



Planning for Growth in Bromley

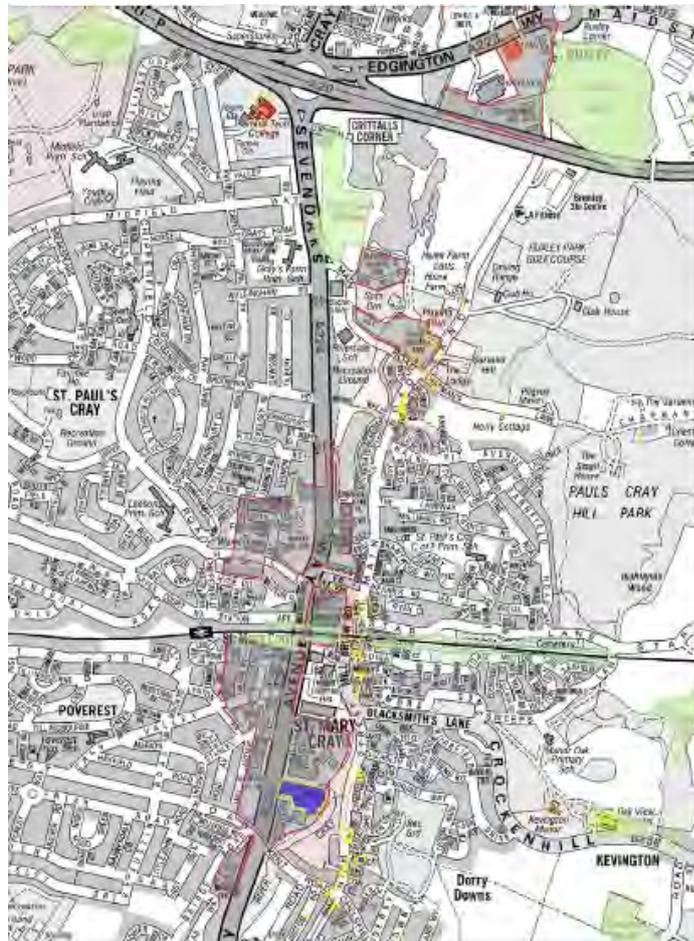
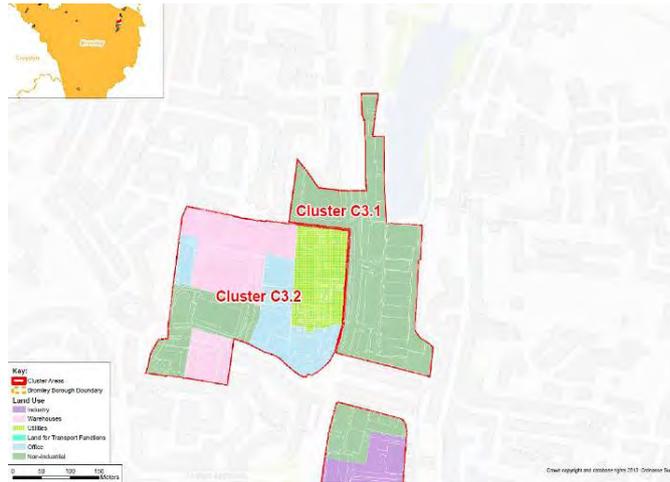
Cray Business Corridor Study

JULY 2014
UNITED KINGDOM & IRELAND



Final Report

Prepared for: LB Bromley





REVISION SCHEDULE					
Rev	Date	Details	Prepared by	Reviewed by	Approved by
1	December 2013	Interim Report	Tony Batten - Project Manager URS Simon Thurley – Consultant URS Greg Openshaw – Principal Economist Jonathan Crabb – Head of Transport South URS DTZ	Ben Castell – Project Director	Tony Batten – project Manager
2	January 2014	Draft Final Report	Tony Batten - Project Manager URS Simon Thurley – Consultant URS Greg Openshaw – Principal Economist Jonathan Crabb – Head of Transport South URS DTZ	Ben Castell – Project Director	Tony Batten – project Manager
3	April 2014	Draft Final Report 2	Tony Batten – Project Manager URS	Tony Batten – Project Manager URS	
4	May 2014	Draft Final Report 3	Tony Batten – Project Manager URS Paul Kelly – Senior Transport Planner URS DTZ	Tony Batten – Project Manager URS	
5	May 2014	Final Draft Report	Tony Batten – Project Manager	Tony Batten – Project Manager URS	
6	July 2014	Final Report	Tony Batten – Project Manager	Ben Castell – Project Director	Ben Castell – Project Director



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1 INTRODUCTION

London Borough of Bromley (LBB) has commissioned URS and DTZ to provide a critical assessment of the growth capacities of the Cray Business Corridor, alongside a similar study of Biggin Hill. The work is to help inform the development of planning policies and identify enabling infrastructure requirements.

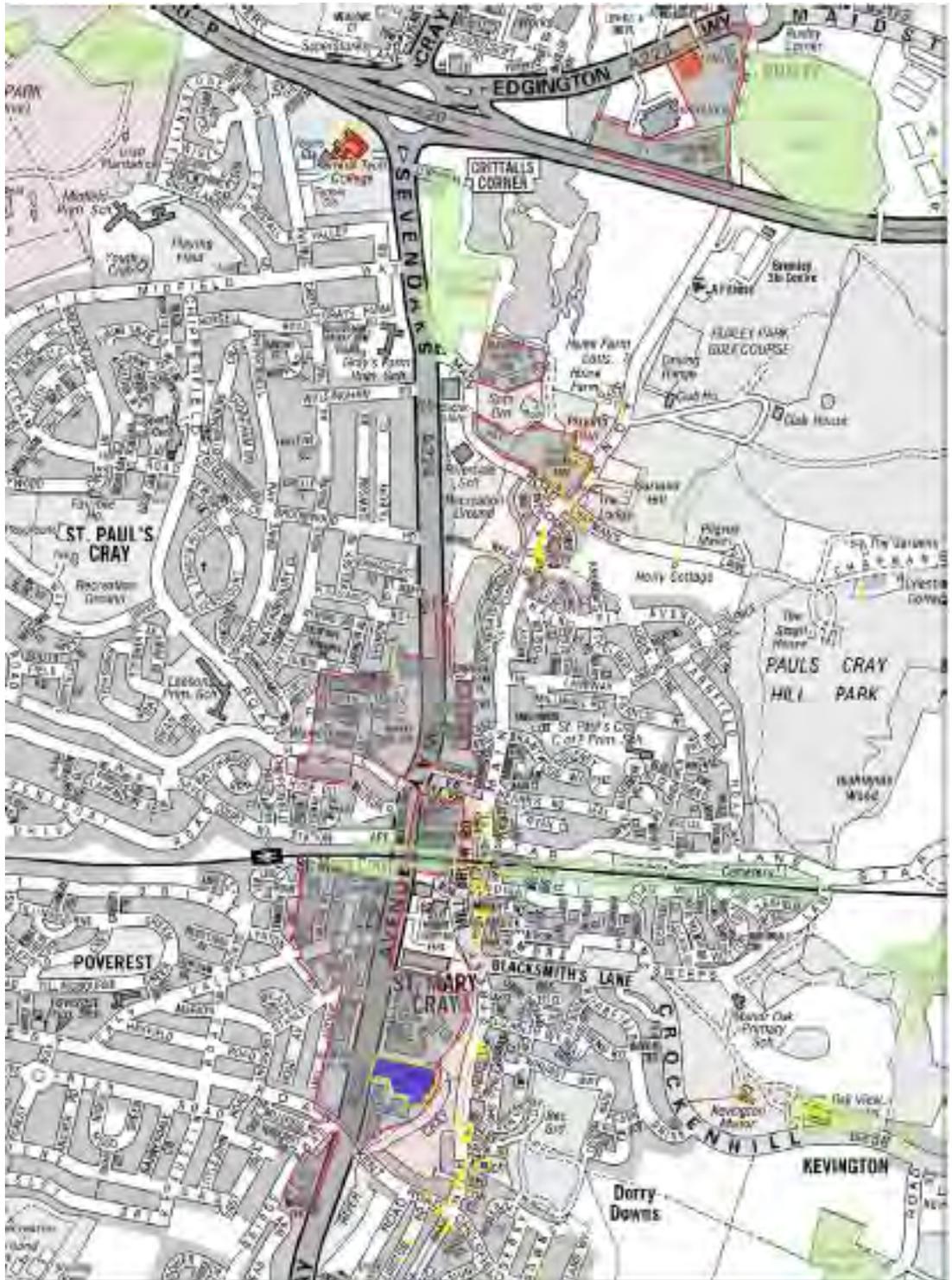
This report focuses on the Cray Business Corridor. Key aims are to assess development capacity within the growth area; identify highways infrastructure requirements; and consider planning policy implications of any growth in order to inform emerging policies within the emerging Local Plan.

Specifically in relation to the employment land context, which is a key part of the study, this paper includes advice on:

- Effectiveness of current SIL policy
- The boundary of the SIL from planning and property market perspectives
- Growth and intensification potential in the context of the existing quality and characteristics of the sites
- The numbers in the GVA and DTZ studies

The Cray Business Corridor study area is defined as the property market area and employment sites (as defined within the adopted UDP) located either side of the A224 Sevenoaks Way and around junction with the A20 at Crittalls Corner.

Figure 1.1 – Cray Business Corridor Study Area and designated employment sites



Source: LB Bromley

The remainder of this report is structured as follows:

- Section 2 explains the approach used
- Section 3 sets out a policy appraisal
- Section 4 covers the property market review
- Section 5 covers the profiling, survey and appraisal of employment sites
- Section 6 provides a forecast demand for employment land and floorspace
- Section 7 reviews the transport impacts of potential growth
- Section 8 sets out conclusions and recommendations

2 APPROACH

2.1 Introduction

This section will set out the main research elements of this study under the following sub-headings:

- Policy context and socio-economic profile;
- Appraisal of employment land supply;
- Property market analysis;
- demand forecasting;
- Transport impacts of growth;
- Conclusions and recommendations.

The analysis of supply and demand of employment land within the Cray Business Corridor has been conducted within the strategic context of a borough wide analysis which has examined all designated employment land within LB Bromley. This report contains the required methodology and inputs of an Employment Land Review assessment since specific conclusions and detailed recommendations are being made on the future portfolio of employment land.

2.2 Policy Context and Socio-economic Profile

This study takes account of relevant national, regional and local policies and strategies of relevance to this study in particular those concerns with employment land. The socio-economic analysis is set out in Appendix A and was undertaken for LB Bromley set within the context of the South East London sub-region. It covered a review of historical employment information for the borough, including information on workforce characteristics, occupations, earnings and analysis of key sectors. This profile was developed utilising a number of information sources including Census data, ONS Annual Population Survey, Annual Business Inquiry and the Local Labour Force Survey.

2.3 Survey of Employment Land Supply

The survey covered the use classes B1, B2 and B8 as per the DCLG Employment Land Review Guidance Note (2004). Throughout this report employment land is referred to as either land in Office (B1a), Research and Development (B1b), Light Industry (B1c), Industry (B2) and Warehousing/Logistical uses (B8).

In total sixteen clusters and two town centres were surveyed and appraised against an agreed set of economic, planning and property market criteria to assess their fitness for purpose. These clusters covered employment areas set out within the latest Local Plan Options and Preferred Strategy document (2013) and adopted 2006 UDP employment land designations: 'Employment Areas'. See Table 5.1 for a full list of clusters. This is in line with DCLG Employment Land Review Guidance Notes (still adopted guidance at the time of the study), GLA Land for Industry and Transport SPG (2012) and NPPF guidance. The study also takes account of the ongoing need for land required to accommodate wider industrial type uses which typically occupy industrial land such as

waste, utilities and transport functions (see Table 5.1 for further information).¹ Property Market Analysis

DTZ conducted a commercial property market assessment of demand by sectors and activities. This involved consultations with stakeholders including landowners and local market agents, a site visit and primary research. DTZ's analysis also considered business rate uplifts as a result of potential growth and an indicative phasing and investment plan.

2.4 Demand Forecasting

Our employment land demand forecast involved a synthesis approach which drew upon the following factors:

- Historic trends in local and sub-regional employment floorspace;
- Historic employment trends by sector;
- Employment projections based on land availability, connectivity and sector-based employment trends; and
- The influence of other factors specific to the local area such as planning and committed major projects, regeneration initiatives, the local economic and commercial property market environment, and the comparative advantages of LB Bromley in relation to its competitor markets.

LB Bromley's employment land market operates within a wider sphere and businesses looking to invest or relocate and take up land and premises are likely to search for suitable locations within a wider geography than the council's administrative boundary. The geography of this sphere of search has a similar economic and commercial property market context and can be described as a Property Market Area (PMA). For office, industry and warehousing our employment demand projections are made in the context of the PMA.

2.5 Highways impacts

URS has assessed the highways impacts arising as a result of the potential growth within the corridor. In completing this assessment, it was considered and agreed with LBB that a spreadsheet model would offer an effective tool in analysing transport patterns for the Cray Business corridor, supported by modelling using industry standard junction software. In developing the model, a first principles and a Reduced Transport Evaluation (RTE) approach have been adopted, on the basis that this provides a flexible method of appraising the development options.

In addition to the above, a qualitative assessment has also been completed as part of this study in order to understand each site's merits in transport terms. Each site has then been evaluated against a number of pre-defined criteria, including for example, PTAL levels. The evaluation framework also takes into account the findings of the spreadsheet modelling, capacity and accident analysis. The information has been used

¹ There is no evidence of additional land requirements for these sectors so the existing baseline is assumed to remain constant during the plan period.

to determine where improvements to travel conditions, may need to focus on more than highway capacity.

2.6 Conclusions and Recommendations

The final chapter draws together all of the previous research elements and provides detailed conclusions and recommendations on the current supply of employment land in the Cray Business Corridor in terms of future planning policy, growth potential and infrastructure requirements.

3 PLANNING POLICY REVIEW

3.1 Introduction

This section provides an overview of the policies and strategies relevant to employment land and growth in the Cray Business Corridor and LB Bromley. The review frames the context to the research in terms of national, regional and local policy.

3.2 National Policy

National Planning Policy Framework

The NPPF condenses all planning policy statements (PPSs) into a single all-encompassing planning framework with the intention of making the planning system less complex and more accessible. The National Planning Policy Framework was published and came into effect on 27th March 2012.

The NPPF describes the Government's vision for building a strong, competitive economy. It sets out a presumption in favour of sustainable development in the absence of a local plan or where the plan is silent or indeterminate. The presumption should be reflected by the emerging local plan and be informed by robust evidence to support clearly defined allocations for land for employment. In relation to economic and employment land it states the following:

A competitive economy requires a planning system which operates to encourage (and not impede) sustainable growth, and the NPPF places weight on the need to support economic growth through the planning system. As such planning policies should recognise and seek to address potential barriers to investment.

The NPPF provides guidance for local planning authorities, when drawing up Local Plans, who should:

- Set out a clear economic vision and strategy for their area which positively and proactively encourages sustainable economic growth;
- Set criteria, or identify strategic sites, for local and inward investment to match the strategy and to meet anticipated needs over the plan period;
- Support existing business sectors, taking account of whether they are expanding or contracting and, where possible, identify and plan for new or emerging sectors likely to locate in their area. Policies should be flexible enough to accommodate needs not anticipated in the plan and to allow a rapid response to changes in economic circumstances;
- Plan positively for the location, promotion and expansion of clusters or networks of knowledge driven, creative or high technology industries; Identify priority areas for economic regeneration, infrastructure provision and environmental enhancement; and facilitate flexible working practices such as the integration of residential and commercial uses within the same unit.

New Permitted Development Rights

Supporting the Government's effort to increase housing supply is an amendment to permitted development rights, which allows the change of use from B1(a) office to residential (C3) without the need for planning permission. These came into force in spring 2013 and have the purpose of supporting and enabling growth. The new permitted development rights will initially be time-limited for three years. Local

authorities were given an opportunity to seek an exemption from office to residential uses for specific geographies where there is evidence to suggest there could be a 'loss of a nationally significant area of economic activity' or 'substantial adverse economic consequences at the local authority level which are not offset by the positive benefits the new rights would bring'. LB Bromley were unsuccessful in their application for an exemption. The potential impacts of this change are explored in the Property Market Assessment (Section 6) and Policy Recommendations (Section 8).

3.3 Regional Policy

London Plan 2011

The London Plan (July 2011) is the spatial strategy for Greater London spanning the next twenty years to 2031. It replaces the previous London Plan (2004). It sets out an integrated social, economic and environmental framework for the future development of London. The relevant policies are stated below. An overall strategic policy of the Plan is contained within six detailed objectives. Those relevant to guide the Council's in the development of their employment policies within their local development plan include the following:

- Objective 1 - A city that meets the challenges of economic and population growth in ways that ensure a sustainable, good and improving quality of life and sufficient high quality homes and neighbourhoods for all Londoners, and help tackle the huge issue of deprivation and inequality among Londoners, including inequality in health outcomes;
- Objective 2 - An internationally competitive and successful city with a strong and diverse economy and an entrepreneurial spirit that benefit all Londoners and all parts of London; a city which is at the leading edge of innovation and research and which is comfortable with – and makes the most of – its rich heritage and cultural resources; and
- Objective 5 - A city that becomes a world leader in improving the environment locally and globally, taking the lead in tackling climate change, reducing pollution, developing a low carbon economy, consuming fewer resources and using them more effectively.

The London Plan identifies outer London as an area that requires specific strategic guidance to ensure that it contributes effectively to the overall prosperity of the capital. Bromley is within outer London. Policy 2.6 sets out the overall vision for Outer London. It states that 'The Mayor will, and boroughs and other stakeholders should, work to realise the potential of outer London, recognising and building upon its great diversity and varied strengths by providing locally sensitive approaches through LDFs and other development frameworks to enhance and promote its distinct existing and emerging strategic and local economic opportunities, and transport requirements'.

Policy 2.7 sets out the Economic policies for Outer London. These include:

- 'Enabling existing sources of growth to perform more effectively, and increasing the competitive attractiveness of outer London for new sectors or those with the potential for step changes in output;
- Ensuring that appropriate weight is given to wider economic as well as more local environmental and other objectives when considering business and residential development proposals;
- Consolidating and developing the strengths of outer London's office market through mixed use redevelopment and encouraging new provision in competitive locations, including through the use of land use 'swaps'; and

- Managing and improving the stock of industrial capacity to meet both strategic and local needs, including those of small and medium sized enterprises (SMEs), start-ups and businesses requiring more affordable workspace.

Policy 2.12: ‘Opportunity Areas and Areas for Intensification’ states that ‘development proposals within opportunity areas and intensification areas should:

- Support the strategic policy directions for the opportunity areas and intensification areas set out in Annex 1, and where relevant, in adopted opportunity area planning frameworks
- Seek to optimise residential and non-residential output and densities, provide necessary social and other infrastructure to sustain growth, and, where appropriate, contain a mix of uses; and
- Contribute towards meeting (or where appropriate, exceeding) the minimum guidelines for housing and/or indicative estimates for employment capacity set out in Annex 1, tested as appropriate through opportunity area planning frameworks and/or local development frameworks.’

Policy 2.15 refers to Town Centres and states that they should be; ‘the main foci beyond the Central Activities Zone for commercial development and intensification’. The London Plan defines Bromley as a Metropolitan Centre and Orpington as a Major Town Centre.

Policy 2.16 encourages London boroughs to develop plans for strategic development centres in outer London. This is designed to help; ‘create a distinct and attractive business offer and public realm through design and mixed use development as well as any more specialist forms of accommodation’.

Policy 2.17 outlines policy towards Strategic Industrial Locations (SILs). It states that the Mayor will, and boroughs and other stakeholders should, promote, manage and, where appropriate, protect the strategic industrial locations, as London’s main reservoirs of industrial and related capacity, including general and light industrial uses, logistics, waste management and environmental industries (such as renewable energy generation), utilities, wholesale markets and some transport functions.

The Strategic Industrial Location (SIL) framework as ‘intended to reconcile the demand for, and supply of, productive industrial land in London’. There are two types of SILs: Industrial Business Parks IBPs and Preferred Industrial Locations (PIL). IBPs are described as locations ‘designed to accommodate general industrial, light industrial and research and development uses that require a higher quality environment and less heavy goods access than a PIL’, of which LB Bromley has Foots Cray Business Area (with Bexley) and St Marys Cray.

In terms of office development Policy 4.2 ‘Offices’ states that “The Mayor will and Boroughs and other stakeholders should:

- Support the management and mixed use development and redevelopment of office provision to improve London’s competitiveness and to address the wider objectives of this Plan, including enhancing its varied attractions for businesses of different types and sizes including small and medium sized enterprises;
- Recognise and address strategic as well as local differences in implementing this policy to meet the distinct needs of the Central London office market... by sustaining and developing its unique and dynamic clusters of ‘world city’ and other specialist functions and business environments;
- Consolidate and extend the strengths of the diverse office markets elsewhere in the capital by promoting their competitive advantages, focusing new

development on viable locations with good public transport, enhancing the business environment including through mixed use redevelopment, and supporting managed conversion of surplus capacity to more viable, complementary uses; and

- Encourage renewal and modernisation of the existing office stock in viable locations to improve its quality and flexibility; and seek increases in the current stock where there is authoritative, strategic and local evidence of sustained demand for office based activities in the context of Policies 2.7, 2.9, 2.13, 2.15–2.17”.

Policy 4.4, Managing Industrial Land and Premises, states that the Mayor will work with boroughs and other partners to:

- ‘Adopt a rigorous approach to industrial land management to ensure a sufficient stock of land and premises to meet the future needs of different types of industrial and related uses in different parts of London, including for good quality and affordable space; and
- Plan, monitor and manage release of surplus industrial land where this is compatible with a) above, so that it can contribute to strategic and local planning objectives, especially those to provide more housing, and, in appropriate locations, to provide social infrastructure and to contribute to town centre renewal.’

Following this, the London Plan states that ‘LDFs should demonstrate how the borough stock of industrial land and premises in strategic industrial locations locally significant industrial sites and other industrial sites will be planned and managed in local circumstances in line with this strategic policy and the location strategy in Chapter 2, taking account of:

- The need to identify and protect locally significant industrial sites where justified by evidence of demand;
- Strategic and local criteria to manage these and other industrial sites;
- The borough level groupings for transfer of industrial land to other uses...and strategic monitoring benchmarks for industrial land release in supplementary planning guidance;
- The need for strategic and local provision for waste management, transport facilities (including inter-modal freight interchanges), logistics and wholesale markets within London and the wider city region; and to accommodate demand for workspace for small and medium sized enterprises and for new and emerging industrial sectors including the need to identify sufficient capacity for renewable energy generation quality and fitness for purpose of sites;
- Accessibility to the strategic road network and potential for transport of goods by rail and/or water transport;
- Accessibility to the local workforce by public transport, walking and cycling;
- Integrated strategic and local assessments of industrial demand to justify retention and inform release of industrial capacity in order to achieve efficient use of land; and
- The potential for surplus industrial land to help meet strategic and local requirements for a mix of other uses such as housing and, in appropriate locations, to provide social infrastructure and to contribute to town centre renewal’.

Map 4.1 refers to Bromley as a ‘Restricted Transfer’ Borough; that is a borough which typically has low levels of industrial land relative to demand, particularly for land used for waste management or logistics. These boroughs also have low proportions of industrial land within SIL frameworks and are therefore encouraged to adopt a more restrictive approach to the transfer of employment land.

A key evidence base document for the London Plan is the 2010 GLA London Industrial Land Baseline Study, undertaken by URS/DTZ.

From January to April 2014 the GLA published its Draft Further Alterations to the London Plan (FALP) for consultation. The only proposed amendment of significance to this study was the highlighting of the government’s recent liberalisation of permitted development rights for changes of use from offices to residential. With a relatively low quantum of office stock (most/ all of which is located within designated employment areas) there is likely to be little if any impact upon the Cray Corridor as a result of this change.

Supplementary Planning Guidance (SPG) Land for Industry and Transport 2012

The SPG was published in September 2012 and adds to the 2008 SPG’s two key objectives with the aim of ensuring the provision of sufficient land, suitably located, for the development of an expanded transport system. Key policies from the London Plan that form the basis for the SPG are Policies 2.17 Strategic Industrial Locations, 4.4 Managing Industrial Land and Premises and 6.2 Providing Public Transport Capacity and Safeguarding Land for Transport.

The SPG has a number of relevant themes for this ELR, including:

- Managing release in the context of demand arising from non-industry uses;
- There is increasing demand for industrial land from a range of other important industrial type functions. The distribution of release must take full account of other land use priorities and be managed carefully to ensure that a balance is struck between retaining sufficient industrial land in appropriate locations and releasing land to other uses;
- Strategic Industrial Locations and Locally Significant Industrial Sites should in general be protected, and release of industrial land through development management should generally be focussed on smaller sites outside of the SIL framework;
- The requirements for utilities also represent established uses of industrial land and their land requirement should be planned for to accommodate growth;
- Need for an integrated/partnership approach to employment land provision;
- A partnership approach and strategic perspective is required in order to keep inner London sustained and to meet the demands of the Central Activities Zone and Canary Wharf for locally accessible, industrial type activities, e.g. including food and drink preparation, printing, publishing, local distribution activities and ‘just-in-time’ services;
- Central and inner London boroughs face strong competition from other higher value land uses, particularly commercial offices, residential and retailing. Boroughs around the Central Activities Zone (CAZ) should consider industrial uses servicing the needs of central London; and
- In outer London boroughs should manage and improve the stock of industrial capacity to meet both strategic and local needs, including those of small and

medium sized enterprises (SMEs), start-ups and businesses requiring more affordable workspace. Parts of outer London have economic functions in logistics, industry and green enterprise that are of greater than sub-regional importance.

Bromley is classified as a borough with a 'restricted transfer of industrial sites'. This states the following:

'Restricted Transfer: Boroughs in this category generally have low levels of industrial land relative to demand (particularly for waste management or land for logistics) and/or low proportions of industrial land within the SIL Framework.

Boroughs in this category are encouraged to adopt a more restrictive approach to the transfer of industrial sites to other uses and set appropriate evidence based criteria to manage smaller non-designated sites.

Annex 1 of the SPG sets out the indicative industrial land release benchmarks for 2011-2031 for Bromley as -9ha (-0.5ha pa).

Annex 2 of the draft SPG gives indicative land demand for waste management and recycling. For Bromley the waste apportionment to 2031 (London Plan 2011) is 343,000 tonnes per annum (pa); however the waste transfer station capacity is 74,100 tonnes pa which is well under demand. The net additional indicative land requirement for waste apportioned to 2031 is therefore 3.4ha. This estimate is an approximate and indicative land requirement only and Boroughs, waste authorities and other partners, in collaboration with the GLA, should determine the actual requirements of industrial land needed to manage waste apportioned in the London Plan.

London's Industrial Land Baseline 2010

Prepared by URS in association with DTZ, this report provides a comprehensive analysis of London's supply of land in industrial and related uses such as warehousing for logistics, waste management, utilities, wholesale markets and vacant land including times series data 2001-2006-2010. Backed by field surveys and Geographic Information System (GIS) mapping, the study provides a valuable input into related studies on industrial land demand and the London Plan's Examination in Public. The study assists the GLA, LDA, TfL, boroughs and other partners to implement a rigorous strategy for industrial land management and investment, and to plan, monitor and manage release of surplus land to contribute to strategic and local planning objectives.

The study found that in 2010 in Bromley:

- There was 134.6 hectares of industrial land
- Of the total, 39.3 hectares was occupied by industry
- Of the total, 50.6 hectares was occupied by warehouses
- Of the total, 38.3 hectares was occupied by wider industrial land uses (such as utilities and waste facilities)
- Of the total, 6.4 hectares was vacant
- LB Bromley lost 5.7 hectares of industrial land to other uses from 2006 to 2010
- More industrial land changed to non-industrial use in the South East London sub-region in the four years between 2006 and 2010 than was recommended for release in the London Industrial Land Release Benchmarks report (URS,

2007) although less land changed to non-industrial than recommended over the twenty year period (2006 to 2026).

Mayor's Economic Development Strategy for Greater London 2010

In May 2010, the Mayor of London published a new Economic Development Strategy (EDS). The purpose of the Strategy is to provide relevant stakeholders, public authorities and interested parties, with a vision for London's future, an analysis of the economy and policy directions for achieving its ambitions; and to clarify roles and responsibilities with other partners who make a major contribution to developing London's economy.

The Economic Development Strategy (EDS) is framed around five central economic objectives, which are:

- 'Promote London as a city that excels as a world capital of business, the world's top international visitor destination, and the world's leading international centre of learning and creativity;
- Ensure that it has the most competitive business environment in the world;
- To make London one of the world's leading low carbon capitals by 2025 and a global leader in carbon finance;
- Give all Londoners the opportunity to take part in London's economic success, access sustainable employment and progress in their careers; and
- To attract the investment in infrastructure and regeneration which London needs, to maximise the benefits from this investment and in particular from the opportunity created by the 2012 Olympic and Paralympic Games and their legacy'.

The Strategy states that the Mayor wants to maximise London's share of the Carbon Trading global market: if London captured even 1 per cent of this new market it would be worth about £3.7 billion per annum. In order to do this, the Mayor considers that London should play to its existing strengths in financial services; business services – including consulting, engineering, architectural and legal services, research, design and product development.

3.4 Local Policy

Bromley Local Plan

The London Borough of Bromley is currently developing its Local Plan for the borough as required by the Planning and Compulsory Act 2004 (amended) and in line with the new National Planning Policy Framework (NPPF) published in 2012. Once adopted the Local Plan will outline the vision and spatial objectives for the borough up to 2030.

In 2013 an Options and Preferred Strategy document was published for consultation. One of the key preferred options is "carry forward the London Plan SIL designations for St Mary's Cray (Industrial Business Park) and Foots Cray Business Area" and to protect them for employment uses encouraging their future development and refurbishment. This reflects the borough's status as a 'restricted' borough for the transfer of industrial land to other uses.

The Options and Preferred Strategy document also proposes to safeguard the Business Area designations as Locally Significantly Industrial Sites (LSIS) so that "they can continue to meet business and employment needs and benefit from protection from changes of use and facilitate their upgrading through development and refurbishment

(Preferred Option 81). In addition Preferred Option 84 states the intention to “introduce a criteria based policy to protect non-designated employment sites from change of use”.

The importance of the Cray Valley commercial corridor to the supply of employment land within the borough is recognised in Preferred Option 80. The option states the need to “increase the economic contribution of the Cray Business Corridor to the local renewal area and to the borough as a whole through improving the quality of the environment, review of designation boundaries and the optimisation of employment sites”. To achieve this the Council needs to ensure a suitable range, quality and size of employment sites is available to meet forecasted growth and future business needs.

The Council also aims to work with Biggin Hill Airport and its associated businesses to enhance the areas employment and business opportunities. Preferred Option 91 states that growth would be accommodated “on the existing sites through intensification and reuse of vacant buildings to meet the objectives of the Strategic Outer London Development Centre (SOLDC)”.

The anticipated demand for additional office floorspace for the period to 2031 is recognised in Preferred Option 86 which states the need to “protect all existing office floorspace in accessible (based on PTAL ratings) locations”. Preferred Options 89 and 90 state that large new office developments should be directed towards town centres and that expansion and intensification should be sought in Bromley town Centre.

Bromley UDP 2006

Whilst the LB Bromley Local Plan is being progressed the majority of the policies within the adopted UDP (July 2006) are ‘saved’ and form part of Bromley’s Development Plan along with the Bromley Town Centre AAP and Supplementary Planning Documents for Planning Obligations and Affordable Housing.

The following ‘saved’ policies relevant for consideration in the context of this study:

- Policy EMP1 ‘Office Development’, which states that proposals for large new office development (more than 2,000 sqm) are to be located on defined proposals sites or within Bromley, Orpington, Penge and Beckenham town centres or on sites that are highly accessible by public transport and by other modes of transport.
- Policy EMP4 ‘Business Areas’, which states that except where sites allocated for other uses are identified in the Schedule of Proposal Sites, in the Business Areas identified on the Proposals Map only the following uses will be permitted:
 - Class B1, provided that the use does not impede effective operation of neighbouring businesses and large new offices meet provisions of Policy EMP1;
 - Class B2; or
 - Class B8, large scale warehousing development over 1,000 sqm will be permitted only in the St Mary Cray Business Area.
- Policy EMP5 ‘Development outside Business Areas’, which states that the redevelopment of business sites or premises outside of the designated business areas will be permitted provided that:
 - The size, configuration, access arrangements or other characteristics make it unsuitable for use Classes B1, B2 or B8 use; and
 - Full and proper marketing of the site conforms the unsuitability and financial non-viability of the site or premises for those uses.

- Policy EMP6 states that outside of Employment Areas the Council will only permit non-conforming business where there would be no significant adverse impact on the amenity of surrounding properties.
- Policy EMP7 'Business Support' states that proposals to improve the supply of small business units, managed workspaces and live/work units will be encouraged. These small business and managed workspaces should be located in town centres, local parades, Business Areas or land and premises used for employment purposes. Live/work units should be located in town centres or local parades.
- Policy EMP9 which states that the Council will strive to reduce commercial vacancy within the Borough through regeneration, town centre management, marketing activities and by working in partnership with appropriate external agencies, including marketing of vacant sites and premises.

Bromley Town Centre Area Action Plan, Adopted October 2010

The Area Action Plan (AAP) sets out the Council's vision for the town centre together with objectives, policies and proposals to guide future development and change. It seeks to enhance Bromley's character and environment and to promote sustainable development which will improve the quality and range of facilities and services available to residents and businesses. One of the key objectives of the AAP is to promote "economic growth and local employment opportunities, increasing the quality of commercial floorspace and economic opportunities in the town centre for benefit of the Borough and London as whole".

3.5 Other Key Documents

GLA London Office Policy Review 2012

The purpose of the London Office Policy Review is to provide planning policy makers with up to date information on the supply and demand for offices in London, including a review of office-based employment projections and office floor space need estimates, and consideration of the potential for conversion of surplus office space to other uses, especially residential, in different parts of London.

The main findings of the report were that despite the difficult post-2008 period, London's future as a World City and global financial centre is secure for the reasonably foreseeable future. The employment forecasts indicate a dynamic metropolitan area. There will be demand for new space, and for new types and formats of office space and related employment space, but in terms of quantity, forecasts suggest there is little need for expansion beyond that already in the pipeline. The rate of growth in office jobs, 2011-2036, is forecast to be half that which prevailed over the past two decades. The key policy task will be to monitor both the quantity and quality of space emerging, balancing new proposals with others that fall out of the pipeline, so that the pipeline is responsive to changes in demand.

The report notes that offices in Outer London beyond Central and Inner London town centres are likely to experience growing problems. It states that South London has encountered challenges regaining its previous share of the office market, and attributes this to changing occupier preferences and difficulties in finding ways to redevelop an increasingly aging office stock. In regards to Bromley the report notes that the £90 million Bromley South Central scheme which was recently granted consent did not involve any office floorspace. The report concludes that Bromley is unlikely to maintain its position as a significant office centre and that the emergence of Ebbsfleet presents a significant long-run challenge.

The report also highlights many options beyond the obvious conversion to residential, requiring spatial planning to be more creative and responsive to local market conditions. Encouraging the supply of space in the new office economy, on high streets, for flexible work patterns and small businesses with new needs could be a key role for spatial policy.

The report indicates that LB Bromley's gross employment floorspace in 2012 (23,474 sq.m) represents 81% of its 2009 gross employment floorspace (28,835 sq.m).

Outer London Commission: Full Report 2010

The Outer London Commission was established by the Mayor in 2008 to explore how different parts of Outer London can better realise their economic potential, especially its town centres, as well as opportunity and intensification areas and industrial locations. The Outer London Commission's Final Report is a compendium of research and analysis on the outer London economy intended to inform the London Plan's Examination in Public in 2010.

The report found that the perception that outer London was economically underperforming in relation to the outer metropolitan area between 2003 and 2007 was misleading. There was no clear pattern of economic out-performance by the outer metropolitan area but there was some evidence that it performed better on quality of environment issues, a potential lesson for outer London areas.

The report states that low-rent industrial activities have an important part to play in London's economy and that they should not be forced to relocate from metropolitan London locations because of competition from higher land values. Rather the planning system should take account not just of issues associated with economic linkages and supply chains but also indirect adverse impacts such as environmental and transport capacity costs associated with a rise in commercial vehicle traffic if they have to relocate further afield.

3.6 Summary

The NPPF states that planning policies should avoid the long term protection of sites allocated for employment use where there is no reasonable prospect of a site being used for that purpose and that land allocations should be regularly reviewed. It goes on to state that "where there is no reasonable prospect of a site being used for the allocated employment use, applications for alternative uses of land or buildings should be treated on their merits having regard to market signals and the relative need for different land uses to support sustainable local communities. (NPPF, page 6-7)."

Within the Supplementary Planning Guidance (SPG) Land for Industry and Transport 2012, the GLA proposes that the LB Bromley is classified as a borough with 'restricted transfer of industrial sites'. This states that 'boroughs in this category generally have low levels of industrial land relative to demand and should generally adopt a more restricted approach to transfer of industrial sites to other uses. However this approach should not preclude the possibility of smaller scale release where adequate provision has been planned for in Council's DPD's.

Within this study the GLA sets out the indicative industrial land release benchmarks for 2011-2031. This indicates that for Bromley the total release of industrial land for the 2011-2031 period could be 9 hectares, or 0.5ha per annum.

In light of this policy it is important for the LB Bromley to consider the overall supply of its employment land portfolio in the context of changing demand, particularly for industrial employment land. This assessment within this study considers the

implications of growth in the context of the Cray Corridor. Later sections of this report cover this assessment in detail.

4 PROFILING, QUALITY AND CHARACTERISTICS OF EMPLOYMENT LAND

4.1 Introduction

This section provides a summary of the key findings of the field survey and desk research appraisal and identifies the suitability of land for on-going B1, B2 and B8 uses. Results are summarised to provide an overview of conditions of employment clusters. Detailed and extensive field and desk research results were collected as part of the research and analysis.

The analysis allows an assessment of whether existing employment land in the study area is 'fit for employment purpose'. The other main objective is to identify those clusters that are most suitable or potentially unsuitable for office, industrial or warehousing employment uses.

To enable a robust assessment to be made of employment land within the Cray Corridor the total supply and demand for employment land across the entire borough was considered. This Section 4 considers the supply of employment land in the Cray Corridor in the context of the borough wide picture to ensure a robust assessment.

Based on the adopted Bromley UDP (2006), LB Bromley's Options and Preferred Strategy document (2013), the GLA's London's Industrial Baseline (2010), and the Council's and consultancy team's knowledge of the area, 18 employment clusters throughout LB Bromley were identified and mapped (see Figure 5.1). For the purpose of this assessment we have only taken account of designated employment land. Identified employment land in Table 4.1 below constitutes a large proportion of industrial and office employment land within the borough.

4.2 Employment Land Profiling

Table 4.1 lists the 18 employment clusters in LB Bromley that were surveyed against the agreed site appraisal criteria. These clusters comprise a total area of approximately 89 hectares, excluding the town centres.

The survey methodology and criteria are based on factors and issues set out, in the GLA Land for Industry and Transport SPG (2012), guidance set out in the NPPF and more recent guidance set out in the National Planning Practice Guidance documents. The survey methodology also considered supplementary criteria from within the ODPM's Employment Land Review Guidance Note (2004).² These criteria have been tailored and refined based on the consultancy team's experience and the specific context within Bromley.

Land use profiles of each of the designated employment sites located within the Cray Business Corridor have been included below in Figures 4.2 to 4.7. All other cluster maps have been included within Appendix A.

In relation to each cluster Figures 4.2 to 4.7 our analysis sets out the following detailed information:

- Land use breakdown
- Land use change 2010-2014

² This remained adopted guidance at the time of the research in late 2013.

- Main occupiers
- Strategic road access
- Neighbourhood issues (including negative impacts of site operations upon sensitive receptors e.g. residential uses, schools)³
- Strategic access to public transport
- Access to waterways and wharves
- Access to railheads
- Physical site constraints
- Planning policy context
- Servicing of businesses
- Parking facilities
- Access to facilities and amenities
- Quality of environment and public realm
- Condition of buildings
- Vacant floor space
- Vacant land and derelict buildings
- Existing and future capacity
- Possibilities for intensification and redevelopment
- Evidence of active marketing on-site
- Description of cluster
- Market interest (including for accommodating for needs of low value businesses and SMEs as part of the property market analysis)
- Typical rental information
- Benchmark industrial land values
- Benchmark build costs
- Overall viability
- Phasing for any future redevelopment
- Next steps for Council in helping facilitate redevelopment

³ Please note that 'Potential for 24 hour working' is implied where bad neighbour issues do not impact upon sensitive receptors.

