Improving the High Road

Crossrail Corridor Area Action Plan
Urban Design Study

An urban design/public realm study by Meadowcroft Griffin Architects for the London Borough of Redbridge

May 2009

Copyright from

Contents

Project Team 3
Acknowledgements 3
Introduction 4
Executive Summary 5

1.0 High Road Identity 7

1.1 Historic legacy and identity 8
1.2 A vibrant diverse high road 10
1.3 Conditions and Constraints 14
1.4 A Successful High Road block 15
1.5 Thematic areas and High Road character 16
1.6 High Road Streetscape 18
1.7 Residential Hinterland 19

2.0 Urban Design Principles 21

2.1 Principles of Approach 22
2.2 Overall Strategy 24
2.3 Enhancing the High Road 26
2.4 Development opportunity sites 28
2.5 Transport Strategy 29
2.6 Key Connections/accessibility 30
2.7 Community facilities 30
2.8 - Design Principles 32
2.9 Development Framework 34
2.10 Landscape 36
2.11 Public Realm 38
2.12 Materials 40
2.13 Street furniture 41
2.14 Public Realm Framework 42

3.0 Opportunity Sites 45

3.1 Sites 46
3.2 Aldborough Road and High Road environs 48
3.3 Lorry Park and Adjacent Sites 52
3.4 Goodmayes, Retail Park & Grove Farm 56
3.5 Summary of site densities guidelines 60

4.0 Public Realm Sites 63

4.1Seven Kings 64
4.2 Goodmayes 66
4.3 Chadwell Heath 68

Conclusion 73

Appendices

Appendix 1 Transport & Access 75
Appendix 2 Costs 81
Appendix 3 Development Studies 88

Project Team

Design Team

Meadowcroft Griffin Architects: Lead Architect & Urban Designer

- Phil Meadowcroft
- Esther Everett
- Elizabeth King

Latz und Partners: Landscape Architect

- Tilman Latz
- Mischa Ickstadt

Appleyards Dobson White Boulcott: Quantity Surveyor

- Simon Cash

Steer Davis Gleave: Transport Consultants

- Simon Hall
- Hannah Shrimpton

Client & Stakeholders

London Borough of Redbridge

- Emma Watson
- Ian Rae
- Jennifer Millard
- Terry Knibbs

Design for London

- Mark Brearley
- Eva Herr
- Fiona Scott

Acknowledgements

Photography by Meadowcroft Griffin Architects and Gort Scott LLP. A special thanks to Gort Scott for contribution of drawings and images produces for the DfL Urban Design Scholarship Programme.

Drawings use maps and aerial photography based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. (10017755)

Introduction

This urban design and public realm study has been commissioned by the London Borough of Redbridge and Design for London. The specific aim of the study is to maximise the potential for delivering high quality urban design and open space along a 4 km stretch of High Road along the Crossrail corridor which includes the stations Ilford, Seven Kings, Goodmayes and Chadwell Heath.

There are two components to the study:

Task A: which looks at the stretch of high road east of Ilford metropolitan centre to the district centre of Chadwell Heath.

Task B: looks at the proposals for the new Station Plaza at Ilford.

Context

Throughout its 2000 year history, the High Road has been a major route to and from the centre of London. Recent processes of urbanisation have led to its transformation into a vibrant and diverse high street serving large residential areas to the north and south. With major changes taking place within the local and surrounding areas the High Road is now at a key point in its history. New developments are taking place close by within east London - the Lea Valley, Stratford, Olympic Park, Thames Gateway and more locally, Ilford and Romford. With confirmation of Crossrail serving stations along the High Road there is now a high level of developer interest in the area. Combined with pressure to meet the Borough's housing targets there is a need to develop a well-managed approach to guide new development and to ensure that maximum benefits are achieved in terms of renewal and regeneration of the area.

Crossrail is a significant infrastructure project for London and provides the opportunity to greatly improve the accessibility of the High Road area. It is essential that both where new station designs are being developed (Ilford Hill) and where improvements to existing stations are envisaged (Seven Kings, Goodmayes & Chadwell Heath), that the opportunity is taken to integrate the stations fully with the wider urban area and improve accessibility. The station interchanges will be considerable attractors for local residents wishing to access central London as well as potentially destinations in their own right. Good permeability of the local urban area and connectivity to the wider public transport network, in particular, high quality pedestrian and cycle links, will be necessary to ensure full integration of the new station and rail services.

Objectives

This Study will form part of the evidence base for the Crossrail Corridor Area Action Plan currently being prepared by LB Redbridge and will feed into the Development Plan Document. The overall objective is to produce a series of guidelines that improve the High Road as a major destination and provide a vision for it as a coherent and vibrant street.
The overall aims include to:

- produce built environment design guidelines for new developments which integrate with and enhance the existing context
- identify focal points for public space improvements and to develop these with costings and outline phasing details
- provide a local movement strategy that identifies the function of the main road, opportunities for integration of pedestrians and cycle routes, and key public space improvements.
- interpret the vision set out in current legislation and guidance and take into consideration the adopted Development Plan Documents
- identify ongoing and emerging project work
- maximise the regeneration benefits in a way that builds a strong identity and cohesive urban structure for future growth

Study Area

The study area follows the route of the High Road from the eastern boundary of Ilford Metropolitan Centre to the borough boundary with London Borough of Barking and Dagenham at Chadwell Heath. The High Road runs alongside the railway line which connects from Shenfield, Essex, to London Liverpool Street and includes the stations at local centres, Seven Kings and Goodmayes and district centre Chadwell Heath.

Currently the study area is characterised by a diverse mix of uses, scales and building typologies and is altogether a vibrant place. However, it suffers from a range of issues including a fragmented and poor quality public realm particularly around the major transport centres. These negative characteristics need to be addressed to allow the area to take full advantage of this unique moment in the transformation of East London and to continue to develop as a major high street serving surrounding communities.

Approach

The strategy has been developed by taking a 'bottom up approach' involving broad consultation with individual stakeholders including: LBR Planning and Regneration, Housing, Highways, Education, Sports and Leisure; PCT; Town Centres and BID manager; Crossrail Urban Integration Team.

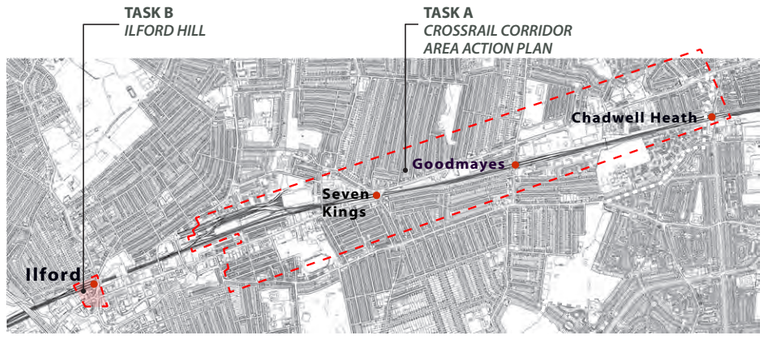
Building on the inherent characteristics of the area, the proposals aim to transform the High Road and existing communities to mesh with the new. The study focuses on transformation rather than change; renewal and repair rather than replacement. It looks to identify and enhance the inherent 'high road' qualities specific to this place, through tight grain, active frontages, diverse mix of uses, scale and character of buildings.

A level of detail has been developed at a range of scales from strategic connections to proposals for key sites to specific public realm projects to suggestions for materials and street furniture. These can help to transform the High Road over varying timescales from a traffic dominated, often chaotic space into a coherent shared public space.

It is worth noting that the Area Action Plan process is an ever-changing process and although this study reacts to known elements, we acknowledge that there are things that are currently unknown and will need to be addressed in further stages of design.

The Structure of the Study

The study is divided into four main sections. The first section, ***High Road Identity*** investigates the characteristics of the High Road and wider area. The second section, ***Urban Design Principles*** presents the opportunities for change and a strategy for improvement, enhancement and development. The third section ***Opportunity Sites*** looks at development opportunities, setting out design guidelines and illustrative proposals. The fourth section, ***Public Realm Sites*** identifies public space focal points and provides both a design framework and outline designs for these with costings and phasings.



List of all consultation and client meetings

Inception meeting with client	*10th December 08*
Site visit with client	*22nd December 08*
Design Team meeting 01	*9th January 09*
Ilford Hill Client meeting and site walk	*9th January 09*
Stakeholder Consultation - Primary Care Trust	*12th January 09*
Stakeholder Consultation - LBR Housing	*12th January 09*
Stakeholder Consultation -LBR Highways	*12th January 09*
Stakeholder Consultation -Town Centres & BID Manager	*12th January 09*
Stakeholder Consultation- Crossrail Urban Integration Team	*12th January 09*
Stakeholder Consultation- LBR Education,	*12th January 09*
Stakeholder Consultation- LBR, Sports and Leisure	*20th January 09*
Design Team Meeting 02	*22nd January 09*
DfL Workshop with Stephen Taylor Architects & East Architects	*2nd February 09*
Crossrail/ Network rail meeting	*10th February 09*
Design Team Meeting 03	*12th February 09*
Workshop with DfL (Gort Scott)	*26th February 09*
Design Team Meeting	*2nd March 09*
Key stakeholder meeting	*5th March 09*
Community Consultation	*5th March 09*
DfL Workshop	*5th March 09*
Design Team Meeting 04	*23rd March 09*

Executive Summary - 10 Key Issues

The High Road that connects Ilford Town Centre to Chadwell Heath is a section of the route of the historic Roman Road. Within the context of developments within the wider area of east London and with the stations at Ilford, Seven Kings, Goodmayes and Chadwell Heath being served by Crossrail in the near future, this stretch of road now has an opportunity to attract significant investment with positive change if regenerative benefits are well managed.

The High Road is a significant local resource for the mainly suburban areas between Seven Kings and Chadwell Heath, supporting them with a range of important facilities, including places to shop, local employment, community facilities, restaurants and stations. The main objective of this report is to set out how development opportunities can be integrated and steered to improve the functioning of the High Road, making it a better and more attractive facility for communities within the wider area.

The High Road is an active and vibrant place of contrasts and juxtapositions characterised by a diverse mix of, uses, scales and building typologies, from terraced houses and historic churches, through to multi-storey offices, 'big box' retail, light industries, schools, restaurants, and other community uses. However, it also suffers from many problems, barriers and constraints including a poor quality public realm, lack of accessibility, empty sites, inconsistent building lines and traffic dominated roads. The railway cutting forms a barrier which gives it a 'one-sided' character as a result of under-used 'interstitial' space between road and rail which now offers significant development opportunities and the potential to knit together active frontages along the High Road.

Within 'Improving the High Road', analysis of current issues and opportunities are developed as strategic proposals and as a framework of urban design guidelines that will enable a coherent and appropriate development of the High Road as a whole, specific development sites and key public spaces.

Ten key issues highlight areas of most concern which are addressed within this report:

1.A vibrant, diverse but undefined High Road

- Vibrancy from a mix of communities and uses
- Juxtaposition of building typologies and uses
- Lack of continuous active frontage, consistent heights and strong building lines

2.Lack of adequate north south connections

- Few connections across the railway
- Lack of pedestrian and cycle routes
- Few connections link into wider area

3.Development opportunity sites

- Interstitial space between the railway and High Road
- Sites already identified by LB Redbridge
- Further identified opportunity sites

4.Stations unconnected to the High Road

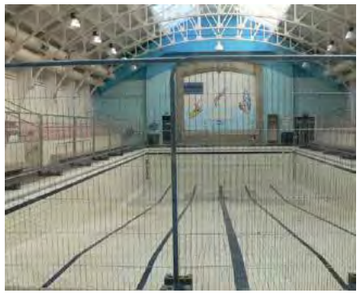
- A lack of visibility between the High Road and the stations as the railway diverges from the High Road, the stations become further estranged. Most notable at Goodmayes and Chadwell Heath
- Poor public realm and wayfinding

5.Poor permeability and accessibility

- Significant barriers including small scale such as railings around crossings
- Crossings not always related to desire lines
- Pedestrian movement not prioritised
- Poor public transport along the High Road

6.Green Space Deficiency and lack of access to parks

- Many parks and green spaces are land locked and difficult to get to
- Some areas along the High Road have a deficiency of green space and require more green open spaces



7.Need for improved and integrated community facilities and social infrastructure

- Good access required to existing and any new facilities
- New community facilities required to replace old and to meet population requirements

8.A cluttered streetscape and public realm

- Streets are cluttered with a mismatch of ad hoc street furniture, signs etc
- Surfaces are inconsistent and require unifying and simplifying
- Cars dominate and need restricting

9.A lack of green along the High Road

- The High Road is virtually devoid of any trees or planting
- The High Road is dull and uninviting in many parts

10.Key Areas

- There are a number of thematic areas along the High Road where there is a concentration of a certain type of activity
- Identify areas of potential change

In contrast to the parades, the rest of the High Road is characterised by remarkable diversity and extraordinary, sometimes extreme, juxtapositions of activities and building types from workshops alongside restaurants, temples next to factories; hidden halls, suburban houses, big box retail, cheek by jowl.

1.0 High Road Identity

1.1 Historic legacy and identity

To understand the character and identity of the High Road it is informative to look at the layers of historic development which have marked its transformation from rural to urban and from strategic arterial route in Roman times to the vibrant and diverse high road it is today. It is these layers which give the road and environs its specific sense of place.

Centuries of development patterns have left a legacy embedded in the physical form and diversity of activities we see along the High Road and within its wider context. Processes of change have happened over varying timescales from slow transformation of wild and rural landscape to the most rapid occurring with the construction of the railway and subsequent suburban development in the 19th century. Whilst residential areas have remained stable since, the High Road itself has followed a process of continuous change which is likely to gather pace.

Its distinctive linearity was established by the Romans. From a road which cut a swathe through marshland and served encampments from London to Colchester in Roman times, the High Road (known also as the Roman Road) developed as a major through route and high road connecting a string of centres from Whitechapel to Romford and beyond. Incremental linear development along its edges during the 19th and 20th centuries supported suburban growth and infilled the areas between the local centres with a rich and diverse mix of uses establishing its specific 'high road' character that we see today.

The various ways the road has been named and referred to: Roman Road, Colchester Road, High Road, London Road, A118; reflects its historic legacy and dual identity both as through-route and local amenity.

Although lost through urbanisation there is a legacy of rural landscape which is still visible in fragments today. The road lies at the far north of the flat flood plain on rising ground which confirms the historic rationale for its location. Prior to the 19th century the surrounding landscape was mostly agricultural combined with brick fields, wild grassland and marshes. Rivers and streams run north south between low ridges upon which the local centres and stations have been built. Drainage ditches and fields affected land ownerships and have been imprinted within road patterns.

Vestiges of watery landscape remain in the present day parks many of which are located on river alignments and contain open stretches of rivers and lakes.

Seven Kings Water, a tributary of the Roding, runs from the north through Westfield Recreation Ground at which point it is today culverted as it travels south underneath the High Road and re-emerges in South Park. The Seven Kings area has always had watery connotations; the name Kings' Watering which refers to the historic Watering Stoop has come almost certainly from ancient times through the legend of seven kings watering their steeds in the ancient brook. South of the High Road, property boundaries still follow the curve of the brook south to the railway.

Historically there was also a water course, the Mares Brook, another tributary of the Roding, which ran to the east of Goodmayes

Drawing of London's Roman Roads courtesy of Gort Scott LLP

Roman Road/ High Road maps showing urban area in red. Drawings courtesy of Gort Scott LLP

1864

1920

1963

Trolley Bus to Seven Kings, near St Mary's

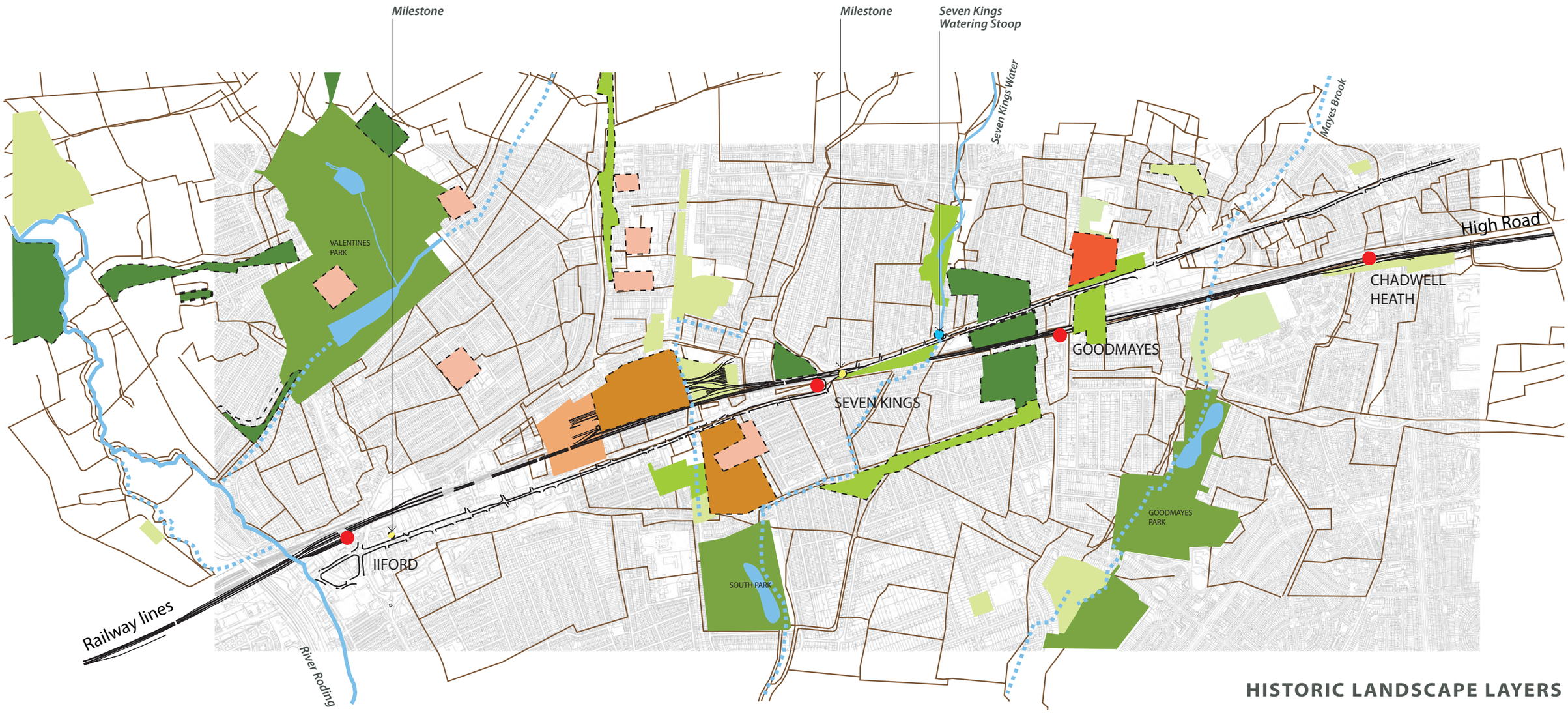
Outside the Cauliflower Pub near Aldborough Road

Seven Kings Station

Seven Kings Hotel, on current Lorry Park Site

Shopping parade at Goodmayes

Shopping parade at Chadwell Heath



HISTORIC LANDSCAPE LAYERS

KEY

- School open space
- Allotment
- Historic Allotment
- Marsh/Bog
- Historic Marsh/Bog
- Historic Woodland
- Historic Gravel Pit
- Historic Cricket Pitch
- Historic Brickfields
- Historic Waterways
- Current Waterways
- Occurring Water Bodies
- Station

Landscape Legacy is reflected in the physical form and diversity of activities along the High Road and in the wider context

1.2 A vibrant and diverse high road

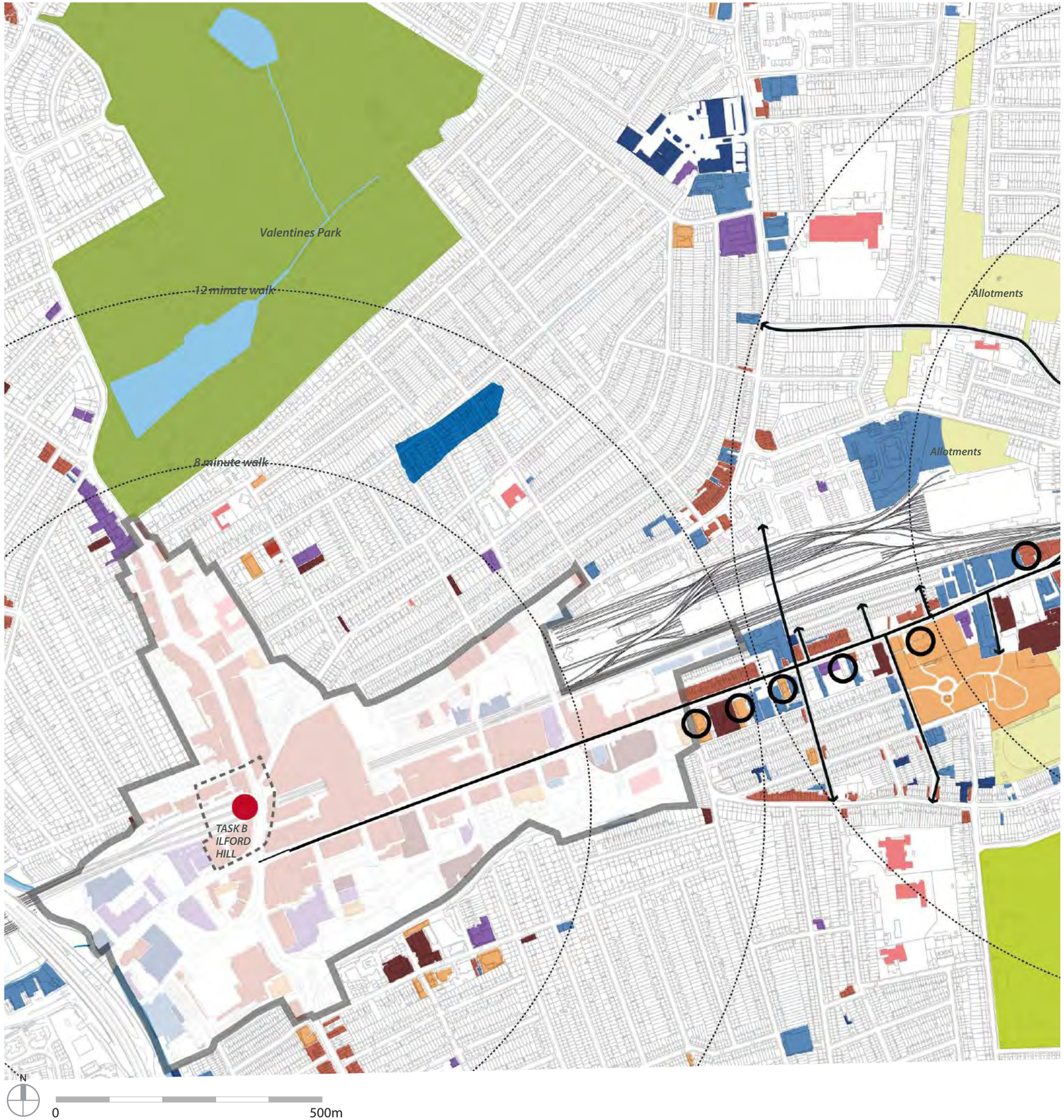
This section studies the specific qualities and characteristics of the High Road as it exists today. It focuses not only on the physical form of the road, buildings which define its edges, and their uses, but also upon the more subtle range of activities and influences which constitutes its specific 'sense of place' - its urban metabolism – what makes it 'tick'.

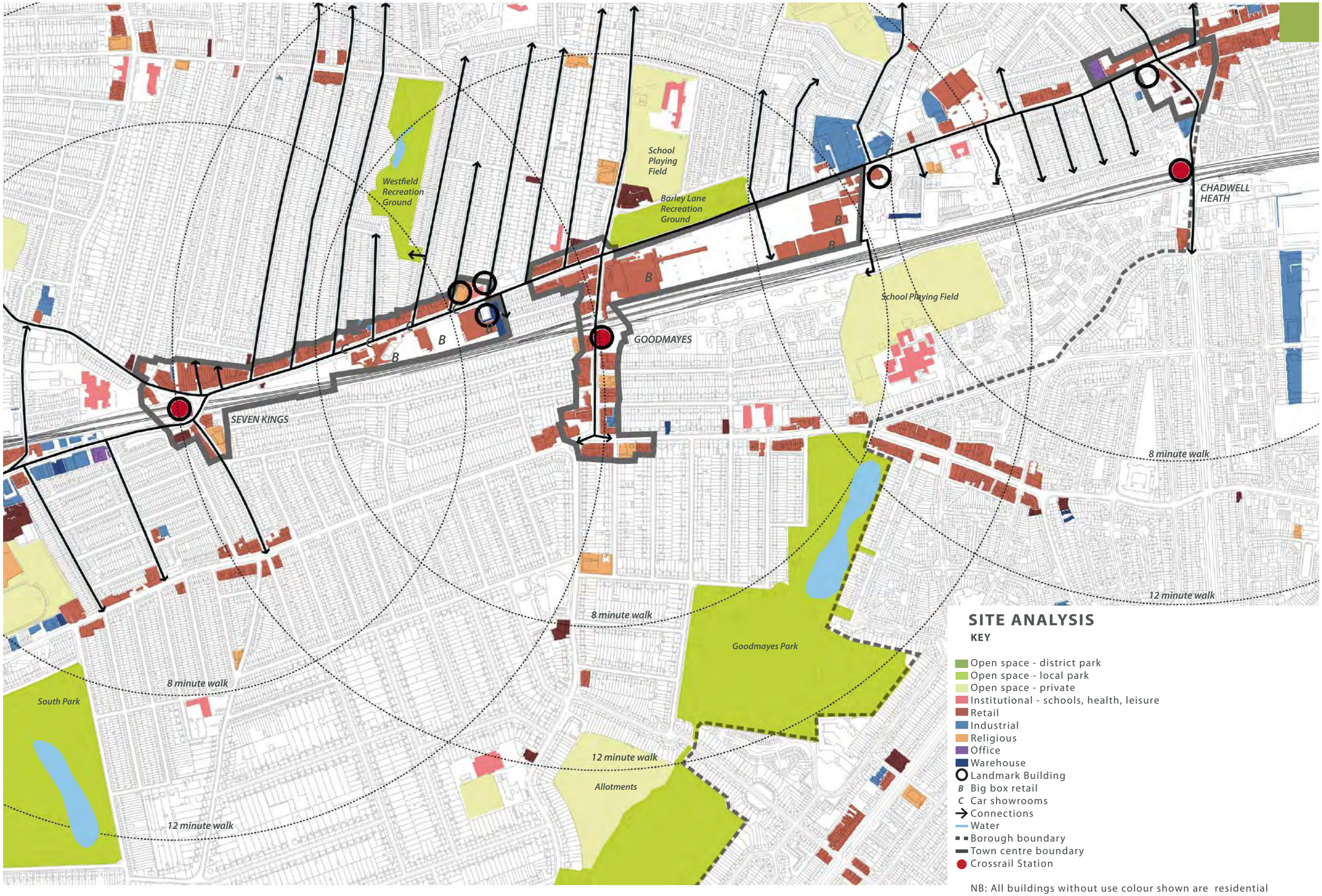
The High Road today is characterised by the intensity of non-residential uses at street level along its edges. There is an extraordinarily diverse mix of conventional 'high street' uses - shops, cafes, restaurants etc. - combined with showrooms, offices, workshops, schools, light industries and big box retail sheds amongst others.

The grain and pattern of use reflects landscape topography, historic development, and the proximity of rail infrastructure:

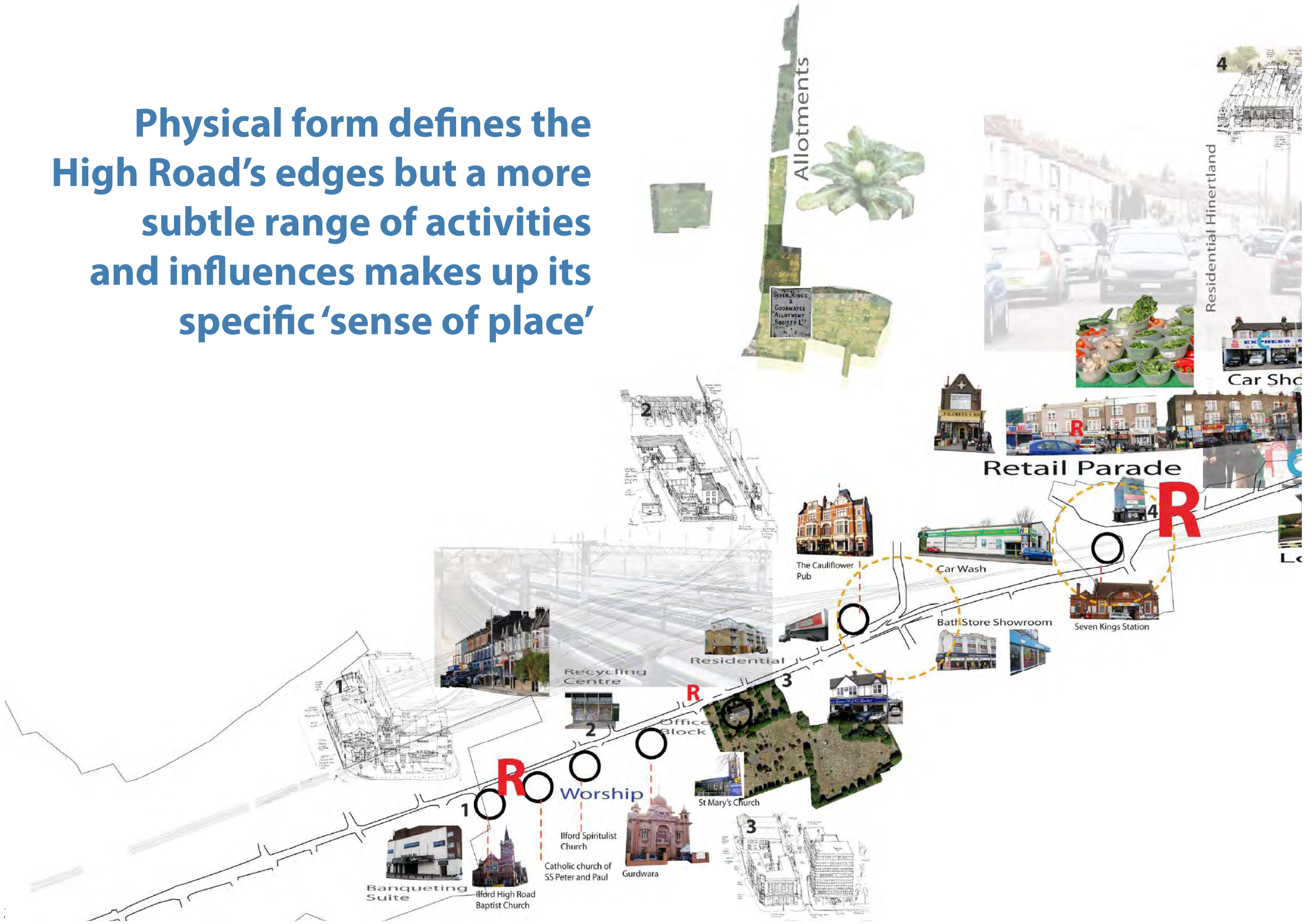
- finer grain, 'stable' built fabric with juxtaposed uses around historic centres.
- higher density of showrooms, light industrial activities, larger scale buildings, between centres;
- big box retail, larger scale industrial buildings on sites 'trapped' between the railway and the high road. These areas have a 'vestigial' and under used quality and have been subject to most recent change which is likely to continue. Within the context of increasingly dense high street uses the 'out of town' type character of big box retail with carpark appears incongruous.

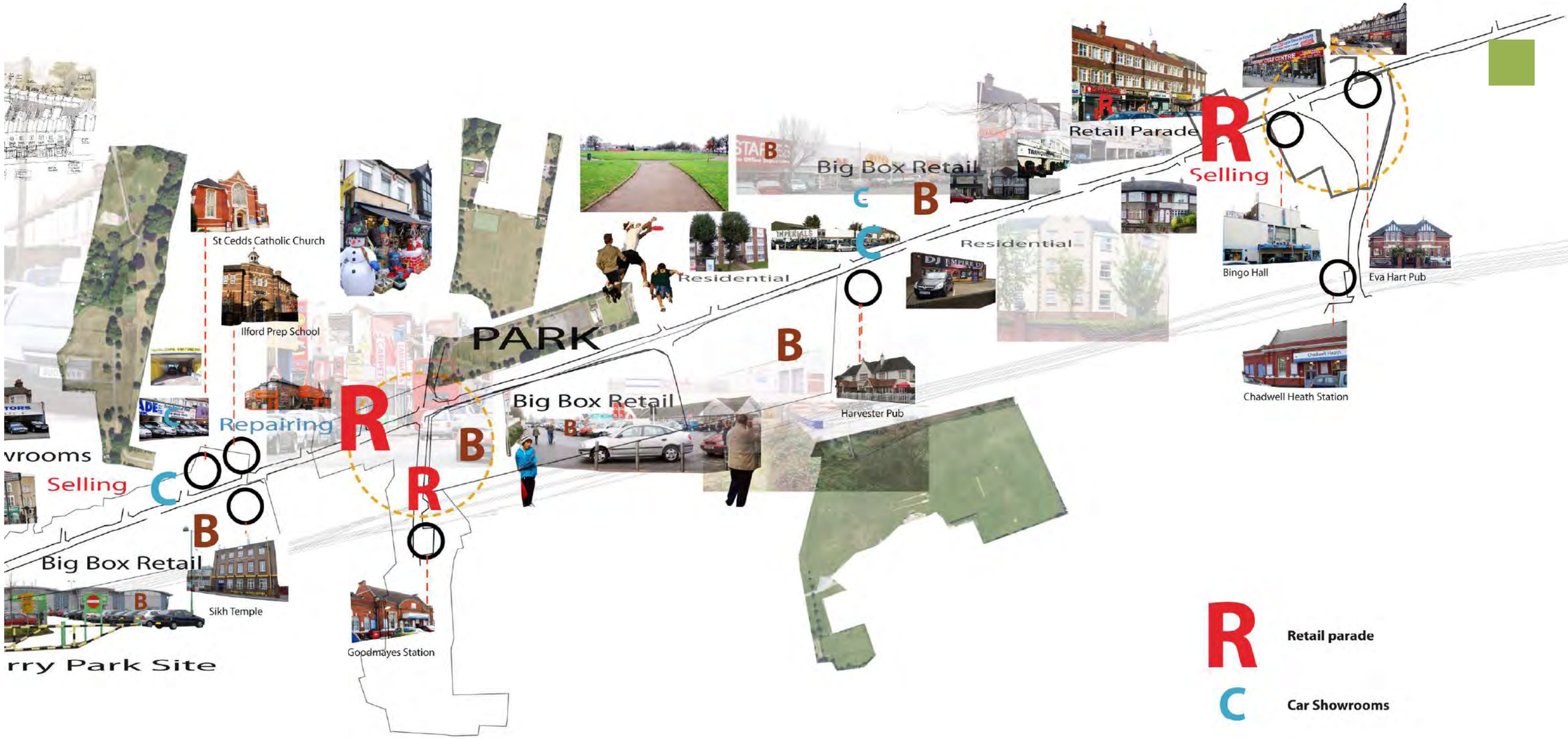
Access to local amenities and stations, soon to be Crossrail, combined with numerous under used and brownfield sites offer the potential for the development of the High Road. The areas most in flux and those falling outside the designated local area boundaries are most vulnerable to change. These areas, along with specific sites will form the focus of the following study, which, if well-managed, can substantially contribute to the long term strengthening and sustainability of the High Road.




Westfield Recreation Ground
School Playing Field
Barley Lane Recreation Ground
CHADWELL HEATH
School Playing Field
GOODMAYES
SEVEN KINGS
8 minute walk
12 minute walk
8 minute walk
Goodmayes Park
8 minute walk
South Park
12 minute walk
Allotments
12 minute walk
SITE ANALYSIS
KEY
Open space - district park
Open space - local park
Open space - private
Institutional - schools, health, leisure
Retail
Industrial
Religious
Office
Warehouse
Landmark Building
B Big box retail
C Car showrooms
Connections
Water
Borough boundary
Town centre boundary
Crossrail Station
NB: All buildings without use colour shown are residential

Physical form defines the High Road's edges but a more subtle range of activities and influences makes up its specific 'sense of place'




St Cedds Catholic Church
Ilford Prep School
PARK
Repairing
R
B
C
Selling
Big Box Retail
Sikh Temple
Goodmayes Station
Residential
Big Box Retail
Big Box Retail
Residential
Harvester Pub
Retail Parade
Selling
Bingo Hall
Eva Hart Pub
Chadwell Heath Station
R Retail parade
C Car Showrooms
B Large retail units
Landmark building
Key connection points

1.3 Conditions and Constraints

There are many barriers and constraints to development of the High Road which coincide with specific conditions upon which to build.

The railway cutting and sidings are a major barrier between residential areas north and south. They influence the High Road and give it an inbalance that responds to the relationship of the railway to the High Road.

From the intersection at Seven Kings the divergent relationship west and east creates an interstitial space between road and rail with markedly different uses and scales of buildings - industrial to the west, big box retail to the east. As a result there is a distinctly 'one-sided' character and discontinuity both along and across which follows the switch from north to south of the railway relative to the High Road.

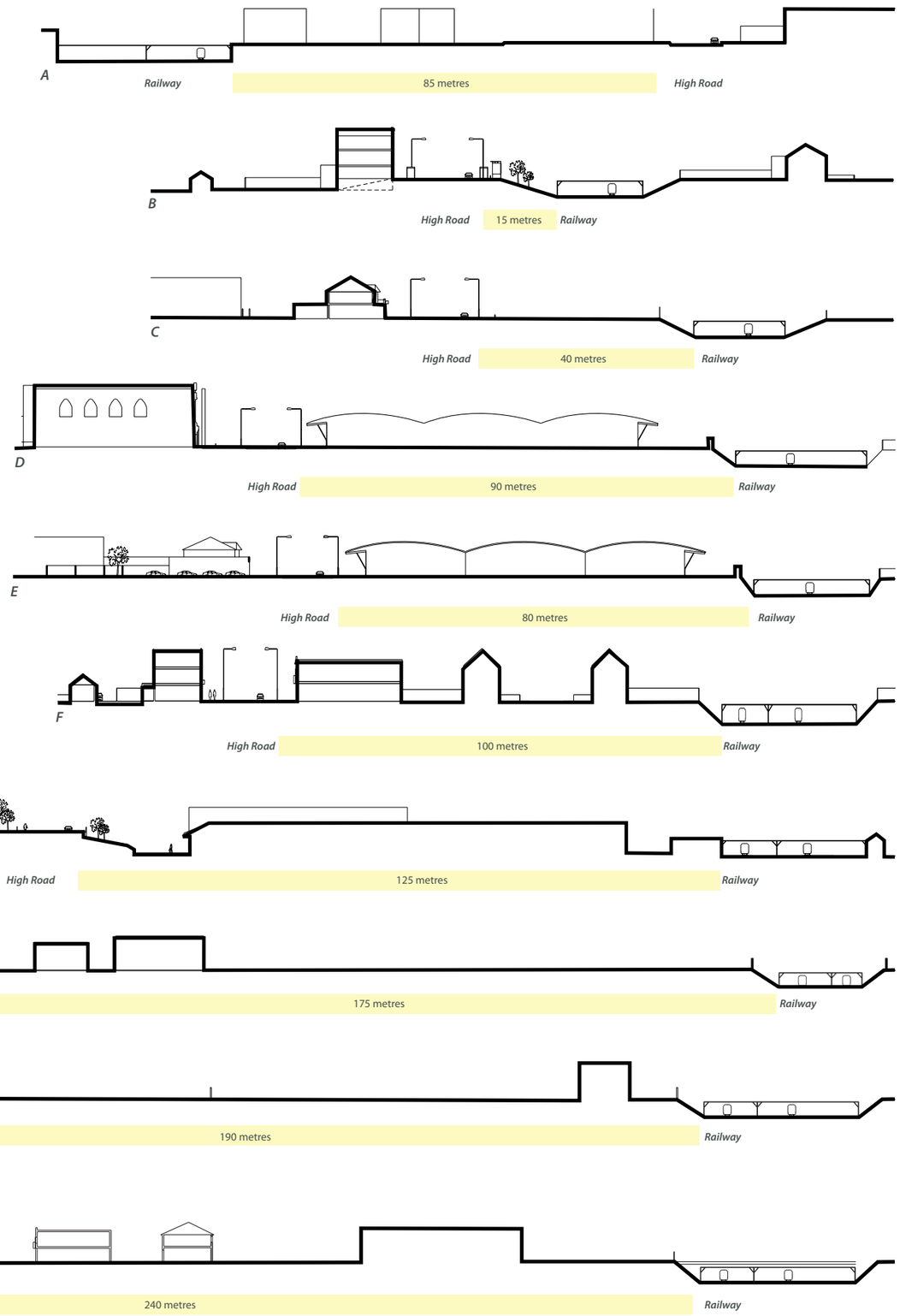
The barrier formed by the railway cutting is evident in the lack of accessibility to the High Road and other amenities from surrounding residential areas. Connections which do exist are of poor quality.

Furthermore the divergence of the railway east of Seven Kings results in the stations of Goodmayes and Chadwell Heath being further away from the High Road.

Interstitial space between railway and High road
Connections across railway

The interstitial space between the road and the railway switches orientation at Seven Kings where the two linear elements intersect

ANALYTICAL SITE SECTIONS



1.4 A Successful High Road block - 'Front-of-house', 'back-of-house'

The parade at Seven Kings is one of a number of places along the High Road where there is an intensity and diversity of activity and street life. The historic 3 storey parades at Seven Kings, Goodmayes and Chadwell Heath are not only the areas which have evolved over the longest time, they are also the places where there is an inhabited depth to the high road edge. These areas are defined by a 'front-of-house', back-of-house' arrangement. The parade of shop window frontages faces onto the High Road giving a sense of urban order and rhythm.

