

**HEARING STATEMENT
SUBMITTED ON BEHALF OF
BARKING, HAVERING AND
REDBRIDGE UNIVERSITY
HOSPITALS NHS TRUST
RESPONSE TO INSPECTOR'S
ISSUES AND QUESTIONS:
ISSUES 4 AND 4A –
CROSSRAIL CORRIDOR –
POLICY LP1B**

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Appendix 1

UPDATED CONCEPTUAL MASTERPLAN OPTION STUDY

Appendix 2

UPDATED TRANSPORT STRATEGY REPORT

1.0 Introduction

- 1.1 This Hearing Statement has been prepared by Bidwells on behalf of the Barking, Havering and Redbridge University Hospitals NHS Trust (“BHRUT”) in support of the land within its ownership at King George Hospital.
- 1.2 King George Hospital is located adjacent to Goodmayes Hospital, which is owned by North East London NHS Foundation Trust (NELFT). Together, the Land at King George and Goodmayes Hospitals is proposed in the Local Plan as Strategic Site 67.
- 1.3 Strategic Site 67 is located within the Crossrail Corridor Investment Growth Area (CCIGA) and is proposed for development of around 500 new homes, a new secondary school a health and community hub and other supporting infrastructure under policy LP1B.
- 1.4 BHRUT fully supports the proposed allocation of Strategic Site 67 in principle.
- 1.5 BHRUT and NELFT submitted representations to the Regulation 19 Consultation seeking amendments to policy LP1B, primary to minimise risks to its deliverability and effectiveness. The comments made by both parties were broadly consistent. Since then BHRUT and NELFT have continued to engage with each other and the London Borough of Redbridge to agree further common ground and many of the issues raised in the representations have been overcome. This Hearing Statement provides an update on the outcomes of this process as part of BHRUT’s response to the Inspector’s Issues and Questions and confirms the outstanding points of difference.
- 1.6 Updates to the Conceptual Masterplan Study (CMS) and Transport Strategy report which accompanied BHRUT’s Regulation 19 consultation are appended to this Statement. The updated documents show how a revised conceptual masterplan, focused on the delivery of family housing, would deliver a mix and quantum of development that is more closely aligned to the Council’s aspirations for this site, its evidence on housing need and its estimate of site capacity. The updated Transport Strategy provides further information on access proposals and engagement undertaken with Transport for London (TfL) since the Regulation 19 consultation confirming that the principle of a new primary access from the A12 is acceptable in principle.
- 1.7 BHRUT is only responding to the Issues and Questions of relevance to Strategic Site 67 and the CCIGA, namely:
- Issue 4 – Question ii);
 - Issue 4a – Crossrail Corridor – Policy LP1B:
 - Question ii);
 - Question iii);
 - Question iv);
 - Question vi) and
 - Question xi)

2.0 Responses to the Inspector's Questions

Issue 4: Are the Investment and Growth Areas properly defined, do they positively promote the spatial vision and objectives for Redbridge and are the expectations for growth justified and deliverable?

Question ii) Will the infrastructure required for the Investment and Growth Areas be delivered in a timely fashion to keep pace with development? How is it to be funded? Does the Infrastructure Delivery Plan (LBR 2.21) provide sufficient clarity? How and when will the infrastructure be triggered?

Education

- 2.1 BHRUT welcomes the modification made to policy LP1B since the Pre-Submission stage confirming that only a new secondary school is required as part of the development of Strategic Site 67 and that there is not a need for a primary school in addition. This ensures consistency with the needs identified in the Infrastructure Delivery Plan (IDP).
- 2.2 Nevertheless, there remains a need for further clarity on the intended mechanisms to fund and deliver the new secondary school, which has been proposed to be located on land owned by NELFT in the Council's Concept Masterplan (ref: LBR2.78). BHRUT contends that CIL is the appropriate mechanism. The IDP and the Council's CIL Regulation 123 List both refer to the use of CIL receipts to fund education facilities including secondary schools.
- 2.3 Given that NELFT will need to provide the land for the new school, BHRUT would support the use of the provision of land and/or construction of the school by NELFT as payment in kind in lieu of a financial CIL contribution, in accordance with CIL Regulation 73. This would avoid the need to deliver the school having a disproportionate impact on the viability of the development of NELFT's land. Development of BHRUT's land will be subject to CIL, ensuring that it will make an appropriate financial contribution toward the development of the new school using this mechanism.
- 2.4 To ensure the effectiveness of Plan in accordance with paragraph 182 of the National Planning Policy Framework (NPPF), policy LP1B or its supporting text should be amended to confirm that the construction of the new secondary school will be funded by CIL and that the Council would consider a payment in kind by NELFT. The relevant criterion in the policy text should read as follows:

On-site provision for a new secondary school funded by CIL. The Council will consider payment in kind as a means of delivery on the Goodmayes Hospital site.

Health and Community Hub

- 2.5 Since the Pre-Submission Consultation, the Redbridge Clinical Commissioning Group's (CCG's) Primary Care Infrastructure Capacity Plan (LBR 2.22), the updated IDP (LBR 2.21), the Council's Concept Masterplan (ref: LBR2.78) and the Modifications to Appendix 1 of the Plan (LBR2.06.1) have identified the need for a new health and community hub to be provided as part of the development of surplus land at King George Hospital.
- 2.6 BHRUT supports the provision of a health and community hub as part of the King George Hospital development. Indeed, investment in the provision new health care facilities as a consequence of

disposal of surplus NHS assets to deliver new housing accords with BHRUT's aspirations and the recommendations of Sir Robert Naylor's report on the future of NHS Property and Estates (published March 2017). The disposal of surplus assets at King George and the provision of a new health and community hub to support population growth may form part of a future Sustainability and Transport Plan (STP), as recommended in the Naylor report.

Issue 4a: Crossrail Corridor – Policy LP1B

ii) Are the strategic sites justified when compared to other reasonable alternatives, deliverable within the plan period having regard to any constraints and consistent with national policy? Is the detail about the site allocations adequate in respect of use, form, scale, access and quantum of development? Could they provide the number of dwellings anticipated having regard to the concept masterplans (LBR 2.78)?

- 2.7 BHRUT is fully satisfied that the Council's evidence base robustly demonstrates that the strategic sites proposed for allocation are justified when compared with all reasonable alternatives and their selection accords with national policy.
- 2.8 BHRUT can confirm that the delivery of the development of surplus land at King George Hospital, as anticipated by the Council's Concept Masterplan (LBR 2.78) is fully deliverable within the Plan period. The evidence prepared by BHRUT to support its Regulation 19 representations and the updates appended this Statement corroborate this fact. This evidence includes analysis of highway and access constraints, urban design opportunities and the designation of part of the site as a Site of Importance for Nature Conservation (SINC). The updated CMS and Transport Strategy at Appendix 1 confirm that the Council's proposals for King George Hospital in respect use, form, scale, access and quantum of development are suitable and deliverable. BHRUT supports the level of detail provided in policy LP1B, which accords with the requirements of NPPF paragraph 157 for Local Plans to *"allocate sites to promote development...and provide detail on form, scale, access and quantum of development where appropriate"*.
- 2.9 BHRUT's updated CMP demonstrates the following:
- That the BHRUT land would be able to accommodate around 107 housing units as part of a family housing led scheme or around 190 as part of an apartment led-scheme. BHRUT recognises that a family-housing led scheme more closely aligns with policy LP5 on housing mix and the Council's aspirations for this site. It is therefore BHRUT's preferred option;
 - Proposed open space and circulation proposals retain the important open grassland and vegetation running along the Seven Kings Water river corridor, providing important amenity space and protecting ecological constraints. Vehicular circulation would be confined largely to the eastern portion of the site;
 - A "left in-left out" vehicle access could be obtained directly from the A12, reducing the burden on the A12 / Barley Lane junction. This approach has the support of TfL. Potential also exists for a secondary access point to the south-east, directly off Barley Lane, and to utilise the Hospital's existing access further to the south; and
 - Displaced hospital car parking can be re-provided elsewhere within the site.
- 2.10 The detailed design of future development proposals for the site would be subject to further testing at the planning application stage once the Local Plan is adopted, but the evidence presented demonstrates deliverability. It also shows how the delivery of family housing on King

George Hospital would result in a site capacity that is broadly consistent with the Council's estimate of its contribution towards the 500 dwellings (approximately) anticipated to come forward on Strategic Site 67 as a whole. On this basis, BHRUT is no longer seeking to amend policy LP1B to require the delivery of 'at least' 500 dwellings, as stated in its Regulation 19 consultation, and is satisfied that its target of 'around' 500 dwellings is appropriate.

2.11 BHRUT welcomes, in part, the modifications to last bullet of the King George/Goodmayes section of policy LP1B recognising that the site can be delivered in phases, taking account of the separate landownerships and governance constraints that apply to the BHRUT and NELFT owned land and the limited interrelationships between the surplus parcels on each site in terms of access and urban design constraints. Nevertheless, BHRUT and NELFT maintain that the Concept Masterplan already prepared by the Council (LBR 2.78) provides sufficient clarity to ensure that the site is delivered in a coordinated fashion and there is no need for a further Planning Brief / Masterplan to be prepared following adoption of the Local Plan. BHRUT contends that the final bullet should be deleted and replaced with the following wording:

- ***The development can be delivered in phases in the context of the Concept Masterplan prepared for the site.***

2.12 Similar amendments should be made to Appendix 1 (LBR 2.06.1) to reflect this.

iii) How would the development of the strategic sites promote sustainable patterns of development?

2.13 The updated Transport Strategy at Appendix 1 helps to demonstrate that the development of Strategic Site 67 would promote sustainable patterns of development because:

- The site is within close proximity to key destinations including various primary schools, a superstore / shopping area, community facilities and numerous recreation areas. Furthermore, development of Strategic Site 67 would include the provision of a secondary school. These factors would encourage residents to travel by non-car modes.
- The site is accessible via sustainable modes of transport. It already contains a series of footways to enable permeability through the site and good connectivity to the external pedestrian / cycle network. LBR together with TfL and Crossrail is proposing to improve the area around Seven Kings and Goodmayes stations, including public realm enhancements that would make the area more attractive for pedestrians and cyclists. Funding for this has already been secured.
- The site is accessible by rail. Goodmayes Railway Station and Newbury Park Underground Station are accessible from the site, providing multiple services per hour during peak periods into Central London. The imminent arrival of Crossrail will result in a substantial increase in connectivity.
- The King George Hospital site already acts as a bus hub for the area. There are a multitude of connections to the local area from the site, including those to Crossrail and Newbury Park stations providing onward links to Central London and beyond.
- The site's relatively low PTAL rating is only one measure of accessibility and, taking account of the above, is not considered to be a true reflection of the accessibility of the site because there are railway stations within walking distance but outside the arbitrary threshold set by TfL in its PTAL methodology. A more appropriate measure is to consider the areas that can be

accessed by residents of the site within a reasonable journey time. TfL's "Time Mapping" tool demonstrates that residents would be able to access Central London within a 45-60 minute journey time. This level of accessibility would encourage sustainable patterns of development.

- 2.14 The site is clearly in a highly accessible area with excellent public transport links, consistent with LBR's objectives to promote sustainable patterns of development and paragraphs 30, 34 and 35 of the NPPF.
- 2.15 Allocation of the site and its removal from the Green Belt will also enable the development of underutilised brownfield land that is surplus to the requirements of the NHS. This will, in turn, facilitate reinvestment of capital receipts in public healthcare provision. These factors will provide important social and economic benefits that contribute towards sustainable development.

iv) Do the strategic sites meet any of the 5 purposes of the Green Belt in paragraph 80 of the NPPF?

- 2.16 BHRUT supports LBR's Green Belt Review (January 2016 – LBR 2.41) and its Addendum (February 2017 - LBR 2.41.1) which confirm that the Strategic Site 67 does not fulfil any of the five Green Belt purposes..

vi) Having regard to paragraph 74 of the NPPF would the loss of existing open space, sports and recreation buildings and land be replaced by equivalent or better provision in terms of quantity and quality in a sustainable location?

- 2.17 No land designated as open space would be lost as a result of the allocation of Strategic Site 67.

xi) Is the expectation of a decentralised energy network at King George and Goodmayes Hospitals justified?

- 2.18 Strategic Site 67 has been identified through the GLA's DEMAP programme and a subsequent Decentralised Energy Masterplanning Study as one of the most suitable areas in the Borough for such a network. BHRUT acknowledges that on-site provision of a decentralised energy network can help meet carbon reduction targets required under Policy LP19 and the London Plan.
- 2.19 BHRUT objected the requirement for a decentralised energy network at King George and Goodmayes Hospital at the Regulation 19 stage due to concerns about feasibility and viability, primary due to the separate ownerships affecting the wider site, the distance between the various development parcels and the need to provide other essential infrastructure as part of the development. Nevertheless, it understands the benefits that a decentralised energy network could provide in helping to deliver high-quality, sustainable development. Following further engagement BHRUT, NELFT and the Council have reached agreement that the delivery of a decentralised energy network should remain in policy LP1B provided that its requirement is subject to feasibility

and viability. Viability has been added to the modified policy. BHRUT contends that both requirements should be referenced in the policy, so it reads as follows:

*...The provision for decentralised energy networks, subject to **feasibility and viability**. Any provision that is secured on this site must comply with policy LP29 in order to limit impacts on residential amenity.*

3.0 Summary and Conclusion

- 3.1 BHRUT fully supports the proposed allocation of Strategic Site 67 in principle and confirms that the proposals for King George Hospital, as anticipated by the Council's Concept Masterplan (LBR 2.78) are deliverable during the Plan period. This is supported by the updated CMS and Transport Strategy at Appendix 1, and the evidence supporting BHRUT's Regulation 19 representation.
- 3.2 BHRUT and NELFT submitted Regulation 19 representations seeking amendments to policy LP1B, primary to minimise risks to its deliverability and effectiveness. BHRUT and NELFT have continued to engage with the London Borough of Redbridge since and have overcome many of the issues raised in the representations, as follows:
- BHRUT recognises that the development of "around 500 dwellings" is appropriate, taking account of the mix of units required and the likely capacity of the site once relevant infrastructure is provided.
 - BHRUT is satisfied that an aspiration to provide a decentralised energy network is desirable subject to sufficient flexibility being provided on viability and feasibility.
 - The Council has confirmed that a new Primary School is not required on Strategic Site 67 and that the BHRUT and NELFT land can be delivered in phases.
- 3.3 BHRUT's outstanding concerns relate to the need for further clarity on the delivery and funding mechanism for the new secondary school and recognition that the Concept Masterplan already prepared by the Council provides sufficient clarity to guide development of both parts of the site.
- 3.4 To take account of its concerns, BHRUT recommends that the relevant section of policy LP1B is worded as follows:

King George & Goodmayes Hospital

The Council expects a coordinated mixed use development to come forward at King George and Goodmayes Hospitals in accordance with the following criteria:

- *Land in and around King George and Goodmayes Hospitals will be delivered to provide around 500 high quality new homes (including affordable);*
- *Optimising densities compatible with local context, sustainable design principles and public transport capacity, in line with the Density Matrix of the London Plan;*
- *The conversion and reuse of non-designated historic assets will enable provision of new homes. This will include, where feasible and viable, the conversion of the former mental health asylum buildings*
- *On site provision for a new secondary school funded by CIL. The Council will consider payment in kind as a means of delivery on the Goodmayes Hospital site;*
- *Permeable design – walkable neighbourhoods with routes and spaces defined by buildings and landscape;*
- *Enhanced open space provision, including the protection and enhancement of land designated as a Site of Importance for Nature Conservation;*

- *Improved east-west pedestrian and cycle routes to link the new neighbourhoods together;*
- *Development to be of the highest quality design, respecting the nature and character of the area;*
- *At Goodmayes development should maximise the opportunity to create a centrepiece for the new neighbourhood with opportunities to enhance the setting of the former mental health asylum;*
- *The provision for decentralised energy networks, subject to feasibility and viability. Any provision that is secured on this site must comply with policy LP29 in order to limit impacts on residential amenity.*
- *Development of this site should also comply with all other relevant policy requirements of this plan; and*
- *The development can be delivered in phases in the context of the Concept Masterplan prepared for the site.*

3.5 This is consistent with the approach being advocated by NELFT.

APPENDIX 1

UPDATED CONCEPTUAL MASTERPLAN OPTION STUDY

MAY 2017

CONCEPTUAL MASTER PLAN OPTION STUDY

KING GEORGE HOSPITAL, GOODMAYES



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01

INTRODUCTION

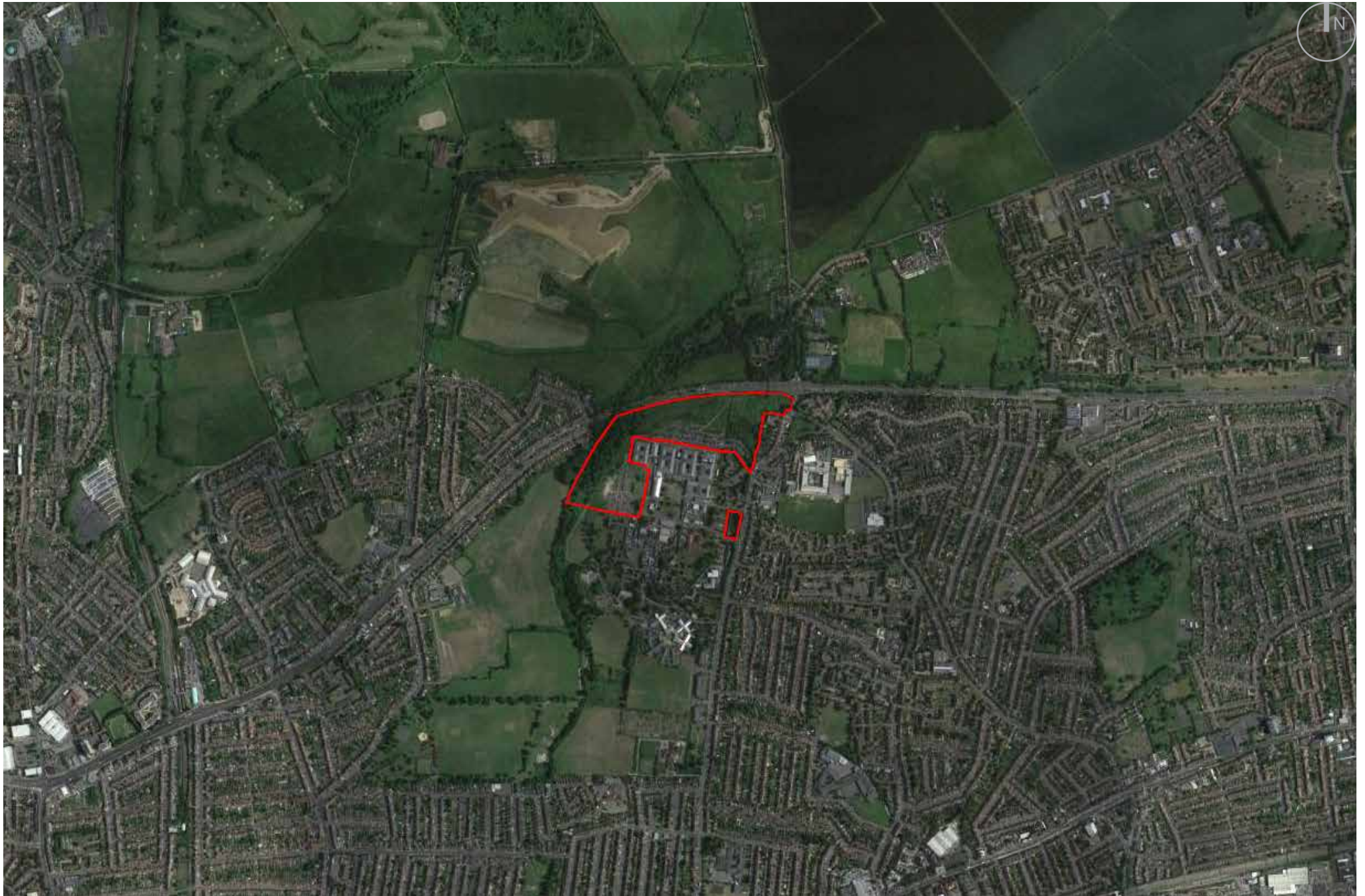


Figure 1: Aerial of proposed application site, with indicative red line boundary.

01 | INTRODUCTION

This document is a site assessment and master planning study for land at King George Hospital, in the Goodmayes area of the London Borough of Redbridge.

The document has been prepared on behalf of the Barking, Havering and Redbridge (University Hospitals) NHS Trust ('BHRUT') to demonstrate the development potential of the King George Hospital site. The site is located in the north east of Greater London, and immediately north of Goodmayes. The site boundaries are diverse, with King George Hospital directly to the south, the northern edge bounded by the A12 (Eastern Avenue), the Seven Kings Water corridor to the west and the Little Heath Conservation Area in the east.

This document is a continuation of the Conceptual Master Planning Study ('CMS') which was prepared in support of representations in relation to the Redbridge Local Plan 2015-2030 Pre-Submission Draft Consultation. The study has been undertaken to illustrate how surplus portions of the site can be bought forward for development, testing the sites capacity. Specifically, this version of the document tests an alternative mix of development, focused on the provision of family housing to more closely align the proposals with the expectations of the London Borough of Redbridge and its emerging policies.

The original master plan resulted from a process of assessment and evaluation to establish site opportunities and constraints, informing a master plan strategy, subsequent illustrative master plan and development mix, to produce a mixed residential proposal over two parcels which ranged from 1 and 2 bedroom apartments through to five bedroom dwellings.

This Conceptual Master Plan Option Study builds on this initial CMS, identifying a second master plan option, which proposes a range of dwellings from 2 to 5 bedrooms on the northern parcel, and 1 and 2 bedroom flats on the southern parcel.

Each master plan proposal within this document is then illustrated and explained in more detail. The updated document has been prepared to support the examination of the London Borough of Redbridge's emerging Local Plan.