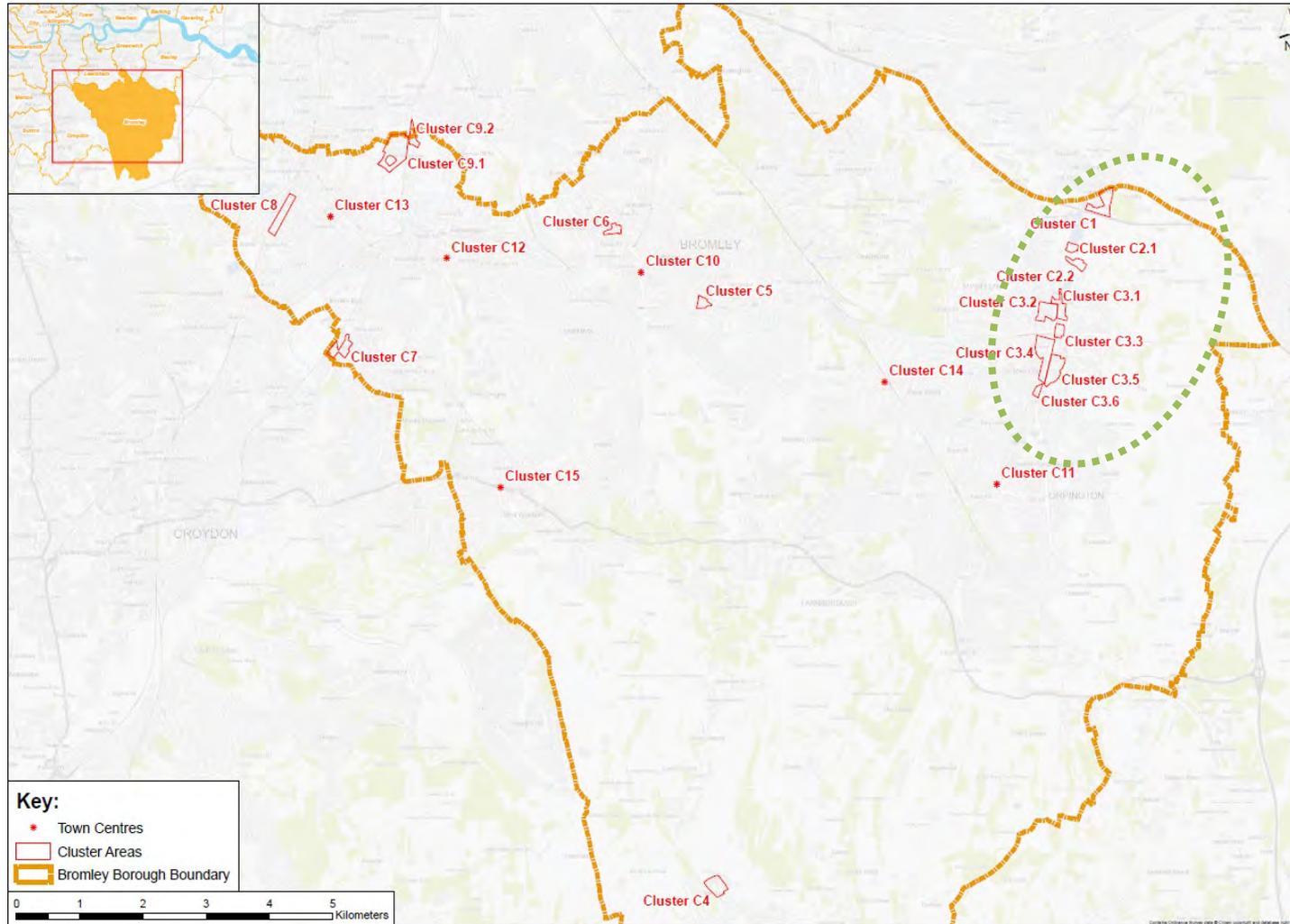
Table 4.1: Cray Business Corridor employment clusters (in red) and wider stock of designated employment land in LB Bromley

URS Cluster No.	Employment Area/Name of Cluster	Policy Designation	Total Employment Cluster Area (ha)	Cluster Breakdown by Use (ha)										
				Industry	Self-Storage / Open Storage	Warehouses	Waste	Utilities	Transport Functions	Land w/ Vacant Buildings	Vacant Industrial Land	Office	Wholesale	Non-Industrial
C1	Ruxley Corner / Foots Cray Business Area Industrial	SIL	8.45	0.69	0.00	1.90	0.00	0.05	0.00	2.70	3.11	0.00	0.00	0.00
C2.1	Crayfields Business Park	Employment Area	2.08	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.00	1.27	0.00	0.00
C2.2	Crayfields Industrial Park	Employment Area	3.36	0.00	0.00	2.43	0.00	0.00	0.00	0.00	0.00	0.74	0.00	0.19
C3.1	St Mary's Cray Industrial Business Park	SIL	4.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.93
C3.2	St Mary's Cray Industrial Business Park	SIL	7.83	0.00	0.00	2.79	0.00	1.60	0.00	0.00	0.00	1.87	0.00	1.58
C3.3	St Mary's Cray Industrial Business Park	SIL	2.75	1.39	0.00	0.00	0.00	0.00	0.84	0.00	0.00	0.00	0.00	0.52
C3.4	St Mary's Cray Industrial Business Park	SIL	10.53	4.21	1.26	1.75	0.00	0.00	0.00	0.00	0.00	0.27	0.58	2.45
C3.5	St Mary's Cray Industrial Business Park	SIL	8.17	4.35	0.00	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C3.6	St Mary's Cray Industrial Business Park	SIL	1.47	1.24	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Total	Cray Business Corridor		49.56	11.87	1.26	12.69	0.00	1.88	0.84	3.51	3.11	4.16	0.58	9.66
C4	Airport Trading Estate	Employment Area	7.16	0.00	0.00	3.15	0.00	0.00	0.00	0.00	1.56	2.22	0.00	0.19
C5	Homesdale Road	Employment Area	2.29	0.00	0.00	0.00	0.00	1.06	0.00	0.23	0.00	0.23	0.00	0.77
C6	Farwig Lane	Employment Area	2.39	0.26	0.31	0.95	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.83
C7	Elmers End, Croydon Road	Employment Area	5.35	1.18	0.00	4.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C8	Oakfield Road	Employment Area	4.66	0.73	0.00	2.05	0.00	0.36	0.00	0.06	0.00	0.04	0.00	1.42

URS Cluster No.	Employment Area/Name of Cluster	Policy Designation	Total Employment Cluster Area (ha)	Cluster Breakdown by Use (ha)										
				Industry	Self-Storage / Open Storage	Warehouses	Waste	Utilities	Transport Functions	Land w/ Vacant Buildings	Vacant Industrial Land	Office	Wholesale	Non-Industrial
C9.1	Lower Sydenham	Employment Area	14.69	6.46	0.00	5.78	0.47	0.77	0.00	0.00	0.54	0.32	0.00	0.34
C9.2	Lower Sydenham	Employment Area	2.88	0.77	0.00	1.08	0.00	0.00	0.00	1.03	0.00	0.00	0.00	0.00
Total	Designated Employment Land		88.93	21.27	1.57	29.86	0.47	4.07	0.84	4.83	5.20	7.02	0.58	13.21

Source: URS Field Survey. Note figures may not always sum due to rounding. Sites within the Cray Business Corridor are highlighted in red.

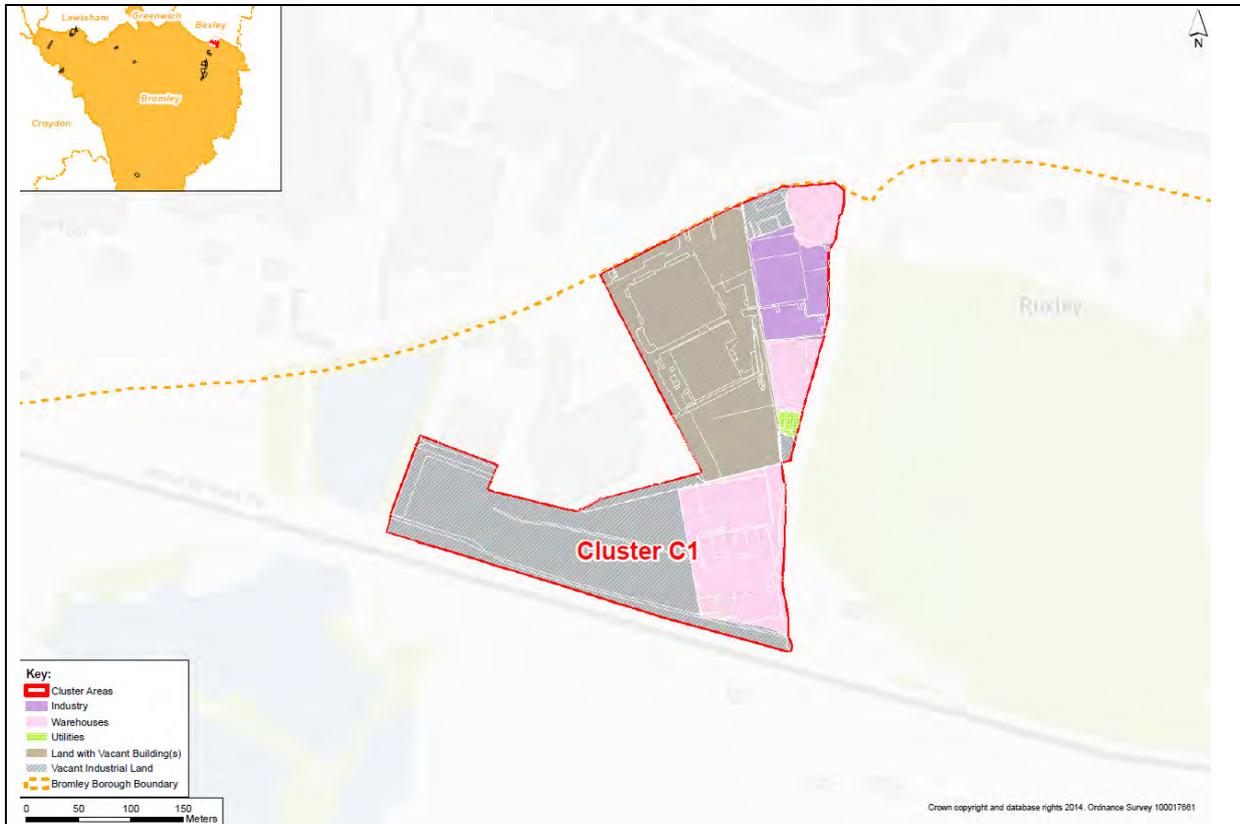
Figure 4.1: LB Bromley Employment Clusters Context Map (Cray Corridor is visible in the north east of the borough)



Source – URS (2013)



Figure 4.2: Employment Cluster 1 Ruxley Corner / Foots Cray Business Area Industrial - Profile and Characteristics

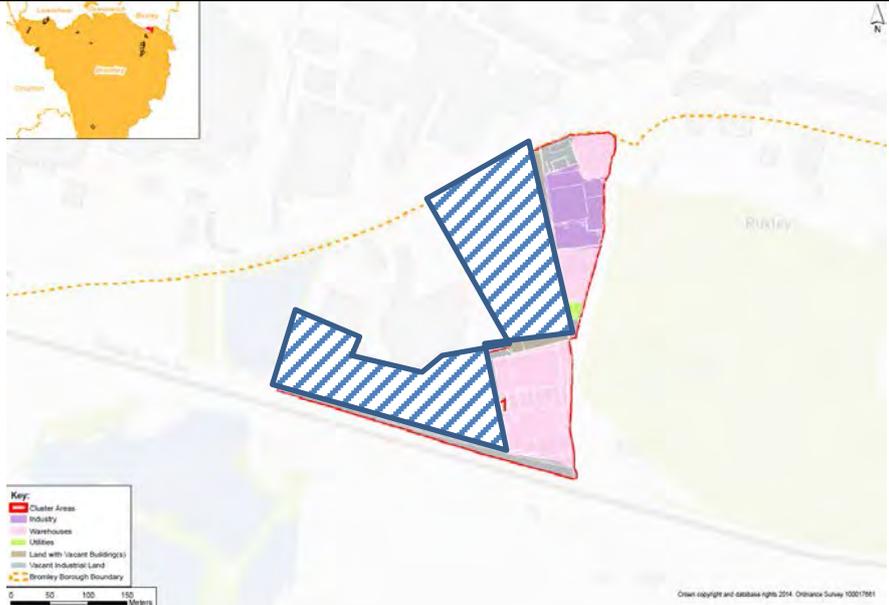


Land area (Ha)	The employment cluster is a total of 8.45 hectares in size.
Land use breakdown 2014 (Ha) (as per above plan)	As per the site surveys and GIS mapping, the cluster was found to contain the following land uses as per the London Plan industrial land use categorisation: <ul style="list-style-type: none"> • B1c/B2 Industry - 0.69 • B8 Warehouses - 1.9 • Utilities 0.05 • Land with Vacant Buildings 2.7 • Vacant Industrial Land 3.11
Land use change 2010-2014	1.44 hectares from 'Vacant Industrial Land' to 'Warehouses'. This relates to recent development of the Fitzroy Business Park for primarily B8 logistical uses.
Main Estates and Occupiers	Klingers (vacated premises), Selco, Rexel Senete, Fitzroy Business Centre, Alsford Timber. <i>Occupiers within the Fitzroy Business Park, November 2013</i>

Strategic Road Access	Direct access to strategic roads - A20 Sidcup by Pass via the A223.
Neighbourhood issues (incl. sensitive receptors e.g. residential, schools)	No bad neighbour issues were observed on site and there are no sensitive adjacent uses such as residential, schools or community uses.
Strategic access to public transport	The cluster falls within a PTAL 2 area - this is considered 'poor' on a scale of 1a (lowest) to 6b (highest).
Access to waterways & wharves	The cluster of sites has no access to any waterways.
Access to railhead	The cluster of sites has no access to any railheads.
Other physical site constraints (layout issues, access through local roads)	The vacant site to the south of Tesco may not be accessible from an adopted highway. The façade of the Klingers building is understood to be listed.
Planning policy context	The cluster is designated as a Strategic Industrial Location and is identified in the London Plan as part of the Footscray Business Area as an Industrial Business Park (IBP).
Servicing of businesses	The businesses within the Fitzroy Business park and those accessible from Sandy Lane were observed to have good servicing in the form of designated off road loading bays. The Klingers business unit, though now vacant also appeared to have historically have had good off road servicing.
Parking facilities	The businesses and sites throughout the cluster were found to have adequate dedicated parking provision.
Access to amenities & facilities	Apart from Tesco there are no shops, restaurants or cafes within a 10-15 min walk. There is a limited selection of places for lunch. Access to facilities and amenities is therefore considered to be relatively poor.
Quality of environment and public realm	Through the site surveys it was found that the quality of environment and public realm was found to be good. In particular the environmental quality within the Fitzroy Business Park (as observed in the below image) was found to be excellent.
Conditions of buildings	Through the site surveys it was found that around 50% of buildings were considered very good, 40% good and a small proportion of 10% of the were

	<p>in poor condition. Please note that this was based on a high level visual inspection and not based on a detailed building condition survey.</p> <p><i>Fitzroy Business Park – an example of very good condition buildings</i></p> 
<p>Vacant floorspace observed</p>	<p>Apart from the vacant Klingers site 1,204m² of floor space was observed to be lettable at the time of the site survey in November 2013.</p> <p><i>Lettable floor space sign</i></p> 

<p>Vacant land and derelict buildings</p>	<p>The land to the south of Tesco comprising a site area of 3.11 ha is the only vacant plot of land within the cluster. This site is identified as 'Vacant Industrial Land' in the plan above.</p> <p><i>Vacant industrial land south of Tesco</i></p>  <p>The site containing the old Klingers building occupies an area of 2.7 ha and these are the only vacant premises within the cluster.</p>
<p>Existing and future capacity</p>	<p>The occupied sites and premises at the Fitzroy Business Centre and to the north of Sandy Lane are fully developed, well utilised by industry and largely occupied suggesting little scope for intensification of redevelopment. There is a clear possibility for redevelopment of the derelict Klingers site and for the vacant land to the south of Tesco directly north of the A20.</p> <p><i>Frontage of Klingers building – a derelict site</i></p> 

<p>Possibility for intensification/redevelopment</p>	 <p>The land identified as 'Land with Vacant Buildings' – the Klingers site and the 'Vacant Industrial Land' located to the south of Tesco, west of the Fitzroy Business park and north of the A20 are the two sites that we believe are good possibilities for intensification and redevelopment (these are hatched in dark blue directly above). These respectively measure 2.7 hectares and 3.11 hectares. Based on single storey buildings and average plot ratio of 0.5 for B1b/c, B2 and B8 (as per good practice set out in the DCLG ELR Guidance Note (Annex D)) these sites are estimated to yield circa 13,500 and 15,500 square metres of industrial employment floor space respectively (29,000 square metres in total).</p>
<p>Evidence of active marketing on site (floorspace and land)</p>	<p>Yes – Glenny surveyors were marketing a 1,204 sq m unit at the Fitzroy Business Park for industrial or warehousing use. See image under 'Vacant floorspace observed' section.</p>
<p>Description of cluster</p>	<p>This is mixed employment area with good strategic road access, no bad neighbour issues and adequate parking and business servicing. The employment area is allocated as a Strategic Industrial Location in the London Plan and this is evidenced to be well suited designation based on the relevant environmental and planning factors that have been assessed. New and occupied high quality B8 units at the Fitzroy Business Centre indicate market demand for such uses and the two large-scale redevelopment opportunities identified present a good opportunity for intensification of this employment area.</p>

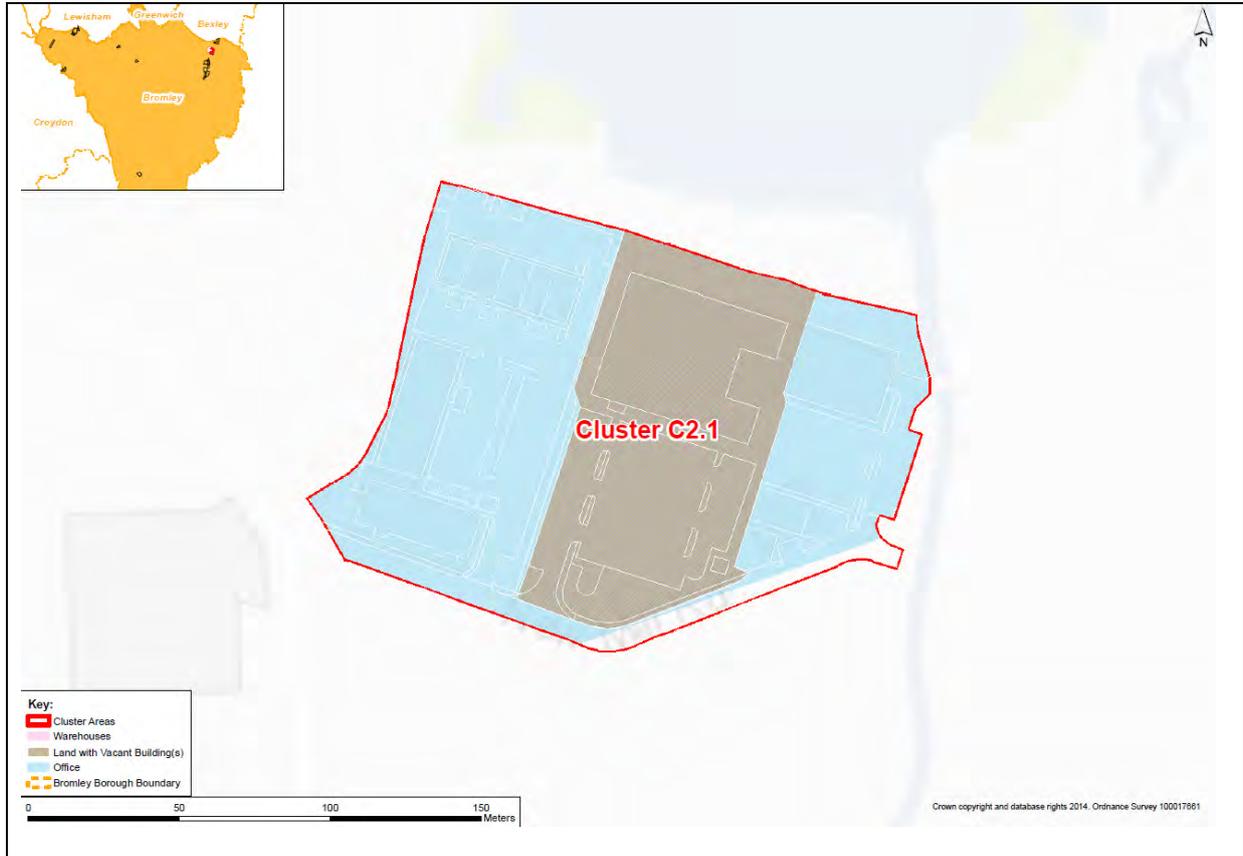
Market information	
<p>Specific market interest / enquiries (outcome of research and consultations)</p>	<p>This cluster within the Cray Valley is perceived by both agents and occupiers as being an excellent location, due to its proximity to the A20, and the quality of the accommodation within the cluster.</p> <p>Edgington Road provides good access to the A20, and is a busy arterial route which benefits many of the incumbent occupiers within the cluster, particularly those that benefit greatly by high volumes of passing traffic like Alsford Timber and Selco Builders Merchants.</p> <p>As mentioned above there are two obvious sites for intensification: being the former Klinger’s Site and what was originally intended to be Phase II of the Fitzroy Business Park, off Sandy Lane (the site to the south of Tesco).</p> <p>We understand that the former Klinger Site is owned by IKEA but they have placed the site under offer to an industrial developer who intends to develop out the site speculatively once they have received planning permission.</p> <p>The Fitzroy Business Park, Phase II land (to the south of Tesco) was sold a couple of years ago to Tesco, who earmarked the site as expansion land for their store on Edgington Way. We understand that consent has yet to be granted; assuming the council continue to support industrial on this site then we envisage that the land will be utilised for industrial development in the future.</p> <p>Either site would be suitable for B1(c), B2 and B8 uses. The former Klinger’s site does have prominence onto Edgington Way, in which case we would also envisage good interest from trade counter style operators.</p>
<p>Typical rental information (rent and yield) for recommended uses</p>	<p>B1c/B2/B8 - £8.00-£9.00 per sq ft (depending on the size of unit) Trade counter retail – £11.50 - £12.50 per sq ft</p> <p>Yield: for a multi-let industrial estate now it would attract interest at between 6 – 6.5%.</p>
<p>Benchmark industrial land values (per ha) for recommended uses</p>	<p>£1.88m - £2.13m per hectare</p>
<p>Benchmark Build costs (per sq m) for recommended uses</p>	<p>£500 - £650 per sq m (industrial)</p>
<p>Overall viability</p>	<p>In respect to the former Klinger’s site, the site is owned by IKEA but under offer to an industrial developer. The site is of a scale that is likely to be under offer to a small to medium sized ‘trader’ developer; typically such developers do not landbank, as the interest accrued holding a site erodes their profit. As</p>

	<p>such we believe that this site will come forward to be redeveloped within the next five years.</p> <p>This site is likely to attract a great deal of interest from B1(c), B2 and B8 uses due to its location and prominent position on Edgington Way. This will include trade counter uses who will be attracted to the prominent position of the site.</p> <p>The future of the vacant land owned by Tesco is less clear. We understand that the site is owned and earmarked by Tesco as a site that could be used to accommodate an extension to the current store. We are unaware as to the exact position in terms of an application by Tesco but we do know that the site is currently allocated as an industrial employment site.</p> <p>Should any application for an extension to the store be refused, Tesco could choose to sell the site to an industrial developer or occupier. Should they choose to do this the question of access is one that needs to be resolved.</p> <p>The original intention was for this land to be the Phase II land for the Fitzroy Business Park, until it was sold to Tesco. It may be that the developers of Fitzroy would be prepared to buy it back, but either way access via Phase 1 of the Fitzroy scheme could still be possible. There is a roundabout at the end of the current Tesco access road, which could well be the route into the site though an agreement may be required with Tesco.</p> <p>We can only assume that Tesco considered its future use should their application being refused in which case one of these two possibilities should be available.</p> <p>Either access route is acceptable from a development point of view, but access from Edgington Way would be preferable to that of Sandy Lane from a viability perspective.</p>
<p>Phasing for future redevelopment</p>	<p>2015-2020. We anticipate that the former Klinger’s site will sell shortly to an industrial developer who is likely to proceed with developing the site over the next three to five years.</p> <p>The Fitzroy Business Park, Phase 2 land (south of Tesco) is likely to come forward within the next five years assuming Tesco are refused planning permission to extend their store, and that they are willing to sell to an industrial developer. Tesco sometimes develop industrial sites via their development arm, Spenhill, but we consider it unlikely at this location, due to the small scale/value of the resulting investment.</p>
<p>Next steps for Council in helping facilitate</p>	<p>As the former Klinger Site is under offer to an industrial developer we do not envisage a role for the council as the market is well placed to deliver a scheme in the short to medium term. As such the developer’s interest will be</p>

<p>redevelopment</p>	<p>aligned with the council’s which is to say that the developer is likely to want to develop the site as soon as possible.</p> <p>Tesco’s aspirations appear to be to achieve a consent to extend their store. Providing the council wish for the site to remain allocated for industrial employment, all applications for an alternative use should be refused, in the hope that similar to IKEA, Tesco will finally sell the site to an industrial occupier / developer. The evidence suggests that this site has all the characteristics to be a successful industrial employment site.</p>
<p>Potential future business rate uplift</p>	<p>£428,000 additional per annum to be retained by the Council as a result of circa 29,000 sqm of assumed new development (using a 0.5 plot ratio) at the two identified sites.</p>
<p>Transport review of redevelopment</p>	<p><u>Access</u> Vehicular and non-motorised access to the vacant Klingers site is provided by an existing stopped up priority junction at Edgington Way, west of Ruxley Corner. No accidents have occurred at the entry to the Klingers Site over the past five years, although accidents associated with turning vehicles have occurred either side of the access over this period at the access points to Ruxley Corner Industrial estate to the north.</p> <p>No existing access is available for land south of Tesco. The delivery of this parcel would be dependent on agreeing access rights either via Tesco (west) or Fitzroy Business Park (east). Given the congested nature of the Edgington Road corridor, offering alternative access from Sandy Lane, through Fitzroy Business Park, should be considered.</p> <p>Access to local bus services is possible 150m west of the site at Tesco. Bus stops at this location offer access to the R11 and the 321 (24 hour) services. Access to a further two services, are available for Maidstone Road, which falls within 640m of the site. Despite good bus connections, the site has a PTAL level of 2.</p> <p>Formal footways are present either side of the Klingers Road site access, and are available from the A224 Cray Road to the A211 Maidstone Road on the northern side of the Edgington Way carriageway. No cycle routes are available along Edgington Way, with this corridor forming a key gap in the local cycle network.</p> <p><u>Highway Network</u> Both Ruxley Corner Roundabout (Junction 1.1) and A224 Cray Road / A223 Edgington Way / A20 / A224 Sevenoaks Way Roundabout (Junction 1.2) will operate over capacity in the future case, and therefore will serve as key constraints to future growth.</p> <p>Traffic generation from the Klingers site and Land South of Tesco is estimated at 65 and 75 vehicle trips in the AM Peak, and 60 and 69 vehicle trips in the</p>

	<p>PM peak. Limited traffic if any is expected at the weekends. 85% of traffic is expected to travel to or from the west, with the remainder looking to travel east (although for traffic exiting the sites via Edgington Way, this will need to travel to Junction 1.2 and u-turn before travelling east due to right-turns being prohibited).</p> <p>Given the congested nature of junctions 1.1 and 1.2, additional traffic is problematic, and improvements are likely to be required to address future traffic levels and to accommodate growth. Furthermore, queuing from the Ruxley Corner Roundabout may impinge on access to the sites, particularly to the Klingers site given that queues of up to 64 vehicles are estimated in the PM peak.</p> <p><u>Network Improvements</u></p> <p>The scale of works needed to address transport issues within the corridor will likely be beyond the remit of one applicant given the modest nature of growth proposed. Therefore, subject to detailed feasibility studies and costing, it is suggested that transport contributions be sought to support future delivery of the following:</p> <ul style="list-style-type: none"> • Strategic highway corridor improvements, with a particular focus on junction 1.1. and 1.2 at this location. Improvements, subject to further review and land availability, may include widening of the Ruxley Corner roundabout, and capacity improvements at Junction 1.2 including full signalisation and the linking of this location to the wider Cray Corridor network using Urban Traffic Control (UTC) SCOOT (Split Cycle Offset Optimisation Technique). This would assist managing traffic and queuing levels along the route and minimising bus delay. • Provision of a cycle route along Edgington Way, which would connect with existing cycle routes within the area. This would fall in line with the ‘Building a Better Bromley 2020 Vision’, which aims to improve the road network for all road users. • Support for maintaining and if feasible improving existing bus services serving Tesco and Maidstone Road
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Figure 4.3 - Employment Cluster 2.1 Crayfields Business Park - Profile and Characteristics

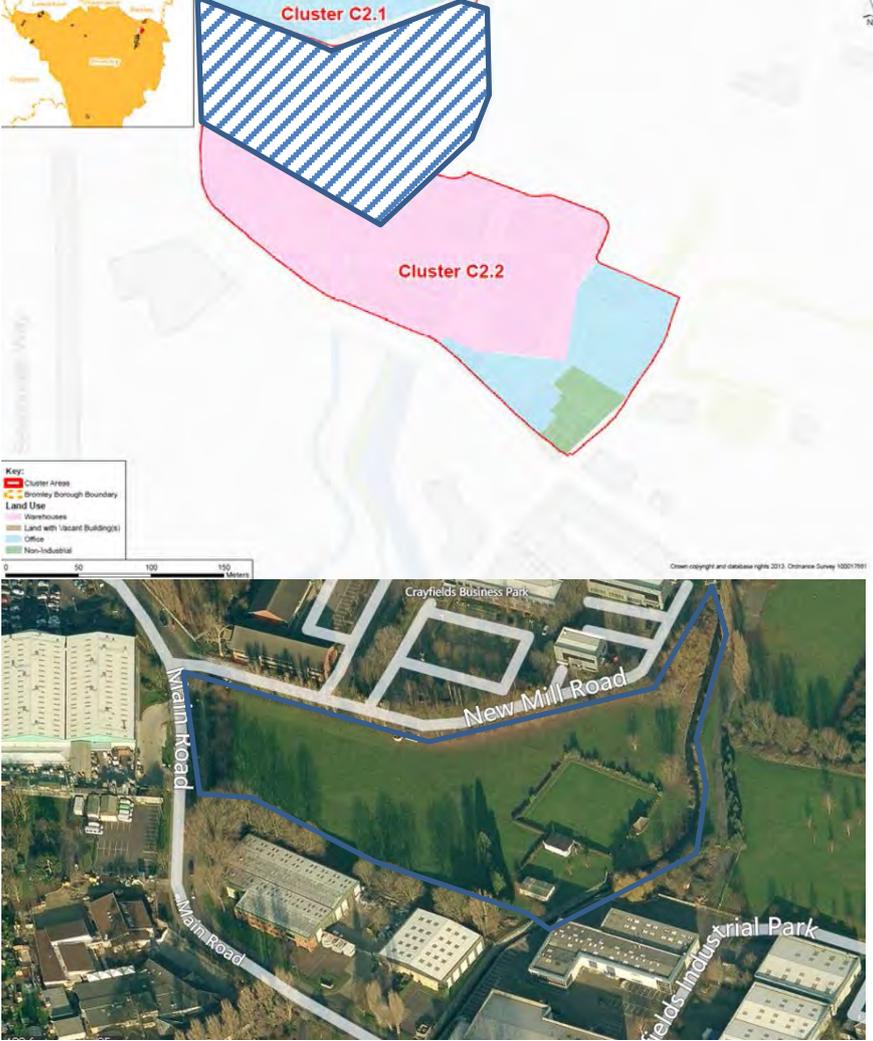


Land area (Ha)	The employment cluster is a total of 2.08 hectares in size.
Land use breakdown 2014 (Ha) (as per above plan)	As per the site surveys and GIS mapping, the cluster was found to contain the following land uses as per the London Plan industrial land use categorisation: <ul style="list-style-type: none"> • B1a Offices – 1.27 • Land with Vacant Buildings – 0.81
Land use change 2010-2014	Between 2010 and 2014 the central office units occupying a land area of 0.81 ha became 'Land with vacant Buildings' having previously been classified as occupied 'office' land. This is because the unit occupying the site became vacant in 2013 prior to the site survey.

<p>Main Estates and Occupiers</p>	<p>Mitie, Margolis, Bellway Homes, OCS, Country Choice, Telecoms World, Genesis Medical Specialist Services, Mitsubishi Electric, Holmes Group.</p> <p><i>Estate sign of occupiers within Crayfields Business Park, December 2013</i></p> 
<p>Strategic Road Access</p>	<p>Direct access onto A224 Sevenoaks Way and indirect access to the A20 Sidcup By Pass. The site has very good strategic road access.</p>
<p>Neighbourhood issues (incl. sensitive receptors e.g. residential, schools)</p>	<p>No bad neighbour issues were observed on site and there are no sensitive adjacent uses such as residential, schools or community uses.</p>
<p>Strategic access to public transport</p>	<p>The cluster falls within a PTAL 1b area - this is considered 'very poor' on a scale of scale of 1a (lowest) to 6b (highest).</p>
<p>Access to waterways & wharves</p>	<p>The cluster has no access to any waterways.</p>
<p>Access to railhead</p>	<p>The cluster has no access to any railheads.</p>
<p>Other physical site constraints (layout issues, access through local roads)</p>	<p>Internal roads are too small for larger HGV movements but appropriate for smaller scale industry and office uses on the site.</p>
<p>Planning policy context</p>	<p>The cluster is designated as a 'Business Area' in the adopted Bromley UDP. This is the equivalent to an LSIS in the London Plan. The site is bordered to the direct north by a 'Site of Special Scientific Interest' and 'Sites of Interest</p>

	<p>for Nature Conservation’ as per the UDP. The site is bordered to the south, east and west by ‘Green Belt’.</p>
<p>Servicing of businesses</p>	<p>The businesses throughout the site were observed to have good servicing in the form of designated off road loading areas. The entire site appeared to be well managed and maintained.</p>
<p>Parking facilities</p>	<p>The businesses and sites throughout the cluster were found to have adequate dedicated parking provision.</p>
<p>Access to amenities & facilities</p>	<p>Access to facilities and amenities is considered to be poor with only the Tesco on Edgington Way within a fifteen minute walk of the site.</p>
<p>Quality of environment and public realm</p>	<p>Through the site surveys it was found that the quality of environment and public realm was found to be very good with well-maintained public and private space throughout.</p> <p><i>Business entrance</i></p> 

<p>Conditions of buildings</p>	<p>Through the site surveys it was found that around 50% of buildings were considered very good including the newer stock to the east of the cluster, the other 50% of buildings in the west of the cluster were considered to be in good condition. Please note that this was based on a high level visual inspection and not based on a detailed building condition survey.</p> <p><i>Crayfields Business Park – typical business facade</i></p> 
<p>Vacant floorspace observed</p>	<p>From the site survey up to 3,060m² of floor space was observed to be lettable for B1 use at the time of the site survey in November 2013.</p> <p><i>Lettable floor space 2013</i></p> 

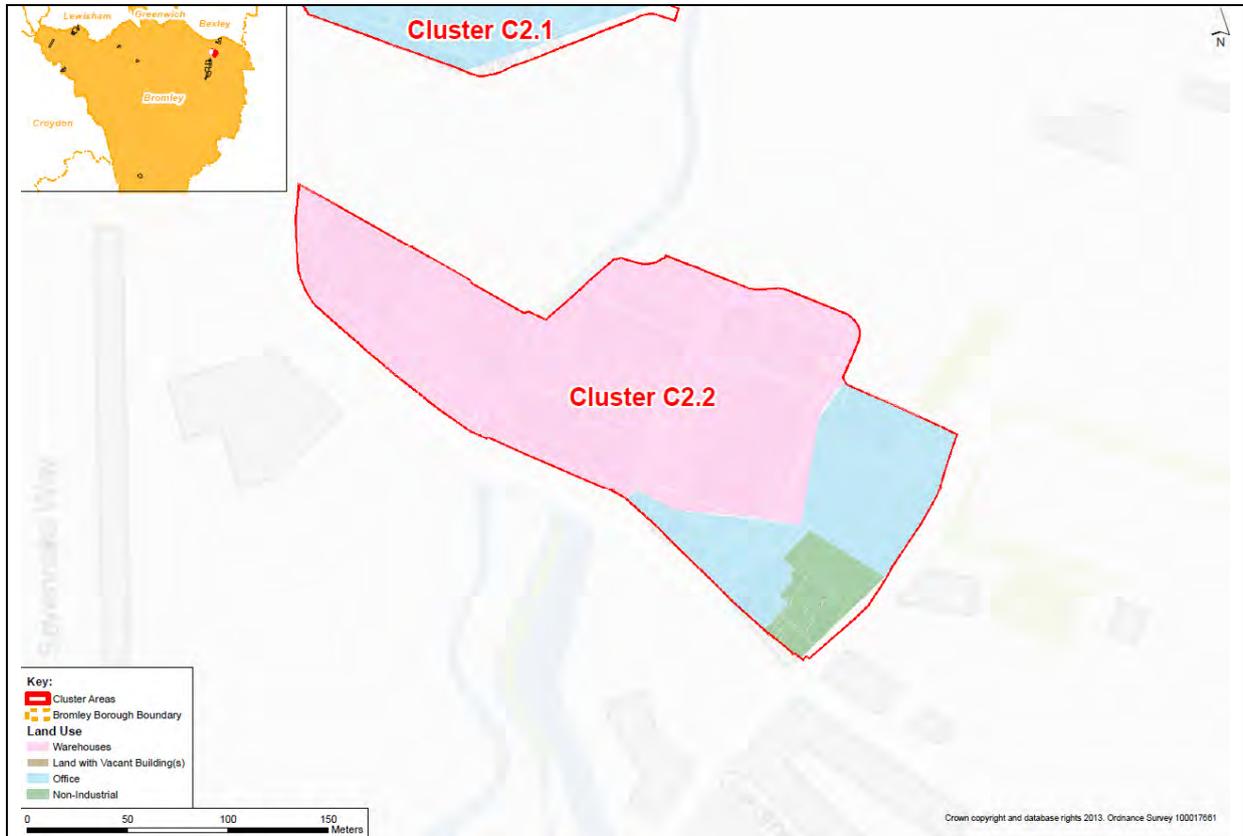
<p>Vacant land and derelict buildings</p>	<p>There is no vacant land or derelict buildings within the cluster.</p>
<p>Existing and future capacity</p>	<p>This is fully developed well used site with no obvious locations for redevelopment within the red line boundary.</p>
<p>Possibility for intensification/redevelopment</p>	 <p><i>Source: Bing maps</i></p> <p>The land located directly to the south of this study site as identified in the above plan and image, which falls between Crayfields Business Park (C2.1) and Crayfields Industrial Estate (C2.2) has been identified as a redevelopment location by site owners Legal and General and by local property agents. This adjacent site is currently identified as Green Belt and contains a bowls club in its east which would either need to be relocated or reprovided on site.</p>
<p>Evidence of active marketing on site (floorspace and land)</p>	<p>Yes – Glenny surveyors were observed to marketing up to 3,060sq m of space for office use. See image under ‘Vacant floorspace observed’ section.</p>
<p>Description of</p>	<p>This is a high quality business park type employment area with a mix of</p>

cluster	<p>companies and sectors occupying space. The cluster has good strategic road access, no bad neighbour issues and adequate parking and business servicing, however it suffers from poor public transport accessibility. The cluster is allocated as a Business Area in the UDP and could be identified as an LSIS in the emerging Local Plan. Some short term vacancy was observed here during the surveys though overall this appears to be a popular business park.</p> <p>The infill site to the south provides the only realistic possibility for intensification at this location and would be most suited to B1b/c, B2 and B8 uses based on its strategic characteristics and demand considerations.</p>
Market information	
Specific market interest / enquiries (outcome of research and consultations)	<p>There are three available office units available on this park. By far the largest is Building 3, which extends to a maximum of 32,926 sq ft (3,060 sq m) of accommodation. There are two years remaining on the existing lease, and we understand that there is good interest in the space at this time.</p> <p>The other two units are Unit 3 & 4 Kingfisher House, Lakeside Court, which extend to 2,454 sq ft (228 sq m) and 2,397 sq ft (22 sq m) respectively. Both of these suites are currently under offer. The agents have been quoting £15.50 per sq ft (£170 per sq m).</p>
Typical rental information (rent and yield) for recommended uses	<p>B1c/B2/B8 - £7.50-£7.75 per sq ft (£80- £85 per sq m) – depending on the size of unit B1a - £16-£18 per sq ft (£172-£194 per sq m)</p> <p>Yield: for a multi-let industrial estate now it would attract interest at between 6-6.25%. For the office element we would apply a yield of circa 8.5%.</p>
Benchmark industrial land values (per ha) for recommended uses	760,000-860,000 per acre (£1.88m-£2.13m per hectare)
Benchmark Build costs (per sq m) for recommended uses	<p>£50-60 per sq ft (£550-£650 per sq m) – industrial £120-£150 per sq ft (£1,300-£1,600 per sq m) – offices</p>
Overall viability	We do not consider there to be any strategy to consider in respect to the intensification of this sub-cluster. Although office demand has been poor over the past five years, according to the letting agents this has dramatically improved over the past six months, leading to the potential deals which they have agreed.
Phasing for future redevelopment	10-20 years.
Next steps for Council in helping facilitate redevelopment	We do not consider there being any steps we would recommend are taken to improve the occupied space within this sub-cluster, and expect it would be fully occupied within six months.