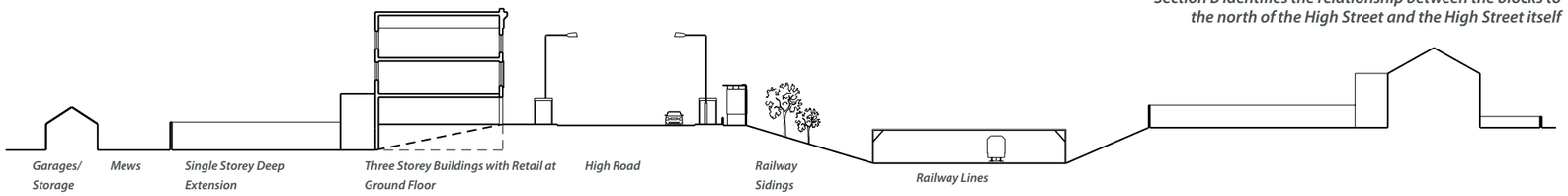
Behind, there is a loose-fit zone of less formal, sometimes 'ad hoc' buildings, activities and 'courtyard' spaces which are often connected to the frontages but are sometimes independent, such as warehousing, gyms, dentists, offices, workshops, showrooms, community facilities such as nurseries and halls, training centres, restaurants and light industries. In the case of Seven Kings it allows larger volumes of space to exist alongside activities which do not necessarily need High Road frontage but benefit from being close to it. As a loose fit space it provides flexibility, expansion and potential for more rapid change than standard shop units. The density and diversity of the 'hidden' back-of-house layer substantially contributes to the vibrancy and sustainability of the High Road and offers a paradigm for contemporary interpretation.

Mews at the back of the Urban Block

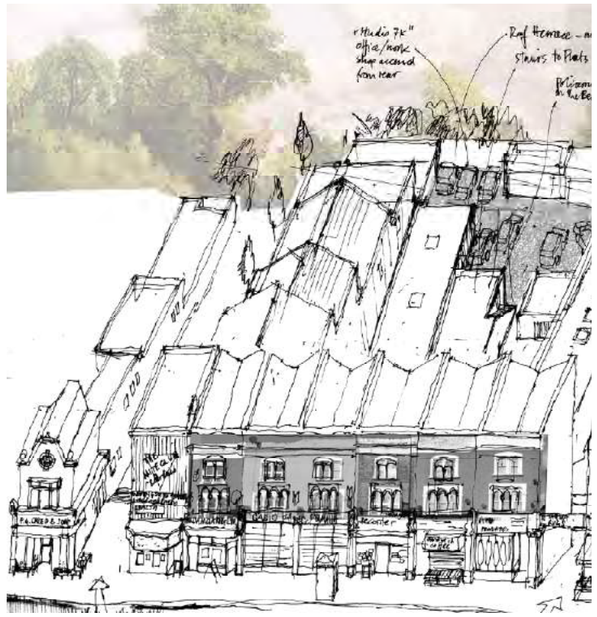
Typical store on the High Road

The High Road lives through the diversity and depth of its edges

Section B identifies the relationship between the blocks to the north of the High Street and the High Street itself



Dense, deep active edges on the north side of the High Road create vibrant active street frontage



Drawing of Urban Block at Seven Kings courtesy of Gort Scott LLP

Panorama of parade to the north of the High Street at Seven Kings

1.5 Thematic areas and High Road character

Thematic areas

There are a number of areas along the High road where there is a concentration of certain activities related to building types and specific circumstances. For example, west of Seven Kings has more larger scale light industrial buildings historically related to the railway sidings; car showrooms to the east of Seven Kings on the north side; big box retail between road and rail; small eateries within parades, large restaurants further away from local centres; suburban residential east of Goodmayes; swathes of suburban estates in the surrounding areas.

Car Showrooms East of Seven Kings with St Cedds Church

Corners

Long views along the High Road emphasise the rhythm of corner sites at key junctions with side roads. Many of the key landmark buildings occupy these sites and form part of the strong character of the High Road.

Landmarks

Taller buildings stand out as significant landmarks against consistent low horizons of terraces, emphasised by the long straight views along the High Road. There are a number of fine Victorian buildings which stand out, such as St Cedds Church and the Cauliflower pub. These are key landmark buildings which mark key locations and help orientation along the road.

Parades and terraces

The parade at Seven Kings is one of a number of parades along the High Road mainly relating to the other historic centres of Goodmayes and Chadwell Heath. Generally of three storeys, there are also significant two storey terraces in between - for example east of St Alban's Road. These also follow the front-of-house, back-of-house arrangement seen at Seven Kings with activities fronting onto the High Road, supported by mews and a diverse range of spaces and activities behind. The rhythm, repetition and scale of parades and terraces define the strong character of the High Road.

Contrasts and juxtapositions

In contrast to the parades, the rest of the High Road is characterised by remarkable diversity and extraordinary, sometimes extreme, juxtapositions of activities and building types from workshops alongside restaurants, temples next to factories; hidden halls, suburban houses, big box retail, cheek by jowl.

Long views along the High Road emphasise the rhythm of corner sites

Architectural Detail on Facade

The Cauliflower Pub at Aldborough Road

Mews behind Goodmayes

Goodmayes Retail Parade

Chadwell Heath Retail Parade

Car Showrooms

The High Road is well known for its concentration of second hand car showrooms which dominate the northern side of the High Road between Seven Kings and Goodmayes. They are an important part of the economy and active life of the High Road. However the car showrooms create a cluttered pedestrian realm with cars blocking footways in some instances. Further parking on the road in this area causes the cycle route to be regularly blocked. There appears to be little enforcement of the parking restrictions as cars should not be for sale on the public highway.

Residential and retail side by side

The 'Niteclub'

Drawing of Urban Block at Chadwell Heath courtesy of Gort Scott LLP

Big Box retail

The southern edge of the High Road east of Seven Kings is dominated by open car parks and big box retail parks within the interstitial space between road and rail. Located opposite fine grain terraces these give a distinctly 'one-sided' character to the High Road for much of this stretch. The large sheds face their car parks with blank facades to the High Road

Industrial activity

Present day industries are part of an heritage of industrial activity which forms a vital part of High Road activity. Much of it is relatively small scale and car related - washing, repairing etc. although larger scale industries do exist. Many are shop front type industries which have a place fronting onto the High Road but benefit from larger units behind - for example Floors-2-Go. With increase in density and pressure for more residential it is important that these activities are not squeezed out but integrated within new development.

Drawing of Typical Urban Block to the East of Seven Kings courtesy of Gort Scott LLP

Transformed Corner Terrace

Recycling Plant near Aldborough Road

Typical Workshop along the High Road

1.6 High Road Streetscape

The High Road is an extraordinary, vibrant and active place with an unusual diversity of activities and its energy survives despite many barriers and impediments. There are many gaps where the continuity disappears and the generally poor physical environment tends to hamper street life. There are insufficient settings to allow the full range of street life to flourish. There seems to be a strong 'latent 'market culture where exchange and interchange happens in the open in a highly visible way.

Key observations and issues:

- Street clutter and cars inhibit movement and street life.
- Too many barriers, too few crossings in key locations. Barriers often contain and constrict pavements.
- An absence of trees, planting and green spaces along the High Road.
- The road is dominated by traffic and cars park indiscriminately often on the pavements.
- Ad hoc parking and lack of parking restrictions result in cars parking within cycleways and footways.
- The car showrooms in particular create obstructions to footways.
- Few places to rest and take a breather away from the hubbub
- Lack of places where street markets can take place.
- Visually chaotic shop frontages - a clutter of signage at high level and discordant fascia signage
- Goods are displayed on the street, in shop fronts and on open stalls
- Poor quality surface materials in many places.
- Gaps between buildings and in frontages such as retail parks, here street life dies out

Key recommendations:

- Declutter the street and remove barriers
- Prioritise pedestrian movement and introduce new crossings on desire lines
- Provide a unifying palette of materials and street furniture
- Introduce landscaping elements including trees
- Control parking and traffic with parking restrictions and changes to signalisation
- Control use of the pavement by retail units and car showrooms
- Provide improved cycleways for safety
- Provide areas for rest for all users
- Ensure active frontages along the High Road
- Support market culture

Typical shop front spilling out onto the street

There are few places to rest and take a breather

The car showrooms create a cluttered pedestrian realm with cars blocking footways in some instances. Further parking on the road in this area causes the cycle route to be regularly blocked. There appears to be little enforcement of the parking restrictions as cars should not be for sale on the public highway.

Cars clutter the pavement

Poor Quality Public Realm inhibits street life

1.7 Residential Hinterland

The High Road serves large residential areas north and south. In contrast to the urban character of the High Road, these areas are distinctly suburban with the majority of housing stock being two storey detached or semi detached with private front and rear gardens. Areas close to the High Road are relatively less affluent than those within the wider area. Within these and other areas there is a current trend towards increased density through conversion of houses into multiple occupancy.

Residential areas have a high proportion of open space although the majority are inaccessible, captured within private gardens or allotments. The map to the right indicates that with the exception of the areas north and south of Seven Kings, most people are within range of a park. However in reality street layouts make access to open spaces and other communal facilities difficult. The combination of long unbroken roads e.g. running between High Road and Meads Lane and lack of north south connections across the railway increases travel distances and resulting car dependency. For example, someone living on Pembroke Road is within the catchment radius of Westfield Recreation Ground, but in reality will have to walk a significant distance to reach the entrance on the far side.

Despite the amount of green space the majority of roads lack tree planting and appear stark.

Connections and permeability of the residential areas is key to improving access to open spaces, shared communal facilities and to the High Road. Improvement of public transport along the High Road, introduction of parking restrictions, improved and new links aim at substantially reducing car use, particularly the number of short journeys to local amenities.

Long uninterrupted residential streets

Residential areas have a high proportion of open space although the majority are inaccessible, captured within private gardens or allotments

Allotments

Seven Kings Water in Westfield Park today

Map (below) showing areas in green which are within 400m of a green open space , deemed to be adequately served, and those areas outside deemed to be deffcient.

Areas which are beyond 400m of a green open space and deemed to be deficient
Town centre boundaries
LBR proposed street tree planting
Area within 400m of public green open space deemed to be adequately served.

‘...there is still a chance that the unexpected will happen on a street, that people will meet, stop and gossip, renew acquaintances with long-lost friends ‘bumped into’ accidentally...’

Ken Worpole
(‘Towns for People’)

2.0 Urban Design Principles

2.1 Principles of Approach

An Overall Vision

The previous section showed the High Road as an area in a state of flux with radical changes to key areas along its edges and within surrounding areas. It is also a unique place with many positive qualities upon which to build. With new Crossrail links and an increase in population there is now an opportunity to establish a framework for growth which enhances the High Road's long term identity as a major high road serving local and wider areas.

This section brings together analysis, observations and proposals within an integrated vision and forms a framework of design principles which focus specifically on ways in which new interventions and improvements can accommodate an increase in population to create a high quality and enhanced environment for the High Road and the wider area.

The overall vision responds to a number of key objectives and thematic areas of intervention from the scale of strategic links, and zones of change, to the specific detail of how environmental improvements can be achieved over a range of time-scales.

This sets the scene for looking at how these design principles can be interpreted within specific development sites in section 3.0.

Challenges

With opportunity there are simultaneous challenges. Rapid change can too easily lead to development that bears little regard to the particularities of place, or that lacks cohesion. Change should be recognised as part of a continuous process which links present and future with recent and distant past. It is vital that change is well managed at every level, that it respects and supports existing communities, recognises and builds upon the positive characteristics of the High Road, as it is today.

Currently the area is characterised by its diverse scale of buildings and uses: large scale sheds alongside fine grain retail and residential parades; large suburban estates next to undervalued open space. Numerous physical and social conditions create hindrance to growth which need to be unlocked for the High Road area to realise its potential and to fully benefit from current and future opportunities.

One of the key challenges addressed within this study is to make sure that development opportunities do not erode the intrinsic high road character of the High Road. Although fragmented in places one of its key strengths is its linearity and the continuity of activity along its length. It is noticeable that stretches where there is residential use at street level or there is an absence of active frontages it becomes lacking as a vibrant public space. With the extent of development opportunity sites becoming available within and outside local centres, combined with the need for residential capacity, there is a danger that future developments will cause further fragmentation if not well managed. A key issue will be how to maintain active non-residential frontages within local centres and of particular importance, within less defined areas in between.

Approach

The following key principles have informed the approach within this study:

Density and diversity

That density and diversity create more vibrant and sustainable urban environments both in the shorter and longer terms. The strategy promotes expansion and integration of activities wherever possible rather than reduction and displacement and follows an approach which preserves and builds on the wide range of existing commercial activities and employment opportunities along the High Road.

A shift from mixed uses, to residential only, for sites fronting onto the High Road is considered detrimental.

Incremental Growth

The design study puts forward a coherent and flexible framework for incremental growth which encourages further development, density and diversity over time. It aims to identify robust design principles which will enable the High Road to transform over varying timescales from immediate 'quick win' streetscape improvements to longer term implementation of strategic infrastructure.

Identity

To support and develop a strong identity for the High Road by supporting its linear 'high road' character. The design principles create a strong sense of place which build upon what exists and reflect the everyday life of the people who already live and work here as well as creating conditions to attract and accommodate new population. It supports a robust approach to protecting non-residential ground floor uses particularly within areas more vulnerable to change between local centres.

Integrated regeneration

For regeneration to succeed there needs to be an integrated holistic approach. It does not depend solely on improvements to the built environment but must also address social and economic issues answering environmental and physical problems, along with issues of employment, economic activity, deficiencies in social infrastructure, poor connectivity and poor quality of public space.

Integration of new developments

In the context of change it is important to consider how high density new development can be integrated with existing lower rise areas and ways in which it can avoid interruption to the active 'high road' character of the High Road. Ground floor non-residential uses, continuity of active frontages, mix of housing types and tenure, linkages, permeability, community facilities and high quality public spaces will all help to integrate new with old and act as a catalyst for further regeneration. It is important that new development builds upon the positive attributes of what exists, and through a process of knitting and healing transforms rather than replaces. Where renewal is inevitable it should be sensitive to the grain, character and scale of the particular places or locations along the High Road.

Accessibility

For the regenerative benefits of new development to be realised over the wider area it is vital to create links and connections which knit separate areas, amenities and communities together. Strong north-south connections which overcome the barriers of the railway and the High Road along with improved east-west movement are key to making sure that all communities within the wider area have improved access to high quality open space, communal facilities, public transport and High Road amenities.

Key objectives and design principles

Enhance and intensify the High Road

- Support local centres and the spaces in between with a diverse mix of non-residential uses at street level to strengthen the continuous active 'high road' character.
- Identify and locate services and facilities necessary to support existing and future communities.

Thematic areas

- Identify key thematic areas along the High Road - areas of change, areas to protect, where there is more or less flexibility, areas which may develop over different timescales.

Development opportunity sites

- Indicate the potential for higher density residential capacity through development of available or under used sites.
- Identify the full range of development opportunity sites - those already identified by LBR plus other key sites
- Propose uses and design guidelines for key sites (see Section 3.0)
- Develop guidelines for mix, density, massing and scale of

buildings to guide future development.

- Follow the principle of non-residential uses at street level along the High Road.
- New landmark buildings and taller buildings should indicate places and spaces of greater importance such as key road junctions, stations and public spaces.
- Elsewhere buildings should be a maximum of 5 storeys or lower to relate to the scale of existing parades and terraces.
- Avoid object buildings surrounded by undefined open space.
- Combine employment and other uses within dense residential developments.

Improve key connections

- Overcome current barriers to improve connectivity. Improve access to existing and future public facilities, green open spaces, transport, high road amenities.
- Improve the safety and quality of existing north-south connections. Improve bridges, legibility of routes and quality of associated public space.
- Improve visual and physical connections to railway stations
- Improve existing pedestrian crossings. Introduce new crossings at key points

Transport

- Improve accessibility, movement and linkage along the High Road and within surrounding areas.
- Improve number and frequency of bus services along the High Road, number and positions of bus stops.
- Improve access to stations ease of transport interchange.
- Create a continuous 2 way cycle lane
- Control car parking and traffic speed in key areas.

Public realm

- Improve the quality of the public realm for pedestrians.
- Propose tree planting and other green landscape.
- Unclutter the streets
- Remove barriers
- Propose a palette of materials and street furniture
- Identify a hierarchy of public spaces and improvements to public spaces.

Green open spaces

- Improve access to parks and other green open spaces.
- Address open space deficiencies by introducing new parks and connections.
- Propose locations for pocket parks

'It is often said that streets are for the passage of traffic only, and although this may be a sound legal view it has obscured the fact that streets perform other functions, some of them vital. They give access to buildings, they provide an outlook from buildings, give light and air, they are the setting for architecture, and they are the backbone of the everyday surroundings for many people'

Colin Buchanan

(Quoted by Ken Worpole in 'Towns for People')

2.2 Overall Strategy

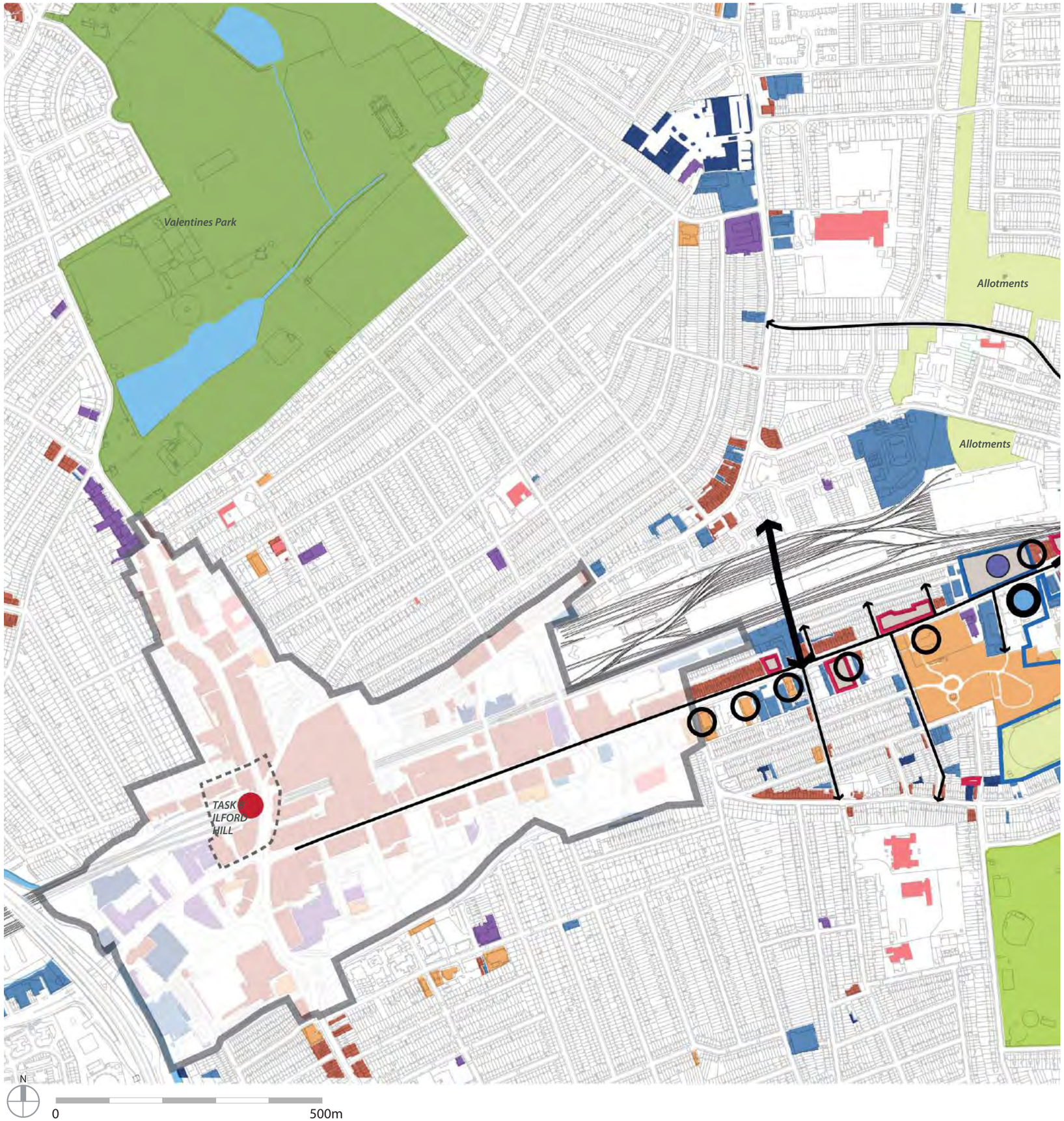
The overall strategy shows the effect of all the design principles and indicative proposals together: crossings, development areas and key sites, uses, landmark buildings, locations for new community facilities, landscape. It shows the complex layering of the High Road as it exists today and how it will continue to develop in the future as a linear active public space with stronger connections to its residential hinterland.

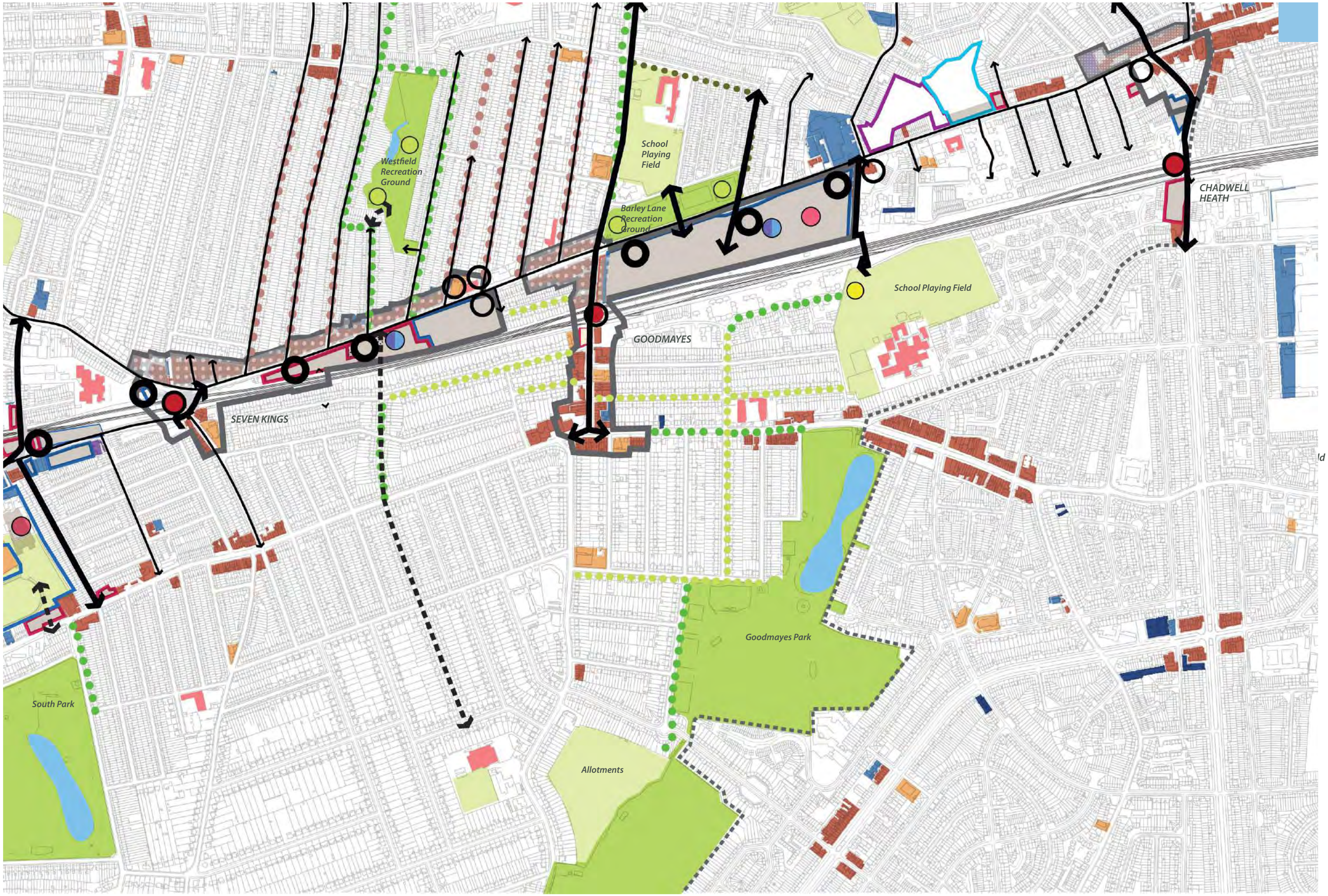
All of the proposed interventions and the reasons for them, are considered in more detail within this section.

DESIGN GUIDELINES

KEY

- Open space - district park
- Open space - local park
- Open space - private
- Institutional - schools, health, leisure
- Retail
- Industrial
- Religious
- Office
- Warehouse
- Existing connections
- Proposed new and improved connections
- Potential connections
- Water
- Landmarks
- Borough boundary
- Town centre boundary
- Station
- Proposed Pocket park
- Proposed possible school location
- Proposed possible swimming pool / polyclinic location
- Proposed Improvements to parks
- Proposed Cherry Blossom tree planting
- Proposed Plane tree planting
- LBR Mayors street trees programme
- LBR Housing opportunity sites
- LBR Business Area
- LBR Retail Park
- Identified opportunity sites
- Ground floor non-residential use within centre boundaries to be maintained
- New development sites
- Proposed landmarks




Westfield Recreation Ground
School Playing Field
Barley Lane Recreation Ground
CHADWELL HEATH
School Playing Field
GOODMAYES
SEVEN KINGS
Goodmayes Park
South Park
Allotments

2.3 Enhancing the High Road - Key Thematic Areas

The promotion of mixed use development with active non-residential uses at street level both inside and outside local centres is essential for the High Road to continue to thrive.

Furthermore the dynamic between established local centres and areas in between is key to defining how coherent future growth occurs. If the assumption is that robust planning policy promotes and preserves mixed uses within local centres the implication is that it does not necessarily do so in areas outside. Intensification of mix within centres which results in residential mono-use in the areas in between will significantly erode the high road character over time.

This study seeks to avoid a necklace of local centres with residential 'gaps' in between but rather supports ways in which current and future planning policy and guidance can promote and sustain a diverse mix along the entire length of the High Road and beyond.

Principles for key thematic areas:

Local centres:

- Build upon the scale, grain and diverse mix of existing parades
- Non-residential ground floor uses along the edges of the High Road
- Continuous active frontages
- Maximum 5 storeys with exception of taller landmark buildings
- Occasional taller buildings in clusters around stations and to mark key road intersections and public spaces in line with the LDF's Tall buildings designation Policy BD2
- Maintain consistency of roof line
- Maintain consistency of building line with occasional set backs to introduce tree planting
- Promote terrace typology; avoid stand alone buildings
- Protect retention of, or encourage new, diverse employment uses which have shop window and counter type frontages (e.g. carpet warehouses north of Seven Kings) such as printers, picture framers, glazers, timber merchants, tilers, etc..

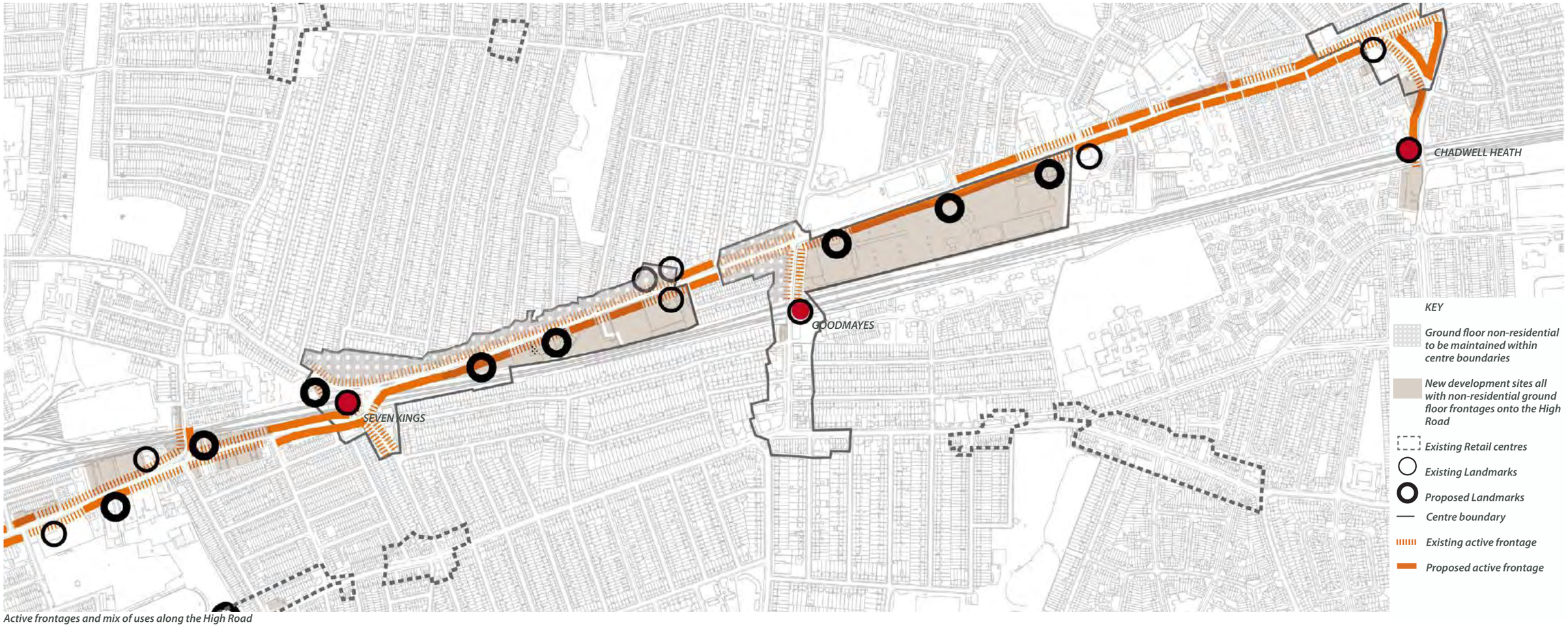
Local centre back-of-house expansion areas:

The study previously observed how back-of house activities (those which require large floor space with a small High Road frontage component; activities without frontages which benefit from being close to the High Road population) contribute to the vitality of public life of the High Road.

The principle is to allow flexibility for the local centre 'back-of-house' uses to expand beyond the local centre boundaries in a well managed way.

Between local centres:

- Non-residential ground floor uses along the edges of the High Road.
- Continuous active frontages
- Maximum 5 storeys facing onto the High Road.
- Maintain consistency of roof line although more variegation



Active frontages and mix of uses along the High Road

may be acceptable

- Maintain consistency of building line with occasional set backs to introduce tree planting
- Occasional taller buildings to mark key corners, junctions, crossings and public spaces
- Protect retention of, or encourage new, diverse employment uses which have shop window and counter type frontages

Larger scale retail sites

It is important to avoid displacement of larger scale retail along the High Road. These should be integrated within new developments, to have active frontages onto the High Road, more compact footprints where possible (by being multi-storey). The majority of car-parking should be below ground level within basement car parks.

Existing residential areas to the north and south

These are areas which have generally remained the most stable in terms of change to built form. However, there is a current movement towards increased density through subdivision of single houses into flats. Where change has occurred within residential street blocks it has been through gradual encroachment of 'back-of-house' mixed uses extending back from the High Road, particularly east of Seven Kings on the north side (see earlier).

Residential areas away from the edge of the High Road should retain their existing character although the possible introduction of individual corner shops (which do not detract from the High Road or other local retail centres, pocket parks and streetscape improvements would improve access to daily provisions, public open space and the public realm for an increasing population.

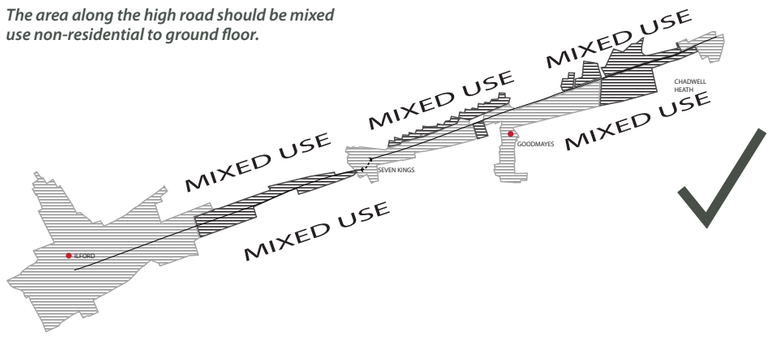
Within these areas there is:

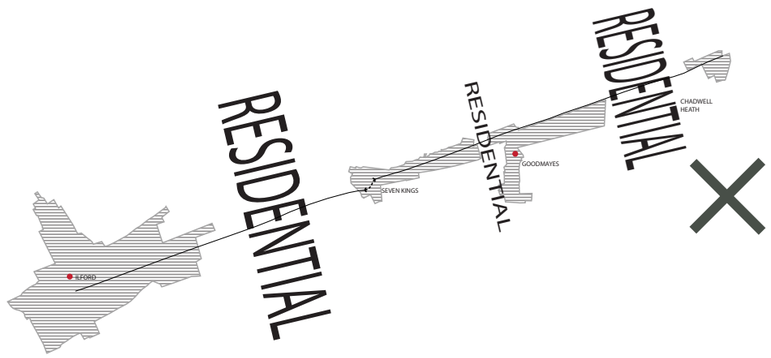
- potential to consider new links when developing consolidated sites to improve connectivity of the overall area.
- the need to retain building lines and front gardens where this contributes to the overall character of a street.
- requirements to conform to neighbouring building heights or to set back additional storeys.
- potential for higher buildings where this relates to urban form, for example at corner sites.
- potential to intensify where this improves local character, creates better frontages and a more useful public realm

maintain mixed use and active frontages along the entire length of the High Road.

"avoid a necklace of local centres with residential 'gaps' in between. Support ways in which current and future planning policy and guidance can promote and sustain a diverse mix along the entire length of the High Road and beyond."

The area along the high road should be mixed use non-residential to ground floor.





MIXED USE STRATEGY KEY

Mixed use outside centre boundaries
Mixed use within centre boundaries

2.4 Known development opportunity sites

Thematic areas define zones of change and zones where uses and activities should be protected. On a more specific level there are numerous sites which have been identified with development potential along and around the High Road area.

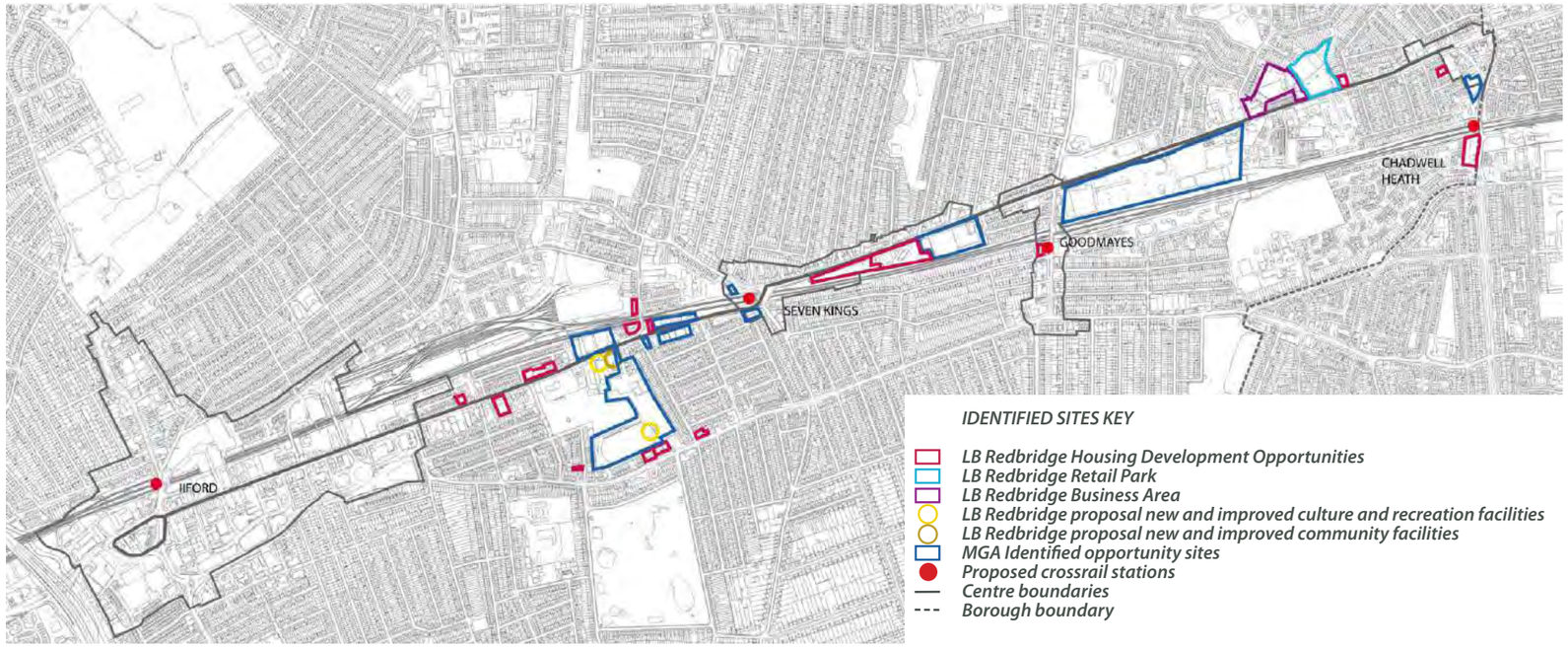
Existing development opportunity sites include those that are identified by LB Redbridge as 'Housing Opportunity Sites', 'Business Area' and 'Retail Park'. Those that are defined as 'Identified Opportunity Sites' are additional sites that have been identified by the consultant team in discussion with LB Redbridge. Many of these sites are within the interstitial spaces between the High Road and the railway which have become 'islands' of under-valued and under-used sites, many of them large in scale. Numerous other smaller sites are currently under used, in decline or considered as longer term 'hot spots' for change which may help unlock further opportunities for the High Road. The facing diagram identifies all of these sites which collectively shows the extent to which the High Road is likely to change.

The development opportunity sites will contribute to LBR's housing targets as well as provide new infrastructure and facilities. The brief asks for the capacity of these sites to be tested in terms of meeting and exceeding LB Redbridge's targets for delivering new housing. This is explored in section *3.0 Opportunity Sites.*

With the number of potential sites along the High Road it is essential to establish clear objectives and guidelines to make sure that the dual aims of enhancing the High Road and improving the public realm are successfully achieved in a sensitive, coherent and integrated way.

Grove Farm

Many of the potential development sites are within the interstitial space between road and rail



View of carpark in Cricklefields site

View east from Aldborough Road towards Seven kings

Homebase car park

Tesco car park

Goodmayes retail park from the east

2.5 Transport Strategy

This section has been produced by Steer Davies Gleave Transport consultants

Pedestrian Links

A clear barrier along the corridor is the presence of the railway line. Limited opportunities exist to cross the line which creates a disjointed pedestrian environment with very little connectivity to the north and south.

There exists two additional pedestrian crossing opportunities over and above the road links at Goodmayes, Seven Kings, Chadwell Heath and Aldborough Road. These are to the west at Francis Street, adjacent to the junction with Connaught Road, and to the east adjacent to the junction with Grove Road.

Both of these pedestrian links are in need of improvement as they currently provide a poor quality and uninviting pedestrian environment. At Grove Road, a pedestrian route runs to the east of Goodmayes Retail Park. The path is currently fenced and creates a dark and uninviting route. It is proposed that this route should be opened up with improved lighting and visibility. This connection would then provide improved access to Mayfield School to the south of the railway and the surrounding residential area.

It is recommended that, more generally, all local pedestrian links should be improved in order that they achieve a Pedestrian Environment Review System (PERS) rating of at least 'Good'.

Cycle Facilities

Along the length of the Crossrail corridor, the provision of cycle facilities varies. In some cases, cycle lanes are very short and are not accompanied by cycle facilities at junctions or signals. Whilst in accordance with TfL design guidelines, this is a difficult route to cycle because of bus stop infrastructure.

The cycle facilities should exhibit more uniformity along the road with every effort made to extend the lengths of cycle route provided. All major road junctions should be provided with Advanced Stop Line facilities for cyclists. Although, as stated within the CRISP report, there is insufficient capacity to accommodate a cycle lane of 1.5 metres along the full length of the High Road, every effort should be made to provide a cycle lane of at least 1.2 metres.

There are two sets of secure cycle parking facilities along the corridor in the form of bicycle lockers – one set at Chadwell Heath and a further set at Seven Kings lorry park. Whilst these are encouraged, they appear to be currently underutilised and could potentially be promoted more widely. Alternative more accessible cycle parking options should also be provided at each of the stations to enable local residents to make use of the rail services for travel into central London.