02

SITE CONTEXT

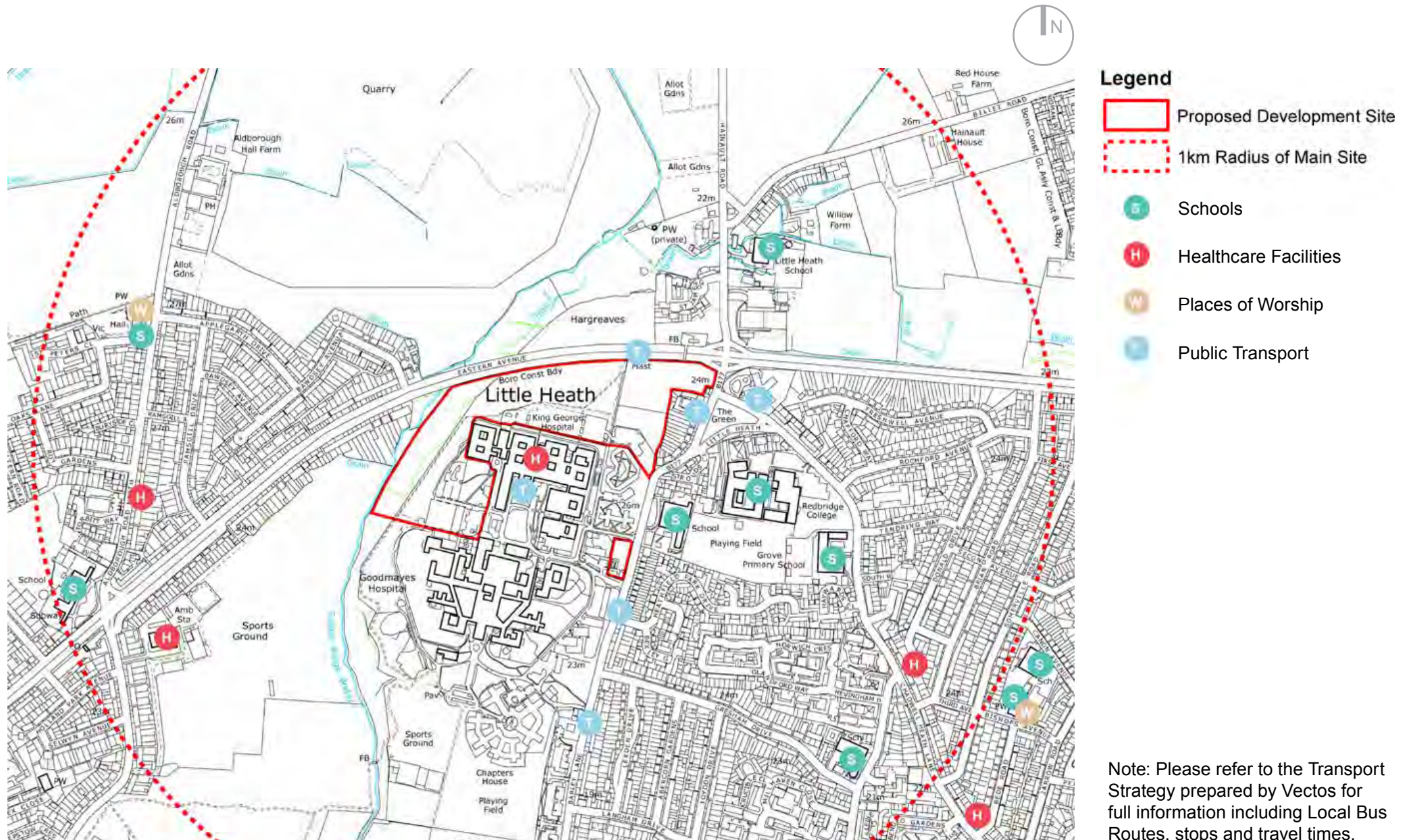
02 | SITE CONTEXT

AERIAL PHOTOGRAPH LOCATION PLAN



Figure 2: Aerial of proposed application site, with surrounding services

LOCAL AMENITIES PLAN



- Legend**
- Proposed Development Site
 - 1km Radius of Main Site
 - S Schools
 - H Healthcare Facilities
 - W Places of Worship
 - T Public Transport

Figure 3: Site location plan, with surrounding services + amenities

Note: Please refer to the Transport Strategy prepared by Vectos for full information including Local Bus Routes, stops and travel times.



03

PLANNING CONTEXT

03 | PLANNING BACKGROUND

PLANNING CONTEXT

The National Planning Policy Framework (NPPF) and the National Planning Practice Guidance (PPG) sets the context for national planning guidance.

The subject site is located within the Green Belt, however the Green Belt Review prepared by Wardell Armstrong LLP to support the emerging local plan identified that the site does not still meet the purposes of the Green Belt as set out in paragraph 80 of the NPPF (parcels GB16b), and has been recommended for release. Please refer to Chapter 4 of this document for further information on the Draft Green Belt Review of January 2016. At a local level The Redbridge Local Plan 2015-2030 Pre-submission Draft dated July 2016 identifies the subject site as a development opportunity within of the Crossrail Corridor Investment and Growth Area.

The King George Hospital site is one of three sites which have been identified, which also include the Ford Sports Ground and Land at Billet Road. Taken together these provide the opportunity to provide approximately 4, 700 high quality new homes (Policies LP2 - Delivering Housing Growth, LP3 - Affordable Housing and LP5 - Dwelling Mix).

The King George and Goodmayes Hospital site, of which this Master Planning study forms part, is targeted to provide approximately 500 high quality new homes as part of the Crossrail Investment and Growth Area.

Please refer to the Representations and Hearing Statement regarding the Redbridge Local Plan 2015 - 2030: Pre-Submission Draft Consultation submitted on behalf of Barking, Havering and Redbridge (University Hospitals) NHS trust regarding Land at King George Hospital for further information and commentaries.

The subsequent proposals take into account the following policies:

- LP1B Crossrail Corridor Investment and Growth Area
- LP2 Delivering Housing Growth
- LP3 Affordable Housing
- LP5 Dwelling Mix

- LP23 Cycle and Car Parking
- LP26 Promoting High Quality Design
- LP29 Amenity and Internal Space Standards
- LP32 Sustainable Design and Construction
- LP35 Protecting and Enhancing Open Space
- LP37 Green Infrastructure and Blue Ribbon Network
- LP39 Nature Conservation and Biodiversity
- Appendix 7 Car and Cycle Parking Standards

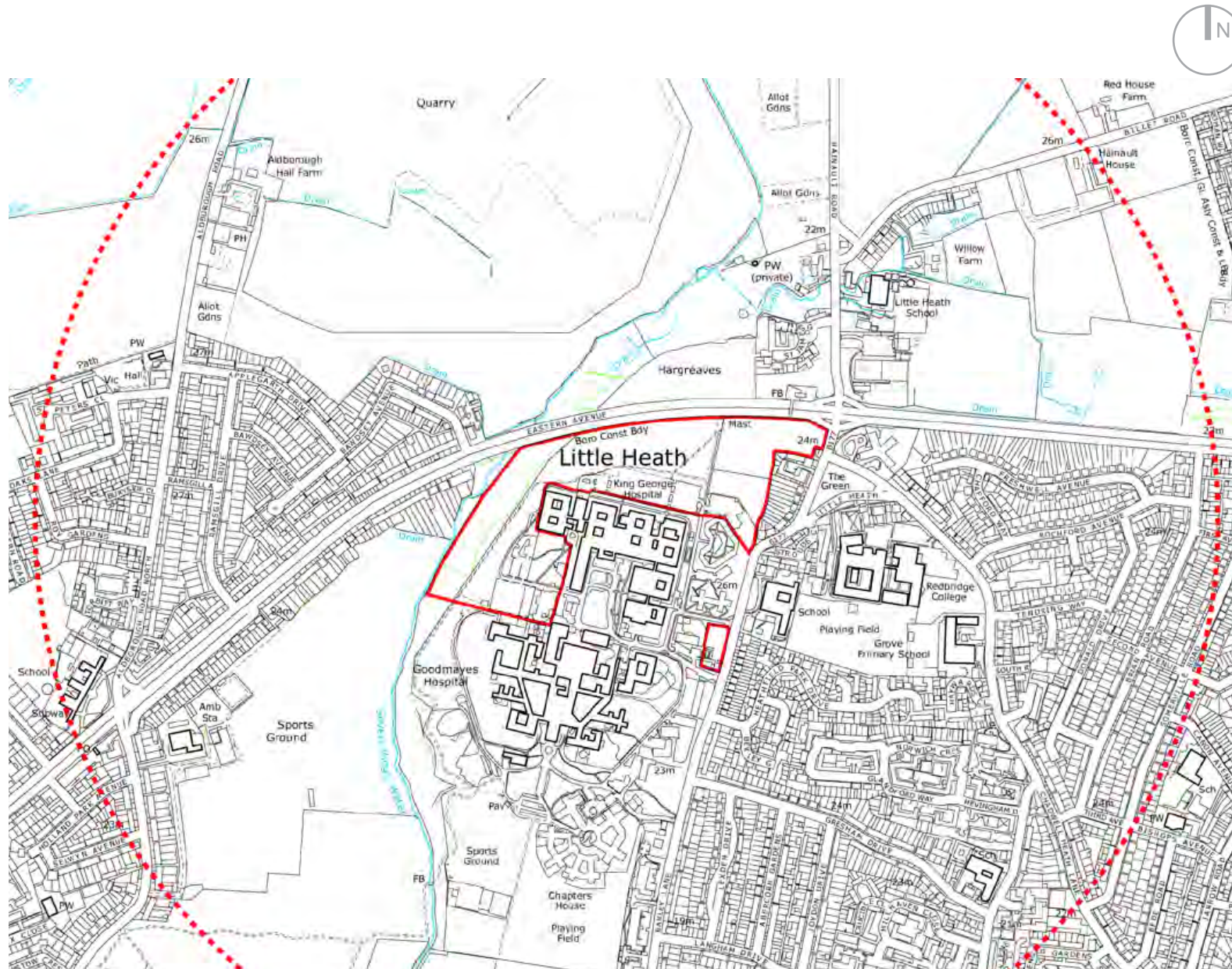


Figure 4: Crossrail Corridor Investment and Growth Area extracted from the Redbridge Local Plan 2015-2030 Pre-submission Draft, July 2016



04

MAPPING STUDY



SUMMARY POINTS

- The total site area is 10.68ha, split over the larger northern portion of the site (10.38ha) and the smaller southern portion of the site (0.30ha).
- The northern portion of the site can be accessed via the A12, Eastern Avenue.
- These areas are largely surplus to the requirements of BHRUT.

Figure 5: Site Location Plan

LOCAL LANDSCAPE CHARACTER MAP

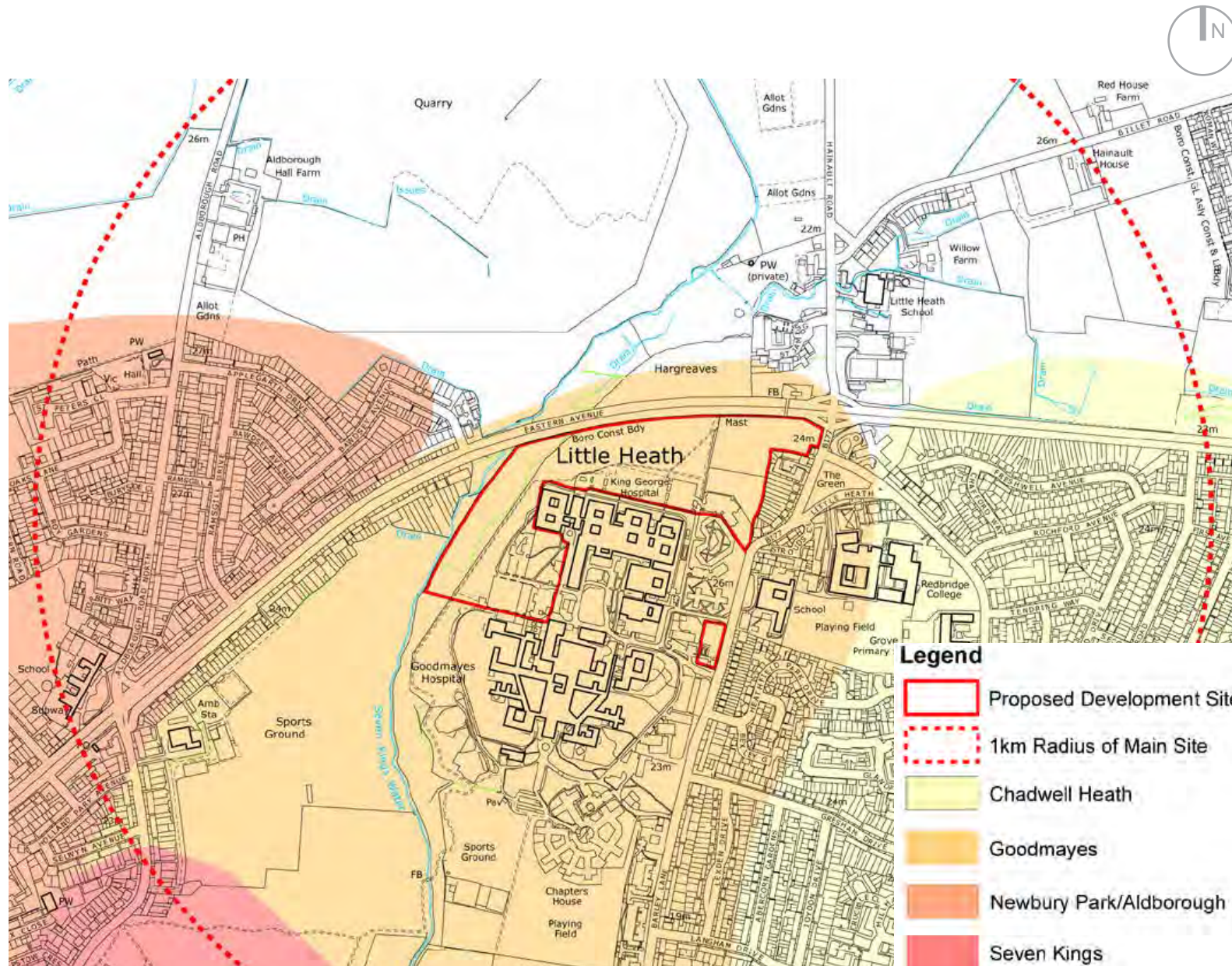
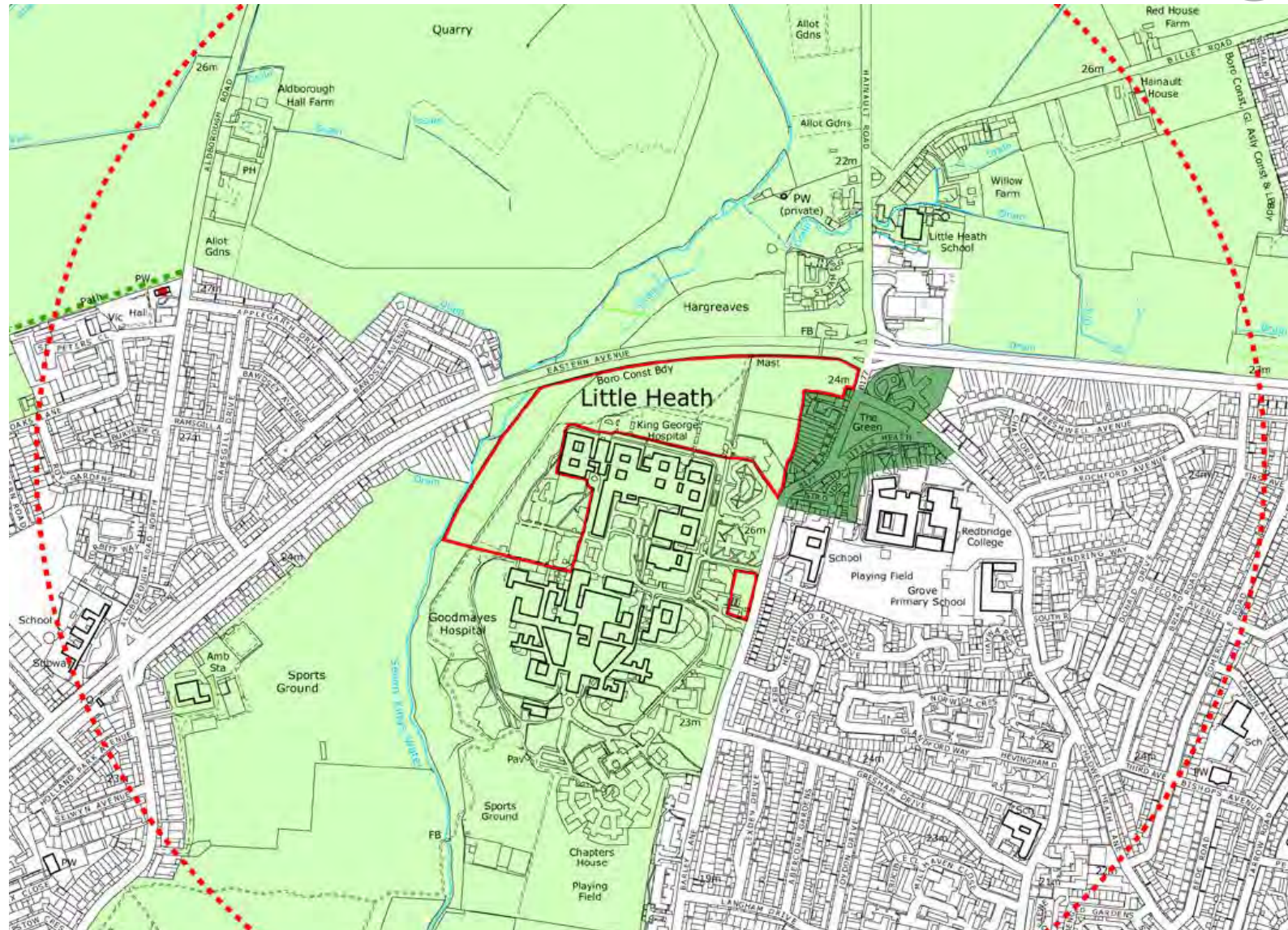


Figure 6: Local Landscape Character

SUMMARY POINTS

The Redbridge Characterisation Study identifies the site as falling wholly within the Goodmayes Character Area. This study identifies:

- Goodmayes was largely undeveloped until the late nineteenth century. The area grew rapidly with the introduction of the railway in the late 1890s.
- Goodmayes Hospital is an important heritage asset but has a limited presence in the area due to the vegetation and new buildings which obstruct the view into the site.
- Residential typologies include Urban Terrace, Suburban or Garden City, Suburban Terrace, Grand Villas, Residential Estates and Flats.
- Goodmayes suffers from a lack of distinctiveness, to the point of having unclear neighbourhood/character area boundaries.
- Goodmayes differs from Seven Kings in that the area feels less intact with more, later infilling apparent. This infilling has often been insensitive to earlier phases of development.



SUMMARY POINTS

- The site lies immediately adjacent to the Little Heath Conservation Area.
- The site is located within the Crossrail Corridor Investment and Growth Area.
- The Goodmayes Hospital and its peripheral buildings are locally listed.
- The site is located within the Green Belt, which is recommended for release in the Draft Green Belt Review of January 2016. Please refer to 'Green Belt Release' adjacent for further information.

Legend

- Proposed Development Site
- 1km Radius of Main Site
- Grade I Listed Building
- Grade II* Listed Building
- Grade II Listed Building
- Public Bridleway
- Public Footpath
- Green Belt
- Conservation Area

Figure 7: Landscape Designations Map

GREEN BELT RELEASE

Draft Green Belt Review (January 2016)

The London Borough of Redbridge in collaboration with Wardell Armstrong undertook a Green Belt review, published in January 2016 which divided the Borough's Green Belt into 16 parcels for individual assessment. King George and Goodmayes Hospitals were assessed together under Parcel Ref No: GB16. The review concluded that GB16 could be released in full from the Green Belt. This conclusion was extended from the 2010 Green Belt review.

Para 3.17 - GB16: King George / Goodmayes Hospitals

The 2010 Green Belt review recommended that GB16 be removed from the Green Belt as the parcel was considered to have an urban character and be isolated from the wider Green Belt.

The review finds that GB16 is :

- Generally flat and slopes downwards towards the southern boundary of a tree lined playing field.
- The parcel can be split into two distinct parts, the hospital site to the east and Seven Kings Park and Fords Sports Ground to west. These areas are dissected by a tree lined river extending north to south.
- The parcel is physically and visually disconnected from the wider Green Belt parcel of GB14 due to the presence of the A12 dual carriageway. The site is surrounded by housing on all sides and the hospital site is relatively urbanised.
- Part of the site is designated a Site of Importance for Nature Conservation (SINC).
- GB16 does not prevent sprawl nor does it prevent the merging of local centres as it is surrounded by development at all sides. Furthermore, its physical and visual connection to GB14 and the wider Green Belt is weak due to the presence of the A12 and the urbanised nature of the hospital site. In that regard it does not safeguard the countryside from encroachment.
- The western and southern parts of the parcel can be considered locally important open space, particularly Fords Sports Ground; Goodmayes Hospital Sports Ground; Seven Kings Park; and Barley Lane Allotments. These spaces also help to

retain the biodiversity of the area.

- The hospital site is urbanised in character and does not meet any Green Belt purpose. However, it should be noted that, if the hospital site was released the remainder of the Green Belt land to the west would be isolated from GB14 and therefore any recommendations must be inclusive of the site as a whole.
- The findings of the 2010 Green Belt review remain valid. It is recommended that the parcel be released from the Green Belt.

The 2016 Green Belt Review, also undertaken by Wardell Armstrong, supports the recommendation for the sites full release from the Green Belt, with no change to the 2010 findings.

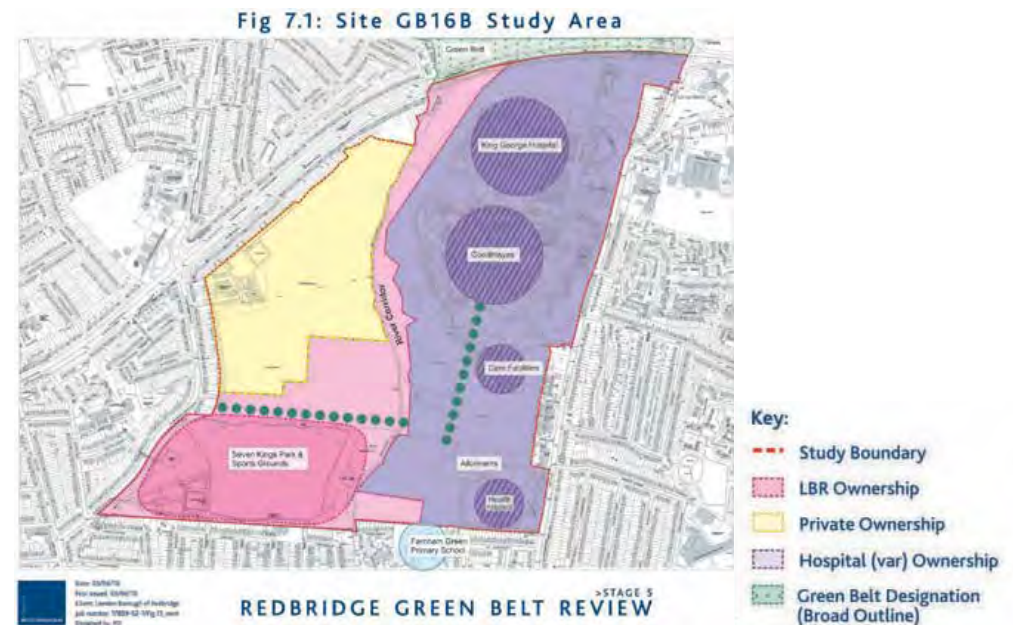


Figure 8: Site GB16B, extracted from the Redbridge Green Belt Review

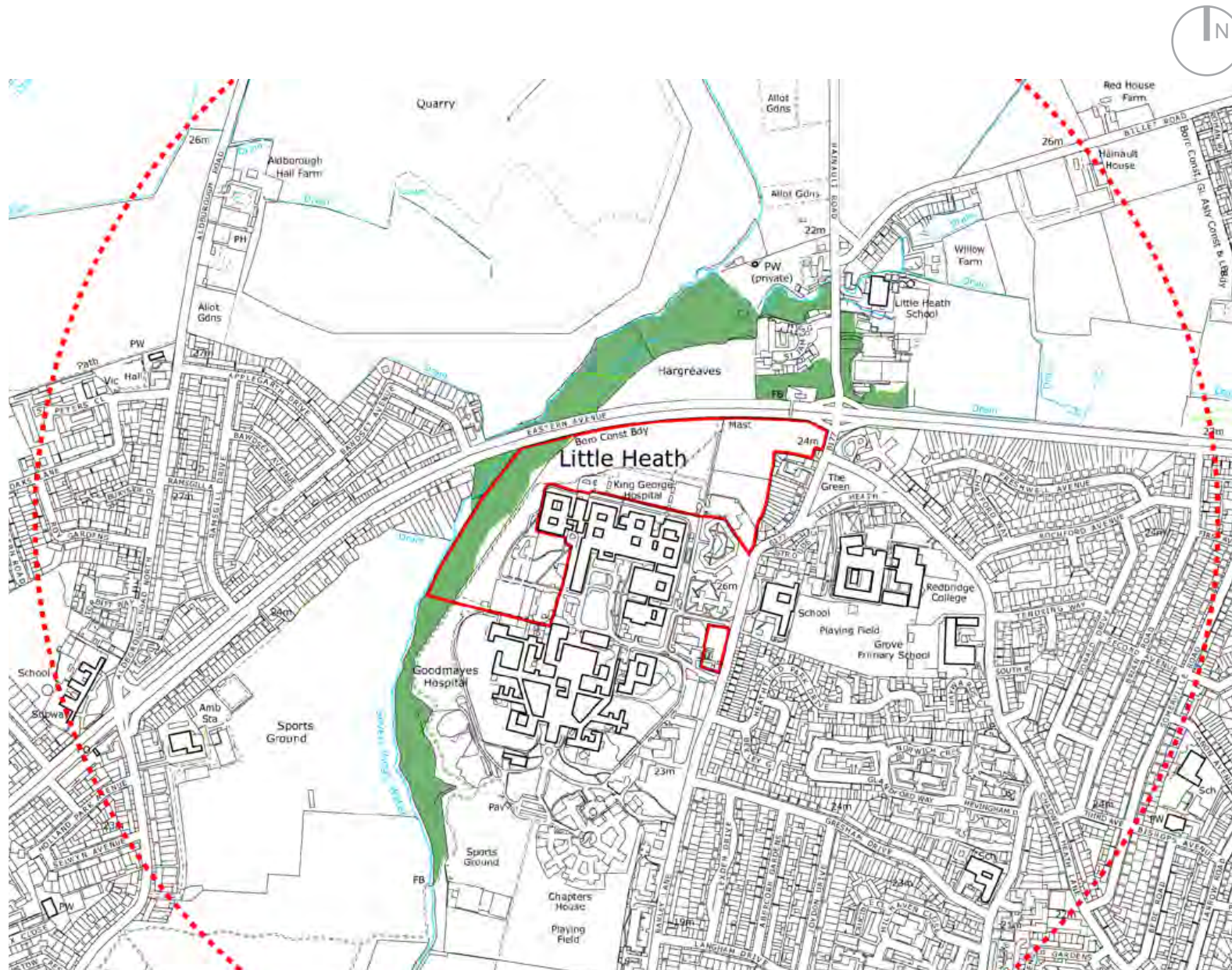


Figure 9: Significant Vegetation Map



SUMMARY POINTS

- The site is bordered to the west by a band of significant vegetation which is located along the eastern bank of Seven Kings Water.
- This band of vegetation connects to the north, creating a woodland verge either side of the A12, Eastern Avenue.

