

Final Sustainability Appraisal of Grahame Park SPD

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Non-technical Summary

This Sustainability Appraisal has been prepared for the Grahame Park Supplementary Planning Document (SPD). This SPD will form a part of Barnet's Local Plan and will provide guidance on the acceptable uses and design expectations in the redevelopment of the existing Grahame Park Estate.

Sustainability Appraisal attempts to predict and highlight the significant effects of implementing the SPD and suggests ways to reduce negative effects, create or enhance positive effects, and to make predicted effects more certain. The appraisal is based upon the economic, environmental and social impacts the development proposals may have on the neighbourhood and wider area. These effects are considered against baseline data established in the Scoping Report for Grahame Park SPD Sustainability Appraisal.

The Sustainability Appraisal Scoping Report identifies both the important issues facing Grahame Park and establishes the Sustainability Objectives and Framework that has been used to carry out this Sustainability Appraisal. The Scoping Report has highlighted particular sustainability issues within the Grahame Park area including:

- Existing Grahame Park development layout contributes towards increased fear of crime
- High levels of deprivation
- Large number of part-time jobs,
- Poor housing stock which contributes to CO2 emissions,
- Grahame Park is in a critical drainage area and at risk of surface water flooding,
- Poor transport connections across the Grahame Park area, including public transport and
- Development pressure will put heritage and ecological assets at greater risk

The Sustainability Appraisal process ensures that these and other broader issues are considered in an iterative process whereby this information is fed back to produce the final version of the SPD.

The Likely Effects of the SPD

The appraisal has demonstrated that the regeneration of Grahame Park following the SPD would generally have very positive effects on the social, environmental and economic climate in the long term. However, this is a reflection of the existing poor quality of the housing stock and of the current public environment.

Further stages of the appraisal have revealed that there were some areas that may have been considered in more detail. When the draft SPD was appraised against the Original Masterplan, adopted in 2008, it was concluded that ecology may have been considered more fully in the form of a biodiversity strategy.

It was concluded that the combined heat and power plant and commitment to the Considerate Contractors Scheme proposed in the draft SPD would have very positive sustainability effects.

For future reference the appraisal recognises that further detail will become clear as future planning applications are made. The following areas were considered :

- the green links,
- access between the community hubs

The final sustainability appraisal report which accompanies the adopted SPD includes consultation feedback from the statutory consultees in section 2.3. The statutory consultees all made minor comments to improve the assessment framework. In addition reference was made by Historic England to ensuring that the rich aeronautical history of Colindale was reflected in the scheme going forward. It was considered that this aspect would be best dealt with through detailed design through the planning application process.

1.1 Introduction

- 1.1.1 This report is the Final Sustainability Appraisal (SA) for Barnet's Grahame Park estate Supplementary Planning Document.
- 1.1.2 The Council in partnership with Genesis Housing Association have taken the decision to undertake a comprehensive review of the remainder of the Grahame Park Estate Masterplan, known as Stage B.
- 1.1.3 Although usually Supplementary Planning Documents (SPDs) do not require sustainability appraisal, one may be considered if there may be significant environmental effects not already considered by a higher tier or other policy or strategy document. The Council considered that the SPD content could be considered a sufficient departure from the original masterplan and outline planning permission to warrant assessment of the impacts of the framework in line with the SEA Directive.