<p>Potential future business rate uplift</p>	<p>No uplift in the business rates to be recorded as it is not envisaged that there will be any short or medium term intensification of the cluster. The intensification of the infill site to the south is covered under C2.2.</p>
<p>Transport review of redevelopment</p>	<p><u>Access</u></p> <p>No access is currently available to the infill land at Cluster 2.1/2.2. Delivery of an access will therefore be required, and this is likely to take the form of a priority junction from New Mill Road to the north of the proposed infill site. No existing accident trends are present on New Mill Road.</p> <p>Formal footways are present on the northern side of New Mill Road. If an access was introduced at New Mill Road, then footways connecting with Main Road may be required. The closest cycle routes are located on the A224 Sevenoaks Way, running north and south. A new off road facility is due to be implemented between the junctions of Station Approach and Poverest Road to improve facilities for cyclists and connections to St Mary Cray Station.</p> <p>The site has a PTAL rating of 1b, which reflects poor public transport accessibility. The closest station is 2km from the site at St Mary Cray. Three bus services are accessible within 640m of the site, from bus stops located on the A224 Sevenoaks Way, south of Main Road. These operate at regular frequencies, offering connections to St Mary Cray Station, Orpington, Bexley, Sidcup and Woolwich.</p> <p><u>Highway Network</u></p> <p>Due to the nature of the proposed land use at this location, the site, unless taken forward as strictly office use, traffic generation is likely to be limited in the weekday AM or PM peaks (between 40 to 50 vehicles arriving or departing). Minimal traffic is expected at the weekend.</p> <p>Traffic from the site will connect with A224 Cray Road corridor at the Main Road/Sevenoaks Way junction. This junction is set to be upgraded to a signalised junction as part of the A224 corridor works, and will incorporate Urban Traffic Control in the form of SCOOT. This will enable the junction to timings to adapt to changing traffic conditions. However any future case for the redevelopment of the C2.1/2.2 site will need to consider the ability of the proposed configuration to incorporate additional traffic, given that initial testing using LBB’s junction model, suggests the junction will operate over recommended capacity thresholds in the future case.</p> <p>Vehicles will predominantly travel to and from the north (c.70%) of Main Road/Sevenoaks Way junction, passing through the Sevenoaks Way/Midfield Way junction (1.3) to connect with the wider strategic network at the A224 Cray Road / A223 Edgington Way / A20 / A224 Sevenoaks Way Roundabout (Junction 1.2). Both junctions are predicted to operate significantly over capacity in the future case, and therefore any additional traffic will be detrimental to the junctions operation. Improvements at both locations will therefore be required to enable further development along the corridor. The</p>

	<p>impact from traffic travelling south is expected to be minimal.</p> <p><u>Network Improvements</u></p> <p>As per Cluster 1, the scale of works required will likely be beyond the remit of one applicant given the modest nature of growth and traffic increases anticipated. Therefore, subject to detailed feasibility studies and costing, it is suggested that transport contributions be sought to support future delivery of the following:</p> <ul style="list-style-type: none"> • Strategic highway corridor improvements, with a particular focus in order of priority: <ul style="list-style-type: none"> ○ Junction 1.2 - Signalisation of the roundabout and the linking of this location to the wider Cray Corridor network using UTC SCOOT, in order to manage traffic and queuing levels along the route and to minimise bus delay. ○ Junction 1.3 – Improvements to Sevenoaks Way/Midfield Way to extend the right turn box and/or signalisation to control blocking back to junction 1.2. • Contributions towards bus improvements in order to improve public transport accessibility at the site. This could include, for example, extension of the 321 service southwards.
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Figure 4.4 - Employment Cluster 2.2 Crayfields Industrial Park - Profile and Characteristics

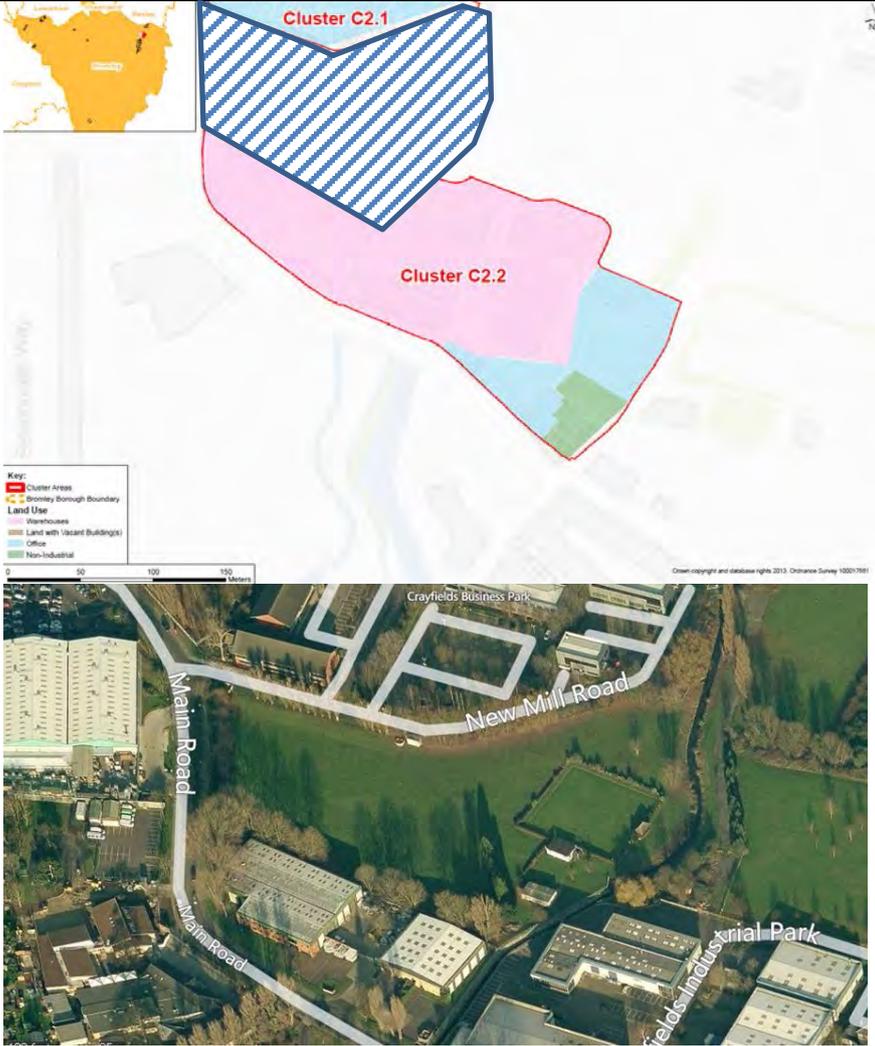


Land area (Ha)	The employment cluster is a total of 3.36 hectares in size.
Land use breakdown 2014 (Ha) (as per above plan)	As per the site surveys and GIS mapping, the cluster was found to contain the following land uses as per the London Plan industrial land use categorisation: <ul style="list-style-type: none"> • B8 Warehouses – 2.43 • B1a Offices – 0.74 • Non-industrial uses – 0.14 (pub) •
Land use change 2010-2014	Between 2010 and 2014 part of the land previously occupied by non-industrial uses located immediately west of the pub (measuring circa 0.4ha) was developed for B1a office use.

<p>Main Estates and Occupiers</p>	<p>DPTS Ltd, Bew Electrical Distributors, Underwood Electrical Distributors, PS Analytical Ltd, Stern, Brake Bros Ltd, Coolfactor Group Ltd and Mennekes.</p> <p><i>Estate sign of occupiers within Crayfields Industrial Park, November 2013</i></p> 
<p>Strategic Road Access</p>	<p>Direct access onto A224 Sevenoaks Way and indirect access to the A20 Sidcup By Pass. The site has very good strategic road access.</p>
<p>Neighbourhood issues (incl. sensitive receptors e.g. residential, schools)</p>	<p>No bad neighbour issues were observed on site and there are no sensitive adjacent uses such as residential, schools or community uses.</p>
<p>Strategic access to public transport</p>	<p>The cluster falls within a PTAL 1b area - this is considered 'very poor' on a scale of scale of 1a (lowest) to 6b (highest).</p>
<p>Access to waterways & wharves</p>	<p>The cluster has no access to any waterways.</p>
<p>Access to railhead</p>	<p>The cluster has no access to any railheads.</p>
<p>Other physical site constraints (layout issues, access through local roads)</p>	<p>None observed.</p>
<p>Planning policy context</p>	<p>The cluster is designated as a 'Business Area' in the adopted Bromley UDP. This is the equivalent to an LSIS in the London Plan. The site is bordered to the west and south by a school recreation ground, to the north and east by 'Green Belt'. The eastern quarter of the site (currently occupied by offices and the pub) forms part of a Conservation Area.</p>
<p>Servicing of businesses</p>	<p>The businesses throughout the site were observed to have good servicing in the form of designated off road loading areas. The entire site appeared to be well managed and maintained.</p>
<p>Parking facilities</p>	<p>The businesses and sites throughout the cluster were found to have</p>

	<p>adequate dedicated parking provision. There was also observed to be some on street parking though this was not causing any traffic circulation problems.</p> <p><i>Dedicated parking with the Crayfields Industrial Park</i></p> 
<p>Access to amenities & facilities</p>	<p>Access to facilities and amenities is considered to be very poor with no facilities or amenities within a fifteen minute walk of the site.</p>
<p>Quality of environment and public realm</p>	<p>During the site surveys it was found that the quality of environment and public realm was found to be very good with well-maintained public and private space throughout. For a predominantly warehousing area the quality of environment is considered to be excellent especially when compared with other similar industrial estates in London.</p> <p><i>Public and private space</i></p> 
<p>Conditions of buildings</p>	<p>Through the site surveys it was found that all of buildings were considered to be in very good external condition. Please note that this was based on a high level visual inspection and not based on a detailed building condition survey.</p> <p><i>Crayfields Industrial Park – typical business premises</i></p>

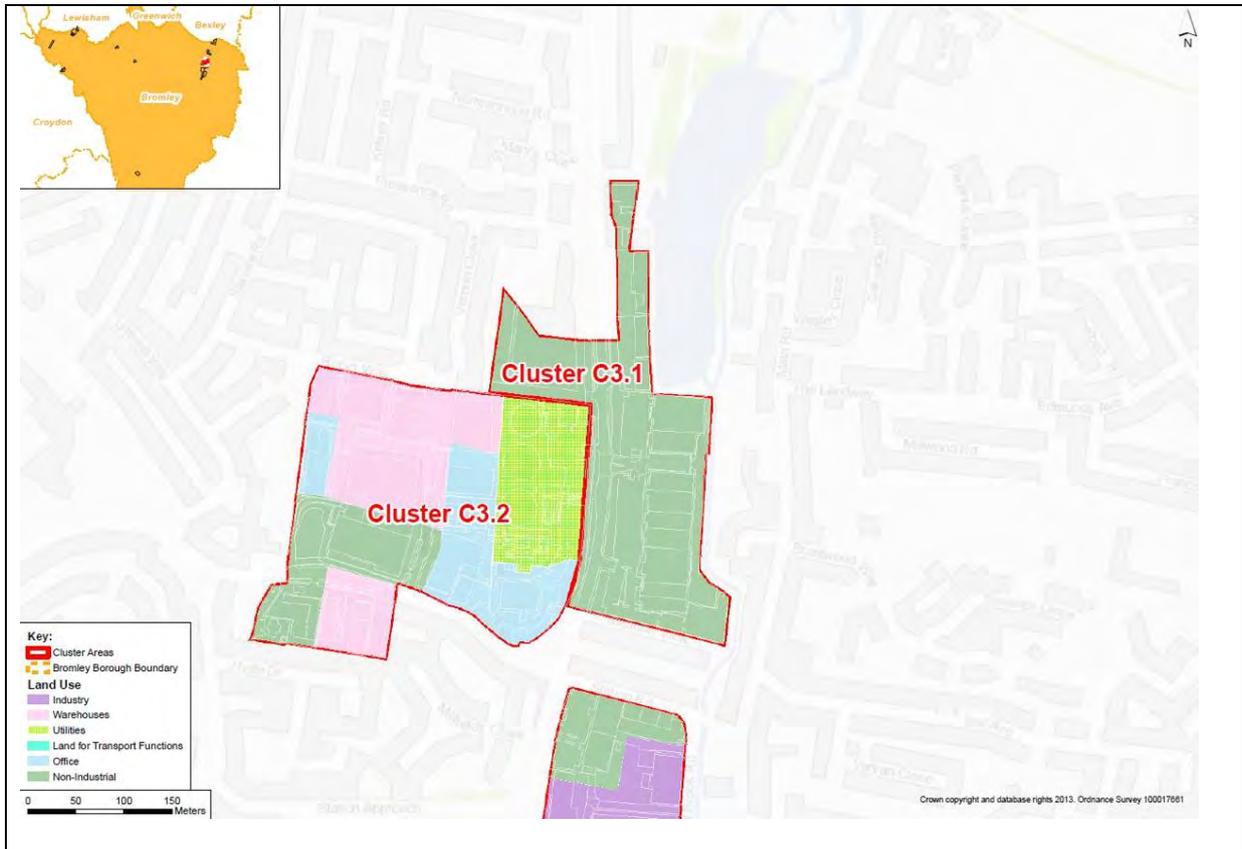
	
<p>Vacant floorspace observed</p>	<p>Up to 4,239m² of floor space was observed to be lettable for B8/B2 use at the time of the site survey in November 2013. This included some units (assumed to be two available as there did not seem to be evidence of much space remaining) of 1,133 sq m and a refurbished unit of 1,973 sq m.</p> <p><i>Lettable floor space, November 2013</i></p> 
<p>Vacant land and derelict buildings</p>	<p>There is no vacant land or derelict buildings within the cluster.</p>
<p>Existing and future capacity</p>	<p>This is fully developed well used site with no obvious locations for redevelopment within the red line boundary.</p>

<p>Possibility for intensification/redevelopment</p>	 <p>Source: Bing maps</p> <p>As discussed under Cluster 2.1 Crayfields Business Park, the infill land located directly to the north of this study site as identified in the above plan and image, has been identified as a redevelopment location by site owners Legal and General and by local property agents. This infill site is currently identified as Green Belt and contains a bowls club in its east which would either need to be relocated or reprovided on site, however subject to potentially overcoming these constraints (including undertaking the relevant tests on the functionality of the green belt at this location – note this site is already surrounded on three sides by development) the consultancy team believes this makes a realistic development opportunity.</p>
<p>Evidence of active marketing on site (floorspace and land)</p>	<p>Yes – Up to 4,239m² of floor space was observed to be lettable for B8/B2 use at the time of the site survey in November 2013. See images under 'Vacant floorspace observed' section.</p>

<p>Description of cluster</p>	<p>Crayfields Industrial Park is a well-functioning industrial estate with a mix of predominately logistical operators and small to medium size industries. The cluster has good strategic road access, no bad neighbour issues and adequate parking and business servicing, however it suffers from poor public transport accessibility. The cluster is allocated as a Business Area in the UDP and could be identified as an LSIS in the emerging Local Plan. Some short term vacancy was observed here during the surveys though overall this appears to be a popular industrial park.</p> <p>The infill site to the north provides the only realistic possibility for intensification at this location and would be most suited to B1b/c, B2 and B8 uses based on its strategic characteristics and demand considerations. The smaller area identified in the east as offices and non-industrial uses (a pub) within the cluster is constrained for redevelopment due its positioning within a conservation area.</p> <p><i>Aerial view of the industrial estate</i></p>  <p>Source – Bing maps</p>
<p>Market information</p>	
<p>Specific market interest / enquiries (outcome of research and consultations)</p>	<p>There has been a good deal of recent activity on the industrial park with the aforementioned 12,842 sq ft (1,193 sq m) unit has now been let.</p> <p>Availability on the park includes a 21,000 sq ft (1,950 sq m), a 15,000 sq ft (1,394 sq m) and an 8,000 sq ft (743 sq m) unit, but all have good interest. The agents are seeking £8.50 per sq ft.</p>
<p>Typical rental information (rent and yield) for recommended uses</p>	<p>B1c/B2/B8 - £7.50-£7.75 per sq ft (£80- £85 per sq m) – depending on the size of unit B1a - £16-£18 per sq ft (£172-£194 per sq m)</p> <p>Yield: for a multi-let industrial estate now it would attract interest at between 6-6.25%. For the office element we would apply a yield of circa 8.5%.</p>
<p>Benchmark industrial land values (per ha) for recommended uses</p>	<p>760,000-860,000 per acre (£1.88m-£2.13m per hectare)</p>

Benchmark Build costs (per sq m) for recommended uses	£50-60 per sq ft (£550-£650 per sq m) – industrial £120-£150 per sq ft (£1,300-£1,600 per sq m) – offices
Overall viability	<p>Crayfields Industrial Park provides good quality modern accommodation. The market has improved dramatically over the past six months, which we expect will lead to the park being fully let within a three to six month period. As such, we do not consider there to be any measures that we would recommend which would lead to the intensification of this sub-cluster.</p> <p>There is an infill plot of land between the Crayfields Business Park, and the Industrial Park. We understand that this land is owned by Legal & General, who would be keen to explore development on the land.</p> <p>According to the agents there would be good demand for both B1c offices, as well as B1b, B2 and B8.</p>
Phasing for future redevelopment	5-10 years
Next steps for Council in helping facilitate redevelopment	<p>The infill plot is situated within the green belt, although as it is situated between two existing employment sites, it is less sensitive than the land to the north of the business park, which is a site of special scientific interest.</p> <p>We agents have informed us that there was a planning consent granted on this land in the late 1990s but this expired, with the owners at the time favouring the development of the Crayfields Business Park.</p> <p>In order for a new application to be successful, the site would need to be reallocated by the local planning authority.</p>
Potential future business rate uplift	£133,000 additional per annum to be retained by the Council as a result of circa 9,000 sq m (using a 0.5 plot ratio) of assumed new development at the infill site.
Transport review of redevelopment	See Cluster 2.1

Figure 4.5 - Employment Cluster 3.1 and 3.2 St Mary's Cray Industrial Business Park – Profile and Characteristics



Land area (Ha)	Employment cluster 3.1 and employment cluster 3.2 are a combined total of 12.76 hectares in size.
Land use breakdown 2014 (Ha) (as per above plan)	As per the site surveys and GIS mapping, employment clusters 3.1 and 3.2 were found to contain the following land uses as per the London Plan industrial land use categorisation: <ul style="list-style-type: none"> • B8 Warehouses- 2.8ha • Utilities- 1.6ha • Offices- 1.9ha • Non-industrial Land (retail uses)- 6.5ha – all of C3.1 and part 3.2
Land use change 2010-2014	No observed land use change from 2010 baseline position was recorded.

<p>Main Estates and Occupiers</p>	<p>Carpet Right, Currys, Argos, Harveys, PC World, Halfords, Furniture Village, Wren Living, Paul Simon, Panadent, Jewson, First Choice Group, Pineapple (contract furniture), Benchmarx, LSC Teepol, STS Flooring Distributors Ltd, Laerdal Medical Ltd, FLR Spectron Ltd, Micron, TM White & Sons.</p> <p><i>Occupiers within the Orpington Trade Centre, Murray Road (C3.2), November 2013</i></p> 
<p>Strategic Road Access</p>	<p>Direct access to strategic roads - A20 Sidcup by pass via the A224.</p>
<p>Neighbourhood issues (incl. sensitive receptors e.g. residential, schools)</p>	<p>No bad neighbour issues were observed on site; however there are a small number of residential properties (which appeared to be interwar period) immediately adjacent to the employment uses along Lessons Hill. It would be appropriate to redraw the red line boundary of the employment area to exclude these houses and to be mindful of any bad neighbour uses being permitted immediately next to them in the future.</p> <p><i>Sensitive residential receptors along Leasons Hill (south of C3.2)</i></p> 

Strategic access to public transport	Employment cluster 3.1 falls within a PTAL 2 area which is considered ‘poor’ on a scale of scale of 1a (lowest) to 6b (highest). Employment cluster 3.2 falls within a PTAL 3 area which is considered ‘moderate’.
Access to waterways & wharves	These clusters of sites have no access to waterways.
Access to railhead	These clusters of sites have no access to railheads.
Other physical site constraints (layout issues, access through local roads)	None observed.
Planning policy context	The employment clusters are designated as Strategic Industrial Locations and both clusters are identified in the London Plan as part of St Mary’s Cray as Industrial Business Park (IBP) locations. The cluster is designated as a ‘Business Area’ in the adopted Bromley UDP.
Servicing of businesses	The businesses within both employment clusters were observed to have good servicing in the form of designated off road loading bays and roadside loading / unloading. Both sites appeared to be very well managed and maintained.
Parking facilities	The businesses and sites throughout the clusters were found to have adequate dedicated parking provision and on limited on street parking which was not found to be impacting negatively on vehicles in the sites. <i>Dedicated parking within Murray Business Centre (Cluster 3.2)</i> 
Access to amenities & facilities	There are very limited shops, restaurants or cafes within a 10-15 min walk of both employment clusters. There is also a limited selection of places for lunch. Access to facilities and amenities for both employment clusters are therefore considered to be poor.
Quality of environment and public realm	Through the site surveys it was found that the quality of environment and public realm was found to be very good in employment cluster 3.1 and good in employment cluster 3.2. In particular the environmental quality within the Springvale Retail Park (Cluster 3.1) was found to be very good. Both sites were well maintained and managed.

<p>Conditions of buildings</p>	<p>Through the site surveys it was found that around 100% of buildings within employment cluster 3.1 were considered very good and 100% of buildings within employment cluster 3.2 were considered to be good. Please note that this was based on a high level visual inspection and not based on a detailed building condition survey.</p> <p><i>Typical building stock / industrial units along Murray Road (C3.2)</i></p> 
<p>Vacant floorspace observed</p>	<p>Up to 2,781m² of floor space was observed to be lettable for B1/B2 use at the time of the site survey in December 2013. This included two small business units of 205m² and 259m² respectively and a small office building comprising 2,317m².</p> <p><i>Lettable floor space, December 2013</i></p> 

	
<p>Vacant land and derelict buildings</p>	<p>There is no vacant land or derelict buildings within the cluster.</p>
<p>Existing and future capacity</p>	<p>These employment clusters are fully developed well used sites with no obvious locations for redevelopment within the red line boundaries.</p>
<p>Possibility for intensification/ redevelopment</p>	<p>These are a pair of fully developed well used sites with no obvious opportunities for intensification or redevelopment of employment land within the red line boundaries.</p>
<p>Evidence of active marketing on site (floorspace and land)</p>	<p>Yes – two small business units (totalling 464m²) and one small office building totalling 2,317m². See image under ‘Vacant floorspace observed’ section.</p>
<p>Description of cluster</p>	<p>The two employment clusters contrast in their employment land offer. Employment cluster 3.1 has almost entirely been developed for retail and retail warehousing uses with some sui generis uses towards the northern end of the cluster. The development of these sites for retail uses is believed to have predated the London Plan and the associated Strategic Employment Location designation which is not applicable for this site given there is little/no B use class stock on the site. Employment cluster 3.1 has adequate access and servicing and the relatively recent age of the building stock within the Springvale Retail Park with landscaping provides an attractive and well-functioning environment.</p> <p>Employment cluster 3.2 is comprised of a mix of uses with Transco occupying the eastern portion of the site for gas utilities uses. The remainder of the site is concentrated along Murray Road with a smaller number of industrial and logistical business units located along Leasons Hill. Much of the building stock within this employment cluster is comprised of older but well maintained premises housing a mix of B1c, B2 and B8 uses. New high quality B8 units at the Orpington Trade Centre Murray Road however indicate market demand for such uses. This cluster has a small amount of observed lettable space however, overall it appears to be a popular location for occupiers.</p>

Both clusters have adequate parking and servicing facilities with no bad neighbour uses identified. However, both locations suffer from relatively poor public transport accessibility and poor proximity to amenities and facilities.

Aerial view of Springfield Retail Park (C3.1)

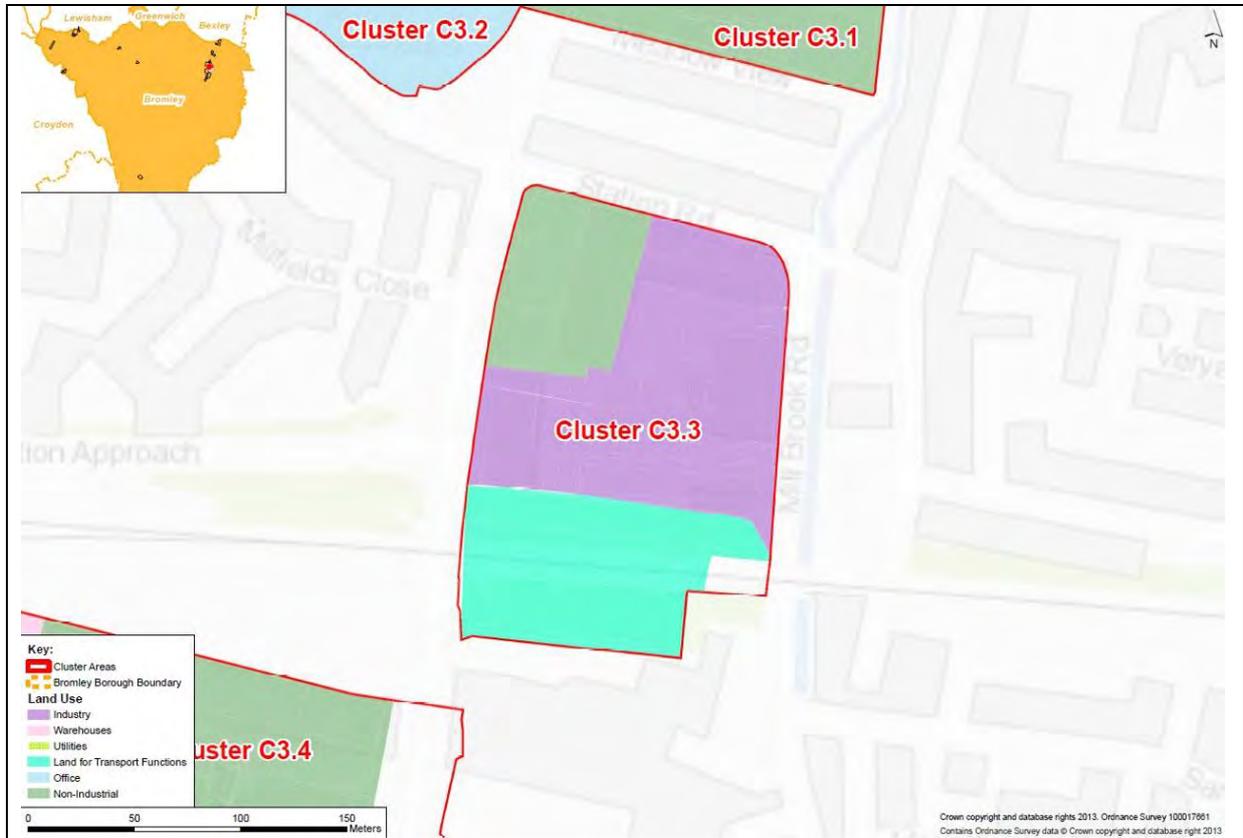


Aerial view of Murray Road and Leasons Hill (C3.2)

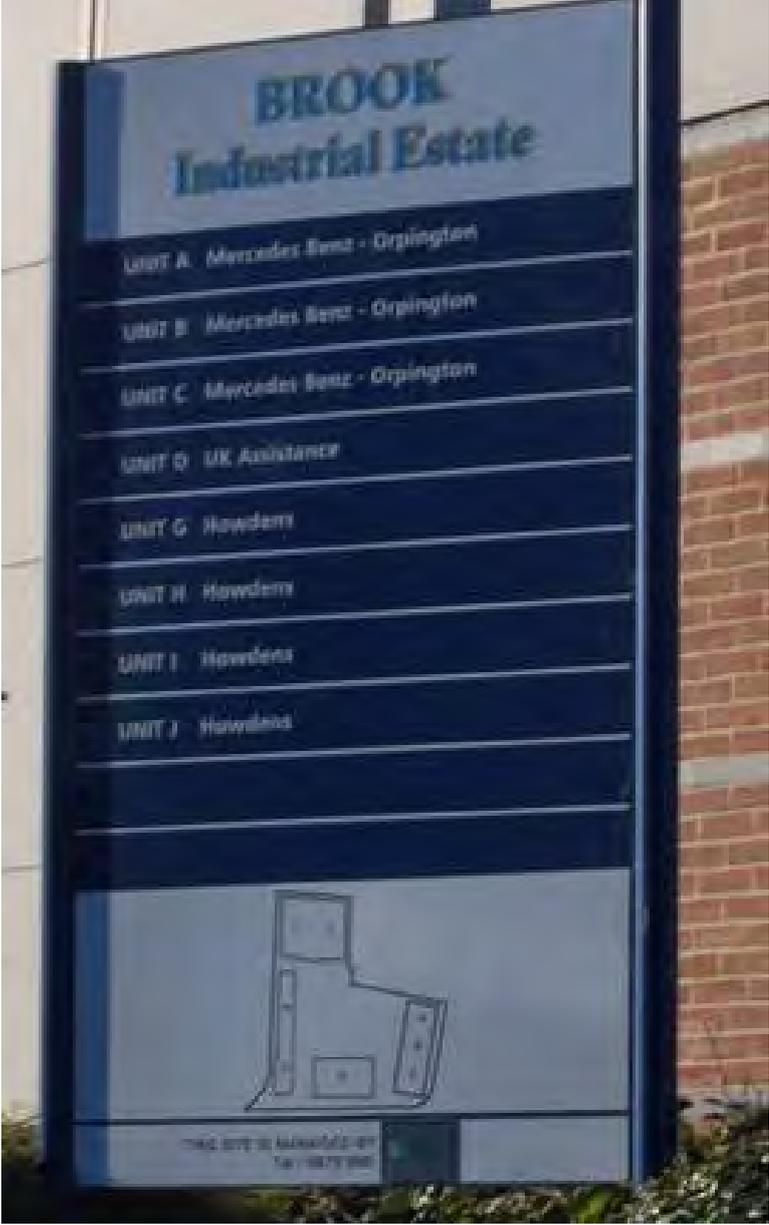


Market information	
Specific market interest / enquiries (outcome of research and consultations)	<p>The Lessons Hill area comprises a mix of trade counter, offices and older style industrial accommodation. Our initial view is that future planning strategy should examine the case for removing the area covered by Cluster 3.1 from an employment allocation as its quality is relatively poor and its primary use is not industrial employment.</p> <p>There is an industrial unit on the corner of Lessons Hill and Murray Road, which extends to 33,167 sq ft and has recently been sold for £50 per sq ft to an owner occupier, who intends to use the building for B2 and B8 purposes.</p>
Typical rental information (rent and yield) for recommended uses	<p>B1c/B2/B8 - £6.00-£8.00 per sq ft (£65-£85 per sq m) - depending on the size of unit.</p> <p>Yield: for a multi-let modern industrial estate it would attract interest at between 6 – 6.5%.</p>
Benchmark industrial land values (per ha) for recommended uses	£600-£650,000 per acre (£1.48m - £1.6m per hectare)
Benchmark Build costs (per sq m) for recommended uses	£500 - £650 per sq m (industrial)
Overall viability	Although the quality of the accommodation is not as high quality as the more modern space found at Crayfields Industrial Estate, there are very few vacancies within this cluster. We do not anticipate a case for redevelopment therefore in the short or medium term, although as the accommodation comes towards the end of its economic life, redevelopment may become a more realistic possibility.
Phasing for future redevelopment	10-15 years (replacement of some older accommodation)
Next steps for Council in helping facilitate redevelopment	None
Potential future business rate uplift	None
Transport review of redevelopment	Not applicable

Figure 4.6 - Employment Cluster 3.3 St Mary's Cray Industrial Business Park – Profile and Characteristics



Land area (Ha)	The employment cluster is a total of 2.75 hectares in size.
Land use breakdown 2014 (Ha) (as per above plan)	As per the site surveys and GIS mapping, the cluster was found to contain the following land uses as per the London Plan industrial land use categorisation: <ul style="list-style-type: none"> • B2/B1c Industrial- 1.39ha • Land for transport functions – 0.84ha • Non-industrial uses – 0.52ha (retail)
Land use change 2010-2014	No observed land use change from the 2010 baseline position was recorded.

<p>Main Estates and Occupiers</p>	<p>Sports Direct, Dreams Beds, Mercedes-Benz, UK assistance, Howdens.</p> <p><i>Estate sign of occupiers within Brook Industrial Estate, November 2013</i></p> 
<p>Strategic Road Access</p>	<p>Direct access onto A224 Sevenoaks Way and onwards to the A20 Sidcup By-Pass.</p>
<p>Neighbourhood issues (incl. sensitive receptors e.g. residential, schools)</p>	<p>No bad neighbour issues were observed on site and there are no sensitive adjacent uses such as residential, schools or community uses. There are some residential uses along Station Road but the employment cluster is very well contained and adverse impacts on these receptors are not expected from employment activities.</p>
<p>Strategic access to</p>	<p>The cluster falls within a PTAL 3 area - this is considered 'moderate' on a</p>

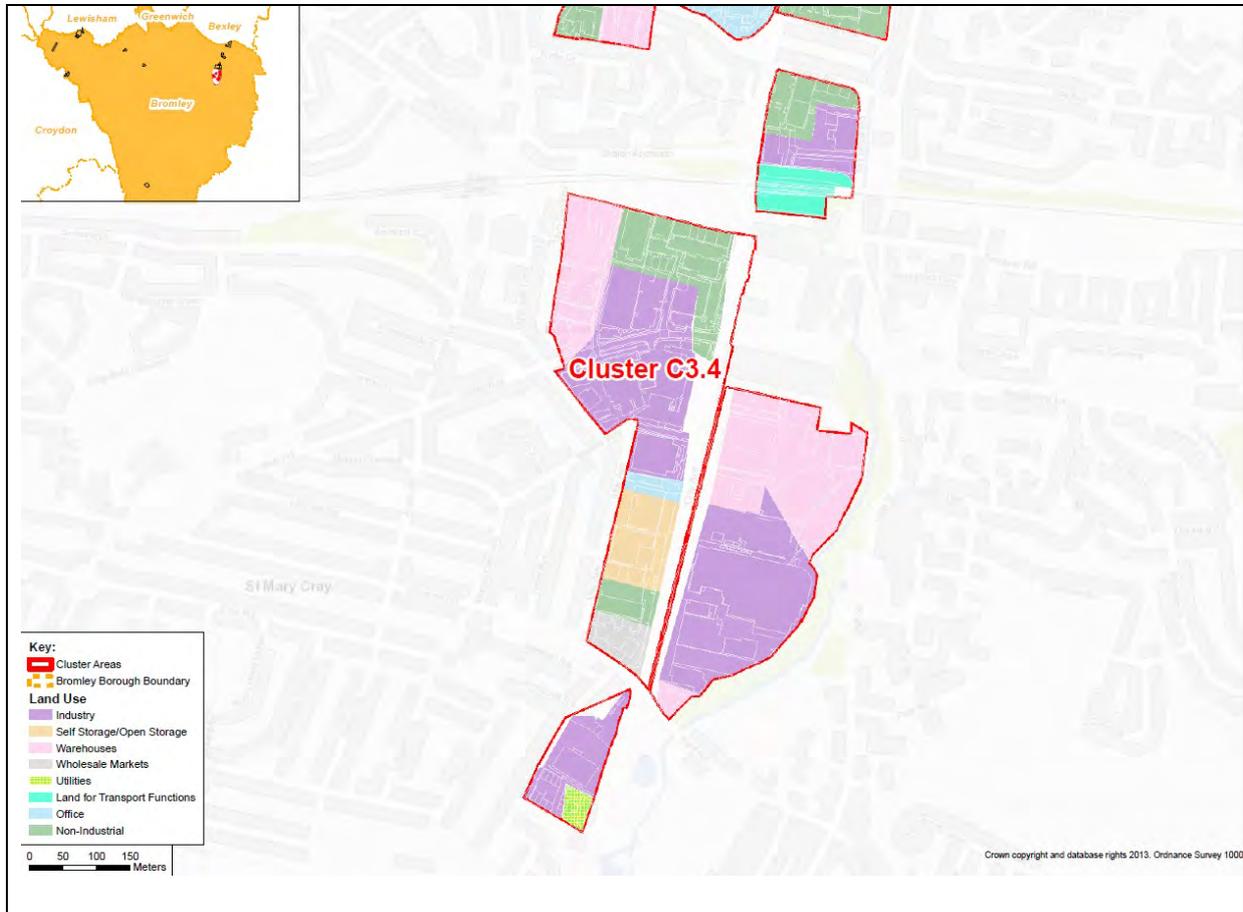
public transport	scale of 1a (lowest) to 6b (highest).
Access to waterways & wharves	The cluster has no access to any waterways.
Access to railhead	The cluster has no access to any railheads.
Other physical site constraints (layout issues, access through local roads)	No physical site constraints were observed.
Planning policy context	<p>Within the London Plan the employment cluster is designated as a Strategic Industrial Location and is designated as part of the St Mary’s Cray area as an Industrial Business Park (IBP). The cluster is designated as a ‘Business Area’ in the adopted Bromley UDP.</p> <p>The employment cluster is bordered to the east by a Conservation Area as per the adopted UDP.</p>
Servicing of businesses	The businesses throughout the employment cluster were observed to have good servicing in the form of designated off road loading areas. The entire cluster appeared to be well managed and maintained.
Parking facilities	<p>The businesses and sites throughout the cluster were found to have adequate dedicated parking provision.</p> <p><i>Dedicated parking within Brook Industrial Park</i></p> 
Access to amenities & facilities	Access to facilities and amenities is considered to be very poor with no facilities or amenities within a fifteen minute walk of the site.
Quality of environment and public realm	During the site surveys it was found that the quality of environment and public realm was found to be good with well-maintained space throughout. The industrial estate is adequately self-contained and offers a clean and

	functional environment.
Conditions of buildings	<p>Through the site surveys it was found that all of buildings were considered to be in very good external condition. Please note that this was based on a high level visual inspection and not based on a detailed building condition survey.</p> <p><i>Brook Industrial Park – typical business premises</i></p> 
Vacant floorspace observed	No observed lettable floorspace was observed at the time of the site survey in December 2013.
Vacant land and derelict buildings	There is no vacant land or derelict buildings within the employment cluster.
Existing and future capacity	This is fully developed well used site with no obvious locations for redevelopment within the red line boundary.
Possibility for intensification/ redevelopment	This employment cluster is a fully developed well used site with no obvious locations for redevelopment or intensification within the red line boundary.
Evidence of active marketing on site (floorspace and land)	None observed.

<p>Description of cluster</p>	<p>Employment cluster 3.3 predominantly consists of Brookfield Industrial Estate which accommodates three key industrial occupiers within B2 / B8 industrial units. There is also a portion of retail warehousing uses which front Sevenoaks Way as well as land for transport functions alongside the railway corridor.</p> <p>The cluster has good strategic road access, no bad neighbour issues or sensitive neighbours and has adequate servicing and parking facilities. It does however suffer from poor access to amenities and facilities; however access to public transport is reasonable. No vacancies were observed within this employment cluster and it appears to be functioning efficiently offering high quality industrial units and a well maintained environment.</p> <p><i>Aerial view of the Brook Industrial Estate</i></p>  <p>Source – Bing maps</p>
<p>Market information</p>	
<p>Specific market interest / enquiries (outcome of research and consultations)</p>	<p>This is a very well let, modern business park, which presents no potential for redevelopment or intensification.</p>
<p>Typical rental information (rent and yield) for recommended uses</p>	<p>B1c/B2/B8 - £8.00-£9.00 per sq ft (£85-£95 per sq m) depending on the size of unit.</p> <p>Yield: for a modern multi-let industrial estate now it would attract interest at between circa 6 – 6.5%.</p>
<p>Benchmark industrial land values (per ha) for recommended uses</p>	<p>750-850,000 per acre (£1.88m - £2.13m per hectare)</p>
<p>Benchmark Build costs (per sq m) for recommended uses</p>	<p>£500 - £650 per sq m (industrial)</p>

Overall viability	No real potential for redevelopment.
Phasing for future redevelopment	10-15 years
Next steps for Council in helping facilitate redevelopment	None.
Potential future business rate uplift	Not applicable.
Transport review of redevelopment	Not applicable.