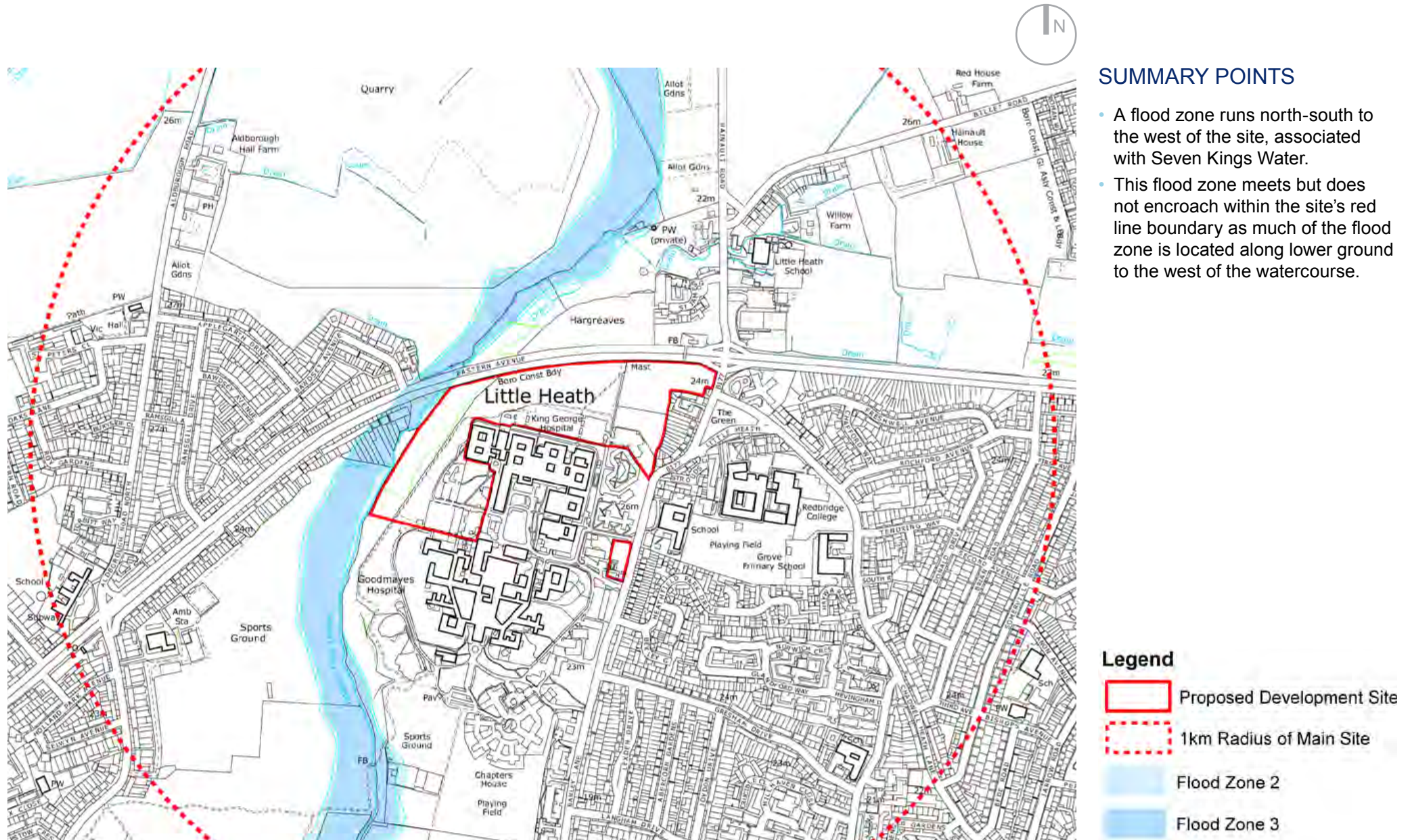
Legend

- Proposed Development Site
- 1km Radius of Main Site
- Significant Vegetation



Figure 10: Aerial indicating existing vegetation

FLOOD ZONE MAP



SUMMARY POINTS

- A flood zone runs north-south to the west of the site, associated with Seven Kings Water.
- This flood zone meets but does not encroach within the site's red line boundary as much of the flood zone is located along lower ground to the west of the watercourse.

Legend





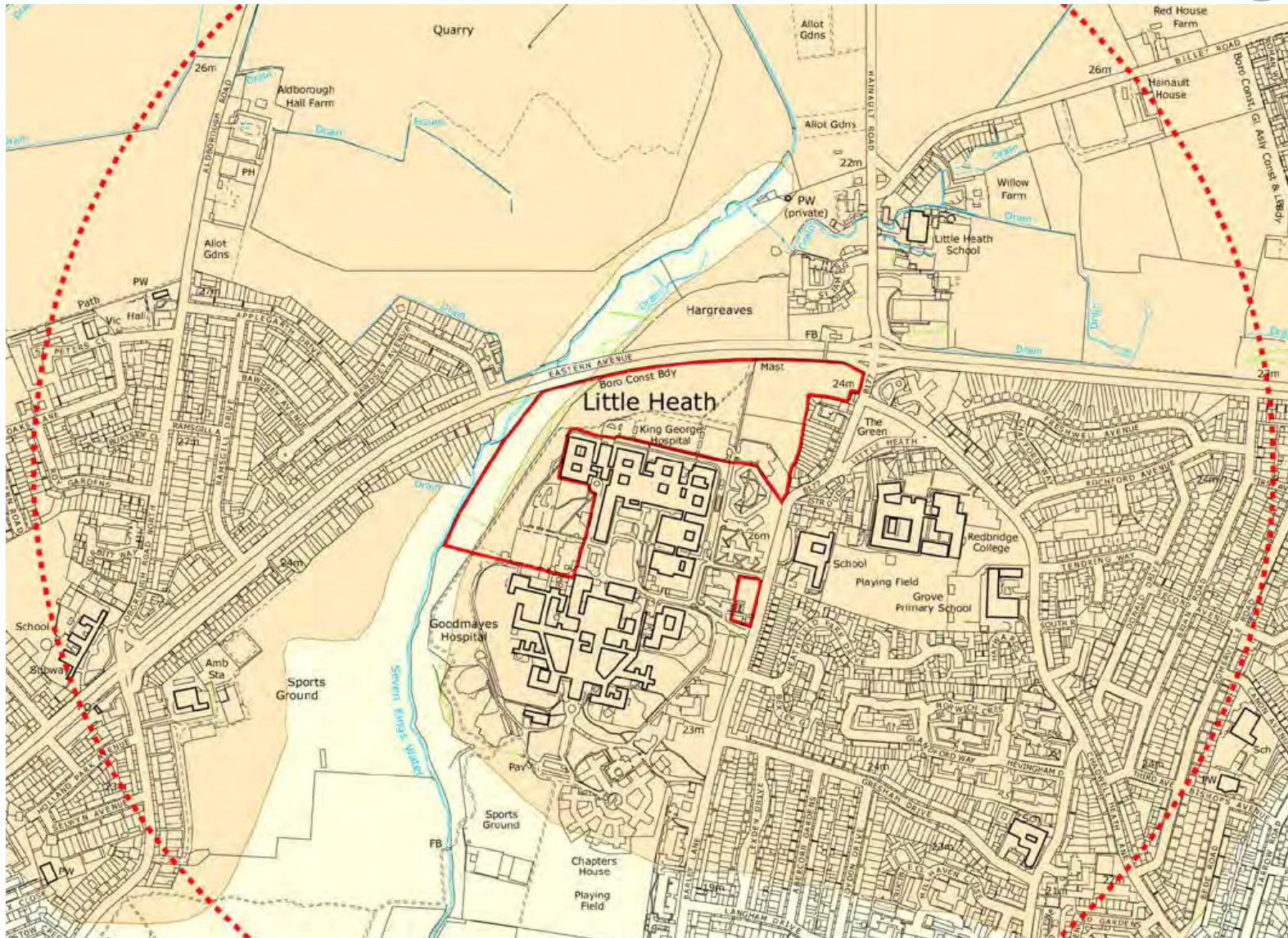
-  Proposed Development Site
-  1km Radius of Main Site
-  Flood Zone 2
-  Flood Zone 3

Figure 11: Environment Agency Flood Risk Map



SUMMARY POINTS

- The site is located within the 10-30m AOD (Above Ordinance Datum) bands.
- Immediately to the west and south of the site ground levels fall away to the 10-20m AOD level, associated with Seven Kings Water and surrounding sports fields adjacent.



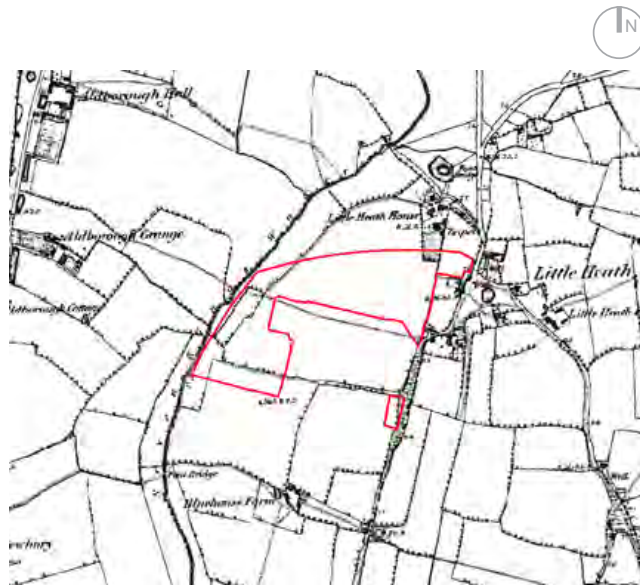
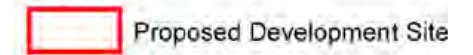
Legend

-  Proposed Development Site
-  1km Radius of Main Site
-  10m - 20m
-  20m - 30m

Figure 12 Topographical Map

HISTORICAL MAPPING CHRONOLOGY

Legend



1875-1881

- The site and the surrounding area is predominantly within agricultural use.
- The village of Little Heath is evident in the east, with Little Heath House evident to the north.



1921

- The site is directly to the north of the West Ham Borough Lunatic Asylum.
- To the south east of the site an Isolation Hospital is in evidence.
- Some residential properties have been developed associated with these two healthcare facilities.
- The village of Little Heath is showing signs of growth, with additional residences, schools and churches apparent.



1951

- The site is noted as a part of the hospital complex, however the land surrounding the facility has undergone a marked increase in density.
- Suburbia is creeping into the agricultural zone surrounding the site.
- The parklands and sporting grounds which now surround the hospital are beginning to consolidate.
- The A12 highway has been constructed along the northern boundary of the site.

Figure 13, 1875 - 1951 Historical Maps



05

VISUAL AND TOWNSCAPE STUDY

ZONE OF THEORETICAL VISIBILITY

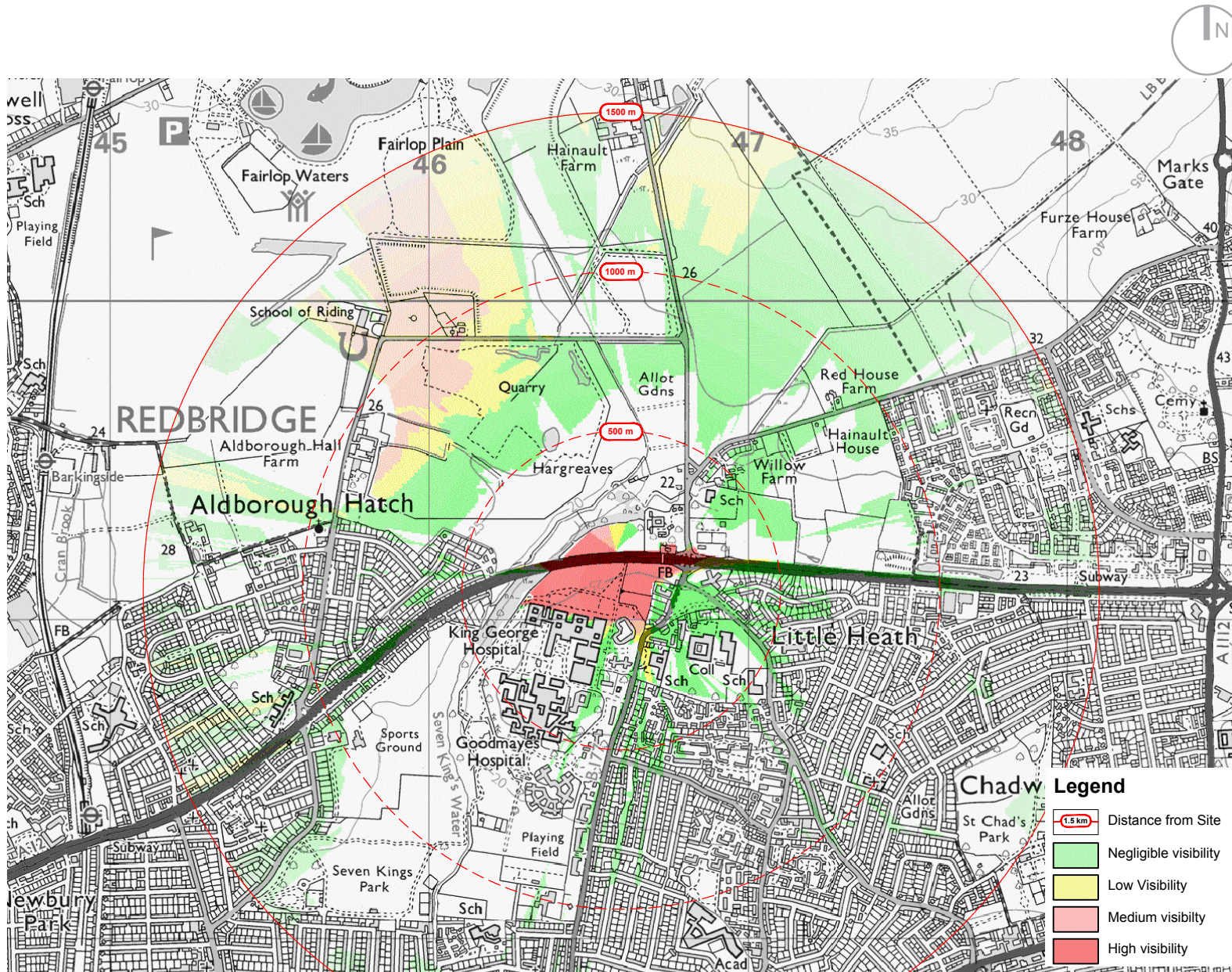


Figure 14: Zone of Theoretical Visibility Map

SUMMARY POINTS

Zone of Theoretical Visibility is generated using 'OS Terrain 5' (digital terrain data at 5 m resolution), assuming the following heights:

- 2 Story building height : 9 m
- 2.5 Story building height : 11.5 m
- 3 Story building height : 12.4 m

The heights of existing vegetation/ structures are estimated, using a combination of online imagery and field observations.

Visual barriers less than 4 m high have not been modelled.

The ZTV identifies those areas from which the development would be theoretically visible. Due to the frequency of hedgerows and low-level vegetation the actual visibility should be significantly less extensive than the drawing indicates.

Given the urban area to the south west and south east visibility of the proposed development is concentrated to the north of the site, with high visibility concentrated on the site and it's immediate surrounds.

WIDER CONTEXT | HOUSING STYLES



Figure 15: Early 20th Century Semi-detached Housing along Barley Lane



Figure 17: Recent development undertaken in the 2000s at Medici Close



Figure 18: Recent 1990s development at Heathfield Park Drive



Figure 16: Semi-detached post-war era dwellings along Barley Lane, fronting onto The Green, within the Little Heath Conservation Area



Figure 19: Post-war terraced Housing on Priestly Gardens



Figure 20: Poor quality 1980s terrace development at Millhaven Close

05 | VISUAL AND TOWNSCAPE STUDY

EXISTING SITE CHARACTERISTICS



Figure 21, Views 1-3 of existing site conditions



Figure 22, Views 1-3 Map

1. View from the north of the site, looking towards the west towards the pedestrian footbridge across the A12, Eastern Avenue. The boundary on the right of the picture is the subject site boundary.
2. View from the existing pedestrian access in the north of the site looking south towards the healthcare facilities.
3. View from the north of the site, looking west towards the boundary with existing dwellings, located within the adjacent conservation area.

EXISTING SITE CHARACTERISTICS



Figure 23: Views 4-6 of existing site conditions



Figure 24: Views 4-6 Map

4. View of the car park looking west towards the car park to the north of the hospital facility.
5. View looking south west from the carpark of the north eastern corner of the hospital, immediately outside the red line boundary.
6. View looking south east from the carpark located on looking towards residences.

05 | VISUAL AND TOWNSCAPE STUDY

EXISTING SITE CHARACTERISTICS



Figure 25: Views 7-9 of existing site conditions



Figure 26: Views 7-9 Map

7. View of the exit onto Barley Lane, from the access road.
8. View of the staff entrance to the King George Hospital.
9. View taken from behind the boundary fence line looking in a northerly direction along Barley Lane, showing local amenities.

EXISTING SITE CHARACTERISTICS



Figure 27: Views 10-12 of existing site conditions



Figure 28: Views 10-12 Map

- 10. View looking west towards the eastern elevation of the Meadow Court Care Home.
- 11. View looking west towards a portion of the eastern elevation of the Victorian Goodmayes Hospital building.
- 12. North East Trust Head Office to the south of the site, with car parking in the foreground.

EXISTING SITE CHARACTERISTICS



Figure 29: Views 13-15 of existing site conditions



Figure 30: Views 13-15 Map

- 13. View looking south into a portion of the existing Goodmayes Hospital Car Park.
- 14. View looking east of the hospital complex, currently undergoing residential conversion.
- 15. View looking west from the hospital perimeter road over open grassland towards the vegetated Seven Kings Water Corridor.

EXISTING SITE CHARACTERISTICS

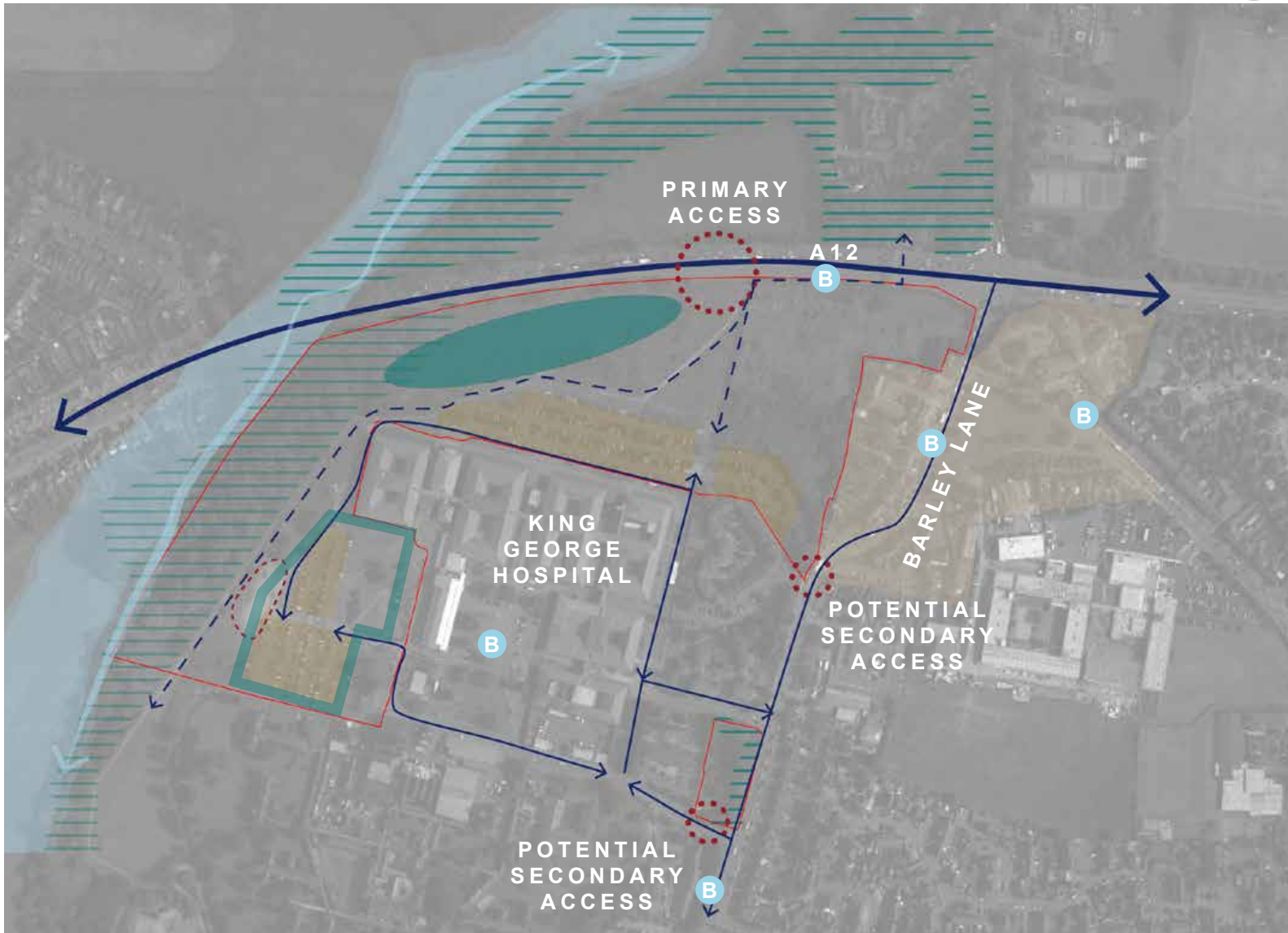


Figure 30: Views 16-18 of existing site conditions



Figure 31: Views 16-18 Map

16. View looking south east across the grounds of the former hospital complex.
17. View looking east towards the Victorian hospital tower, with existing car parking in the foreground.
18. View looking south towards the interface of the Victorian Hospital complex, where it interfaces with the existing car parking, part of which can be seen in the foreground.