1.2 The Grahame Park SPD

- 1.2.1 The Grahame Park Estate was built by the Greater London Council in the 1960s and 70s, originally comprising 1,777 homes. The estate layout is based on the Radburn principles of separating vehicles and pedestrians, which has led to unsafe and difficult circulation routes. When these factors are coupled with poor accommodation, overcrowding and poorly integrated local facilities they have resulted in the estate becoming isolated from the rest of Colindale.
- 1.2.2 In 2003 residents voted in favour of a full regeneration of the estate and in 2004 a new masterplan was submitted, with outline consent approved in 2007. The masterplan is now 10 years old and out of date, with only a small amount of the envisaged regeneration implemented. The most recent phase of development required a complicated amendment to the original outline for only a minor change to the scheme, increasing costs and delays to the developer (Genesis Housing Association (GHA)) and the Council. Therefore in light of these delays and costs and in discussion with the Council, GHA have taken the decision to undertake a comprehensive review of the remainder of the masterplan (known as Stage B), to add drive to the project. This is important, given the significant amount of private development in the area, which threatens to leave Grahame Park further isolated.
- 1.2.3 The potential for changed scale of development, layout, provision of open space and other factors are considered to be potentially significant in terms of assessment.
- 1.2.4 A Supplementary Planning Document for Stage B will provide the Council with a framework within which to consider individual detailed planning applications for a series of phases over a 10-15 year period and provide certainty for GHA.

1.3 Development Progress

- 1.3.1 In 2003 planning permission was granted for outline permission for the entire Grahame Park regeneration. The whole scheme was divided into two stages; Stage A and B.

1.3.2 Stage A – was further broken down into three component phases

- Phase 0 – delivered 39 residential units
- Phase 1A (W01731LA/07) – 319 residential units (of which 50% affordable – 164 units); and
- Phase 1B (Planning ref: H/00308/11) – 446 Residential units and 5, 483m2 of non-residential floor space, including:
 - ✓ Library
 - ✓ Community Centre
 - ✓ Supermarket; and
 - ✓ Ancillary retail units

1.3.3 All parts of Stage A have now received planning permission and Stage B of the regeneration is yet to be implemented.

1.3.4 Stage B – Stage B has not been implemented and forms the basis of the current Draft Grahame Park SPD. Stage B of the approved outline planning permission from 2007 (Planning ref: W01731JS/04) is considered out of date and the draft SPD presents an opportunity to update this part of the Grahame Park regeneration.

1.4 Planning History

1.4.1 The planning history of Grahame Park is extensive. The following table sets out some of the key consents that have relevance to this report.

Planning Reference	Proposal	Decision	Decision Date
15/04039/FUL	Construction of a new council office building between 4 and 9 storeys in height providing 10,777sqm of floorspace comprising 8,361sqm of (B1) office space and 158sqm of (A3) cafe and ancillary space on ground floor. Provision of landscaping and public realm improvements, car and cycle parking and refuse and recycling stores	Approve subject to legal agreement	
H/00320/14	Revised application for development of plot A8 consisting of a 5 storey building comprising a 5,536sqm college, 500sqm public library and 500sqm centre for independent living (all Use Class D1); associated vehicle access, parking, landscaping, refuse and cycle storage (this is an amended proposal for the whole of this development plot, being proposed instead of the reserved matters approval reference H/00308/11 dated 21/02/2012 for 57 flats, a 750sqm public library, 945sqm centre for independent living and 279sqm of retail	Approved following legal agreement	6/5/2015

	floorspace).		
H/00308/11	Reserved matters application seeking approval for design, external appearance and landscaping for Phase 1B of the Grahame Park Estate Regeneration comprising 446 residential units (including Block A9), 5,483sqm (GEA) of non-residential floorspace including a library (Use Class D1), community centre (Use Class D1), supermarket (Use Class A1) and ancillary retail units (Use Classes A1, A2 and A3), pursuant to condition 6 of outline planning permission reference H/00309/11 for the regeneration of Grahame Park Estate, together with details of traffic management/highway improvements (condition 12) and phasing plans (condition 44) required to form part of the reserved matters, and details of the construction methods statement in order to discharge condition 46.	Approved following legal agreement	21/2/12
W01731JS/04	Redevelopment of site involving the demolition of 1314 existing residential units and construction of 2977 new residential units providing a total of 3440 units on the estate, provision of approximately 9074sqm replacement retail (Class A1), office (Class A2) food and drink (Class A3) and social and community (Class D1) uses and associated public and private open space, car parking and access arrangements. (OUTLINE) Submission of Environmental Statement.	Approved subject to conditions	17/1/07