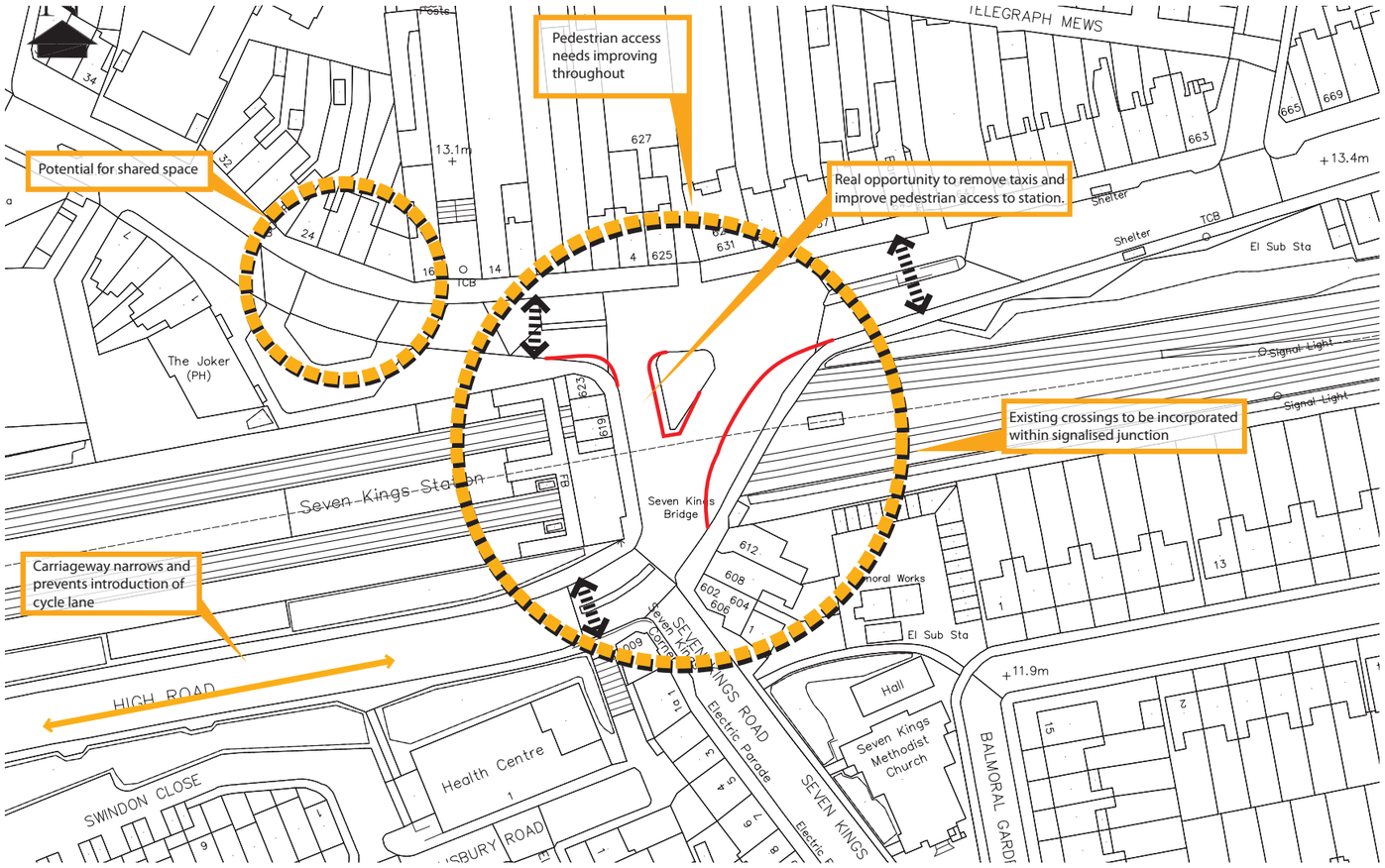
Car Parking Facilities

Parking restrictions vary along the corridor with some areas of short-term parking provided where retail premises are present. This parking keeps the retail frontage 'live' and should therefore be maintained.

However, there appears to be limited parking enforcement and management with inconsistent restrictions along the corridor. Parking should also be avoided adjacent to cycle routes wherever possible. Currently parking is permitted across cycle routes outside peak hours which is unsafe for cyclists and potentially confusing for drivers. Wherever possible, on-street parking should be located within lay-by bays to reduce the impact on traffic flow, bus routes and cyclists.

Taxi rank parking at all stations needs to ensure that pedestrian access is not limited through excessive stationary vehicles.

Wangey Road Junction at Chadwell Heath



Transport Analysis carried out for Seven Kings. Full analysis for other key junctions along the High Road are in the appendix

2.6 Key Connections/accessibility

Whilst many people living north and south of the High Road should be within easy walking distance of the local amenities, they are difficult to access because of major barriers, lack of public transport, poor quality cycle and pedestrian routes and perceived lack of safety. For the communities around the High Road to benefit from existing and new facilities it is vital that new and improved connections are put in place to overcome the dual barrier of the railway and the High Road.

Key objectives are to improve access to:

1. Shops, services, public transport and other public facilities along the High Road.

2. Public green open spaces There are numerous parks and recreation grounds close to the High Road within surrounding residential areas, yet their benefits are not fully realised due to poor accessibility from many areas. Existing parks generally follow the line of historic rivers. Strengthening routes along north-south green corridors related to accessible crossings can improve access to existing parks and help reduce open space deficiency. For example a new bridge link across the railway could give access for communities south of Seven Kings to Westfield Recreation Ground.

3. Stations and improved bus services to reduce car dependency

4. Existing and new health and leisure facilities as shown in preferred locations along the High Road. Improved connections to and along the High Road will give access to the proposed polyclinic and leisure centre within potential new development sites. Improved bus services along the High Road to Barley Lane will improve access to Kings Georges and Goodmayes hospitals.

5. Schools particularly from north of the High Road to both Goodmayes School and the proposed new Academy at Cricklefield.

Proposed key connections:

1. Along and across the High Road through improved bus services, cycleway and pedestrian crossings

2. Connaught Street to Ley Street The current footbridge over the train depot and railway sidings is difficult to find, of poor quality, not DDA compliant, feels isolated, enclosed and unsafe. Substantial improvements to the footbridge and to the public realm from Connaught Street to Ley Street are required to improve accessibility, visibility, natural surveillance, lighting and safety.

3. High Road / Aldborough Road As one of the few existing bridges over the railway it is already an important road connection but improvements are required for pedestrians. Surrounded by potential development sites including the proposed Academy, this junction and north south connection has the potential to serve a wider population and become a significant public space.

Steps and ramps from the High Road to bridge level linked to new crossings could improve pedestrian access to the bridge and to areas south of the High Road.

4. Seven Kings is a key road intersection and public space that is currently traffic dominated with roads isolating the station from the shopping parade to the north. Removal of the roundabout, new pedestrian crossings, potential shared surfaces and public realm improvements could enhance north south connections and access to the station. Bus stops should be relocated closer to the station to improve transport interchange.

5. Westfield Recreation Ground to the south The residential streets around Gartmore Road to the south are particularly remote from the High Road, parks and stations and improved north south connections would be beneficial. Future development of the Lorry Park & adjacent sites gives the opportunity for creating a new green link from Westfield Recreation Ground, bridging the railway to Gartmore Road and southwards.

6. Goodmayes station to High Road Streetscape improvements with new and improved crossings at the High Road / Barley Lane junction could help access and orientation to the station.

7. Grove Road, High Road to Goodmayes The existing enclosed pathway and bridge link fail to adequately serve the strong desire line from the north to Goodmayes and the secondary school. Similar to the Connaught Street footbridge, it is enclosed, isolated, and feels very unsafe. Substantial improvements are required or a longer term alternative of a DDA compliant bridge.

8. Chadwell Heath station to High Road Chadwell Heath station is remote from the High Road. Improvements to the public realm including new and improved crossings combined with alterations to traffic flow at the High Road / Station Road / Wangey Road junction would improve access and orientation to the station. Consideration should be given to making one arm of the High Road / Station Road / Wangey Road triangle 2-way traffic and pedestrianising the other.

Permeability:

There is high permeability to existing areas where north south residential streets join the High road. To improve permeability, particularly across the High Road, it is important to continue the grain and scale of existing street patterns into new sites. This will not only provide visual and physical connection across into the depth of new sites but will also relate to the existing street rhythm, grain and character.

2.7 - Community facilities

There is currently a need for a new polyclinic, swimming pool and primary school within the area. Possible locations are proposed for each of these. These need to be related to catchment populations, and should have good transport links. Land availability is a key factor in determining their location. The Lorry park & adjacent sites and Goodmayes Retail Park offer sufficient area to accommodate these uses, are highly visible and accessible.

Polyclinic:

Potential locations for a new polyclinic in the High Road area were discussed at a meeting with the PCT on 12.01.09. It was recognised that public transport would need to be improved to support a polyclinic at the King George Hospital site. Locations along the High Road may be preferable due to greater accessibility and regeneration potential. There are three potential sites:

1. King George hospital Barley Lane:
The polyclinic would benefit from being on a known healthcare site, sharing existing medical facilities and economies of scale. However it is not well served by public transport and is remote from the High Road.

2+3. The Lorry park & adjacent sites and Goodmayes Retail Park sites:
A polyclinic could be integrated within mixed use development on both of these sites with the benefits of:

- An active shop frontage onto the High Road
- Visibility within the centre of the community it serves.
- Health link to a new swimming pool and/or other community facilities
- Access to good quality public transport.

Both sites could comfortably accommodate the required 2,500 sqm if they are joined. However it is possible for them to be next to each but separate.

Swimming pool/leisure centre:

A new swimming pool and leisure centre are required to replace the old pool located on the south side of the High Road near to Aldborough Road. A proposal for a new pool on the existing site has been granted outline planning permission. Potential co-existence and integration of the pool and approved Academy school is considered positive, but there are financial viability issues to resolve in terms of apportionment of revenue from the leisure centre to the school and associated management issues. Alternative locations include the Lorry Park & Adjacent Sites & the Tescos/ Goodmayes Site. In total there are three potential sites:

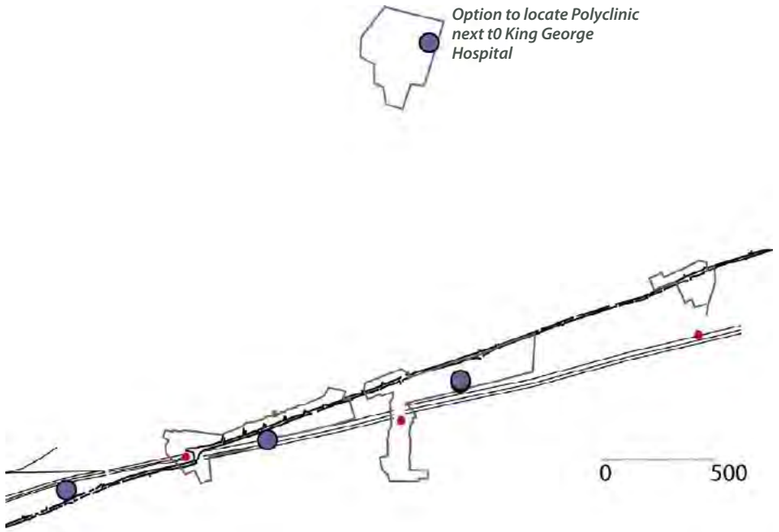
1. Existing swimming pool site:

- The new pool would benefit from being in an established location

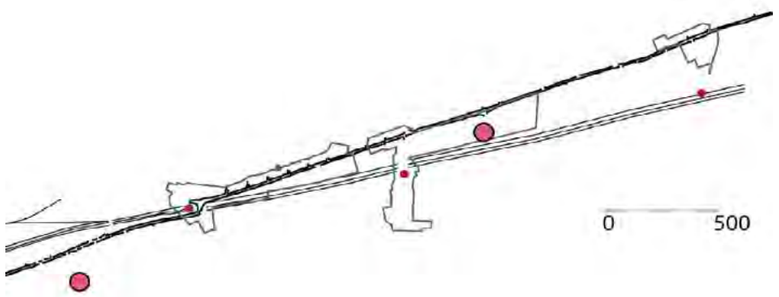
- It would have a prominent street frontage
- It benefits from good transport links
- It could coexist with the Academy

2. The Lorry park & adjacent sites and 3. Goodmayes Retail Park sites:

- The new pool could be integrated into new mixed developments
- It would have a prominent street frontage
- It benefits from good transport links
- It could coexist with a polyclinic or other community facilities
- Both sites can easily accommodate the scale of pool and leisure centre.



Location options for proposed Polyclinic

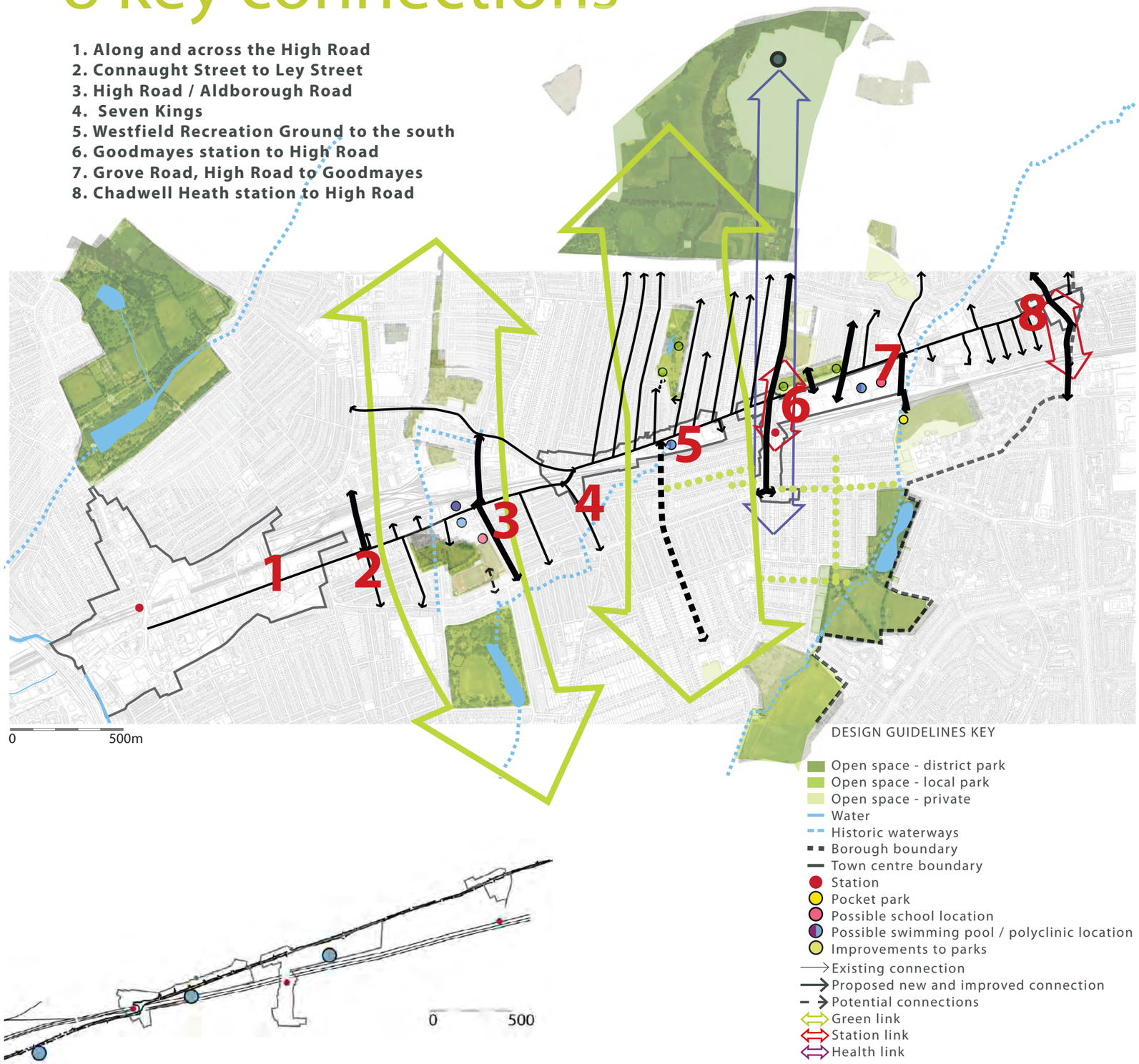


Location options for proposed School

Location options for proposed Swimming Pool/Leisure Centre

8 key connections

1. Along and across the High Road
2. Connaught Street to Ley Street
3. High Road / Aldborough Road
4. Seven Kings
5. Westfield Recreation Ground to the south
6. Goodmayes station to High Road
7. Grove Road, High Road to Goodmayes
8. Chadwell Heath station to High Road



2.8 - Design Principles for new development along the High Road

Section 1.0 High Road Identity concluded that the High Road has two complementary characteristics:

1. A singular identity as a linear public space with part of its strength lying in its consistency, rhythm and repetition.
2. A space which serves numerous communities each with their own specific identity. There is a distinct hierarchy of places along the road which have varying levels of intensity and significance, each with specific qualities and characteristics.

The dynamic between consistency and specificity is key to developing the character and identity of the High Road. We support diversity and difference but also recognise that without coherent order it can lead to fragmentation of the High Road and a cluttered and chaotic streetscape. Equally, too much regularisation may destroy its vibrancy and singular identity.

The design principles in this section are aimed at developing a framework which is sufficiently defined to reinforce the singular identity of the High Road but also flexible enough to avoid being restrictive, particularly as circumstances change.

The task is twofold :

1. To define principles for making the High Road thrive and to improve its general environment;
2. To identify the key places, where, against a more consistent background, specific treatment is warranted. This approach:

- Supports the thematic areas of the High Road.
- Expresses the hierarchy of spaces and places.
- Improves legibility and orientation.

Developing the edges

Maintaining activity along the High Road is not just about non-residential uses at street level. It also relies upon the mix of uses vertically and within the depth of built fabric which extends from the edge of the road. The urban block studies in section 1.0 demonstrated how the 'front-of-house' / 'back -of-house' relationship are mutually supportive and how this 'gives weight' to the vibrancy of activity of the public space.

The proximity of people making, selling, buying, passing by, working in offices, playing, being fed, entertained and residing. This is a recipe which already exists in the areas where activity is most intense along the High Road and is one that should be replicated or interpreted within new developments to create a successful and sustainable urban environment.

The diagrams opposite show proposed generic sections for different scales of development sites. The generic section acts as a guideline to demonstrate the principle of continuing 'front-of-house' / 'back -of-house' layering and how uses can be combined vertically and behind street frontages. They show variations between small to medium more compact sites where depth of block is limited, to larger sites where there is greater depth back from the High Road. These represent the varying conditions within the divergent interstitial space between road and rail but are equally applicable as exemplars to be interpreted elsewhere.

Each section, small scale to large scale, adopts the following key principles:

- **'Front-of-house' non-residential** uses facing onto the High Road at ground floor level. In the context of the High Road this will be mainly retail, cafes, restaurant, takeaways and also other uses which have counter or shop front type uses already described. Any use which promotes 'drop-in' by the passing public will generate activity within the public space. Offices at ground floor will not generate a good level of activity and is the only non-residential use which should be restricted.
- **Offices or residential above -** if possible in combination.
- **'Back-of-house' uses set behind -** workshops, light industries, studios, gyms, community spaces etc. - a broad range of activities which require larger volumes of space and which may or may not have entrances or frontages onto the High Road.
- **Integration of large retail (big box) units -** where there is enough space (e.g. tesco site) large retail units can be integrated into sites with sufficient depth.
- **Basement car parking** to avoid car parks at street level.

Other small individual 'pocket' sites along and set back from the High Road should be treated on their own merit. New buildings should follow general principles of maximum 5 storeys unless at key junctions or public spaces where taller landmark buildings may be appropriate. Non-residential ground floor uses fronting onto the High Road is the priority.

Residential plots could change to mixed use within local centres and within the mixed use 'expansion' zones outside local centre boundaries. Elsewhere, to the north and south, the character of residential areas should be preserved. However there may be individual plots outside the expansion zones which may be acceptable for change - for example locations where there is a deficiency of daily provision shops to support increased population.

new developments follow front-of-house, back-of-house principle. Non-residential street frontages, vertical stacking of mixed uses, diverse back-of-house activities within the depth of block.

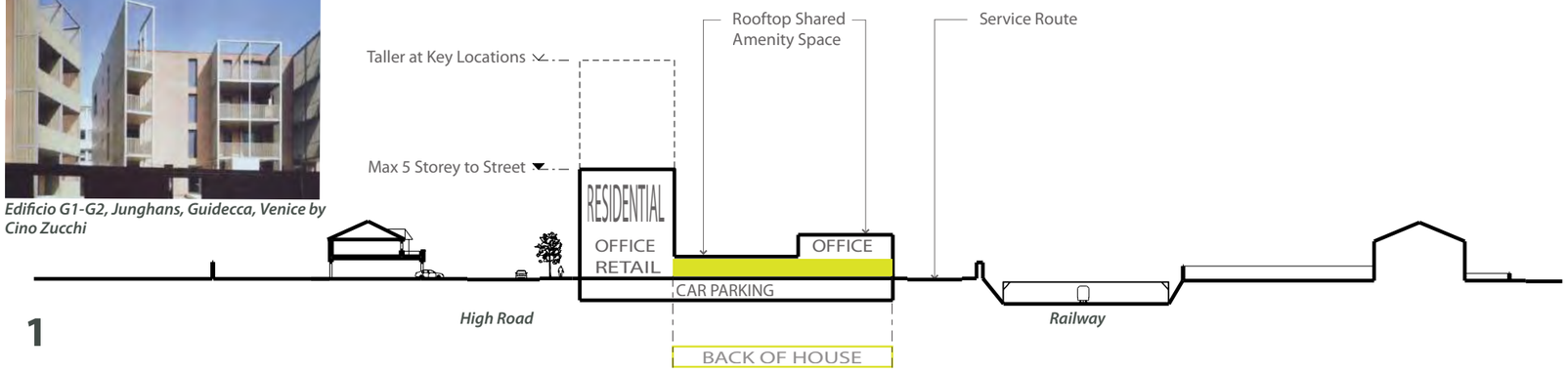
The Iroko building Coin Street, London is a good example of a 5 storey mixed residential development with private and shared amenity space

1. small to medium

More compact sites where depth of block is limited - e.g. within narrower sections of the interstitial space between road and rail and smaller development sites.

- Front-of-house: non-residential active frontages onto the High Road; offices and residential above
- Back-of-house: related, or other, non-residential activities with or without frontage onto the High Road - gyms, workshops, industries, community hall etc.. Rooftop shared amenity space serving flats above
- Shared courtyards accessed from the side roads or mews
- Basement car parking

Edificio G1-G2, Junghans, Guidecca, Venice by Cino Zucchi

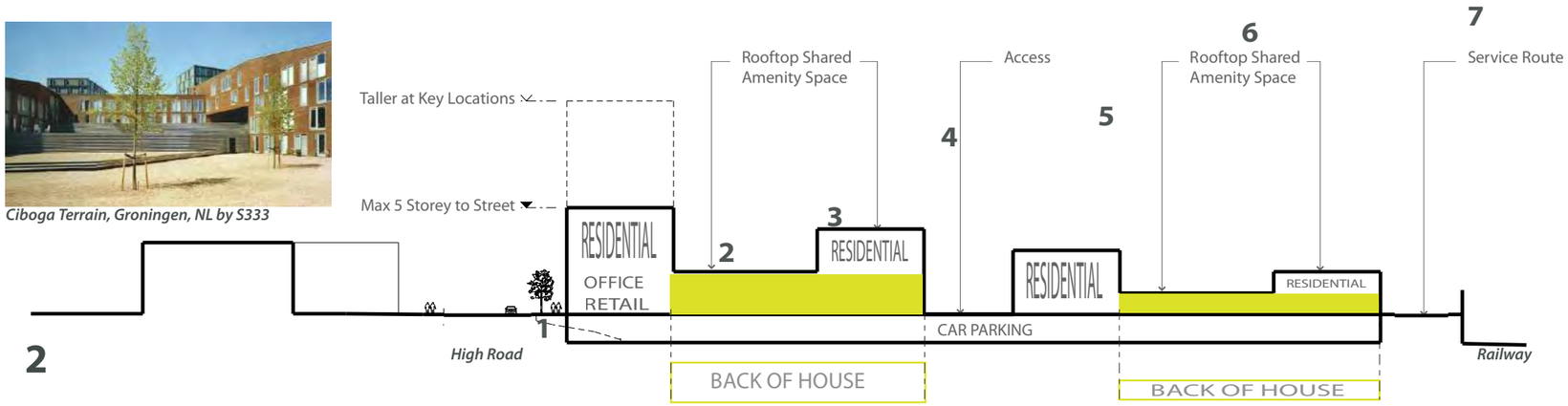


2. large

Larger sites where there is greater depth back from the High Road within wider sections of the interstitial space between road and rail e.g. Homebase site, Goodmayes Retail Park.

- Front-of-house: non-residential active frontages onto the High Road; offices and residential above.
- Back-of-house: related, or other, non-residential activities with or without frontage onto the High Road - health centre, polyclinic, medium size retail, showrooms, light industries with rooftop shared amenity space serving flats above
- New streets relating to surrounding street patterns with the grain continuing from north to south
- Basement car parking

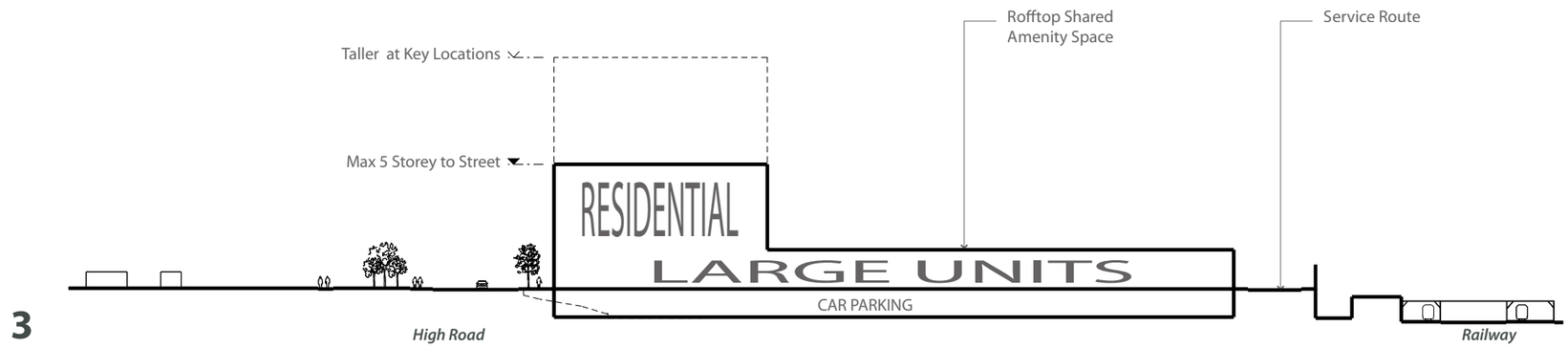
Ciboga Terrain, Groningen, NL by S333



3. large units

Where big box retail units currently occupy existing sites they should be integrated into new mixed developments.

- Front-of-house: non-residential frontages onto the High Road; offices and residential above.
- Back-of-house: large retail units or other large floor area uses e.g. bowling alley, warehouse, with rooftop shared or public amenity space.
- Range of scales and compatible uses such as start up units, shared workshops, light & creative industries
- Service access from railway side
- Basement car parking



2.9 Development Framework

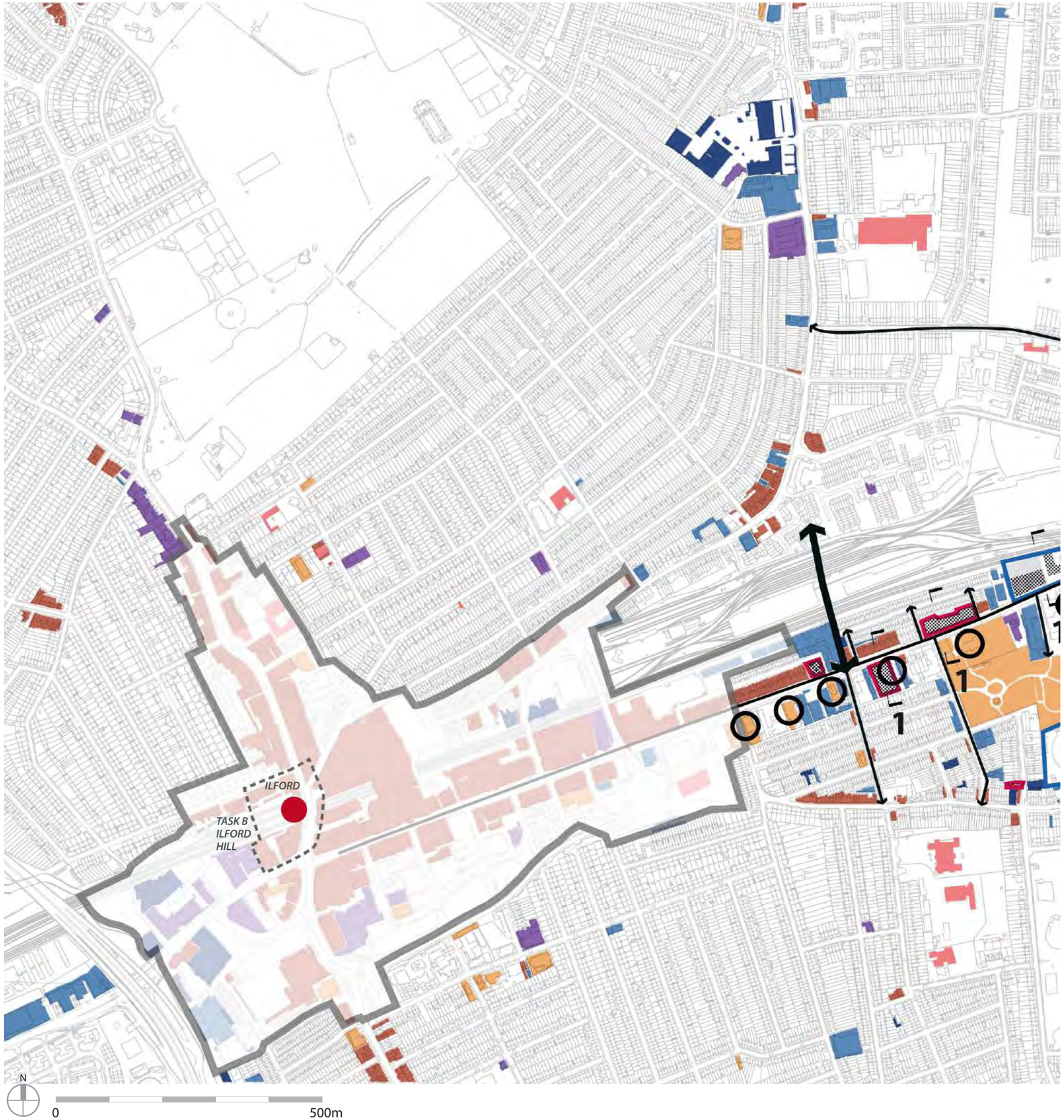
This drawing shows the strategy for new development, community facilities and landmark locations in relation to key connections and existing uses. It also identifies places where generic building sections apply.

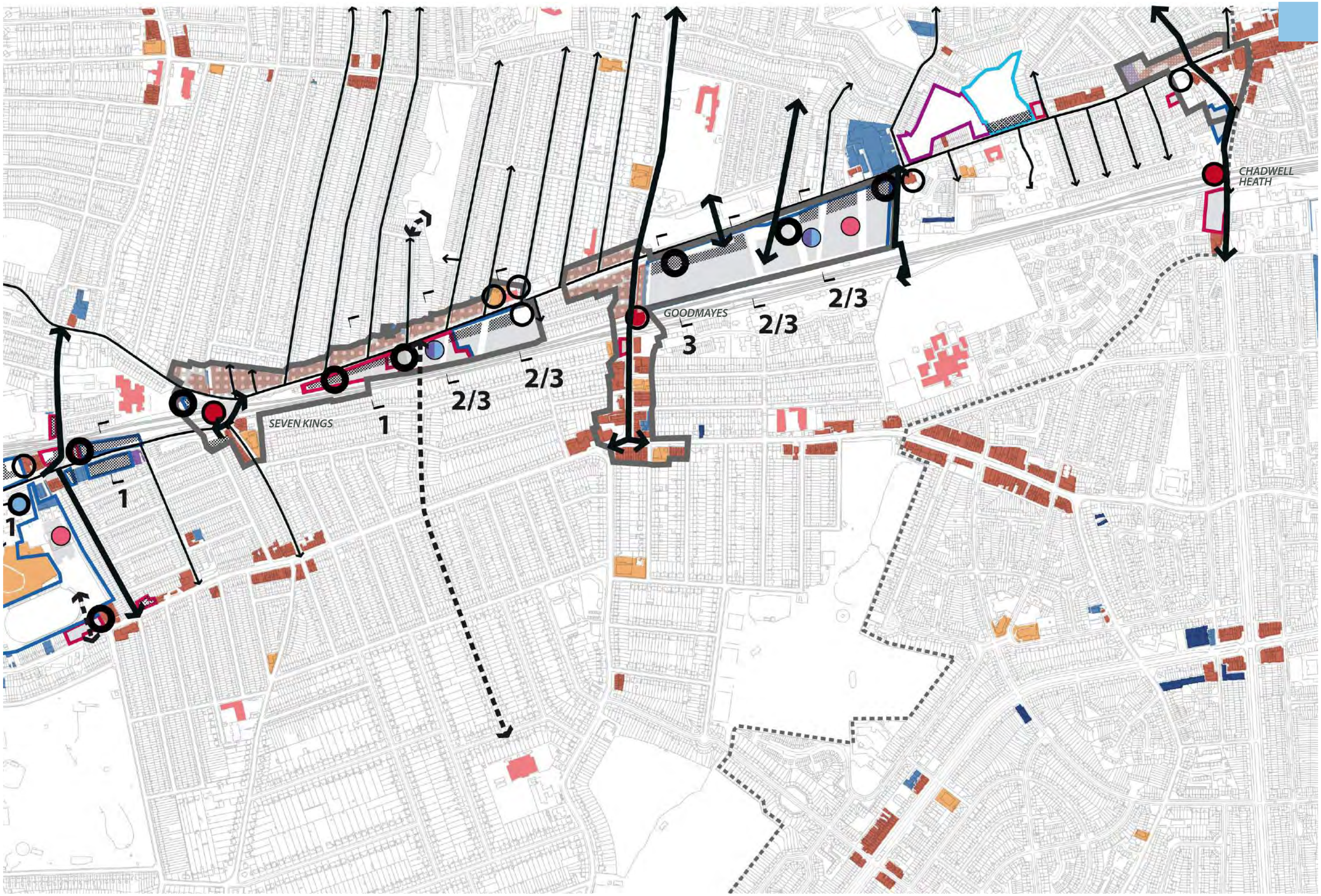
DEVELOPMENT FRAMEWORK

KEY

- Institutional - schools, health, leisure
- Retail
- Industrial
- Religious
- Office
- Warehouse
- Existing connections
- Proposed new and improved connections
- Potential connections
- Water
- Landmarks
- Borough boundary
- Town centre boundary
- Station
- Proposed possible school location
- Proposed possible swimming pool / polyclinic location
- LBR Housing opportunity sites
- LBR Business Area
- LBR Retail Park
- Identified opportunity sites
- Ground floor non-residential to be maintained within centre boundaries
- Proposed landmarks
- Max 5 storey development
- Max 4 storey development

NB: Buildings without use colour are residential




CHADWELL HEATH
GOODMAYES
SEVEN KINGS
1
1
2/3
2/3
3
2/3
2/3

2.10 Landscape

Although there are large areas of green space within surrounding areas it is not evident along the High Road itself. A noticeable absence of trees and other planting gives it a stark character which is discordant with the green suburban surroundings, and a major contribution to the poor quality of public space.

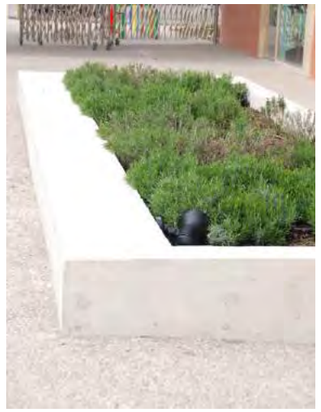
The following principles define a strategy for tree planting along the High Road linked to new development and other streetscape improvements which will substantially help to improve the overall environment of the road.

- Uniform avenues of trees have been considered and deemed unfavourable because of existing narrow site conditions and existing uses.
- Differentiated, thematic tree planting has been chosen instead as it can respond to specific site conditions along the length of the road
- Larger scale trees along the High Road are used to express urban character; smaller scale along residential side roads to express suburban character.
- Relate density of tree planting to specific frontages, connections, junctions, green links, landmarks, new developments and uses.
- Create 'clusters' of more dense tree planting to express the proximity of green open spaces close to the High Road and to extend the 'green links' from North to South.
- The southern edge of the High Road has scope for more expansive and differentiated tree planting related to the large new development sites.
- A view into tree canopies will substantially improve the outlook from north facing buildings along the south side of the High Road.
- Define building alignments in key locations, particularly along the south side to increase pavement widths in front of new buildings allow for breathing spaces incorporating more trees Deep set backs at a few key locations relate to crossing points.
- In certain places, use large planters for trees and other plants to double as seats
- Introduce trees around recessed parking bays on the north side: extend pavements at junctions with side roads and introduce new peninsulas within parking bays to allow tree planting.
- Use different species of trees as part of a marker system and hierarchy a constrained space may warrant columner trees, whereas more space could support larger and wider growing specimens
- Plant trees to residential streets with species appropriate to residential areas - for example flowering cherry trees. These trees should stop short of the High Road, for example not encroach into the proposed 'expansion zones' or conflict with 'urban' type trees.
- High Road type trees may be used on north - south roads connecting parks to the high road and along green links - for example roads connecting Westfield Recreation Ground to the High Road.
- No trees in front of existing and new 'landmark buildings'

The diagrams on the opposite page show generic proposals for tree planting within proposed pavement widths related to new developments. The composite plan on pages 42 and 43 indicates where these principles could be applied along the High Road.

Planters can provide a wider range of planting and colour. They can be designed to double as seating.

Well designed seating provide places to rest, meeting



'Well I can't think of a better symbol of regeneration and growth than a tree. I can't think of a better way of bringing people together than encouraging them to actively care for their own patch. Most people live in cities. City parks and planted squares are small pauses in the breathless narrative of traffic and work. We need those pauses. Our bodies benefit from the filtered air the trees provide and from the natural sound barrier any planting creates. Trees are not a luxury. The poorer the area, the more it needs trees.'

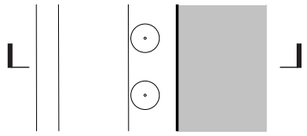
Jeanette Winterson, writer.

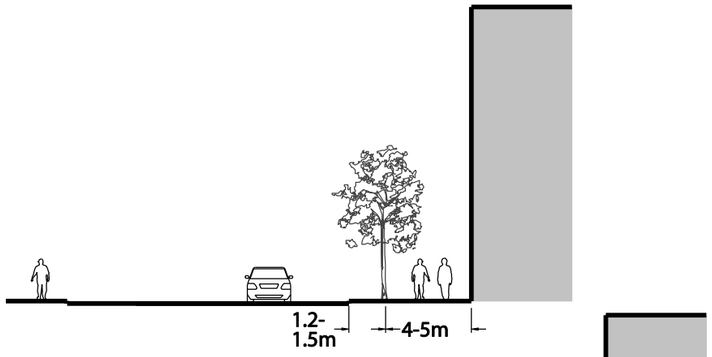
A noticeable absence of trees and other planting gives the High Road a stark character which is discordant with the green suburban surroundings, and a major contribution to the poor quality of public space.

A

Single Row Tree Planting

Pavement 4-5m in width

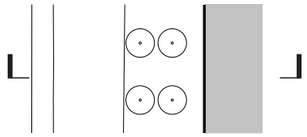


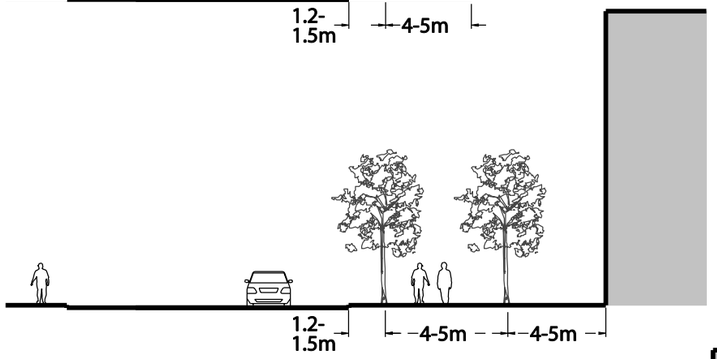


B

Double Row Tree Planting

Pavement 9.2-10.5m in width

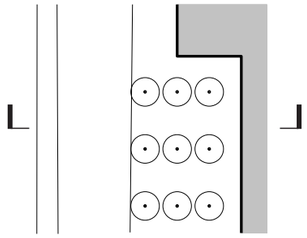


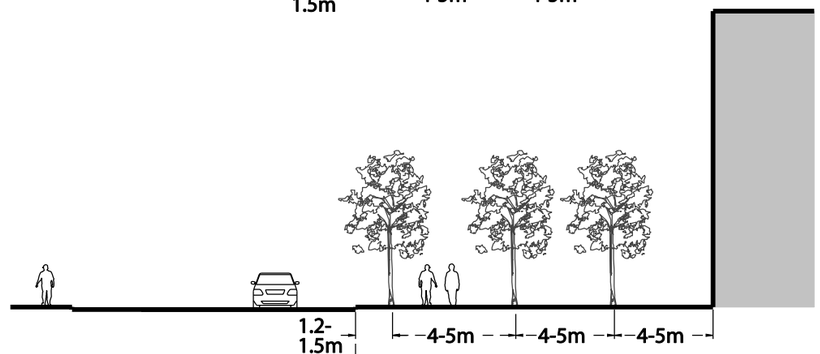


C

Triple row tree planting

Set back building facade

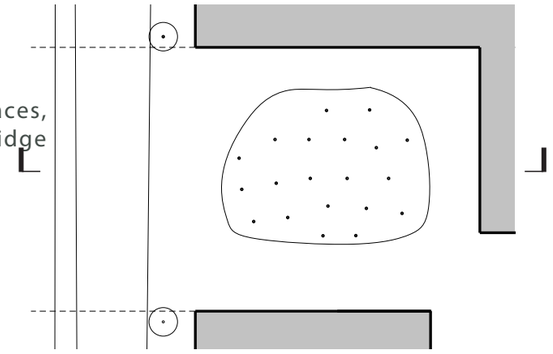




D

Tree planting cluster

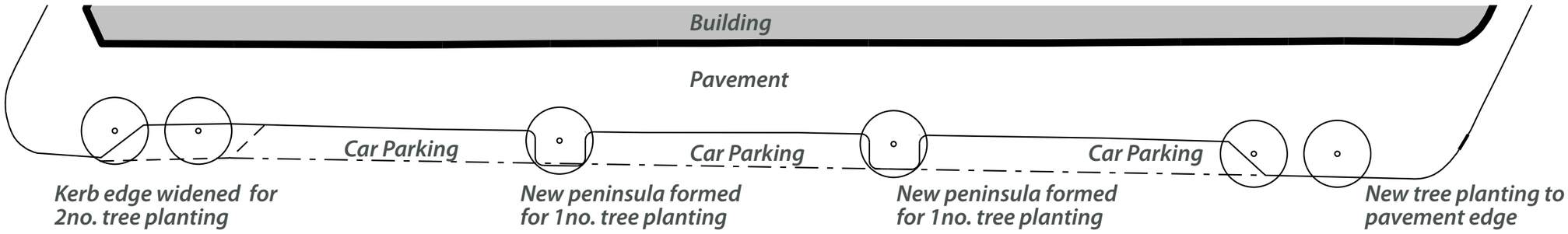
Key locations - public spaces, forecourts, crossings, bridge connections



E

Tree planting to north side of High Road

Car parking proposal



Proposed tree planting strategy

2.11 Public Realm

The apparently chaotic nature of parts of the High Road is an expression of the density and diversity of activities along its edges and in certain respects is something to be celebrated rather than suppressed. There is a fine balance between allowing free reign and instilling order. Too much of one or the other can be detrimental. However, it is clear that the High Road is currently too disordered in many places and too sterile in others.