The opportunities and constraints plan (left) summarises the pertinent issues relating to the site and its context, as determined through the site assessment, visual study and baseline mapping exercise. The key points relating to opportunities and constraints of the site are listed (right).

LEGEND

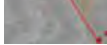





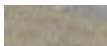




-  Site Boundary
-  Existing Vegetation
-  Mounded Grassland Area
-  Pedestrian Route
-  Vehicular Route
-  Conservation Area
-  Existing Surface Parking Space
-  Flood Zones 2 + 3
-  Existing Informal Overflow Carparking (red dashed line)
-  Bus Stop
-  Potential location of Health and Community Hub and intensified parking

Figure 32: Opportunities and Constraints Diagram

OPPORTUNITIES AND CONSTRAINTS OF THE SITE INCLUDE:

- A GRADUAL GRADIENT EXISTS FROM HIGHER GROUND IN THE EAST TO LOWER GROUND IN THE WEST OF THE SITE, ASSOCIATED WITH SEVEN KINGS WATER.
- THE SITE'S WESTERN BOUNDARY IS PROTECTED BY A BAND OF EXISTING SIGNIFICANT VEGETATION, PROTECTING VIEWS INTO THE SITE FROM THE A12. THIS TRANSITIONS TO A MOUNDED LANDSCAPE IN THE NORTH.
- THE SOUTHERN BOUNDARY OF THE SITE IS SHARED WITH HOSPITAL FACILITIES. A SENSITIVELY DETAILED INTERFACE WITH THE HOSPITAL IS REQUIRED.
- THE EASTERN BOUNDARY IS OVERLOOKED BY EXISTING DWELLINGS ALONG BARLEY LANE. ALTHOUGH THESE BOUNDARIES ARE HEAVILY VEGETATED, OVERLOOKING MUST BE CONSIDERED. THESE DWELLINGS ARE WITHIN THE LITTLE HEATH CONSERVATION AREA, WHICH MUST BE RESPECTED IN THE EMERGING PROPOSALS.
- THE SITE LIES WITHIN THE GREEN BELT, HOWEVER IT IS RECOMMENDED FOR RELEASE AS A PART OF SITE GB16B.
- THERE ARE NO PUBLIC RIGHTS OF WAY OR BRIDLEWAYS RUNNING THROUGH THE SITE, HOWEVER THE SEVEN KINGS CYCLE ROUTE RUNS TO THE WEST OF THE SITE.
- PRIMARY ACCESS FOR THE SITE CAN BE PROVIDED DIRECTLY OFF THE A12, EASTERN ROAD.
- POTENTIAL EXISTS FOR A SECONDARY OR EMERGENCY ACCESS IN THE SOUTH FROM BARLEY LANE.
- POTENTIAL PEDESTRIAN AND CYCLE LINKS INTO THE EXISTING PUBLIC OPEN SPACE TO THE WEST CAN BE CREATED IN THE DEVELOPMENT, CONNECTING INTO THE RIVER CORRIDOR.
- GOODMAYES HOSPITAL AND IT'S PERIPHERAL BUILDINGS LOCATED TO THE SOUTH OF THE SITE ARE LOCALLY LISTED (NO.157), AND MUST THEREFORE BE RESPECTED.
- THE REDBRIDGE LOCAL PLAN 2015 - 2030 KEY DESIGN PRINCIPLES FOR THE GOODMAYES AND KING GEORGE HOSPITALS SITE IDENTIFIES PART OF THE SOUTH WEST OF THE SITE AS A HEALTH AND COMMUNITY HUB.



06

CONSULTANTS ANALYSIS

06 | CONSULTANTS ANALYSIS

TRANSPORT AND ACCESS

A Transport Strategy has been undertaken for the site by Vectos. This strategy found that overall the potential development is considered feasible from a transport perspective, supporting the London Borough of Redbridge's vision and strategic objectives.

Specifically, Vectos found that:

- The site is close to a number of local facilities, within a walking or cycling distance of the proposed development. These facilities include schools, shops, community facilities and recreation areas.
- Both Goodmayes Railway Station and Newbury Park Underground Station are accessible from the site, offering direct access into Central London.
- Rail services will be increased with the arrival of Crossrail, which will connect into Seven Kings, Goodmayes and Chadwell Heath Stations, which will increase the connectivity of the area.
- An opportunity exists to provide new footway links within the site to improve permeability as well as connectivity to the wider context.
- The area surrounding the site already acts as a hub for bus services for the area with numerous services serving the hospital, linking with the future Crossrail stations. TFL has reviewed bus operations into the site, resulting in suggested improvements which would allow additional buses to pass through the site, rather than along the A12). Bus frequencies in the area have increased recently, and further improvements may follow.
- The site has good strategic vehicular connections, linking to Brentwood, Stratford, Romford within 30 minutes. These locations provide key employment and retail destinations.
- Parking surveys have also been undertaken with BHRUT, to confirm the current site provision.
- On a site level, vehicular access can be provided from both the A12 and / or Barley Lane. The exact design and locations of these junctions would require coordination with the highways authority, but preliminary compliant designs have been prepared for each. Engagement with Transport for London (TFL) has confirmed that primary access taken from the A12 is acceptable in principle.

For further detail on transport and access please refer to the Transport Strategy prepared by Vectos.

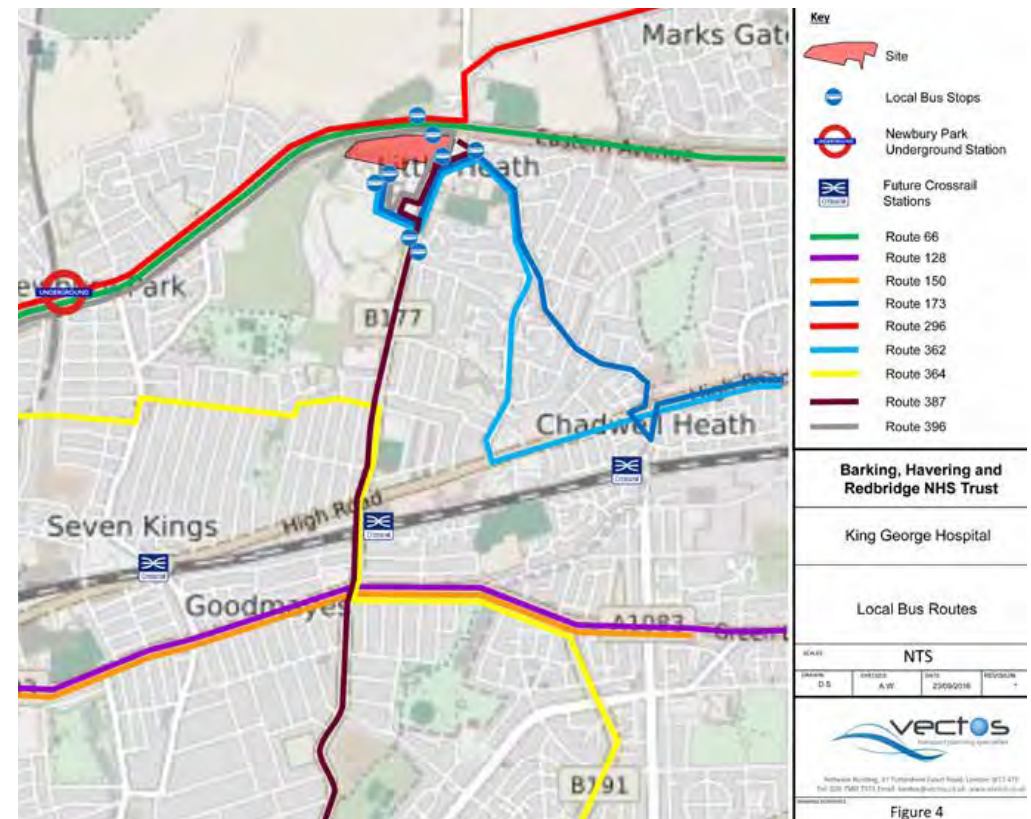


Figure 33: Local Bus Routes surrounding King George Hospital, extracted from the Transport Strategy

ECOLOGY

A preliminary Ecological Appraisal has been undertaken by Southern Ecological Solutions (SES) during September 2016.

Specifically, SES found that:

- The larger land parcel to the north of King George Hospital is a mixture of habitats of low ecological value surrounding the hospital buildings, with the semi-natural broad leaved woodland and semi-improved grassland in the west and north of the site providing the highest ecological value at the site. The proposed development and associated infrastructure will occupy up to c. 25% of the site. A portion of the 'Hargreaves Scout Camp, Seven Kings Water and Goodmayes Hospital' Site of Importance for Nature Conservation (SINC) falls within the northern parcel.
- The smaller land parcel is dominated by tall ruderal vegetation with scattered broad leaved and coniferous trees and buildings.
- Further ecological surveys and assessment works have been recommended for a number of species including badger, bat, nesting birds, an Invertebrate Walkover Survey, Reptiles and any notable mammal records found in any of the above surveys.
- A summary of likely impacts, mitigation and enhancement measures and residual impacts can be found in Table 5 of the Ecological appraisal.
- Overall the appraisal has found that should all outlined precautionary methods be undertaken it is considered that '...all significant impacts upon biodiversity; including any potential adverse impacts upon specific protected species, habitats and designated sites will likely be able to be wholly mitigated in line with relevant wildlife legislation, chapter 11: Conserving and Enhancing the Natural Environment, of the NPPF (DfCLG, 2012 and Strategic Policy 2: Green Environment with Redbridge Borough Council's Local Development Core Strategy (2008).'

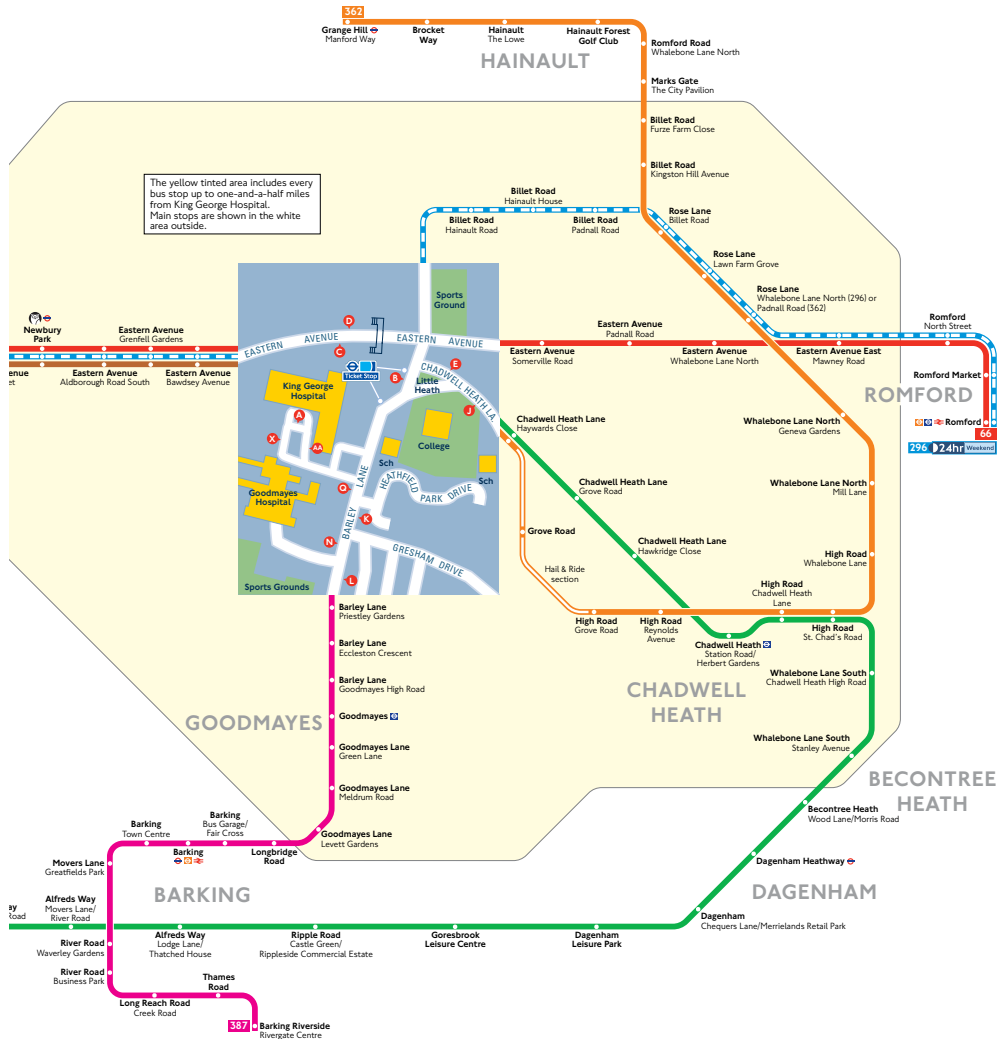
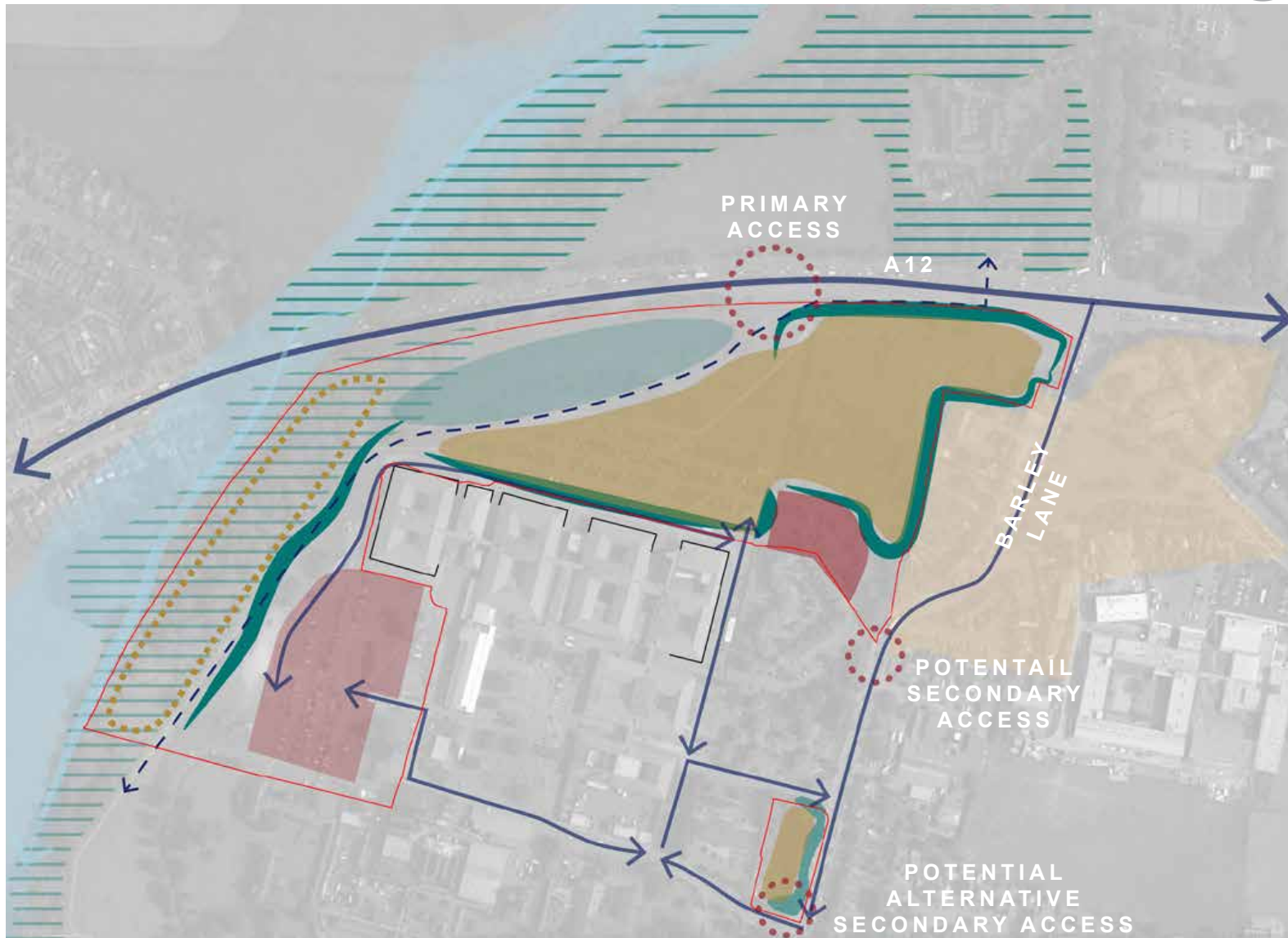


Figure 34: Local Bus stops and route locations surrounding King George Hospital, extracted from the Transport Strategy



07

MASTER PLAN STRATEGY



The strategy plan and points opposite define the strategic 'big moves' for the subsequent master planning design exercise.

LEGEND



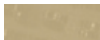









-  Site Boundary
-  Structural Planting
-  Developable Area
-  Potential Future Developable Area
-  Existing Vegetation
-  Pedestrian Route
-  Vehicular Route
-  Potential future Deck Car Park and Health and Community Hub
-  Existing Car Park to be retained
-  Conservation Area
-  Flood Zones 2 + 3
-  Existing Hospital Frontage

Figure 35: Landscape Strategy Diagram

MASTER PLAN STRATEGY - AIMS AND OBJECTIVES

FOLLOWING AN APPRAISAL OF THE SITE, IT HAS BEEN DETERMINED THAT THE PROPOSED MASTER PLAN SHOULD SEEK TO:

1. ENSURE THE **PRESERVATION** OF THE **NATURE AREA** TO THE NORTH WEST OF THE SITE, BUFFERING THE PROPOSED DEVELOPMENT FROM THE A12.
2. CREATE NEW PEDESTRIAN AND VEHICULAR **PRIMARY ACCESS** INTO THE SITE VIA A12 IN THE NORTH.
3. PRESERVE THE DIRECT NORTH-SOUTH PEDESTRIAN CONNECTIONS THROUGH THE SITE, WHILST IMPROVING THE SOUTH-WEST **PEDESTRIAN PERMEABILITY**, CONNECTING OPEN SPACE, THE PROPOSED DEVELOPMENT AND THE SURROUNDING RESIDENTIAL COMMUNITY.
4. CREATE A **STRONG LANDSCAPE STRUCTURE** TO MINIMISE IMPACTS OF DEVELOPMENT ON SURROUNDING RESIDENTS, WHILST CREATING A **PLEASANT, LANDSCAPE LED RESIDENTIAL MASTER PLAN**.
5. PROPOSED **DEVELOPABLE AREA** IN THE EASTERN PORTION OF THE SITE, WITH **CHARACTER INSPIRATION FROM ADJACENT CONSERVATION ZONE**.
6. A SENSITIVELY **LANDSCAPED INTERFACE** WITH KING GEORGE HOSPITAL IN THE SOUTH.



THE BOULEVARD

The concept plan defines the strategic 'big moves' for the subsequent master planning design exercise.

The Boulevard Concept is defined by the north-south landscaped boulevard which will form the main site entry, which will be used to create a legible hierarchy through the master plan, linking a proposed green to the boulevard. A pedestrian network will feed into the surrounding amenities.

LEGEND







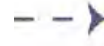

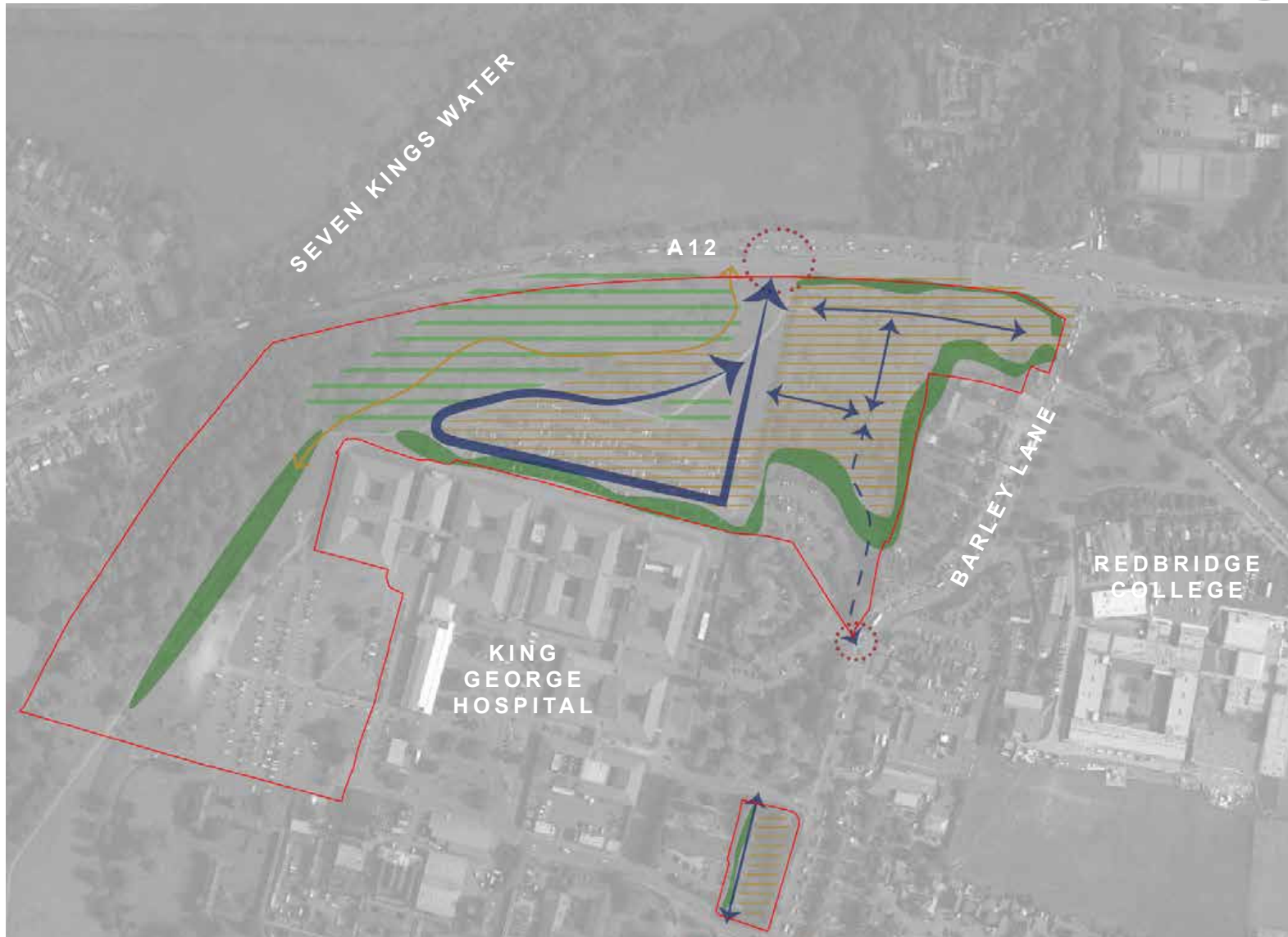
-  *Developable area*
-  *Public Open Green Space*
-  *Buffer Planting*
-  *Boulevard*
-  *Road*
-  *Potential Vehicular Link*
-  *Pedestrian Route*
-  *Site Access*

Figure 36: Option 1 Concept Plan Diagram

THE LOOP CONCEPT PLAN



THE LOOP

The concept plan defines the strategic 'big moves' for the subsequent master planning design exercise.