Figure 4.7 - Employment Cluster 3.4 St Mary's Cray Industrial Business Park – Profile and Characteristics



Land area (Ha)	The employment cluster is a total of 10.53 hectares in size.
Land use breakdown 2014 (Ha) (as per above plan)	As per the site surveys and GIS mapping, the cluster was found to contain the following land uses as per the London Plan industrial land use categorisation: <ul style="list-style-type: none"> • B2/B1c Industry – 4.21ha • B8 Self storage / open storage- 1.26ha • B8 Warehouses- 2.33ha • B1a Offices – 0.27ha • Non-industrial uses – 2.45ha (retail)
Land use change 2010-2014	No observed land use change from 2010 baseline position recorded.
Main Estates and Occupiers	Carpets4less, Crown Decorating Centre, Carpet Right, Tile Giant, Carpet Giant, Tool Station, B&P, Magnet, Comet, SEM, CEF, Plumbase, CDEC, Kentish Match Company, Sun Chemical, Prestige Elite Records, Ace Cutters, 1 st Impression, 3 Dimensional Print, Crest Displays Ltd, Prima Tapes and Labels, Mailability, Stanbridge Ltd, Delta, Access Self-Storage, Arco, Big Yellow Self Storage, Tile Clearing House, PTS, Dulux Centre, Plumb Centre,

	Affinity Sutton, Atomwide, Bell Group UK, SPE Ltd.
Strategic Road Access	Direct access onto A224 Sevenoaks Way and indirect access to the A20 Sidcup By Pass. The site has very good strategic road access.
Neighbourhood issues (incl. sensitive receptors e.g. residential, schools)	No bad neighbour issues were observed on site and there are no sensitive adjacent uses such as schools or community uses. The cluster is very well defined and adjacent residential properties along Lynton Avenue, May Avenue and Lynmouth Rise are not considered to be adversely affected from employment uses and activities.
Strategic access to public transport	The cluster falls within a PTAL 4 area - this is considered 'good' on a scale of scale of 1a (lowest) to 6b (highest). The cluster is under five minutes' walk from St Marys Cray Station.
Access to waterways & wharves	The cluster has no access to any waterways.
Access to railhead	The cluster has no access to any railheads.
Other physical site constraints (layout issues, access through local roads)	None observed.
Planning policy context	Within the London Plan the employment cluster is designated as a Strategic Industrial Location and is designated as part of the St Mary's Cray area as an Industrial Business Park (IBP). The cluster is designated as a 'Business Area' in the adopted Bromley UDP.
Servicing of businesses	The businesses throughout the site were observed to have good servicing in the form of designated loading bays, off road loading/unloading areas as well as road side loading/unloading. The entire site appeared to be well managed and maintained. <i>Yard space and access into a smaller industrial unit</i> 

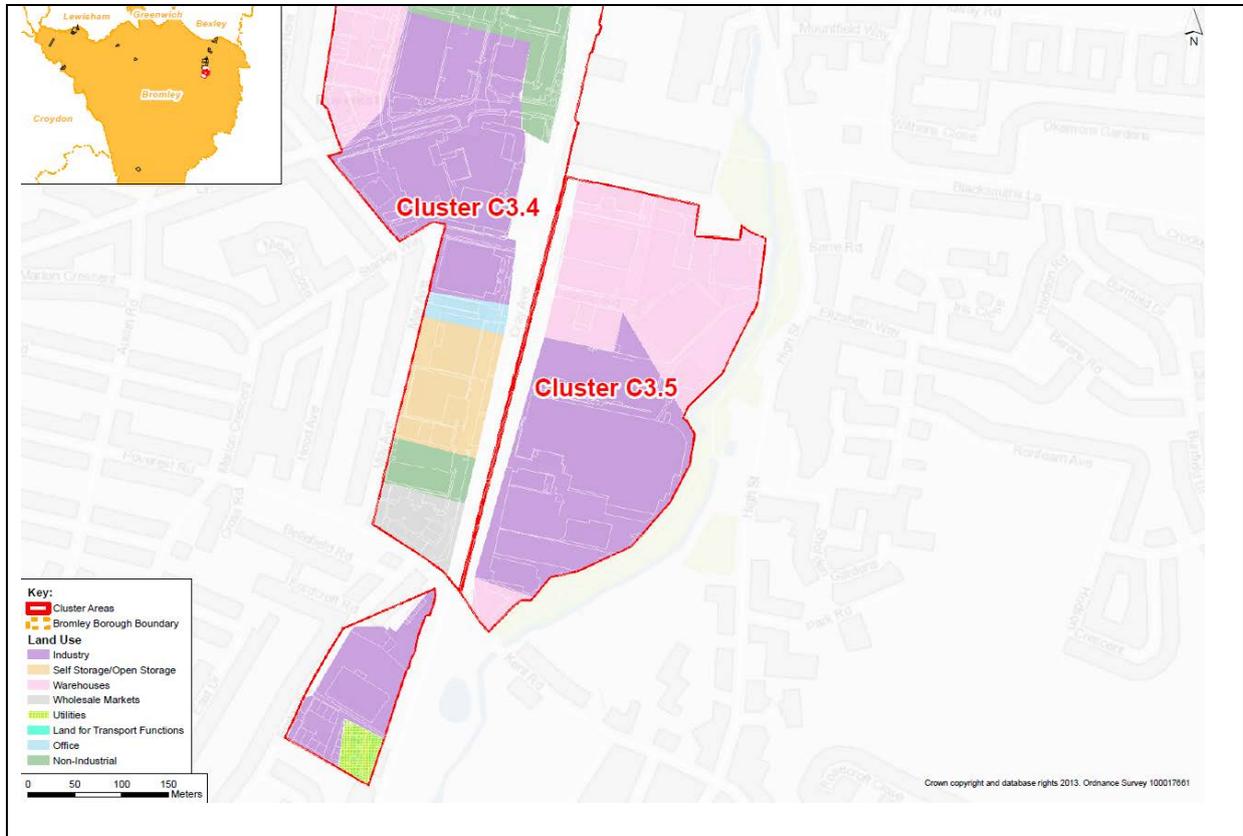
<p>Parking facilities</p>	<p>The businesses and sites throughout the cluster were found to have adequate dedicated parking provision. There was also observed to be some on street parking though this was not causing any traffic circulation problems.</p> <p><i>Dedicated parking with the employment cluster</i></p> 
<p>Access to amenities & facilities</p>	<p>Access to facilities and amenities is considered to be very poor with no facilities or amenities within a fifteen minute walk of the site.</p>
<p>Quality of environment and public realm</p>	<p>During the site surveys it was found that the quality of environment and public realm was found to be good with relatively well-maintained public and private space throughout.</p>
<p>Conditions of buildings</p>	<p>Through the site surveys it was found that the majority of buildings were considered to be in good external condition. Older building stock is located along Faraday Way.</p> <p><i>Typical good quality building stock within the cluster</i></p>  <p><i>Faraday Way – Example of older building stock</i></p>

	
<p>Vacant floorspace observed</p>	<p>No observed letable floorspace was observed at the time of the site survey in December 2013.</p>
<p>Vacant land and derelict buildings</p>	<p>There is no vacant land or derelict buildings within the cluster.</p>
<p>Existing and future capacity</p>	<p>This is fully developed well used site with no obvious locations for redevelopment within the red line boundary.</p>
<p>Possibility for intensification/ redevelopment</p>	<p>This employment clusters is a fully developed well used site with no obvious location for redevelopment within the red line boundary.</p>
<p>Evidence of active marketing on site (floorspace and land)</p>	<p>None observed.</p>
<p>Description of cluster</p>	<p>This employment cluster primarily consists of a mix of B1c, B2 and B8 uses in the northern section including a large area occupied by Sun Chemicals. Faraday Way in particular is a well-established industrial area accommodating a number of small industrial occupiers. South of Stanley Way there is a concentration of self-storage uses whilst at the southern end of the cluster there are a number of good quality business units including B1 uses at Ravensquay. There are also a number of trade counter occupiers fronting onto Sevenoaks Way.</p> <p>The cluster has good strategic road access, no bad neighbour issues or sensitive neighbours and has adequate servicing and parking facilities. It does however suffer from poor access to amenities and facilities but has good public transport accessibility. No vacancies were observed within this employment cluster and it appears to be functioning efficiently.</p> <p><i>Aerial view of the industrial estate</i></p>

	 <p>Source – Bing maps</p>
Market information	
Specific market interest / enquiries (outcome of research and consultations)	<p>There are no voids within this cluster, and that is primarily due to the quality of the accommodation, and the prominence onto Sevenoaks Way, which has led to a high level of industrial occupiers and trade counter operators locating here.</p> <p>There is a vacant plot, which used to be occupied by the Go Ahead bus depot. The site is being marketed by Gerald Eve, who has recently placed the site under offer. They have not been forthcoming as to who the site is under offer to, nor whether they are an occupier or developer. We have been informed however that the prospective purchaser intends to buy the site for industrial uses.</p>
Typical rental information (rent and yield) for recommended uses	<p>B1c/B2/B8 - £8.00-£9.00 per sq ft (£85-95 per sq ft) depending on the size of unit.</p> <p>Trade counter retail – £11.50 - £12.50 per sq ft (£125-£135 per sq m).</p> <p>Yield: for a modern multi-let industrial estate it would attract interest at between circa 6 – 6.5%.</p>
Benchmark industrial land values (per ha) for recommended uses	£650-£700,000 per acre (£1.6m - £1.73m per hectare)
Benchmark Build costs (per sq m) for recommended uses	£500 - £650 per sq m (industrial)
Overall viability	Save for the Bus Depot site, which we consider to be suitable for industrial employment use, there is no redevelopment potential within this cluster.
Phasing for future redevelopment	5-10 years
Next steps for Council in helping facilitate redevelopment	None

Potential future business rate uplift	Not applicable.
Transport review of redevelopment	Not applicable.

Figure 4.8 - Employment Cluster 3.5 St Mary's Cray Industrial Business Park – Profile and Characteristics

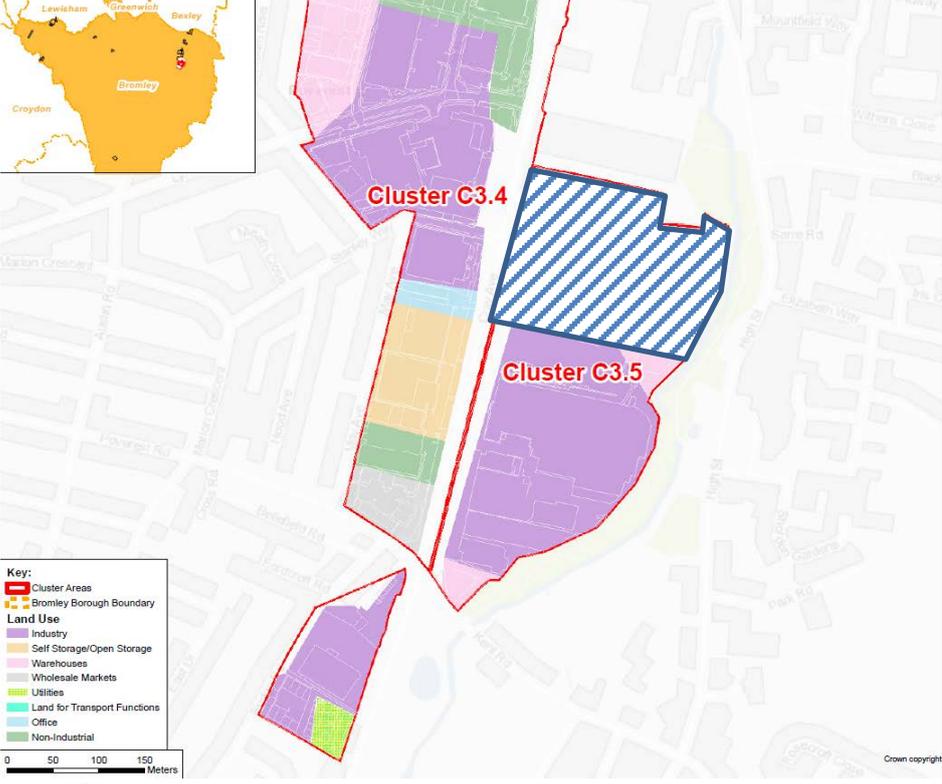


Land area (Ha)	The employment cluster is a total of 8.17 hectares in size.
Land use breakdown 2014 (Ha) (as per above plan)	As per the site surveys and GIS mapping, the cluster was found to contain the following land uses as per the London Plan industrial land use categorisation: <ul style="list-style-type: none"> • B1c/B2 Industry – 4.35 ha • B8 Warehouses – 3.82 ha
Land use change 2010-2014	There was no land use change within this cluster between 2010 and 2014.

<p>Main Estates and Occupiers</p>	<p>Allied Bakeries (covering much of the south of the cluster), Safestore Self Storage, Screw Fix, Travis Perkins, The Hill Group, Neilcott, F&P Wholesale, Elite Gym (occupying a former business unit) and other businesses at the Lagoon Road Industrial Estate.</p> <p><i>Estate sign at Lagoon Road Industrial Estate (covering the northern part of the cluster)</i></p> 
<p>Strategic Road Access</p>	<p>Direct access onto A224 Sevenoaks Way and indirect access to the A20 Sidcup By Pass. The site has very good strategic road access.</p>
<p>Neighbourhood issues (incl. sensitive receptors e.g. residential, schools)</p>	<p>No bad neighbour issues were observed on site and there are no sensitive immediately adjacent uses such as residential, schools or community uses.</p>

Strategic access to public transport	The cluster falls within a PTAL 4 area - this is considered 'good' on a scale of scale of 1a (lowest) to 6b (highest).
Access to waterways & wharves	The cluster has no access to any waterways.
Access to railhead	The cluster has no access to any railheads.
Other physical site constraints (layout issues, access through local roads)	Access through Lagoon Road Industrial Area was found to be constrained by on street parking and on street business servicing.
Planning policy context	The cluster is designated as a 'Business Area; in the adopted UDP and a 'Strategic Industrial Location (Industrial Business Park)' as per the London Plan. The site is bordered to the east by an 'Urban Open Space' and 'Conservation Area'.
Servicing of businesses	Most businesses throughout the cluster were observed to have designated off road loading areas though some within the Lagoon Road industrial Estate had roadside loading which was found to cause congestion issues.
Parking facilities	<p>Most of the businesses and sites throughout the cluster were found to have adequate dedicated parking provision. There was also observed to be some on street parking though this was not causing any traffic circulation problems at the time of the site visit.</p> <p><i>On street parking within the cluster</i></p> 
Access to amenities & facilities	Access to facilities and amenities is considered to be very poor with no facilities or amenities within a fifteen minute walk of the site.
Quality of environment and public realm	During the site surveys it was found that the quality of environment and public realm was found to be generally good though there were some signs of a lack of investment for example in internal roads particularly at Lagoon Road.

<p>Conditions of buildings</p>	<p>Buildings throughout the cluster were considered to be good except for within lagoon Road industrial estate where some units were considered poorer.</p> <p><i>Business premises within Lagoon Road</i></p> 
<p>Vacant floorspace observed</p>	<p>Up to 2,442 sq m of floor space was observed to be letable within the Lagoon Road area at the time of the site survey in December 2013. Several units were vacant and being marketed including 1,290m² for B8 use, a unit of 567m² for B1c use and a unit of 585m² for B2 use. This extent of vacancy suggests that units available are not attractive to occupiers.</p>
<p>Vacant land and derelict buildings</p>	<p>There is no vacant land or derelict buildings within the cluster though there is significant building vacancy and some signs of a lack of investment within the Lagoon Road Industrial area.</p>
<p>Existing and future capacity</p>	<p>The location hatched on the below plan, which covers Lagoon Road Industrial Area, is considered to be a good location for business space redevelopment.</p>

<p>Possibility for intensification/redevelopment</p>	<p>The Lagoon Road Industrial Area (an area of circa 4.0 hectares as hatched on the below plan) is considered to be a good location for intensification and redevelopment. Our surveys found there to be significant vacancy, some signs of a lack of investment, relatively poor quality commercial stock and lower intensity development. The four hectare site area could yield circa 20,000 sq m of development based on single storey uses and a 0.5 plot ratio. The site is considered suitable for B1b/c, B2 and B8 uses.</p>  <p>Source: Bing maps</p>
<p>Evidence of active marketing on site (floorspace and land)</p>	<p>Yes – Up to 2,442sq m of floor space was observed to be lettable for B1c/B8/B2 uses at the time of the site survey in December 2013.</p>
<p>Description of cluster</p>	<p>The south of the cluster is dominated by Allied Bakeries and a cluster of small industrial units at its southern end. Though many of the premises in this area are dated and potentially in need of upgrade in the medium to longer term, the level of occupancy is high and overall this area is well functioning as an industrial employment area. Allied Bakeries have confirmed during consultations that they have no intention of vacating their site in the near future and it remains operationally important. The northern part of the cluster is comprised mainly of the Lagoon Road Industrial area / Cray Avenue Industrial Estate. There is an evidenced demand for industrial space in this area though a significant number of units here remain vacant. There is some evidence here of a lack of investment in business space and an opportunity for comprehensive redevelopment exists with more modern business space</p>

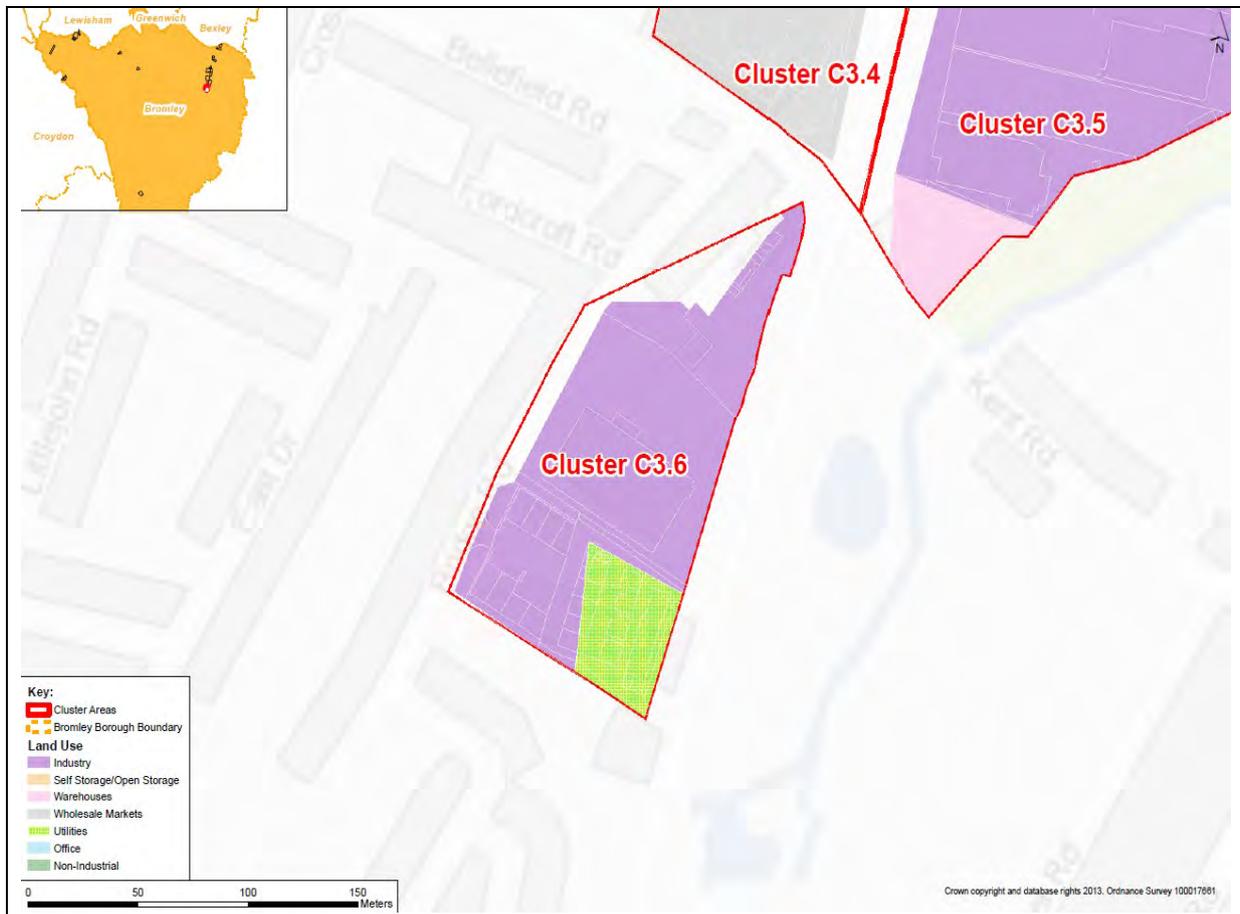
	being provided. There appears to be a multitude of ownerships at Lagoon Road, so further investigation into feasibility and ownership is required.
Market information	
Specific market interest / enquiries (outcome of research and consultations)	<p>This cluster is made up of three distinct areas: the Lagoon Road Industrial Estate at the north, the Allied Bakery factory, and a small area to the south of the cluster where Walkers and Travis Perkins Building Merchants are located.</p> <p>We are not aware that Allied Bakeries, Walkers or Travis Perkins are considering relocating and as such we would not earmark this part of the cluster as a potential area for redevelopment within the next five to 10 years.</p> <p>The Lagoon area is an area consisting of a group of primarily industrial buildings, but some office space built in the 1970s. The nature and general configuration of the stock is poor, with many of the buildings coming to the end of their economic life.</p> <p>There is currently one vacant building on Lagoon Road, which is being marketed by Michael Rogers and extends to 13,885 sq ft (1,290 sq m). The agent is quoting £6.50 per sq ft (£70 per sq m) for the building and has reported that they have received interest mainly from short term interest from such sectors as garages and storage operators. The agent commented that should the site be developed they would expect good demand from B1(c), B2 and B8 uses.</p>
Typical rental information (rent and yield) for recommended uses	<p>B1c/B2/B8, for new space - £8.50-£9.00 per sq ft (£90-£95 per sq m) – depending on the size of unit.</p> <p>For the existing accommodation - £5.00-£6.00 per sq ft (£55.00-£65.00 per sq ft).</p> <p>Yield: for a multi-let industrial estate now it would attract interest at between 6-6.25% on the basis of a new development.</p>
Benchmark industrial land values (per ha) for recommended uses	£650,000-£700,000 per acre (£1.60m-£1.73m per hectare)
Benchmark Build costs (per sq m) for recommended uses	£50-60 per sq ft (£550-£650 per sq m) – industrial
Overall viability	This whole cluster includes buildings coming to the end of their economic life which is certainly an important factor when considering the viability of redevelopment. We have identified the northern area of this cluster around Lagoon Road as an area which represents an opportunity to improve on the quality of the accommodation, and potentially increase the amount of floor area. The Council could add value by assisting in delivering a comprehensive scheme in this area (see below for further detail).

Phasing for future redevelopment	0-5 years but only if there is a willingness to sell by the current owners.
Next steps for Council in helping facilitate redevelopment	<p>The next step would be for the Council to consult with the relevant owners of this cluster around Lagoon Road to establish their future intentions and whether they would be receptive to a party looking to assemble the land.</p> <p>Should these discussions prove positive, the Council should assess the development potential of the site in more detail through the production of a development brief, determine which interests need to be acquired to deliver a viable scheme through assess viability through a detailed financial appraisal, carry out valuations of the site and enter into detailed discussions with landowners. A CPO strategy should be developed so that should the Council need to use its compulsory purchase powers the necessary sequence of decisions is in place. Development options should then be assessed, including the potential for the Council to either develop the site itself or partner with a developer.</p> <p>The advantage of this strategy, as outlined above, is that developing this site piecemeal is unlikely to provide the quality of environment necessary to ensure its viability.</p> <p>The difficulty with a comprehensive development is that due to the likely number of owners within the cluster, even if there is resistance from one party it may prove too difficult to achieve.</p> <p>Furthermore the viability of the development is likely only to be made should the owners willingly sell for the market price, which will not necessarily happen.</p>
Potential future business rate uplift	£295,000 additional per annum to be retained by the Council as a result of circa 20,000 sqm of assumed new development (using a 0.5 plot ratio) at the identified site.
Transport review of redevelopment	<p><u>Site Access</u> Existing access to the development is available from the A224 Cray Avenue/Lagoon Road priority junction. All movements are possible from this junction in its existing configuration. No existing accident trends have been identified at this location and a review of the access in the future case suggests that capacity should be available to accommodate predicted demand.</p> <p>Formal footways extend both north and south from the Lagoon Road access. The site is located adjacent to an existing cycle route which runs north towards the A20 Sidcup cycle route and south towards Orpington along the A224. Part of this route between Poverest Road and Station Road is due to</p>

	<p>be upgraded to provide improved facilities for cyclists.</p> <p>The site has good accessibility to public transport (PTAL 4), with seven bus routes available within 100m of the site access, and a further two bus routes available within 640m of the site. St Mary Cray Station is also located approximately 700m from the site, offering access to destinations such as London Victoria and Ashford International.</p> <p><u>Highway Impact</u></p> <p>Of the sites proposed for redevelopment, Lagoon Road Industrial Area (20,000 sqm) would be likely to generate the greatest number of trips due to its potential size. 97 and 90 vehicles would be expected to travel to or from the site during the weekday AM peak and PM peaks respectively. A c.60/40 split between movements north and south is expected.</p> <p>For the trips travelling north, the majority will use the A20 Sidcup bypass to travel east or west, and therefore will pass through the A224 Sevenoaks way/Midfield Way junction (Junction 1.3) and the A224 Cray Road / A223 Edgington Way / A20 / A224 Sevenoaks Way Roundabout (Junction 1.2). Both of these junctions operate significantly over capacity in the future case, and are recommended for improvement irrespective of growth in the area.</p> <p>To the south, approximately 30% of trips will pass through the A224 Cray Avenue / Lower Road / A224 Court Road / A223 High Street junction (1.6), which has also been identified through the highways review as a key capacity constraint in the future case, with or without development. Any additional traffic from development will accentuate predicted heavy queuing, and improvements at this junction are therefore also recommended to facilitate future growth in the area.</p> <p><u>Network Improvements</u></p> <p>In facilitating development, the delivery of highway improvements should form the key focus for this site, given the site’s favourable characteristics in regards to access by other modes. Similar to the other sites, contributions should be sought, given that the delivery of improvement schemes is likely to fall beyond the scope of one developer. Specific schemes to consider, subject to further review, costing and land availability, would be as follows:</p> <ul style="list-style-type: none"> • Junction 1.2 - Signalisation of the roundabout and the linking of this location to the wider Cray Corridor network using UTC SCOOT, in order to manage traffic and queuing levels along the route and to minimise bus delay. • Junction 1.3 – Improvements to Sevenoaks Way/Midfield Way to extend the right turn box, and/or signalisation to control blocking
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	<p>back to junction 1.2.</p> <ul style="list-style-type: none">• Junction 1.6 – Delivery of a toucan crossing across the southern arm of the signalised crossroads, and amendments to connection with the southbound cycle lane in order to alter the need for a cycle specific stage at this location. <p>For this site, delivering improvements at Junction 1.2 and Junction 1.6 are likely to form key priorities.</p>
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Figure 4.9 - Employment Cluster 3.6 St Mary's Cray Industrial Business Park – Profile and Characteristics



Land area (Ha)	The employment cluster is a total of 1.47 hectares in size.
Land use breakdown 2014 (Ha) (as per above plan)	As per the site surveys and GIS mapping, the employment cluster was found to contain the following land uses as per the London Plan industrial land use categorisation: <ul style="list-style-type: none"> • B1c/B2 Industry – 1.24ha • Utilities- 0.23ha
Land use change 2010-2014	No observed land use change from 2010 baseline position was recorded.
Main Estates and Occupiers	Specac, Treval, Window Clean Uk, Barrier Air Conditioning Ltd, Midguard Ltd.
Strategic Road Access	Direct access onto A224 Sevenoaks Way and indirect access to the A20 Sidcup By Pass. The site has very good strategic road access.
Neighbourhood issues (incl. sensitive receptors e.g. residential, schools)	No bad neighbour issues were observed on site and there are no sensitive adjacent uses such as schools or community uses. The cluster is well defined and adjacent residential properties along Bridge Road are not considered to be adversely affected from industrial employment uses.
Strategic access to public transport	The cluster falls within a PTAL 3 area - this is considered 'moderate' on a scale of scale of 1a (lowest) to 6b (highest).

<p>Access to waterways & wharves</p>	<p>The cluster has no access to any waterways.</p>
<p>Access to railhead</p>	<p>The cluster has no access to any railheads.</p>
<p>Other physical site constraints (layout issues, access through local roads)</p>	<p>None observed.</p>
<p>Planning policy context</p>	<p>Within the London Plan the employment cluster is designated as a Strategic Industrial Location and is designated as part of the St Mary’s Cray area as an Industrial Business Park (IBP).</p> <p>The cluster is designated as a ‘Business Area’ in the adopted Bromley UDP.</p>
<p>Servicing of businesses</p>	<p>The businesses throughout the site were observed to have adequate servicing in the form of designated loading bays and off road loading/unloading areas. The entire cluster appeared to be well managed and maintained.</p> <p><i>Example of off road loading/unloading areas</i></p> 
<p>Parking facilities</p>	<p>The businesses and sites within the cluster were found to have adequate dedicated parking provision suitable for the scale of the operations at those sites.</p> <p><i>Dedicated parking with the employment cluster</i></p> 

<p>Access to amenities & facilities</p>	<p>Access to facilities and amenities is considered to be adequate with the facilities and amenities of Orpington High Street within a fifteen minute walk of the site.</p>
<p>Quality of environment and public realm</p>	<p>During the site surveys it was found that the quality of environment and public realm was found to be very good with well-maintained public and private space throughout.</p>
<p>Conditions of buildings</p>	<p>Through the site surveys it was found that the majority of buildings were considered to be in very good external condition. In particular Metro Centre provides very high quality building stock and shows obvious signs of active management and maintenance. The Travel site primarily consists of yard space with older building stock however overall the site is well maintained.</p> <p><i>Specac UK Headquarters</i></p> 
<p>Vacant floorspace observed</p>	<p>No observed lettable floorspace was observed at the time of the site survey in November 2013.</p>
<p>Vacant land and derelict buildings</p>	<p>There is no vacant land or derelict buildings within the cluster.</p>
<p>Existing and future capacity</p>	<p>This is fully developed well used site with no obvious locations for redevelopment within the red line boundary.</p>
<p>Possibility for intensification/ redevelopment</p>	<p>This employment clusters is a fully developed well used site with no obvious location for redevelopment within the red line boundary.</p>
<p>Evidence of active marketing on site (floorspace and land)</p>	<p>None observed.</p>
<p>Description of cluster</p>	<p>This employment cluster is compact in nature, consisting of Travel (metal fabrication), Specac Headquarters, the Metro Centre which contains good quality industrial/ distribution units and an electricity substation. The majority of the employment uses are accessible from Cray Avenue whilst the Metro Centre is accessed from Bridge Road.</p> <p>The cluster has good strategic road access, no bad neighbour issues or sensitive neighbours and has adequate dedicated servicing and parking</p>

	<p>facilities. It has reasonable access to amenities and facilities and access to public transport is assessed to be moderate. No vacancies were observed within this employment cluster and it appears to be functioning efficiently offering high quality industrial / business units and a well maintained environment.</p> <p>The cluster is allocated as a Business Area in the UDP and should be allocated as a SIL within the Local Plan as per the London Plan designation.</p> <p><i>Aerial view of the industrial estate</i></p>  <p><i>Source – Bing maps</i></p>
Market information	
Specific market interest / enquiries (outcome of research and consultations)	This cluster represents an area where there are no voids and no obvious potential for intensification.
Typical rental information (rent and yield) for recommended uses	<p>B1c/B2/B8 - £7.00-£9.00 per sq ft (£75-£95 per sq ft) depending on the size of unit.</p> <p>Yield: for a modern multi-let industrial estate now it would attract interest at between circa 6 – 6.5%.</p>
Benchmark industrial land values (per ha) for recommended uses	£650-£700,000 per acre (£1.6m - £1.73m per hectare)
Benchmark Build costs (per sq m) for recommended uses	£500 - £650 per sq m (industrial)
Overall viability	There is little potential for redevelopment in the short term. The Specac building is modern and functional, and which occupies a large proportion of the site. The Metro Centre is also modern and fully let. The Traval site is likely to viable should it be brought forward for redevelopment, but there is no intelligence to suggest this is likely to happen in the short to medium term.

Phasing for future redevelopment	10-15 years.
Next steps for Council in helping facilitate redevelopment	None
Potential future business rate uplift	None.
Transport review of redevelopment	Not applicable.

4.3 Summary of supply

Within the employment clusters surveyed across the borough, a total of 88.93ha of designated employment land was recorded. This represents a majority of the total supply of employment land within the LB Bromley however it does not include non-designated employment sites which generally includes smaller sites or lone business units.

The largest proportion of designated employment land within LB Bromley is primarily utilised for warehousing (B8) uses (34%), whilst industrial (B1c/B2) uses accounted for just under a quarter of all designated employment land (24%). Office (B1a) uses only accounted for 8% of all designated employment land (not including town centres) whilst approximately 15% was utilised for non-industrial uses such as retail which represents the majority of non-industrial uses within the borough's employment land designations.

The results of our site surveys revealed that 56% (49.6ha) of employment land within designated (protected) employment clusters lies within the Cray Business Corridor. Of this, approximately 8% was utilised by office (B1a) use, 24% was utilised for industrial (B1c/B2) uses and 26% was utilised for warehousing uses (B8).

Approximately 19.5% (9.7ha) of land within the Cray Business Corridor employment designations is utilised for non-industrial uses, which represents the majority (73%) of all non-industrial uses within designated employment sites in LB Bromley. Retail uses are predominant, accounting for almost all non-industrial uses within the Cray Business Corridor. In total more than half of these retail uses are contained within Cluster 3.1, whilst a quarter of retail uses are situated within Cluster 3.4. This analysis confirms the significant presence of large scale retail units within the Cray Business Corridor, particularly along Sevenoaks Way and Cray Avenue.

No land was found to have been 'lost' from employment use in the study area between 2010 and 2013/14. This means that no land was recorded as having changed from industrial employment use to a non-industrial use between the period in 2010 during which URS/DTZ completed the London Industrial Land Baseline study for the GLA and the completion of this study in 2014.

Our assessment of the supply of employment land has also included a review of clusters' suitability for office (B1a) and industrial (B1c/B2/B8) land-uses. As user demands and site-specific characteristics for the two types of employment uses differ our analysis has considered site suitability against both sets of criteria. An example of this is that B1a land users typically require better access to public transport than industrial (B1c/B2/B8) land users who require better access to strategic transport routes. The assessment criteria used is included under Appendices B and C.

The comparative analysis of the quality and characteristics of clusters for employment use in the next section is carried out on the basis of the quantity of land contained within the lined boundaries of designated employment clusters.

4.4 Summary of redevelopment opportunities

Our research presented in Section 4.2 identified four main redevelopment sites / opportunities for intensification. These are summarised below:

Table 4.2 – Summary of identified intensification opportunities in the Cray Corridor

Intensification Areas	Site Area	Potential Use and Estimated Development Floorspace ⁴ (gross quantum)	Opportunities (including rationale for use)	Constraints ⁵	Estimated Delivery Timescale
C1 – Ruxley Corner / Foots Cray Business Area; the vacant 'Klingers site' – identified in the north of the site as 'Land with Vacant Buildings'	2.7 ha	B1b/c, B2 or B8 13,500 sq m.	Owners of the site IKEA are in the process of selling the site to a logistical operator who would develop the site for B8 uses. Given its strategic characteristics including good accessibility the site lends itself to such uses.	An obvious constraint is the listed façade to the Klingers building.	2015-2020
C1 – Ruxley Corner / Foots Cray Business Area; the vacant 'Land to the Rear of Tesco, Edgington Way, Sidcup' – identified in the south of the site as 'Vacant Industrial Land'	3.1 ha	B1b/c, B2 or B8 15,500 sq m	Given its strategic characteristics including good accessibility the site lends itself to B1b/c, B2 or B8 uses.	A footpath running through the centre of the site may indicate a public right of way. It is unclear whether the access road running into the site from Edgington Way is an adopted highway. If this is owned by Tesco an access agreement may need to be made with whoever develops the site.	2015-2020
Cluster 2.1 Crayfields Business Park/ 2.2 Crayfields Industrial Park: Land between Crayfields Business Park and Industrial Estate	1.8 ha ⁶	B1b/c, B2 or B8 9,000 sq m	Legal and General have indicated during consultations that they would be interested in developing this infill site for industrial employment use. The two business parks themselves are fully developed without scope for further intensification.	The site is designated as green belt so further assessment on its effectiveness and functioning would be needed before any policies or policy mechanisms enabling development could be proposed.	2020-2025

⁴ Based on a single storey building and an average plot ratio of 0.5 for B1b/c, B2 and B8 (as per good practice set out in the DCLG ELR Guidance Note 2004 (Annex D)).

⁵ These are based on the consultants' initial assessment and agreed work scope so should not be regarded as a complete list. The Council may wish to undertake more detailed due diligence.

⁶ Approximate and discounting the sports ground as it is assumed this will need to be retained somewhere in site.

Cluster 3.5 St Mays Cray Industrial Business Area - Lagoon Road Industrial Area	4.0ha	B1b/c, B2 or B8 20,000 sq m	Low intensity, dated industrial area that would benefits from comprehensive redevelopment.	Multiple ownership constraint. Some site owners may not want to sell. Further investigation into feasibility and ownership required.	2020-2030
Total	11.6 ha	58,000 sq m			

4.5 Potential business rates uplift as a result of intensifications

This section seeks to estimate the additional business rate revenue per annum which would be payable to the London Borough of Bromley from the development of the intensification areas in the Cray Corridor as identified above. The previous sections outline the estimated gross development floorspace of each of these areas and these figures are adopted here.

The additional business rate revenue has been estimated using the new development floorspace. A gross to net adjustment of 95% has been assumed to convert this gross floorspace to net figures. This is a generic assumption to acknowledge the fact that there will likely be a range of B1-B8 uses on each site but, given the locations, there are unlikely to be high quality offices.

To calculate the business rates payable, the net development floorspace figures are multiplied by an estimated rateable value per sq m. Due to the high level nature of the calculations, a single assumption on rateable value per sq m has been used for all the development sites. This figure is based on the unadjusted unit rate from comparables in the local area, amended to reflect the fact that the units will be new and of high quality.

It should be remembered that rating values very much depend on the exact nature of the proposed development and its context i.e. scale and type of development, and we have only been able to make generic assumptions here based on local comparables. The anticipated business rates may well differ significantly as the schemes for each location become known in more detail.

Local comparables represent a mix of recent B1-8 developments (but excluding high quality offices) and indicate an average unit rate of c. £120 per sq m. These generally represent whole new business, trade or industrial parks. To take account of this we have discounted this figure by 10% to reflect the fact that in-fill on an existing estate / industrial area may not achieve the same values. We expect new infill developments to still significantly out value surrounding quality older stock, which currently has average unit rates of c.£85 per sq m (typically 1990s units). Old, outdated stock (e.g. on Lagoon Road) has much lower unit rates of c.£40 per sq m.

The average unit rate of £110 per sq m has then been multiplied by the anticipated net development floorspace. This results in an expected total rateable value for each of the new development sites. A government non-domestic rating multiplier (at 47.1p in each £1 of rateable value) is then applied to calculate the business rates due per annum. It is assumed here that the occupiers would be general businesses, rather than small or medium enterprises (as these attract a slightly lower rating multiplier).

An assumption has been made that 30% of future business rate revenues will be retained by the London Borough of Bromley (based on information from the Council) as

part of HM Government’s Business Rate Retention Scheme, though this may change depending on the difference between expected returns from business rates and past government grant levels.

Business Rate Impact

Using the above method, the total business rate increase for LBB from the anticipated floorspace totals around £856,000 per annum, as set out in the table below. It should be noted that this figure is an estimate based on the series of assumptions above. The actual rates retained may be higher or lower than this due to a number of factors – most obviously the rateable values of the resulting new developments, the total floorspace developed and any changes in the proportion of rates retained by LBB.

Figure 4.3 - Estimated Business Rate Uplift to LB Bromley

	Gross Development Floorspace	Total Estimated Business Rates per annum	LBB Business Rate uplift (at 30% retention)
C1 – Ruxley Corner / Foots Cray Business Area - Klingers Site	13,500 sq m	£ 664,000	£ 199,000
C1 – Ruxley Corner / Foots Cray Business Area - Land to rear of Tesco	15,500 sq m	£ 763,000	£ 229,000
Cluster 2.1/2.2 -Land between Crayfields Business Park and Industrial Estate	9,000 sq m	£ 443,000	£ 133,000
Cluster 3.5 St Mays Cray Industrial Business Area - Lagoon Road Industrial Area	20,000 sq m	£ 984,000	£ 295,000
TOTAL	58,000 sq m	£ 2,854,000	£ 856,000

4.6 Cluster Suitability for B1a Land-use

This section sets out a short summary of the key findings of the cluster field surveys as presented earlier in this section. It is useful as it assesses to what extent each of the clusters have the key characteristics necessary and suitable for B1a uses based on environmental factors. The town centres of the borough are predominantly where office uses are clustered and the appropriate locations for the majority of future office growth, however there are several other areas in the borough that contain established office floorspace such as the Crayfields Business Park. Drawing upon our field survey and desk research, we have assessed all employment clusters for their suitability for office B1a uses against the following strategic criteria.

Cluster suitability for B1a uses is largely reliant on satisfying the following types of criteria (as identified within DCLG and GLA guidance) using information presented in Section 4.2:

- Proximity and accessibility to public transport;
- Overall quality of environment as employment clusters;
- Building condition;
- Site constraints;
- Compatible adjacent land uses;
- Adequate servicing;
- Adequate parking facilities;
- Access to facilities and amenities;
- Active use of the cluster for B1a employment uses.

As shown in **Table 4.2** the vast majority of employment clusters within the borough are performing well in regards to displaying the characteristics necessary for accommodating B1a uses. The majority of employment clusters within the borough generally have a good quality environment and public realm, adequate parking and servicing facilities, lack of physical site constraints, compatible neighbouring land uses and healthy occupation and take-up of employment land.

Results from our field surveys indicate that Crayfields Business Park and some of the Sevenoaks Way/ Cray Avenue employment sites possess a successful employment offer to potentially accommodate B1a uses. However, it was noted that the supply B1a accommodation within the Cray Business Corridor was not predominate with the majority of the supply being in the north of the cluster. The recent investment by Legal and General in the Crayfields Business Park in particular, has resulted in the addition of some high quality B1a office stock which may be attractive for occupiers looking for out of centre office locations.