Our aim is to find a framework which balances an order which interprets the best parts of the High Road (the deep parades), allows the diversity of activities to flourish in places where it already exists and where it is lacking in places where buildings turn away; and through opportunity extend the spectrum of settings to support the range of genuine street life from the most animated and noisy to places where quiet conversation or solitary rest can take place.

The key objectives for improving the quality of public space of the High Road for pedestrians are through:

- De-cluttering
- Removing barriers to desire lines and pedestrian flow
- Preventing cars from obstructing pavements
- Improving position, number and arrangement of crossings
- Widening pavements in key locations - bus stops, resting places, gathering places, public buildings.
- Supporting LBR shop front guidance to de-clutter facades
- Improving lighting and signage
- Improving quality of surfaces
- Providing a range of settings to support the public street life - places to meet, sit, chat, wait, relax, walk; settings for street markets and pavement stalls.

Shop Frontages

The visual display of goods and services from consumables to cars and parts is vital to the active life of the High Road. Support of local retail shops, convenience stores and a wide range of services draws people to the High Road and encourages passing trade. Other uses such as car showrooms, larger retail units also have a valuable role to play.

Parades and shop-front terraces are currently the focus of greatest activity. We support the aims of LBR Shopfront Guidance to improve the consistency of shop frontages within these areas. Consistency, rhythm and de-cluttering of extraneous signage will help to alleviate the visual chaos of the High Road. However, this should not result in sanitisation of frontages. Special cases should be protected and encouraged to mark important places.

Within new developments, there is more scope to vary the scale, rhythm and proportion of retail frontages to suit the scale and type of retail unit. As stated earlier it is essential that all new development has active retail or other non-residential frontages onto the High Road.

De-clutter

With increased density of population and retail provision it is essential to improve movement and access along and across the High Road. Currently the road is traffic dominated, is congested, constricted and cluttered. Visual chaos makes orientation difficult. For it to work as a public space it needs to be more pedestrian user friendly and de-cluttered of all constraints to movement. Fences and barriers should be removed from crossings and junctions. Crossings improved and new crossings introduced on desire lines. Bins, signs, and other obstructions to be removed from the edges of pavements and replaced as part of an overall High Road strategy. Recent public realm improvements within Ilford town centre adjacent to the library are a good example of uncluttered public space which shows principles which can be adopted for the rest of the High Road and are broadly in line with TfL Streetscape Guidance.

In the short term the highest priority is to remove railings and rid cars from pavements. Improved policing of illegally parked cars will make a big difference. Bollards and trees can prevent cars mounting the pavement edge, although this may be difficult to integrate with car showrooms where an integral part of the trade is to drive cars on and off the pavement.

Settings for diverse activities
New development gives the opportunity for a range of public spaces to provide settings for diverse activities which are not currently adequately provided for - places to sit, meet, play, wide pavements for market stalls, cycle parking, planting etc.

Better signage and wayfinding
Introduce and/or replace existing cluttered signage with new clear, consistent signs particularly around major junctions and connections.

Improved surfaces
Along with de-cluttering general improvement to pavement surfaces will improve the quality, consistency and visual appearance of public space and movement along it. In accordance with TfL streetscape guidance:

1.New footway paving should be in keeping with the streetscape character area and take into account local distinctiveness in special areas.

2. Good quality paving design and materials and an uncluttered street furniture layout aids legibility and enhances pedestrians' perceptions of the built environment.

Raised road surfaces at key junctions and points along the High Road will help to physically and visually connect the two sides.

Ilford town centre - uncluttered public space with raised road surface to connect both sides.

Quick win Projects
Remove barriers, at key junctions and crossings
Remove high level signage
Improve policing of illegal parking and introduce restrictions
Rationalise and replace signage, particularly around stations

Our aim is to find a framework which interprets the best parts of the High Road, allows diversity of activities to flourish and extend the spectrum of settings to support street life from the most animated and noisy to places where quiet conversation or solitary rest can take place.

Kensington High street is a classic example of uncluttered streetscape

2.12 Materials

The principle aim is to unify the main character of the High Road as a singular linear space through consistency of materials and street furniture.

As set out on page 18, the existing condition of public space along the High Road often comprises poor quality surface materials and street clutter, and suffers from a lack of greenery.

Materials should be functional, robust, low maintenance and attractive. They should also relate to the specific conditions of each place and be part of a thematic hierarchy which relates one place to another.

A stone (granite) palette is proposed for the major public spaces: Aldborough Road, and at the stations at Seven Kings, Goodmayes and Chadwell Heath. Large concrete slabs are proposed for the spaces in between: the majority of the length of the High Road. The use of a higher quality material in the main public spaces will convey the message of their importance and will help to promote their use as shared public places designed for higher levels of footfall.

Smaller still, textured and random units can be used in certain areas to complement the large smooth slabs to combine a sense of landscape with urban qualities.

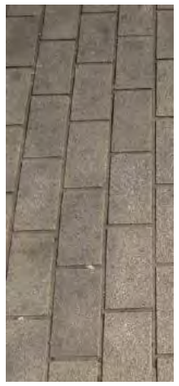
Key principles:

- Stone palette around the stations
- Concrete palette in areas in between
- Large slab units
- Granite kerbs throughout
- Smaller stone and concrete units, within areas relating to green landscape links and related to tree clusters.
- Resin bound gravel tree pits

Stone Palette

Large unit granite paving

York stone paving



Granite setts

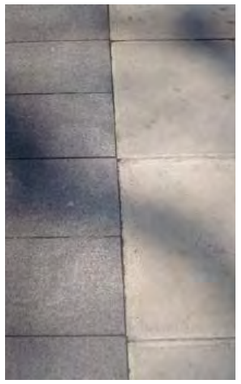
Irregular stone units

Palette of Details & Interface of Materials

Resin bound gravel tree pits

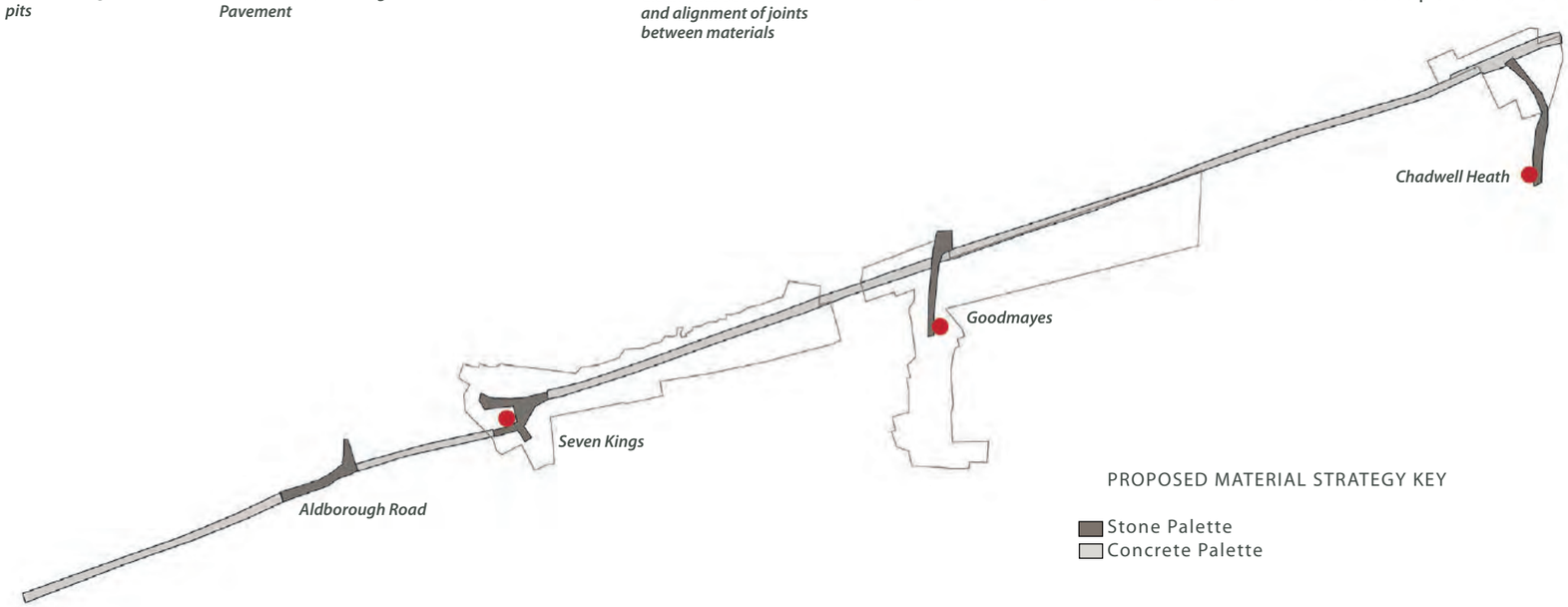
Tactile Hazard Warning Pavement

Granite kerbs



Clean lines between and alignment of joints between materials

Good quality paving design and materials and an uncluttered street furniture layout aids legibility and enhances pedestrians' perceptions of the built environment. TfL Streetscape Guidance



2.13 Street furniture

The recent street improvements in the town centre at Ilford to the area outside Ilford Central Library have introduced a range of stainless steel street furniture related to a palette of stone surfaces. These broadly accord with the TfL street guidance and we propose to continue this core stainless steel palette along the High Road.

Within special areas such as those related directly to the stations along the High Road, where a stone palette of surface materials is being proposed, additional items will be introduced such as granite bollards and bench seating relating to granite surfaces.

TfL Streetscape Guidance

Lighting

High Road: Street Lighting Examples extracted from TFL's Streetscape Guidance

Stainless Steel

Granite

Bollards

Major public spaces: Granite bollards. Image from Hope street, Liverpool
High Road: stainless steel bollards to match existing within the area outside Ilford Central Library.

Bus Shelter

High Road and major public spaces: Stainless steel 'landmark bullet' 3/4 bay bus shelter ' from TfL Streetscape Guidance

Litter Bin

High Road and major public spaces: Stainless steel Litter Bins from the 'woodhouse' - Geo range.
Example shown is Geo2 Litter Bin Mark 2

Cycle Storage

High Road and major public spaces: Stainless steel cycle storage to match the area outside Ilford Central Library.

Wayfinding and Signage

High Road and major public spaces: Stainless steel Signage and wayfinding posts from the 'woodhouse' - Geo range. Examples shown: Geo Keep Left Hoop and Finger Post

Seating

Major public spaces : Granite bench
High Road: Metal and Timber bench. Image from the area outside Ilford Central Library.

2.14 Public Realm Framework

This drawing shows the strategy for the public realm improvements and landscaping works along the High Road. It also identifies places where the tree planting treatments apply.

PUBLIC REALM GUIDELINES

KEY

- Open space - district park
- Open space - local park
- Open space - private
- Existing connections
- Proposed new and improved connections
- Potential connections
- Water
- Landmarks
- Borough boundary
- Town centre boundary
- Crossrail Station
- Proposed Pocket park
- Proposed Improvements to parks
- Proposed Cherry Blossom tree planting
- Proposed Plane tree planting
- LBR Mayors street trees programme
- LBR Housing opportunity sites
- LBR Business Area
- LBR Retail Park
- Identified opportunity sites
- Development sites
- **A** Tree planting strategy A
- **B** Tree planting strategy B
- **C** Tree planting strategy C
- **D** Tree planting strategy D
- **E** Tree planting strategy E
- Proposed concrete material strategy
- Proposed stone material strategy

Westfield Recreation Ground
School Playing Field
Barley Lane Recreation Ground
CHADWELL HEATH
School Playing Field
GOODMAYES
SEVEN KINGS
Goodmayes Park
South Park
Allotments

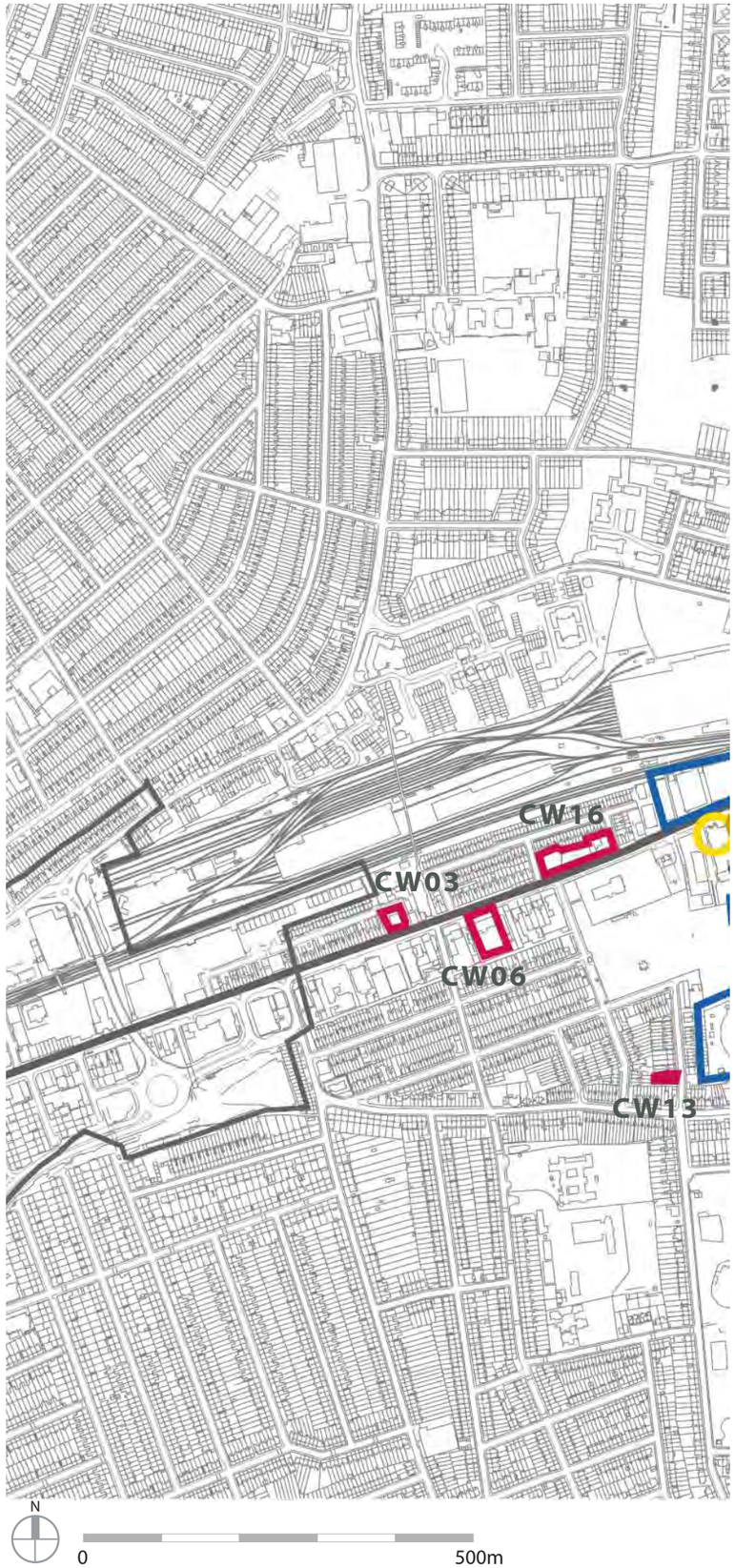
3.0 Opportunity Sites

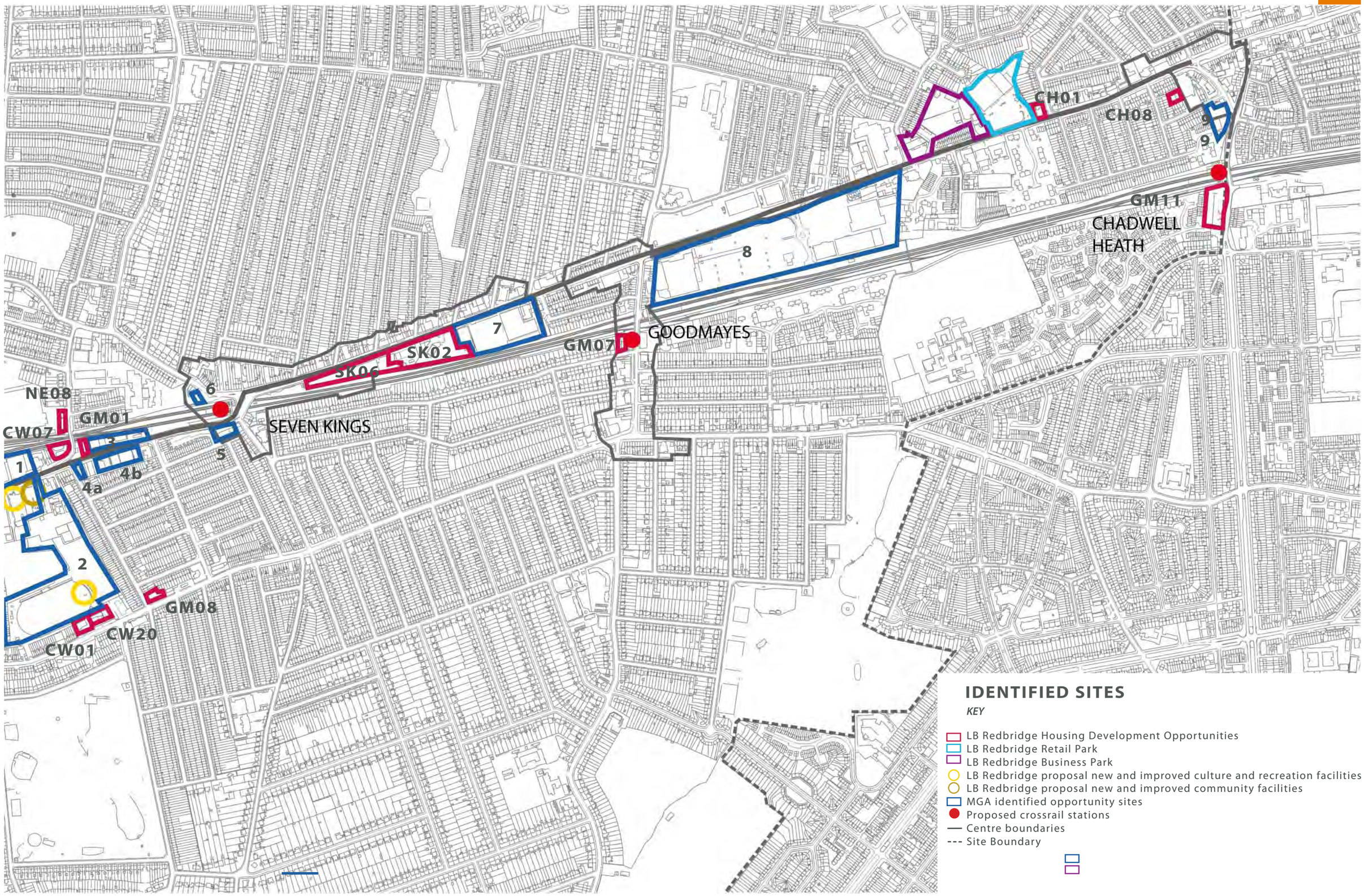
3.1 Known Sites

The previous section outlined design principles for the High Road as a whole. This section develops the principles and looks at how they can be applied and interpreted within the identified development sites. In particular it focuses on the larger opportunity areas of Aldborough Road, the Lorry Park and adjacent sites, Goodmayes Retail Park (Tesco) and Grove Farm setting out a framework of urban design principles, uses, massing and scale from which to estimate development capacity.

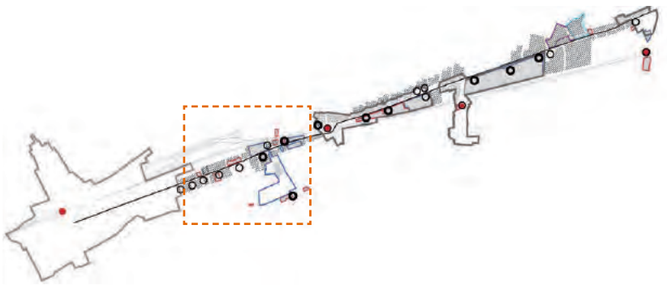
The identified sites are:

	Site code for LBR sites from LBR Proposals Map/ or number for further identified sites	Area (Hectares)
LB Redbridge Housing Development Opportunity sites	**CW01** 205-223 Green Lane	0.10
	CW03 395-405, High Road	0.07
	CW06 Balfour House, 390-398 High Road	0.23
	CW07 561A High Road	0.10
	CW13 1 Pelham Road, Ilford	0.02
	CW16 461 High Road	0.23
	NE08 1 Aldborough Road, Seven Kings	0.08
	GM01 569 High Road, Seven Kings	0.04
	GM08 83-85 Highbury Gardens, Seven Kings	0.08
	GM11 Car park adjacent to Chadwell Heath Station	0.31
	CW20 225-227 Green Lane, Ilford	0.14
	SK02 674-700 High Road, Seven Kings	1.10
	SK06 Seven Kings Car park & Lorry park, High Road	0.60
	GM07 58-64 Goodmayes Road, Goodmayes	0.06
	CH01 Chadwell Heath Service Station 1023 High	0.07
	CH08 8a Cedar Park Gardens, Chadwell Heath	0.06
Further identified opportunity sites	**1** West of Aldborough Road	0.74
	2 Cricklefields Site	3.85
	3 East of Aldborough Road	0.29
	4a & b South of Aldborough Road	0.34
	5 Health Centre site, Seven Kings	0.13
	6 The Joker Pub site, Seven Kings	0.03
	7 Homebase Site, Seven Kings	1.30
	8 Tesco Site, Goodmayes	7.66
	9 Car Park site, Chadwell Heath	0.11




CH01
CH08
9
GM11
CHADWELL
HEATH
8
7
GOODMAYES
GM07
SK02
SK06
6
NE08
GM01
CW07
SEVEN KINGS
5
1
4b
4a
2
GM08
CW20
CW01
IDENTIFIED SITES
KEY
LB Redbridge Housing Development Opportunities
LB Redbridge Retail Park
LB Redbridge Business Park
LB Redbridge proposal new and improved culture and recreation facilities
LB Redbridge proposal new and improved community facilities
MGA identified opportunity sites
Proposed crossrail stations
Centre boundaries
Site Boundary

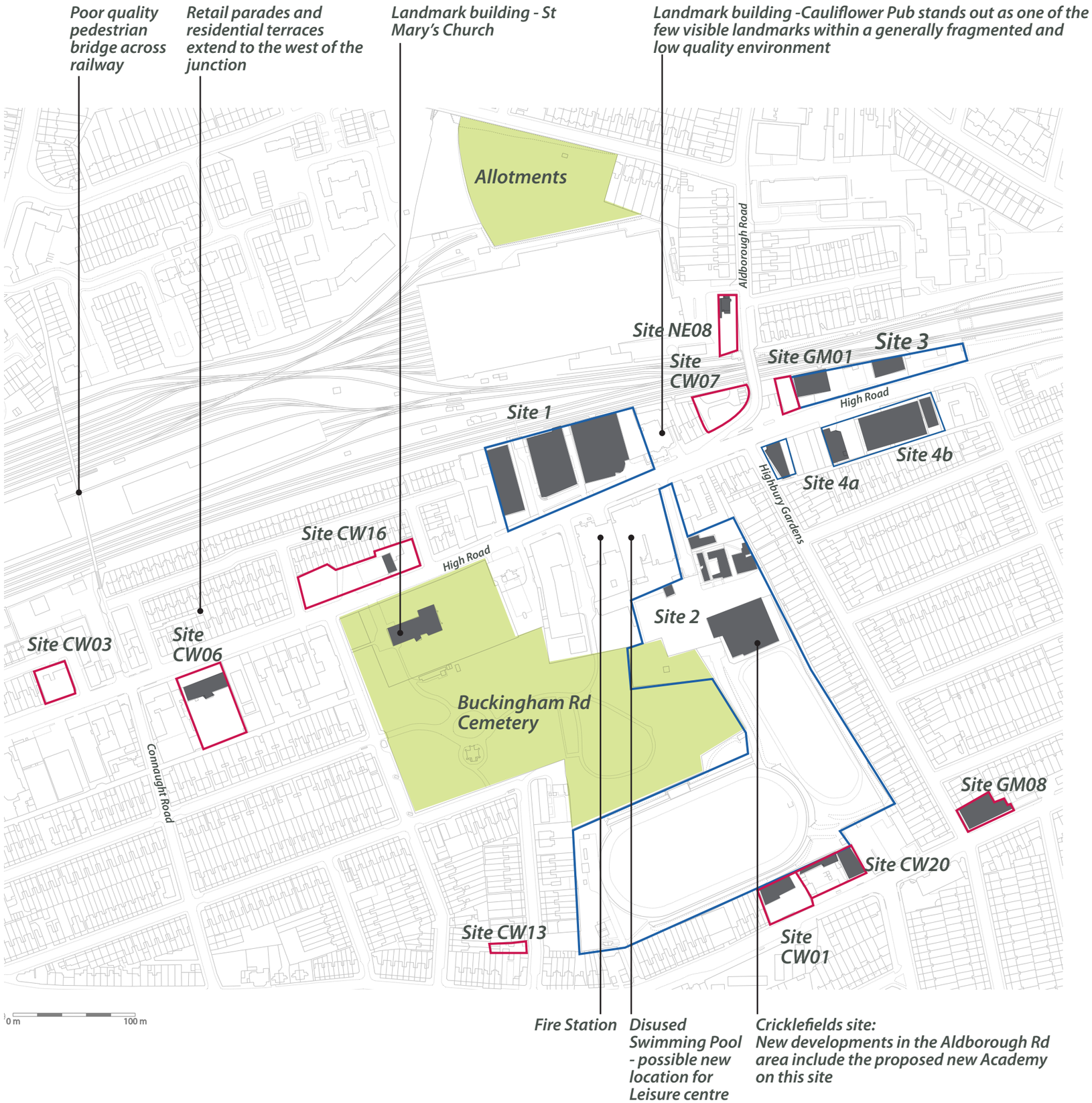
3.2 Aldborough Road and High Road environs



Aldborough Road itself is one of the few vehicular and cycle crossing points over the railway, however, it is one way (south to north) and awkward to cross as a pedestrian due to the change in levels. Either side of the junction, this stretch of the High Road lies between both Ilford and Seven Kings centre boundaries. Due to both the underused/vacant sites in the interstitial space between road and rail and size of plots and ownerships it is prone to incremental changes. It is important that change does not result in a discontinuity of the High Road fabric.

Issues and objectives:

- Develop the connection between Aldborough Road and Highbury Gardens as a key north-south connection
- Develop the continuity of the active High Road between Ilford and Seven Kings.
- Within the context of incremental change create continuous non-residential frontages to the High Road and general continuity of building line.
- Improve the High Road/Aldborough Road junction as a key north-south crossing point for pedestrians.
- Connect both sides of the High Road, making sure that residential areas have good access to existing and new community facilities. Access to the new Academy on the Cricklefields site is of particular importance
- Avoid a 'patchwork' of individual building types and styles related to individual sites. Strike a balance between consistency of High Road frontage and diversity which is part of its strong current character.
- Relate to scale and grain of surrounding areas and street patterns
- Improve the public realm by de-cluttering and improving pedestrian movement north-south, east west.
- Integrate community facilities within new developments Consider options - e.g. a new swimming pool, Academy - along with the identity they have on the High Road.
- Introduce tree planting to support the green link, existing and new public spaces related to building frontages.



Retail parades and residential terraces

Cauliflower pub

Aldborough Road bridge over railway

Aldborough Road is one of the few vehicular crossing points over the railway. With the new Academy and new development sites it will become a vitally important connection and public space

Aldborough Road approach

Design Principles for Aldborough Road Area

1. Improve bridge footway to High road connection

- Replace existing crossing linking Aldborough Road to Highbury Gardens with new Toucan crossing.

2. Pedestrian steps and ramp access to bridge footway

- New step and ramp access from pavement level east of the junction to connect bridge footway

3. Improve existing pedestrian bridges over sidings

- Replace bridge enclosure with a more transparent mesh and better lighting in the short term to improve safety along the bridge itself.
- Replacement of the bridge with a new 4m wide pedestrian and cycle bridge with DDA ramps is a preferred longer term option.

4. New leisure centre

- New leisure centre on the existing swimming pool site integrated within a mixed residential block.
- Potential to be a taller landmark building visible along the High road.
- Redevelopment of the brownfield site opposite offers potential for integration of a new community facility -e.g. the polyclinic.

5. New public spaces fronting High Road

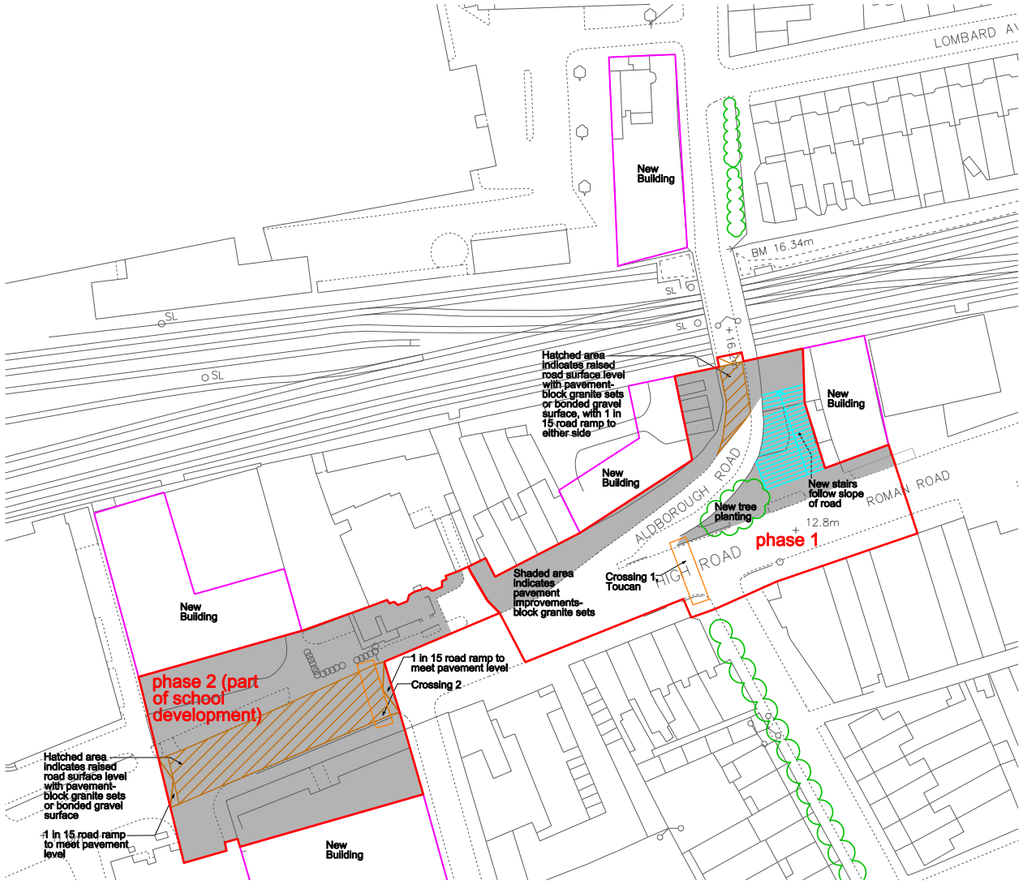
- New steps and ramp to High road (2) provides potential for a new linear public space which forms part of a public space between the junction, Academy entrance and potential new leisure centre.
- A significant set back to a new building on the swimming pool site will provide a drop off/pick-up and gathering space serving the possible leisure centre and Academy entrance.
- Planting related to set backs of building facades to consist of clusters of different species.

6. Continuous building line with set backs at the key public spaces at Aldborough road junction and in front of new leisure centre

- New buildings to extend to the boundaries, possibly even with party walls to maintain the sense of continuous terraces along the High Road.
- Pavement widening and tree planting in line with key landscape principles outlined in the previous section.

7. Mixuse non-residential to ground floor

- Uses should follow the front-of-house, back-of-house principle of retail facing onto the High Road, residential and offices above; other non-residential uses set behind, where depth of site permits.
- Retain the diverse activities of the area by retaining the existing light industrial uses within the back-of-house zone, particularly within the road/rail interstitial space.



Description of proposed phases:

Phase 1:

- New cycle and pedestrian crossing (toucan)
-Pavement improvements including stairs to follow the slope of Aldborough road

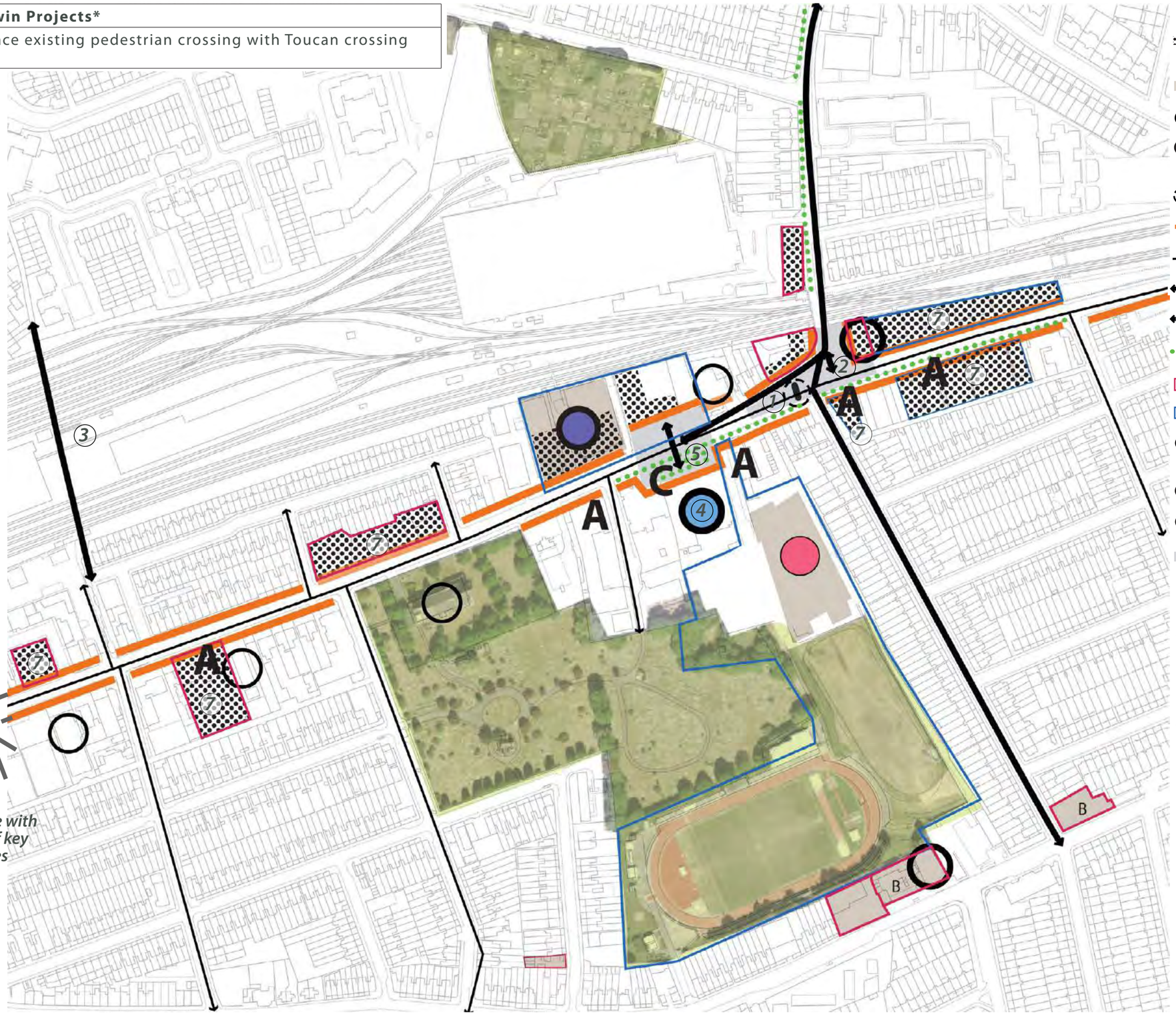
Phase 2:

-New public space as part of school development inlcuding raised shared road surface and crossing

Drawing produced for costing (see appendix)

Quick win Projects*

1. Replace existing pedestrian crossing with Toucan crossing



KEY

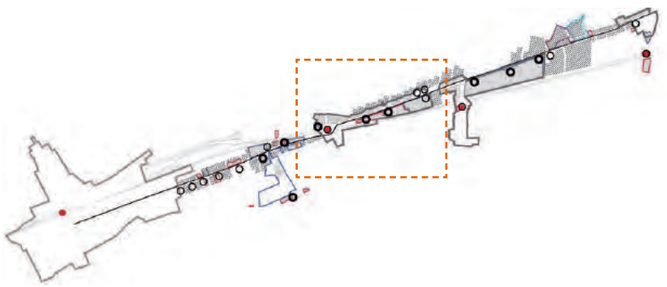
- Max. 5 storey development with non-residential active frontages facing onto the High Road at ground level
- Max 4 storey development
- Existing landmark building
- Proposed landmark building to mark Aldborough Rd junction and new leisure facility
- Proposed Toucan crossing
- Active frontage
- Existing connection
- Existing connection to be improved
- Potential new connection
- Proposed Tree Planting
- LBR Housing opportunity sites
- Identified opportunity sites
- Proposed possible school location (Academy proposal)
- Proposed possible swimming pool/leisure centre
- Proposed possible polyclinic location
- Proposed public space improvements to upgrade surface materials in relation to key buildings: granite slabs to public building frontages/thresholds and new steps, and raised road levels

A Single row Plane tree planting to south side of High Road accommodated by widened pavement as part of new developments

B Double row tree planting

C Triple row tree planting clusters of different species within recesses relating to key building facades. Density of tree planting in this location helps to mark the public building and relates to the green link

3.3 Lorry Park and Adjacent Sites

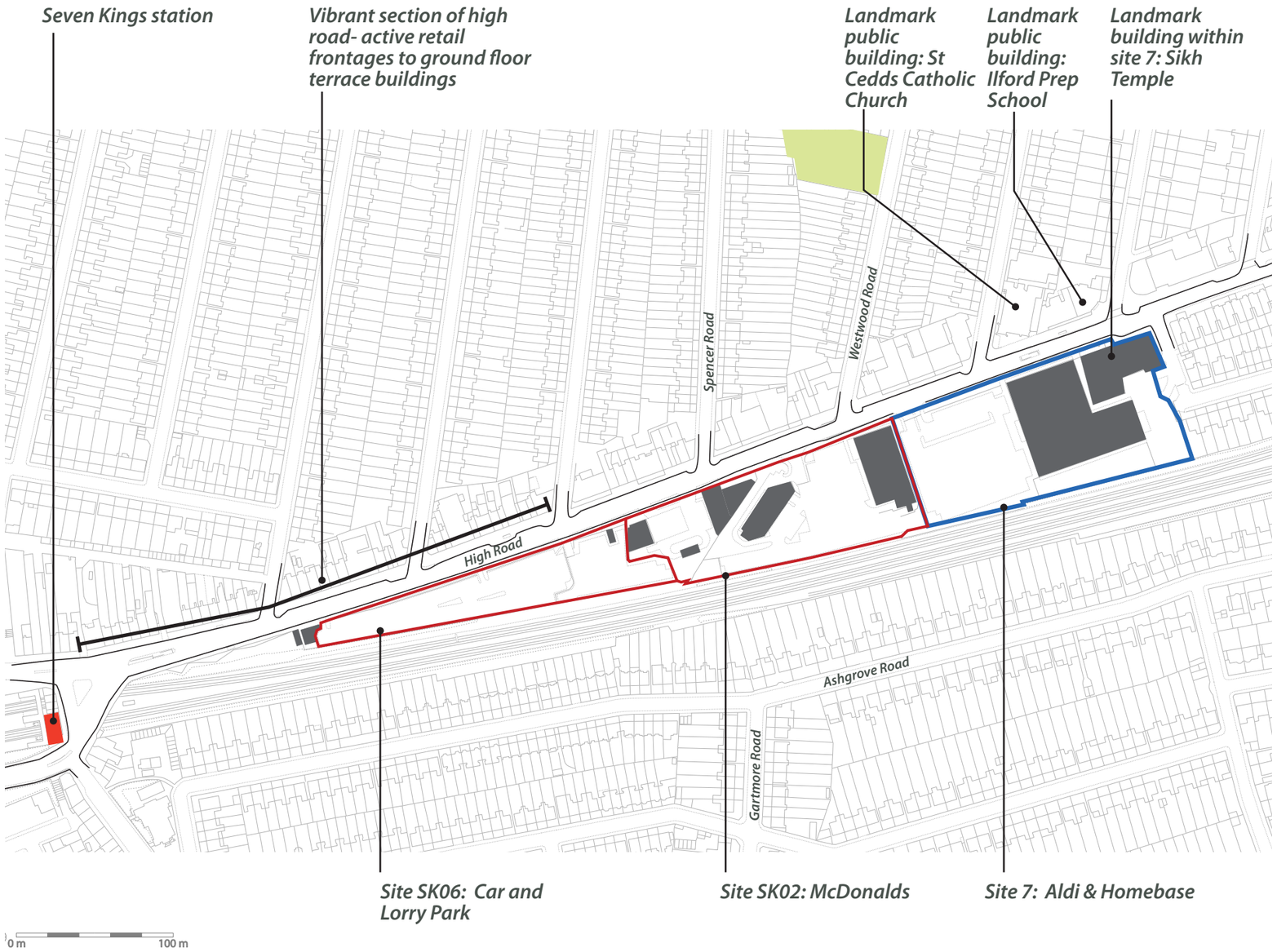


This considers the Lorry Park site (SK06) which is already subject to development proposals along with adjacent sites occupied by McDonalds (SK02), Aldi, Homebase (7)each characterised by large areas of surface car parking without active frontages onto the High Road.