The Loop concept creates a feature loop within the central portion of the northern site, beginning at the main site entrance and picking up on a proposed green, and leading residents around the site in a circular fashion.

Legend

- Developable area
- Public Open Green Space
- Buffer Planting
- Boulevard
- Road
- Potential Vehicular Link
- Pedestrian Route
- Site Access

Figure 37: Option 2 Concept Plan Diagram

OPTION COMPARISON

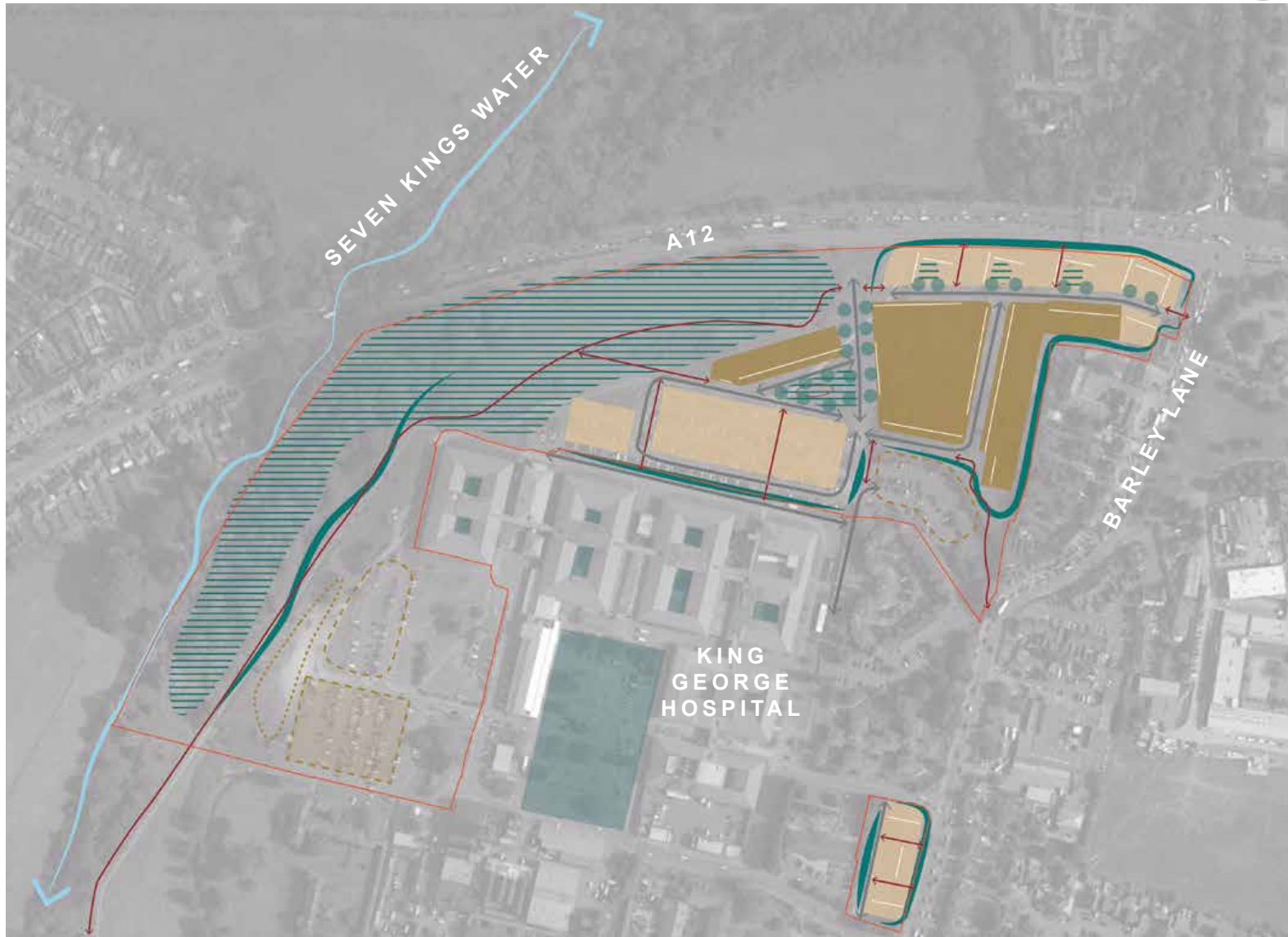
BOTH MASTER PLAN STRATEGY OPTIONS EXPLORE THE WAYS IN WHICH THE PROPOSED DEVELOPMENT CAN RELATE TO IT'S CONTEXT. AS A RESULT OF THIS EACH OF THE STRATEGIES SHARE A RESPECT FOR THEIR BOUNDARIES, AND A DESIRE TO IMPROVE THE PERMEABILITY OF THE SITE. THIS CAN BE ACHIEVED THROUGH:

- STRONG LANDSCAPE BUFFERS PROPOSED BETWEEN THE DEVELOPMENT SITE AND HOSPITAL, TO ENSURE THIS SENSITIVE BOUNDARY IS MANAGED WITH CARE AND DETAIL.
- THE ADJACENT CONSERVATION AREA IS SHOWN RESPECT THROUGH THE INSERTION OF STRATEGIC LANDSCAPE BUFFERS SURROUNDING THE EDGE OF THE SITE, THROUGH WHICH PEDESTRIAN CONNECTIONS WILL BE INSERTED TO PROVIDE ACCESS TO THE EXISTING SERVICES AND PUBLIC TRANSPORT ALONG BARLEY LANE.
- STRONG PEDESTRIAN PERMEABILITY TO THE A12 IN THE NORTH, ALLOWING ACCESS TO PUBLIC

TRANSPORT ROUTES AND THE PEDESTRIAN BRIDGE ENABLING ACCESS TO THE GREEN BELT TO THE NORTH.

- EACH OPTION PROPOSES A DEVELOPABLE AREA CONCENTRATED IN THE WEST OF THE SITE, RESPECTING THE HIGHER QUALITY AREAS OF THE SINC.
- EACH OPTION ALLOWS ACCESS TO THE VEGETATED CORRIDOR WHICH IS CO-LOCATED WITH THE SEVEN KINGS WATER COURSE.

OPTION ONE HAS BEEN SELECTED AS THE PREFERRED STRATEGY OPTION DUE TO IT'S STRONG NORTH SOUTH BOULEVARD WHICH WILL VISUALLY CONTINUE THE STRONG AXIAL DESIGN OF THE HOSPITAL SITE. THIS STRONG BOULEVARD WILL ENABLE A LEGIBLE HIERARCHY OF STREETS WITHIN THE DEVELOPMENT, IMPROVING WAY FINDING CUES AND LINKING THE PROPOSED VILLAGE GREEN WITH THE PRIMARY SITE ENTRANCE.



The Zoning Plan demonstrates the proposed layout of development across the site, informed by the structure of open space and circulation routes. Using this method we aim to create development which is open space led, driven by the established opportunities and constraints and strategy for the site.

LEGEND












-  *Developable Area with Frontage*
-  *Apartment Developable Area with Frontage*
-  *Public Open Space*
-  *Existing / Potential Hospital Garden*
-  *Existing Surface Car Park*
-  *Existing Informal Overspill Car Park*
-  *Potential Future Multi-Storey Car Park as part of the Health and Community Hub*
-  *Vehicular Circulation*
-  *Pedestrian Circulation*
-  *Structural Planting*
-  *Boulevard Planting*

Figure 38: Preferred Option Zoning Diagram



08

MASTER PLAN OPTIONS

Two indicative Illustrative Master Plans illustrating the layout of development have been prepared. These options focus on residential dwellings, with one exploring a combination of apartment, terrace and semi-detached dwellings, and the other focusing on terrace and semi-detached dwellings only.



The Illustrative Master Plan demonstrates a potential layout of development across the site area, illustrating the resultant relationship between existing and proposed built form and open space.

The Contextual Master Plan demonstrates how the master plan may fit within its wider context. The proposals indicate 187 housing units within 2-3 storey dwellings, with 1 storey garages.

This is a higher density apartment led scheme.

Legend

-  Proposed Strategic Planting
-  Proposed Public Open Space
-  Residential Properties
-  Proposed Vehicle Access
-  Proposed Shared Zone
-  Proposed Apartment Buildings
-  Proposed Grassland Mound

Figure 39: Option 1 Illustrative Master Plan

OPTION 1 - HOUSING FIGURES

In the development of the master plan, options may be explored which examine the relationship between the development and the SINC in the north western corner, which provides a positive interaction between the existing open space and the proposed village green.

SITE WIDE FIGURES		HECTARES	
Total Site Area (hectares)		10.68ha	
Northern Portion of Site (hectares)		10.38ha	
Southern Portion of Site (hectares)		0.30ha	
DEVELOPMENT OPTIONS		NORTHERN PARCEL	SOUTHERN PARCEL
Infrastructure (hectares)		0.90ha	0.11ha
Public Open Space (hectares)		5.39ha	0.11ha
Total Built Plot Area (hectares)		1.84ha	0.08ha
Area retained for hospital functions (no-build)		2.25ha	0ha
Total No. Units		173	14
Gross Density (ex. areas in hospital use)		21.27 dwellings per hectare	46.66 dwellings per hectare
NET Density (excluding areas in hospital use, infrastructure and open space)		94 dwellings per hectare	175 dwellings per hectare
5-Bed (No.)		3	0
4-Bed (No.)		10	0
3-Bed (No.)		21	0
2-Bed (No.)		19	0
Flats (1-Bed)		60	7
Flats (2-Bed)		60	7

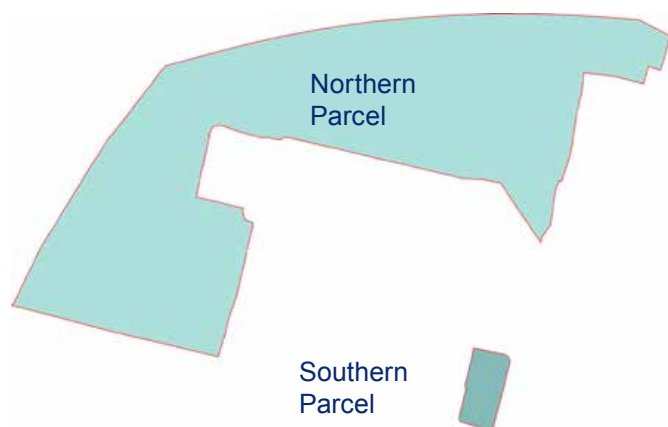


Figure 40: Parcel Key Plan

The site wide figures are listed first, followed by an analysis of each specific parcel. The density figures for housing are given as four distinct calculations:

1. Gross Density of development within both Land Parcels, including open space and infrastructure.
2. NET Density of development within both Land Parcels, excluding open space and infrastructure.
3. Gross Density of development within the Total Redline Site Area, including open space and infrastructure.
4. NET Density of development within the Total Redline Site Area, excluding open space and infrastructure.

08 | MASTER PLAN OPTIONS

OPTION 1 - BUILDING HEIGHTS



The proposed Building Heights Plan indicates the potential spread of building heights from 1 to 3 stories across the site area.

The proposed heights respond to the surrounding site uses, with lower heights proposed adjacent to the Little Heath Conservation Area. Densities increase with proximity to the existing hospital and the A12.

LEGEND

- 1 Storey
- 2 Storey
- 2.5 Storey
- 3 Storey

Figure 41: Option 1 Building Heights Master Plan

OPTION 1 - HOUSING SCHEDULE

UNIT	UNIT NUMBERS	GFA RANGE	PARKING (GARAGE)	PARKING (ON PLOT)	TOTAL PARKING SPACE
5-Bed (No.)	3	180m ²	Minimum 1 garaged space, two units with 2 garaged spaces	Minimum 1 on plot space, 2 plots with 2 on-plot spaces.	2-4
4-Bed (No.)	10	140m ²	Minimum 1 garaged space, 1 unit with 2 garaged spaces	Minimum 1 on plot space, 1 plot with 2 on-plot spaces.	2-4
3-Bed (No.) Semi-detached	6	130m ²	1 garaged space	1 on plot space	2
3-Bed (No.) Terrace	15	105m ²	-	1 on plot space	1
2-Bed (No.) Semi-detached	2	90m ²	1 garaged space	1 on plot space	2
2-Bed (No.) Terrace	17	70m ²	-	1 on plot space	1
Flats (1-Bed) *	67	50-55m ²	-	1 communal car space per dwelling	1
Flats (2-Bed) *	67	70m ²	-	1 communal car space per dwelling	1

*Additional below podium parking spaces not included.

Please note: Option 1, the apartment led scheme, could potentially trigger a reduction in the number of hospital car parking spaces in the northern portion of the site. Should this option be brought forward, a detailed layout of the car park would be produced, to determine available numbers. Should this result in a shortfall of hospital spaces, solutions to provide additional spaces in the south west of the site, co-located with the proposed location of the Health and Community Hub would be pursued.

08 | MASTER PLAN OPTIONS

OPTION 1 - NORTHERN PARCEL MASTER PLAN



Figure 42: Option 1 Northern Parcel Master Plan

OPTION 1 - SOUTHERN PARCEL MASTER PLAN

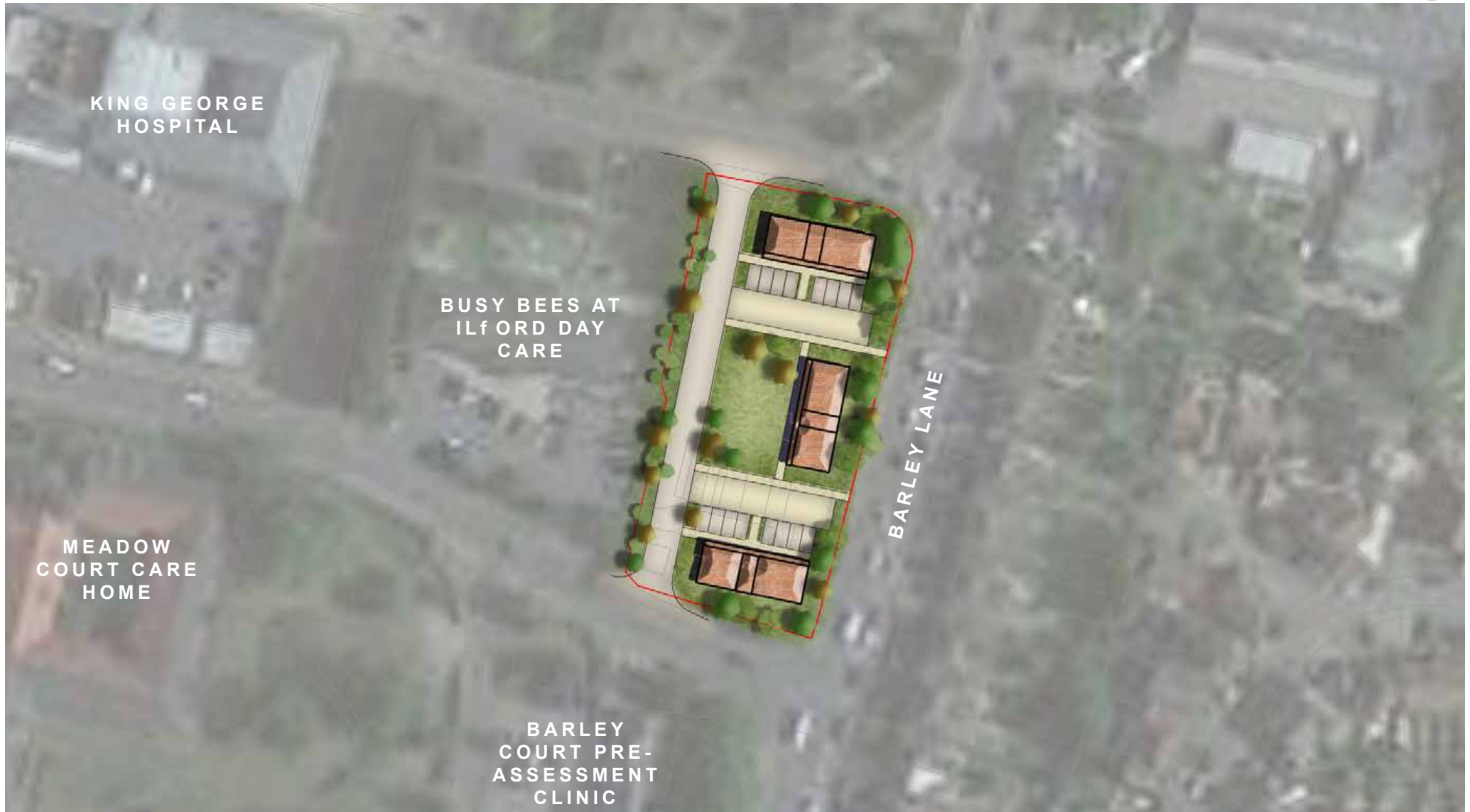


Figure 43: Option 1 Northern Parcel Master Plan

08 | PREFERRED MASTER PLAN OPTION

OPTION 1 CONTEXTUAL MASTER PLAN



Figure 44: Option 1 Contextual Illustrative Master Plan

OPTION 1 - OPEN SPACE AND CIRCULATION PLAN



The proposed Open Space and Circulation proposals for the proposed development are driven largely by the desire to retain the open grassland and vegetated river corridor running along Seven Kings Water. The vehicular circulation is confined largely to the eastern portion of the site, with a Boulevard providing the main access to and from the site. All roads will be sided by pedestrian pathways, and additional pathways will create a permeable landscape. Additional and separate vehicular access for existing facilities will be maintained.

LEGEND

-  Land to remain in existing use
-  Proposed Public Open Space
-  Proposed Boulevard
-  Proposed Vehicular Street
-  Proposed Pedestrian Connection
-  Proposed Strategic Planting
-  Proposed Play Area
-  Proposed Hospital Vehicle Circulation

Figure 45: Option 1 Open Space and Circulation Diagram



The Illustrative Master Plan demonstrates a potential layout of development across the site area, with apartment dwellings omitted from the northern parcel. This master plan illustrating the resultant relationship between existing and proposed built form and open space.

The Contextual Master Plan demonstrates how the master plan may fit within its wider context. The proposals indicate 107 housing units within 2-3 storey dwellings, with 1 storey garages, an overall lower density than the apartment option. The existing car parking to the north of the hospital would be relocated to a decked system west of the hospital.

LEGEND

-  *Proposed Strategic Planting*
-  *Proposed Public Open Space*
-  *Residential Properties*
-  *Proposed Vehicle Access*
-  *Proposed Shared Zone*
-  *Proposed Grassland Mound*

Figure 46: Option 2 Illustrative Master Plan

OPTION 2 - HOUSING FIGURES

Option 2 - Family Housing Led Scheme has been developed in response to policy LP5, which states that the council will seek all housing developments to provide a range of sizes, focusing on the provision of larger family sized homes (3 bed plus).

In the development of the master plan, options may be explored which examine the relationship between the development and the SINC in the north western corner, which provides a positive interaction between the existing open space and the proposed village green.

SITE WIDE FIGURES		HECTARES	
Total Site Area (hectares)		10.68ha	
Northern Portion of Site (hectares)		10.38ha	
Southern Portion of Site (hectares)		0.30ha	
DEVELOPMENT OPTIONS		NORTHERN PARCEL	SOUTHERN PARCEL
Infrastructure (hectares)	0.91ha	0.11ha	0.11ha
Public Open Space (hectares)	5.00ha	0.11ha	0.11ha
Total Built Plot Area (hectares)	2.22ha	0.08ha	0.08ha
Area retained for hospital functions (no-build)	2.25ha	0ha	0ha
Total No. Units	107	14	14
Gross Density (ex. areas in hospital use)	13.16 dwellings per hectare	46.66 dwellings per hectare	46.66 dwellings per hectare
NET Density (excluding areas in hospital use, infrastructure and open space)	48.19 dwellings per hectare	175 dwellings per hectare	175 dwellings per hectare
5-Bed (No.)	8	0	0
4-Bed (No.)	16	0	0
3-Bed (No.)	44	0	0
2-Bed (No.)	39	0	0
Flats (1-Bed)	0	7	7
Flats (2-Bed)	0	7	7

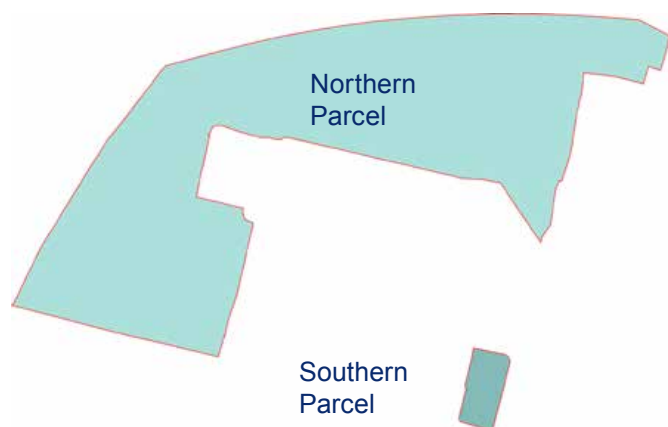


Figure 47: Parcel Key Plan

The site wide figures are listed first, followed by an analysis of each specific parcel. The density figures for housing are given as four distinct calculations:

1. Gross Density of development within both Land Parcels, including open space and infrastructure.
2. NET Density of development within both Land Parcels, excluding open space and infrastructure.
3. Gross Density of development within the Total Redline Site Area, including open space and infrastructure.
4. NET Density of development within the Total Redline Site Area, excluding open space and infrastructure.

08 | MASTER PLAN OPTIONS

OPTION 2 - BUILDING HEIGHTS



The proposed Building Heights Plan indicates the potential spread of building heights from 1 to 3 stories across the site area.

The proposed heights respond to the surrounding site uses, with lower heights proposed adjacent to the Little Heath Conservation Area. Densities increase with proximity to the existing hospital, away from the green belt designation across the A12.