It is important to note however, that whilst the characteristics of the employment land within the Cray Business Corridor lends itself to B1a uses this study does not necessarily recommend that these employment sites should accommodate B1a uses. The Cray Business Corridor is generally characterised by traditional industrial employment uses, large scale retail warehousing, storage and trade counter uses which may not be attractive for office occupiers. The demand for B1a uses within the LB

Bromley as a whole and the Cray Business Corridor is outlined in Section 5: Property Market Assessment, and Section 6: Employment Land Forecasting.

4.7 Cluster Suitability for B1c/B2/B8 Land-uses

This section is an assessment of the 16 clusters suitability for B1c/B2/B8 uses based on different environmental criteria than that used to assess cluster suitability for B1a uses. The two town centres clusters will be excluded from this assessment as they don't contain B1c, B2 and B8 uses.

Some of the clusters are potentially include office uses at present. However it is still relevant to assess all clusters suitability for industrial/warehousing use as over the long term planning period there could be the potential for change of use.

The most relevant and significant criteria for the assessment of suitability of employment clusters for B1c/B2/B8 uses include the following characteristics below. These correspond to the comprehensive criteria contained in Annex 3 of the GLA Land for Industry and Transport SPG and uses information presented in Section 4.2 of this report:

- Transport accessibility including strategic road access;
- Overall quality of the environment as employment cluster;
- Building condition;
- Site constraints;
- Neighbourhood issues (where impacting upon sensitive adjacent receptors);
- Servicing of businesses;
- Adequate parking facilities; and
- Active use of the cluster for B1c/B2/B8 employment uses.

Table 4.3 outlines the assessment of the employment clusters for their suitability for B1c/B2/B8 uses. As shown in the table the majority of employment clusters within the borough display the appropriate suitability for accommodating B1c/B2/B8 employment uses with the exception of the Crayfields Business Park. The vast majority of employment land within LB Bromley benefits from good strategic road access, adequate parking and servicing facilities, good quality building stock and environment and healthy market conditions resulting in high occupancy rates. The majority of employment clusters are appropriate to their surroundings, although there are some residential uses in clusters such as Homesdale Road, Farwig Lane and Oakfield Road in the West of the Borough and within the Sevenoaks Way/ Cray Avenue employment area.

Within the study area our assessment identifies that those clusters within Ruxley Corner, Crayfields and the Sevenoaks Way/ Cray Avenue employment sites possess site characteristics suitable for B1c/B2/B8 employment land-use. All nine clusters within the Cray Business Corridor to varying extents were identified as having good or very good strategic road access (via the A224 to the A20 and the M25 corridor), as well as a good quality of environment and adequate parking and servicing facilities. Only one cluster was assessed to be situated close enough to residential areas or other sensitive receptors, that they could have a detrimental impact on them.

Table 4.2- Suitability or potential suitability for B1a Uses

Key:

Cluster attributes for B1a uses greater than 75% positive= Dark Green (Greatest suitability characteristics for such use)

Cluster attributes for B1a uses between 50-75% positive= Medium Green (Suitable characteristics for such use)

Cluster attributes for B1a uses less than 50% positive= Red (Less suitable characteristics for such use)

Cluster	Designation	PTAL Level 4+	Quality of Environment >50% Good or V. Good	Building Condition >50% Good or V. Good	No Physical Site Constraints	Adjacent to Compatible Land Uses	Established Office Location (>25% B1 Floorspace)	Adequate Servicing	Adequate Parking Facilities	Good/V.Good Access to Facilities and Amenities
C1	SIL	X	✓	✓	✓	X	X	✓	✓	X
C2.1	Emp. Area	X	✓	✓	✓	✓	✓	✓	✓	X
C2.2	Emp. Area	X	✓	✓	✓	✓	X	✓	X	X
C3.1	SIL	X	✓	✓	✓	✓	X	✓	✓	X
C3.2	SIL	X	✓	✓	✓	✓	X	✓	✓	X
C3.3	SIL	X	✓	✓	✓	✓	X	✓	X	X
C3.4	SIL	✓	✓	✓	✓	✓	X	✓	✓	X
C3.5	SIL	✓	✓	✓	✓	X	X	✓	✓	X
C3.6	SIL	X	✓	✓	✓	✓	X	✓	✓	✓
C4	Emp. Area	X	✓	✓	✓	✓	X	✓	✓	X
C5	Emp. Area	X	✓	✓	✓	X	X	✓	✓	X
C6	Emp. Area	✓	✓	✓	✓	X	X	✓	✓	✓
C7	Emp. Area	X	✓	✓	✓	X	X	✓	✓	✓

C8	Emp. Area	X	✓	✓	✓	✓	X	✓	✓	✓
C9.1	Emp. Area	X	X	X	X	X	X	✓	✓	X
C9.2	Emp. Area	X	✓	X	✓	X	X	✓	✓	X
C10	Bromley TC	✓	✓	✓	✓	✓	✓	✓	✓	✓
C11	Orpington TC	✓	✓	✓	✓	✓	✓	✓	✓	✓

Source: URS 2013

Table 4.3- Cluster Suitability or potential suitability for B1c/B2/B8 Uses

Key:

Cluster attributes for B1c/B2/B8 uses greater than 75% positive= Dark Green (Greatest suitability characteristics for such use)

Cluster attributes for B1c/B2/B8 uses between 50-75% positive= Medium Green (Suitable characteristics for such use)

Cluster attributes for B1c/B2/B8 uses less than 50% positive= Red (Less suitable characteristics for such use)

Cluster	Designation	Direct Strategic Road Access	Direct Waterways / Wharves Access	Direct Railhead Access	>50% of Environment in Good/ V.Good Condition	>50% of Buildings in Good/ V.Good Condition	No Physical Site Constraints	No Bad Neighbourhood Issues impacting negatively on sensitive adjacent receptors	Adequate Servicing of Businesses	Adequate Parking	>50% of cluster actively used for B1c/B2/ B8 employment uses
C1	SIL	✓	X	X	✓	✓	X	✓	✓	✓	X
C2.1	Emp. Area	X	X	X	✓	✓	X	✓	✓	X	X
C2.2	Emp. Area	X	X	X	✓	✓	✓	✓	X	✓	✓
C3.1	SIL	✓	X	X	✓	✓	✓	✓	✓	✓	X
C3.2	SIL	✓	X	X	✓	✓	✓	X	✓	✓	X

C3.3	SIL	✓	X	X	✓	✓	✓	✓	✓	X	✓
C3.4	SIL	✓	X	X	✓	✓	✓	✓	✓	✓	✓
C3.5	SIL	✓	✓	X	✓	✓	✓	✓	✓	✓	✓
C3.6	SIL	✓	X	X	✓	✓	✓	✓	✓	✓	✓
C4	Emp. Area	✓	X	X	✓	✓	✓	✓	✓	✓	✓
C5	Emp. Area	X	X	X	✓	✓	✓	X	✓	✓	X
C6	Emp. Area	✓	X	X	✓	✓	✓	X	✓	✓	✓
C7	Emp. Area	✓	X	X	✓	✓	✓	✓	✓	✓	✓
C8	Emp. Area	✓	X	X	✓	✓	✓	X	✓	✓	✓
C9.1	Emp. Area	✓	X	X	✓	X	X	✓	✓	✓	✓
C9.2	Emp. Area	✓	X	X	✓	X	X	✓	✓	✓	✓

Source: URS 2013

4.8 Conclusions

URS's qualitative survey of employment land in LB Bromley comprised of a field visit of 16 employment clusters and 2 town centre locations combined with elements of desk research. This assessment was carried out against agreed site appraisal criteria. A comparative analysis of the quality and characteristics of clusters for employment uses was then undertaken on the basis of the quantity of land contained within the lined boundaries of clusters. Owing to the different site characteristics required by office (B1a) and industrial (B1c/B2/B8) users, our analysis assessed cluster suitability for these Use Classes separately.

Focusing upon the study area our survey identifies that the Cray Business Corridor is an established business location and a combination of both designated SIL sites and employment areas appear to be suitable in this context. The corridor has a wide variety of employment sites which are well functioning, well managed and support the diverse range of business types found within these employment areas.

Our assessment broadly concludes that those clusters already designated as SILs in the London Plan (2011) possess the appropriate quality and site characteristics for such uses and are well supported by existing policy. However, there is evidence of some historic erosion of SIL employment land by large scale retail warehousing in the northern end of the Sevenoaks Way/ Cray Avenue SIL site. However it is believed that much of the retail warehousing located within the SIL designations was developed prior to adoption of the London Plan so the application of a SIL boundary to these established retail sites may not have been appropriate historically. These factors indicate that a re-apportioning of the SIL boundaries in this area might be appropriate in order to maintain that the integrity of the employment land designations.

5 PROPERTY MARKET ASSESSMENT

This section assesses the study area from a property market perspective building upon information already presented in Section 4.2.

5.1 Property Market Areas (PMA)

The Cray Corridor provides a wide array of existing business space accommodation, from the modern accommodation afforded at Crayfields Business Park (C 2.1), to the more dated southern industrial area around the Allied Bakery site (C3.5) on Cray Avenue.

The Cray Valley area accounts for approximately 50% of Bromley's business space, which is by far the largest cluster of businesses within the borough. The majority of the accommodation is industrial space. Other areas of industrial concentration in the Borough are those such as Lower Sydenham, but outside of this the majority of the other industrial sites within the Borough are generally infill sites which are important in accessing key markets but do not provide strategic scale or critical mass.

In addition to its importance due to its size, the Cray Valley is also the best located industrial area in the Borough, due to the proximity to the A20, and thus the M25, which benefits businesses with the speed in which to access their target markets.

Given its strategic importance, the intensification and modernisation of the Cray Valley is crucial in promoting business growth in the medium to long term.

In relation to offices, however, the Cray Valley is of less strategic significance. This is partly due to the proximity of St Mary Cray station when compared to Crayfields Business Park (C 2.1), coupled with a general view that occupiers would prefer to be located on Crossways in Kent, or Bromley Town Centre. It is anticipated that in the future, Bromley Town Centre and to a lesser extent Orpington and Beckenham will continue to provide the key areas where office demand and supply is concentrated within the LB Bromley area.

The area as a whole has evolved to comprise a high proportion of retail warehousing, whilst the relatively new Nugent Shopping Centre on Cray Avenue is now fully let and has a good mix of quality tenants.

We provide commentary on the specific sectors below.

Industrial

The broader South East property market has witnessed a revival in the latter stages of 2013, and the early stages of 2014. Since the slump of 2009/2010 the market has been steadily improving, but it was the second half of 2013 where activity levels have been such that has led to marked improvement in sentiment by tenants, developers and investors.

One of the reasons for this is a lack of quality accommodation, primarily stemming from a cessation of speculative development activity post 2008. Although there has been a lack of good quality stock since that point, it is only now that demand is exceeding available supply thus resulting in increased competition where availability is present, and instances where occupiers have to opt for new build or remain in sub-standard accommodation.

In the South East the proportion of available Grade A accommodation is at 12.1% of overall available supply.

This picture is true anywhere in the Greater London area. This fact is particularly true in the Cray Corridor and a five mile radius because there has been no speculative development which has yet recommenced in this economic cycle. This compares less than favourably with areas such as West and North London where there is currently 500,000 sq ft of speculatively constructed accommodation either recently completed or under construction.

As a result there is demand for the redevelopment or the refurbishment of existing stock to satisfy this demand in the Cray Corridor.

The Cray Corridor benefits from a large proportion of trade counter units, where the use is designated under B8, Sui Generis or ancillary trade counter. This market is thriving in Greater London, primary due to the strong housing market, a major factor which has an influence on building and household supplies industries.

Due to the importance of Sevenoaks Way / Cray Avenue as a transport corridor, demand in this location is growing and there is certainly a degree of suppressed demand in evidence both in terms of trade counter operators, as well as traditional manufacturing and storage uses.

Rents achieved on the Crayfields Industrial Estate (C2.2) continue to be evidenced at £7.50 - £8.00 per sq ft, and will be higher than any other industrial stock within the corridor, save the aforementioned trade counter stock, which would attract a premium.

Offices

The Cray Corridor does not represent a significant office location. The road connections are reasonable but public transport accessibility is poor, with the station (St Mary Cray) likely to be more than walking distance away, discouraging occupiers to locate along the corridor.

Demand for this area of Greater London is concentrated either at Bromley Town Centre, or further north in Dartford. Bromley Town Centre benefits from two mainline train stations with excellent connectivity to the West End or the City. There has been a previous trend for corporate to locate back office functions in Bromley due to its connectivity and lower occupancy cost relative to Central London.

Notwithstanding this, although the Cray Corridor does suffer from a lack of indigenous office occupiers and is unlikely to become a major office location in the future, the supply of good quality accommodation is in short supply, meaning that there may be selective opportunities for office development in the future. One opportunity could be at Cray Business Park (C2.1) is situated in an attractive setting, with the lake and woodland to the north providing a unique setting for quality business space along the corridor.

It is unclear as to whether any future expansion of this park would be successful. Out of town office locations, such as Crossways in Dartford or Kings Hill Business Park in Maidstone, can prove to be thriving locations for business. Their success is not guaranteed with corporates often taking the safer option of locating in established areas where a local skilled workforce is more readily available, which leads to organic growth witnessed with the Thames Valley office area, or along the north M25 at St Albans and Hatfield.

5.2 Cray Business Corridor

Given our market assessment as set out above, we set out below preliminary views on the sites that form the various components of the Cray Corridor.

Ruxley Corner / Foots Cray Business Park (Including Klingers site) (Cluster 1)

- The current use of this area is industrial. It comprises a mix of modern industrial estates, as well as single ownership buildings / timber merchants.

The Richard Klinger site (owned by IKEA), was supposed to shortly come to the market following two failed attempts by IKEA to secure a retail consent on the site. We understand that IKEA approached a small number of industrial developers in order to facilitate an off market sale, and we understand that it is under offer to an industrial developer.

The intention of the purchaser will be to speculatively develop a multi-let industrial scheme, targeting B1(c), B2 and B8 occupiers. The expectation from local agents is that they may deal with the facade by attempting to attract a self storage operator / hotel use on the front of the site, with a combination of light industrial and storage uses behind within a multi-let scheme similar to Fitzroy Business Park on Sandy Lane.

- Accessibility and demand for industrial employment use in this area should be generally good. As such, we consider that it would be sensible for planning purposes to retain and protect industrial use over the entire area.
- This protection will assist in helping the area accommodate potentially growing demand in the area for industrial uses. Since the middle of 2013 the industrial market in general in London has improved, which is reflection of the overall economic upturn. In addition to this, the booming housing market within Greater London has encouraged those industrial support services to begin to flourish again. The location is likely to attract further demand from these uses due to the efficient local road network, as well as good visibility to passing traffic.

Behind the Richard Klinger site is a vacant site as identified in Section 4. This was originally planned to be Phase 2 of the Fitzroy Business Park, and was owned by the developer of Phase 1. We understand that it was sold to Tesco two years ago with a view to obtaining permission for an extension to the store. We are unaware as to the current position in regards to the planning process and whether this proposal will ultimately be successful. We have already commented that this would be an ideal location for industrial employment uses. Across the A20 from the Klinger site is a greenfield plot understood to be owned by a private individual. Cray Wanderers FC have submitted a planning application for a 5,000 seater stadium and 160 new homes. This was refused and the applicant has subsequently submitted a new application for a 2,200 seater stadium and 6 individual industrial units totalling 10,000 sq ft.

Crayfields Business Park (Cluster 2.1)

- This site comprises the Legal & General scheme, which forms the only Grade A office accommodation in the Cray Corridor.
- The site also benefits from an attractive, good quality “business park”-type environment and setting.
- There is a two storey office building available on this park, available by way of an assignment of an existing lease which has a rent passing of £17.50 per sq ft. Speaking to the agents for Legal & General there is strong interest and terms out to one particular party.

- Although not a traditional location for offices, the park is well let, occupiers of which include Bellway Homes, OCS (Facilities Management Company) and Mitsubishi. This park should therefore be retained for its current use.

Crayfields Industrial Park (Cluster 2.2)

- This site comprises an existing, modern industrial estate that is relatively well let. There are two available units of 11,000 sq ft and 15,000 sq ft, and where rents of £8 per sq ft are being quoted. The agents on the industrial are confident that these units will let well, and that they will achieve in excess of £7.50 per sq ft. Existing tenants on the scheme include a number of electrical wholesalers, as well as a MOT garage and a number of smaller SMEs who operate a variety of B1(c) and B8 businesses.
- Future planning strategy should prioritise the retention of the site in this use.

Infill between the Crayfields Sites

- Given the location of this infill opportunity between two established business locations (office and industrial), it could form an attractive future opportunity, although the agents for Legal & General have certainly expressed a preference for the expansion of the industrial element, which will attract more demand than offices at this location.
- Further, more detailed assessment of the site (including its current planning status) and potential demand should take place to test this potential further.

St Mary's Cray Industrial Business Park (Clusters 3.1-3.6)

- The quality of the existing stock, accessibility and the business environment in this location is lower than in the northern part of the Cray Corridor
- The southern area of St Mary's Cray Industrial Business Park, east of the Cray Avenue (including the large Allied Bakeries site) could be considered for redevelopment / improvement. Our initial view is that retention for industrial employment would be sensible.
- We have no market intelligence to suggest that Allied Bakeries are considering relocating or redeveloping this site in the short to medium term. Adjacent to the bakery is the Lagoon industrial area, where there is one unit available at 13,800 sq ft. The agent is quoting £6.50 per sq ft for the building and has reported that they have received interest mainly from short term interest from such sectors as garages and storage operators. The agent commented that should the site be developed they would expect good demand from B1(c), B2 and B8 uses.

This vacant unit is owned by IGNIS (a City based fund) in isolation. The agent believes that the other buildings within this area are owned by separate parties which would mean that redevelopment would be difficult unless they were assembled, which is something that the council could consider.

- The opposite side of Cray Avenue consists of one business park, which consists of offices and industrial units, called Ravensquay Business Park as well as roadside operators (Big Yellow / Arco / Access self storage etc), and the Sun Chemicals site. Our view is that future planning strategy should be to retain this area for industrial employment uses.
- Between the above areas and the railway line are a mixture of retail (Magnet, TK Maxx, Carpetgiant) and roadside industrial (Tilegiant, Tool Station, Carpets 4 less etc). Our view is that these areas (focused on retail) could be removed from an industrial employment allocation.

The Goahead Bus Depot to the rear of this site has very recently become vacant, and will shortly be coming to the market. The site is two acres and the agents will be quoting £1.2m for the freehold. The site does not have a specific consent, but is zoned for an industrial employment use. The agents suspect that the site may well be suitable for trade uses, but would certainly attract B1(c) and B8 uses.

- The Lessons Hill area comprises a mix of trade counters, offices and older style industrial. Our initial view is that future planning strategy should examine the case for removing this area from an industrial employment allocation as its quality is relatively poor and access is compromised.

There is an industrial unit on the corner of Lessons Hill and Murray Road, which extends to 33,167 sq ft and has recently been sold for £50 per sq ft to an owner occupier, who intends to use the building for B2 and B8 purposes.

- There is increased demand from higher value uses in this location fronting Sevenoaks Way, from occupiers looking to take advantage of the road frontage including trade occupiers and car dealerships.

6 EMPLOYMENT LAND FORECASTING

6.1 Introduction

In this chapter we consider future demand for employment land in LB Bromley over the period 2013 to 2031.

In the past few years there have been a number of studies which have estimated demand for employment land in LB Bromley. These include: the Economic Development and Employment Land Study (GVA Grimley, 2010); the Retail, Office, Industry and Leisure Study (DTZ, 2012); and the Land for Industry and Transport SPG (GLA, 2012). This section begins with a review of these reports to provide context to and reasoning for our own demand forecasts for B use classes in LB Bromley.

6.2 Previous Employment Land Studies

The latest employment land review (ELR) for LB Bromley was produced in 2010 produced by consultants GVA Grimley. The report identified a contraction in the demand for industrial land of -15ha and a limited demand for office uses of 31,100 sqm over the period 2006 to 2026.

The Retail, Office, Industry and Leisure Study (2012) undertaken by consultants DTZ provides an update to the 2010 ELR for land required for office uses for the period 2011 to 2026. Similar to GVA Grimley’s 2010 ELR, the 2012 DTZ report anticipates an office market with limited growth in the region of 30,000 sqm.

The Land for Industry and Transport Supplementary Planning Guidance (SPG) provides guidance on the implementation of policies relating to land for industrial type activities and transport in the London Plan. It provides borough-level benchmark projections for industrial land releases until the end of the planning period (2031). The SPG categorises LB Bromley as a borough for restricted transfer able to with the loss of 9 hectares of industrial land.

A summary of the findings of these reports is given in in **Table 6.2**.

Table 6.1 Previous Net Additional Land and Floorspace Requirements

	Business Type	Net Additional	
		Land (Ha)	Floorspace (Sq m)
		Office	Industrial
<i>GVA Grimley ELR (2010)</i>	Office	3.1	31,073
	Industrial	-15.2	-60,616
<i>DTZ (2012)</i>	Office	3.3	33,400
	Industrial	N/A.	-92,000
<i>GLA SPG (2012)</i>	Office	N/A.	N/A.
	Industrial	-9.0	N/A.

Source: URS; VOA 2012. Figures may not sum due to rounding. N/A = not applicable.

On reflection of the above report variations we consider it necessary to undertake our own forecast of employment land demand. Our forecast will provide an up to date,

robust projection of office floorspace and industrial land required for the planning period. It will improve the preceding approaches in the following ways:

- By setting LB Bromley’s commercial property market in the context of the wider property market area
- Applying the most up to date GLA employment forecasts, which were released in May 2013. These forecasts for London boroughs provide the most up to date forecast incorporating the impact of the recent economic downturn and how the London economy is emerging from the recession
- Investigating the historic relationship between floorspace supply figures and employment patterns by key sectors to inform floorspace projections; and
- Projecting demand for whole the planning period up to 2031.

6.3 Demand Forecasting Approach

Our approach to estimating demand for industrial land and office space is compliant with the National Planning Policy Framework (NPPF), Employment Land Reviews: Guidance Note (2004) and the GLA Land for Industry and Transport SPG (Sept 2012). It is also compliant with the draft National Planning Practice Guidance (NPPG).

Our approach synthesises published employment projections with historic floorspace trends and local economic drivers specific to the property market area (PMA) in which LB Bromley’s industrial and office markets operate.

Our approach projects floorspace for office and industrial uses by applying a compound annual rate of growth to floorspace stock. For industrial uses projected floorspace is converted to land demand using plot ratios. This method overcomes the requirement to convert employment projections to floorspace using employment densities, which vary widely for industrial premises meaning that the conversion to employment can be unreliable.

6.4 Property Market Area

Our forecast takes account of demand for employment land and premises occurring across a wider associated geography – the property market area. Businesses searching for sites or premises will typically consider a number of similar locations in the vicinity. These competing locations within the area of search will often have similar characteristics such as connectivity and transport reliability, access to labour markets, clients, the supply chain and property (rental values, size and grade), which are influential in their choice of location. The area of search for property is typically larger than any one district - unless the market is localised - and can be termed the property market area (PMA).

The relevant PMA for industrial uses incorporates the following London boroughs:

- Bromley, Bexley, Croydon, Greenwich and Lewisham.

It also includes the following Kent districts:

- Dartford and Sevenoaks.

The office market is considered to serve local businesses and have a smaller PMA. Unlike LB Croydon, LB Bromley does is not considered to be a location for head quarter back office functions which, by quantity, make up the majority of Croydon town centre’s office stock. For this reason we consider LB Bromley’s office PMA to comprise:

- Bromley, Bexley, Greenwich, Lewisham, Dartford and Sevenoaks.

6.5 Historic Trends

Floorspace

The Valuation Office Agency (VOA) records the amount of floorspace in an area for tax purposes (the assessment of business rates) by building type. The historic office and industrial floorspace trends across the PMA and LB Bromley are shown in **Table 6.2**.

Table 6.2 Change in Industrial and Office Floorspace 2000 to 2012

	Business Type	2000 m ²	2012 m ²	Diff (%)	CAGR*
<i>LB Bromley</i>	Office	339,000	295,000	-13.0%	-1.2%
	Industrial	460,000	466,000	+1.3%	+0.1%
<i>PMA</i>	Office	919,000	988,000	+7.5%	+0.6%
	Industrial	4,481,000	4,154,000	-7.3%	-0.6%

Source: URS; VOA Business Floorspace (Experimental Statistics) 2012.

Note: CAGR: Compound Annual Growth Rate. Figures may not sum due to rounding.

Analysis of VOA floorspace data finds that there has been a growth in office floorspace of 0.6% per annum (pa) but a contraction in industrial floorspace of -0.6% pa across the PMA since the year 2000. Compared with the PMA, LB Bromley has recorded a stronger growth in industrial floorspace but a contraction in office floorspace.

Employment

The second component of our demand analysis is employment. Historic employment data is drawn from the Annual Business Inquiry (ABI) (pre 2008) and the Business Register and Employment Survey (BRES) (post 2008). Both datasets are compiled by the Office for National Statistics (ONS) and are expressed by Standard Industrial Classifications (SIC), not by use class. To estimate employment by use industrial land class (office, industry and warehousing uses) we have identified those business activities that typically operate from B1, B2 and B8 use class premises, as set out in **Table 6.3**.

Table 6.3 Historic Employment (2000 - 2012)

	Business Type	ABI 2000-08	BRES 2009-12	Weighted CAGR
<i>LB Bromley</i>	Office	5.1%	-5.7%	2.6%
	Industrial	-2.0%	-0.7%	-1.6%
<i>PMA</i>	Office	2.4%	-1.7%	1.2%
	Industrial	-2.0%	-0.2%	-0.9%

Source: URS; ONS 2013. Taking account of SIC discontinuities between ABI and BRES datasets. Figures may not sum due to rounding.

LB Bromley demonstrates a positive rate of CAGR office employment growth of 2.6%, greater than the PMA average. Conversely, LB Bromley shows a greater contraction of industrial employment than the PMA.

6.6 Published Employment Projections

As the PMA includes areas both within and outside Greater London, we draw upon two different employment projections: projections published by Greater London Authority (GLA) Economics and by Kent County Council.

GLA Economics produces employment projections by London borough. The most recent forecasts were published in May 2013 and therefore provide an up to date forecast which takes into account the impact of the recent economic downturn. GLA Economics project employment change by the triangulation of:

- Long term trend analysis of the employment by sector, to capture period of economic contraction and growth;
- Transport improvements planned; and
- The availability of land for the development of new office employment sites in each borough (the forecasts assume that vacant industrial sites become residential over the time period).

In order to project future employment trends for the office and industrial PMAs, the GLA forecast data was combined with the most recent available figures for the two relevant districts from the Kent Economic Forecasting Model (2009) (KEFM).

KEFM forecast uses trend based data to 2008 with 2009 being the first year of forecast. The KEFM forecasts therefore pre-dates the impact of the economic downturn (which began in the first half of 2008). For this reason we have amended the KEFM forecast appropriately to factor in the potential impact of the economic downturn. This factor is based on amendments made to the GLA Economics 2013 forecast compared with the GLA Economics 2009 forecast, and an appreciation of how Kent's economy has responded to the economic downturn since 2008.

Following the above, **Table 6.4** presents the employment forecasts for LB Bromley and the office and industrial PMAs.

Table 6.4 Employment Projections LB Bromley and PMA (2013-2031)

	Business Type	2013	2031	CAGR 2013-31
<i>LB Bromley</i>	Office	20,000	22,100	+0.6%
	Industrial	11,000	8,400	-1.5%
<i>PMA</i>	Office	55,600	66,400	+1.0%
	Industrial	71,000	64,500	-0.5%

Source: URS; GLA Borough Employment Projections (2013); KEFM (2009). May 2013 GLA forecasts only forecasts employment by borough and not by industrial or office uses. The London Employment Figures may not sum due to rounding.

The table shows that employment in LB Bromley is projected to grow at a slower rate than the wider PMA for office and at a stronger negative rate for industrial employment.

The employment figures and timescales presented in Table 6.4 are clarified against the employment figures presented within the Further Alterations to the London Plan in Appendix F. The key differences between the figures presented in Table 6.4 and the FALP are as follows.

- Table 6.4 presents employment figures relating specifically to B use class sectors only (which are estimated to account for approximately 30% of employment in Bromley in 2011)
- Table 6.4 employment figures relate specifically to the Bromley Local Plan period, which is shorter than the FALP period
- The FALP presents a net growth figure of circa 16,000 employees for Bromley to the end of its plan period. Unfortunately a complete sectoral breakdown for boroughs including Bromley is not provided⁷ so it is not possible to determine which specific employment sectors are expected to grow in Bromley, however pan-London employment growth figures are listed and these can be used as a proxy for Bromley. See the end of Section 6.8 for further details.

⁷ The London Employment Time Series (2010) is the latest source that provides any form of sectoral breakdown of employment projections by borough. However, this study considers only 'office', 'industrial' and 'other' sectors, and therefore does not allow us to forecast the breakdown of employment growth in specific non-B use class sectors.

6.7 Synthesis of Historical Trends and Projections

Synthesis Demand

Our forecasting approach calculates the relationship between the compound annual growth rate (CAGR) of historic floorspace, historic employment and projected employment and applies to reach an adjusted CAGR for floorspace demand. The results are shown below.

Table 6.5 Synthesis Forecast for Employment Floorspace

	Floorspace	Employment		Adjusted
	CAGR	CAGR	CAGR	
	2000-2012	2000-2012	2013-2031	CAGR
Office (PMA)	+0.6%	+1.2%	+1.0%	+0.5%
Industrial (PMA)	-0.6%	-0.9%	-0.5%	-0.4%

Source: URS calculations 2013. Figures may not sum due to rounding.

The table shows that demand for office space is projected to grow at a rate of 0.5% a year and for industrial space at a rate of -0.4% a year.

Local Factors Adjustment

To this adjustment factor we consider other local or sub-regional drivers of demand within the office and industrial PMAs which are not picked up in historic floorspace and employment trends. These factors include:

- URS' experience of consulting with property market agent on other projects has found that there is an out migration of industry from central London locations to outer London boroughs, such as Bromley. Central London locations are typically land constrained and offer poor rates of return for land owners compared to other uses, such as residential. As a consequence industry is being forced out or is moving out. The migration of B2 and B8 uses to outer London locations is expected to become more pronounced over the long term as the availability of appropriate land and viability for industrial uses in central London areas falls. It is thought that LB Bromley, and areas such as the Cray Valley Business Park, could benefit from this movement of industry.
- Bromley has good strategic accessibility with important road arteries such as the A21, the A20-M20 and M25 motorway serving the PMA. There is a trend towards industrial occupiers, logistics and warehousing (B8 use class) locating close to lines of strategic accessibility in order to serve businesses located in central London and other areas within the M25. This trend has been observed in areas such as Havering, Dartford and Thurrock and the strategic location of Bromley also allows businesses to this comparative advantage over some other areas of London. The increase in demand for warehousing space in area of high accessibility is in line with a national trend of de-industrialisation, resulting in increased reliance on importing goods, leading to an increase in demand for storage and distribution space. The demand for accessible locations in proximity to central London, for locations close to the M25 to access markets north and west, and for locations close to the M20 to access Channel Ports, is

likely to increase over time. This provides opportunities for LB Bromley to attract B2 and B8 use classes and raise economic growth.

- LB Bromley's Unitary Development Plan contains a series of policies designed to support and assist businesses in the borough. Policies EMP7-10 in particular encourage and support employment land demand and business growth. These policies have however been promoted for a number of years and are not considered to drive a step change in demand for office or industrial space in LB Bromley.

Following the above, **Table 6.6** presents the combined effects of local factors on the adjusted CAGR set out in **Table 6.5** above. This is presented in the form of either a positive impact on demand (↑), a negative impact on forecasts (↓) or no overall impact (↔). Each factor is given a weighting of +/-5% of the CAGR, depending on the direction of the arrow. This weighting is based on professional judgment.

Table 6.6 Local Factors' Impact on Synthesis Forecast

	<i>Office</i>	<i>Industrial</i>
<i>CAGR Forecast</i>	+0.5%	-0.4%
<i>Migration of industry to outer London</i>	↔	↑
<i>Demand for strategic accessibility</i>	↔	↑
<i>Business Support Policies</i>	↔	↔
<i>Adjustment %</i>	+0%	+10%
<i>CAGR Forecast with Local Factors</i>	+0.5%	-0.3%

Source: URS (2013). Note: May not sum due to rounding.

To account for potential variations in our synthesis of projections based on employment, floorspace and local factors we introduce high and low growth scenarios to our demand projections +/-10% either side of our best estimates (medium growth scenario). The three growth scenarios, including the impact of local factors, are presented in Error! Reference source not found..

Table 6.7 Growth Projections with Local Factors and Sensitivity

	<i>Adjusted CAGR</i>	
	<i>Office</i>	<i>Industrial</i>
<i>Low Growth Scenario</i>	+0.43%	-0.30%
<i>Medium Growth Scenario</i>	+0.48%	-0.33%
<i>High Growth Scenario</i>	+0.53%	-0.36%

Source: URS (2013)

6.8 Industrial and Office Forecast for LB Bromley

To translate our industrial floorspace forecasts into industrial land required we apply a plot ratio. The Office of the Deputy Prime Minister Employment Land Review: Guidance Note outlines recommended plot ratios each use time. We also account for a fictional floorspace – vacant space required to enable the commercial market to operate

effectively and allow businesses to move in order to expand / contract. We have applied the recommended optimal floorspace vacancy rate of 8%⁸.

The net growth in demand for office and industrial floorspace over the planning period, 2013 to 2031, is set out in Table 6.8. The table shows that, under the medium growth scenario, over the plan period, the net requirement for additional office floorspace in LB Bromley is estimated to be 28,800m². For industrial floorspace net demand is estimated to contract by 28,800m², the equivalent of minus 6.5 hectares.

Table 6.8 - 2031 Office and Industrial Floorspace Forecast ('000 m2)

	Net Additional Floorspace Requirements 2013 - 2031		
	Low growth.	Medium growth	High growth
Office (m ²)	+25,800	+28,800	+31,800
Industrial (m ²)	-26,000	-28,800	-31,600
Industrial (ha)	-5.9	-6.5	-7.1

Source: VOA; URS 2013. Note: Includes frictional floorspace requirement.

These projections are broadly in line with the Land for Industrial and Transport SPG which guides LB Bromley on the release of minus 9ha over the period 2011-2031. Our office floorspace projections also come in line with those forecast in LB Bromley's 2010 ELR and DTZs retail assessment of 2012.

Apportionment of borough wide growth and/or decline to Cray Corridor

The last step is to apportion a quantum of forecast growth or decline for the B Use Classes over the plan period to the Cray Corridor.

B1a

Based on up to date data supplied by the Council there is approximately 15,136 square metres of B1a floor space in the Cray Corridor which represents 5% of the total borough wide office stock (295,000 square metres according to recent VOA data). A 5% proportion of the forecast growth in B1 under the medium growth scenario (+28,800 sq m) set out in Table 6.8 equates to around 1,440 square metres (15,500 square feet) of net additional floor space. This level of growth is modest, particularly over a 15-20 year plan period and reflects the fact that Bromley Town Centre will continue to be the primary location of B1a growth.

B1c/B2/B8

For B1c, B2 and B8 uses the forecast borough-wide reduction in floor space and land is likely to be far more pronounced and apportioned to the smaller designations and non-designated industrial employment sites located outside of the Cray Corridor which do not benefit from such positive strategic characteristics. As previous sections of the report demonstrate, overall the Cray Corridor displays good strategic characteristics for accommodating industrial and logistical businesses and there is significant occupier demand for space at this location as evidenced through our consultations and surveys, therefore there is not expected to be a significant net loss of B1c/B2/B8 land or space within this study area location over the plan period. Within the continuing gross overall demand for employment land in the borough there are a number of intensification opportunities within the study area as identified within this study.

⁸ London Office Policy Review (2012)

Employment growth in other sectors

Our forecasting exercise considered projections for B use class employment sectors over the plan period. Table 6.4 breaks down the employment figures for industry and offices and Appendix F frames these in the context of the GLA Further Alternations to the London Plan timeframe. It was found during 2011⁹ that B use class employment sectors represented around 30% of the total employment in Bromley.

Other employment sectors in Bromley are set to grow during the plan period and contribute to the additional 16,000 jobs¹⁰ forecasted between 2012 and 2036 in the FALP. These sectors have not formed a focus of this study but can be considered in the context of the wider regeneration of the borough. As mentioned unfortunately the FALP and GLA working paper projections do not offer employment figures for Bromley for all sectors. The GLA stopped producing employment projections by borough and sector in 2011.

Based on the London wide sectoral employment projections that are available it is possible to get a sense of those expected to grow. Those forecast to increase by more than 5% across the Bromley plan period that are not already covered in the B use classes include:

- Accommodation and food services
- Education
- Health
- Arts, entertainment and recreation

⁹ The latest available date for which the GLA provided breakdowns of sectors.

¹⁰ URS was concurrently commissioned by LBB in late 2013 to undertake a study of proposed growth associated with Biggin Hill Airport. In its Economic Growth Plan Update of June 2014 report, the LOCATE partnership sets out its vision for this area and as part of this envisages an additional 2,300 new jobs coming forward during the plan period. It is important to note that this growth is not considered part of new employment growth covered by the London Plan projections. This is because the growth forecast at Biggin Hill generally captures a footloose global demand associated with the international aviation industry therefore it is not possible for it to be picked up through traditional employment forecasts, which are driven in large part from local and regional factor and trends.

7 TRANSPORT REVIEW OF GROWTH SCENARIOS

7.1 Introduction

This chapter considers the highway impacts arising along the Cray Business Corridor over the period 2013 to 2031, with specific consideration to the proposed employment growth at Cluster 1, 2.1/2.2 and 3.6. Consideration is also given as to where infrastructure requirements may be required to support or enable future development to come forward.

The study includes both quantitative and qualitative assessments, considering the existing transport environment in Bromley and how this is expected to change in future years, taking account of developments and improvements which are committed or expected to come forward in the future. Against this backdrop, the role of transport planning measures and infrastructure schemes have been considered.

This section begins by outlining the methodology adopted and agreed with LBB to assess the future year impacts arising from enhanced traffic levels.

7.2 Methodology

Following liaison with LBB, it was identified that a spreadsheet model should be developed to inform the assessment of growth scenarios. The assessment has been prepared in accordance with the Highways Agency guidance 'Local Development Frameworks – Evaluating Transport Impacts', which utilises a first principles method and allows different options to be tested and particular sites / schemes to be turned 'on' or 'off' within the model.

Study Area

The A224, which forms the spine of the Cray Business corridor, provides good linkages and access to the A20, and subsequently Central London to the west and the M25 to the east. The road also provides a key connection between Orpington and Dartford, as well as affording access to a range of local residential areas. As such it carries a mixture of local and strategic traffic. Given the role of the A224 in the Bromley area, it is very busy during the weekday peak, as well as Saturday in regards to retail demand. Each of these periods was considered within the modelling undertaken.

Liaison with LBB identified six junctions which would be considered as part of the study, and which would be included in the spreadsheet model. These are shown in Figure 7.1 below, with a brief description of each provided below.

Junction 1.1 - Ruxley Corner Roundabout

Ruxley Corner roundabout is a 5 arm roundabout just north of the strategic road network of the A20. Edgington Way serves as the main road from the A20 to Ruxley Corner and the North Cray Road serves as the main route into Bexley.

Junction 1.2 – A224 Cray Road / A223 Edgington Way / A20 / A224 Sevenoaks Way

The A224 Cray Road / A223 Edgington Way / A20 / A224 Sevenoaks Way junction is a 5 arm partially signalised roundabout. The junction provides the main access to the strategic road network of the A20 that connects with the M20 and M25 J3.

Junction 1.3 - A224 Sevenoaks Way / Midfield Way

The Midfield Way / Sevenoaks Way junction is a three arm priority junction that serves the residential area to the west of Sevenoaks Way. Left turn only movements are permitted from Midfield Way, whilst on approach to the junction from the north is a right turn bay.

Junction 1.4 – A224 Sevenoaks Way / Station Road / Leeson's Hill

The Sevenoaks Way / Station Road / Leeson's Hill is a 4 arm signalised junction located in a residential area with signalised pedestrian crossings across all arms. An improvement is planned for this junction, which will add an additional lane on both the north and south A224 Sevenoaks Way approaches to the junction, providing a stop line capacity of 3 lanes.