1.5 The Vision behind the Grahame Park SPD

- 1.5.1 It is recognised that flexibility will be needed to achieve the Council's strategic vision of the regeneration of Grahame Park Estate, as reflected in SPD. The SPD is not intended to preclude or constrain other acceptable development and/or strategies for achieving sustainable comprehensive regeneration in accordance with relevant London Plan and Barnet Core Strategy/Development Management Policies. The SPD has been drafted with this in mind, such that it can be applied to any application coming forward on the site and can be given appropriate weight in the decision making process, should national, regional or local policy change over the course of the development

Key outcomes

- 1.5.2 The new neighbourhood would be constructed around a traditional network of streets, reflecting successful Victorian and Edwardian suburban areas. The buildings would be low scale, generally no more than 6 storeys with some taller elements to mark key corners, edges and community uses.

- 1.5.3 The SPD sets out that new housing should be available in a mixture of tenures, providing some new replacement social rented accommodation, shared ownership and additional social housing where viable, along with enabling private sale housing.
- 1.5.4 All housing should be built to up– to-date standards in terms of internal space and energy efficiency. There is an opportunity to deliver a large proportion of the new housing as family units, either as maisonettes or as terraced townhouses. This will help with current overcrowding issues on the estate, as well as contributing to a more balanced mix of unit types across the Colindale area.
- 1.5.5 The regeneration will inevitably improve the quality of the housing stock across the estate, but it is important that features such as cycle storage, amenity space and general storage are designed in from the outset. It will also be important that new housing is fully accessible and adaptable to future needs. Housing should, wherever possible, have front doors to the street and not too many flats to a stairwell core, in order to improve surveillance of the public realm and community cohesion.
- 1.5.6 The objective of the SPD is to provide good quality private and communal garden space, whilst ensuring that all properties have good outlook either to the street or to garden areas or open space. Good levels of daylight and sunlight should be achieved, so it will be important that primary windows are not overshadowed. Back to back distances and the design of the housing should ensure that privacy is not compromised
- 1.5.7 The existing estate is poorly integrated with surrounding neighbourhoods, so it will be important that any new masterplan puts a strong emphasis on improving connections with neighbouring routes, with a particular emphasis on pedestrian, cycle and public transport.
- 1.5.8 The objective of the SPD is to create three distinct character areas that connect better with surrounding neighbourhoods. It is important that these character areas relate to their surroundings, both architecturally and in the way that they function.
- 1.5.9 Each character area should have localised centres of activity with shops and community facilities that are accessible to new residents and existing residents of surrounding areas
- 1.5.10 It is envisaged that a new network of streets will be created with a clear hierarchy, to ensure that larger roads can accommodate buses, whilst smaller residential streets are narrower and quieter, with reduced traffic speeds. The street network should offer people a choice of routes and should be complimented by features and distinctive buildings that aid navigation. Streets and spaces should not be overly dominated by car parking, but adequate spaces should be provided to serve the development.
- 1.5.11 The pedestrian environment within the estate is not user friendly and the SPD intends to improve some existing well used routes by replacing surface materials and lighting, as well as introducing better natural surveillance from new buildings to reduce anti-social behaviour. New footpaths should be sited close to people’s front doors where possible to ensure that they are active and overlooked.
- 1.5.12 The existing community facilities are generally concentrated in the Concourse area and, with this area likely to be demolished soon, it will be necessary to ensure continued provision of services through phasing of development or temporary facilities if necessary.
- 1.5.13 The SPD objective is to ensure that community and retail facilities are clustered in convenient and accessible locations in each of the character areas. The southern character area already has planning approval as part of Stage A (Phase 1B) for retail and community

facilities, including the re-provided library, as well as the re-located Barnet and Southgate College campus.