LEGEND

- 1 Storey
- 2 Storey
- 2.5 Storey
- 3 Storey

Figure 48: Option 2 Building Heights Master Plan

OPTION 2 - HOUSING SCHEDULE

UNIT	UNIT NUMBERS	GFA RANGE	PARKING (GARAGE)	PARKING (ON PLOT)	TOTAL PARKING SPACE
5-Bed (No.)	8	180m ²	Minimum 1 garaged space, two units with 2 garaged spaces	Minimum 1 on plot space, 2 plots with 2 on-plot spaces.	2-4
4-Bed (No.)	16	140m ²	Minimum 1 garaged space, 1 unit with 2 garaged spaces	Minimum 1 on plot space, 1 plot with 2 on-plot spaces.	2-4
3-Bed (No.) Semi-detached	21	130m ²	1 garaged space	1 on plot space	2
3-Bed (No.) Terrace	23	105m ²	-	1 on plot space	1
2-Bed (No.) Semi-detached	2	90m ²	1 garaged space	1 on plot space	2
2-Bed (No.) Terrace	37	70m ²	-	1 on plot space	1
Flats (1-Bed) *	7	50-55m ²	-	1 communal car space per dwelling	1
Flats (2-Bed) *	7	70m ²	-	1 communal car space per dwelling	1

Please note: Option 2, the family led housing scheme, would trigger the full removal of hospital parking from the northern portion of the site. In this instance the decked car park solution to the south west of the site, co-located with the proposed location of the Health and Community Hub, would be pursued to make up the short fall.

08 | MASTER PLAN OPTIONS

OPTION 2 - NORTHERN PARCEL MASTER PLAN



Figure 49: Option 2 Northern Parcel Master Plan

OPTION 2 - SOUTHERN PARCEL MASTER PLAN



Figure 50: Option 2 Northern Parcel Master Plan



Figure 51: Option 2 Contextual Illustrative Master Plan

OPTION 2 - OPEN SPACE AND CIRCULATION PLAN



The proposed Open Space and Circulation proposals for the proposed development are driven largely by the desire to retain the open grassland and vegetated river corridor running along Seven Kings Water. The vehicular circulation is confined largely to the eastern portion of the site, with a Boulevard providing the main access to and from the site. All roads will be sided by pedestrian pathways, and additional pathways will create a permeable landscape. Additional and separate vehicular access for existing facilities will be maintained.

LEGEND

-  Land to remain in existing use
-  Proposed Public Open Space
-  Proposed Boulevard
-  Proposed Vehicular Street
-  Proposed Pedestrian Connection
-  Proposed Strategic Planting
-  Proposed Play Area
-  Proposed Hospital Vehicle Circulation

Figure 52: Option 2 Open Space and Circulation Diagram

CONCLUSION AND BENEFITS OF THE PROPOSAL

A comprehensive review of the site has been undertaken, which has informed the opportunities and constraints of the site, and its context. In turn, this has informed the master plan proposals, guiding the proposed development as part of the Crossrail Investment and Growth Area.

The site, as part of a wider land parcel, has been recommended for release from the Green Belt, to enable the delivery of high quality new homes.

The overall built form has been carefully considered, and placed at the east of the site to minimise potential conflict with the SINC in the west. This creates the opportunity to consolidate the residential development surrounding the Little Heath Conservation Area, improving pedestrian permeability, and providing opportunity to link with the existing public transport network located along the A12 and Barley Lane.

Two conceptual master plans have been developed:

- Option 1 - Apartment Led Scheme - proposes 187 new dwellings, with 173 in the northern parcel, and 14 in the southern parcel. These proposed dwellings are a mixture of housing types, including flats, terraces, semi-detached and detached houses. This option delivers a higher density built form, designed to reflect the wider context.
- Option 2 - Family Housing Led Scheme- comprises 14 No. 1 and 2 bed flats in the southern parcel, with 107 houses to the north, ranging from 2 bed terraces to 5 bed detached properties. This option has been developed to respect Redbridge Borough Council's draft Local Plan Policy LP5, which seeks to provide a range of dwelling sizes focusing on the provision of larger 'family sized' (three bed plus) dwellings, reinforcing the council's general aspirations for the borough.

It is recognised that Option 2 more closely aligns with London Borough of Redbridge's aspirations for the site and it is the trust's preferred option for further development. In summary the proposed conceptual master plans achieve the following design credentials:

- A proposed new public open space and play area at the heart of the development;
- Provide meaningful connections into the existing SINC and pedestrian and cycle network surrounding Seven Kings Water;
- Have strong pedestrian connections to the existing public transport stops;
- Provide primary vehicular access off the A12 in the north, with strong pedestrian and cycle permeability throughout the proposed plan. A secondary junction has been designed for Barley Lane, however this has been excluded from this master plans at this stage in the interests of eliminating a potential short-cut route avoiding the A12, Barley Lane intersection;
- Meet the Redbridge Car and Cycle Parking Standards; and
- Support the strategy for new investment in homes and social infrastructure identified for the Crossrail Corridor Investment and Growth Area.

This conceptual study proves the site's appropriateness for development and the quantum of development which can be brought forward. In addition to proposing between 121 and 187 new dwellings, which will add to the vibrancy of the area, improvements to access and permeability of public open spaces will improve the local areas recreational infrastructure.

The master plan concept proposals provide examples of how the surplus land at King George Hospital could be developed into a high quality new neighbourhood and give a steer on the capacity of the site. The design will be subject to further testing once the local plan process is complete, prior to a planning application being submitted.

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Figure 50: Option 2 Northern Parcel Master Plan

Figure 51: Option 2 Contextual Illustrative Master Plan

Figure 52: Option 2 Open Space and Circulation Diagram

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APPENDIX 2

UPDATED TRANSPORT STRATEGY REPORT

Barking, Havering and Redbridge NHS Trust

King George Hospital,
Goodmayes

Transport Strategy

May 2017

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1 INTRODUCTION

- 1.1 Vectos has been appointed by Barking, Havering and Redbridge NHS Trust to provide advice on the traffic and transportation issues associated with the potential development of land within King George Hospital (“the Site”). The Site, in combination within the adjoining Goodmayes Hospital, has been identified as a key opportunity site for the delivery of housing growth within the Pre-Submission draft of the Redbridge Local Plan (July 2016).
- 1.2 The Local Plan has provisionally outlined the delivery of approximately 500 residential units between the two hospital sites. An indicative masterplan for the Site shows approximately 120 residential units.
- 1.3 The Site is located within King George Hospital, to the north of Goodmayes Hospital and to the west of Barley Lane. The Site is within the “Crossrail Corridor” Investment and Growth area identified in the Local Plan. The proposed development site is shown in **Figure 1** and **Figure 2**.
- 1.4 This Transport Strategy has been prepared to set out how the site could be developed and considers the high level strategic transport effects of the proposed developments on the surrounding highway network.
- 1.5 This document also sets out how potential development at the site would be consistent with the overall objectives within the Local Plan.

Policy Context

- 1.6 The Pre-Submission Draft Local Plan sets out the London Borough of Redbridge’s (LBR) overall vision and objectives. A key component of the vision involves directing growth to LBR’s Investment and Growth Areas (including the Crossrail Corridor).
- 1.7 A particular focus is the imminent arrival of Crossrail in 2019. LBR is keen to ensure that this enhanced level of connectivity to Central London will prove a catalyst for investment and intensification within the borough.
- 1.8 The above is reflected in the Strategic Objectives listed in the Local Plan. The relevant strategic objectives (in terms of transport) are:

Objective 1: Promoting and Managing Growth

- To harness growth and help achieve sustainable patterns of development by focusing new development in the borough's Investment and Growth Areas of Ilford, Barkingside, Crossrail Corridor, Gants Hill and South Woodford;

Objective 2: Promoting a Green Environment

- Capitalise on enhanced connectivity between Ilford and Central London with the arrival of Crossrail in 2019;
- • Encourage sustainable patterns of transport by improving walking and cycling routes;

1.9 The report is set out as follows:

- Section 2 - A brief description of the surrounding highway network and local facilities;
- Section 3 – Sets out proposed development proposals;
- Section 4 – Provides a summary and conclusion to the report.

2 LOCATION AND CONNECTIONS

Proximity to Key Destinations

- 2.1 There are numerous facilities and amenities located within easy reach of the Site. **Figure 3** shows the location of local facilities.
- 2.2 **Table 2.1** set out the local facilities in Goodmayes, alongside the distances from the proposed Site and walk/cycling journey times.

Table 2.1: Travel Time from Site to Local Facilities

Facility	*Distance from Site	*Walking Time (mins)	*Cycle Time (mins)
Grove Primary School	900m	11	4
Redbridge College	450m	6	2
Silver News Post office	900m	11	8
Tesco Extra Supermarket	1.9km	23	6
Bus Stop (Chadwell Heath Barley Lane)	350m	5	2
Recreation Area (Ford's Sports Ground)	1.5km	18	6
Goodmayes Station	1.9km	23	7
Newbury Park Station	2.2km	27	7

* Assumed walking speed of 80m per minute and cycling speed of 18kph.

- 2.3 In addition to the above, the provision of a new secondary school has been identified on the Goodmayes parcel of land that forms part of the overall proposed allocation.
- 2.4 The presence of these facilities within easy walking / cycling distance will encourage residents to travel by non-car modes and is consistent with LBR's strategic objective to "*achieve sustainable patterns of development*". In particular, the site is conveniently located to take advantage of the enhanced connections into Central London that will be provided through Crossrail.
- 2.5 The rest of this section describes the connectivity of the site to these local facilities. The data summarised above shows that all of the facilities within Goodmayes are within an acceptable walking/cycling distance of the site.

Accessibility

Walking and Cycling

- 2.6 A plan of local walking and cycling routes are shown in **Figure 3**.
- 2.7 One of the main factors demonstrating the suitability of a development site is its accessibility by non-car modes of transport. This helps to reduce the reliance on the use of the private car as well as promoting the aims of sustainable travel choices.
- 2.8 For short journeys, it is considered that other factors in addition to distance, such as journey purpose and the pedestrian environment (including legibility, safety and gradient) can be significant in influencing people decision to walk/cycle. It is considered that a good pedestrian environment, which provides a safe and legible route, will encourage sustainable accessibility to local services.
- 2.9 It is commonly accepted that walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly those under 2km.
- 2.10 The site currently contains a series of footways and there is ample opportunity to ensure good permeability through the site and good connectivity to the external pedestrian / cycle network. A potential masterplan of the site is included in **Appendix A** and shows a network of potential internal routes.
- 2.11 A new footway will connect the site with King George Hospital to the south. Two additional footway/cycleways will be proposed that will connect the site with Barley Lane to the east and south east.
- 2.12 The proposed footway would provide a continuous links to key facilities and amenities to the south of the Site including the bus stop, primary school and foodstore, which are all within walking distance of the Site (**Table 2.1**).
- 2.13 Walking and cycling routes across the Site linking to the surrounding area will be enhanced and upgraded to a high standard so that there will be a choice of routes available for residents of the Site.
- 2.14 The existing footway/cycleway, which extends through the site linking the A12 to the residential areas to the south of the site will also be improved. These improvements will seek

to enhance the route making it more attractive as a leisure route and for accessing local facilities.

- 2.15 Clear opportunities exist to walk between and through the Site to nearby local facilities and the rail stations. Footways are provided on both sides of Barley Lane within the vicinity of the site, which link the site to the surrounding residential area. A number of designated pedestrian crossings are also provided over Barley Lane to the south of the site providing a safe and convenient location for pedestrians to cross.
- 2.16 A pedestrian footbridge is provided over the A12 immediately to the north of the site, providing a safe and convenient route for pedestrians seeking to access the school or leisure facilities to the north of the A12. The A12/Barley Lane signalised junction also provides at-grade signalised pedestrian crossings and a shared pedestrian/cyclist toucan facility on Barley Lane.
- 2.17 A shared footway/cycleway is provided through the site, which links to the footway adjacent to the A12 and the pedestrian footbridge. This route continues southwards to the west of the Hospital adjacent to Seven Kings Water linking to the Ford's Sports Ground and the residential areas to the south of the site.
- 2.18 LBR together with TfL and Crossrail has proposed a series of improvements in the area around Seven Kings and Goodmayes stations. These improvements will include public realm enhancements that will make the area more attractive for pedestrians and cyclists. The consultation period on the improvements finished in July 2016 and funding has already been secured.
- 2.19 Cycling has the potential to substitute short car trips, particularly those under 5km, and to form part of a longer journey by public transport. Within the vicinity of the Site on-road cycle lanes are located along both sides of the Barley Lane.
- 2.20 **Figure 3** shows the network of cycle routes linking the site to the wider area. This includes a shared cycleway/footway running north from King George Hospital through the centre of the site extending south to residential roads located to the south of the site (this is also referred to as the Seven Kings Greenway). Chadwell Heath Lane, which is located to the north-east of the site and can be accessed from Barley Lane, is designated a 'quiet route'. This route

extends north over the A12 and south to High Road. This route links to an extensive network of local cycle routes, which link to Romford and south-west into Central London.

- 2.21 Barley Lane includes sections of on—road cycle lanes along its entire length from the A12 to High Road. **Figure 3** shows that there are already direct cycle routes from the Site to the nearby Crossrail stations as well as the main shopping area on High Road. In addition, the public realm improvements mentioned above will include cycle parking at both Goodmayes and Seven King stations.
- 2.22 Other off-site improvements to the walking and cycling network would be discussed with LBR and TfL as necessary during the planning application process.

Rail

- 2.23 The closest station to the proposed Site is Goodmayes Station, which is approximately 1.9km to the south. Goodmayes station operates services linking to Shenfield and London Liverpool Street.
- 2.24 Goodmayes station is served by 12 trains per hour to Shenfield and London Liverpool Street during peak periods.
- 2.25 Newbury Park Underground Station is located approximately 2.2km west of the site. The station operates Central Line services to Hainault, West Ruislip and Ealing Broadway. During peak periods 21 trains per hour operate from this station.
- 2.26 As noted previously, the proposed site lies within the Crossrail Investment Area, which will see significant housing development within the coming years. The eastern section of the Elizabeth line route runs on the existing rail network between Stratford and Shenfield in Essex. A number of major upgrades are being carried out by Network Rail on this section of the route in preparation for the arrival of the new services from 2019. The Crossrail project will provide new trains, better stations and quicker, easier, more reliable journeys for passengers in east London and Essex.
- 2.27 At peak times 12 Elizabeth line trains an hour will run between Shenfield and central London, calling at all stations. The four platforms at Goodmayes will be extended from their current length of 184 metres to accommodate the Crossrail trains which will be over 200 metres

long. New lifts, signage, help points, customer information screens and CCTV will be installed in preparation for the opening of Crossrail.

2.28 A plan of the proposed Crossrail route can be viewed at **Appendix B**.

Bus

2.29 The King George Hospital site is already a key bus hub in the area. This is highlighted by the TfL spider map, which is centred on the site (included in **Appendix C**), which shows the multitude of connections to the local area from the site. The nearest bus stops are located in the site and other stops are located on Barley Lane to the east and on the A12 to the north of the site. These bus stops and bus routes are shown on **Figure 4**.

2.30 **Table 2.3** below summarises the route and service frequencies from bus stops within walking distance of the site.

Table 2.3: Bus Services within walking distance of the site

No.	Route	Frequency (minutes)		
		Monday - Friday	Saturday	Sunday
66	Romford Station-Newbury Park Station-Gants Hill Station-Leytonstone Station	10-14	10-14	21-22
128	Romford Station-Illford Station-Gants Hill Station-Mossford Lane-Claybury Broadway	10-13	10-14	20-22
150	Becontree Health Leisure Centre-Illford Station-Gants Hill Station-Hainault Station-Lambourne Road	10-13	10-12	20-22
173	Beckton Bus Station-Jenkins Lane-Dagenham Heath Station-King George Hospital	7-13	8-12	16-17
296	Romford Station-Newbury Park Station-Gants Hill Station-Illford Station-Roden Street	18-19	19-20	30-31
362	Manor Road-Harbourer Road-King George Hospital	29-30	31-32	30-31
364	Hainault Street-Illford Station-Goodmayes Station-Dagenham East Station-Ballards Road	6-10	9-11	15-16
EL3	Chadwell Heath-Goodmayes Station-Barking Station-Rivergate Centre	10	11-13	20-31

396	King George Hospital-Newbury Park Station-Ilford Station-Roden Street	21	21-22	20-28
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- 2.31 In particular, there are a number of bus routes serving the site, which provide access to the Crossrail (Seven Kings, Goodmayes and Chadwell Heath) and Newbury Park station. As part of TfL’s review of improving services in the area, the frequency of Route 173 (serving the site and Chadwell Heath Station) has recently been increased and the Route 387 (to Goodmayes Station) has been renamed “EL3” and its frequency increased.
- 2.32 TfL has also recently prepared a report (dated July 2016) reviewing bus operations for two BHRUT sites (including the King George Hospital Site). The report acknowledges that LBR is proposing to allocate land adjacent to KGH for residential purposes, which also includes the neighbouring Ford Sports Ground. The TfL report suggests a series of improvements to bus connectivity including a potential new road link between Barley Lane and Aldborough Road South, which could then “*create the opportunity to amend bus routeings e.g. the 66, 296 and/or 396*”.
- 2.33 **Figure 4** shows how the site is currently connected by public transport to the wider area as well as potential / imminent improvements.

Public Transport Accessibility Level (PTAL)

- 2.34 Whilst the PTAL (Public Transport Accessibility Level) of the site is relatively low, this is only one measure of accessibility and in this case is not considered to offer a true reflection of the accessibility of the Site as there are railway stations within walking distance but outside the arbitrary threshold set by TfL in their PTAL methodology.
- 2.35 A more appropriate measure is to consider the areas that can be accessed by residents of the site within a reasonable journey time. This can be measured using TfL’s “Time Mapping” tool. The Time Mapping (**Appendix D**) shows journey isochrones using public transport from the Site in 2021 (i.e. when Crossrail is operational). It demonstrates that residents would be able to access Central London within a 45-60 minute journey time. This level of accessibility would encourage sustainable patterns of development.

Vehicle Access - Local and Strategic Connections

- 2.36 The location of the site with respect to the highway network is shown in **Figure 1** and **Figure 2**.
- 2.37 The site is formed of a parcel of land located to the north of King George Hospital. The eastern border of the site is Barley Lane whilst the A12 forms its northern boundary. King George Hospital is located immediately to the south of the site, whilst Seven Kings Water forms the western boundary.
- 2.38 To the north east the site is the Barely Lane/A12 junction, which has been upgraded recently to include longer right-turn lanes and improved pedestrian/cycle facilities. The A12 extends westwards providing a direct route into Central London. The A12 also provides excellent connections to the Northern Circular and the M11 to the west of the site, which provide access to the M25. The A12 also links to M25 Junction 28 and Junction 29 via the A127 to the east of the site.
- 2.39 Barley Lane extends south linking to Goodmayes. Goodmayes operates as a local centre providing a train station and a number of other key local facilities including a foodstore, bank and leisure facilities.

Travel Plan

- 2.40 A Travel Plan would be prepared to support a planning application for the Site to encourage travel by sustainable modes. The primary objective of a Travel Plan will be to set out a long term strategy to facilitate and encourage modes of travel to the Site other than by private car.
- 2.41 The developer will appoint a Travel Plan Co-ordinator (TPC) to manage the Travel Plan as well as overseeing its development, implementation, monitoring and review. A number of targets will be set, based on reducing single occupancy vehicle trips to/from the Site and encouraging the use of sustainable modes. In order to achieve these targets, a number of initiatives and measures will be implemented.
- 2.42 These will be a mixture of hard and soft measures. Hard measures will include the provision of facilities such as safe and secure cycle parking, whilst soft measures include initiatives

such as providing information on public transport services. This can be achieved through the provision of information as part of a Welcome Pack given to new residents.

3 VEHICLE ACCESS STRATEGY

Vehicular Access

- 3.1 A number of vehicular access options have been reviewed and are considered to be feasible for the Site. These options are outlined below.

Proposed A12 Access

- 3.2 Access to the site is envisaged via a new left-in/left-out junction with the A12 to the north of the site. A plan of the proposed access can be viewed at **Appendix E**.
- 3.3 The proposed access has been designed in accordance with the standards outlined within the Design Manual for Roads and Bridges (DMRB). The A12 is subject to a 50mph speed limit within the vicinity of the site. Based on this speed, a visibility splay of 2.4mx160m is required to satisfy DMRB standards. Drawing 151947/A/05.1 at **Appendix E**, shows that a 160m visibility splay can be achieved.
- 3.4 Following consultation with TfL, the proposed location and design of the access has been agreed in principle. Details of the discussions with TfL can be viewed at **Appendix F**.

Proposed Barley Lane Accesses

- 3.5 The feasibility of providing an access to the site from Barley Lane to the south-east of the site has also been investigated. Two access options have been considered; the first a new priority junction to the north of the existing access into King George Hospital. The proposed access, which can be viewed at Drawing 151947/A/02 Rev A (**Appendix G**), will provide direct access into the proposed site.
- 3.6 Barley Lane is subject to a 30mph speed limit along its full extent. In line with guidance outlined within Manual for Streets 2 for 30mph roads, a SSD of 43m should be provided. This is from a set back from the main road of 2.4m. The position of the junction has taken account of the existing loading bay on Barley Lane.
- 3.7 The second access proposes to utilise the existing 'exit only' access into King George Hospital. The proposal seeks to revise the link to permit two-way traffic allowing entry and exit to both the site and King George Hospital via Barley Lane. As shown at Drawing

151947/A/06 (**Appendix G**), the proposal also seeks to convert the existing Barley Lane access priority junction to a new mini-roundabout.

- 3.8 Whilst the exact design and positioning of the vehicular accesses from Barley Lane would be subject to discussion with LBR, it has been demonstrated that vehicular access to the site from Barley Lane can also be achieved.

Traffic Impact

- 3.9 As part of our discussions with TfL, the traffic impact of the proposed development from either an access from the A12 or Barley Lane has been considered. A review of the likely volume of additional traffic generated by the development at the A12/Barley Lane signal junction has been assessed.
- 3.10 The traffic analysis indicates that either access option will result in a negligible increase in vehicle trips at the A12/Barley Lane junction. These additional movements generated by the proposed development are unlikely to result in a material impact on the operation of the immediate local highway network including the A12/Barley Lane junction. The analysis was submitted to TfL and they did not raise any concerns when accepting the principle of the vehicular access strategy.

Pedestrian Accessibility

- 3.11 The quality of the links is important in offering an attractive alternative to using vehicles, especially for short journeys. It is proposed to provide high quality, user friendly and direct links to key facilities. It is proposed that new walking and cycling links will be provided to tie in with existing facilities.

Parking

Residential

- 3.12 Parking will be provided on each residential plot to ensure that it is well located to the houses that it serves and to ensure that on-street parking does not occur to any significant degree. This means that access to all parts of the Site will be maintained at all times for larger vehicles (refuse lorries and delivery vehicles) and for the emergency services.

3.13 This approach recognises the need to provide sufficient parking spaces to avoid parking that would adversely affect the operation of surrounding streets, but not providing parking to a level that would encourage excessive car usage. This is a balanced approach that is consistent with local and national planning policies. The appropriate level of parking will be discussed further with the planning and highway authorities during a planning application stage.

Hospital

3.14 The proposed development will result in the loss of parking located to the north of the hospital site. The loss of hospital parking associated with the proposed development will be re-provided, potentially within a decked car park located to the west of the hospital site.

3.15 The exact level of parking to be re-provided would be the subject of discussion with stakeholders as and when proposals are finalised. These discussions will take into account the Trust's operational needs and the Travel Plan initiatives that are currently being agreed with TfL.