The sites, all within Seven Kings local centre boundary, occupy a triangular interstitial zone between road and rail narrowing from approximately 70metres deep at Goodmayes Avenue to a single point at Seven Kings.

Issues and objectives:

- Define residential capacity within a mixed development facing onto one of the most vibrant and active parts of the High Road
- Create continuous non-residential frontages to the High Road
- Help to connect both sides of the High Road
- Support and enhance the character of the local centre and the High Road
- Avoid an imposing mono-block
- Relate to scale and grain of surrounding areas and street patterns
- Improve the public realm
- Look at integration of community facilities within new development - e.g. a new swimming pool and/or Polyclinic
- Introduce tree planting
- Improve access to green open spaces where possible
- Provide the opportunity for a bridge link to the south



Big box retail next to Sikh Temple

Tripartite windows to terrace facades

Car showrooms

Cluttered streetscape

The existing Sikh Temple at the eastern end is part of a significant cluster of public buildings which include the Primary School and St Cedds Church opposite.

Homebase opposite St Cedds Church

Design Principles for Lorry Park and Adjacent Sites

1. Extend existing street pattern

- Extend existing pattern of streets from the north side of the High Road southwards to establish an equivalent rhythm of frontages and access points on both sides and provide visual connections across and into the depth of the site.
- Exception is at the western end (the Lorry park site) where the plot depth is too shallow to extend streets. At this point set backs and local change in building height could reflect the grain of streets opposite and avoid an overscaled monoblock.

2. Green square at centre of development

- Form a new open space opposite Spencer Road on the approximate alignment of the Seven Kings Water culvert to emphasise and express the green link connection described earlier.
- Extend in future as either a green bridge or 4m pedestrian and cycle bridge over the railway cutting to connect into Gartmore Road to the south to benefit residential areas and address green open space deficiency
- Cluster different tree species within the new open space.

3. New crossing at Blythswood Road junction

- Improve existing signalised crossing as a single 'puffin' crossing rather than the 'sheep pen' used currently by reducing the road width.
- Extend the 20mph school zone to cover the area around the Sikh temple as well due to the occasional high numbers of visitors.

4. New crossings and public space improvements at Seven Kings station

- Strengthen the connection of the station to the surrounding edges with new crossings as part of a wider public space improvement strategy, as detailed in the following section.

5. Prominent location for a polyclinic/swimming pool

- The suggested location for the polyclinic and swimming pool would give them prominence and frontages onto the High road and the new open space.

6. Mix-use non-residential to ground floor: create active frontages to south side of High Road

- Non-residential active frontages are shown along the entire length of the combined site to extend the active High road eastwards from Seven Kings and to complement the shop front terraces on the north side.
- Uses should follow the front-of-house, back-of-house principle of retail facing onto the High Road, residential and offices above; other non-residential uses set behind, where depth of site permits.

7. Landmark taller buildings at Western 'nose' of development and at public space along High Road

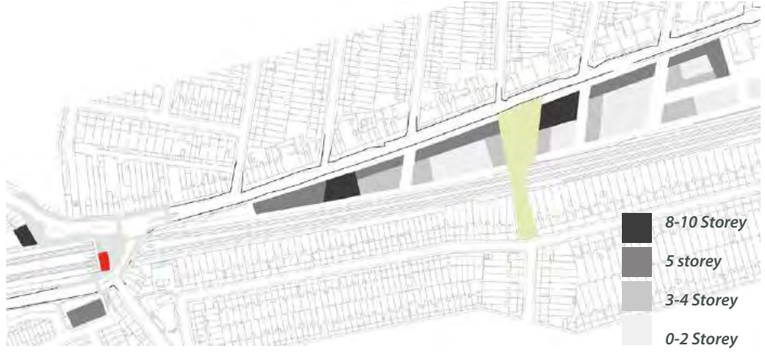
- Up to 5 storeys along the High Road frontage with taller landmark buildings at the western 'nose' and to mark the corner of the new open space.
- Lower building heights towards the south to provide good sunlight and rooftop shared amenity space to residential blocks along the High Road.

8. Public space at Western end of site

- The removal of the unsightly and obstructive advertising hoardings close to Seven Kings, along with deck widening creates a new public space at the western end of the site.

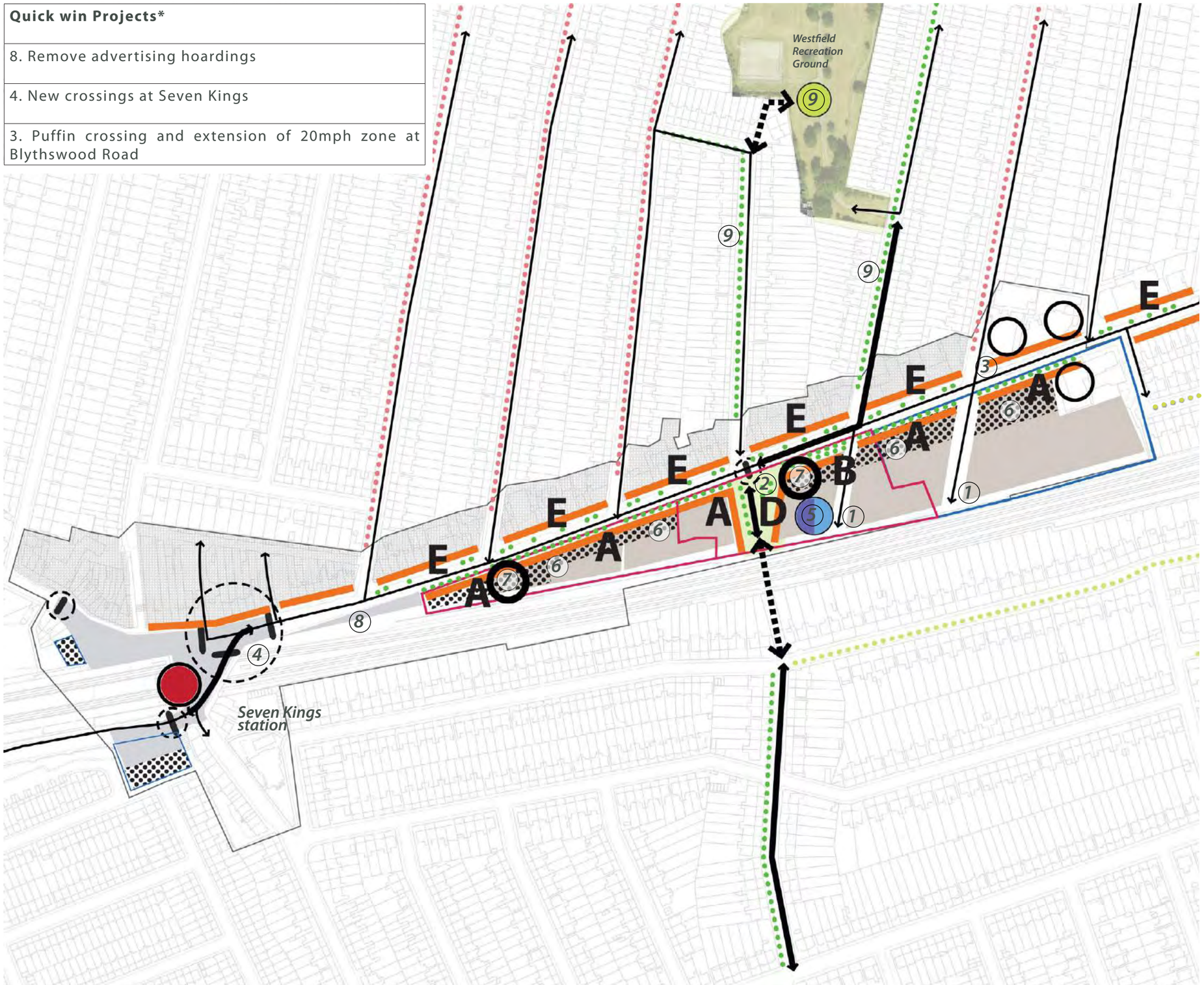
9. Improve access to Westfield Recreation Ground

- New Plane tree planting to Spencer Road and Westwood Road to emphasize rout to park
- Potential for improved link at west side of park



Site massing study

Quick win Projects*
8. Remove advertising hoardings
4. New crossings at Seven Kings
3. Puffin crossing and extension of 20mph zone at Blythswood Road



KEY

- Max. 5 storey development with non-residential active frontages facing onto the High Road at ground level
- Max 4 storey development
- Existing landmark buildings
- Proposed landmark buildings at western 'nose of development site, and to mark new green public space
- Proposed crossing at Seven Kings and to connect green public space
- Active frontage
- Existing connection
- Existing connection to be improved
- Potential new connections to connect across railway and into Westfield Recreation Ground
- Proposed Tree Planting
- Proposed Cherry Blossom Tree Planting to residential streets
- LBR Mayors street trees programme
- LBR Housing opportunity sites
- Identified opportunity sites
- Proposed possible swimming pool/polyclinic at centre of development fronting green public space and High Road
- Proposed improvements to park entrance
- Proposed public space improvements to upgrade surface materials at Seven Kings station (shown in detail in following section) and at western edge of site

A Single row Plane tree planting to south side of High Road accommodated by widened pavement as part of new developments

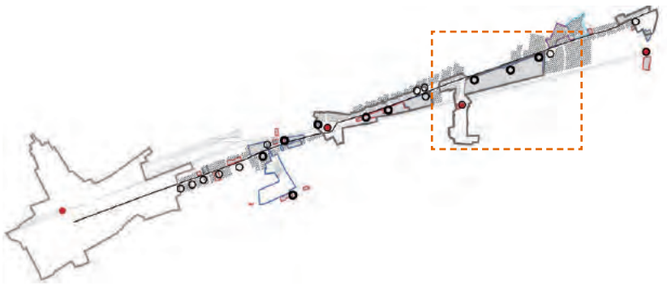
B Double row tree planting at set back facade to mark green public space

D Tree planting cluster of different species in green public square helps relates to the green link north to south

E Tree planting to north side of high road relates to car parking (see landscaping section 2.10 for further detail)

- Seven Kings Station

3.4 Goodmayes, Retail Park (Tesco) and Grove Farm



Goodmayes is centred on the busy traffic dominated junction of the High Road, Barley Lane and Goodmayes Road. The station itself is set back from the High Road and is not visible from the junction. To the east is Tesco owned and occupied site: recent discussions between LBR and Tesco indicate Tesco's interest in integrating an expanded store within a mixed residential development for the site. The Grove Farm retail site to the north of the High Road east of site 8 is currently undersued with car parking facing the High Road and has the potential for mixed use development.

Issues and objectives:

- Integrate an expanded Tesco store within a mixed residential development with a capacity of approximately 600-800 units based on current infrastructure capacity. (NB. based on urban design principles in section 3 the whole site could support the provision of up 1500 residential units).
- Create continuous non-residential frontages facing onto the High Road at street level.
- Improve permeability into and through the site. A 'destination' close to the railway tracks will improve movement from the High Road into the site.
- Avoid street level car parks in favour of basement car parks.
- Avoid an imposing mono-block.
- Integrate rather than displace large scale retail units within dense, mixed, new development
- Connect both sides of the High Road - create links to Barley Lane Recreation Ground opposite.
- Improve visual and physical connections south between the High road the station and Green Lane; north to Barley Lane and the Hospitals.
- Improve crossings at Barley Lane junction to promote pedestrian movement along the High Road to the east.
- Look at potential for integration of a new swimming pool, polyclinic and/or primary school within new development.
- Introduce tree planting along the southern edge opposite the Recreation Ground.

Goodmayes station: located 140m from High Road is not visible from the Barley Lane High Road and Junction

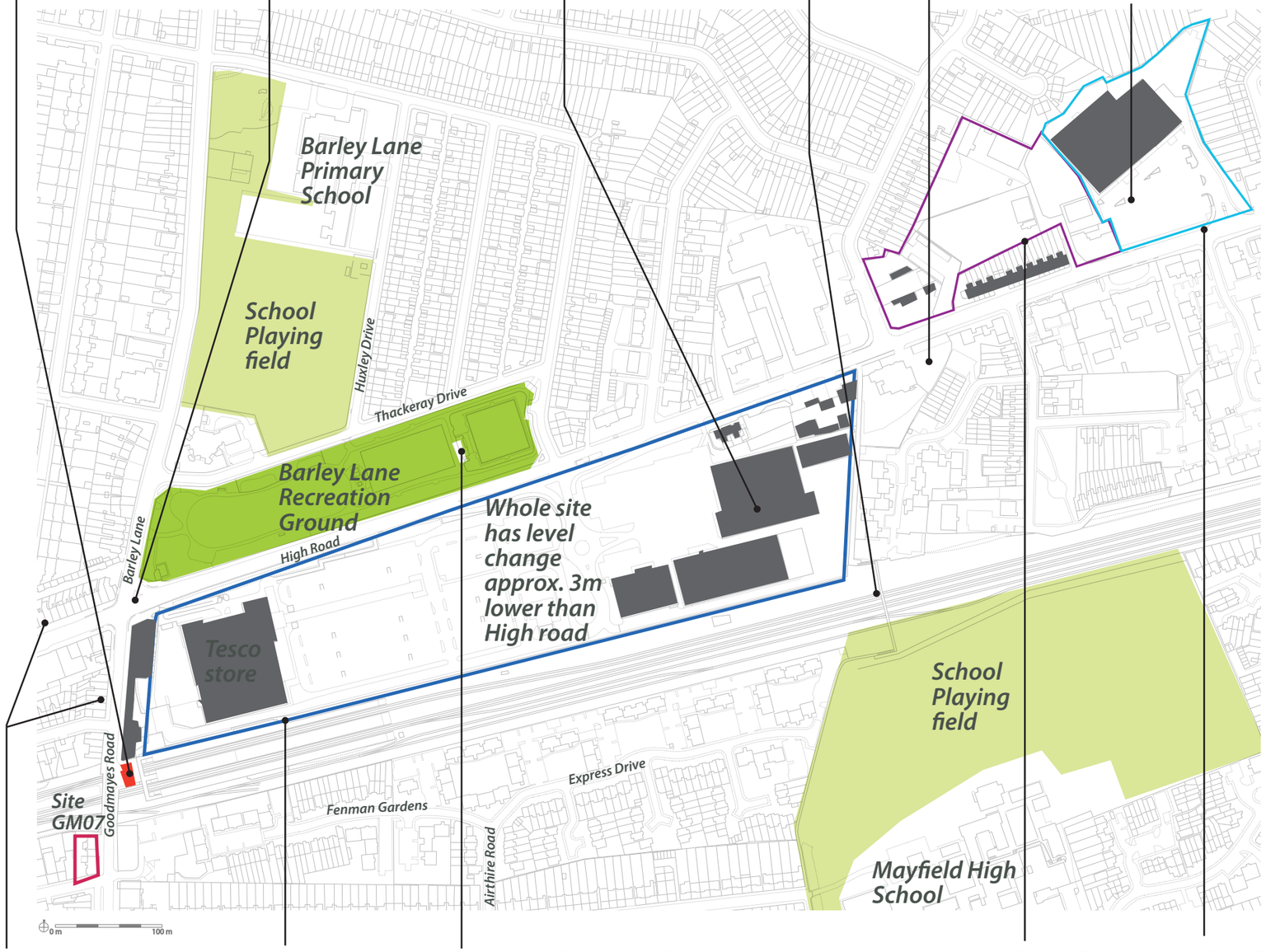
Barley lane and High Road junction: busy and traffic dominated as link north to King George hospital and A12

Goodmayes Retail Park: consists of single storey retail units with large areas of car park

Existing poor quality pedestrian bridge

Suburban character to east of site

Grove Farm Retail park: currently creates a further 'gap' in the frontage with car park facing the road



Active retail parades extend westwards along the High Road and south along Goodmayes Road to the station and Green Lane.

Site 8

Barley Lane Recreation Ground is one of the few green open spaces which front onto the High Road but is an under-used amenity: perimeter fencing, lack of entrances, make the park difficult to access.

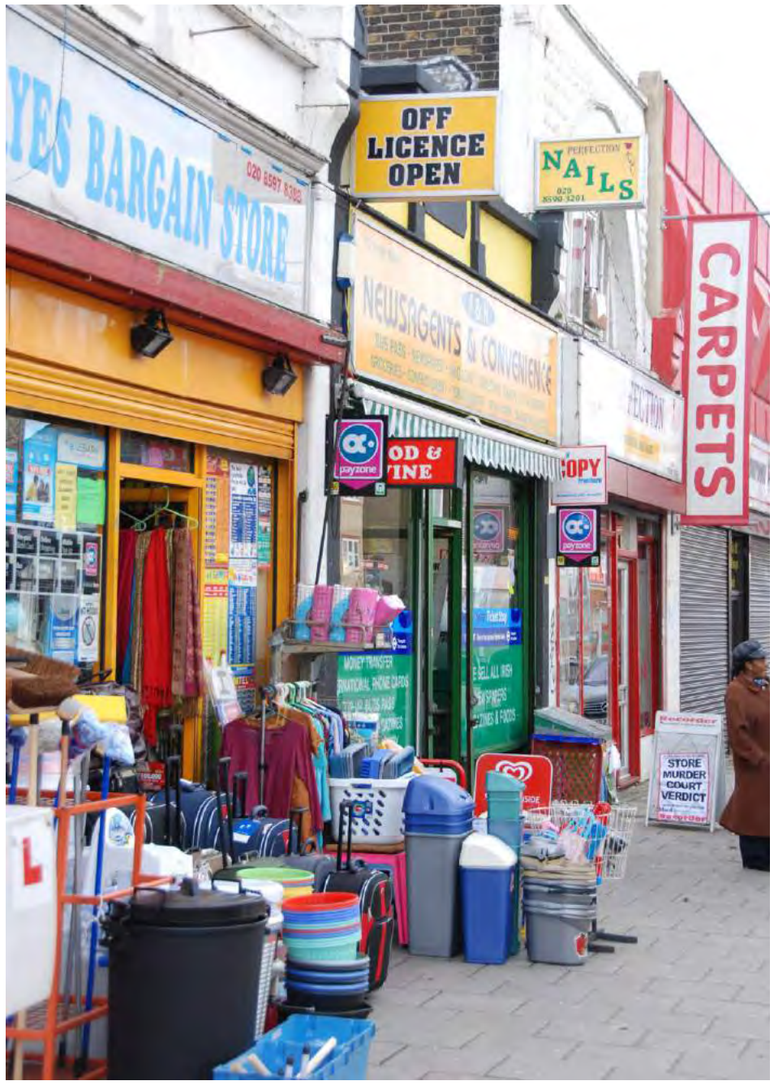
Site: LBR Business Area

Site: LBR Retail Park

Goodmayes station

- Improve the existing connection and bridge link from Grove Road to Goodmayes Secondary School and Green Lane to the south. The existing route feels very unsafe.
- Improve entrances into the Recreation ground. Create new entrances in response to desire lines.
- Widen pavements in key locations, along with general public realm improvements.

The Goodmayes Tesco, Retail park and Grove Farm sites present the most significant development opportunities with good connections at the centre of the study area



Existing streetscape, Goodmayes

Barley Lane at Goodmayes

Barley Lane Recreation Ground

Existing Pedestrian bridge across railway

Design Principles for Goodmayes, Retail Park (Tesco) and Grove Farm

1. Raise all new development to street level

- New development in site 8 should be raised from the existing lower level to the road level, all with car-parking underneath.

2. Extend alignment and rhythm of street pattern from north to south

- Provide visual and physical connection to the depth of the site by extending the alignment and rhythm of the existing street pattern.

3. A new destination - city farm

- A city farm or garden centre, for example, could provide an appropriate destination along the railway, avoiding dead ends and would encourage north south movement.

4. Improve Barley Lane junction for pedestrians

- Limited capacity to alter the junction due to the very high traffic flows in all directions. Adjust signal timings to improve pedestrian crossing provision.
- Remove all barriers and guard-railing.
- Opportunity to provide an Advanced Stop Line to improve cycle provision.

5. New road and crossing on eastern site boundary improves access and link to pedestrian railway crossing

- A new north south road along the eastern boundary overlooked by existing and new active frontages will greatly improve access to the existing bridge over the railway.
- A new pedestrian crossing over the High Road will reinforce this link.

6. Improve pedestrian crossing over railway - short and long term

- Improve safety in the short term: replace enclosure with transparent mesh and provide better lighting.
- In long term replace the bridge with a new 4m wide pedestrian and cycle bridge with DDA ramps, integrated into the new road.

7. A new entrance and park building for Barley Lane Recreation Ground

- Locate a new gate at the mid point along the southern edge of the park to relate to the existing gate position on the north side providing a direct route from Huxley drive to the High Road and retail stores.
- Remove perimeter fences to create more open park - this can improve safety by not trapping victims of aggressive behaviour inside the park.
- Locate new building at entrance to provide park facilities.
- New lighting to improve general safety during the day and night.

8. Mixed use non-residential to street: active frontages along High Road in site 8 and along new road to the east of site 8.

- Non-residential active frontages along the entire length of the Goodmayes and Grove Farm Retail Parks and returning into side roads both north and south.
- Active frontages overlooking the new road connection at the eastern end improve safety through natural surveillance.
- Uses follow the front-of-house, back-of-house principle - Tesco and other large/small retail units to front High Road with residential/offices above.
- Light industrial, workshops, studios, creative industries/start up units with residential above to blocks away from High road.

9. New community facilities along the High Road - 'health and exercise' theme

- Prominent street frontage for polyclinic, swimming pool and Primary School with access to and from the Recreation Ground.
- Alternative locations for the swimming pool and polyclinic: relate to bridge connection at eastern end of site.

10. Public space in front of new Tesco Store

- New building lines allow for pavement widening and a new tree planted public space which provides the setting for community facilities and a 'breathing space', close to Tesco.

11. Taller landmark buildings to mark key points - park entrance, community buildings, new road to east of site

- Locate taller landmark building to mark park entrance, but set away from the existing buildings to east side of Goodmayes Lane.
- Locate other taller landmarks to mark new public space opposite park, and new north south road at eastern end of site 8.

12. Potential new east west road

- The depth of the site at the eastern end is sufficient to allow for a road parallel to the High Road connecting into the residential estate to the east.

13. Improvements to public space at Goodmayes station and connection to High Road

- Adjacent to the station, it is proposed that an improved space is provided for taxi and disabled parking. This is shown in more detail in the following section.
- Improved surface materials and raised road surface would improve the connection to the High Road.
- Potential to locate direct crossing to Tesco site.

14. Extend green space of park to south of High Road

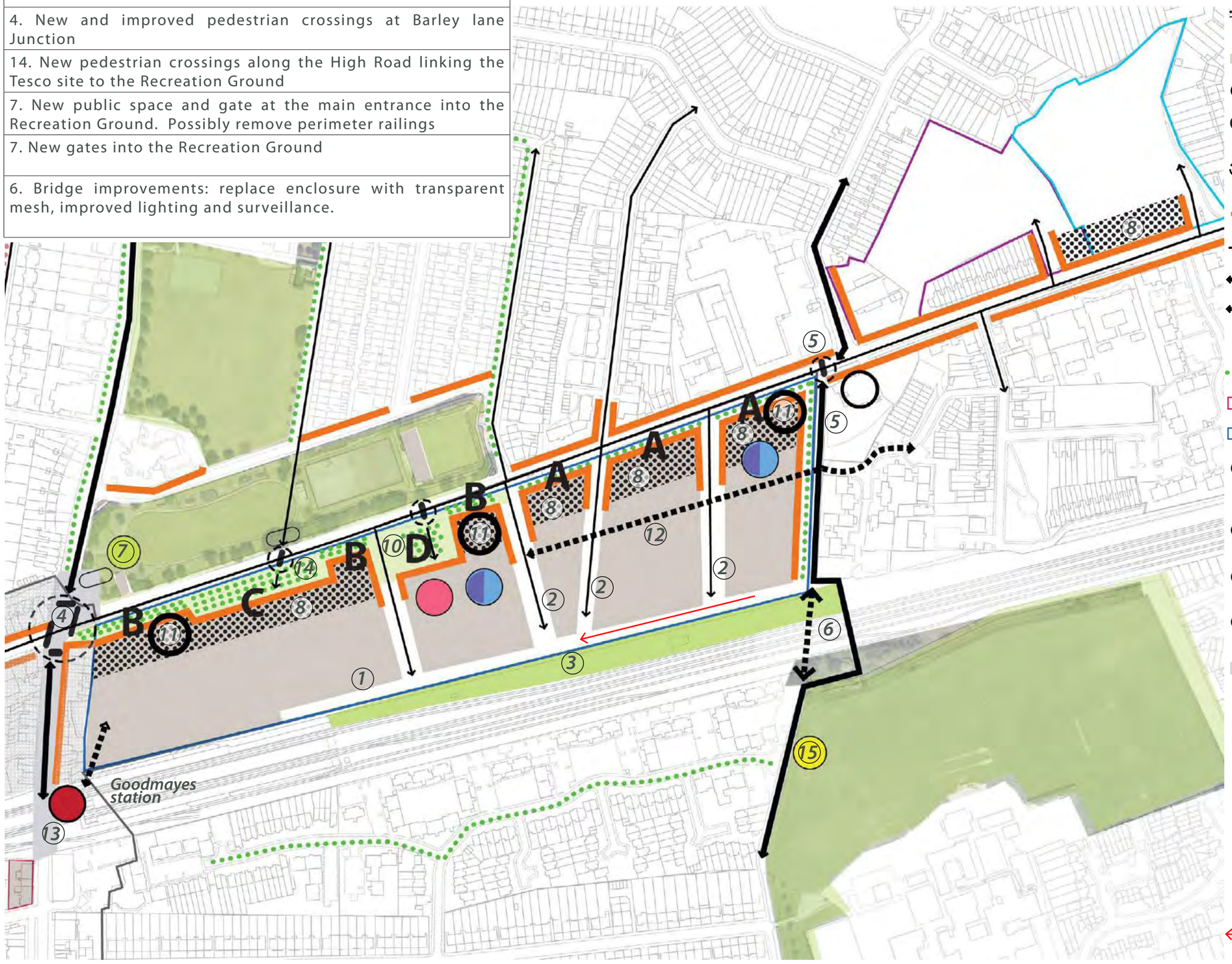
- Articulation of the new High Road frontage through building set-backs and street tree planting visually and physically extends the green open space of the park opposite onto the south side and provides a generosity of public space in front of the new larger retail shop fronts.
- Locate new crossing to High Road at this point to enhance connection.

15. New pocket park to south of pedestrian bridge

- Enhance green link by locating new pocket park to edge of Mayfield School playing fields to south of the pedestrian link across railway.

Site massing study:
Buildings step down towards the south (as section 3/CC) in response to south light. Roofs of ground floor non-residential uses can be used as shared amenity space for the perimeter residential buildings above.
Generally, raised courtyard perimeter block building types would suit the scale of blocks and create firm building lines to define the street edges.

Quick win Projects
4. New and improved pedestrian crossings at Barley lane Junction
14. New pedestrian crossings along the High Road linking the Tesco site to the Recreation Ground
7. New public space and gate at the main entrance into the Recreation Ground. Possibly remove perimeter railings
7. New gates into the Recreation Ground
6. Bridge improvements: replace enclosure with transparent mesh, improved lighting and surveillance.



KEY

- Max. 5 storey development with non-residential active frontages facing onto the High Road at ground level
- Max 4 storey development
- Existing landmark building The Harvester Pub
- Proposed landmark buildings to mark park entrance, and new crossings
- Proposed crossings to connect recreation ground to new public space, and to link to new north south road
- Active frontage
- Existing connections
- Existing connections to be improved
- Potential new connections: from station to Tesco site, east west through new site development, and pedestrian bridge
- Proposed Tree Planting
- LBR Housing opportunity sites
- Identified opportunity sites
- Proposed possible swimming pool/polyclinic at either centre fronting public space, or along new road at east of site
- Proposed possible school location to connect to recreation ground
- Proposed pocket park to connect to pedestrian crossing over railway
- Proposed improvements to Barley Lane Recreation Ground
- Proposed public space improvements to upgrade surface materials at Goodmayes station and along Goodmayes Road
- **A** Single row Plane tree planting to south side of High Road accommodated by widened pavement as part of new developments
- **B** Double row tree planting at set back facade provide green connection with recreation ground
- **C** Triple row tree planting at set back facade provide green connection with recreation ground
- **D** Tree planting cluster of different species in new public square relates recreation ground
- Servicing Route retail/light industrial units will be from the southern edge
- Goodmayes Station

3.5 Summary of guidelines for site development densities

The two tables outline the development density potential for each of the housing opportunity sites and other identified sites respectively. It allows for comparison of the LBR current policy for density as outlined in the Borough Wide Primary Policies, The London Plan housing densities based on PTAL ratings, the capacity study undertaken by GVA Grimley, and recommendations based on the urban design guidelines outlined in this report.

The tables have columns labelled with a key A-E based on the following:

A = Unit numbers calculated from LBR Housing density guidelines of 50-80 units/hectare (u/h)

B= Unit numbers calculated from LBR Housing density guidelines 80-120 u/h

C = Unit numbers calculated for LBR sites by GVA Grimley urban Development Capacity Study, Oct. 2008

D = Unit numbers calculated from the London Plan based on the existing PTAL rating for each site. Assumes sites are classed as Urban with mainly 1-2 bed flats.

E = Unit numbers calculated from range of 195-230 u/h. This range has been generated by applying the design principles set out in section two. These principles were applied to two case study sites the amalgamation of SK02, SK06 and 7 (Lorry Park and adjacent sites) and 8 (Tescos/ Goodmayes site). This range is then applied to all other sites to generate possible densities.

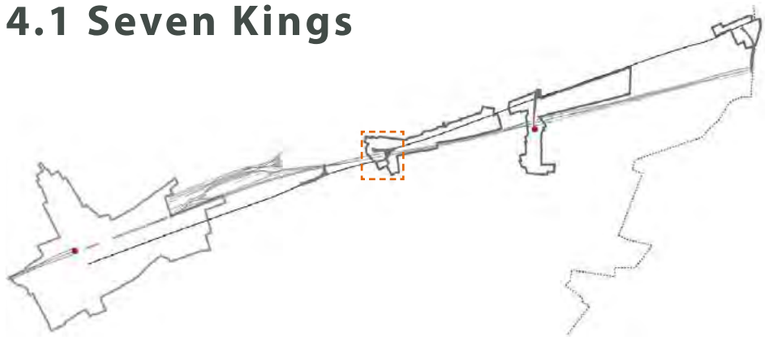
NB: These densities would need to be tested in a further design development stage to establish viability.

Site code	Area (Hectares)	A 50-80 u/h	B 80-120 u/h	C GVA Grimley	Site PTAL	D 70-170/ 70-260 u/h	E 195-230 u/h	Recommendation for site development for LB Redbridge defined Housing Opportunity Sites
CW01	0.10	5-8	8-12	20	*3*	7-17	**20-23**	Max. 5 storey mixed residential with non-residential uses and active frontage to Green Lane. Tree planting (type B) to reflect green link. Possible entrance into the new academy from the south.
CW20	0.14	7-11	12-16	8	*3*	10-23	**28-32**	Max. 5 storey mixed residential with non-residential uses and active frontage to Green Lane. Possible taller 'landmark' building to mark the park and academy at the eastern end. Tree planting (type B) to reflect green link.
CW03	0.07	4-5	6-8	5	*5*	5-18	**14-16**	Max. 5 storey mixed residential with non-residential uses and active frontage to High Road. Establish consistent building line with no building set back.
CW06	0.23	12-18	19-27	46	*5*	16-59	**45-52**	Max. 5 storey mixed residential with non-residential uses and active frontage to High Road. Establish consistent building line with no building set back. Tree planting (type A).
CW07	0.10	5-8	8-12	7	*3*	7-17	**20-23**	New building currently under construction.
CW13	0.02	1-2	2	4	*3*	2-3	**4**	Max. 5 storey mixed residential active frontage, preferably to match adjacent building height.
CW16	0.23	12-18	19-27	15	*3*	16-39	**45-53**	New building constructed at western end of site. For remaining plot at eastern end of site max. 5 storey mixed residential with non-residential uses and active frontage to High Road. Establish consistent building line with no building set back.
NE08	0.08	4-6	7-9	2	*3*	6-13	**16-18**	Max. 5 storey mixed residential or non-residential frontage to Aldborough Road. Tree planting (type B) to reflect green link.
GM01	0.04	2-3	4	6	*3*	3-6	**8-9**	Mixed residential with non-residential active frontage to street. Possible taller 'landmark' building to mark the crossing at Aldborough Road incorporating new public space stepped access to crossing.
GM07	0.06	3-5	5-7	4	*5*	5-15	**12-13**	Max. 5 storey mixed residential with non-residential uses and active frontage to Goodmayes Lane. Potential for taller 'landmark building here to mark Goodmayes station location.
GM08	0.08	4-6	7-9	5	*3*	6-13	**16-18**	Max. 5 storey mixed residential with non-residential uses and active frontage to Green Lane. Tree planting (type B) to reflect green link.
GM11	0.31	16-24	25-37	25	*4*	21-80	**61-71**	Max. 5 storey mixed residential with non-residential uses next to station with and active frontage to Station Road. Potential for taller 'landmark building here to mark Chadwell Heath station location. Below ground car parking.
SK02	1.10	55-88	88-132	68	*3*	77-187	**215-253**	Max. 5 storey mixed residential with non-residential uses and active frontage to High Road. Possible taller 'landmark' buildings to mark corner to open space and connection across road and the potential railway crossing. Establish consistent building line with tree planting (type A) with exception for buildings adjacent to public space to be set back to allow for tree planting (type B). Tree planting (type D) to public space to reflect green link. Below ground car parking.
SK06	0.60	30-48	48-72	40	*3*	42-102	**117-138**	Max. 5 storey mixed residential with non-residential uses and active frontage to High Road. Possible taller 'landmark' buildings at western end of site to mark Seven Kings station and public space. Establish consistent building line with tree planting (type A).
CH01	0.07	4-5	6-8	23	*3*	5-11	**14-16**	Max. 5 storey mixed residential with non-residential uses and active frontage to High Road. Establish consistent building line with no building set back.
CH08	0.06	3-5	5-7	5	*4*	4-15	**12-13**	Max. 5 storey mixed residential active frontage, preferably to match adjacent building height.
TOTAL	**3.29**	**167-260**	**269-389**	**283**	**N/A**	**232-618**	**675-752**	

Site code	Area (Hectares)	A 50-80 u/h	B 80-120 u/h	C GVA Grimley	Site PTAL	D 70-170 u/h	E 195-230 u/h	Recommendation for site development for further identified sites
1	0.74	37-59	60-88	N/A	*3*	52-125	**145-170**	Max. 5 storey mixed residential with non-residential uses and active frontage to High Road. Potential for taller landmark building with community facilities opposite swimming pool and academy.
2	3.85	N/A	N/A	N/A		N/A	**N/A**	Site identified as location for new academy school and/or swimming pool. Location for possible landmark to street, mixed use non-residential active frontage to street. Possible site for new community/ health facility
3	0.29	15-23	24-34	N/A	*3*	21-49	**57-66**	Max. 5 storey mixed residential with non-residential uses and active frontage to High Road. Establish consistent building line with no building set back.
4a & b	0.34	17-27	28-40	N/A	*3*	24-58	**66-78**	Max. 5 storey mixed residential with non-residential uses and active frontage to High Road. Establish consistent building line with no building set back. Tree planting type A.
5	0.13	7-10	11-15	N/A	*4*	10-33	**25-29**	Max. 5 storey mixed residential with non-residential active frontage to street, with potential for community use (Health Centre) fronting new public space with tree planting (type C/D) to High Road.
6	0.03	1-2	3	N/A	*4*	2-7	**6**	Mixed residential with non-residential uses and active frontage to new public realm development at Seven Kings. Potential 'landmark' building to mark public space and station location.
7	1.30	65-104	104-156	N/A	*3*	91-221	**254-299**	Max. 5 storey mixed residential with non-residential uses and active frontage to High Road. Establish consistent building line with no building set back with tree planting (type A). Protect Sikh temple to Eastern end of site.
8	7.66	383-612	613-919	N/A	*3*	537-1302	**1500-1760* (see note opposite with regards capacity)**	Max. 5 storey mixed residential with non-residential uses and active frontage to High Road incorporating new Tesco development. Possible number of taller 'landmark' buildings to mark entrance to Goodmayes Recreation Ground and to a new public space with tree planting (type D). Establish consistent building line with tree planting (type A). The exception is buildings fronting the park to be set back to allow for tree planting (type B) to reflect green link. Basement car parking. *Note: current infrastructure capacity would support 600-800 units. To achieve this there would need to be a total of approx. 43280-57700 sqm of residential floorspace based on the mix of housing required by the Borough including an allowance of 20% space for circulation. In terms of site area, applying the massing and mix of use urban design principles as outlined in section 2, a site area of between 3-3.5 hectares would support 600-800 units.
9	0.11	6-8	9-13	N/A	*4*	18-28	**21-25**	Max. 5 storey mixed residential active frontage, preferably to match adjacent building height.
TOTAL	**10.6**	**531-845**	**852-1268**	**N/A**	**N/A**	**755-1823**	**2074-2433**	

4.0 Public Realm Sites

4.1 Seven Kings



Seven Kings junction is currently traffic dominated. The station is isolated from its surroundings by roads which are difficult to cross. The area immediately in front of the station is cluttered and of poor quality with a car drop-off and mini-cabs parked next to the station entrance. Bus stops are located some distance from the station, in particular those serving westbound services.

The junction is currently a roundabout with limited pedestrian crossing facilities close to the station. LBR have planned improvements to the junction commencing next year.

There are opportunities to significantly improve the pedestrian access to the station by reducing the dominance of cars immediately outside the station entrance. There is potential to remove the roundabout and narrow the carriageway without affecting the junction capacity. This provides the opportunity to bring bus stops closer to the station, introduce a new raised road surface and new crossings, particularly to the northern shopping parade. Relocation of taxi drop-off will unclutter the forecourt to make way for a new high quality public space in front of the station.

Cluttered streetscape at Seven Kings

Vision of Seven Kings public space

SEVEN KINGS PUBLIC SPACE STRATEGY KEY

- Development sites
- Ground floor non-residential to be maintained within centre boundaries
- Landmark buildings
- Active frontage
- Existing connection
- Proposed crossing point
- New tree planting
- New public space - stone palette
- New public space - concrete palette
- Bus stop

5 new crossings and a high quality public space

Key design principles:

- Remove the roundabout
- Signalise the junction
- Introduce 5 new crossings
- Narrow the carriageways, to bring the pavements closer together.
- Relocate taxis from in front of the station to the turn around along Cameron Road
- Locate bus stops close to the station
- Introduce a new raised road surface to strengthen the visual and physical connections to the surroundings.
- Locate cycle parking along Cameron Road
- Create a new high quality granite paved station forecourt with stone bollards and bench seating.
- Elsewhere, improve surrounding pavements by removing all barriers and street-clutter. Pave using large concrete slabs.
- Plant new trees along the south side of Cameron Road
- Clear, well located signage.

Project	Phasing	Order of cost
4 new crossings	1	£
Remove roundabout, re-align road edges, new shared surface	2	£££
New station forecourt	2	££

SEVEN KINGS PUBLIC SPACE KEY 1:1000

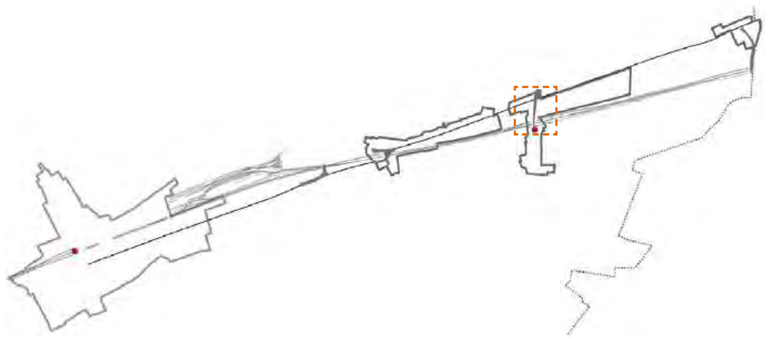
Concrete paving

Large Granite Slabs define station forecourt

Raised road surface level with pavement

1. Proposed grove of trees with taxi drop
2. Proposed landmark building
3. Seven Kings Station
4. Bicycle parking on granite setts
5. Existing health centre to be developed with pavement in front
6. New crossing
7. New bus stops

4.2 Goodmayes



Barley Lane Junction

Goodmayes Station

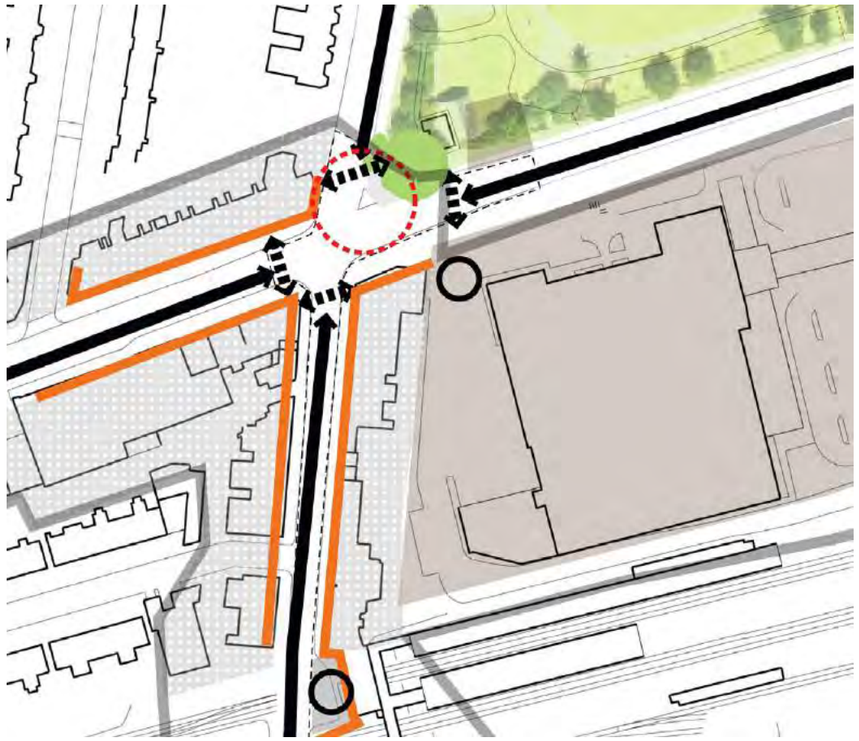
The Barley Lane junction is traffic dominated and difficult to cross. Crossings do not adequately relate to desire lines. Multiple barriers give a sense of constriction and are visually obtrusive.