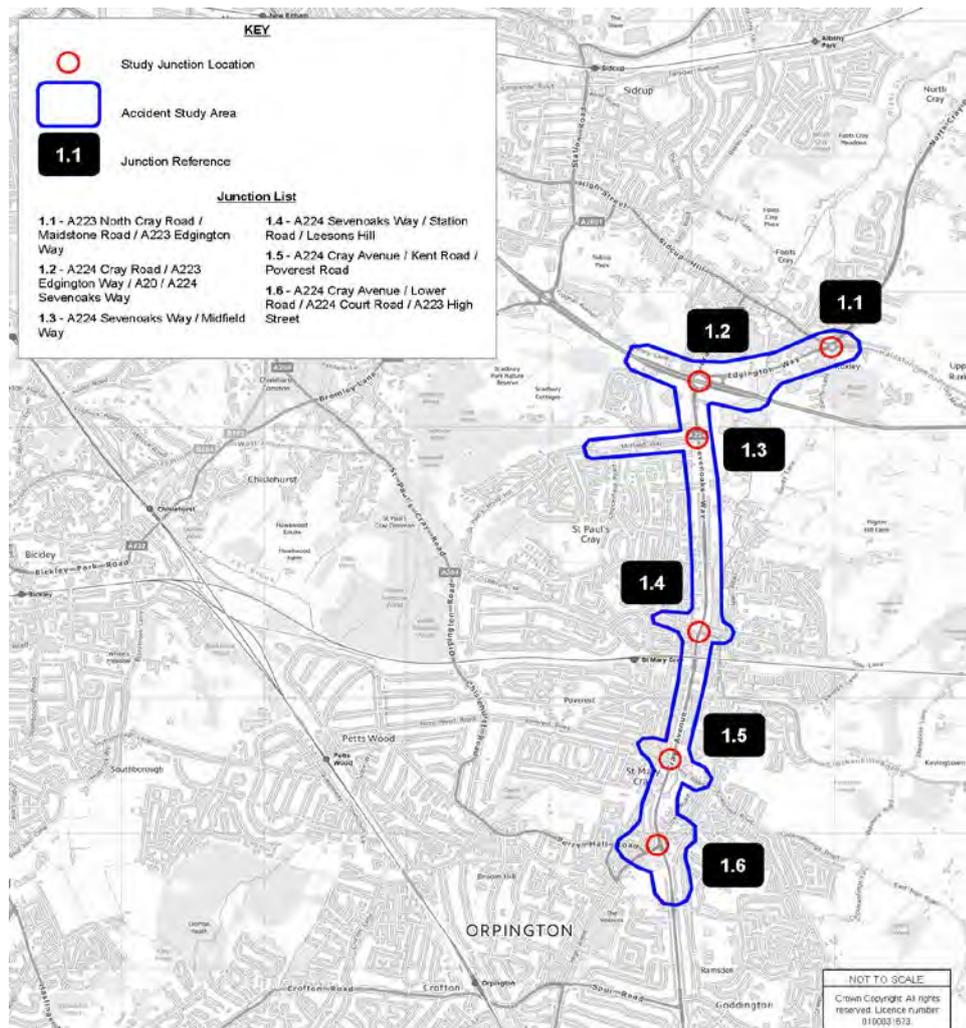
Junction 1.5 – A224 Cray Avenue / Kent Road / Poverest Road

The A224 Cray Avenue / Kent Road / Poverest Road is a 4 arm signalised junction with signalised pedestrian crossings. The junction provides access to the local communities of Petts Wood to the west and St Mary Cray to the east.

Junction 1.6 – A224 Cray Avenue / Lower Road / A224 Court Road / A223 High Street

The A224 Cray Avenue / Lower Road / A224 Court Road / A223 High Street is a 4 arm signalised junction with signalised pedestrian and cycle crossings. Orpington Town centre is located to the west of the junction and this can be accessed via the A223 High Street. There is a planned improvement at the junction to the road markings on the High Street approach arm. The nearside lane becomes a left only instead of left and straight ahead movement and the right turn markings will be redefined.

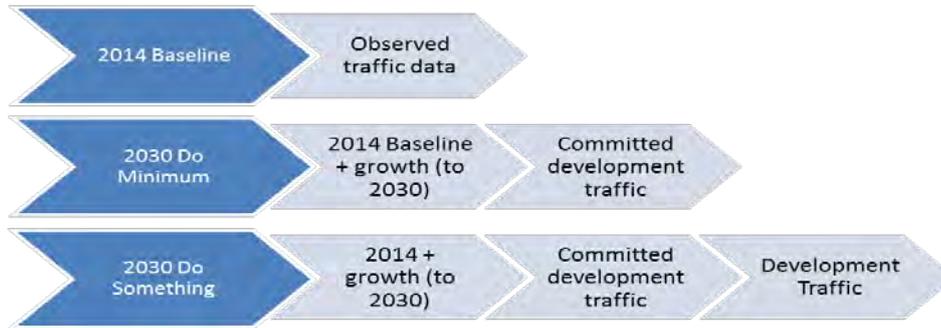
Figure 7.1 - Cray Business Corridor Study Area



Modelling Scenarios

Three scenarios were identified for inclusion within the model. These comprise the 2014 Baseline situation, which represents the existing case, and two future year scenarios. The first is taken at 2030, as agreed with LBB, and represents the future year do minimum situation, which includes background traffic growth and committed development. The final scenario comprises the 2030 Do Something case, which includes traffic associated with the preferred growth option for each corridor.

Figure 7.2 - Summary of spreadsheet model scenarios



2014 Baseline

The baseline scenario was developed based on observed traffic data, which was collected during December 2013 and January 2014. A review of the observed traffic data and consideration of transport assessments prepared for committed developments within the area identified the network weekday ‘peak’ hours as between 0800 – 0900 and 1700 – 1800, and the Saturday peak as between 12:00 and 13:00.

2030 Do Minimum

To forecast the 2030 future year traffic flows for the Cray Business corridor, traffic growth rates between 2014 and 2030 were derived from the Department for Transport’s (DfT) TEMPRO database (version 6.2) and applied to the 2014 baseline.

Due to the congested nature of the corridor, which is likely to limit growth in background strategic through traffic within the peak hours, local factors were derived directly from TEMPRO. These were adjusted by committed development for the 2030 Do Minimum scenario. The committed developments included and agreed with LBB are shown in Table 7.1, with the resultant growth rates shown in Table 7.2. The housing and employment levels indicated are based on a comparison of the floor space levels and the Homes & Communities Agency’s ‘Employment Densities’ (2010) guide.

Table 7.1 - Committed development schedule

Application Name	Houses (units)	D1 (sqm)	B8 (sqm)	B1/B2/B8 (sqm)	Stadium (sqm)	Assumed Jobs*
Cray Wanderers FC	0	0	0	5,850	485	124
ENSO House	0	927	0	0	0	26
Kennedy House	0	180	0	0	0	5
222 Cray Avenue (Honda)	0	0	3,500	0	0	44
H Smith Engineers	28	0	0	0	0	0

*Employment levels are based on the Homes & Communities Agency’s ‘Employment Densities’ (2010) guide

Table 7.2 - 2014 to 2030 Do Minimum growth factors

<i>Growth Factor</i>	<i>AM Peak</i>	<i>PM Peak</i>	<i>Saturday</i>
2014 - 2030	1.0779	1.0775	1.0771

Estimated traffic flows for the various committed developments have been derived from the various planning information available for each application, and are incorporated into the traffic spreadsheet model.

2030 Do Something

Within the 2030 Do Something scenario, the growth rates have also been adjusted to allow for potential future growth in employment at the four redevelopment sites. This has been undertaken, as redevelopment of the four sites would form part of local planning growth targets and therefore would result in double counting of traffic growth once the development specific flows are applied, if unadjusted. As a result, in some instances, traffic flows will be similar or lower to those in the do minimum case.

A summary of each site in regards to assumed employment levels (based on the Homes & Communities Agency's 'Employment Densities' (2010) guide) are provided in Table 7.3, with the resultant growth rates shown in Table 7.4.

Table 7.3 - Proposed development (assumed employment levels)

<i>Proposed Development</i>	<i>Development Type</i>	<i>Quantum (sqm)</i>	<i>Assumed Jobs*</i>
C1N - Ruxley Corner (Klingers Site)	B1/B2/B8	13,500	265
C1S - Ruxley Corner (Land South of Tesco)	B1/B2/B8	15,500	304
C2.1/C2.2 - Land between Crayfields Business Park and Industrial Estate	B1/B2/B8	9,000	176
C3.5 - Lagoon Road Industrial Area	B1/B2/B8	20,000	392

*Employment levels are based on the Homes & Communities Agency's 'Employment Densities' (2010) guide

Table 7.4 - 2014 to 2030 Do Something growth factors

<i>Growth Factor</i>	<i>AM Peak</i>	<i>PM Peak</i>	<i>Saturday</i>
2014 - 2030	1.0712	1.0709	1.0704

Development trip levels were calculated for each cluster based on average trip rates for B1/B2/B8 development derived from TRAVL, which is an industry standard tool for calculating trip rates within the London area. The results are shown in Table 7.5. Trips for each cluster have been distributed across the corridor based on journey to work Census data, with the resultant trip levels by junction shown in Table 7.6. The resultant information was added to the committed development flows, and the growth baseline traffic in order to calculate the resultant 2030 Do Something scenarios. Analysis of the TRAVL database indicated that no trips are likely to be generated for these development types on a Saturday. On this basis, the performance of the road network in the 2030 Do Something case on Saturday is assumed to be commensurate with the 2030 Do Minimum case.

Table 7.5 - Proposed development trip generation

Proposed Development	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arrivals	Departures	Total	Arrivals	Departures	Total
C1N - Ruxley Corner (Klingers Site)	46	19	65	20	40	60
C1S - Ruxley Corner (land south of Tesco)	53	22	75	23	46	69
C2.1/C2.2 - Crayfields	31	13	44	14	27	41
C3.5 - Lagoon Road Industrial Area	68	28	96	30	59	89
Total	198	82	280	87	172	259

Table 7.6 - Proposed development trip generation by junction

Peak	Site	Junction (vehicles passing through junction)					
		1.1	1.2	1.3	1.4	1.5	1.6
AM	<i>Ruxley Corner (Klingers Site)</i>	9	53	18	18	18	18
	<i>Ruxley Corner (land south of Tesco)</i>	11	60	21	21	21	21
	<i>Land between Crayfields Business Park and Industrial Estate</i>	6	31	31	12	12	12
	<i>Lagoon Industrial Area</i>	14	59	59	59	38	27
PM	<i>Ruxley Corner (Klingers Site)</i>	9	45	17	17	17	17
	<i>Ruxley Corner (land south of Tesco)</i>	10	52	20	20	19	19
	<i>Land between Crayfields Business Park and Industrial Estate</i>	6	29	29	11	11	11
	<i>Lagoon Industrial Area</i>	13	54	54	54	35	25

7.3 Capacity Assessment

For each of the junctions forming part of the modelled study area, baseline junction capacity assessments have been conducted to establish the existing operational performance of the network. These have then been taken forward to determine the operation of the junctions in the future case.

Industry standard software programmes have been employed to undertake this analysis, and comprise the following:

- PICADY (v8) for priority junctions;
- ARCADY (v8) for roundabouts;
- LINSIG (v3) for signalised junctions; and
- TRANSYT (v14) for signalised roundabouts

Each of the models is governed by capacity thresholds, whereby in each case 1.0 (or 100%) represents the theoretical capacity of a junction. For uncontrolled junctions (priority junctions and roundabouts), the recommended capacity threshold is 85%. For signalised junctions, the optimum performance threshold is 90%.

In order to simplistically illustrate the existing performance of the junctions, a RAG (Red, Amber, Green) analysis has been prepared, whereby:

- Green indicates that a junction is operating within its recommended threshold (under 85% (roundabouts and priority junctions) or 90% (for signals));

- Amber indicates that the junction is operating in excess of its recommended threshold, but below the theoretical threshold (between 85-100% (for roundabouts and priority junctions) or 90-100% (for signals)), and;
- Red indicates that the junction is operating in excess of its theoretical threshold (over 100%)

The results of the modelling assessment are set out below.

2014 Baseline

Tables 7.7 and 7.8 below provides an overview of the baseline results for junctions 1.1 to 1.6 for the existing configuration and planned improvements where applicable, using the RAG (Red, Amber, Green) analysis system. Full results can be found in Appendix E.

Table 7.7 2014 Baseline Junction capacity summary

Junction / Link	Location	Junction Type	Performance Summary		
			AM Peak	PM Peak	Saturday Peak
J1.1	Ruxley Corner	Roundabout	Amber	Amber	Amber
J1.2	A224 Cray Road/ A223 Edgington Way/ A20/ A224 Sevenoaks Way	Roundabout with partial signals	Red	Amber	Amber
J1.3	A224 Sevenoaks Way / Midfield Way	Priority	Amber	Amber	Red
J1.4	A224 Sevenoaks Way / Station Road / Leeson's Hill	Signalised	Amber	Amber	Green
J1.5	A224 Cray Avenue / Kent Road / Poverest Road	Signalised	Green	Green	Green
J1.6	A224 Cray Avenue / Lower Road / A224 Court Road / A223 High Street	Signalised	Red	Amber	Red

Table 7.8 2014 Baseline Junction capacity summary (planned improvements)

Junction / Link	Location	Junction Type	Performance Summary		
			AM Peak	PM Peak	Saturday Peak
J1.4	A224 Sevenoaks Way/ Station Road /Leeson's Hill	Signalised	Green	Green	Green
J1.6	A224 Cray Avenue / Lower Road / A224 Court Road / A223 High Street	Signalised	Red	Amber	Red

From a review of the existing network, it is apparent that the network is heavily congested during the weekday and Saturday peaks. Particular hotspots include Junction 1.2, which forms the key connection point for the Cray Business Corridor in regards to access to and from the wider strategic network via the A20 Sidcup Bypass, and Junction 1.6, which connects the A224 with Orpington High Street and Lower Road.

In regards to junction 1.2, the baseline results show the junction operates over maximum capacity in the AM peak, with a queue of 34 passenger car units (pcus) on the A20 off slip (WB). Blocking back was also observed when the signalised pedestrian crossing, on the A224 southern arm of this junction was called. Junction 1.6 operates over capacity in the AM and Saturday peaks, with maximum queues of 51 pcus in the AM peak and 67 pcus in the PM peak on the A224 Cray Avenue (northern arm). Planned improvements will have minimal impact on queuing at this junction.

Ruxley Corner (Junction 1.1) operates at capacity (between 85 and 100%) in the existing case. However queuing is generally limited with a maximum queue of eight pcu's in the AM peak on Maidstone Road. Site observations noted that the performance of the roundabout was intermittently affected by queuing back from the Foots Cray Hill High Street/ A224/A211 Junction, which falls outside the study area.

At Junction 1.3, queuing was observed at both the left turn from Midfield Way in the weekday PM and Saturday peak, and at the right turn from the A224 Sevenoaks Way for all peaks. For the right turn, this was observed to lead to the blocking on occasion of through movements, with a maximum queue of 41 pcu's in the Saturday peak. A large number of right turners are observed at this location, due to the banning of right turn movements downstream at Junction 1.4.

Planned improvements to the A224 Sevenoaks Way / Station Road / Leeson's Hill junction (1.4) should ensure that this junction operates within capacity, with queuing expected to reduce on all arms with the exception of Station Road following the highway works.

Only Junction 1.5, operates within capacity in the existing case, with any significant queuing observed on the A224 resulting from upstream junction queuing e.g. Junction 1.6 (A224 Cray Avenue / Lower Road / A224 Court Road / A223 High Street).

2030 Do Minimum and Do Something

The first of the future year scenarios considers the operation of the Cray Business Corridor in 2030, accounting for background growth in traffic and committed development traffic. This serves as a marker for considering the impact of growth at the four clusters identified for redevelopment. The table below summarises the operation of the six junctions within the study area in the 2030 Do Minimum case.

Table 7.9 2030 Do Minimum junction capacity summary analysis

Junction / Link	Location	Junction Type	Performance Summary		
			AM Peak	PM Peak	Saturday Peak
J1.1	Ruxley Corner	Roundabout	Amber	Red	Amber
J1.2	A224 Cray Road / A223 Edgington Way / A20 / A224 Sevenoaks Way	Roundabout with partial signals	Red	Red	Red
J1.3	A224 Sevenoaks Way / Midfield Way	Priority	Red	Red	Red
J1.4	A224 Sevenoaks Way / Station Road / Leasons Hill	Signalised	Green	Amber	Green
J1.5	A224 Cray Avenue / Kent Road / Poverest Road	Signalised	Amber	Green	Green
J1.6	A224 Cray Avenue / Lower Road / A224 Court Road / A223 High Street	Signalised	Red	Red	Red

The second scenario considers the operation of the Cray Business Corridor in 2030, with the addition of traffic from the four potential redevelopment sites identified through the employment land assessment. A summary of the operational performance of the six junctions failing within the study area are set out below.

Table 7.10 2030 Do Something junction capacity summary analysis

Junction / Link	Location	Junction Type	Performance Summary		
			AM Peak	PM Peak	Saturday Peak
J1.1	Ruxley Corner	Roundabout	Amber	Red	Amber
J1.2	A224 Cray Road / A223 Edgington Way / A20 / A224 Sevenoaks Way	Roundabout with partial signals	Red	Red	Red
J1.3	A224 Sevenoaks Way / Midfield Way	Priority	Red	Red	Red
J1.4	A224 Sevenoaks Way / Station Road / Leasons Hill	Signalised	Amber	Amber	Green
J1.5	A224 Cray Avenue / Kent Road / Poverest Road	Signalised	Amber	Green	Green
J1.6	A224 Cray Avenue / Lower Road / A224 Court Road / A223 High Street	Signalised	Red	Red	Red

In addition to the summary information presented above, a summary chart for the AM and PM peaks has also been provided below which illustrates the capacity results for each of the study junctions, by scenario. For the purposes of the graph, the threshold between green and amber status is shown as 90%, for the non-signalised junctions e.g. junctions 1.1 and 1.3, the thresholds is 85%.

Figure 7.3 AM Peak Capacity Summary

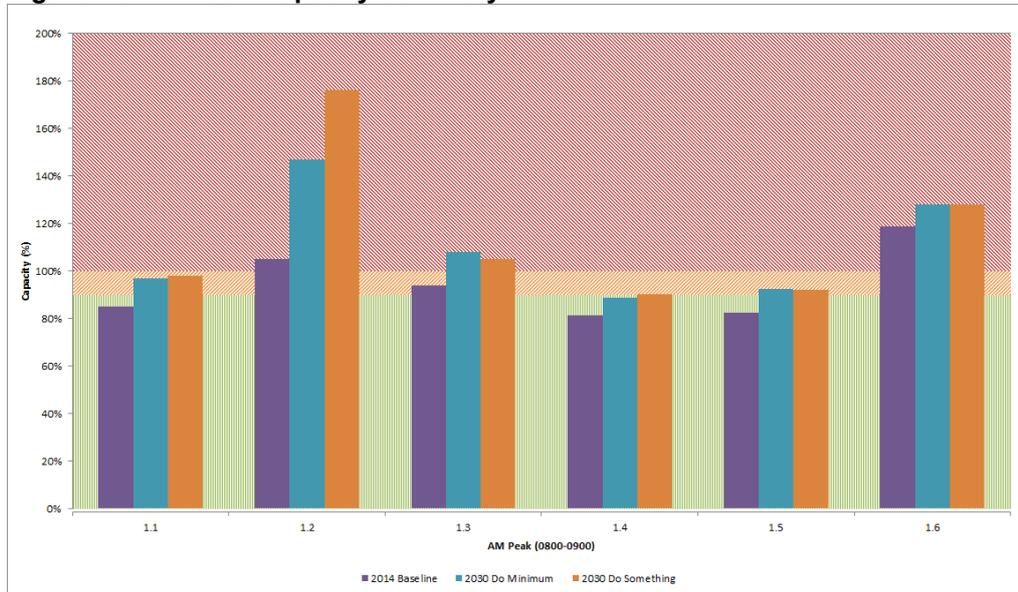
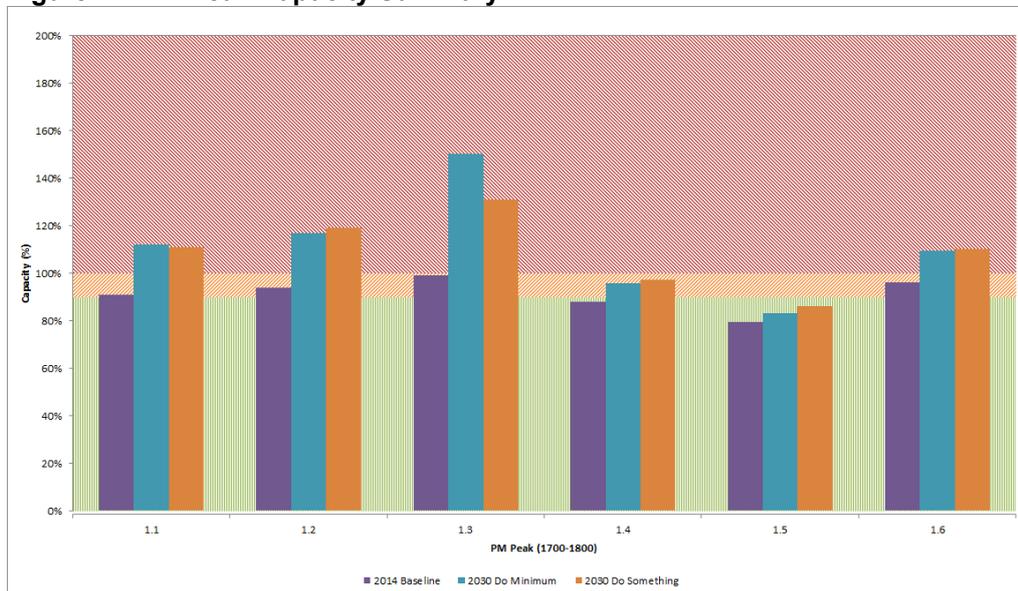


Figure 7.4 PM Peak Capacity Summary



At Ruxley Corner Roundabout (Junction 1.1), the 2030 Do Minimum results show the junction is forecast to operate over the recommended capacity in the AM and Saturday peaks, and over capacity in the PM peak. This is also the case for the 2030 Do Something scenario, with generally small changes in RFC and queuing when compared to the 2030 Do Minimum results. The most significant impacts are as follows:

- In the PM peak, the ratio of flow to capacity (RFC) on Edgington Way increases from 101% to 107%, with an increase in forecast queues from 31 to 64 pcus.

The A224 Cray Road/ A223 Edgington Way/ A20/ A224 Sevenoaks Way Roundabout (Junction 1.2) is predicted to operate over capacity in both the 2030 Do Minimum and Do Something scenarios. The most significant differences relative to the Do Minimum case are set out below:

- In the AM peak, the Degree of Saturation (DoS) on the A20 Offslip WB is forecast to increase from 147% to 176% with queuing increasing from 145 to 204 pcus.
- In the PM peak, the DoS on A224 Sevenoaks Way is forecast to increase from 108% to 114% with queuing increasing from 91 to 133 pcus. All other arms are forecast to operate within capacity.

At the Sevenoaks Way/Midfield Way junction (Junction 1.3.), significant queuing is expected at both the right turn from Sevenoaks Way and the left turn from Midfield Way. The junction operates over capacity in all scenarios. Similar impacts are expected between the Do Minimum and Do Something scenarios in regards to queuing, although due to changes in the pattern of flows, the maximum RFC is expected to be lower in the AM and PM peaks relative to the Do Minimum.

The 2030 Do Minimum results show that the A224 Sevenoaks Way / Station Road / Leasons Hill junction (1.4) is forecast to operate over the recommended capacity threshold in the PM peak scenario only. In the 2030 Do Something scenario, the AM peak is also predicted to operate just above the recommended capacity level, although changes in the Degree of Saturation and queuing are generally small, with a maximum increase of four pcus in the PM peak on the A224 Sevenoaks Way (south) arm, from 51 pcus to 55 pcus.

At Cray Avenue / Kent Road / Poverest Road (1.5), the junction is predicted to operate over the recommended capacity in the AM peak only, in both the 2030 Do Minimum and Do Something scenarios. Generally minor changes in queuing are forecast in all scenarios when compared to the 2030 Do Minimum results, with a maximum increase of 6 pcus on the Cray Avenue (North) arm in the AM and PM peaks.

Finally, at the A224 Cray Avenue / Lower Road / A224 Court Road / A223 High Street junction (1.6), the junction operates over capacity in the AM, PM and Saturday peaks. This is the case for both the 2030 Do Minimum and Do Something scenarios. The most significant differences were as follows:

- In the AM peak, the DoS on A224 Cray Avenues is forecast to increase from 111.2% to 113.2%, with queuing increasing from 86 to 95 pcus. Furthermore, the DoS on Court Road increases from 107% to 109.4% and queuing increased from 65 to 74 pcus.
- In the PM peak, the DoS on A224 Cray Avenue is forecast to increase from 105.6% to 110.3%, with an increase in forecast queues from 74 to 95 pcus

7.4 Accident Analysis

An assessment of the road safety record for the Cray Business Corridor was undertaken for the study area illustrated at Figure 7.1. This was based upon Personal Injury Accident (PIA) data sourced from TfL for the most recent five year period available (1st October 2008 to 31st September 2013).

Within the study area (Figure 7.1), a total of 215 accidents were reported during the study period. This comprised 191 slight accidents, 23 serious accidents, and 1 fatal accident. The one fatal accident was the result of driver error, with the driver using the wrong side of the carriageway on the A20 Sidcup Bypass, resulting in a head on collision. Table 7.11 below summarises the results for the six junctions identified for assessment within the study area.

Table 7.11 2030 Do Something junction capacity summary analysis

Ref	Junction	Junction Type	Accidents, by Severity			
			Slight	Serious	Fatal	Total
1.1	North Cray Road/Maidstone Road/Edgington Way	Roundabout	24	1	0	25
1.2	Cray Road/Edgington Way/A20/Sevenoaks Way	Roundabout	29	6	0	35
1.3	Sevenoaks Way/Midfield Way	Priority	4	4	0	8
1.4	Sevenoaks Way/Station Road/Leesons Hill	Signalised	33	2	0	35
1.5	Cray Avenue/Kent Road/Poverest Road	Signalised	20	1	0	21
1.6	Cray Avenue/Lower Road/Court Road/High Street	Signalised	25	3	0	28

A review of accidents occurring at these junctions, determined that there are accident trends apparent at three junctions within the area. At Junction 1.2, 15 accidents involved vehicles driving into the rear of the vehicle in front, particularly whilst on the roundabout, and are therefore likely to be attributable to the partial signalisation of this junction.

Of the eight accidents reported at Sevenoaks Way / Midfield Way (1.3), five of them, including the four serious accidents, were as a result of a failure to give way. A failure to give way and moving off or turning within the junction and colliding with another vehicle was also the cause of the majority of incidents at Sevenoaks Way/Station Road/Leesons Hill junction (1.4).

In regards to Sevenoaks Way / Midfield Way, right turns from Midfield Way were banned in 2011, whilst recent improvements have taken place to improve left turning give way conditions. However, accidents regarding right turners from Sevenoaks Way to Midfield Way remain a concern, and further improvements to the junction may be required in the future case.

For junction 1.4, forthcoming works should improve capacity and reduce risk taking by motorists, whilst also improving management of right turners. This should contribute in addressing the accident trend identified; however it is recommended that this junction continues to be monitored post implementation.

No other accident trends, outside of these study junctions were notable within the study area.

7.5 Access Appraisal

Cluster 1: Ruxley Corner / Foots Cray Business Area

As referenced within the site profile, the potential for redevelopment at this cluster is identified for two parcels of land, comprising the 'Klinger Site' and 'Land to the South of Tesco'.

For the former Klinger Site (C1N), access has historically been provided by a priority junction at Edgington Way, approximately 170m west of Ruxley Corner Roundabout.

This access permitted all movements in, but left turn movements out only. This access point is currently stopped up. Vehicular accesses are also located immediately east and west of this location, providing access to Ruxley Corner Industrial Estate north of Edgington Way. A total of six accidents associated with turning traffic have occurred at these locations over the past five years.

The proximity of these junctions, mean that the only option for access from this location would be a priority junction, with traffic permitted to exit left only. An initial junction appraisal of the site access in 2030, suggests that sufficient capacity should be available to accommodate predicted demand in vehicle trips to and from the site. However, queuing back from Ruxley Corner Roundabout is likely to block access to this junction for right turners, and therefore improvements to this junction to ensure good access to the site remains, is likely to be important.

Due to the accident record and cause of these incidents, it is recommended that a full access appraisal and Road Safety Audit would be required to support the re-use of this facility. An initial appraisal of the existing junction configuration, suggests that sufficient capacity could be available to accommodate the predicted vehicle demand.

At land south of Tesco (C1S), no existing access is available. The delivery of this parcel would therefore be dependent on agreeing access rights either via Tesco (to the west and via Edgington Way) or Fitzroy Business Park (to the east, accessing the highway network via Sandy Lane). Given the congested nature of the Edgington Road corridor, offering alternative access from Sandy Lane through Fitzroy Business Park, should be considered. It is recognised that this would impinge on a key attractor of the site, access from Edgington Way; however it would assist in limiting additional pressure at Ruxley Corner roundabout and the Cray Road/Edgington Way/A20/Sevenoaks Way Roundabout (1.2) by offering alternative routing via Sandy Lane and by minimising the need for u-turning at Junction 1.2, on the basis that vehicles are only able to turn left out of the Tesco access.

Cluster 2.1/2.2: Crayfields Business Park and Industrial Estate

The land proposed for redevelopment currently has no formal access. Delivery of suitable access arrangements will therefore be required to enable this site to come forward, and it is suggested that any access is likely to take the form of a priority junction from New Mill Road to the north of the proposed infill site. A key consideration at this location will be the line of trees that currently border this green space, and whether any preservation orders restrict their removal. No accidents have occurred at this location over the past five years.

Traffic from this infill site is likely to connect with the Cray Business Corridor at the A224 Sevenoaks Way/Main Road junction. The junction is set to be upgraded from a priority junction to a fully signalised junction by LBB, and will also be linked by UTC SCOOT to the wider signal corridor in order to better manage movements. The level of traffic from the infill site is likely to be low. Whilst this junction falls outside those agreed for assessment, an initial review of the junction using a model previously developed by LBB, suggests the junction will operate over recommended capacity thresholds in the 2030 Do Minimum and subsequently Do Something case. As such, any application for this site will need to give careful consideration to the operation of this facility in the context of traffic generated by the development.

A review of the recent accident history at this junction, suggests there have been five slight accidents at this junction over the past five years, three of which were associated with conflicts between turning traffic. The introduction of signals should help to control such conflicts.

Cluster 3.5: St Mary’s Cray Industrial Business Park - Lagoon Road Industrial Estate

Existing access to the development is available from the A224 Cray Avenue/Lagoon Road priority junction. All movements are possible from this junction in its existing configuration. No existing accident trends are identified at this location, whilst an initial junction appraisal of the site access in 2030, suggests that sufficient capacity should be available to accommodate predicted demand in vehicle trips to and from the site.

7.6 Qualitative Assessment

Introduction

The quantitative assessment presented earlier within this report has given consideration to the anticipated traffic impacts associated with the delivery of the potential site allocations.

To supplement that analysis and give further consideration to each of the potential sites, a qualitative assessment has also been conducted to provide a high level overview. Each site has therefore been reviewed and subsequently evaluated against pre-defined criteria. These are set out in Table 7.12, qualified as red, amber or green based on the assessment matrix, giving consideration to site access, location and access to sustainable transport networks. The sites have been assessed individually.

Table 7.12 Qualitative assessment criteria

Criteria Ref	Criteria	Red	Amber	Green
A	Access to Existing Highway	No direct access to the existing highway	Site adjacent to existing highway	Site has an existing formal access to the highway
B	Road Safety	5 or more accidents occurring within 25m of the site access over a five year period	Less than 5 accidents within 25m of the site access over a five year period	No accidents within 25m of the site access over a five year period
C	Proximity to Local Residential Areas	≥ 1,500m of walking to local residential areas	Between 500m and 1,500m of walking to local residential areas	≤ 500m of walking to local residential areas
D	Proximity to Existing Pedestrian Networks	No immediate access to existing pedestrian and cycle networks	Some access to existing unpaved pedestrian and cycle networks	Full access to existing paved pedestrian and cycle networks
E	Proximity to Existing Cycle Networks	≥ 500m from an existing cycle route	Located within 500m of an existing cycle route	Located on an existing cycle route
F	Proximity to Existing Bus Network	< 4 services available within 640m of the site	Between 4 and 6 services available within 640m of the site	≥6 services available within 640m of the site
G	Proximity to Existing Train Services	≥ 2,000m walk from existing train services	Between 960m and 2,000m walk from existing train services	≤ 960m walk from existing train services

H	PTAL Level	1-2	3-4	5-6
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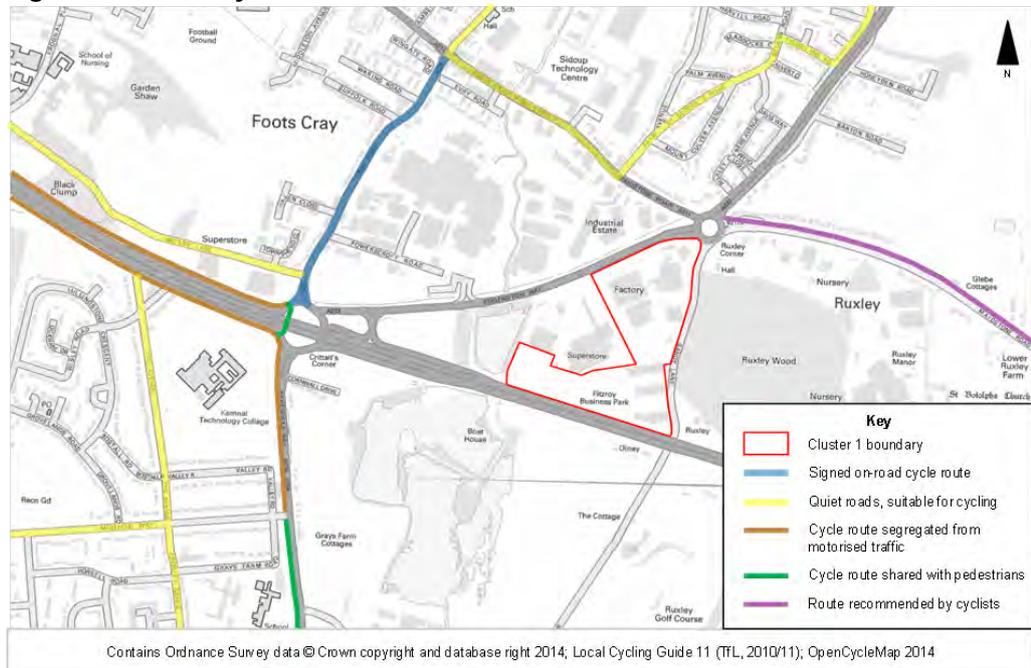
Site Overview

Cluster 1: Ruxley Corner / Foots Cray Business Area (Klinger and Land South of Tesco)
 Both potential sites are located in the northwest of the Borough, at the boundary between Bromley and Bexley. Access is available to the Klinger Site, although this is currently stopped up. No direct access currently exists for land south of Tesco.

The key corridor for travel through this area is the A223 Edginton Way, connecting Ruxley Corner Roundabout and the Cray Road/Edginton Way/A20/Sevenoaks Way Roundabout, a key gateway to the business corridor. Footways extend along the northern side of Edginton Way between these two junctions, however along the southern side, footways only extend as far west as the Mckillop Way access. A signalised crossing point is located 110m west of the Klingers Road access, and an uncontrolled crossing point is located 90m east of this point.

No cycle routes are present along this road, with the closest cycle routes located to the west on the A20 Sidcup Bypass (segregated), southwest along the A224 Sevenoaks Way. Also, to the east, along the B2173 Maidstone Road (towards Swanley), is a route recommended by cyclists. As shown by Figure 7.5, this represents a clear gap in the cycle network.

Figure 7.5 Local Cycle Facilities



Four bus services, comprising the R11, 321, 233 and 492 are available within 640m of Cluster C1, offering regular connections to key local destinations such as Eltham, Bexley, Sidcup, Lewisham and Orpington. The closest services comprise the R11 and the 321 (24 hour service), which are accessible from Tesco, approximately 150m west of the site. The other two services are available to the north east of the site from the

A211 Maidstone Road. The closest rail station is St Mary Cray, which is located approximately 3km to the south west. The site has an overall PTAL rating of 2 (Low).

Cluster 2.1/2.2: Crayfields Business Park Industrial Estate

The site is located to the west of the Cray Business Corridor, and is bounded by New Mill Road and Main Road. No direct access is currently available to the site.

Formal footways are present on the northern side of New Mill Road, and are present on both sides of Main Road. As part of the proposed signalisation of Main Road/Sevenoaks Way junction, controlled pedestrian crossing facilities will also be introduced across the A224.

The closest cycle path is located to the west of the site adjacent to the A224, running north from Main Road to the A20, via a mix of off road and on road cycle paths, where it connects with a further cycle route, which provides access to the west alongside the A20. A cycle route is also available to the south, towards Orpington, and comprises a mix of formal cycle paths and on road cycle routes. A new off road facility is due to be implemented on the A224 between Station Approach and Poverest Road to improve facilities for cyclists and connections to St Mary Cray Station.

The site has a PTAL rating of 1b, which reflects poor public transport accessibility. The closest station is 1900m from the site at St Cray, with the closest bus services accessible on A224 Sevenoaks Way, south of Main Road (within 640m). Three services operating at regular frequencies depart from these bus stops, offering connections to St Mary Cray Station, Orpington, Bexley, Sidcup and Woolwich.

Cluster 3.5: St Mary's Cray Industrial Business Park - Lagoon Road Industrial Estate

The site sits at the heart of the Cray Business Corridor, with direct access to and from the A224 via an existing priority junction at Lagoon Road.

Formal footways extend both north and south from the Lagoon Road access, with an uncontrolled crossing facility, 50m north of the access, providing passage to and from the A224 northbound bus stop. The site will also benefit from a new off road cycle facility, which is due to be implemented between the junctions of Station Approach and Poverest Road to improve facilities for cyclists. This will enable improved cycle connections to St Mary Cray Station, as well as northwards towards the A20 cycle route, and south towards Orpington.

The site is located within 700m of St Cray Station, offering frequent rail services to destinations such as London Victoria, Ashford International and Sevenoaks. Sheltered bus stops are located immediately south of the access for southbound services, and 90m north of Lagoon Road for northbound services. These bus stops provide access to seven bus routes, and a further 3 services are available within 500m of the site, offering connections to a range of destinations, including Woolwich, Chislehurst, Orpington, Sidcup and Bexley. Overall, the site has good accessibility to public transport reflecting, as reflected by its PTAL score of 4.

Evaluation

The qualitative transport appraisal has been carried out against the criteria presented in Table 7.13, qualified as red, amber or green based on the assessment matrix, giving consideration to site access arrangements, location in relation to services and amenities, and access to sustainable transport networks. The sites have been assessed individually and not cumulatively with adjacent sites.

Table 7.13 Qualitative assessment of site's identified for employment growth

Criteria Ref	Criteria	C1N	C1S	C2.1/2.2	C3.5
		Ruxley Corner / Foots Cray Business Area (Klingers Site)	Ruxley Corner/ Foots Cray Business Area (land south of Tesco)	Land between Crayfields Business Park and Industrial Estate	St Marys Cray Industrial Business Pak (Lagoon Industrial Area)
A	Access to Existing Highway	Yes	Located close to existing road	Located close to existing road	Yes
B	Road Safety	7 accidents	4 accidents (Tesco Access)	0 accidents (New Mill Road)	2 accidents
C	Proximity to Local Residential Areas	300m	400m	400m	300m
D	Proximity to Existing Pedestrian Networks	Direct Access	Dependent on securing access (private land)	Direct Access	Direct Access
E	Proximity to Existing Cycle Networks	300m (Maidstone Rd)	300m (Maidstone Rd)	200m (A224)	0m
F	Proximity to Existing Bus Network	4 bus services	4 bus services	3 bus services	9 bus services
G	Proximity to Existing Train Services	3km	3km	1.9km	670m
H	PTAL Level	2	2	1b	4

Of the four sites identified for redevelopment, Site 3.5 has the most favourable characteristics generally in regards to location and accessibility. For the Klingers site, consideration of conflicts with existing accesses east and west of the site will be key in taking this site forward, as will improving connections to cycle and bus networks. Similarly for site 2.1/2.2, improved bus service accessibility should comprise a focus of any development strategy.

7.7 Mitigation

Based on the results of the highway assessment, alongside the qualitative assessment of the four sites proposed for future redevelopment, consideration is given to mitigation which is likely to be required to facilitate future development in the area.

Given the scale of development and level of trips estimated to be generated by each site, the delivery of enabling infrastructure by a single developer is likely to be beyond the scope of a single applicant alone, and therefore it is likely that contributions will need to be pooled from these developments, and combined with those sourced from other future schemes in order to deliver the required improvements.

Highway Improvements

New traffic signals are due to be installed at the Nugent Centre exit/entrance and Main Road junction with Sevenoaks Way, alongside the upgrade of the A224/Leesons Hill (Junction 1.4) traffic signal junction. Alongside these works, it is proposed by LBB that Urban Traffic Control (UTC) SCOOT (Split Cycle Offset Optimisation Technique) will be installed at each set of traffic signals from Poverest Road to Main Road, in order to link

and co-ordinate these locations. This will allow timings at signals to be varied to suit the demands of the current traffic conditions, and should improve the through flow of traffic through the corridor. LBB expect that journey time delays on the A224 would be reduced by anything from 8% to about 20% through the use of UTC SCOOT.

The installation of this system and associated junction upgrades will assist in managing and controlling the flow of traffic through the heart of the corridor in the future case. However, as identified by the highway assessment, the Cray Road/Edgington Way/A20/Sevenoaks Way Roundabout (Junction 1.2) and the Cray Avenue/Lower Road/Court Road/High Street Signalised Crossroads (Junction 1.6), which essentially form the gateways to the corridor, will comprise key congestion hotspots in the future case and are unlikely to be affected by these improvements. Furthermore, queuing back from right turners at Sevenoaks Way/Midfield Way (Junction 1.3) and capacity issues at Ruxley Corner roundabout are also likely to comprise key issues in the future case.