- 1.5.14 The estate has a number of existing green open spaces, including Grahame Park and areas of public space in between the existing blocks. Many of these spaces have an attractive, wooded quality, with mature trees of amenity value. These spaces should be retained and enhanced, retaining as many trees as possible. Open spaces should be refurbished as development progresses, so that improvements can be realised after each phase of development.
- 1.5.15 There are currently a lot of levels changes in the public realm, including underpasses and uneven surfaces. The new neighbourhood should be fully accessible to all and should incorporate surface materials that will stand the test of time.
- 1.5.16 It will be important that the new and refurbished open spaces contain activities for all age groups, including play areas for children, outdoor gym and sports facilities for adults and sitting places for the elderly.
- 1.5.17 In addition, new open spaces should be created as part of new development, including pocket parks, and doorstep play areas.
- 1.5.18 The usability and ecological value, rather than the size or amount of open spaces, will be the important consideration. New tree planting should be maximised, including on streets and in amenity areas.
- 1.5.19 The Concourse currently blights the rest of the estate and the strategy is to ensure that this is demolished as part of the next phase of development to bring about the change that is needed to add drive to the regeneration.
- 1.5.20 The scheme should provide all necessary infrastructure to support the new community, including replacement community and retail facilities, improved public transport, highways enhancement and job brokerage for local people.

Core Design Principles of the SPD

- 1.5.21 The Core Design Principles which underpin the SPD approach are:
 - To knit the site into surrounding neighbourhoods by connecting routes, locating convenient community services and enhancing green spaces
 - To remove the concept of the 'Estate' by establishing three areas of distinct character in tune with their surroundings, with localised centres and public amenities
 - To improve public facilities with community hubs located across the site to serve the southern, central and northern areas and wider neighbourhoods. (See Section 3.2 of the Grahame Park SPD).
 - To improve public open space, by enhancing green assets and mature trees.
 - To create useable, attractive, safe and active routes and parks, well positioned for the immediate and wider community. (See Section 3.3 and 3.4 of the Grahame Park SPD).
 - To improve accessibility with a familiar, legible network of traditional streets and safe, attractive walking routes. See Sections 3.4 and 3.5.

- To develop new quality homes that are well planned, sustainable and adaptable for current and future generations. (See Sections 3.6 and 3.7 of the Grahame Park SPD).

2.1 What is Sustainability Appraisal?

2.1.1 Sustainability Appraisal is a statutory obligation undertaken by local planning authorities to ensure that social, environmental and economic considerations are taken into account during all the stages of a plan's preparation.

2.1.2 Sustainability appraisal has been defined as:

*"A systematic and iterative process undertaken during the preparation of a plan or strategy, which identifies and reports on the extent to which the implementation of the plan or strategy would achieve environmental, economic and social objectives by which sustainable development can be defined, in order that the performance of the strategy and policies is improved."*¹

2.1.3 SA is therefore an on-going process, which seeks to improve the sustainability performance of a plan by testing it throughout its preparation in order to expose any weaknesses in its contribution to achieving sustainable development. It is an integral part of good plan-making, and to enable it to be effective and worthwhile, the appraisal must start early in the plan-preparation process. By doing so the SA assists with the identification of sustainability issues and options, which in the case of the Local Plan, will be refined through the SA process into policies to form its eventual content.

*"Sustainable development is central to the reformed planning system. The purpose of sustainability appraisal (SA) is to promote sustainable development through the integration of social, environmental and economic considerations into the preparation of revisions of Regional Spatial Strategies and for new or revised Development Plan Documents (DPDs) and Supplementary Planning Documents (SPDs)."*²

2.1.4 This document seeks to determine the performance, in terms of sustainability, of the objectives and approach taken in the Grahame Park SPD. Its role is to assist with the identification of the appropriate sustainable approach to predict implications for sustainable development and put forward recommendations for improvement where necessary.

2.1.5 Sustainability Appraisal is a multi-stage process. The national guidance on SA sets out the process in a number of stages as illustrated in Table 1. This sustainability appraisal represents stages B, C and D in this process, developing and refining alternatives, assessing effects, preparing the sustainability appraisal report and seeking representations on the Sustainability Appraisal Report from consultation bodies and the public.