Goodmayes station is invisible from the High Road. The forecourt to the station is dominated by minicabs whilst the route to the station is poorly signposted as is the route to the Hospitals along Barley Lane to the north. On the positive side, the stretch of Goodmayes Road between the station and the High Road has a high density of retail frontages and has a high level of pedestrian flow.

Access to Barley Lane Recreation Ground is poor. The main entrance is difficult to find and there are no other entrances along the High Road.

Despite its size and proximity to Barley Lane junction and the station, Tesco is not visible and is difficult to access.

Vision of Barley Lane Junction



4 new crossings and a new entrance to the Recreation Ground

GOODMAYES PUBLIC SPACE STRATEGY KEY

- Development sites
- Ground floor non-residential to be maintained within centre boundaries
- Landmark buildings
- Active frontage
- Existing connection
- Proposed crossing point
- New tree planting
- New public space - stone palette

Key design principles:

- Improve visibility and connection of the station to the High Road.
- Improve visibility and access to Tesco for pedestrians from the junction and the station.
- Improve the environment of Barley Lane junction for pedestrians and cyclists.
- Remove all barriers
- 4 new crossings at Barley Lane junction. Remove sheep pens where possible
- Adjust signal phasing to improve pedestrian flow
- Introduce parking restrictions and define mini-cab parking in front of the station
- Extend the pavement on the north east corner of Barley Lane junction to create a paved forecourt and entrance to the park with future park building.
- Introduce a new raised road surface to strengthen the visual and physical connections across the junction.
- New high quality granite paving to the station threshold.
- Elsewhere, improve surrounding pavements by removing all barriers and street-clutter. Pave using large concrete slabs.
- Plant new trees along the south side of the High Road east of Goodmayes Road
- Clear, well located signage to define the route from the High Road to the station.

Project	Phasing	Order of cost
4 new crossings,	1	£
remove barriers, unclutter around the junction	1	£
new park entrance and forecourt	1	£
new raised road surface	2	££
streetscape improvements to Goodmayes Road	2	££
streetscape improvements to High Road	2	££
new park building	2/3	£££

GOODMAYES PUBLIC SPACE KEY 1:1000

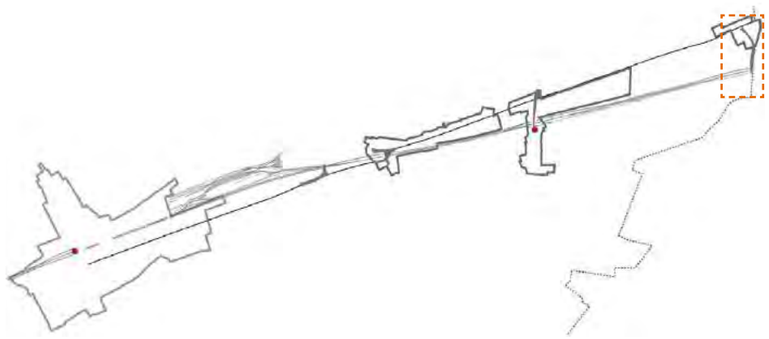
Concrete paving

Large Granite Slabs define station forecourt

Raised road surface level with pavement

① Goodmayes Station
② New Crossing
③ New park building with facilities including cafe, park ranger base, information point and WCs

4.3 Chadwell Heath



Chadwell Heath is characterised by active retail parades along the north and south of the High Road and the triangle formed by the two arms of Wangey Road and Station Road. The divergence of the railway from the High Road locates Chadwell Heath Station approximately 300 metres to the south, out of view and disengaged from the main thoroughfare. Although retail units front onto Station Road, the route between the High Road and the station lacks active frontages and has a 'backland' character with fragmented and disused sites particularly along Wangey Road. The station itself is isolated from surrounding residential areas and occupies a cramped location on the narrowest part of the bridge which is often congested when buses stop outside the station. From the direction of the station there is no clear sight of the High Road nor activity to engender a sense of safety, particularly at night. With increase in population along the High Road it will become increasingly important to improve the route from the station to the High Road.

The car park to the south of the station is a significant development opportunity site which could become a landmark building to mark the station and provide activity around the station

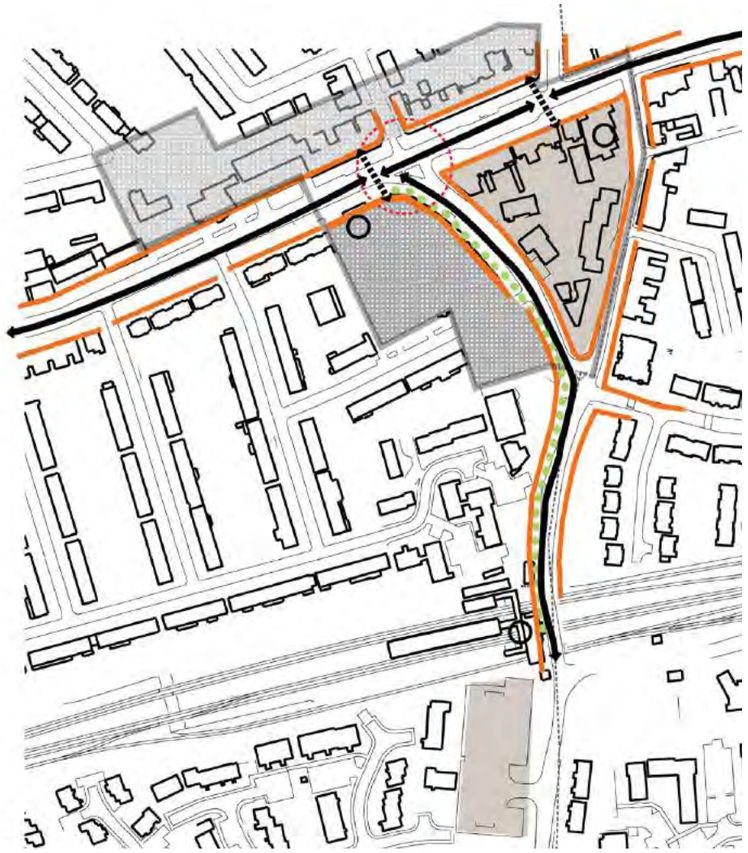
Wangey Road and Station Road form a complex and confused junction with the High Road with one-way traffic along the two arms - northbound along Wangey Road, southbound along Station Road. The junction is traffic dominated and provides a difficult environment for pedestrians and cyclists. It suffers from multiple barriers, crossings which do not satisfy desire lines and the usual street clutter.

Alterations to traffic flow, increased activity along Wangey Road and Station Road can help to improve orientation and the connection to the High Road.

Key design principles:

- Improve orientation and connection of the station to the High Road.

6 new crossings and a clear connection between Chadwell Heath Station and the High Road



View north towards High Road from the station

CHADWELL HEATH PUBLIC SPACE STRATEGY KEY

- Development sites
- Ground floor non-residential to be maintained within centre boundaries
- Landmark buildings
- Active frontage
- Existing connection
- Proposed crossing point
- New tree planting
- New public space - stone palette

- Develop active frontages along Wangey Road and Station Road. In particular, sites along the western edge of Wangey Road have the potential to become denser mixed residential developments with active frontages and integration of existing uses.
- Alter Wangey Road to take two way traffic allowing Station Road to be pedestrianised. Increase retail and other non-residential frontages along Station Road to extend High Road activity southwards towards the station to improve orientation and a sense of safety.
- Develop the car park site as mixed residential use. It could take a tall landmark building visible from Wangey Road and Station Road. It could integrate car parking at a lower level beneath and provide a location for bus stops, cycle parking and taxi drop off. In the short term, ramps would improve access to the car park for pedestrians and cyclists.
- Remove all barriers at key junctions
- 6 new and improved crossings along Station Road, and junctions between Wangey Road, Station Road and the High Road. Change to a 'puffin' crossing at Wangey road/Station road junction.
- Raise the High Road surface between Wangey Road and Station Road to footway level to improve pedestrian crossing
- The junction of Wangey Road and High Road would be altered to incorporate improved cycle facilities including an Advanced Stop Line and a continuation of the cycle route along the High Road to the east and west.
- Adjacent to the station the bus stops should be better integrated, preferably within and opposite a forecourt to new development on the car park site.
- New tree planting along Wangey Road can provide a visual link between the station and the High Road

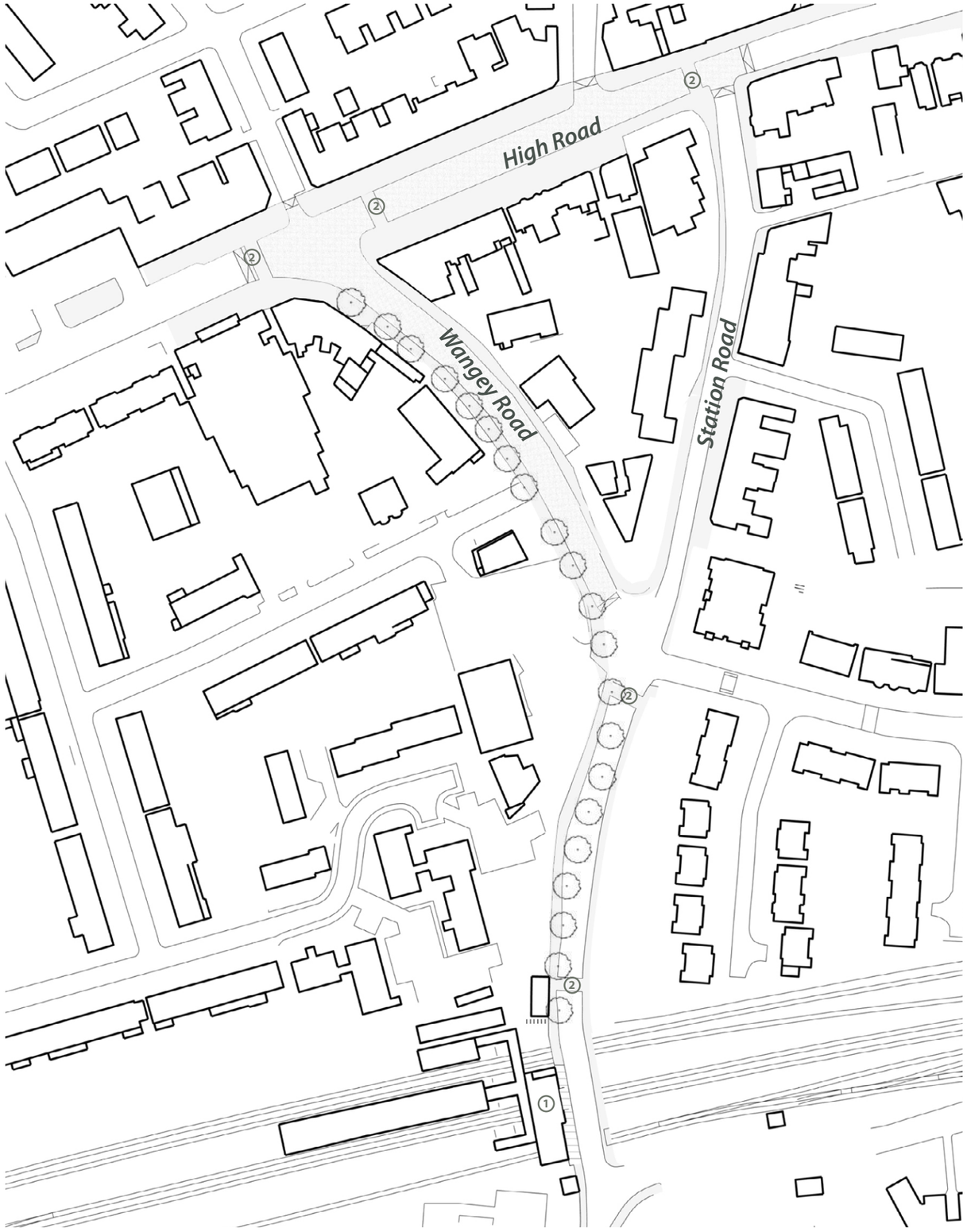
CHADWELL HEATH PUBLIC SPACE KEY 1:2000

Concrete paving

Large Granite Slabs define station forecourt

Raised road surface level with pavement

① Chadwell Heath Station
② New Crossing



Conclusion- 10 Key Principles for the Development of the High Road

1. Develop a continuous High Road character

- Non- residential active frontages must continue along the entire length of the High Road edges
- Maintain front-of-house/back-of-house relationship in existing and new buildings
- Establish strong building lines and consistent heights along High Road
- Use landmark/ tall buildings to emphasise key points on High Road

2. Improved and new north south connections

- Improve existing road, cycle and pedestrian crossings over the railway
- Introduce new pedestrian and cycle crossings over the High Road that link into wider connections

3. Identify development sites and offer design guidelines

- Consolidate LB Redbridge identified sites with other potential sites
- Establish how overall development targets can be met on identified development sites and through incremental change
- Test the capacity of new sites in terms of meeting and exceeding LB Redbridge's targets for delivering new housing

4. Connect the stations to the High Road

- Make stations more visible from the High Road
- Improve general orientation through works to the public realm and wayfinding
- Upgrade routes and promote activity & natural surveillance along them

5. Improve permeability and access

- Remove barriers
- Provide upgraded and new crossings on desire lines that link into wider context connections
- Prioritise pedestrian movement throughout the area
- Extend cycleways throughout the area
- Improve public transport to and along the High Road

6. Improve access to parks

- Use Wider context Green Links to provide green local links
- Improve access to existing parks
- Tree-line roads that are on Green Links using Mayor's Trees Programme
- Provide new pocket parks
- Improve entrances to existing parks
- Upgrade facilities within existing parks

7.Improve and integrate community facilities and social infrastructure

- Link proposed facilities with new public spaces and improved connections to the landscape
- Link in with existing proposals to provide a holistic approach
- Ensure new facilities incorporate decentralised and renewable energy supplies

8.Improve the public realm

- De-clutter and clear the streets
- Rid cars from pavements
- Improve surfaces for all users
- Provide settings for diverse street life
- Incorporate high quality street furniture

9.Landscape the High Road

- Promote considered tree planting along the High Road
- Use landscaping to improve orientation
- Integrate landscaping with street furniture

10.Key Thematic Areas

- Identify areas to protect
- Identify areas where existing thematic uses could expand
- Identify zones in which to encourage change

Appendix 1
Transport and Access

This section has been prepared by Steer Davies Gleave

1 Introduction

1.1 This report provides a summary of the transport and access issues and opportunities in the Crossrail Corridor. This feeds into the Crossrail Corridor Area Action Plan Urban Design Study.

1.2 The Crossrail corridor runs to the east of Ilford in London Borough of Redbridge. The corridor runs from Ilford to Chadwell Heath and the eastern borough boundary. The corridor follows the line of the main railway link between London Liverpool Street and Shenfield in Essex.

1.3 The report provides a summary of the existing transport conditions within the corridor, including details of public transport services. The Crossrail proposals are discussed with details of the forecast passenger growth associated with the new stations.

1.4 A detailed site visit has been carried out to identify the issues and opportunities that exist to improve movement and access in the vicinity of the Crossrail corridor. The results of this assessment have been used to develop the Movement and Access Strategy for the site with a series of proposals for transport and access improvements throughout the study area.

2 Existing Transport Conditions

2.1 This chapter provides an overview of the existing transport conditions in the Crossrail corridor, examining the highway, public transport, cycle and pedestrian networks.
Highway Network

2.2 The Crossrail corridor is defined by the A118 High Road which runs between Ilford Town Centre and Romford.

2.3 The road is single carriageway along this corridor and is relatively heavily used in both directions. The road is mainly used by local traffic providing east-west links between Romford and Ilford. The A118 forms part of the Strategic Road Network (SRN). Figure 2.1 shows the local road network.

2.4 Traffic data previously collected by London Borough of Redbridge show relatively high levels of traffic across the day along the High Road at Goodmayes. The average 5-day daily flow (12 hour) is 7,998 westbound and 7,292 eastbound. Observed flows are higher during the afternoon than the morning period.
Parking

2.5 The parking restrictions vary along the length of the High Road. There are a series of areas, adjacent to retail centres, where short-term parking on-street is permitted outside peak hours. In addition, lay-bys are provided in Goodmayes and Chadwell Heath to accommodate parked vehicles without affecting the through-flow of traffic.

2.6 All pay and display on-street parking within the corridor is restricted to a maximum stay of two hours.

2.7 There are a series of Controlled Parking Zones that overlap the Crossrail corridor. These are as follows:

- Ilford 'B' – covers High Road between Green Lane and Elizabeth Avenue to the east of Ilford Town Centre;
- Seven Kings 'A' – between Seven Kings Station and Chester Road, including the junction of High Road and Cameron Road;
- Seven Kings 'B' – between Aldborough Road and Seven Kings Road, covering the area to the south of the High Road;
- Chadwell Heath 'A' – between Chadwell Heath Lane and Birchdale Gardens, to the north of the High Road; and
- Chadwell Heath 'B' – to the south of the station covering the residential area adjacent to the station car park.

2.8 Public car parks are provided by the borough within the Crossrail corridor at the following locations:

- Chadwell Heath Station;
- Chadwell Heath, Wangey Road;
- Goodmayes Road;
- Seven Kings, High Road;
- Ilford Cricklefields, High Road (behind existing public baths); and
- Ilford, High Road (adjacent to Lynton House).

Public Transport Network

2.9 The Crossrail Corridor is served by a number of bus routes as well as National Rail services from Chadwell Heath, Goodmayes, Seven Kings and Ilford Stations.
Local Bus Services

2.10 Table 2.1 provides details of all bus services serving the Crossrail corridor. Only one route runs the full length of the High Road, the 86. All routes are shown in Figure 2.2.

National Rail Services

2.11 Ilford, Seven Kings, Goodmayes and Chadwell Heath stations are all served by National Express East Anglia services between Shenfield and London Liverpool Street Station.

Public Transport Accessibility Level

2.12 Figure 2.3 shows the PTAL map for the Crossrail corridor with current public transport conditions. This shows Ilford town centre with a PTAL score of six – Excellent. Goodmayes and Chadwell Heath show PTAL scores of 4 adjacent to the stations where this is access to a higher number of public transport services.

2.13 Individual site specific PTAL scores have been calculated for locations along the High Road. These are detailed in Table 2.2.

Pedestrian Network

2.14 Figure 2.4 shows the walk catchments of each of the stations along the corridor. The map shows there is a clear gap between Ilford and Seven Kings stations where areas are more than 12 minutes walk from a station. 3 Crossrail Proposals

3.1 This chapter outlines the proposals for Crossrail services within the study area. The Crossrail services are forecast to commence operation in 2016 and will provide rail connections from Shenfield in the east to Maidenhead and Heathrow in the west. A further eastern branch down to Abbey Wood in Kent is also proposed.

3.2 All stations within the Crossrail corridor will be part of the Crossrail network, significantly enhancing the connections by public transport in this area. As part of the project, a range of improvements are proposed at the stations in order to provide sufficient station capacity for these longer and more frequent train services.

3.3 Ilford Station is to be redeveloped to provide an improved station facility along with enhanced public realm and pedestrian access.

3.4 Goodmayes, Seven Kings and Chadwell Heath Stations will all be subject to minor improvements including extending platforms and re-branding. At present there are no plans to carry out works related to Crossrail outside of these station boundaries.
3.5 Figure 3.1 shows the proposed route map for the new Crossrail services.

Passenger Forecast

3.6 With the introduction of Crossrail, the stations within the study area are forecast to experience an uplift in passenger demand. Table 3.1 below details this forecast increase in passenger demand based on data provided by CLRL for the morning peak period (07:00-10:00).

3.7 The passenger demand forecasting shows an average of 38% increase in passenger demand at the stations. The largest increase is forecast to be at Ilford station with an uplift in demand of 40%. The lowest increase is forecast at Seven Kings Station with an increase of 30%.

3.8 There is no information currently available as to the likely mode of arrival at each of the stations for these additional passengers. It has been assumed, based on the level of parking provided at stations, that the majority of these passengers would be pedestrians and cyclists. The limited parking facilities at stations currently will not accommodate the increased patronage as car trips. Therefore it is essential that the urban realm works to support the increase in arrivals by walk, cycle and bus.
Crossrail and PTALs

TABLE 2-2 PTAL INDIVIDUAL SITES

Location	Peak PTAL	Off-Peak PTAL
Ilford High Road/Winston Way	6a	5
Aldborough Road	3	3
Seven Kings	4	3
Westwood Road/High Road	3	2
Goodmayes – Barley Lane	4	3
Grove Road/High Road	3	2
Chadwell Heath - Wangey Road	4	3

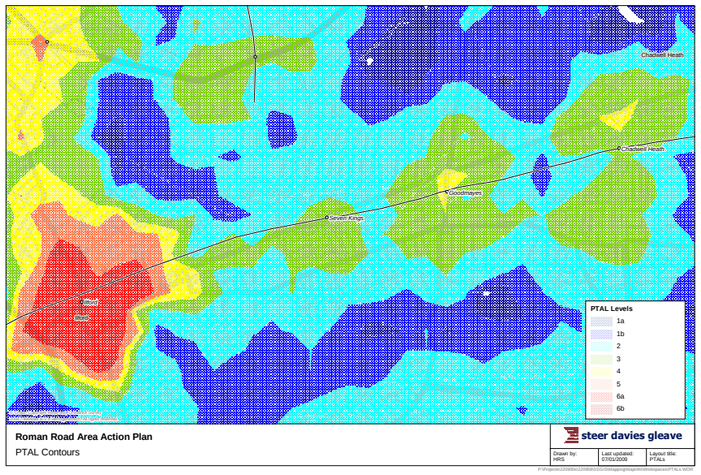


TABLE 2-1 ROMAN ROAD BUS SERVICES

Route Number	Route Description	Peak Headway (min)
25	Oxford Circus – St. Paul's – Bank – Whitechapel – Forest Gate - Ilford	6-10
62	Barking – Becontree – Chadwell Heath – Marks Gate	7-11
86	Stratford – Forest Gate – Ilford – Seven Kings – Goodmayes – Chadwell Heath - Romford	5-8
123	Wood Green – Tottenham – Blackhorse Road – Walthamstow – Gants Hill – Ilford	8-12
128	Claybury Broadway – Gants Hill – Ilford – Goodmayes – Becontree Heath – Romford	10-13
145	Leytonstone – Wanstead – Redbridge – Ilford – Barking – Becontree - Dagenham	10-13
147	Canning Town – Prince Regent – East Ham – Ilford	6-9
150	Chigwell Row - Hainault – Barkingside – Ilford – Becontree Heath	11-14
167	Ilford – Barkingside – Chigwell – Buckhurst Hill – Loughton – Debden	20
169	Barking – Ilford – Barkingside – Clayhall	8-11
173	Beckton – Dagenham Heathway – Chadwell Heath – King George Hospital	10-12
179	Barking – Ilford – Gants Hill – Woodford Green - Chingford	10-13
296	Ilford – Gants Hill – Newbury Park – Chadwell Heath – Romford	15-20
362	King George Hospital – Grove Road – Chadwell Heath – Hainault – Grange Hill	30
364	Ilford – Goodmayes – Becontree – Dagenham	9-11
366	Cyprus – Beckton – Barking – Ilford - Redbridge	10-13
369	Thames View Estate – Barking – Ilford	6-8
387	Barking Reach – Barking – Goodmayes – Goodmayes Hospital – Little Heath	10-13
396	Ilford – Gants Hill – Newbury Park – King George Hospital	20
462	Ilford – Gants Hill – Barkingside – Grange Hill – Hainault	12-15
W19	Walthamstow – Leytonstone – Manor Park - Ilford	15-20

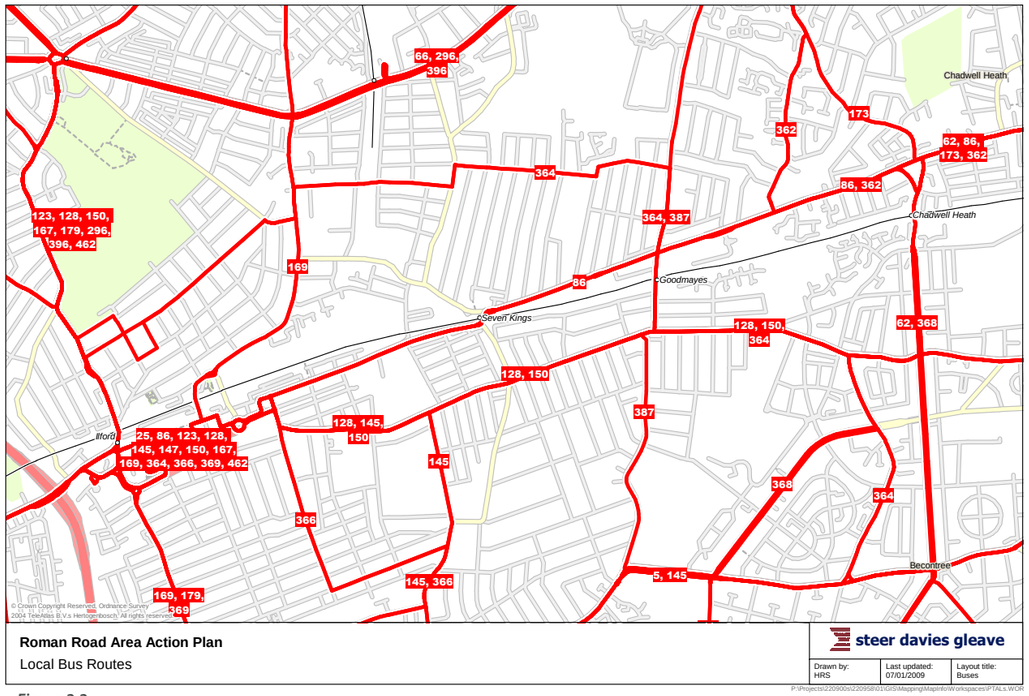


Figure 2.2

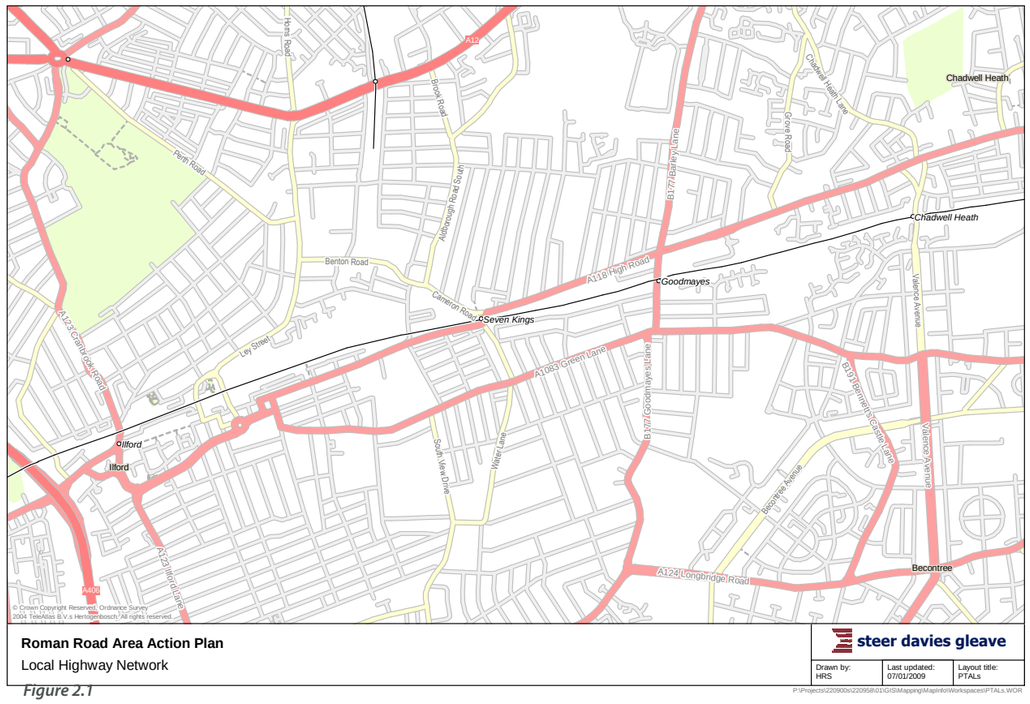


Figure 2.1

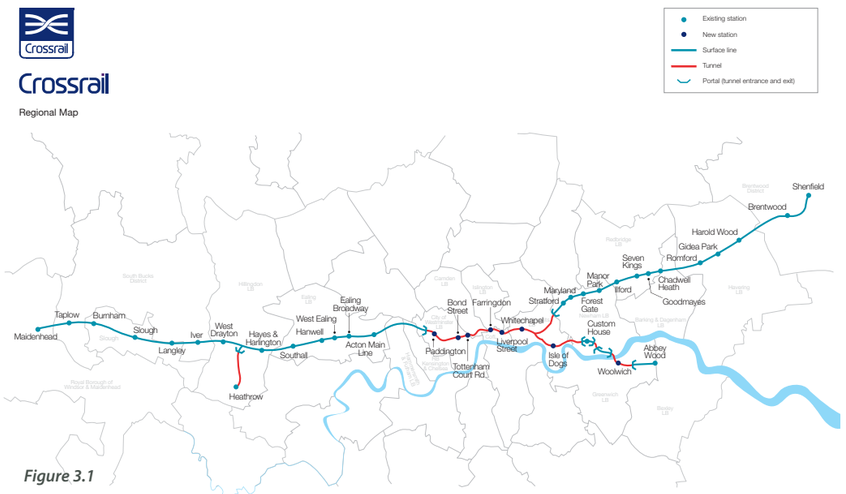


Figure 3.1

TABLE 3-1 ROMAN ROAD CROSSRAIL STATION DEMAND FORECASTS (AM PEAK PERIOD)

Station	2016 without Crossrail			2016 with Crossrail			Percentage Increase in Passenger Numbers		
	Boarders	Alighters	Total	Boarders	Alighters	Total	Boarders	Alighters	Total
Chadwell Heath	2,600	450	3,050	3,600	600	4,200	38%	33%	39%
Goodmayes	2,100	350	2,450	2,900	500	3,400	38%	43%	39%
Seven Kings	1,000	150	1,150	1,300	200	1,500	30%	33%	30%
Ilford	4,800	500	5,300	6,700	700	7,400	40%	40%	40%
TOTAL	10,500	1,450	11,950	14,500	2,000	16,500	38%	38%	38%

3.9 The effect of the introduction of the Crossrail services on PTAL levels has been examined. As the introduction of these services is not considered as a new service, rather an enhancement of existing rail services from each station, the impact of the increased services has no effect on PTAL level in any of the areas measured.

4 Existing Studies

4.1 A number of transport studies have been carried out previously within the area of the High Road. The main studies are summarised within this chapter. The results of these studies have been taken into consideration wherever possible within this strategy.

LCN+ CRISP Report Link 160

4.2 The Cycle Route Implementation and Stakeholder Plan (CRISP) process has been developed by Transport for London. The aim of the studies is to review cycle network coverage and facilities and identify recommendations for improvements to routes and facilities where appropriate. Link 160 runs along the High Road A118 between Ilford Hill in the west to Chadwell Heath at the eastern borough boundary.

4.5 The junction of High Road and Cameron Road at Seven Kings has been studied widely by LBR in order to identify an improved junction layout with safer road conditions for pedestrians and cyclists.

4.6 This particular study was commissioned by LBR to examine the impact of proposals to signalise the junction and replace the existing roundabout. The existing layout of the junction is considered to be operating over capacity during peak times with insufficient facilities for cyclists and pedestrians wishing to access Seven Kings Station.

4.7 The proposals for a signalised layout at the junction are aimed at addressing the difficulties caused by the existing layout by controlling the flow of traffic through the junction itself and the pedestrian crossings.

4.8 Alongside the signalised junction, amendments are proposed within the report to the waiting and loading restrictions in the vicinity of the junction and improve pedestrian access to the station.

4.9 Figure 4.1 shows the proposed junction layout as detailed in the report.

4.10 The improvements proposed are aimed primarily at vehicular flow. The proposals do not include a crossing for pedestrians east-west at the junction providing direct links from existing bus stops to the station. This is considered to be a key desire line for interchange from rail to bus and vice versa.

4.11 The traffic flows detailed within the report show high levels of traffic from the south using the smaller feeder road immediately in front of the station to avoid the roundabout and travel on up Cameron Road. This situation is considered to be unsafe for station users and the new proposals do not appear to alleviate this problem.

4.12 Further discussion of this junction layout and proposals for further improvements are provided in Chapter Six.

5 Issues and Opportunities

5.1 This chapter will examine each of these study areas in more detail, highlighting the issues that exist in transport terms and identifying opportunities for improvements.

5.2 A detailed site visit was carried along the length of the Crossrail corridor where observations were made as to the issues in transport and access terms that exist along the High Road and the opportunities that improvement that exist. The preliminary results from this site visit are described in this chapter.

Seven Kings

5.14 Figure 5.5 shows the Seven Kings area of the High Road adjacent to Seven Kings Station and the junction between High Road and Cameron Road. At present the bus stops are located some distance from the station, in particular those serving westbound services. Parking is an issue outside the station with large numbers of mini-cabs parked adjacent to the station entrance.

5.15 The junction is currently a roundabout with limited pedestrian crossing facilities close to the station. London Borough of Redbridge have planned improvements programmed to signalise the junction.

5.16 Our observations identify opportunities to significantly improve the pedestrian access to the station by reducing the dominance of cars immediately outside the station entrance. There is potential to narrow the carriageway without affecting the junction capacity thereby providing greater scope to bring bus stops closer to the station.

Seven Kings East/Lorry Park & Adjacent Sites

5.17 Figure 5.6 shows the site visit observations for the corridor between Seven Kings Lorry Park and Goodmayes.

5.18 The area is dominated on the north side of the road by small retail units and car showrooms. To the south of the High Road are currently parking areas, a drive-through fast food premises, a small supermarket and a large DIY superstore. At the eastern end of this section of road is a primary school on the north side of the road with a Sikh temple opposite.

5.19 The car showrooms create a cluttered pedestrian realm with cars blocking footways in some instances. Further parking on the road in this area causes the cycle route to be regularly blocked. There appears to be little enforcement of the parking restrictions as cars should not be for sale on the public highway.

5.20 A signalised crossing has recently been introduced to the east of the junction with Blythswood Road. This provides a safe means of crossing for school pupils and those visiting the temple. It was observed that this crossing could be implemented as a single 'puffin' crossing rather than the 'sheep pen' used currently by reducing the road width. This reduces the distance travelled by pedestrians, and the red time for motorists.

5.21 There is scope to consider extending the 20mph school zone to cover the area around the Sikh temple as well due to the high numbers of visitors on occasions.

Goodmayes Town Centre

5.22 Figure 5.7 shows the area between Wellwood Road and Goodmayes Retail Park. This plan covers Goodmayes Station and town centre.

5.23 The area features a large Tesco superstore as part of the larger Goodmayes Retail Park to the south of the High Road to the east of Barley Lane. The Barley Lane junction with High Road is very busy as it provides a link up to the A12 to the north. To the northeast of the junction is Barley Lane Recreation Ground.

5.24 Goodmayes Station lies along Goodmayes Road approximately 140 metres to the south of the High Road junction.

5.25 A number of the junctions have built out pavements to allow adequate sight-lines past corner parking. This could be avoided through revising parking locations and enforcement.

5.26 The Barley Lane junction is very busy and does not provide ideal pedestrian crossing facilities. There may be scope to alter the signal phasing to improve both traffic and pedestrian flow or potentially providing refuges on some arms of the junction.

5.27 There is no access to the park from the High Road which should be rectified as it is a key green resource in the area. Opposite the park, the footway on the southern side of the High Road terminates along the highway edge and continues through Tesco car park via a series of ramps and steps. This is not ideal and should be redesigned to reduce the need for pedestrians to travel additional distances, across private retail space.

5.28 The area in front of the station is dominated by minicabs parked up and taking up disabled spaces and drop-offs. There is limited signage from the High Road indicating the route to the station.

5.29 The junction of the retail park access and the High Road provides limited pedestrian provision and pedestrians were observed crossing on arms where no facilities were present, despite this being the more obvious pedestrian desire line. There is also opportunity to provide an Advanced Stop Line at the junction to improve cycle provision.

Chadwell Heath

5.30 To the east of Goodmayes lies Chadwell Heath, the eastern extent of the study area. Chadwell Heath Station lies approximately 300 metres to the south of the High Road via Wangey Road. The area is shown in Figure 5.8.

5.31 Wangey and Station Roads form a one-way access to the south with northbound traffic using Wangey Road and southbound traffic using Station Road. A signalised junction is provided where Wangey Road meets the High Road.

5.32 The junction of Wangey Road and High Road could be improved to provide improved cycle facilities.

5.33 The junction of Station Road and Wangey Road provides a difficult pedestrian environment and a confused junction. It is suggested that a mini roundabout would operate better at this junction. Further south, there is scope to provide a widened footway to improve access to the bus stop.

5.34 Adjacent to the station the bus stops should be better incorporated into the station forecourt design to enable improved interchange. There is potential for the provision of new cycle parking and an integrated access ramp to the existing car park to the southwest of the railway.

5.35 Along Station Road, there is scope to reduce parking thereby allowing for a wider footway and improved cycle route. Currently no crossing is provided or signals are provided at the junction of Station Road and High Road. This could be improved to allow easier access to this arm of the one-way system for both cyclists and pedestrians.

6 Movement and Access Strategy

6.1 This chapter builds upon the Issues and Opportunities chapter to provide a general strategy for movement and access across the whole corridor as well as providing details of specific project areas along the corridor and the transport elements of these.

General Proposals

Cycle Facilities

6.2 Along the length of the Crossrail corridor, the provision of cycle facilities varies. In some cases, cycle lanes are very short and are not accompanied by cycle facilities at junctions or signals. Whilst in accordance with TfL design guidelines, this is a difficult route to cycle because of bus stop infrastructure.

6.3 The cycle facilities should exhibit more uniformity along the road with every effort made to extend the lengths of cycle route provided. All major road junctions should be provided with Advanced Stop Line facilities for cyclists. Although, as stated within the CRISP report, there is insufficient capacity to accommodate a cycle lane of 1.5 metres along the full length of the High Road, every effort should be made to provide a cycle lane of at least 1.2 metres.

6.4 There are two sets of secure cycle parking facilities along the corridor in the form of bicycle lockers – one set at Chadwell Heath and a further set at Seven Kings lorry park. Whilst these are encouraged, they appear to be currently underutilised and could potentially be promoted more widely. Alternative more accessible cycle parking options should also be provided at each of the stations to enable local residents to make use of the rail services for travel into central London.

Pedestrian Links

6.5 A clear barrier along the corridor is the presence of the railway line. Limited opportunities exist to cross the line which creates a disjointed pedestrian environment with very little connectivity to the north and south.

6.6 There exists two additional pedestrian crossing opportunities over and above the road links at Goodmayes, Seven Kings, Chadwell Heath and Aldborough Road. These are to the west at Francis Street, adjacent to the junction with Connaught Road, and to the east adjacent to the junction with Grove Road.

6.7 Both of these pedestrian links are in need of improvement as they currently provide a poor quality and uninviting pedestrian environment. At Grove Road, a pedestrian route runs to the east of Goodmayes Retail Park. The path is currently fenced and creates a dark and uninviting route. It is proposed that this route should be opened up with improved lighting and visibility. This connection would then provide improved access to Mayfield School to the south of the railway and the surrounding residential area.

6.8 It is recommended that, more generally, all local pedestrian links should be improved in order that they achieve a Pedestrian Environment Review System (PERS) rating of at least 'Good'.
Car Parking Facilities

6.9 Parking restrictions vary along the corridor with some areas of short-term parking provided where retail premises are present. This parking keeps the retail frontage 'live' and should therefore be maintained.

6.10 However, there appears to be limited parking enforcement and management with inconsistent restrictions along the corridor. Parking should also be avoided adjacent to cycle routes wherever possible. Currently parking is permitted across cycle routes outside peak hours which is unsafe for cyclists and potentially confusing for drivers. Wherever possible, on-street parking should be located within lay-by bays to reduce the impact on traffic flow, bus routes and cyclists.

6.11 Taxi rank parking at all stations needs to ensure that pedestrian access is not limited through excessive stationary vehicles.

Aldborough Road

6.12 The junction of Aldborough Road is recognised above as being in need of improvements, in particular for cyclists and pedestrians.

6.13 It is proposed that the existing pedestrian crossing is replaced with a toucan crossing linking up the route from Highbury Gardens to Aldborough Road more effectively. The link over the railway at this point is a key bridging point and should be enhanced.