An initial review of options for delivering improvements to the four junctions referenced above has been undertaken, in order to identify potential improvements that may allow additional traffic to be accommodated in the future case. In the short term, it is recommended that the improvements set out below are taken forward to be reviewed and developed in further detail.

Junction 1.1 – Ruxley Corner Roundabout

At Ruxley Corner roundabout, both the A223 Edgington Way and Maidstone Road (W) are likely to operate over capacity and cause significant tailbacks by 2030 in the PM peak. To address this problem, and subject to further review, the following improvements are suggested:

- Widen the Edgington Way approach to 3 lanes (Lane 1 – left & ahead to North Cray Rd, Lane 2 – ahead to North Cray Rd, Lane 3 right to Maidstone Way (E) and Sandy Lane)
- Widen the Maidstone Road (W) approach to 3 lanes to the east of the residential access
- Widen circulatory carriageway between Edgington way and North Cray Road to 3 lanes (to accommodate the 3 lane approach from Edgington Way)
- Potentially provide a toucan crossing across Sandy Lane and Maidstone Road (E) to connect with the proposed cycle route along Edgington Way

Initial testing suggests that queuing on the Edgington Way and Maidstone Road (W) arms will reduce significantly with the introduction of these changes. The junction is expected to operate within the maximum capacity threshold as a result.

Junction 1.2 - Cray Road/Edgington Way/A20/Sevenoaks Way Roundabout

The operation of this junction is likely to be severely compromised in the future case as a result of background growth in traffic and committed development, with any additional traffic from the redeveloped clusters accentuating the problems. As a key gateway to the Cray Business corridor, detailed consideration will need to be given to the performance of this roundabout, and it is recommended that a specific study is undertaken to develop an optimum scheme for future delivery.

An initial review of the junction suggests that full signalisation of the junction will be required, in order to control and manage queuing, with a particular focus on minimising tailbacks to the A20. This should also assist in better controlling flows and the accident trend relating to rear shunts on the circulatory carriageway. In addition to this, and subject to further study, potential further improvements include:

- Realigning the Edgington Way approach to the roundabout to move the entry further north from Edgington Way.
- Creating a junction for access onto to the A20 eastbound from the realigned Edgington Way arm

- Widening the circulatory carriageway between the realigned Edgington Way arm and the A224 Seven Oaks Road (S) arm.
- Provision of a segregated left turn from A20 WB off slip to A224 Sevenoaks Way
- Extending the proposed SCOOT network to include this junction.

During site observations, it was noted that blocking back occurred from the southern arm of the junction, when the pedestrian crossing was called. With full signalisation of the junction, this crossing could be incorporated into the overall phasing strategy, reducing the effects of this facility. However, in the shorter term, it may be worth reviewing the demand for this crossing and pedestrian desire lines, and whether this could be relocated further south.

Junction 1.3 – A224 Sevenoaks Way/Midfield Way

At Junction 1.3, the blocking back of vehicles attempting to turn right in Midfield Way will be a continuing concern in the future case. The introduction of signals at the A224 Sevenoaks Way / Main Road junction, to the south, may offer more gaps upstream for vehicles turning into and out of Midfield Way. However, with the potential for blocking through traffic, which could interrupt the strategically important A20 junction, modifications are likely to be required in the future case. This may be a staged process, and the following should be considered:

- Extension of the right turning box from Sevenoaks Way initially
- Signalisation of the junction to permit vehicles to turn to and from Midfield Way. Right turns from Midfield Way should still be prohibited, in order to allow sufficient green time for traffic travelling southbound. The implementation of traffic signals would also enable the gating of traffic travelling northbound towards Junction 1.2.

Initial testing of the signal option suggests that queuing would still occur, particularly southbound on the A224; importantly however queuing and blocking back would be controlled, and the signals could be linked to the wider corridor UTC SCOOT system which is due to be implemented. The improvement could also incorporate a controlled crossing for pedestrians and cyclists travelling north and south along the A224.

Junction 1.6 – Cray Avenue / Lower Road / A224 Court Road / A223 High Street

The junction was observed to operate over capacity in the AM and Saturday Peaks, and above recommended capacity levels in the PM peak in the existing case. As a result, the growth of traffic through the corridor is predicted to exacerbate these issues resulting in excessive queues, particularly on the A224 arms. To address these issues, and subject to further study, the following improvements are identified:

- Reconfigure the crossing area to combine the pedestrian and cycle movements across Court Road
- Remove the uncontrolled cycle crossing across the Court Road arm and replace with a controlled toucan crossing.
- Revise the junction staging to remove the all red stage (which currently allows bicycles to cross the arm without conflicting with traffic movements)
- Extend the proposed SCOOT network to include this junction.

Through these amendments and the removal of the red stage, c.20 seconds of additional green time becomes available at the junction, which is split across the various arms. Initial testing suggests that with these improvements the junction will operate within the recommended capacity thresholds, with queuing significantly reduced on all arms.

Other Mitigation

A review of the width of verge and footway available along Edgington Way, suggests that the delivery of an off-road cycle route between Ruxley Corner roundabout and Cray Road/Edgington Way/A20/Sevenoaks Way Roundabout may be feasible. This would address a clear gap in the network and would significantly improve cycle accessibility for the Ruxley Corner site, as well as the wider area, thereby supporting the use of this mode. This would also fall in line with the 'Building a Better Bromley 2020 Vision', which aims to improve the road network for all road users.

A shared cycleway/footway is likely to be feasible between Cray Road and the signalised pedestrian crossing, west of Tesco. At this point, it is likely that the cycle route will have to be continued along the southern footway/verge, with the crossing amended to a Toucan. This is on the basis that the Ruxley Corner Industrial Estate accesses, to the east of this point, are likely to serve as constraints to the delivery of a route along the northern verge, given the extended width, safety concerns (with a number of HGV movements) and parking at these access points. Other constraints to the delivery of this route will be the Mckillon Road access, and the delivery of suitable facilities across at Ruxley Corner roundabout and the Cray Road/Edgington Way/A20/Sevenoaks Way Roundabout.

Extension of the UTC SCOOT to include Junction 1.6, and also Junction 1.2 and 1.3 if signalised, would not only benefit the management and flow of traffic through the corridor, but it would also have advantages in minimising bus delay, with the potential to prioritise particular stages upon advanced detection of buses, in order to reduce bus delay, for example if the service is not running to schedule. Funding should also be sought, where applicable, for maintaining and growing bus services through the Cray corridor, this should focus on sites at C1 and C2.1/2.2, where public transport accessibility is limited.

Funding

As suggested by the results of the modelling, the Junction 1.1, 1.2, 1.3 and 1.6 will operate over their maximum capacity thresholds in the future case, irrespective of the additional growth proposed for the corridor. Traffic levels from the developments, given the nature of the land use will be moderate during the peak hours; however they will serve to reinforce or exacerbate issues at these junctions.

Improvements will therefore be required to enable the delivery of these developments, but also any further development in the area, in order to ensure that one of the key features of the Cray Business Corridor, which comprises good accessibility to the M25 and wider London area is preserved.

The scale of the upgrades, particularly at Cray Road/Edgington Way/A20/Sevenoaks Way Roundabout, will be beyond the scope of one site or developer. Therefore, contributions will need to be sought and pooled from the four proposed sites for redevelopment, alongside other developments in the area coming forward relative to their impacts on the network. Table 7.14 suggests the key focus for funding at each of these sites, alongside the reasoning behind this.

In maintaining good access to the corridor, it is recommended that enhancements to Junction 1.2 are prioritised, and that in the short term detailed review and consultation regarding the development of this junction, with key stakeholders e.g. TfL, London Borough of Bexley is considered. Further review, development of the designs and costing of these options is also recommended for the other improvements identified.

Table 7.14 Review of potential funding streams

<i>Location</i>	<i>Improvements</i>	<i>Potential Site Contributions</i>	<i>Reasoning</i>
Ruxley Corner Roundabout	<ul style="list-style-type: none"> Geometric improvements at Edgington Way and Maidstone Road Widening of circulatory carriageway 	C1N, C1S	<ul style="list-style-type: none"> Ruxley Corner Roundabout operates over capacity in the future case Queuing could impinge on access to and from the proposed sites at Edgington Way or Sandy Lane
Cray Road/ Edgington Way/ A20/ Sevenoaks Way Roundabout	<ul style="list-style-type: none"> Full Signalisation Geometric changes including realignment of Edgington Way, reconfiguration of access to A20 eastbound and segregated left turn from A20 westbound offslip Widening of circulatory carriageway Incorporation of SCOOT 	C1N, C1S, C2.1/2.2, C3.5	<ul style="list-style-type: none"> Majority of trips from the four sites identified will pass through this strategic junction. Important to retain good access to the Cray Business Corridor; in the future case this junction will operate significantly over capacity Historical accident trends identified at this location regarding circulatory movements (rear shunts)
Sevenoaks Way / Midfield Way	<ul style="list-style-type: none"> Extension of right turn bay (stage 1) Signalisation of junction (stage 2) 	C2.1/2.2 / C3.5	<ul style="list-style-type: none"> Significant queuing for right turning vehicles from Sevenoaks Way and left turn vehicles from Midfield Way Vehicles from all sites will pass through junction, however largest traffic flows likely from C2.1/2.2 and C3.5
Cray Avenue / Lower Road / A224 Court Road / A223 High Street	<ul style="list-style-type: none"> Reconfigure cycle crossing arrangements on the southern arm Revise staging arrangements Incorporate SCOOT 	C3.5	<ul style="list-style-type: none"> The junction operates over capacity in the future case, however the scale of works needed to improve capacity are likely to be minor Vehicles from all sites will pass through junction, however largest traffic flows likely from C3.5 (at 20,000 sqm)
Edgington Way	<ul style="list-style-type: none"> Delivery of a cycle route between Ruxley Corner and A224 Cray Road 	C1N/C1S	<ul style="list-style-type: none"> Key gap in the local cycle network Improve cycle accessibility for Ruxley Corner sites and wider area
Cray Corridor	<ul style="list-style-type: none"> Maintaining at a minimum and expanding existing bus services 	C1N, C1S, C2.1/2.2	<ul style="list-style-type: none"> Sites C1 and 2.1/2.2 have poor public transport accessibility, Improvements to services may reduce dependence on the car for travel to and from the site



8 CONCLUSIONS AND RECOMMENDATIONS

8.1 Introduction

This section sets out conclusions and recommendations for the study building upon findings from previous sections of the report.

8.2 Conclusions

Supply and Demand Analysis of Employment Land

The NPPF states that planning policies should avoid the long term protection of sites allocated for employment use where there is no reasonable prospect of a site being used for that purpose and that land allocations should be regularly reviewed. It goes on to state that “where there is no reasonable prospect of a site being used for the allocated employment use, applications for alternative uses of land or buildings should be treated on their merits having regard to market signals and the relative need for different land uses to support sustainable local communities. (NPPF, page 6-7).”

Within the Supplementary Planning Guidance (SPG) Land for Industry and Transport 2012, the GLA proposes that the LB Bromley is classified as a borough with ‘restricted transfer of industrial sites’. This states that ‘boroughs in this category generally have low levels of industrial land relative to demand and should generally adopt a more restricted approach to transfer of industrial sites to other uses. However this approach should not preclude the possibility of smaller scale release where adequate provision has been planned for in Council’s DPD’s.

Against this policy background the consultants were asked to consider the extent and appropriateness of the SIL boundary within the Cray Corridor. To ensure a robust analysis the study therefore included a comparative analysis of the wider supply of employment land within the borough.

Our forecasting exercise found that over the plan period, the net requirement for additional office floorspace in LB Bromley is estimated to be 28,800m². For industrial floorspace (B1c, B2 and B8 uses) net demand is estimated to contract by 28,800m², the equivalent of minus 6.5 hectares. When apportioning this quantum of forecast B1a growth to the Cray Corridor it was estimated that there could be modest growth of around 1,440 square metres (15,500 square feet) of net additional floor space though the majority of growth would continue to be focused in Bromley Town Centre.

For B1c, B2 and B8 uses the forecast reduction in floor space and land is likely to be more pronounced and apportioned to the smaller designations and non-designated industrial employment sites located outside of the Cray Corridor. Our findings were that overall the Cray Corridor displays good strategic characteristics for accommodating industrial and logistical businesses therefore the net loss of B1c/B2/B8 space and land in this location is likely to be limited with an overall gross demand continuing and specific opportunities for intensification.

This is because the Cray Business Corridor is an established business location with a combination of both designated SIL sites and employment areas which were found to be largely suitable for their current use. The corridor has a wide variety of employment sites which are well functioning, well managed and support the diverse range of business types typically found within strategic and local employment designations in London.

Our assessment broadly concludes that those clusters already designated as SILs in the London Plan (2011) possess the appropriate quality and site characteristics for such uses and are well supported by existing policy. However, there is evidence of some historic erosion of employment land by large scale retail warehousing in the northern end of the Sevenoaks Way/ Cray Avenue SIL site. However it is believed that much of the retail warehousing located within the SIL designations was developed prior to adoption of the London Plan so the application of a SIL boundary to these established retail sites may not have been appropriate historically. These factors indicate that a re-apportioning of the SIL boundaries in this area would be appropriate in order to maintain the integrity of the employment land designations.

Property Market Analysis

The Cray Corridor provides a wide array of existing business space accommodation, from the modern accommodation afforded at Crayfields Business Park (C 2.1), to the more dated southern industrial area around the Allied Bakery site on Cray Avenue (C3.5). In addition to its importance due to its size, the Cray Valley is also the best located industrial area in the Borough, due to the proximity to the A20, and thus the M25, which benefits businesses with the speed in which to access their target markets. Given its strategic importance, the intensification and modernisation of the Cray Valley is crucial in promoting business growth in the medium to long term.

The Cray Corridor benefits from a large proportion of logistical operators and trade counter units, where the use is designated under B8, Sui Generis or Trade Counter. This market is thriving in Greater London, primary due to the strong housing market, a major factor which has an influence on building and household supplies industries.

Due to the importance of Sevenoaks Way / Cray Avenue as a transport corridor, demand in this location is growing and there is certainly a degree of suppressed demand in evidence both in terms of trade counter operators, as well as traditional manufacturing and storage uses. There is evidence that businesses are migrating to outer London locations such as the Cray Corridor from inner London boroughs within the same proper market area such as Southwark (e.g. Old Kent Road) and Greenwich (e.g. New Charlton and Greenwich Peninsula) where industrial land is being lost primarily to higher value residential uses.

Overall the Cray Corridor does not represent a significant office location. The road connections are reasonable but public transport accessibility is poor, with the station (St Mary Cray) likely to be more than walking distance away, discouraging occupiers to locate along the corridor. Demand for this area of Greater London is concentrated either at Bromley town centre, or further north in Dartford. Bromley town centre benefits from two mainline train stations with excellent connectivity to the West End or the City. There has been a previous trend for corporate to locate back office functions in Bromley due to its connectivity and lower occupancy cost relative to central London.

Notwithstanding this, although the Cray Corridor does suffer from a lack of indigenous office occupiers and is unlikely to become a major office location in the future, the supply of good quality accommodation is in short supply, meaning that there may be selective opportunities for office development in the future. This is supported by the demand forecasting exercise. One opportunity could be at Crayfields Business Park (C2.1) is situated in an attractive setting, with the lake and woodland to the north providing a unique setting for quality business space along the corridor.

Key locations for floor space growth

Based on the assessment of the employment areas within the Cray Corridor the Council asked the consultancy team to identify sites with scope for significant floorspace growth.

This has been done based on the theoretical capacity of sites that are considered suitable for intensification based on the various strands of research. Table 8.1 below summarises this information and maps from Figures 4.2 to 4.9 and represents data from Table 4.2 to show the extent of the areas for which intensification is believed to be most appropriate. The information represented here should be read in conjunction with Section 4 which provides a wider analysis of constraints and opportunities in relation to each location.

The Council has also asked the consultancy team to consider whether intensifications and additions of a greater quantum of new industrial floor space at identified locations within the Cray Corridor could permit release of poorer quality industrial land elsewhere in the borough, bearing in mind the borough is close to achieving its total benchmark release figure for industrial land as specified in the Land for Industry and Transport SPG. Subject to discussions and agreement with the GLA, which would include consideration of the wider regeneration benefits such as new housing and additional jobs arising from release of poorer quality industrial areas, this may be possible.

Table 8.1 – Potential Intensification Areas in the Cray Corridor

Intensification Areas	Site Areas	Potential Use and Estimated Development Floorspace ¹¹ (gross quantum)	Opportunities (including rationale for use)	Constraints ¹²	Estimated Delivery Timescale	Role of Council in helping facilitate development
C1 – Ruxley Corner / Foots Cray Business Area; the vacant 'Klingers site' – identified in the north of the site as 'Land with Vacant Buildings'	2.7 ha	B1b/c, B2 or B8 13,500 sq m.	Owners of the site IKEA are in the process of selling the site to a logistical operator who would develop the site for B8 uses. Given its strategic characteristics including good accessibility the site lends itself to such uses.	An obvious constraint is the listed façade to the Klingers building.	2015-2020	
C1 – Ruxley Corner / Foots Cray Business Area; the vacant 'Land to the Rear of Tesco, Edgington Way, Sidcup' – identified in the south of the site as 'Vacant Industrial Land'	3.1 ha	B1b/c, B2 or B8 15,500 sq m	Given its strategic characteristics including good accessibility the site lends itself to B1b/c, B2 or B8 uses.	A footpath running through the centre of the site may indicate a public right of way. It is unclear whether the access road running into the site from Edgington Way is an adopted highway. If this is owned by Tesco an access agreement may need to be made with whoever develops the site.	2015-2020	Ensure both sites remain designated as SIL and enforce policy. Allocate sites as SSAs in development plan.
Clusters 2.1/2.2: Land between	1.8 ha ¹³	B1b/c, B2 or B8 9,000 sq m	Legal and General have indicated during	The site is designated as green belt so	2020-2025	Further feasibility into removal of infill

¹¹ Based on a single storey building and an average plot ratio of 0.5 for B1b/c, B2 and B8 (as per good practice set out in the DCLG ELR Guidance Note 2004 (Annex D)).

¹² These are based on the consultants' initial assessment and agreed work scope so should not be regarded as a complete list. The Council may wish to undertake more detailed due diligence.

¹³ Approximate and discounting the sports ground as it is assumed this will need to be retained somewhere in site.

Crayfields Business Park and Industrial Estate			consultations that they would be interested in developing this infill site for industrial employment use. The two business parks themselves are fully developed without scope for further intensification.	further assessment on its effectiveness and functioning would be needed before any policies or policy mechanisms enabling development could be proposed.		site from Green Belt in development plan. If removed from Green Belt allocate as an LSIS and SSA in development plans.
Cluster 3.5 St Marys Cray Industrial Business Park: Lagoon Road Industrial Area	4.0ha	B1b/c, B2 or B8 20,000 sq m	Low intensity, dated industrial area that would benefit from comprehensive redevelopment.	Multiple ownership constraint. Some site owners may not want to sell. Further investigation into feasibility and ownership required.	2020-2030	Consult relevant landowners; production of site development brief; detailed financial appraisal; CPO Strategy (if necessary); Development options assessment.
Total	11.6 ha	58,000 sq m				

Business rates retention

As a result of the estimated floor space growth associated with intensification, it has been calculated that LB Bromley may be able to retain up to £856,000 per annum through business rates retention.

Transport infrastructure requirements

As a result of the completed transport assessment, it has been identified that the corridor is operating at capacity in the 2014 baseline, with background traffic growth and committed development traffic, expected to lead to a number of junctions operating significantly over capacity in the future case (modelled as 2030). As a result of the estimated floor space growth associated with intensification, it is expected that these trends will be reinforced and in some case accentuated as a result of development coming forward.

In order to accommodate growth in the corridor, it is therefore expected that improvements will be required at the junctions set out below. An initial review of the junctions has suggested potential mitigation options to improve performance, and it is recommended that in the short term these are reviewed, and if supported, developed further, considering issues such as land ownership, in order to identify a potential cost for delivery.

- Junction 1.1 – Ruxley Corner Roundabout (widening of roundabout and key arms)
- Junction 1.2 - Cray Road/Edgington Way/A20/Sevenoaks Way Roundabout (signalisation and changes to access from Edgington Way and the A20 eastbound slip roads)

- Junction 1.3 – (extension of the right turn box from Sevenoaks Way initially, followed by full signalisation if required)
- Junction 1.6 - (amendments to the cycle crossing on the southbound arm and adjustments to the signal staging)

Alongside the above, the extension of the UTC SCOOT corridor, which is due to be introduced along the A224 between Main Road and Poverest Road, to include Junction 1.6, as well as Junction 1.2 and 1.3 if signalised, is also recommended to improve traffic management. Whilst locally at Cluster 1: Ruxley Corner, the delivery of a cycle route along Edgington Way would improve cycle accessibility.

As recognised within the assessment, the scale of works may fall beyond the remit or contributions from a single site, particularly in the case of Junction 1.2. Therefore it is recommended that contributions are pooled from the site's identified for intensification, and from any future developments coming forward in Bromley or the wider area e.g. Bexley, where an impact on these junctions is determined. In preserving a key attractor of the Cray Business Corridor, which relates to accessibility from the strategic network, priority should be given to the future improvement of Cray Road/Edgington Way/A20/Sevenoaks Way Roundabout, given that this forms the key gateway to the area.

8.3 Proposed Policy Direction

The proposed policy direction in response to the conclusions and main findings of the study are set out below.

The below employment land use strategy recommendations come in the format of a recommendation and then supporting justification and rationale. These recommendations build upon our conclusions presented above. Any quantitative recommendations are based on the medium demand scenario as described in Section 7.

Please note that this is one of a number of evidence base documents the Council will be considering that will feed into and inform its Local Plan evidence base. These recommendations are the consultants' independent recommendations and the Council will subsequently consider these before drafting its own Local Plan policies.

Continued Protection of Cluster C1 Ruxley Corner

R1: To help ensure there is sufficient capacity to meet projected demand for industrial land in the Cray Business Corridor, the following recommendations are made in reference to the continued protection of all employment land at Ruxley Corner (Cluster C1):

- a) The continued protection of Ruxley Corner (Cluster C1) as a SIL designation with no change to the SIL boundary; and
- b) The promotion of appropriate business space intensification in the south western portion of the site and on the vacant Klinger site (perhaps through SSA designations).
- c) Consider designating as a PIL as oppose to an IBP (as per the London Plan definitions) to reflect the fact that there is demand for B8 uses at this location.

Justification

Although this cluster has some vacant employment land, the site displays positive characteristics for accommodating B1b/c, B2 and B8 uses. The Fitzroy Business Park in the south eastern portion of the site was constructed three years ago and the site offers good accessibility, adequate parking, and servicing and good quality building stock. The forecasting exercise indicates that no net loss of employment floorspace should be permitted and therefore the continued redevelopment of this site for future employment uses is encouraged.

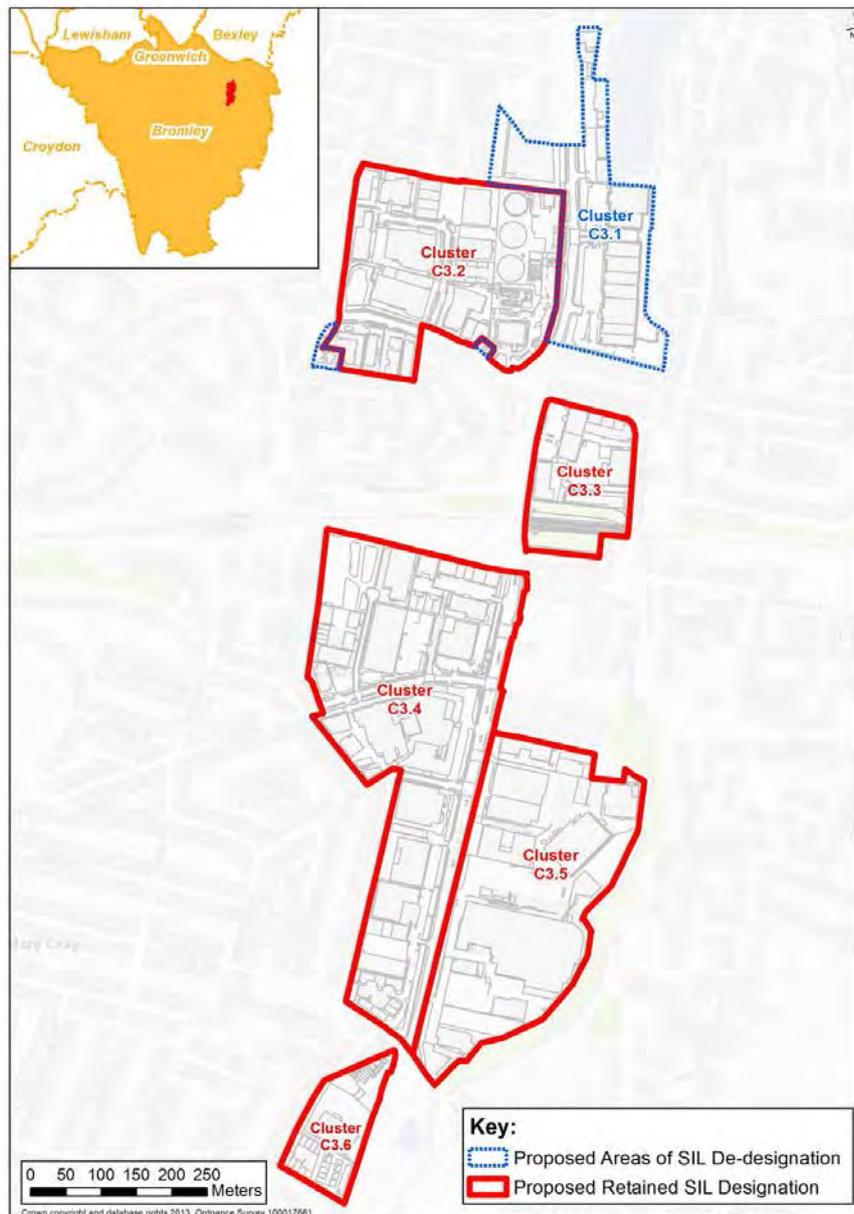
The SIL policy at this location has been effective in protecting and promoting employment uses such as the development of the Fitzroy Business Park. The designation has also safeguarded land in the northern and the south western portion of the cluster for further business development for which the demand forecast suggests there is a long term demand.

Our consultations with agents have demonstrated that there is demand for sites from industrial and logistical businesses at this location so encroachment of retail uses should be avoided.

Redefinition of Sevenoaks Way/ Cray Avenue SIL Boundaries

R2: The Council should consider redefining the boundary of the Sevenoaks Way/ Cray Avenue SIL to exclude the large scale retail units in the north eastern portion (all of Cluster 3.1) and two specific locations of residential land uses in the north western portion, thus helping to strengthen and maintain the integrity of the remaining SIL policy at this location. It is also recommended that the remaining SIL area should retain its IBP designation to safeguard local amenity and protect environmental quality. The redefinition of the SIL boundary should avoid the net loss of employment land.

Figure 8.1 – Proposed SIL De-Designation



Source: URS 2013

Justification

At present the Sevenoaks Way/ Cray Avenue SIL boundary includes a significant portion of large scale retail warehousing and a small amount of residential uses which are not appropriate for inclusion within the designation. In the Springvale Retail park area minimal floorspace is in B1 or B2/B8 use and therefore it is recommended that this land is released from the SIL and the SIL boundaries consolidated to maintain the integrity of the remaining employment floorspace in the rest of the cluster.

Retention of Existing SIL IBP Boundary for Cluster C3.3

R3: To help ensure there is sufficient capacity to meet ongoing demand for industrial employment land uses within the Cray Corridor, the following designated employment sites should continue to be protected as SIL IBP land in their entirety:

- a) 2.74ha of employment land at Cluster C3.3
- b) 10.53ha of employment land at Cluster C3.4;
- c) 8.17ha of employment land at Cluster C3.5; and
- d) 1.47ha of employment land at Cluster C3.6.

Justification

Over the Local Plan period there is projected to be a gross ongoing demand for industrial land (B1c, B2 and B8) in LB Bromley (see Section 7). In line with the principles of the NPPF this demand should be accommodated at the most appropriate locations for these uses within the borough. The vast majority of existing SIL sites remain the most suitable locations for accommodating this industrial and warehousing demand. This corresponds to the principles set out in London Plan Policy 2.17. Whilst the predominate land uses within the SIL locations are B1c, B2 and B8 industrial use classes, some small areas have seen the encroachment of A Use retail classes. It is recommended therefore that when these sites are re-developed that the council should enforce the SIL IBP policy to ensure industrial uses to return to these sites.

Assessments made during the field survey of the SIL clusters against the criteria discussed at Section 4 suggests that the vast majority of this industrial land is appropriate and adequate for industrial use. Positive industrial characteristics include access to strategic roads, adequate parking and servicing, good quality building stock and lack of bad neighbour issues. On this basis we recommend the continued designation of these existing SIL clusters and the retention of their IBP designation to safeguard local amenity and protect environmental quality for residential uses.

R4 The Council should promote the redevelopment and intensification of employment land in the Lagoon Road Industrial Estate (Cluster C3.5).

Justification

For B1c, B2 and B8 uses the forecast borough-wide reduction in floor space and land is likely to be far more more pronounced and apportioned to the smaller designations and non-designated industrial employment sites located outside of the Cray Corridor which do not benefit from such positive strategic characteristics. As previous sections of the report demonstrate, overall the Cray Corridor displays good strategic characteristics for accommodating industrial and logistical businesses and there is significant occupier demand for space at this location as evidenced through our consultations and surveys,

therefore there is not expected to be a significant net loss of B1c/B2/B8 land or space within this study area location over the plan period.

The Lagoon Road Industrial Area (an area of circa 4.0 hectares) is considered to be a good location for intensification and redevelopment. Our surveys found there to be some signs of a lack of investment, relatively poor quality commercial stock and lower intensity development. From speaking to local agents there is an evidenced demand for industrial space in this area though a significant number of units here remain vacant. There is some evidence here of a lack of investment in business space and an opportunity for comprehensive redevelopment exists with more modern business space being provided.

Designation of Employment Areas as LSIS in line with the London Plan.

R5: To help bring LB Bromley planning policy in line with the London Plan naming conventions the following employment areas are recommended to be designated as LSIS to help meet expected forecast demand and due to their positive industrial land characteristics:

- a) **Crayfields Business Park (Cluster C2.1);**
- b) **Crayfields Industrial Park (Cluster C2.2) (plus infill site if taken out of Green Belt)**

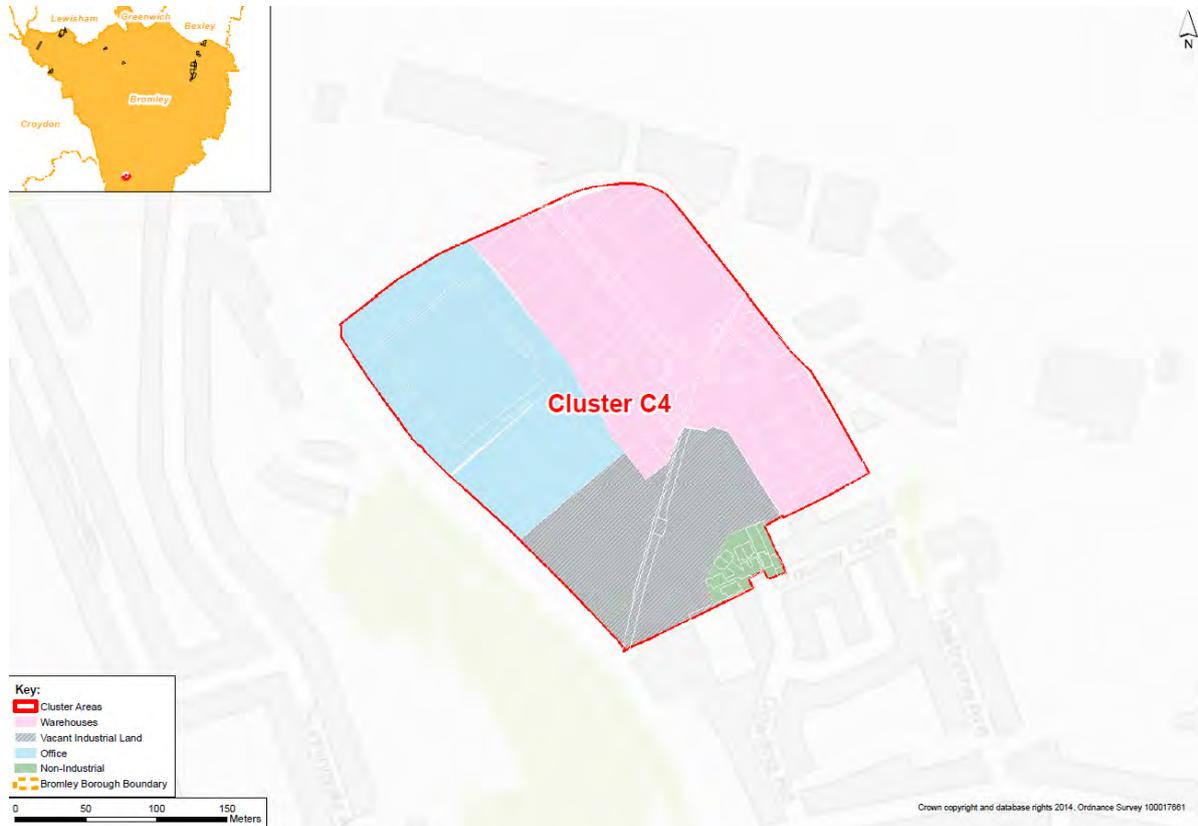
Justification

As previously discussed there is an ongoing overall demand in LB Bromley for industrial employment land over the planning period and the Cray Business Corridor is the most successful and popular industrial business location in the borough. Whilst the majority of this demand can be accommodated in the identified SIL allocations a proportion of this demand can continue to be accommodated within Employment Areas/ LSISs, particularly where sites and their clustering of businesses are considered to be locally significant to the local economy rather than regionally significant. LSIS is a lower form of designation, identified at paragraph 4.19 of the London Plan (2011). It covers industrial land that fulfils a locally significant function. The London Plan suggests that Councils should make explicit what uses are considered appropriate at these locations to avoid change of use and loss of industrial capacity. LB Bromley currently has a designation of Employment Areas for non SIL industrial land. It is recommended that all non SIL Employment Areas are designated LSIS to bring them in line with the London Plan.

APPENDICES

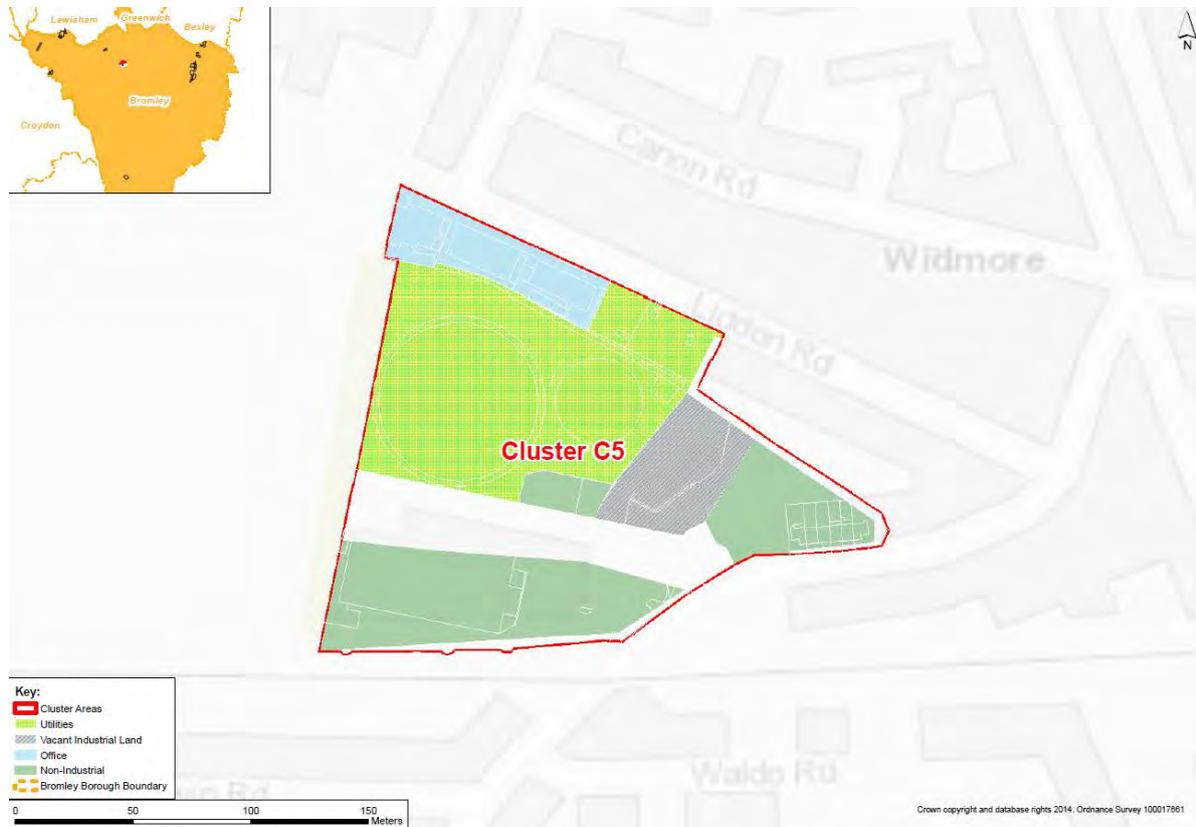
APPENDIX A – Additional Employment Cluster Maps