4 SUMMARY

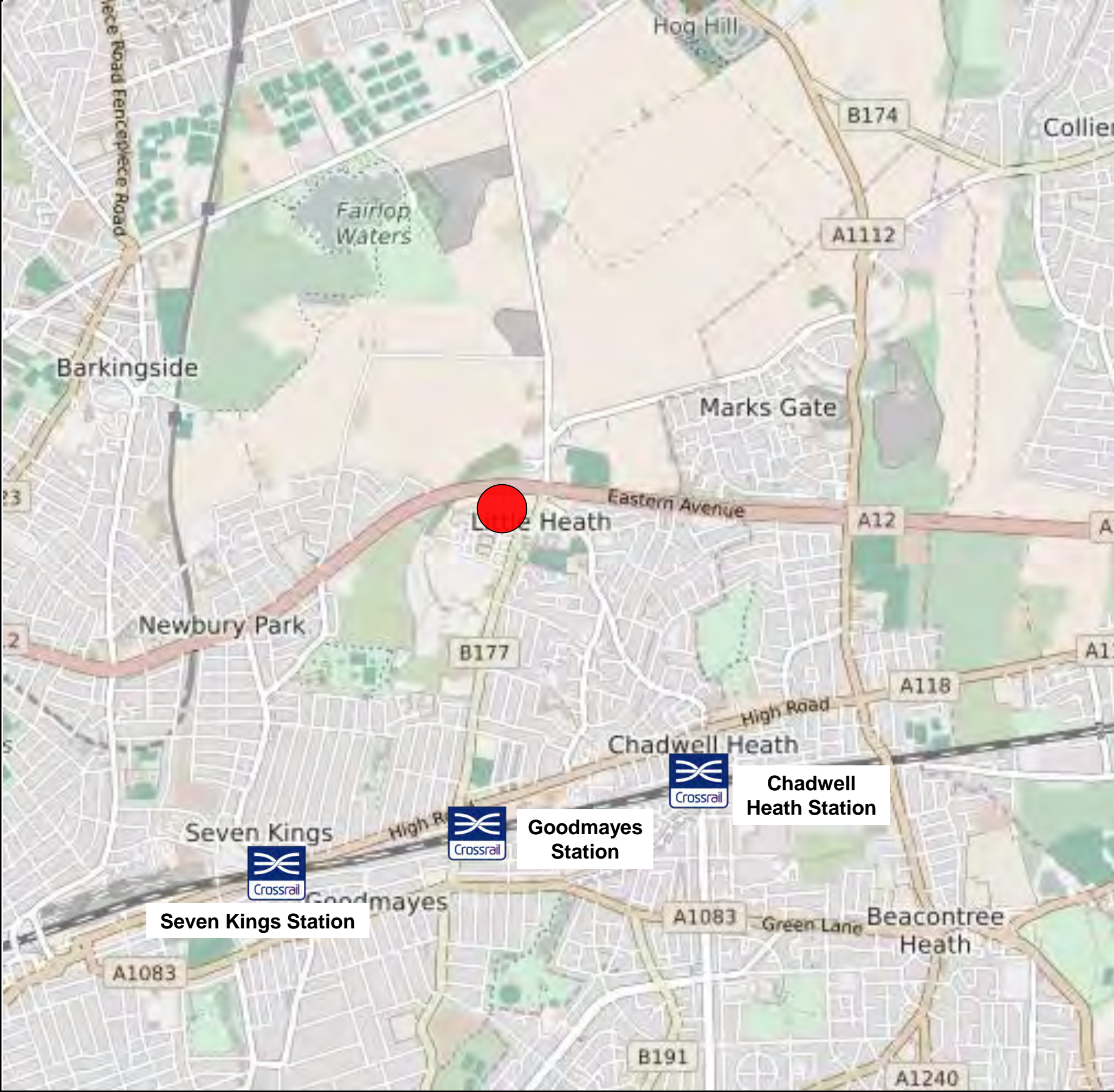
- 4.1 Vectos has been appointed by Barking, Havering and Redbridge NHS Trust to provide advice on the traffic and transportation issues associated with the potential development of the proposed site to the north of King George Hospital, in the context of the Redbridge Local Plan 2015-2030 Pre-Submission Draft.
- 4.2 The Site is formed of a parcel of land located to the west of Barley Lane, to the north of King George Hospital and to the south of the A12. Barley Lane runs north to the south, which forms the eastern boundary of Site.
- 4.3 The Site is located close to a number of local facilities, which are within a walking and cycling distance of the Sites including various primary schools, a superstore / shopping area, community facilities and numerous recreation areas.
- 4.4 Goodmayes Railway Station and Newbury Park Underground Station are accessible from the site, providing multiple services per hour during peak periods into Central London. The imminent arrival of Crossrail to Seven Kings, Goodmayes and Chadwell Heath stations will result in a substantial increase in connectivity to the area.
- 4.5 There is already an excellent network of pedestrian and cycle facilities linking the site to local facilities and public transport nodes. Furthermore, the Site will be within easy commuting distance to Central London.
- 4.6 There is also the opportunity to provide new footway links within the Site to improve permeability as well as connectivity to the wider area. Further off-site improvements can be discussed with the highway authorities at the planning application stage.
- 4.7 The Site already acts as a key bus hub for the area, with numerous routes serving the hospital. These routes provide excellent links to the Crossrail stations providing onward journeys into Central London and beyond. TfL has recently reviewed bus operations to the Site and has suggested potential improvements that would allow additional buses to pass through the site (rather than along the A12). It is also acknowledged that bus frequencies have increased recently and further improvements may follow.

- 4.8 In summary, the site is in a highly accessible area, with excellent links to public transport including the Crossrail stations. This is consistent with LBR's objectives to promote sustainable patterns of development.
- 4.9 The site has good strategic connections to Brentwood, Stratford, Romford and the A12 within 30 minutes by car, which provides key employment and retail destinations.
- 4.10 Vehicular access to the site is proposed from the A12. Following consultation with TfL, the proposed location and design of the A12 access has been agreed in principle. The feasibility of providing an access from Barley Lane has also been investigated. Whilst the exact design and positioning of the vehicular accesses from Barley Lane would be subject to discussion with LBR, it has been demonstrated that vehicular access to the site from Barley Lane can be achieved.
- 4.11 The Transport Assessment will identify any off-site transport mitigation measures associated with the development proposals when a planning application is submitted.

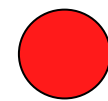
Conclusion

- 4.12 In conclusion, the potential development assessed within this appraisal are considered to be feasible and would be compliant with LBR's vision and strategic objectives. This supporting Transport Strategy, therefore supports the allocation of the Site within the Redbridge Local Plan 2015-2030.

FIGURES



Key



Site Location

Barking, Havering and Redbridge NHS Trust

King George Hospital

Strategic Site Location

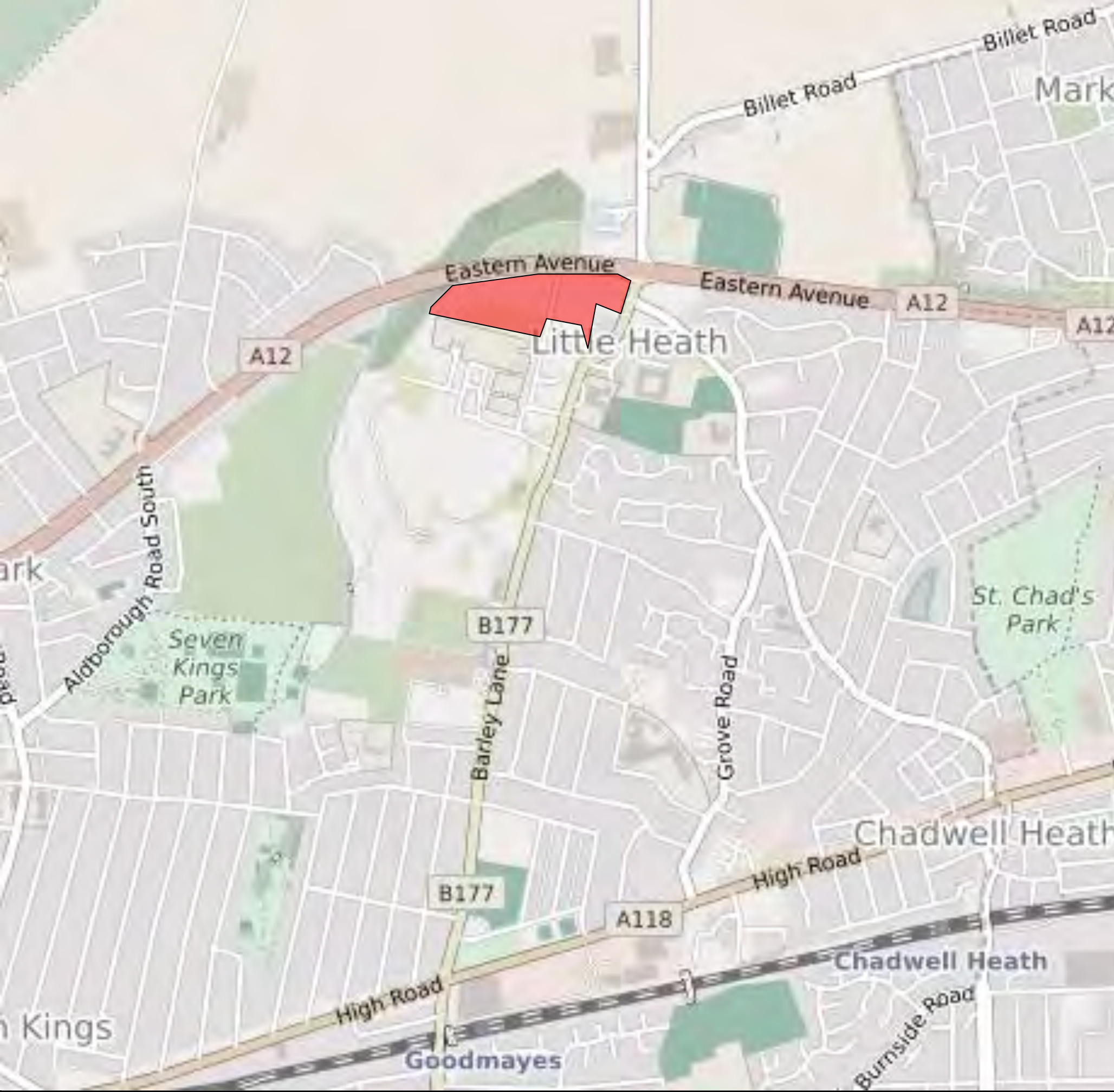
SCALES: **NTS**

DRAWN: D.S.	CHECKED: A.W.	DATE: 23/09/2016	REVISION: •
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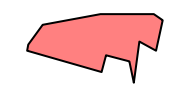


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DRAWING REFERENCE: **Figure 1**



Key



Site Location

Barking, Havering and Redbridge NHS Trust

King George Hospital

Local Site Location

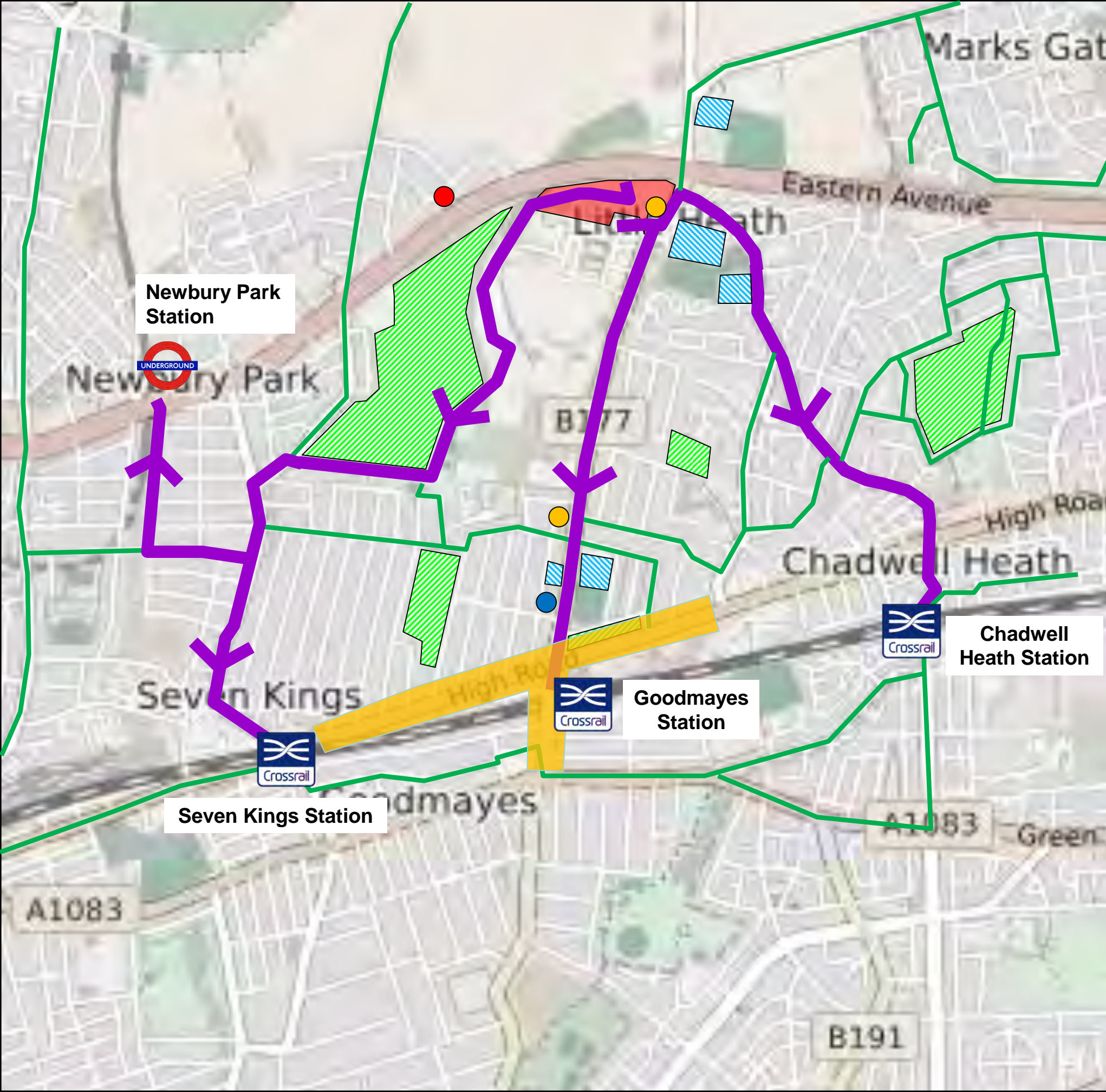
SCALES: **NTS**

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DRAWING REFERENCE: **Figure 2**



Key

-  Newbury Park Underground Station
-  Future Crossrail Stations
-  Cycle Routes
-  Cycle Routes Connecting with Train Stations
-  High Street & Shopping Area
-  Local Schools & Nurseries
-  Recreational Areas
-  Community Centre
-  Post Office
-  Convenience Store

Barking, Havering and Redbridge NHS Trust

King George Hospital

Cycle Connectivity to Local Facilities

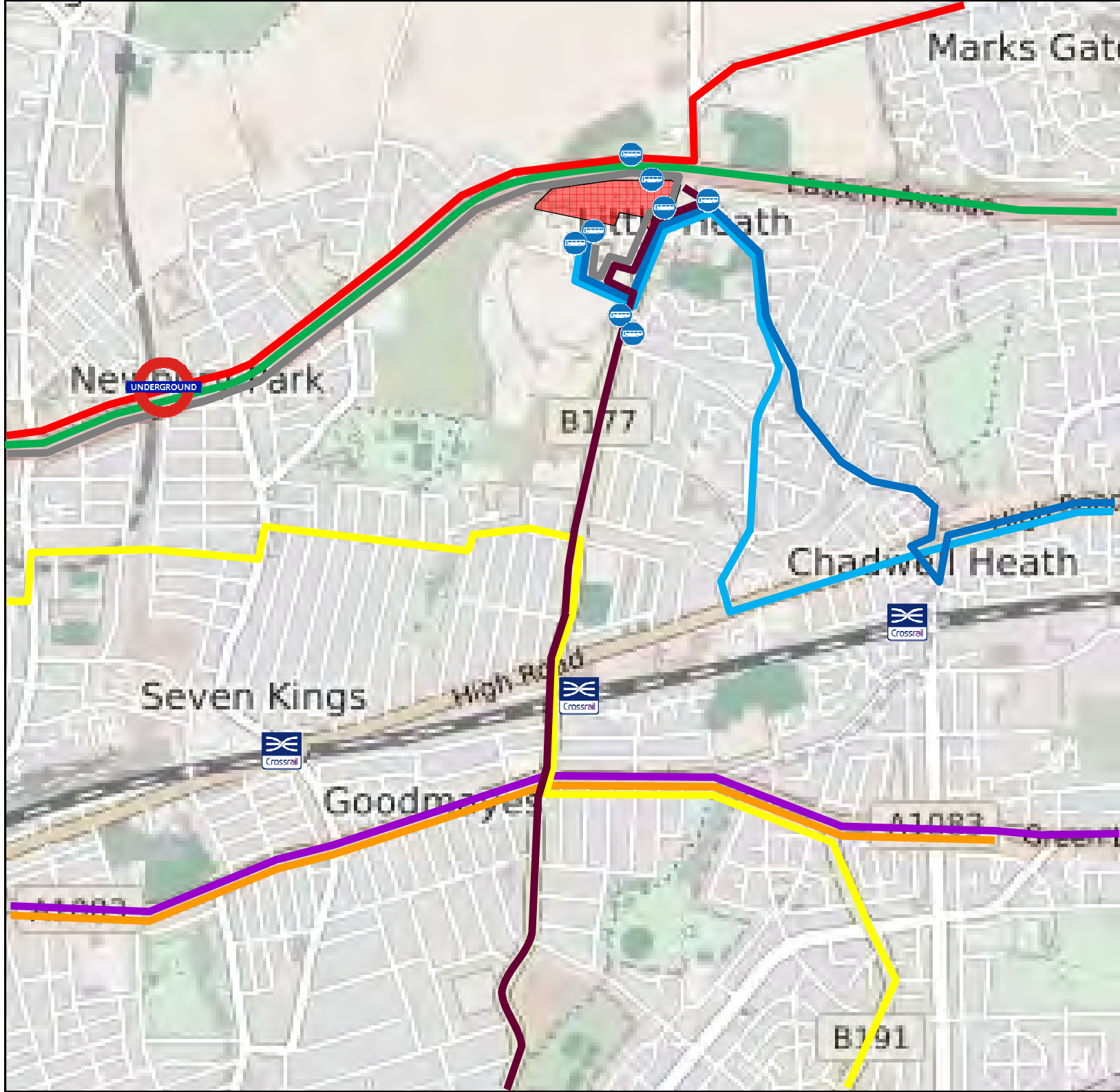
SCALES: **NTS**

DRAWN: D.S.	CHECKED: A.W.	DATE: 23/09/2016	REVISION: •
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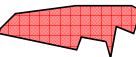














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DRAWING REFERENCE: **Figure 3**



Key

-  Site
-  Local Bus Stops
-  Newbury Park Underground Station
-  Future Crossrail Stations
-  Route 66
-  Route 128
-  Route 150
-  Route 173
-  Route 296
-  Route 362
-  Route 364
-  Route EL3
-  Route 396

Barking, Havering and Redbridge NHS Trust

King George Hospital

Local Bus Routes

SCALES: **NTS**

DRAWN: D.S.	CHECKED: A.W.	DATE: 23/09/2016	REVISION: •
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DRAWING REFERENCE: **Figure 4**

APPENDIX A



The Illustrative Master Plan demonstrates a potential layout of development across the site area, with apartment dwellings omitted from the northern parcel. This master plan illustrating the resultant relationship between existing and proposed built form and open space.

The Contextual Master Plan demonstrates how the master plan may fit within its wider context. The proposals indicate 107 housing units within 2-3 storey dwellings, with 1 storey garages, an overall lower density than the apartment option. The existing car parking to the north of the hospital would be relocated to a decked system west of the hospital.