6.14 The link also provides the opportunity to create an improved pedestrian space and links from the crossing area to the Aldborough Road footway.

Seven Kings

6.15 The Seven Kings junction is programmed to be altered from a roundabout to a signalised junction over the next year or so with options going out to consultation shortly, as discussed in Chapter Four. We have proposed additional alterations, building upon the signalised arrangement which aims to further improve pedestrian and cycle facilities.
6.16 It is proposed that the area in front of the station entrance is closed to vehicles connecting up the existing public space with the station. This creates a public 'plaza' in front of the station.
6.17 The plaza would then be linked by improved pedestrian crossings to the northern side of the High Road. The area of highway immediately adjacent to the public space will be raised to provide a common surface across the junction.

6.18 Presently, the westbound bus stop is located some distance from the station. It is proposed that this could be relocated to the bridge opposite the station entrance, enabled through a narrowing of the highway.

6.19 A new taxi stand and drop-off area would be provided to the northwest of the station along Cameron Road.
6.20 The overall aim is to create a more defined centre with pedestrians given priority over vehicular traffic and enhancing the station forecourt.

Goodmayes

6.21 The area around Goodmayes is dominated by the Tesco Store and the Barley Lane junction. There is limited capacity to alter the junction as it has very high flows on all arms. However, it is proposed that the signal timings could be adjusted to improve pedestrian crossing provision. This would be accompanied by the removal of all barriers and guard-railing that is in place at the junction.

6.22 Presently the footway on the southern side of the High Road terminates to the east of the junction with pedestrians required to walk through the Tesco site to access Goodmayes Road and the Barley Lane junction. It is considered that there is sufficient highway width to allow for the extension of this footway to the junction.

6.23 Access to the park to the northeast of the Barley Lane junction is currently difficult with no frontage onto the High Road.

It is proposed that a new entrance to the park be created at the corner of Barley Lane and High Road.

6.24 Due to the distance between the High Road and Goodmayes Station, it is recommended that clear signage is put in place to direct pedestrians to and from the station, and as part of an area wayfinding strategy.

6.25 As part of the wider development proposals, it is proposed that the existing shop frontage to the eastern side of Goodmayes Road be set further back to enable a wider footway. This new frontage would allow access to a redeveloped Tesco site directly from Goodmayes Road.

6.26 Adjacent to the station, it is proposed that an improved space is provided for taxi and disabled parking.

6.27 There is potential for raising the road surface along Goodmayes Road to further enhance the public realm.

Chadwell Heath

6.28 It is proposed that the current one-way operation of Wangey Road and Station Road be altered to enable a two-way operation along one arm. This would allow for the pedestrianisation of the remaining arm. It is recommended, based on existing highway width, that Wangey Road should be altered to a two-way operation, with Station Road being closed to through vehicular traffic. Access would still be permitted for vehicles to and from Herbert Gardens and Chapel Lane.

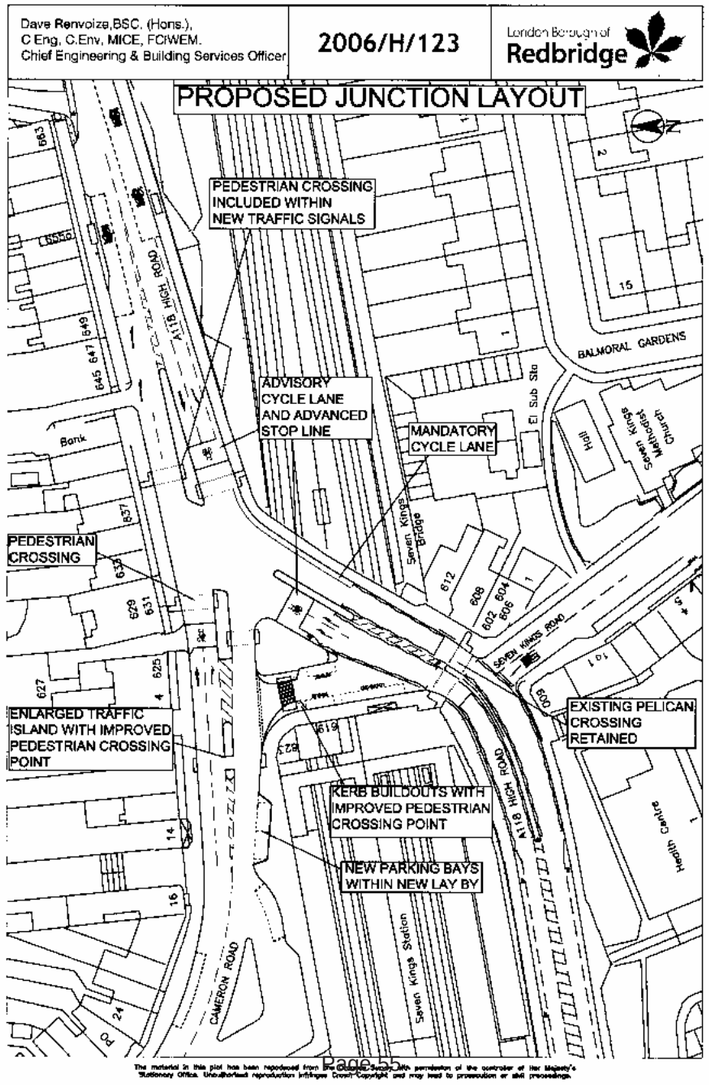
6.29 The area of High Road between Wangey Road and Station Road would be raised to footway level to improve pedestrian crossing.

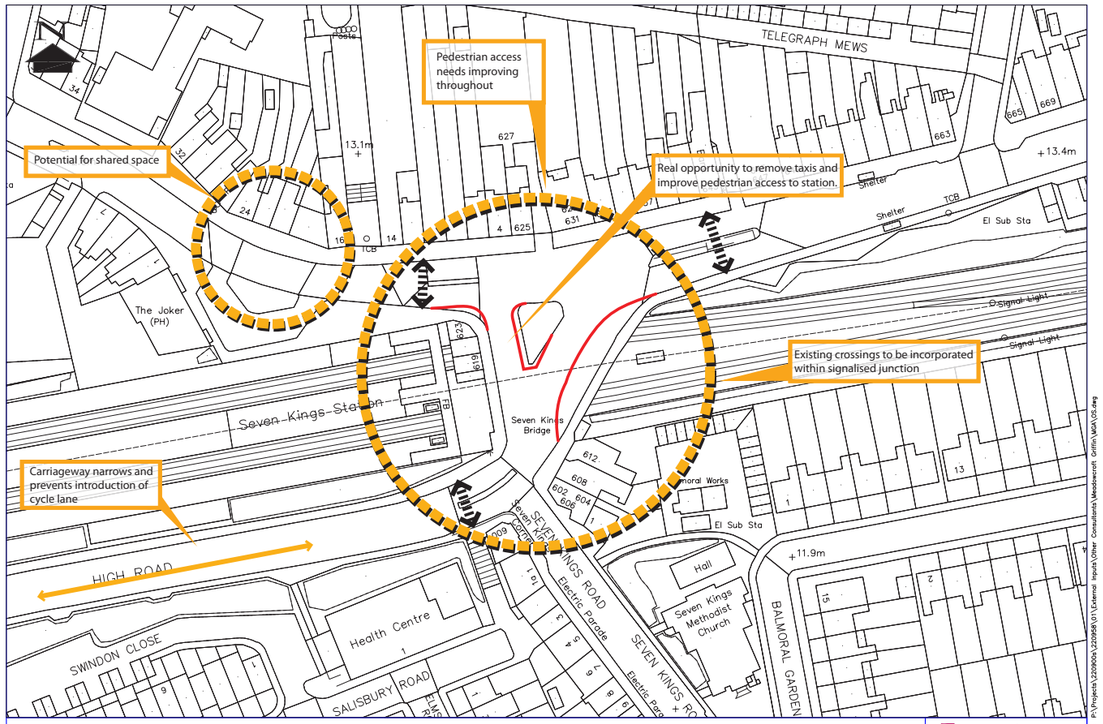
6.30 The junction of Wangey Road and High Road would be altered to incorporate improved cycle facilities including an Advanced Stop Line and a continuation of the cycle route along the High Road to the east and west.

6.31 To the south, the crossing at the junction of Station Road and Wangey Road would be improved and upgraded to a 'Puffin' crossing. A further crossing would be provided to the south of the station.

6.32 Currently there is a car park provided at Chadwell Heath station for passengers. The car park is at a considerably lower level than Station Road. It is proposed that access to the car park could be improved through the introduction of a ramp and steps up to street level. In addition, additional cycle parking should be provided either at street level through the introduction of a decked area, or within the car park adjacent to any ramp provided.

6.33 As with Goodmayes Station, it is proposed that additional space be provided for disabled parking and taxi drop-offs at the station where possible.



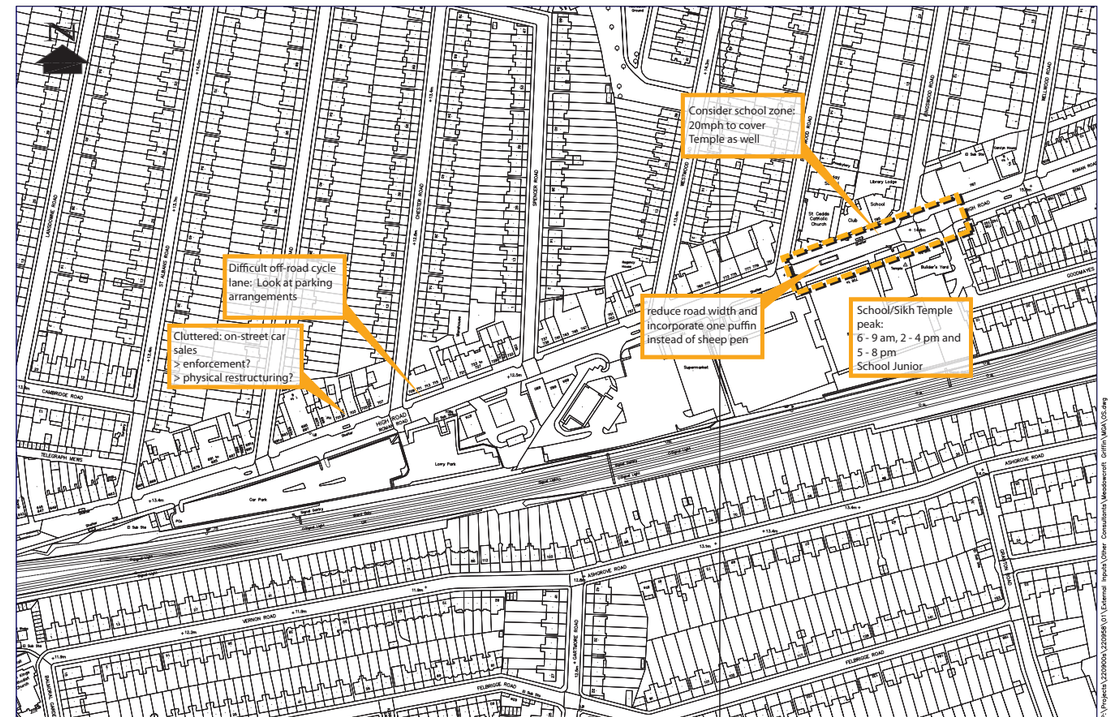


Roman Road Area Action Plan
Figure 5.5: Seven Kings

steer davies gleave

Drawn:	Date:	Scale:	Figure No:
YPL	13/01/09	NTS	220958_005b

OS REFERENCE: P:\Projects\220900s\220958\01\External Inputs\Other Consultants\Meadowcroft Griffin\MGA\05.dwg

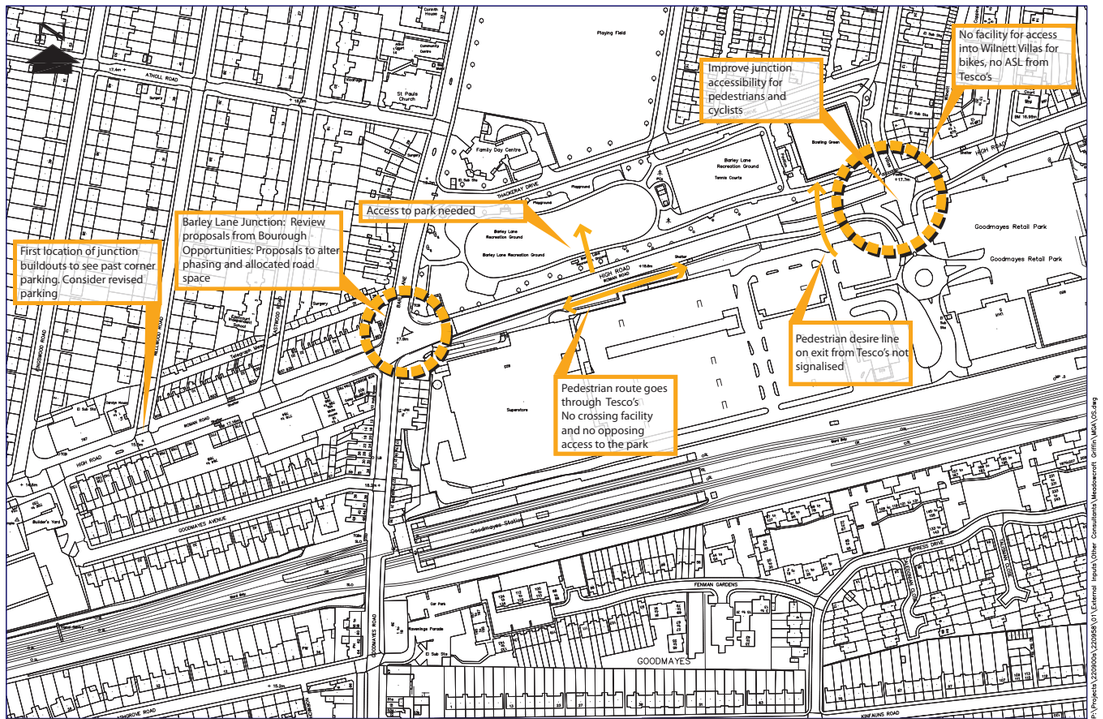


Roman Road Area Action Plan
Figure 5.6: Seven Kings East/Lorry Park Site

steer davies gleave

Drawn:	Date:	Scale:	Figure No:
YPL	13/01/09	NTS	220958_006

OS REFERENCE: P:\Projects\220900s\220958\01\External Inputs\Other Consultants\Meadowcroft Griffin\MGA\06.dwg

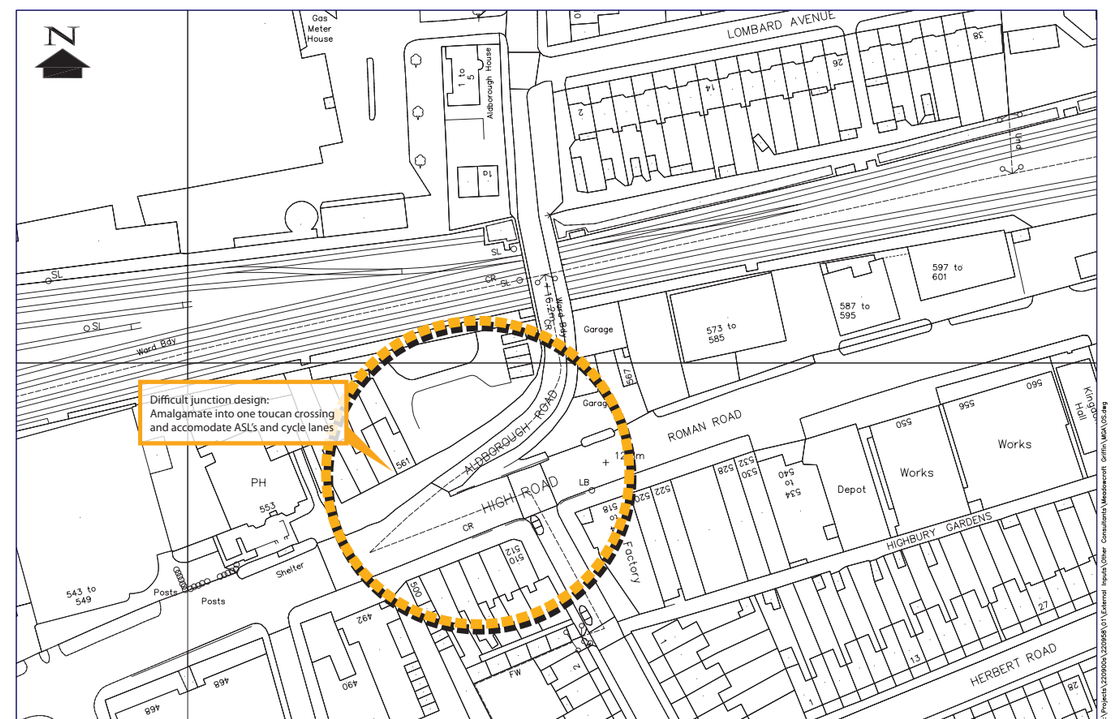


Roman Road Area Action Plan
Figure 5.7: Goodmayes Town Centre

steer davies gleave

Drawn:	Date:	Scale:	Figure No:
YPL	13/01/09	NTS	220958_007

OS REFERENCE: P:\Projects\220900s\220958\01\External Inputs\Other Consultants\Meadowcroft Griffin\MGA\07.dwg



Roman Road Area Action Plan
Figure 5.4: Aldborough Road

steer davies gleave

Drawn:	Date:	Scale:	Figure No:
YPL	13/01/09	NTS	220958_005a

OS REFERENCE: P:\Projects\220900s\220958\01\External Inputs\Other Consultants\Meadowcroft Griffin\MGA\05.dwg

Appendix 2
Costs

This section has been prepared by Appleyards DWB

CONSULT • ADVISE • MANAGE

Appleyards DWB

Roman Road Urban Design Study

for

London Borough of Redbridge

High Level Budget Costs

Rev 01
DATE: 23/02/09

Experience Certainty

High Holborn House 52-54 High Holborn London WC1V 6RL
t 020 7269 0450 f 020 7269 6757 e mail@appleyardsdwb.co.uk www.appleyardsdwb.co.uk

Appleyards DWB

Roman Road Urban Design Study
for
London Borough of Redbridge

INTRODUCTION

MAIN SUMMARY

		Low		High	
Seven Kings					
Phase 1		£ 500,000		£ 600,000	
Phase 2a		£ 550,000		£ 650,000	
Phase 2b		£ 250,000		£ 300,000	
Phase 3a - Assume that this would be funded through the redevelopment of the Health Centre site. These costs do not allow for building up the levels from current formation to street level		£ 175,000		£ 225,000	
Phase 3b - Not costed		0	£ 1,475,000	0	£ 1,775,000
Aldborough Road					
Phase 1		£ 275,000		£ 325,000	
Phase 2 - Assume that this would be funded through the develoment of the new school		£ 500,000	£ 775,000	£ 600,000	£ 925,000
Chadwell Heath/Allotment Link					
Option 1		£ 1,600,000	£ 1,600,000	£ 1,800,000	£ 1,800,000
Option 2					
(Note: Option 1 carried through for total high level budget cost)					
Goodmayes					
Phase 1		£ 700,000		£ 800,000	
Phase 2 - includes £1,000,000 allowance for a new market building		£ 2,000,000	£ 2,700,000	£ 2,400,000	£ 3,200,000
Farm Crossing - Allowance for planting			£ 100,000		£ 100,000
Marsh Crossing - Allowance for planting			£ 100,000		£ 100,000
			£ 6,750,000		£ 7,900,000
Design (10%) & Construction Contingency (5%)	15.0%		£ 1,013,000		£ 1,185,000
			£ 7,763,000		£ 9,085,000
Fees	12.0%		£ 932,000		£ 1,090,000
Planning, Legals, Surveys	2.5%		£ 194,000		£ 227,000
TOTAL			£ 8,889,000		£ 10,402,000
TOTAL COST - HIGH LEVEL BUDGET			£ 8,889,000		£ 10,402,000

Appleyards DWB

Roman Road Urban Design Study
for
London Borough of Redbridge

Notes related to the estimated costs;

A The estimate is based on drawings issued by Meadowcroft Griffin as listed under each project.

B Due to the early stages of design and subject to final definition of project boundaries, the areas used are approximate only.

C The estimate is based on current prices at 1st Quarter 2009.

D The estimate assumes that the works would be carried out as a single rolling project.

E Estimated costs assume that the contract will be procured in competition.

F It is assumed that all issues relating to ownership will be investigated prior to carrying out any works.

Exclusions from the estimated costs;

A Tender price increases beyond 1st Quarter 2090.

B Abnormal ground conditions found as a result of surveys.

C Rerouting of any utilities other than adaptation of stormwater drainaige to suit changes in finished levels of road and pavement surfaces.

C Acquisition costs for any land/buildings required as part of any of the project proposals.

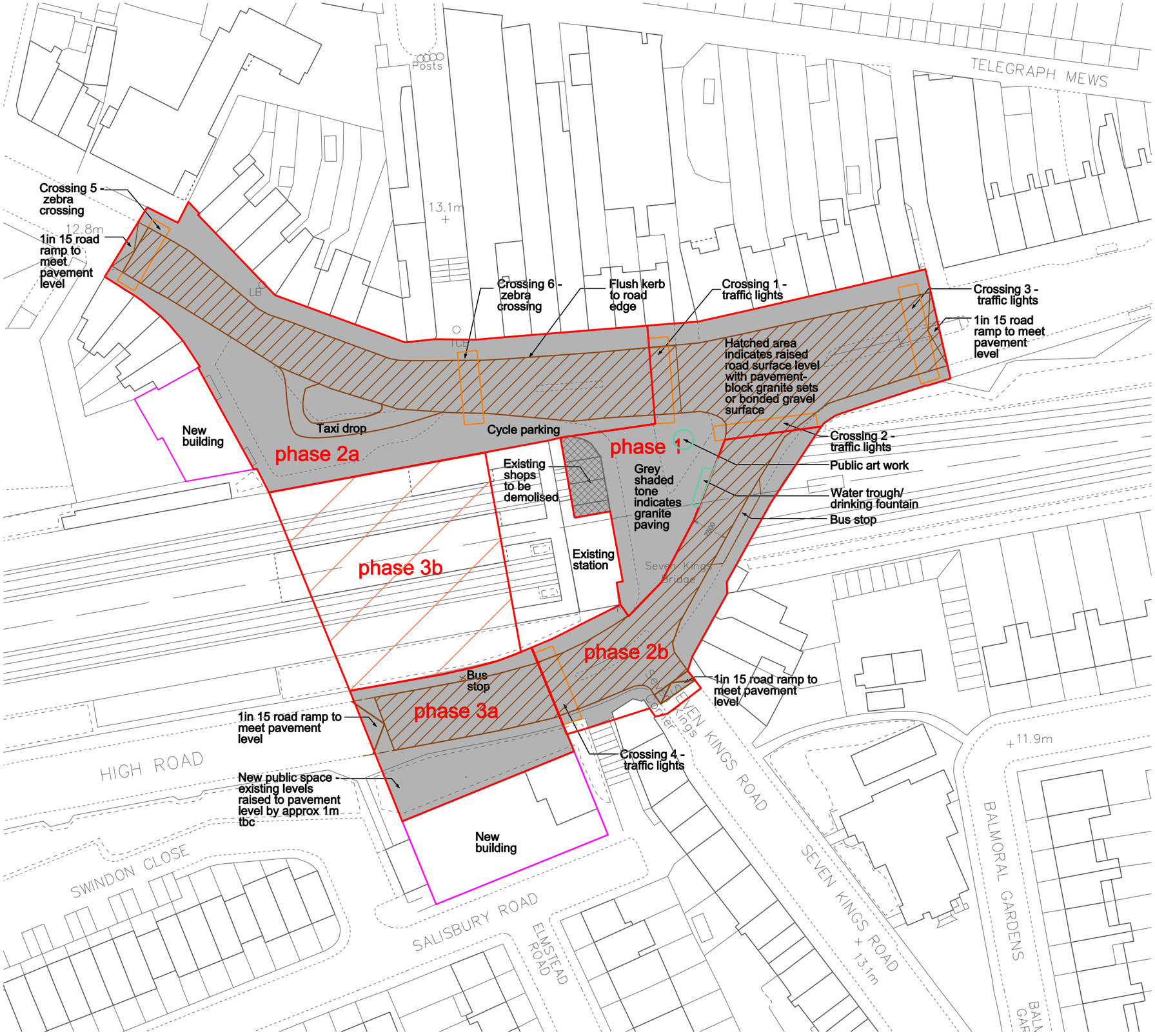
D Removal and remedial works associated with invasive plant species (e.g. Japanese Knotweed, Giant Hogweed, etc)

E Section 106 requirements and specific requirements of the Local Authority or other regulating bodies e.g. TfL.

F Finance costs

G Value Added Tax or other tax liabilities.

2. Seven Kings



Description of proposed phases:

Phase 1:

- Public space to front of station
- Roundabout removed
- Crossings remodelled

Phase 2a:

- Cycle parking
- Enlarged public space to north of station
- Raised shared surface
- Taxi/car drop off

Phase 2b:

- Bus stop for east bound buses created opposite station
- Raised shared surface

Phase 3a:

- Remodelling of the health centre site
- New public space in front of new building

Phase 3b:

- New square created over railway behind station with new development, market

Roman Road Urban Design Study
for
London Borough of Redbridge

DRAWINGS USED 0809_212_plan_SEVEN KINGS_090206 BY Meadowcroft Griffin Ltd

Seven Kings

Phase 1 - Outline Schedule of Works	Quantity	Unit	Rate (£)	
Preparation Works				
Take up existing surfaces including pavings, kerbs, tarmac and dispose to tip	2,150	m2	£ 20.00	£ 43,000.00
Allow for clearing away street funiture, signage, fittings etc.	1	Item	£ 2,000.00	£ 2,000.00
Demolish existing shops - assume that this is carried out by others				£ -
Regrading to allow raised road surface flush with pavement	1,040	m2	£ 15.00	£ 15,600.00
Allow for imported fill to make up formation levels where required to suit new surface treatments and levels	1	Item	£ 5,000.00	£ 5,000.00
Ramp formation e/o (including temp. due to phasing)	3	Nr	£ 1,000.00	£ 3,000.00
Surface Treatments				
Granite pavers for pedestrian areas	1,110	m2	£ 110.00	£ 122,100.00
Block granite sets or bonded granite surface for shared surfaces	1,040	m2	£ 130.00	£ 135,200.00
Drainage				
Allowance for alterations to stromwater/surface water drainage	1	Item	£ 6,400.00	£ 6,400.00
Shallow granite stormwater channel	120	m	£ 75.00	£ 9,000.00
New stormwater gullies	1	Item	£ 5,000.00	£ 5,000.00
Street Furniture				
Allowance for public artwork	1	Item	£ 35,000.00	£ 35,000.00
Water trough/drinking trough	1	Item	£ 4,000.00	£ 4,000.00
Benches - assume custom made timber	5	Nr	£ 1,000.00	£ 5,000.00
Bins - assume anti vandalism steel type	5	Nr	£ 450.00	£ 2,250.00
Planters	10	Nr	£ 750.00	£ 7,500.00
Lighting				
Allowance for possible alterations to existing street lighting	2,150	m2	£ 5.00	£ 10,750.00
Bollard lighting around station paved area including electrical installation and connection to adopted supplies	15	Nr	£ 1,500.00	£ 22,500.00
Feature lighting to public artwork	1	Item	£ 7,500.00	£ 7,500.00
Wayfinding				
Allow for local wayfinding	2,150	m2	£ 2.00	£ 4,300.00
Allow for traffic signage	2,150	m2	£ 4.00	£ 8,600.00
Road markings	1,040	m2	£ 3.00	£ 3,120.00
Traffic Control				
Crossing point - Traffic lights; synchronised system	3	Nr	£ 10,000.00	£ 30,000.00
				£ 486,820.00
Contractors Preliminaries		12%		**£ 58,418.40**

Roman Road Urban Design Study
for
London Borough of Redbridge

		£	545,238.40
Design & Construction Contingency	15%	£	81,785.76
		£	627,024.16
Fees	12%	£	75,242.90
TOTAL		**£**	**702,267.06**
TOTAL COST - HIGH LEVEL BUDGET		**£**	**702,300.00**

Appleyards DWB

Roman Road Urban Design Study
for
London Borough of Redbridge

DRAWINGS USED 0809_212_plan_SEVEN KINGS_090206 BY Meadowcroft Griffin Ltd

Seven Kings

Phase 2A- Outline Schedule of Works	Quantity	Unit	Rate (£)	
Preparation Works				
Take up existing surfaces including pavings, kerbs, tarmac and dispose to tip	2,880	m2	£ 20.00	£ 57,600.00
				£ -
Regrading to allow raised road surface flush with pavement	1,210	m2	£ 15.00	£ 18,150.00
Allow for clearing away street funiture, signage, fittings etc.	1	Item	£ 2,000.00	£ 2,000.00
Allow for imported fill to make up formation levels where required to suit new surface treatments and levels	1	Item	£ 5,000.00	£ 5,000.00
Ramp formation e/o	1	Nr	£ 1,000.00	£ 1,000.00
Surface Treatments				
Granite pavers for pedestrian areas	1,670	m2	£ 110.00	£ 183,700.00
Block granite sets or bonded granite surface for shared surfaces	1,210	m2	£ 130.00	£ 157,300.00
Drainage				
Allowance for alterations to stromwater/surface water drainage	1	Item	£ 8,700.00	£ 8,700.00
Shallow granite stormwater channel	230	m	£ 75.00	£ 17,250.00
New stormwater gullies	1	Item	£ 5,000.00	£ 5,000.00
Street Furniture				
Benches - assume custom made timber	5	Nr	£ 1,000.00	£ 5,000.00
Bins - assume anti vandalism steel type	5	Nr	£ 450.00	£ 2,250.00
Planters	3	Nr	£ 750.00	£ 2,250.00
Cycle hoops	12	Nr	£ 350.00	£ 4,200.00
Lighting				
Allowance for possible alterations to existing street lighting	2,880	m2	£ 5.00	£ 14,400.00
Bollard lighting around taxi rank paved area including electrical installation and connection to adopted supplies	15	Nr	£ 1,500.00	£ 22,500.00
Wayfinding				
Allow for local wayfinding	2,880	m2	£ 2.00	£ 5,760.00
Allow for traffic signage	2,880	m2	£ 4.00	£ 11,520.00
Road markings	1,210	m2	£ 3.00	£ 3,630.00
				£ 527,210.00
Contractors Preliminaries		12%		**£ 63,265.20**
				£ 590,475.20
Design & Construction Contingency		15%		£ 88,571.28
				£ 679,046.48
Fees		12%		£ 81,485.58
TOTAL				**£ 760,532.06**
TOTAL COST - HIGH LEVEL BUDGET				**£ 760,500.00**

Appleyards DWB

Roman Road Urban Design Study
for
London Borough of Redbridge

DRAWINGS USED 0809_212_plan_SEVEN KINGS_090206 BY Meadowcroft Griffin Ltd

Seven Kings

Phase 2B- Outline Schedule of Works	Quantity	Unit	Rate (£)	
Preparation Works				
Take up existing surfaces including pavings, kerbs, tarmac and dispose to tip	1,160	m2	£ 20.00	£ 23,200.00
				£ -
Allow for clearing away street funiture, signage, fittings etc.	1	Item	£ 2,000.00	£ 2,000.00
Regrading to allow raised road surface flush with pavement	760	m2	£ 15.00	£ 11,400.00
Allow for imported fill to make up formation levels where required to suit new surface treatments and levels	1	Item	£ 3,000.00	£ 3,000.00
Ramp formation	1	Nr	£ 1,000.00	£ 1,000.00
Surface Treatments				
Granite pavers for pedestrian areas	400	m2	£ 110.00	£ 44,000.00
Block granite sets or bonded granite surface for shared surfaces	760	m2	£ 130.00	£ 98,800.00
Drainage				
Allowance for alterations to stromwater/surface water drainage	1	Item	£ 3,500.00	£ 3,500.00
Shallow granite stormwater channel	150	m	£ 75.00	£ 11,250.00
New stormwater gullies	1	Item	£ 2,500.00	£ 2,500.00
Street Furniture				
Bins - assume anti vandalism steel type	2	Nr	£ 450.00	£ 900.00
Bus shelter with interactive timetable	1	Item	£ 15,000.00	£ 15,000.00
Lighting				
Allowance for possible alterations to existing street lighting	1,160	m2	£ 5.00	£ 5,800.00
Wayfinding				
Allow for local wayfinding	1,160	m2	£ 2.00	£ 2,320.00
Allow for traffic signage	1,160	m2	£ 4.00	£ 4,640.00
Road markings	761	m2	£ 3.00	£ 2,283.00
Traffic Control				
Crossing point - Traffice lights synchronised to traffic light installation in Phase 1	1	Nr	£ 10,000.00	£ 10,000.00
				£ 241,593.00
Contractors Preliminaries		12%		**£ 28,991.16**
				£ 270,584.16
Design & Construction Contingency		15%		£ 40,587.62
				£ 311,171.78
Fees		12%		£ 37,340.61
TOTAL				**£ 348,512.40**
TOTAL COST - HIGH LEVEL BUDGET				**£ 348,500.00**

Appleyards DWB

Roman Road Urban Design Study
for
London Borough of Redbridge

DRAWINGS USED 0809_212_plan_SEVEN KINGS_090206 BY Meadowcroft Griffin Ltd

Seven Kings

Phase 3A- Outline Schedule of Works - it is assume that these works would form part of the re-development of the Health Centre Site	Quantity	Unit	Rate (£)	
Preparation Works				
Take up existing surfaces including pavings, kerbs, tarmac and dispose to tip	950	m2	£ 20.00	£ 19,000.00
Allow for clearing away street funiture, signage, fittings etc.	1	Item	£ 2,000.00	£ 2,000.00
Regrading to allow raised road surface flush with pavement	440	m2	£ 15.00	£ 6,600.00
Regrading to allow new public space flush with pavement	340	m2	£ 25.00	£ 8,500.00
Allow for imported fill to make up formation levels where required to suit new surface treatments and levels	1	Item	£ 3,000.00	£ 3,000.00
Ramp formation	1	Nr	£ 1,000.00	£ 1,000.00
Surface Treatments				
Granite pavers for pedestrian areas	510	m2	£ 110.00	£ 56,100.00
Block granite sets or bonded granite surface for shared surfaces	440	m2	£ 130.00	£ 57,200.00
Drainage				
Allowance for alterations to stromwater/surface water drainage	1	Item	£ 2,800.00	£ 2,800.00
Shallow granite stormwater channel	80	m	£ 75.00	£ 6,000.00
New stormwater gullies	1	Item	£ 2,500.00	£ 2,500.00
Street Furniture				
Benches - assume custom made timber	4	Nr	£ 1,000.00	£ 4,000.00
Bins - assume anti vandalism steel type	4	Nr	£ 450.00	£ 1,800.00
Lighting				
Allowance for possible alterations to existing street lighting	950	m2	£ 5.00	£ 4,750.00
Wayfinding				
Allow for local wayfinding	950	m2	£ 2.00	£ 1,900.00
Allow for traffic signage	950	m2	£ 4.00	£ 3,800.00
Road markings	440	m2	£ 3.00	£ 1,320.00
				£ 182,270.00
Contractors Preliminaries		12%		**£ 21,872.40**
				£ 204,142.40
Design & Construction Contingency		15%		£ 30,621.36
				£ 234,763.76
Fees		12%		£ 28,171.65
TOTAL				**£ 262,935.41**
TOTAL COST - HIGH LEVEL BUDGET				**£ 262,900.00**

Appleyards DWB

Roman Road Urban Design Study
for
London Borough of Redbridge

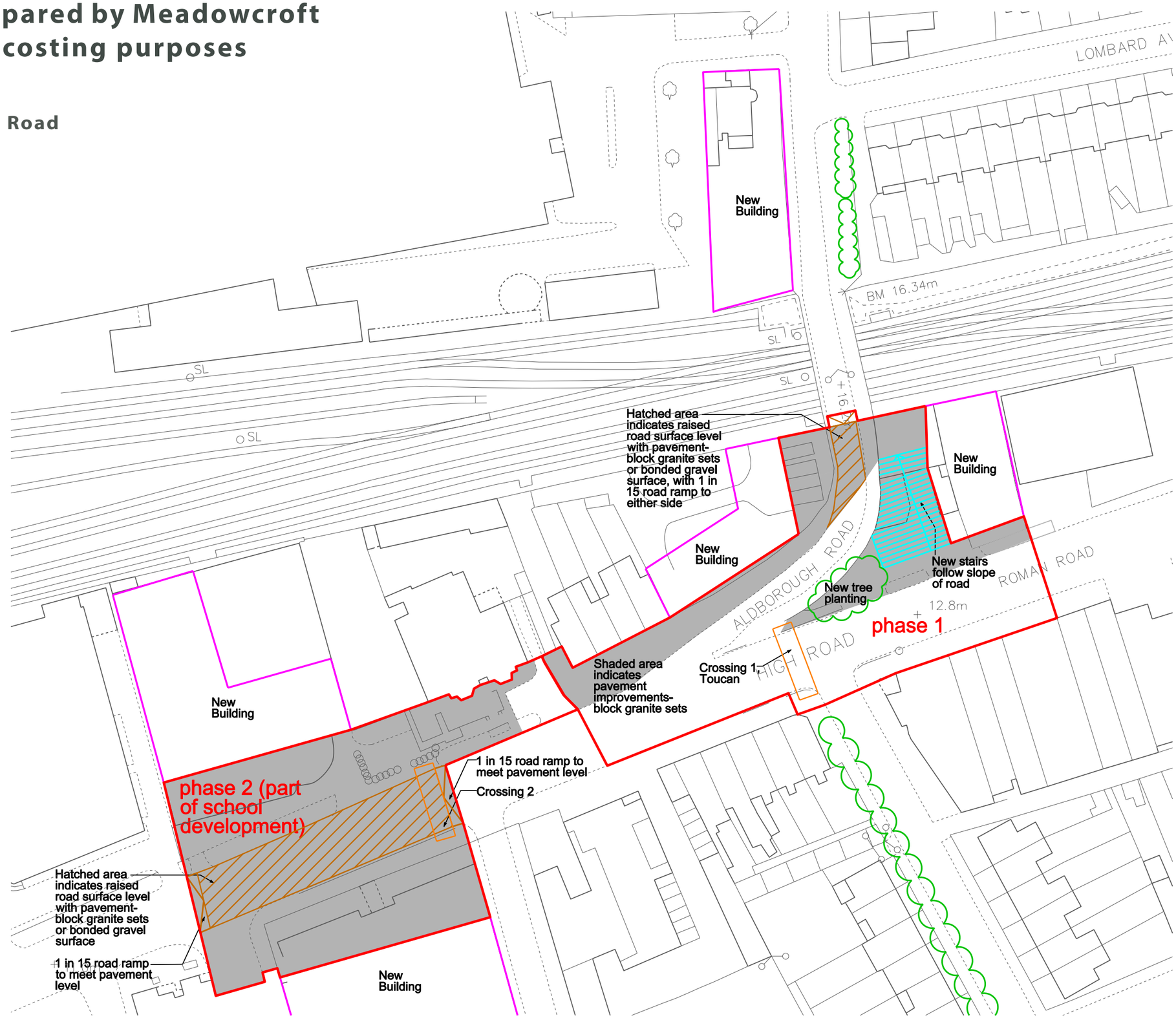
DRAWINGS USED 0809_212_plan_SEVEN KINGS_090206 BY Meadowcroft Griffin Ltd

Seven Kings

Phase 3B- Outline Schedule of Works	Quantity	Unit	Rate (£)	
This phase has not been costed. It is seen as part of the wider vision of this study demonstrating the full potential of the proposed works				
			£	**-**
Contractors Preliminaries		12%	**£**	**-**
			£	-
Design & Construction Contingency		15%	£	-
			£	-
Fees		12%	£	-
TOTAL			**£**	**-**
TOTAL COST - HIGH LEVEL BUDGET			**£**	**-**

Drawings of proposed Public Spaces prepared by Meadowcroft Griffin for costing purposes

1. Aldborough Road



Description of proposed phases:

Phase 1:

- New cycle and pedestrian crossing (toucan)
-Pavement improvements including stairs to follow the slope of Aldborough road

Phase 2:

-New public space as part of school development inlcuding raised shared road surface and crossing

Appleyards DWB

Roman Road Urban Design Study
for
London Borough of Redbridge

DRAWINGS USED 0809_211_plan_ALDBOROUGH ROAD_090212 BY Meadowcroft Griffin Ltd

Aldborough Road/Allotment Link

Phase 1 - Outline Schedule of Works	Quantity	Unit	Rate (£)	
Preparation Works				
Take up existing surfaces including pavings, kerbs, tarmac and dispose to tip	1,370	m2	£ 20.00	£ 27,400.00
Allow for clearing away street funiture, signage, fittings etc.	1	Item	£ 2,000.00	£ 2,000.00
Regrading to allow raised road surface flush with pavement	130	m2	£ 15.00	£ 1,950.00
Regrading to allow new steps to follow slope	240	m2	£ 20.00	£ 4,800.00
Allow for imported fill to make up formation levels where required to suit new surface treatments and levels	1	Item	£ 7,500.00	£ 7,500.00
Ramp formation e/o	2	Nr	£ 1,000.00	£ 2,000.00
Surface Treatments				
Granite pavers for pedestrian areas	1,000	m2	£ 110.00	£ 110,000.00
Granite pavers for stepped pedestrian areas	240	m2	£ 200.00	£ 48,000.00
Block granite sets or bonded granite surface for shared surfaces	130	m2	£ 130.00	£ 16,900.00
Drainage				
Allowance for alterations to stromwater/surface water drainage	1	Item	£ 4,100.00	£ 4,100.00
Shallow granite stormwater channel	30	m	£ 75.00	£ 2,250.00
New stormwater gullies	1	Item	£ 2,500.00	£ 2,500.00
Street Furniture				
Benches - assume custom made timber	2	Nr	£ 1,000.00	£ 2,000.00
Bins - assume anti vandalism steel type	2	Nr	£ 450.00	£ 900.00
Tree planting	2	Areas	£ 3,000.00	£ 6,000.00
Lighting				
Allowance for possible alterations to existing street lighting	1,370	m2	£ 5.00	£ 6,850.00
Wayfinding				
Allow for local wayfinding	1,370	m2	£ 2.00	£ 2,740.00
Allow for traffic signage	1,370	m2	£ 4.00	£ 5,480.00
Road markings	130	m2	£ 3.00	£ 390.00
Traffic Control				
Toucan crossing	1	Nr	£ 10,000.00	£ 10,000.00
				£ 263,760.00
Contractors Preliminaries		12%		**£ 31,651.20**
				£ 295,411.20
Design & Construction Contingency		15%		£ 44,311.68
				£ 339,722.88
Fees		12%		£ 40,766.75
TOTAL				**£ 380,489.63**
TOTAL COST - HIGH LEVEL BUDGET				**£ 380,500.00**