Figure A.1 – Cluster C4



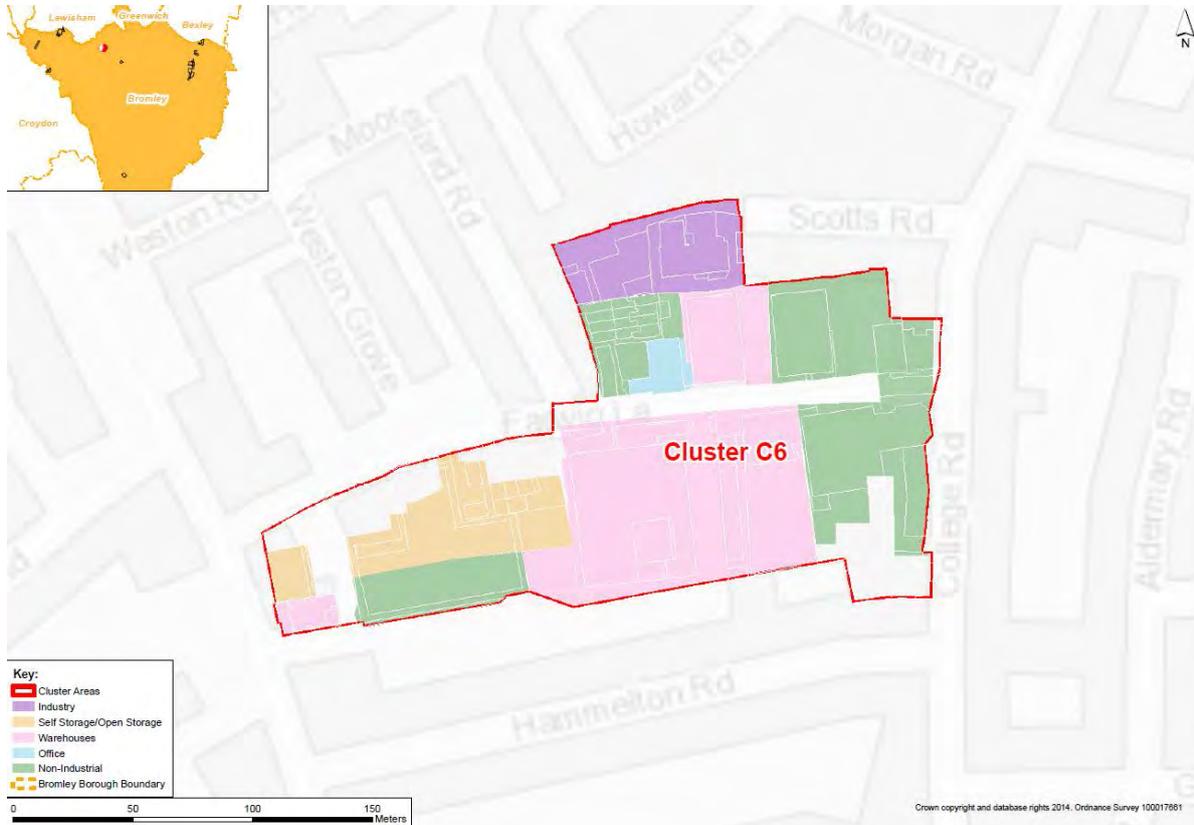
Source- URS 2013

Figure A.2 – Cluster C5



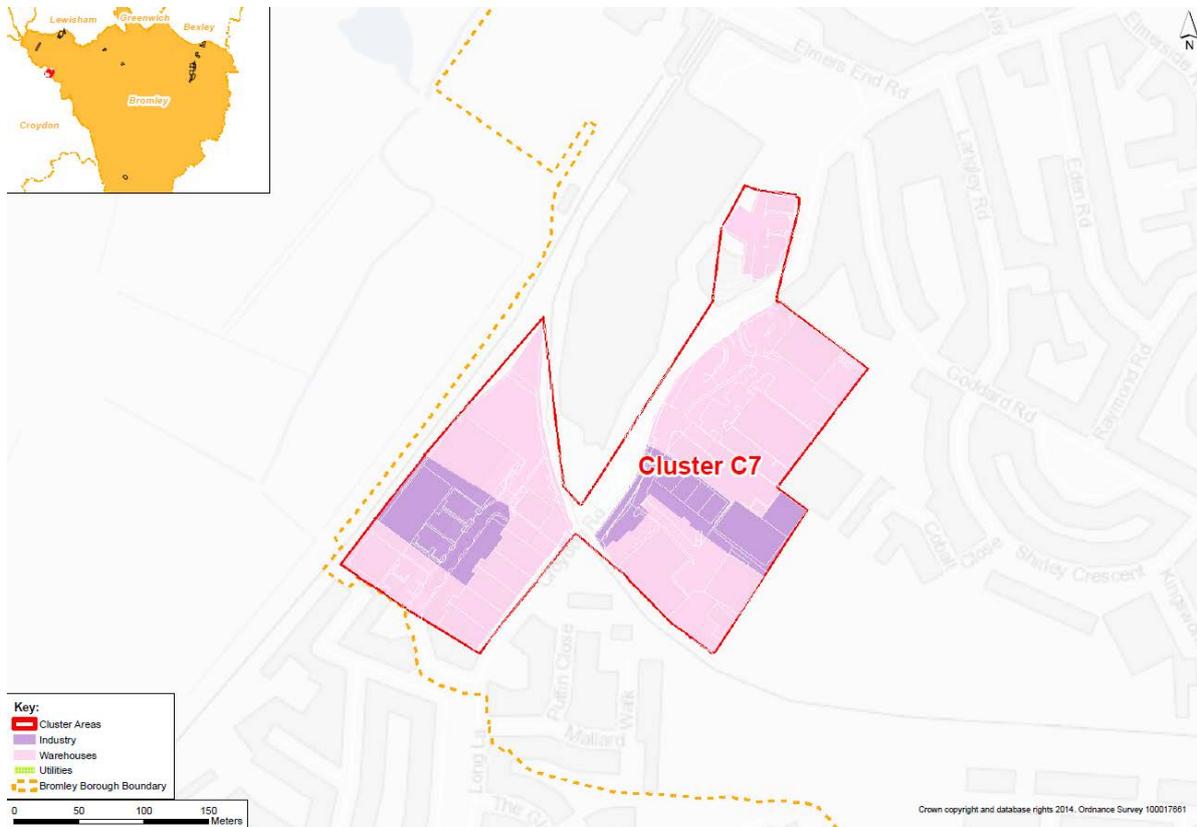
Source- URS 2013

Figure A.3– Cluster C6



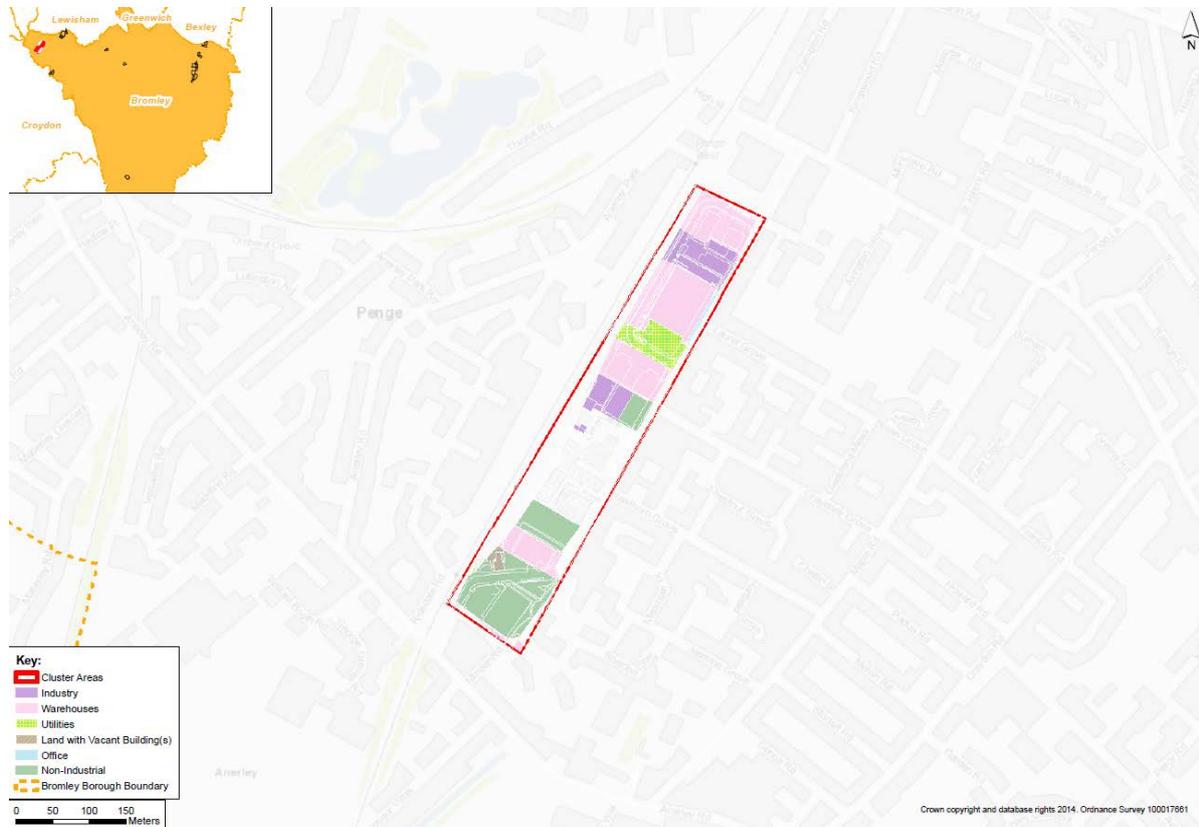
Source- URS 2013

Figure A.4– Cluster C7



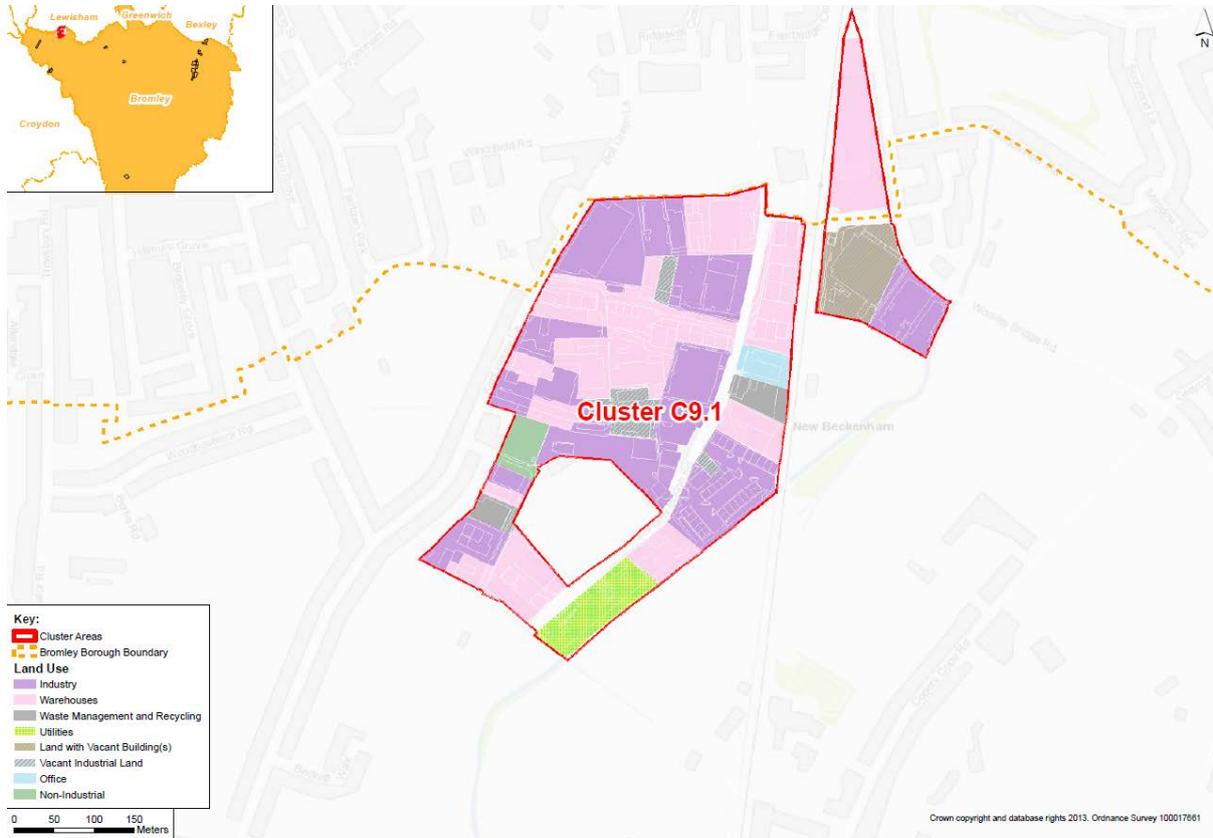
Source- URS 2013

Figure A.5– Cluster C8



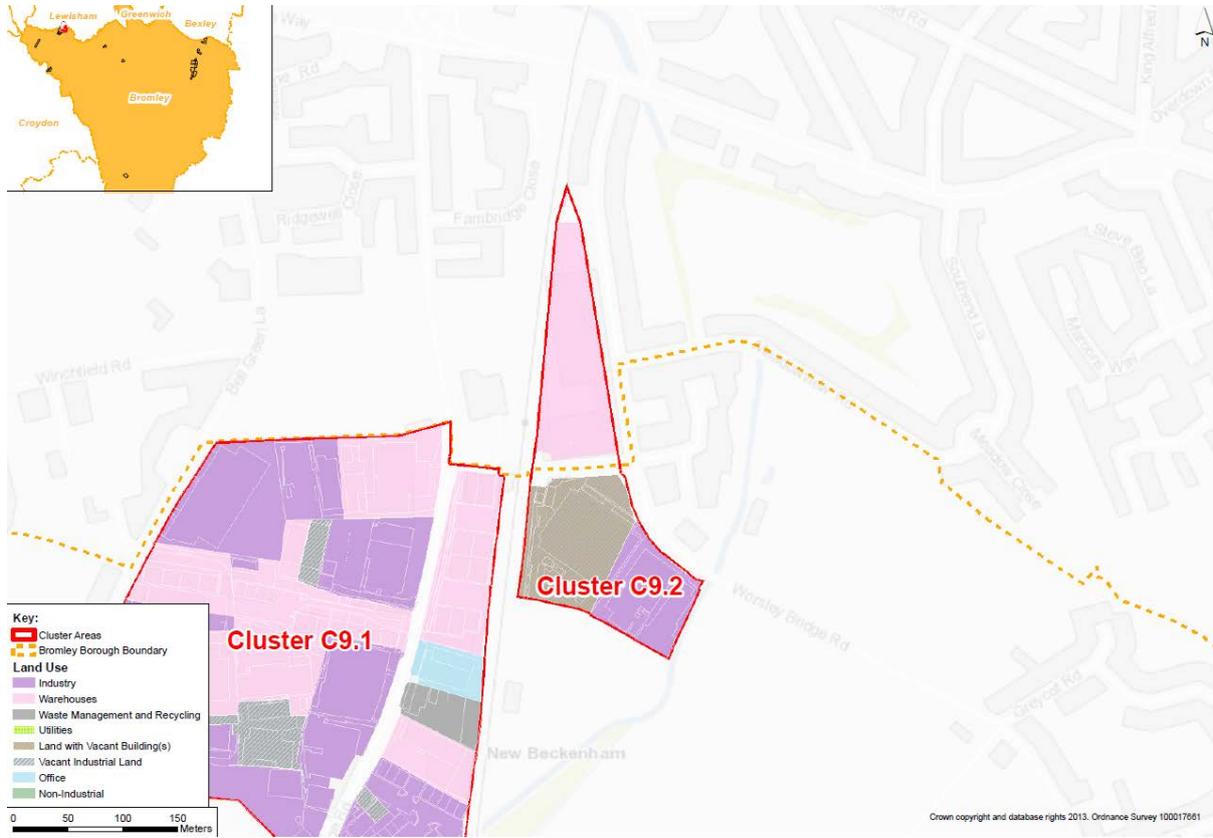
Source- URS 2013

Figure A.6– Cluster C9.1



Source- URS 2013

Figure A.7– Cluster C9.2



Source- URS 2013

APPENDIX B - CRITERIA FOR SUITABILITY FOR B1a EMPLOYMENT USE

Cluster Ranking Criteria	Criteria and Scoring
Access to Public Transport	<ul style="list-style-type: none"> • Poor or Very Poor = PTAL level 0-3: 0 points. • Good = PTAL level 4-5: 0.5 points • Very Good = PTAL level 6a & 6b: 1 points
Quality of Environment	<ul style="list-style-type: none"> • >75% of environment in good or very good condition: 1 point • 50-75% of environment in good or very good condition: 0.67 point • 25-49% of environment in good or very good condition: 0.33 point • 0-24% of environment in good or very good condition: 0 point
Condition of Buildings	<ul style="list-style-type: none"> • >75% of buildings in good or very good condition: 1 point • 50-75% of buildings in good or very good condition: 0.67 point • 25-49 of buildings in good or very good condition: 0.33 point • 0-24% of buildings in good or very good condition: 0 point
Physical Site Constraints	<ul style="list-style-type: none"> • 1 point if there is no site constraints • 0 points if there are at least one physical site constraint
Proximity to compatible land use	<ul style="list-style-type: none"> • 1 point if adjacent to compatible land uses (other office, residential, retail) • 0 point if adjacent to incompatible land uses (industrial, waste)
Servicing of businesses in cluster	<ul style="list-style-type: none"> • Adequate: 1 • Not adequate: 0
Parking Facilities	<ul style="list-style-type: none"> • Adequate: 1 • Not adequate: 0
Access to facilities and amenities	<ul style="list-style-type: none"> • 1 points for very good access • 0.5 point for good access • 0 points for poor/very poor access
Level of utilisation for active employment uses (B1 use class)	<ul style="list-style-type: none"> • More than 75% cluster currently actively used for employment uses: 1.5 points • 50-74% cluster currently actively used for employment uses: 1 point • 25-49% cluster currently actively used for employment uses: 0.5 points • Under 25% cluster currently actively used for employment uses: 0 points

APPENDIX C - CRITERIA FOR SUITABILITY FOR B1c/B2/B8 EMPLOYMENT USE

Cluster Ranking Criteria	Criteria and Scoring
Strategic Road Access	<ul style="list-style-type: none"> • Direct: 1 point • Indirect: 0 point
Access to waterways and wharves	<ul style="list-style-type: none"> • Direct: 1 point • No access: 0 point
Access to railhead	<ul style="list-style-type: none"> • Direct: 1 point • No access: 0 point
Quality of Environment	<ul style="list-style-type: none"> • >75% of environment in good or very good condition: 1 point • 50-75% of environment in good or very good condition: 0.67 point • 25-49% of environment in good or very good condition: 0.33 point • 0-24% of environment in good or very good condition: 0 point
Condition of Buildings	<ul style="list-style-type: none"> • >75% of buildings in good or very good condition: 1 point • 50-75% of buildings in good or very good condition: 0.67 point • 25-49 of buildings in good or very good condition: 0.33 point • 0-24% of buildings in good or very good condition: 0 point
Physical site constraints	<ul style="list-style-type: none"> • 1 point if there are no physical site constraints • 0 points if there are site constraints
Bad neighbourhood issues	<ul style="list-style-type: none"> • Employment areas start with 1 point and minus 0.2 for each bad neighbourhood use (Noise pollution, air pollution, smell, HGV traffic, significant car traffic, other) To maximum of –0.2. • Additional -0.5 point if employment area in close proximity to existing or proposed residential
Servicing of businesses in cluster	<ul style="list-style-type: none"> • Adequate: 1 • Not adequate: 0
Parking Facilities	<ul style="list-style-type: none"> • Adequate: 1 • Not adequate: 0
Level of utilisation for active employment uses (B2/B8 use class)	<ul style="list-style-type: none"> • More than 75% cluster currently actively used for employment uses: 1.5 points • 50-74% cluster currently actively used for employment uses: 1 point • 25-49% cluster currently actively used for employment uses: 0.5 points • Under 25% cluster currently actively used for employment uses: 0 points

Appendix D: Socio-economic Analysis

Introduction

This section profiles the changes in Bromley's socio-economic characteristics since the 2010 ELR in terms of:

- Population;
- Labour Market Structure;
- Company size and registration; and
- Industrial structure.

The analysis informs our understanding of some of the opportunities and constraints within the borough, which could impact upon the demand and supply for employment land. The analysis will also inform the demand forecasting section by setting out what sectors the borough specialises in, thereby what type of space will be needed.

The most up-to-date and relevant data sources have been used, including Office for National Statistics (ONS) data and Greater London Authority (GLA) data. Data for LB Bromley is benchmarked against regional and national levels for direct comparison.

Population Demographics

Demand for housing, retail, community facilities and employment sites and premises will be driven in part by population. Between 2001 and 2011 Bromley's population increased by 4.7% to 309,392 (ONS 2001, 2011). This growth rate is significantly less than that of London, which over the same period grew by 14% and slightly less than within England (7.9%). Forecasts by the GLA show that Bromley's population is expected to be 6.5% higher in 2030 than in 2013 (GLA, 2012). The implication is a likely growth in demand for land for housing, community facilities, infrastructure and employment land over the Local Plan period.

In 2009, 194,700 people in the LB Bromley (equivalent to 63.8% of the population) were of working age¹⁴, compared with 69% in London and 65.1% nationally. In 2012 the working age population proportionately decreased to 63.1% of the total population similar to the trend experienced within London and Great Britain as a whole with an decrease in the working age population to 68.6% and 64.2% respectively.

In 2012 approximately 158,800 of the working age population were economically active (equivalent to 79.2% of the working age population), which is comparable to 75.8% for London and 76.9% nationally. In addition 85.4% of males were economically active, compared to 73.3% of females.

In 2012 the unemployment rate in LB Bromley was 5.6% (8,900), which is somewhat below that of London (9.1%) and slightly less than that of Great Britain (8%).

Labour Market Structure

Business investment decisions are typically based on the availability of land / sites, capital and labour. Below we consider the labour market by profiling the broad occupational breakdown, earnings and the travel to work catchment of residents.

¹⁴ The working-age population refers to men aged 16 to 64 and women aged 16 to 59.

Occupational Structure

In terms of occupational structure, statistics indicate that approximately 58.3% of the working population in Bromley are employed in managerial, professional and associate professional occupations, which is slightly higher than the rest of London at 54.7% but significantly higher than Great Britain at 44%. This is presented in Table 4.1 below.

Table A.1: Employment by Occupation

	Bromley (numbers)	Bromley (%)	London (%)	Great Britain (%)
Managers and senior officials	17,400	11.3	11.5	10.1
Professional occupations	38,400	25.0	24.8	19.4
Associate professional & technical	33,400	21.7	18.0	14.2
Administrative & secretarial	19,400	12.6	10.9	10.9
Skilled trades occupations	10,500	6.8	7.2	10.5
Personal service occupations	12,400	8.1	7.2	9.0
Sales and customer service	6,800	4.4	6.4	8.2
Process plant & machine operatives	6,000	3.9	4.2	6.3
Elementary occupations	8,600	5.6	9.1	10.8

Source: ONS annual population survey, 2012

Earnings by Resident

In 2012 the average gross weekly earnings for worker within the LB Bromley were £670.80, which is approximately £57.50 higher than the London average of £613.30 and £162.80 higher than the rest of Great Britain (£508.0). Residents of LB Bromley earn a significantly higher wage to those people who work in LB Bromley (approximately £546 per week).

Workplace earnings have seen a larger increase in Bromley than in London (by £4.5) over the 2009-2012 period. A similar trend can be noted over the same period for resident earnings with residents in Bromley earning a somewhat greater increase than in London as a whole (by approximately £8.40). See Table 4.2.

Table A.2: Average Gross Weekly Earnings

Borough / Comparator	Average Gross Weekly Earnings: Residents (£)		Average Gross Weekly Earnings: Workplace (£)	
	2009	2012	2009	2012
LB Bromley	644.90	670.80	523.80	546.00
London	598.20	613.30	627.40	652.80
Great Britain	490.50	508.00	489.90	507.60

Source: Annual Survey of Hours and Earnings, 2012

Qualifications

The ONS Annual Population Survey reveals (Table 4.3) that in 2012, the workforce within LB Bromley was slightly more qualified than the London average, with 95% of individuals holding a qualification (compared to 91.6% in Greater London). The LB Bromley has a somewhat higher proportion of the population who hold a degree or higher degree (44.5%) compared with Great Britain (34.4%) but a smaller proportion than within London as a whole (47.6%). This reveals a skills gap in comparison to Greater London and with employers seeking more a highly skilled workforce, points towards a need to improve the skills base within Bromley's population.

Table A.3: Qualifications

	Bromley (numbers)	Bromley (%)	London (%)	Great Britain (%)
NVQ4 and above	89,100	44.5	47.6	34.4
NVQ3 and above	126,800	63.3	63.2	55.1
NVQ2 and above	156,100	77.9	75.1	71.8
NVQ1 and above	178,800	89.3	83.6	84.0
Other qualifications	11,400	5.7	8.0	6.3
No qualifications	10,100	5.0	8.4	9.7

Source: ONS Annual Population Survey 2012

Industrial Structure

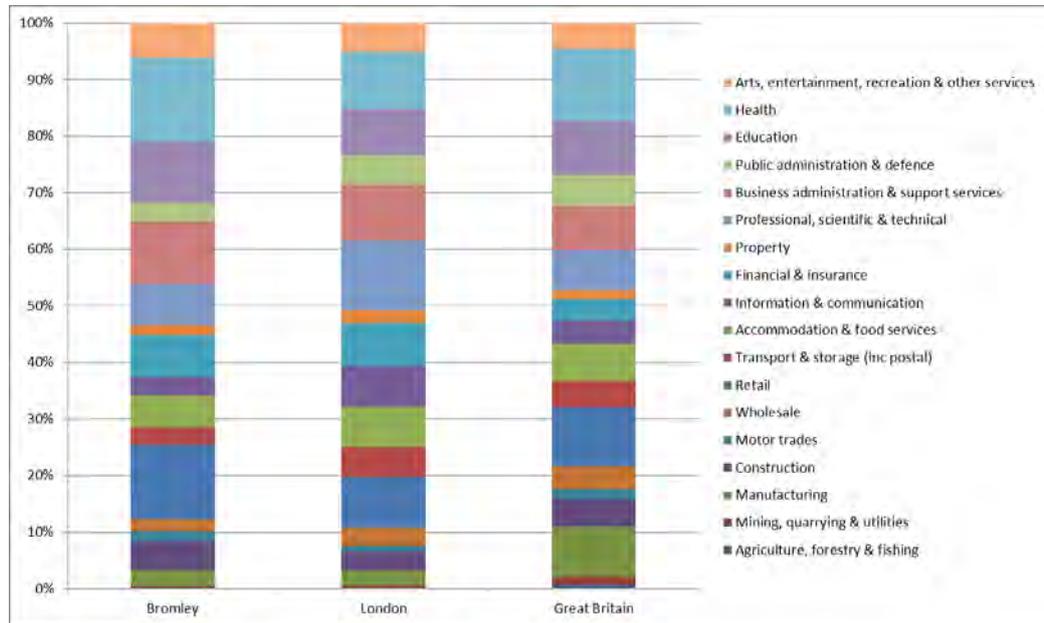
Below we set out the profile of the industrial structure of the borough and key sectors (Figure 4.1). The Business Register and Employment Survey (BRES) shows that employment in Bromley decreased from 103,311 in 2009 to 97,791 in 2012, a decrease of 5.4%. Conversely, over the same time period London saw an increase in employment compared with an average rise in employment of 7.4% whilst Great Britain as a whole experienced a marginal increase in employment of 0.3%. Table 4.4 sets out the industrial structure of LB Bromley by employment.

Table A.4: Employment in LB Bromley by Broad Industrial Groups

Industry	2009	% of total	2012	% of total	Change (Actual)	Change (%)
Agriculture and fishing	19	0.0%	7	0.0%	-12	-63.2%
Mining, quarrying and utilities	520	0.5%	881	0.9%	361	69.4%
Manufacturing	2,822	2.7%	2,658	2.7%	-164	-5.8%
Construction	5,187	5.0%	6,426	6.6%	1,239	23.9%
Motor Trades	1,866	1.8%	1,224	1.3%	-642	-34.4%
Wholesale	2,279	2.2%	2,110	2.2%	-169	-7.4%
Retail	13,583	13.1%	12,883	13.2%	-700	-5.2%
Transport & storage	3,216	3.1%	3,140	3.2%	-76	-2.4%
Accommodation & food services	5,885	5.7%	6,213	6.4%	328	5.6%
Information & communication	3,195	3.1%	3,352	3.4%	157	4.9%
Financial & insurance	7,758	7.5%	5,956	6.1%	-1,802	-23.2%
Property	1,788	1.7%	2,160	2.2%	372	20.8%
Professional, scientific/tech	7,581	7.3%	6,375	6.5%	-1,206	-15.9%
Business administration	11,440	11.1%	9,362	9.6%	-2,078	-18.2%
Public administration	3,245	3.1%	3,102	3.2%	-143	-4.4%
Education	11,214	10.9%	11,474	11.7%	260	2.3%
Health	15,313	14.8%	14,967	15.3%	-346	-2.3%
Arts, entertainment, rec.	6,400	6.2%	5,501	5.6%	-899	-14.0%
Total	103,311	-	97,791	-	-5,520	-5.4

Source: ONS, Business Register and Employment Survey. These figures do not include self-employed individuals. Note that figures do not always add up to exact sum due to rounding.

Figure A.8 Profile of Employment at LB Bromley’s Workplaces 2012



Workplace Economy- Business Size and Stock

VAT registration – de-registration rates for LB Bromley provide an indication of the entrepreneurial characteristics of the borough. The latest published data indicates that in 2011 there were 1,580 registrations whilst there were 1,250 de-registrations resulting in a net gain in LB Bromley’s stock of 330 businesses. Comparatively in 2009 there were 1,320 business registrations compared to 1,740 de-registrations resulting in a net loss in LB Bromley’s stock of 420 businesses.

Business size provides a useful indication of the make-up of firms operating in LB Bromley. Small businesses contribute significantly to employment within the borough, with 11,620 businesses employing between one and nine employees, comprising 87.2% of the 13,320 companies registered within the borough in 2013. The proportion of SMEs¹⁵ in the economy is similar to that of Greater London and Great Britain as a whole, with SMEs accounting for 99.5% and 98.5% of businesses respectively. There are 35 businesses employing more than 250 employees in the borough, which represents 0.3% of businesses. Table 4.5 presents a size band analysis of work places in the borough. The size band refers to the number of employees at each workplace (not the size of the parent company).

¹⁵ SMEs are defined as enterprises which employ fewer than 250 people.

Table A.5: Business units by size band, 2013

Number of employees	Bromley		London	
	Number	% of total	Number	% of total
0-9	11,620	87.2	366,610	84.8
10-49	1,380	10.4	51,945	12.0
50-249	285	2.1	11,480	2.7
250+	35	0.3	2,065	0.5
Total	13,320	-	394,055	-

Source: ONS, UK Business: Activity, Size and Location 2013

Appendix E: Capacity Assessment Results
2014 Baseline Scenario
Table E.1: Ruxley Corner Roundabout 2014 Baseline Results

Arm	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)		SAT Peak (17:00-18:00)	
	RFC	MMQ (pcu)	RFC	MMQ (pcu)	RFC	MMQ (pcu)
1 - North Cray Road	0.85	5	0.50	1	0.86	6
2 - Maidstone Road (E)	0.59	1	0.31	0	0.38	1
3 - Sandy Lane	0.35	1	0.31	0	0.37	1
4 - A223 Edginton Way	0.71	2	0.81	4	0.79	4
5 - Maidstone Road (W)	0.40	1	0.91	8	0.61	2

Table E.2: A224 Cray Road / A223 Edginton Way / A20 / A224 Sevenoaks Way 2014 Baseline Results

Arm	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)		SAT Peak (17:00-18:00)	
	DOS %	MMQ (pcu)	DOS %	MMQ (pcu)	DOS %	MMQ (pcu)
Cray Road	48	4	92	13	76	7
A223 Edginton Way	55	4	61	3	98	25
A20 Offslip WB	105	35	57	3	84	2
A224 Sevenoaks Way	90	15	94	6	95	20
Internal Roundabout Signal	88	18	78	19	83	19
A20 Offslip EB	95	23	77	15	84	19

Table E.3: A224 Sevenoaks Way / Midfield Way 2014 Baseline/Planned Results

Arm	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)		SAT Peak (17:00-18:00)	
	RFC	MMQ (pcu)	RFC	MMQ (pcu)	RFC	MMQ (pcu)
Midfield Way to Sevenoaks Way	0.71	2	0.95	9	1.34	38
Sevenoaks Way (N) to Midfield Way	0.94	9	0.99	11	1.10	25

Table E.4: A224 Sevenoaks Way / Station Road / Leeson Hill 2014 Baseline/Planned Results

Arm	Configuration	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)		SAT Peak (17:00-18:00)	
		DOS (%)	MMQ (pcu)	DOS (%)	MMQ (pcu)	DOS (%)	MMQ (pcu)
A - A224 Sevenoaks Way (N)	Baseline	91.3	32	84.8	30	83.6	30
	Planned	70.9	23	63.9	22	65.8	23
B - B258 Station Road	Baseline	73.1	11	50.2	8	68	10
	Planned	73.1	11	55.1	8	70.2	11
C - A224 Sevenoaks Way (S)	Baseline	81	31	93.2	45	79	33
	Planned	81	31	87.8	41	77.5	33
D - Leeson Hill	Baseline	92.4	18	93	20	82.7	13
	Planned	81.2	15	86.8	18	76.8	13

TABLE.5: A224 Cray Avenue / Kent Road / Poverest Road 2014 Baseline Results

Arm	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)		SAT Peak (17:00-18:00)	
	DOS (%)	MMQ (pcu)	DOS (%)	MMQ (pcu)	DOS (%)	MMQ (pcu)
A – A224 Cray Avenue (North)	82.5	23	79.6	23	74.7	21
B - Kent Road	82.1	12	79.2	9	69.5	6
C – A224 Cray Avenue (South)	56.3	18	56.0	19	52.4	17
D - Poverest Road	80.9	12	65.9	9	73.9	9

TABLE E.6: A224 Cray Avenue / Lower Road / A224 Court Road / A223 High Street 2014 Baseline/Planned Results

Arm	Configuration	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)		SAT Peak (17:00-18:00)	
		DOS (%)	MMQ (pcu)	DOS (%)	MMQ (pcu)	DOS (%)	MMQ (pcu)
A - A224 Cray Avenue	Baseline	101.9	51	96.2	23	107.1	67
	Planned	101.9	51	96.2	43	107.1	67
B - Lower Road	Baseline	109.4	28	65.3	7	72.3	10
	Planned	116.7	37	65.3	7	69.3	9
C - A224 Court Road	Baseline	103.4	49	93.2	32	102.2	50
	Planned	98.2	39	93.2	32	107.3	63
D - A223 High Street	Baseline	118.7	19	93.4	12	98.1	12
	Planned	118.7	35	97.8	10	96.9	14

2030 Do Minimum and Do Something Scenarios
Table E.7: Ruxley Corner Roundabout 2030 Do Minimum / Do Something Results

AM Peak (08:00-09:00)	2030 DM		2030 DS	
Approach (from)	RFC	MMQ (pcu)	RFC	MMQ (pcu)
1 - North Cray Road	0.97	17	0.98	20
2 - Maidstone Road (E)	0.68	2	0.69	2
3 - Sandy Lane	0.41	1	0.42	1
4 - A223 Edgington Way	0.82	4	0.82	4
5 - Maidstone Road (W)	0.46	1	0.46	1
PM Peak (17:00-18:00)	2030 DM		2030 DS	
Approach (from)	RFC	MMQ (pcu)	RFC	MMQ (pcu)
1 - North Cray Road	0.63	2	0.61	2
2 - Maidstone Road (E)	0.37	1	0.58	1
3 - Sandy Lane	0.35	1	0.41	1
4 - A223 Edgington Way	1.01	31	1.07	64
5 - Maidstone Road (W)	1.21	73	1.11	47
SAT Peak (17:00-18:00)	2030 DM		2030 DS	
Approach (from)	RFC	MMQ (pcu)	RFC	MMQ (pcu)
1 - North Cray Road	0.97	15	0.97	15
2 - Maidstone Road (E)	0.42	1	0.42	1
3 - Sandy Lane	0.42	1	0.42	1
4 - A223 Edgington Way	0.87	6	0.87	6
5 - Maidstone Road (W)	0.72	2	0.72	2

Table E.8: A224 Cray Road / A223 Edgington Way / A20 / A224 Sevenoaks Way junction 2030 Do Minimum / Do Something Results

AM Peak (08:00-09:00)	2030 DM		2030 DS	
Approach (from)	DOS (%)	MMQ (pcu)	DOS (%)	MMQ (pcu)
Cray Road	56	5	60	5
A223 Edgington Way	63	5	67	6
A20 Offslip WB	147	145	176	204
A224 Sevenoaks Way	95	23	98	29
Signals (RDBT)	89	20	87	20
A20 Offslip EB	100	33	99	32
PM Peak (17:00-18:00)	2030 DM		2030 DS	
Approach (from)	DOS (%)	MMQ (pcu)	DOS (%)	MMQ (pcu)

Cray Road	117	66	119	72
A223 Edgington Way	68	6	72	8
A20 Offslip WB	75	7	82	9
A224 Sevenoaks Way	108	91	114	133
Signals (RDBT)	80	24	76	24
A20 Offslip EB	82	20	84	22
SAT Peak (17:00-18:00)	2030 DM		2030 DS	
Approach (from)	DOS (%)	MMQ (pcu)	DOS (%)	MMQ (pcu)
Cray Road	91	12	91	12
A223 Edgington Way	112	87	112	87
A20 Offslip WB	99	15	99	15
A224 Sevenoaks Way	104	63	104	63
Signals (RDBT)	84	22	84	22
A20 Offslip EB	87	23	87	23

Table E.9: A224 Sevenoaks Way / Midfield Way junction 2030 Do Minimum / Do Something Results

AM Peak (08:00-09:00)	2030 DM		2030 DS	
Approach (from)	RFC	MMQ (pcu)	RFC	MMQ (pcu)
Midfield Way to Sevenoaks Way	0.81	4	0.97	10
Sevenoaks Way (N) to Midfield Way	1.08	23	1.05	19
PM Peak (17:00-18:00)	2030 DM		2030 DS	
Approach (from)	RFC	MMQ (pcu)	RFC	MMQ (pcu)
Midfield Way to Sevenoaks Way	1.50	69	1.31	50
Sevenoaks Way (N) to Midfield Way	1.16	30	1.13	26
SAT Peak (17:00-18:00)	2030 DM		2030 DS	
Approach (from)	RFC	MMQ (pcu)	RFC	MMQ (pcu)
Midfield Way to Sevenoaks Way	1.56	86	1.56	86
Sevenoaks Way (N) to Midfield Way	1.27	52	1.27	52

Table E.10: A224 Sevenoaks Way / Station Road / Leasons Hill junction 2030 Do Minimum / Do Something Results

AM Peak (08:00-09:00)	2030 DM		2030 DS	
Approach (from)	DOS (%)	MMQ (pcu)	DOS (%)	MMQ (pcu)
A224 Sevenoaks Way (North)	77.5	27	79.8	29
B258 Station Road	79.7	13	82.4	13
A224 Sevenoaks Way (South)	88.6	37	90.3	39
Leasons Hill	87.5	17	89.5	18
PM Peak (17:00-18:00)	2030 DM		2030 DS	
Approach (from)	DOS (%)	MMQ (pcu)	DOS (%)	MMQ (pcu)
A224 Sevenoaks Way (North)	69.7	25	71.7	26
B258 Station Road	61.7	9	63.6	9
A224 Sevenoaks Way (South)	95.8	51	97.1	55
Leasons Hill	93.6	22	95.3	23
SAT Peak (17:00-18:00)	2030 DM		2030 DS	
Approach (from)	DOS (%)	MMQ (pcu)	RFC	MMQ (pcu)
A224 Sevenoaks Way (North)	72.2	26	72.2	26
B258 Station Road	75.6	12	75.6	12
A224 Sevenoaks Way (South)	85.0	39	85.0	39
Leasons Hill	83.0	16	83.0	16

Table E.11: A224 Cray Avenue / Kent Road / Poverest Road junction 2030 Do Minimum / Do Something Results

AM Peak (08:00-09:00)	2030 DM		2030 DS	
Approach (from)	DOS (%)	MMQ (pcu)	DOS (%)	MMQ
Cray Avenue (North)	92.3	30	92.2	36
Kent Road	79.8	11	83.8	12
Cray Avenue (South)	63.9	21	65.4	27
Poverest Road	90.1	13	91.2	14
PM Peak (17:00-18:00)	2030 DM		2030 DS	
Approach (from)	DOS (%)	MMQ (pcu)	DOS (%)	MMQ (pcu)
Cray Avenue (North)	83.3	27	85.7	33
Kent Road	81.5	12	86.2	12
Cray Avenue (South)	61.2	23	60.0	24
Poverest Road	83.2	15	85.9	14

SAT Peak (17:00-18:00)	2030 DM		2030 DS	
Approach (from)	DOS (%)	MMQ (pcu)	DOS (%)	MMQ (pcu)
A - Cray Avenue (North)	81.5	26	81.5	26
B - Kent Road	76.5	7	76.5	7
C - Cray Avenue (South)	56.9	20	56.9	20
D - Poverest Road	81.3	12	81.3	12

Table E.12: A224 Cray Avenue / Lower Road / A224 Court Road / A223 High Street junction 2030 Do Minimum / Do Something Results

AM Peak (08:00-09:00)	2030 DM		2030 DS	
Approach (from)	DOS (%)	MMQ (pcu)	DOS (%)	MMQ (pcu)
A - A224 Cray Avenue	111.2	86	113.2	95
B - Lower Road	125.1	49	124.7	49
C - A224 Court Road	107.0	65	109.4	74
D - A223 High Street	128.0	35	128.0	36
PM Peak (17:00-18:00)	2030 DM		2030 DS	
Approach (from)	DOS (%)	MMQ (pcu)	DOS (%)	MMQ (pcu)
A - A224 Cray Avenue	105.6	74	110.3	95
B - Lower Road	66.5	7	66.5	7
C - A224 Court Road	109.3	80	109.8	73
D - A223 High Street	103.3	21	103.1	22
SAT Peak (17:00-18:00)	2030 DM		2030 DS	
Approach (from)	DOS (%)	MMQ (pcu)	RFC	MMQ (pcu)
A - A224 Cray Avenue	116.5	104	116.5	104
B - Lower Road	74.7	11	74.7	11
C - A224 Court Road	116.3	97	116.3	97
D - A223 High Street	116.3	42	116.3	42

Appendix F: Borough employment forecast in this study compared to the figures in the Further Alterations to the London Plan

The Draft Further Alterations to The London Plan quotes a net additional employment figure for Bromley as 16,000 for the period to 2036. The net additional employment projections provided by the URS study are different as:

- the time frame covered by each study is different; and
- the Cray Business Corridor study focuses on the office and industrial sectors only.

The Draft Further Alterations to The London Plan uses the same GLA Employment Projections (2013) source as this study. However, it does so over a longer time frame. The table below presents these figures for Bromley. It should be noted that, as employment projections do not predict a constant rate of increase, the ratio between years covered and net additional employment are not the same

Table 6.9 – Bromley employment projections during the study timeframes

Study	Period Covered	Years Covered	Net Additional Employment
FALP	2011 to 2036	25	16,000
Cray Business Corridor Study ¹⁶	2013 to 2031	18	10,000

Source: GLA Employment Projections (2013)

The GLA released forecasts by borough and sector in 2010. They provided raw figures for office, industrial and other sector employment, alongside total employment, for each borough over five year periods. This allows us to extrapolate the shares of total employment that will be made up by the office and industrial sectors, presented in the table below.

Table 6.10 – Office and industrial sector shares of employment in Bromley

	2011	2016	2021	2026	2031
Office Share	21.1%	21.3%	21.4%	21.6%	21.6%
Industrial Share	11.5%	10.6%	9.7%	8.9%	8.2%

Source: GLA (2010) London Employment Time Series

Both office and industrial employment provide a minority of the total employment in Bromley. These shares are projected onto the most recent total employment forecasts to provide employment forecasts for the office and industrial sectors. The table below presents the net additional employment effects using this procedure for both time periods (assuming the share in 2031 to hold until 2036). This corresponds with information in Table 6.4.

Table 6.11 – Net additional office and industry employment in Bromley

Study	Net Additional Office Employment (B1a and B1b)		Net Additional Industrial Employment (B1c, B2 and B8)	
	2011 to 2036	2013 to 2031	2011 to 2036	2013 to 2031
FALP	+2,900		-3,000	
Cray Business Corridor Study		+2,100		-2,600

Source: URS

¹⁶ Borough wide figure.

It shows that, if the Cray Business Corridor Study looked at a longer time period, the net additional employment for office would increase and for industrial would decrease.