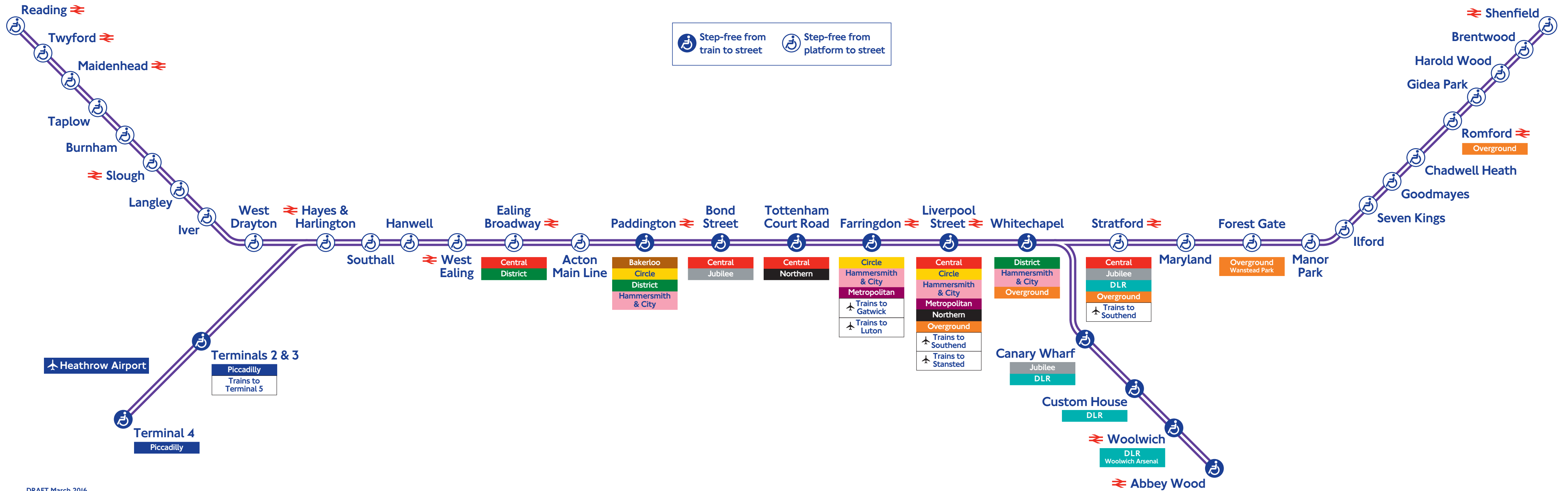
LEGEND

-  *Proposed Strategic Planting*
-  *Proposed Public Open Space*
-  *Residential Properties*
-  *Proposed Vehicle Access*
-  *Proposed Shared Zone*
-  *Proposed Grassland Mound*

Figure 46: Option 2 Illustrative Master Plan

APPENDIX B

Elizabeth line



DRAFT March 2016

APPENDIX C

Buses from King George Hospital

Route finder

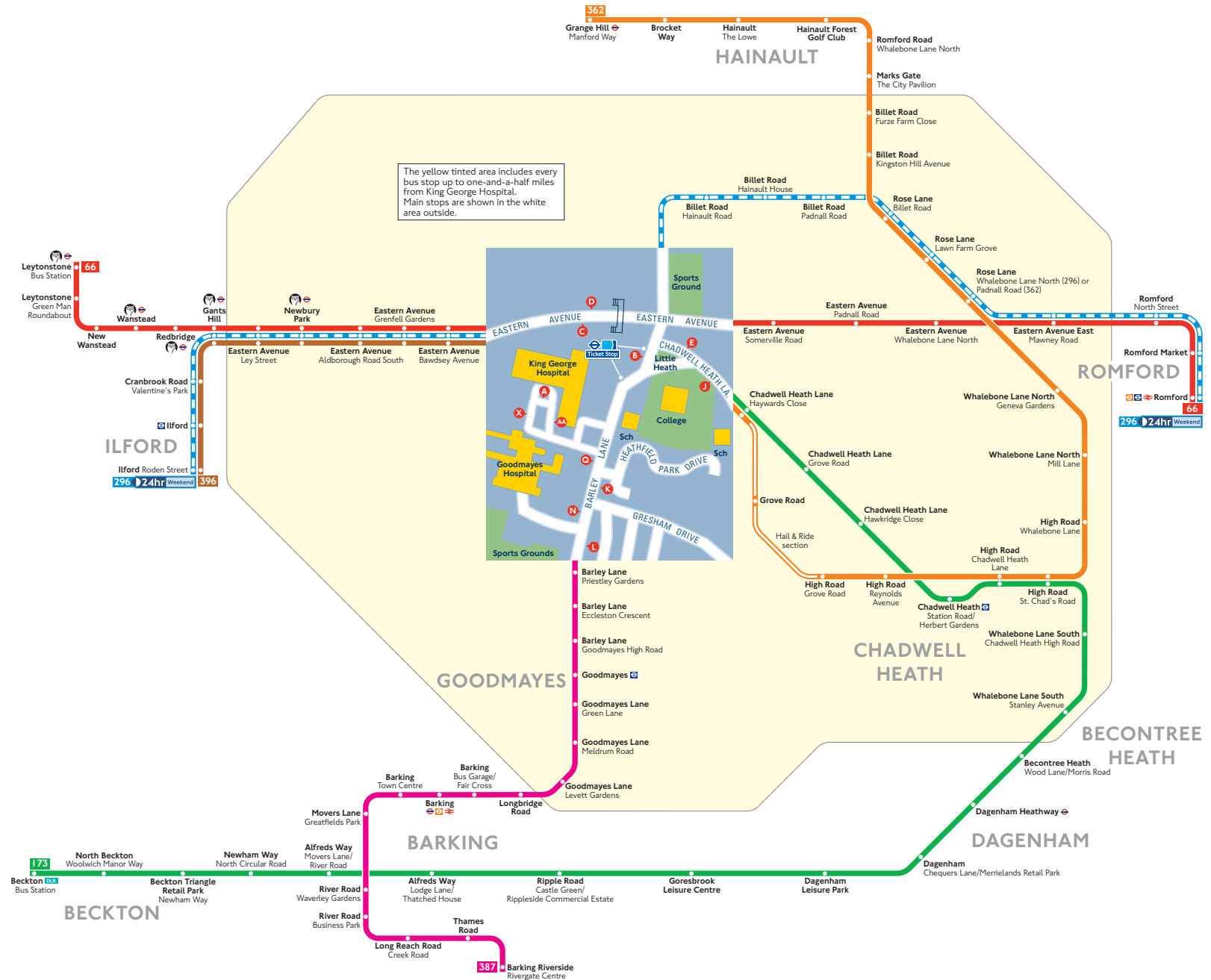
Bus route	Towards	Bus stops
66	Leytonstone	C
173	Romford	D
296 <small>▷24hr (Weekend)</small>	Beckton	A E
	Ilford	C
	Romford	D
362	Grange Hill	A E
387	Barking Riverside	A B E K L
396	Ilford	AA B C

Key

	Connections with London Underground
	Connections with London Overground
	Connections with TfL Rail
	Connections with National Rail
	Connections with DLR
	Operates daily with 24-hour service Friday and Saturday nights
	Tube station with 24-hour service Friday and Saturday nights when Night Tube services operate

Ways to pay

	Use your contactless debit or credit card. It's the same fare as Oyster and there is no need to top up.
	Top up your Oyster pay as you go credit or buy Travelcards and bus & tram passes at around 4,000 shops across London.
	Sign up for an online account to top up online and see your travel history and spending



APPENDIX D

WebCAT

Address or co-ordinates

King George Hospital, Ilford, UK ✕







Go

Access level (PTAL)


Time mapping (TIM)

TIM: a new measure, looking at how far you can travel in a given journey time.

Map key - Travel Time

 < 15 minutes	 15 - 30 minutes
 30 - 45 minutes	 45 - 60 minutes
 60 - 75 minutes	 > 75 minutes

Map layers

 Travel Times

Scenario

2021 (Forecast) ▾

Mode

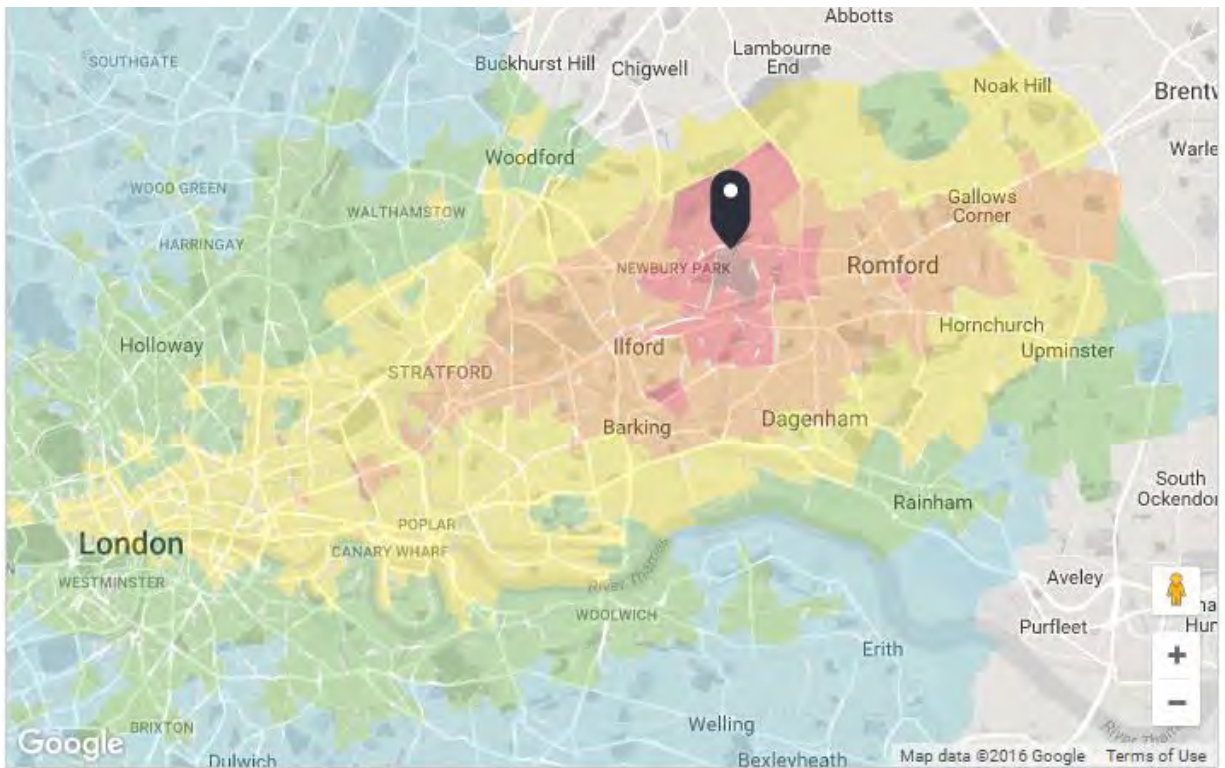
All public transport modes ▾

Time of Day

AM peak ▾

Direction

Average ▾



You can click anywhere on the map to change the selected location.

TIM output for 2021 (Forecast)

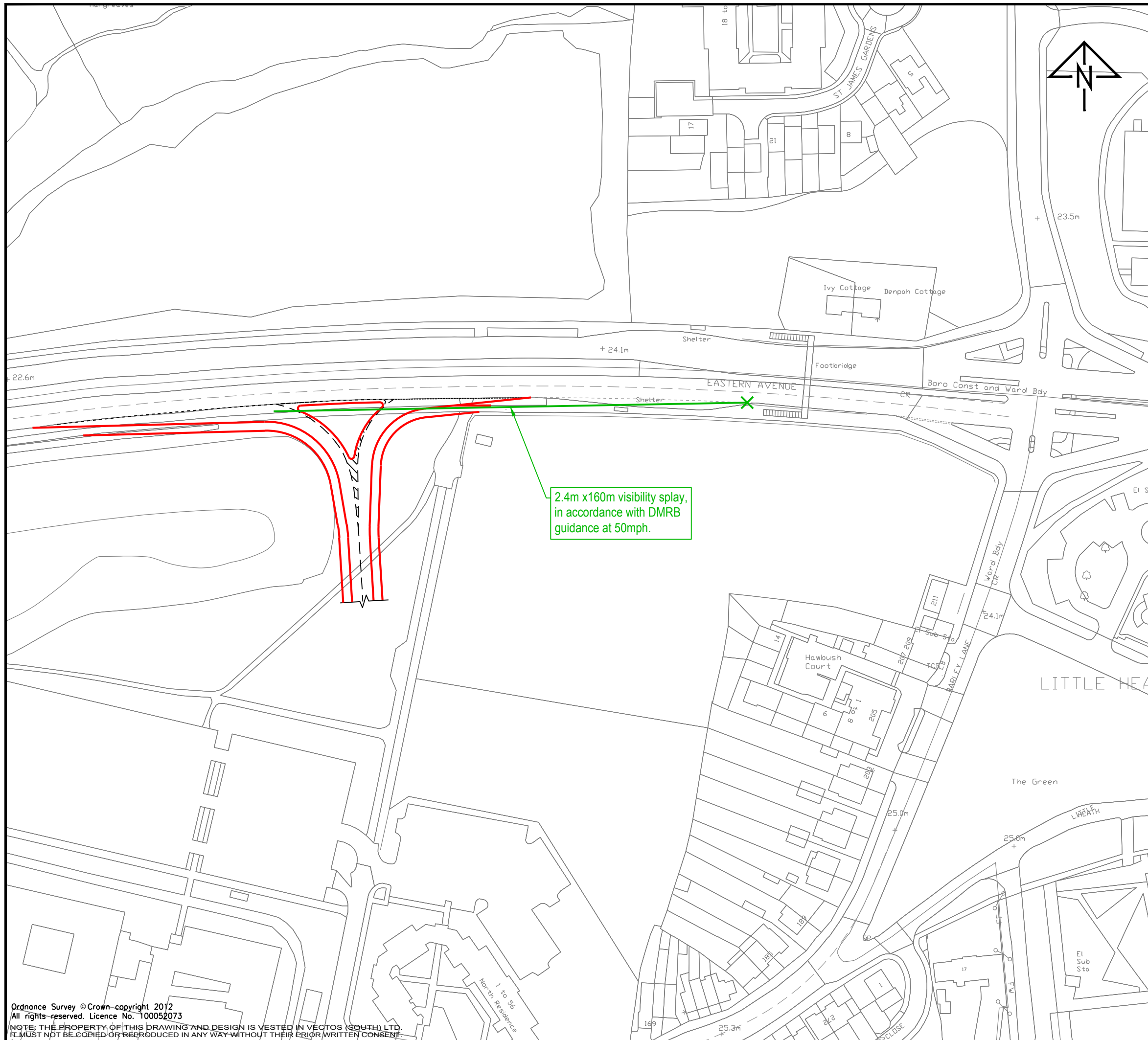
Mode: All public transport modes. Time of day: AM peak. Direction: Average

King George Hospital
Barley Ln, Goodmayes, Ilford IG3 8YB, UK

Easting: 546468, Northing: 188902

All public transport modes in London available in 2021:
National Rail, London Overground, Tube, DLR, Tram, Buses
Principal public transport network improvements include schemes held in TfL's committed and funded transport investment programme eg Crossrail 1 - linking east and west London.
Bus services are based on the base year network with a 3% uplift in frequencies.

APPENDIX E



- Notes:**
1. This is not a construction drawing and is intended for illustrative purposes only.
 2. White lining is indicative only.
 3. Identical to A/03 (no rev) as submitted in Repts to LB Redbridge in September 2016.

REV.	DETAILS	DRAWN	CHECKED	DATE

CLIENT:
**Barking, Havering and Redbridge
 NHS Trust**

PROJECT:
King George Hospital

DRAWING TITLE:
**Potential Access off A12
 Merge / Diverge Tapers
 Original Option**

SCALES:
1:1250 at A3

DRAWN: TF CHECKED: KH DATE: 16.02.2017



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DRAWING NUMBER: **151947/A/05** REVISION: .

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APPENDIX F

Ben Brogan

From: Goodall Rob <RobGoodall1@tfl.gov.uk>
Sent: 28 April 2017 09:13
To: Andrew Ward
Cc: Kamran Haider; Neale Timothy
Subject: RE: King George Hospital

Andrew,

Thank you for the information provided to us to date on the potential access into the King George Hospital site from the A12. Following our meeting and internal reviews and discussions we can confirm that in principle TfL would be willing to accept a new access onto the A12 at this location, subject to a full Transport Assessment, approved detailed designs and planning application for the access and development site and gaining the necessary TMAN approvals. It is TfL's view that any potential junction must have acceleration and deceleration lanes to mitigate any impacts as best as possible on A12 to through traffic and reduce the likelihood of incidents. As such, the circulated design drawing would be the preferred access solution, subject to the caveats above.

I hope this gives you a clear understanding of TfL's position.

Kind regards,

Rob Goodall | Principal Technical Planner | Borough Planning
TfL Planning, Transport for London

Tel: 020 3054 3680 | Auto: 83680 | Mob: 07808 736016 | Email: robgoodall1@tfl.gov.uk

For more information regarding the TfL Borough Planning team and TfL's *Transport Assessment Best Practice Guidance* please visit <https://tfl.gov.uk/info-for/urban-planning-and-construction/transport-assessment-guidance> and for pre-application advice please visit <https://tfl.gov.uk/info-for/urban-planning-and-construction/planning-applications/pre-application-advice>.

From: Andrew Ward [mailto:Andrew.Ward@vectos.co.uk]
Sent: 27 April 2017 14:17
To: Goodall Rob
Cc: Kamran Haider
Subject: King George Hospital

Hi Rob,

Further to our previous emails and subsequent meeting, please find attached a Technical Note outlining the proposed traffic generation and distribution of the proposed development and its likely impact on the A12. Also, please find attached a plan of the proposed site access junction with the A12 for your consideration.

It would be greatly appreciated if you could confirm you're happy in principle with the proposed access from the A12 and our Technical Note.

Please feel free to contact either Kamran or myself if you have any questions.

Thanks

Andrew Ward



020 7580 7373 (T) 07984 308 967 (M)

Andrew.Ward@vectos.co.uk

Network Building, 97 Tottenham Court Road, London, W1T 4TP



A DIFFERENT TYPE OF TRANSPORT PLANNING



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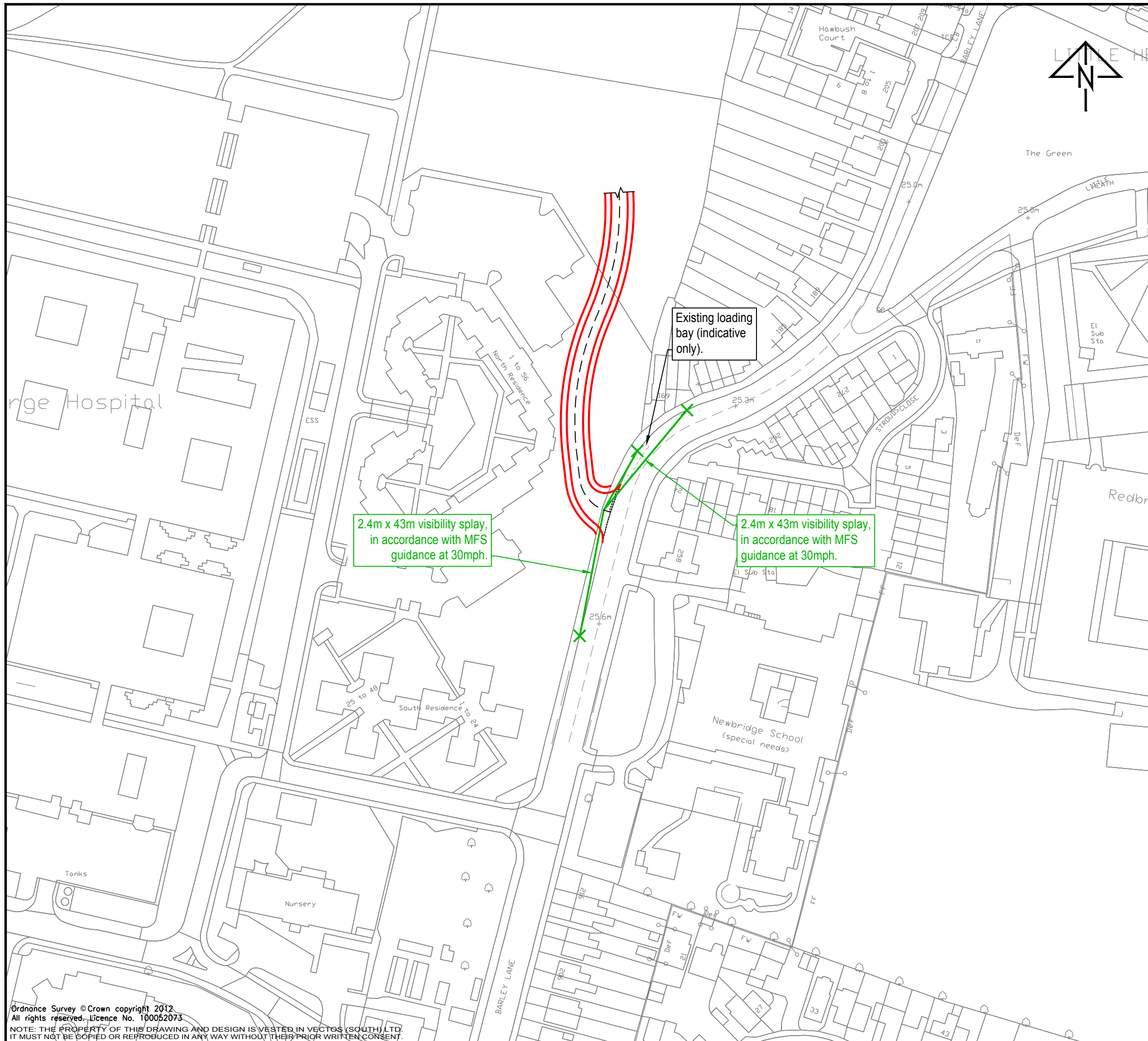
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APPENDIX G



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REV.	A	Alignment amended to avoid car park.	TF	KH	13.02.2017
		DETAILS	DRAWN	CHECKED	DATE

CLIENT:
**Barking, Havering and Redbridge
 NHS Trust**

PROJECT:
King George Hospital

DRAWING TITLE:
**Potential Access
 Barley Lane**

SCALES:
1:1250 at A3

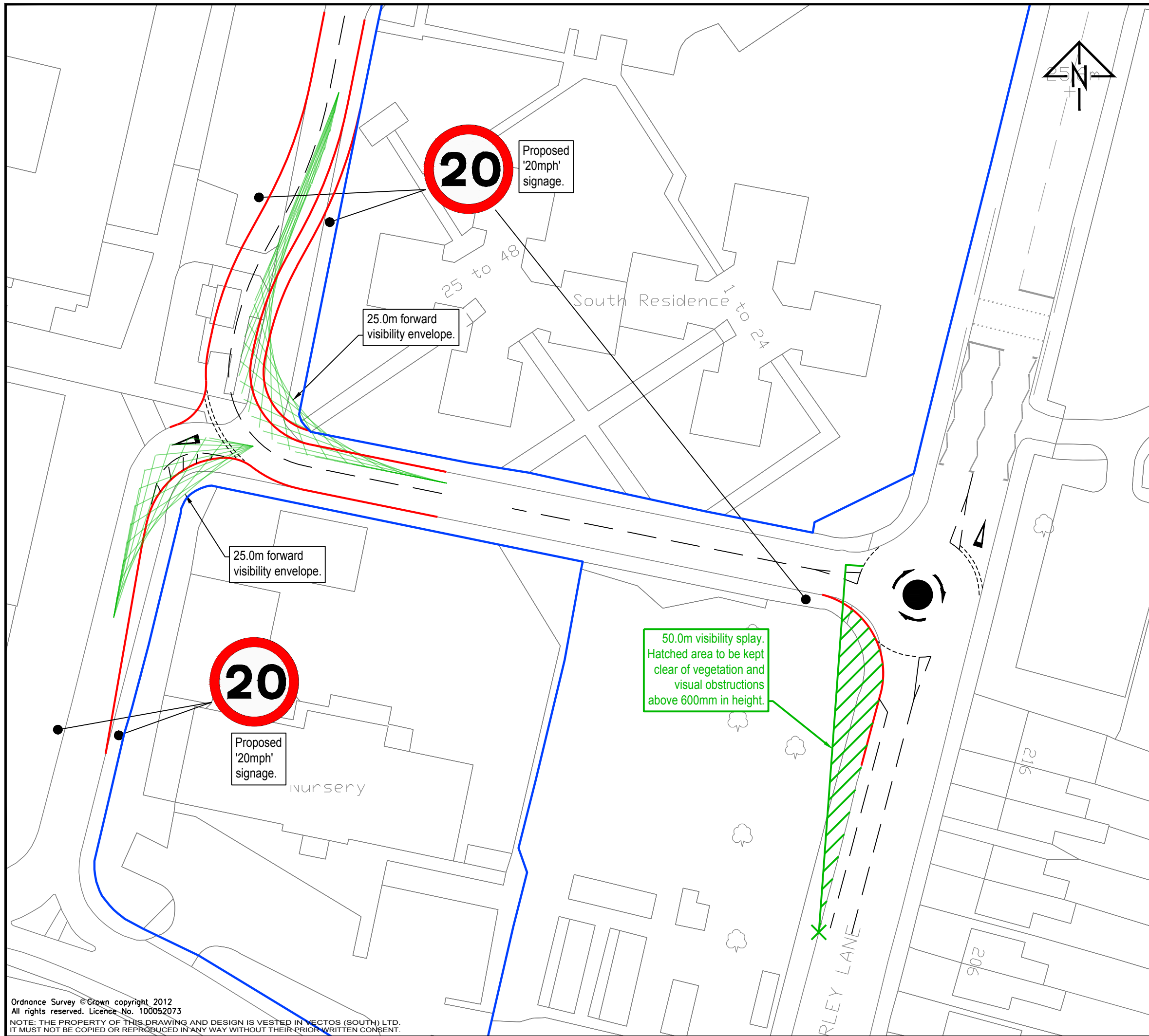
DRAWN: TF CHECKED: KH DATE: 20.09.2016



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— Leasehold Boundary

REV.	DETAILS	DRAWN	CHECKED	DATE

CLIENT:
**Barking, Havering and Redbridge
 NHS Trust**

PROJECT:
King George Hospital

DRAWING TITLE:
**Potential Mini-Roundabout
 Barley Lane**

SCALES:
1:500 at A3

DRAWN: TF CHECKED: KH DATE: 19.04.2017



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