Appleyards DWB

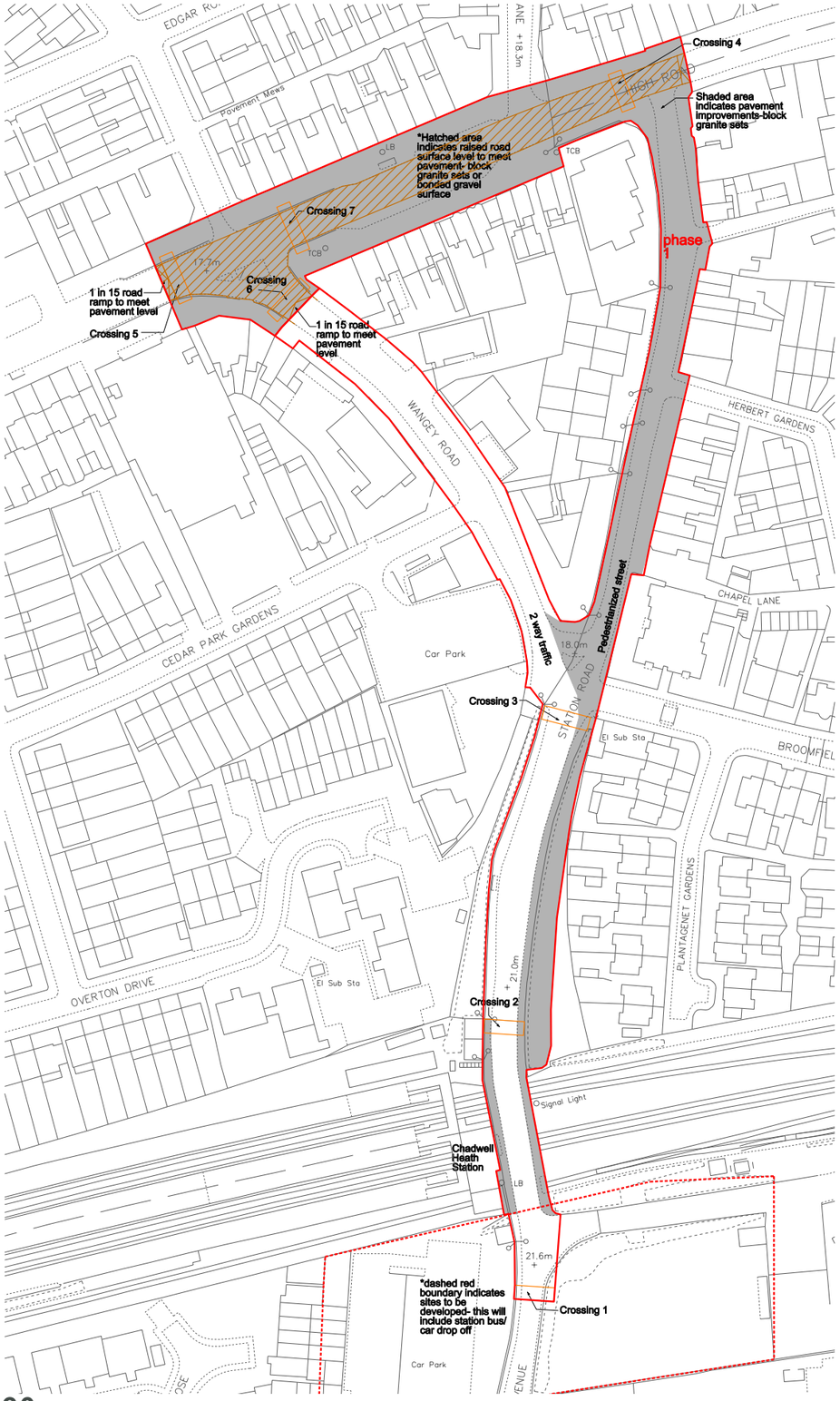
Roman Road Urban Design Study
for
London Borough of Redbridge

DRAWINGS USED 0809_211_plan_ALDBOROUGH ROAD_090212 BY Meadowcroft Griffin Ltd

Aldborough Road/Allotment Link

Phase 2 - Outline Schedule of Works	Quantity	Unit	Rate (£)	
Preparation Works				
Take up existing surfaces including pavings, kerbs, tarmac	2,730	m2	£ 20.00	£ 54,600.00
Allow for clearing away street funiture, signage, fittings etc.	1	Item	£ 2,000.00	£ 2,000.00
Regrading to allow raised road surface flush with pavement	670	m2	£ 15.00	£ 10,050.00
Allow for imported fill to make up formation levels where required to suit new surface treatments and levels	1	Item	£ 10,000.00	£ 10,000.00
Ramp formation e/o	2	Nr	£ 1,000.00	£ 2,000.00
Surface Treatments				
Granite pavers for pedestrian areas	2,060	m2	£ 110.00	£ 226,600.00
Block granite sets or bonded granite surface for shared surfaces	670	m2	£ 130.00	£ 87,100.00
Drainage				
Allowance for alterations to stromwater/surface water drainage	1	Item	£ 8,200.00	£ 8,200.00
Shallow granite stormwater channel	120	m	£ 75.00	£ 9,000.00
New stormwater gullies	1	Item	£ 5,000.00	£ 5,000.00
Street Furniture				
Benches - assume custom made timber	4	Nr	£ 1,000.00	£ 4,000.00
Bins - assume anti vandalism steel type	4	Nr	£ 450.00	£ 1,800.00
Lighting				
Allowance for possible alterations to existing street lighting	2,730	m2	£ 5.00	£ 13,650.00
Wayfinding				
Allow for local wayfinding	2,730	m2	£ 2.00	£ 5,460.00
Allow for traffic signage	2,730	m2	£ 4.00	£ 10,920.00
Road markings	670	m2	£ 3.00	£ 2,010.00
Traffic Control				
Toucan crossing	1	Nr	£ 10,000.00	£ 10,000.00
				£ 462,390.00
Contractors Preliminaries		12%		**£ 55,486.80**
				£ 517,876.80
Design & Construction Contingency		15%		£ 77,681.52
				£ 595,558.32
Fees		12%		£ 71,467.00
TOTAL				**£ 667,025.32**
TOTAL COST - HIGH LEVEL BUDGET				**£ 667,000.00**

4. Chadwell Heath

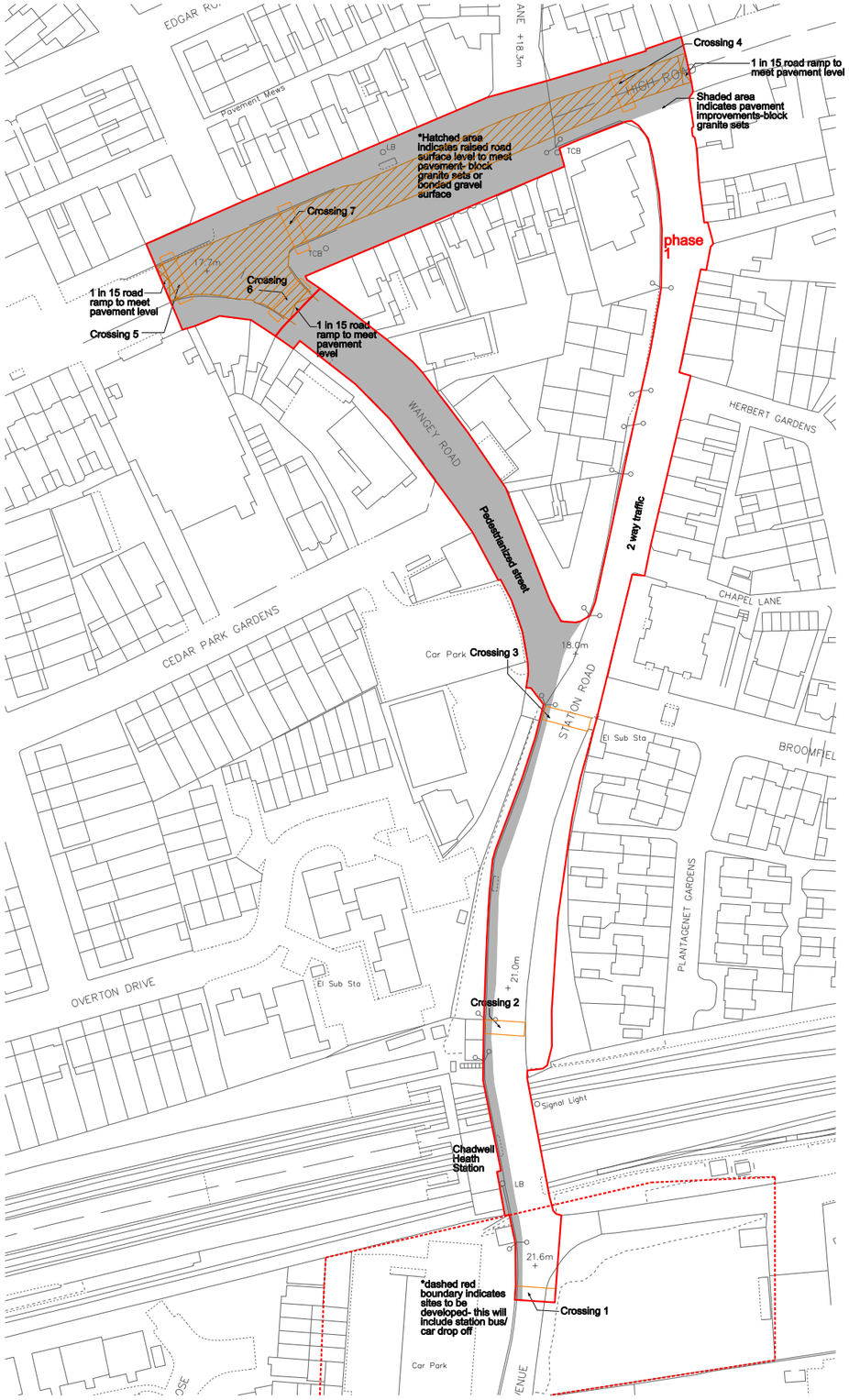


Description of proposed phases:

Phase 1:

- Pedestrianise Station Road
-Road system altered: Wangey Road to take two way traffic
-7no. crossings
-Shared road surface for section of High road
-Pavement improvements

***New bus tops/car drop off to be included as part of development to exg car park site south of station**



Description of proposed phases:

Phase 1:

- Pedestrianise Wangey Road
-Road system altered: Station Road to take two way traffic
-7no. crossings
-Shared road surface for section of High road
-Pavement improvements

***New bus tops/car drop off to be included as part of development to exg car park site south of station**

Appleyards DWB

Roman Road Urban Design Study
for
London Borough of Redbridge

DRAWINGS USED 0809_214_plan_CHADWELL HEATH_OPTION 1_090212 BY Meadowcroft Griffin Ltd

Chadwell Heath - Option 1

Outline Schedule of Works	Quantity	Unit	Rate (£)	
Preparation Works				
Take up existing surfaces including pavings, kerbs, tarmac	7,470	m2	£ 20.00	£ 149,400.00
Allow for clearing away street funiture, signage, fittings etc.	1	Item	£ 4,000.00	£ 4,000.00
Regrading to allow raised road surface flush with pavement	1,940	m2	£ 15.00	£ 29,100.00
Regrading to existing roads to allow pedestrianised areas	1,570	m2	£ 20.00	£ 31,400.00
Allow for imported fill to make up formation levels where required to suit new surface treatments and levels	1	Item	£ 25,000.00	£ 25,000.00
Ramp formation e/o	3	Nr	£ 1,000.00	£ 3,000.00
Surface Treatments				
Granite pavers for pedestrian areas	5,530	m2	£ 110.00	£ 608,300.00
Block granite sets or bonded granite surface for shared surfaces	1,940	m2	£ 130.00	£ 252,200.00
Drainage				
Allowance for alterations to stromwater/surface water drainage	1	Item	£ 22,400.00	£ 22,400.00
Shallow granite stormwater channel	700	m	£ 75.00	£ 52,500.00
New stormwater gullies	1	Item	£ 10,000.00	£ 10,000.00
Street Furniture				
Benches - assume custom made timber	12	Nr	£ 1,000.00	£ 12,000.00
Bins - assume anti vandalism steel type	12	Nr	£ 450.00	£ 5,400.00
Planting	1	Item	£ 25,000.00	£ 25,000.00
Lighting				
Allowance for possible alterations to existing street lighting	7,470	m2	£ 5.00	£ 37,350.00
Allowance for new lighting to pedestrianised area lighting	1,570	m2	£ 25.00	£ 39,250.00
Wayfinding				
Allow for local wayfinding	7,470	m2	£ 2.00	£ 14,940.00
Allow for traffic signage	7,470	m2	£ 4.00	£ 29,880.00
Road markings	3,310	m2	£ 3.00	£ 9,930.00
Traffic Control				
Crossing point - Traffice lights; 2 nr; synchronised system	7	Nr	£ 10,000.00	£ 70,000.00
				£ 1,431,050.00
Contractors Preliminaries		12%		**£ 171,726.00**
				£ 1,602,776.00
Design & Construction Contingency		15%		£ 240,416.40
				£ 1,843,192.40
Fees		12%		£ 221,183.09
TOTAL				**£ 2,064,375.49**
TOTAL COST - HIGH LEVEL BUDGET				**£ 2,064,400.00**

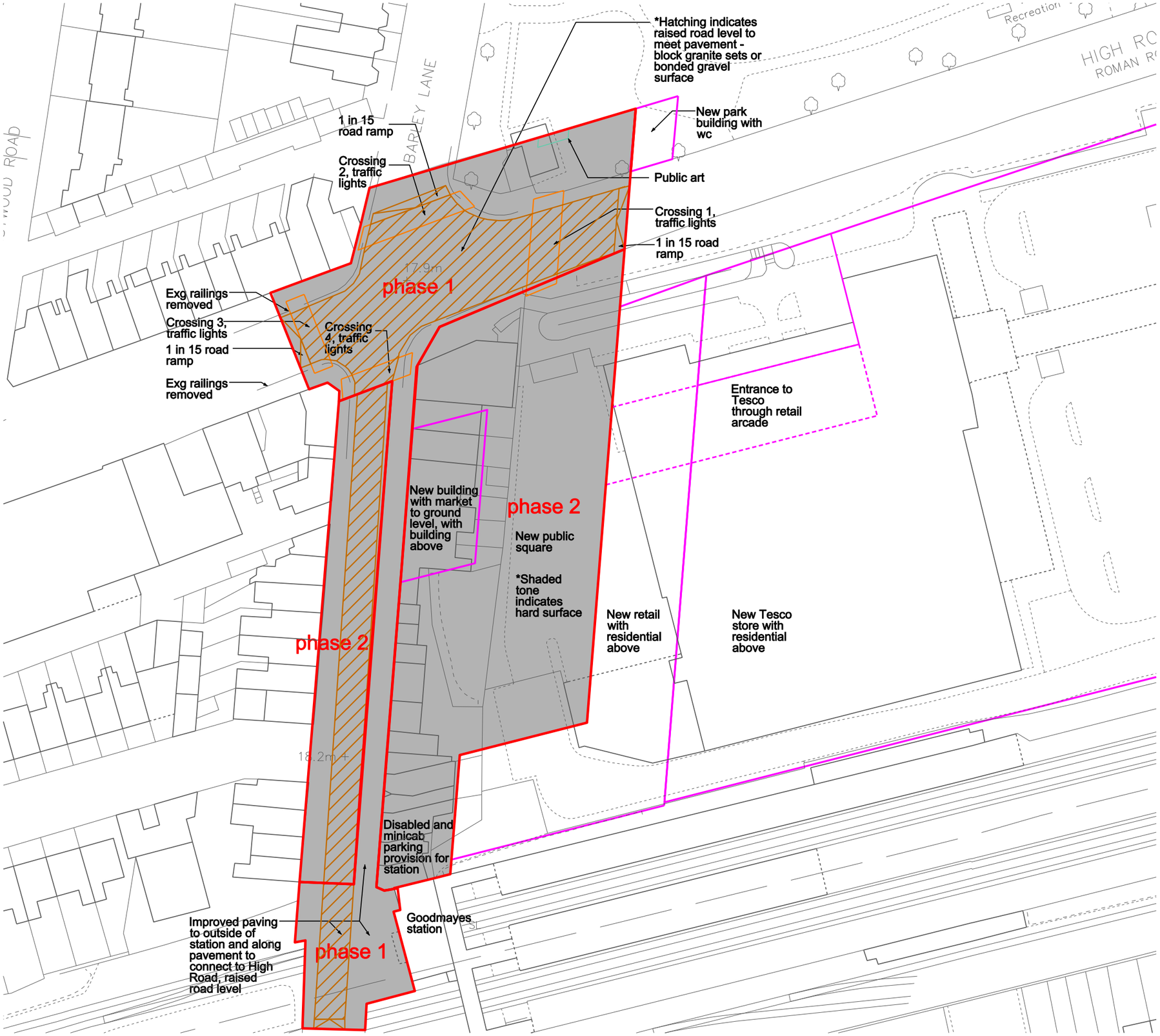
Appleyards DWB

Roman Road Urban Design Study
for
London Borough of Redbridge

DRAWINGS USED 0809_215_plan_CHADWELL HEATH_OPTION 2_090212 BY Meadowcroft Griffin Ltd

Chadwell Heath - Option 2

Outline Schedule of Works	Quantity	Unit	Rate (£)	
Preparation Works				
Take up existing surfaces including pavings, kerbs, tarmac	6,800	m2	£ 20.00	£ 136,000.00
Allow for clearing away street funiture, signage, fittings etc.	1	Item	£ 4,000.00	£ 4,000.00
Regrading to allow raised road surface flush with pavement	2,067	m2	£ 15.00	£ 31,005.00
Regrading to existing roads to allow pedestrianised areas	1,692	m2	£ 20.00	£ 33,840.00
Allow for imported fill to make up formation levels where required to suit new surface treatments and levels	1	Item	£ 25,000.00	£ 25,000.00
Ramp formation e/o	3	Nr	£ 1,000.00	£ 3,000.00
Surface Treatments				
Granite pavers for pedestrian areas	4,733	m2	£ 110.00	£ 520,630.00
Block granite sets or bonded granite surface for shared surfaces	2,067	m2	£ 130.00	£ 268,710.00
Drainage				
Allowance for alterations to stromwater/surface water drainage	1	Item	£ 20,400.00	£ 20,400.00
Shallow granite stormwater channel	600	m	£ 75.00	£ 45,000.00
New stormwater gullies	1	Item	£ 10,000.00	£ 10,000.00
Street Furniture				
Benches - assume custom made timber	10	Nr	£ 1,000.00	£ 10,000.00
Bins - assume anti vandalism steel type	20	Nr	£ 450.00	£ 9,000.00
Planting	1	Item	£ 25,000.00	£ 25,000.00
Lighting				
Allowance for possible alterations to existing street lighting	6,800	m2	£ 5.00	£ 34,000.00
Allowance for new lighting to pedestrianised area lighting	1,692	m2	£ 25.00	£ 42,300.00
Wayfinding				
Allow for local wayfinding	6,800	m2	£ 2.00	£ 13,600.00
Allow for traffic signage	6,800	m2	£ 4.00	£ 27,200.00
Road markings	3,372	m2	£ 3.00	£ 10,116.00
Traffic Control				
Crossing point - Traffice lights; 2 nr; synchronised system	7	Nr	£ 10,000.00	£ 70,000.00
				£ 1,338,801.00
Contractors Preliminaries		12%		**£ 160,656.12**
				£ 1,499,457.12
Design & Construction Contingency		15%		£ 224,918.57
				£ 1,724,375.69
Fees		12%		£ 206,925.08
TOTAL				**£ 1,931,300.77**
TOTAL COST - HIGH LEVEL BUDGET				**£ 1,931,300.00**



Description of proposed phases:

Phase 1:

- 4no. crossings to junction
- Pavement improvements including removal of railings
-New entrance to park from High Road, with public art piece
-Improvements to public space outside of station including raised road section and new paving to pavement along Goodmayes Road

Phase 2:

-Phased Redevelopment of Tesco site including new square to north of station with market building
-Minicab, disabled and cycle parking to north of station
-Raised road shared surface and pavement improvements to Goodmayes Road

Appleyards DWB

Roman Road Urban Design Study
for
London Borough of Redbridge

DRAWINGS USED 0809_213_plan_GOODMAYES_090212 BY Meadowcroft Griffin Ltd

Goodmayes

Phase 1 - Outline Schedule of Works	Quantity	Unit	Rate (£)	
Preparation Works				
Take up existing surfaces including pavings, kerbs, tarmac	3,171	m2	£ 20.00	£ 63,420.00
Removal of existing street furniture and sundry works	1	Item	£ 2,000.00	£ 2,000.00
Removal of existing railings	1	Item	£ 2,000.00	£ 2,000.00
Regrading to allow raised road surface flush with pavement	1,556	m2	£ 15.00	£ 23,340.00
Regrading to existing roads to allow pedestrianised areas	271	m2	£ 20.00	£ 5,420.00
Allow for imported fill to make up formation levels where required to suit new surface treatments and levels	1	Item	£ 10,000.00	£ 10,000.00
Ramp formation e/o (including temp. due to phasing)	6	Nr	£ 1,000.00	£ 6,000.00
Surface Treatments				
Granite pavers for pedestrian areas	1,615	m2	£ 110.00	£ 177,650.00
Block granite sets or bonded granite surface for shared surfaces	1,556	m2	£ 130.00	£ 202,280.00
Drainage				
Allowance for alterations to stromwater/surface water drainage	1	Item	£ 9,500.00	£ 9,500.00
Shallow granite stormwater channel	212	m	£ 75.00	£ 15,900.00
New stormwater gullies	1	Item	£ 5,000.00	£ 5,000.00
Street Furniture				
Benches - assume custom made timber	6	Nr	£ 1,000.00	£ 6,000.00
Bins - assume anti vandalism steel type	6	Nr	£ 450.00	£ 2,700.00
Allowaance for public artwork	1	Item	£ 35,000.00	£ 35,000.00
Lighting				
Allowance for possible alterations to existing street lighting	3,171	m2	£ 5.00	£ 15,855.00
Feature lighting to public artwork	1	Item	£ 7,500.00	£ 7,500.00
Wayfinding				
Allow for local wayfinding	3,171	m2	£ 2.00	£ 6,342.00
Allow for traffic signage	3,171	m2	£ 4.00	£ 12,684.00
Road markings	1,556	m2	£ 3.00	£ 4,668.00
Traffic Control				
Crossing point - Traffice lights; 2 nr; synchronised system	4	Nr	£ 10,000.00	£ 40,000.00
				£ 653,259.00
Contractors Preliminaries		12%		**£ 78,391.08**
				£ 731,650.08
Design & Construction Contingency		15%		£ 109,747.51
				£ 841,397.59
Fees		12%		£ 100,967.71
TOTAL				**£ 942,365.30**
TOTAL COST - HIGH LEVEL BUDGET				**£ 942,400.00**

Appleyards DWB

Roman Road Urban Design Study
for
London Borough of Redbridge

DRAWINGS USED 0809_213_plan_GOODMAYES_090212 BY Meadowcroft Griffin Ltd

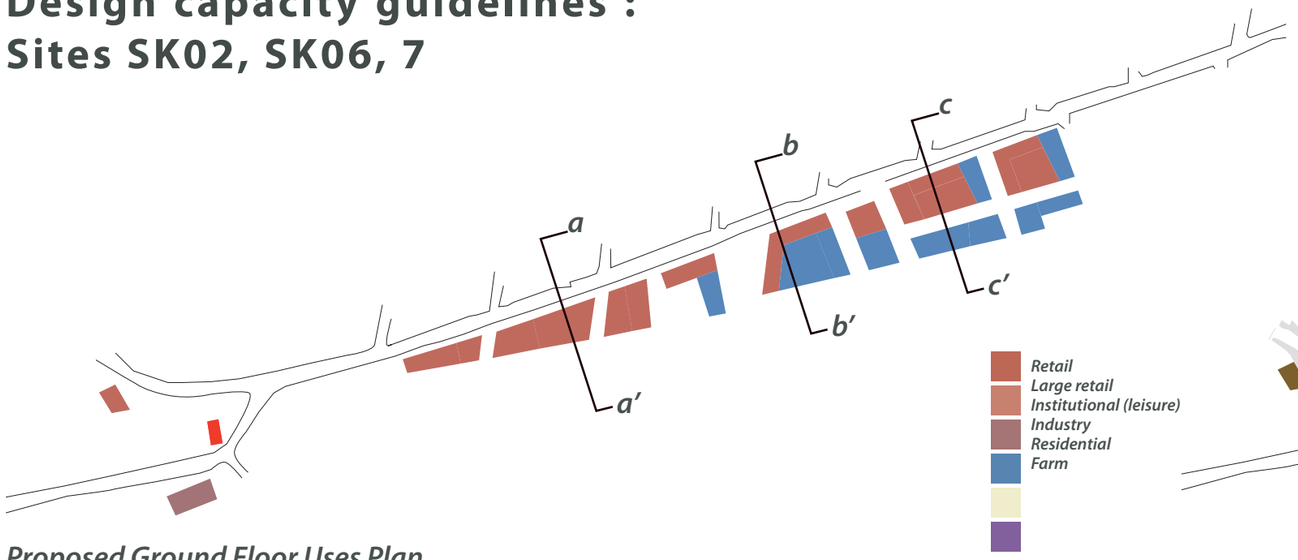
Goodmayes

Phase 2 - Outline Schedule of Works	Quantity	Unit	Rate (£)	
Preparation Works				
Demolition and clearance of existing buildings	1	Item	#########	£ 100,000.00
Take up existing surfaces including pavings, kerbs, tarmac	5,144	m2	£ 20.00	£ 102,880.00
Removal of existing street furniture and sundry works	1	Item	£ 3,000.00	£ 3,000.00
Regrading to allow raised road surface flush with pavement	619	m2	£ 15.00	£ 9,285.00
Regrading to existing roads to allow pedestrianised areas	139	m2	£ 20.00	£ 2,780.00
Allow for imported fill to make up formation levels where required to suit new surface treatments and levels	1	Item	£ 25,000.00	£ 25,000.00
Ramp formation e/o (including temp. due to phasing)	6	Nr	£ 1,000.00	£ 6,000.00
Surface Treatments				
	(NOTE - Building footprint included !!!!!!)			
Granite pavers for pedestrian areas	4,525	m2	£ 110.00	£ 497,750.00
Block granite sets or bonded granite surface for shared surfaces	619	m2	£ 130.00	£ 80,470.00
Drainage				
Allowance for alterations to stromwater/surface water drainage	1	Item	£ 15,400.00	£ 15,400.00
Shallow granite stormwater channel	201	m	£ 75.00	£ 15,075.00
New stormwater gullies	1	Item	£ 10,000.00	£ 10,000.00
Construction				
New Market Building - allowance only				£ 1,000,000.00
Street Furniture				
Benches - assume custom made timber	10	Nr	£ 1,000.00	£ 10,000.00
Bins - assume anti vandalism steel type	10	Nr	£ 450.00	£ 4,500.00
Lighting				
Allowance for possible alterations to existing street lighting	5,144	m2	£ 5.00	£ 25,720.00
Wayfinding				
Allow for local wayfinding	5,144	m2	£ 2.00	£ 10,288.00
Allow for traffic signage	5,144	m2	£ 4.00	£ 20,576.00
Road markings	619	m2	£ 3.00	£ 1,857.00
				£ 1,940,581.00
Contractors Preliminaries		12%		**£ 232,869.72**
				£ 2,173,450.72
Design & Construction Contingency		15%		£ 326,017.61
				£ 2,499,468.33
Fees		12%		£ 299,936.20
TOTAL				**£ 2,799,404.53**
TOTAL COST - HIGH LEVEL BUDGET				**£ 2,799,400.00**

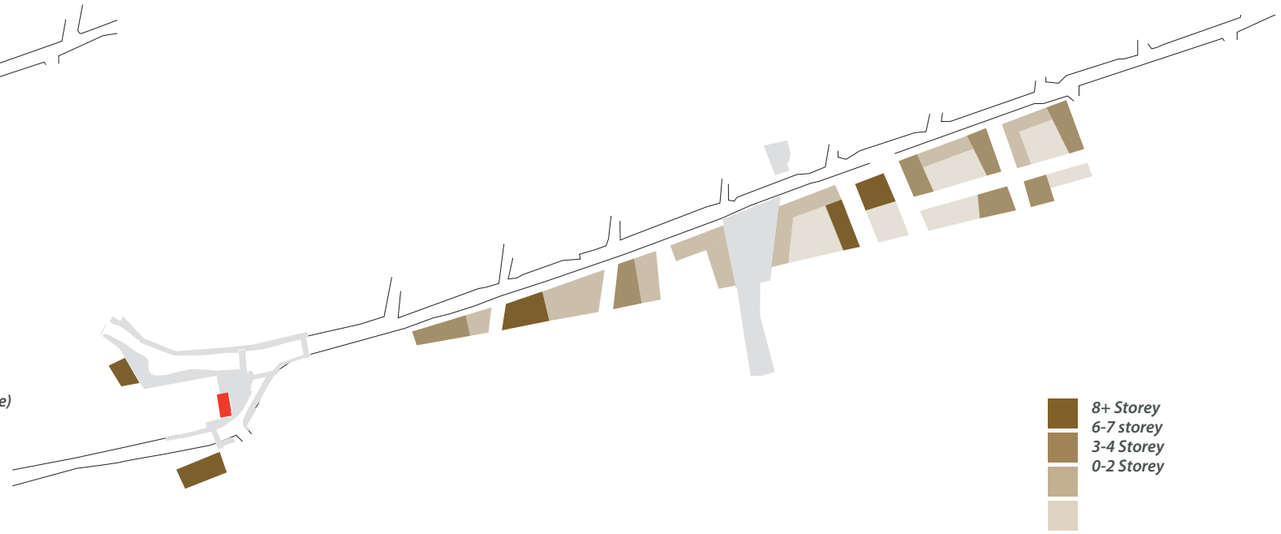
Appendix 3
Development Sites

Design capacity drawings for sites SK02, SK06, 7, and site 8, prepared by Meadowcroft Griffin

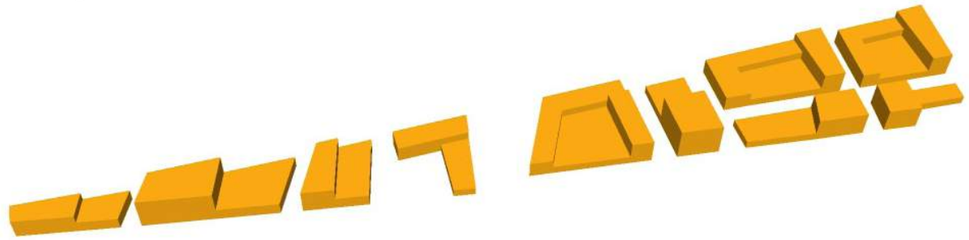
Design capacity guidelines : Sites SK02, SK06, 7



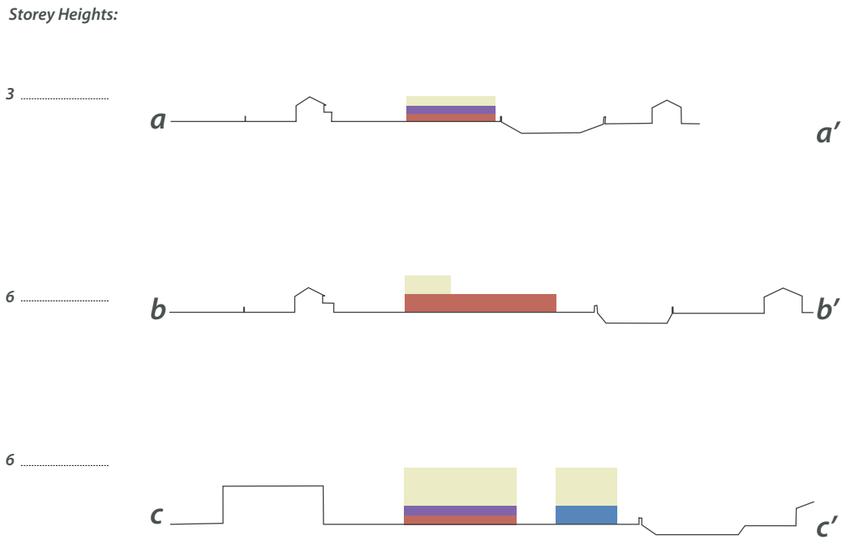
Proposed Ground Floor Uses Plan



Proposed Massing Plan



Indicative 3D Model birds eye view

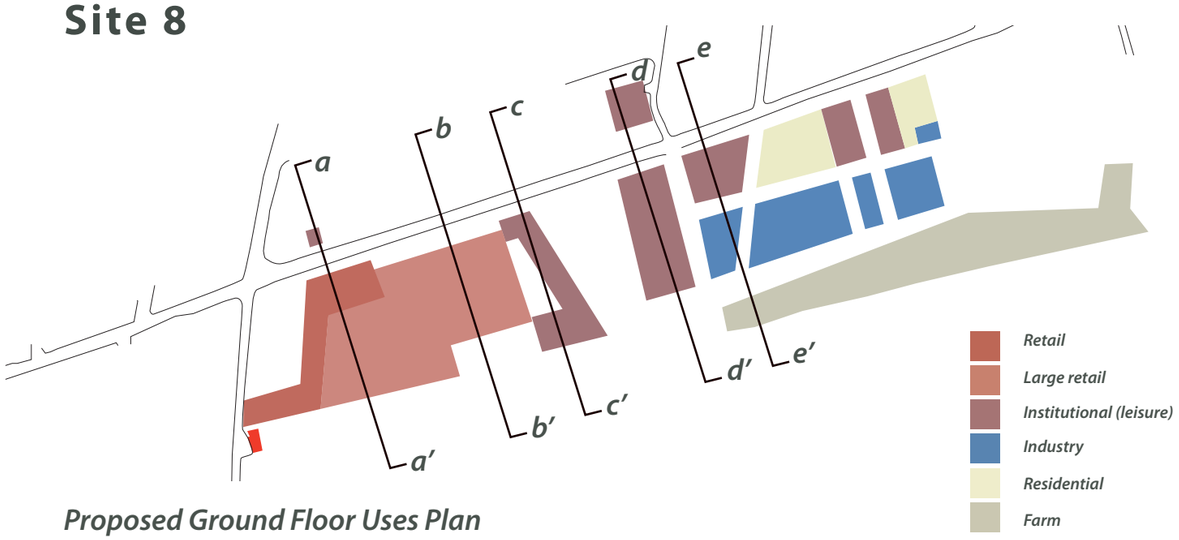


Proposed uses sections

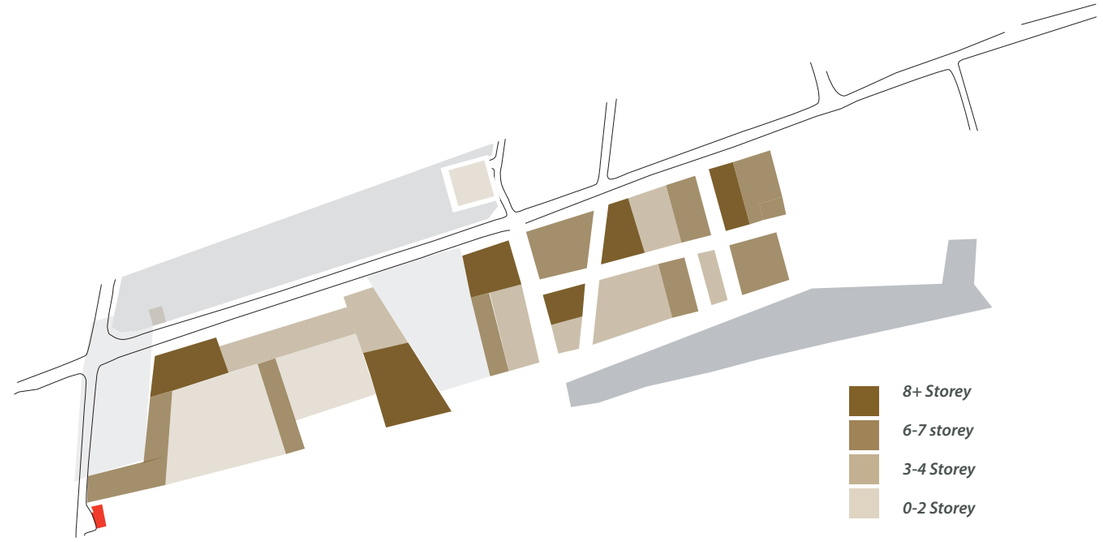
Density	Units	Total Residential Area required for mostly flats
80-120 units/hectare (LB Redbridge)	max 360	26000sqm
170 units/hectare (London Plan)	max 510	36800sqm
Proposal as shown above	max 586-695	50250sqm

Housing capacity analysis table

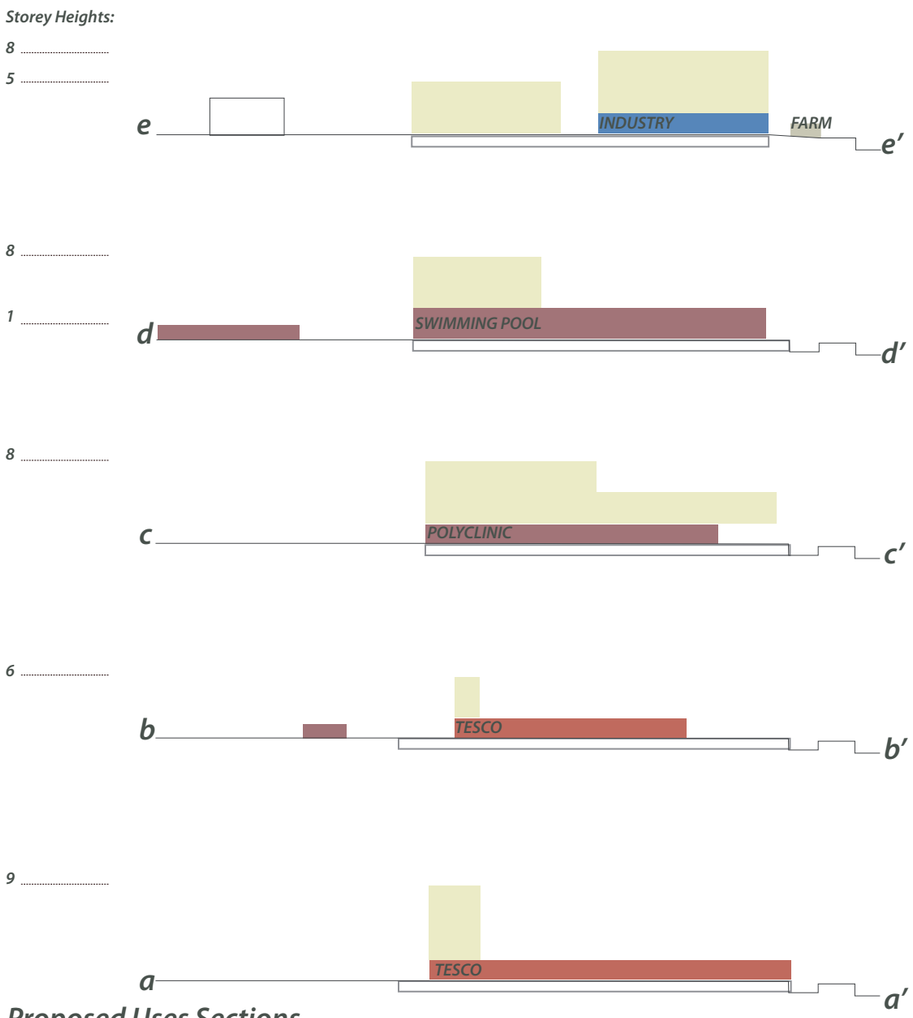
Design capacity guidelines : Site 8



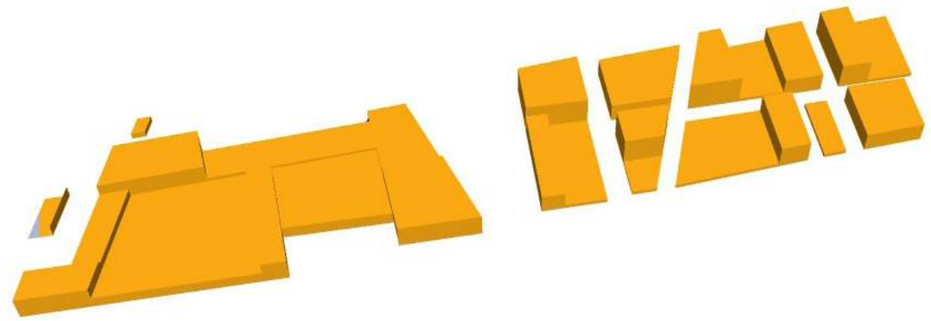
Proposed Ground Floor Uses Plan



Proposed Massing Plan



Proposed Uses Sections



Indicative 3D Model birds eye view

Density	Units	Total Residential Area required for mostly flats
80-120 units/hectare (LB Redbridge)	max 919	66300sqm
170 units/hectare (London Plan)	max 1302	93900sqm
Proposal as shown above	max 1500-1760	104100sqm

Housing capacity analysis table