Table 1 – Key Stages of Sustainability Appraisal

¹ Good Practice Guide on Sustainability Appraisal of Regional Planning Guidance, Department for the Environment, Transport and the Regions. London, 2000

² Good Practice Guide on Sustainability Appraisal of Regional Planning Guidance, Department for the Environment, Transport and the Regions. London, 2005

Stages in the SA Process		Sub Stages	Tasks
STAGE A	Setting the context and objectives, establishing the baseline and deciding on the scope.	A1	Identify other relevant policies, plans, programmes, and sustainability objectives.
		A2	Collect baseline information.
		A3	Identify sustainability issues and problems
		A4	Develop the sustainability appraisal framework.
		A5	Consult the consultation bodies on the scope of the sustainability appraisal report.
STAGE B	Developing and refining alternatives and assessing effects	B1	Test the SPD objectives against the sustainability appraisal framework
		B2	Develop the SPD options including reasonable alternatives
		B3	Evaluate the likely effects of the SPD and alternatives
		B4	Consider ways of mitigating adverse effects and maximising beneficial effects
		B5	Propose measures to monitor the significant effects of implementing the SPD.
STAGE C	Prepare the Sustainability Appraisal Report		
STAGE D	Seek representations on the Sustainability Appraisal Report from consultation bodies and the public		
STAGE E	Post adoption reporting and monitoring	E1	Prepare and publish post-adoption statement
		E2	Monitor significant effects of implementing the SPD
		E3	Respond to adverse effects

2.1.6 This document builds upon work previously undertaken by the Council in the preparation of the SA Scoping Report for Grahame Park SPD (Stage A in the Sustainability Appraisal process (Table 1)).

2.2 Consultation Responses to the Grahame Park SPD Scoping Report

2.2.1 The draft Scoping Report for Sustainability Appraisal of the Grahame Park SPD was consulted on for the statutory period of 5 weeks from 27 May until 1 July 2015. Three Statutory Consultees were invited to make comments; these bodies are:

- Natural England;
- Environment Agency; and
- Historic England.

Below is a summary of the responses from the statutory consultees received through the consultation.

Natural England

- The key messages supporting Biodiversity, Flora and Fauna were welcomed in line with NPPF paragraph 118 and the assessment should consider the wider impacts on biodiversity as well as designated sites
- We recommend that the environmental objective: *Protection of the historic environment and biodiversity within the borough* be split into two thus treating these

two issues individually: we suggest ‘Enhance and protect Biodiversity within the borough’.

- It would be useful to recognise that a planned green infrastructure network aims to provide additional services that contribute to climate change adaptation and water quality as well as health and well-being and biodiversity.
- Incorporating well designed Suds using appropriately planted swales, rain gardens and living roofs and walls can add quality and interest to small areas of open space. We support measures such as community food growing areas for example, sited near play areas to give added supervision.

Environment Agency

- The area detailed within this SPD lies within Flood Zone 1, however the proposed scale of development may still present risks of flooding on-site and/or off-site if surface water run-off is not effectively managed.
- New developments should aim to reduce water consumption to 110 litres per head (lph). This is a requirement set out in the new Housing Standards and London Plan Policy 5.15: Water Use and Supplies
- Our records show that the site contains areas of historical landfill. All risks to groundwater and surface waters from contamination need to be identified so that appropriate remedial action can be taken.

Historic England

- It would be helpful if all the listed buildings and heritage assets were plotted on a map in the Environmental Assessment.
- Take a positive approach to historic environment and explore the opportunities the historic environment offers that could help improve the character and quality of the place that you are planning to develop.

2.3 Consultation Responses to the Grahame Park SPD draft Sustainability Appraisal Report

Historic England

- Welcome the addition of the map of all the listed buildings and heritage assets but suggest that it is revised as it has been cropped and omits various several listed buildings in proximity to the development site.

The map has been reviewed and considered clear

- Concern that the assessment does not follow through on a statement which correctly identifies that Colindale has a rich aeronautical history but is not reflected

throughout the document in particular in table X the appraisal assessment of the Grahame Park SPD objectives against the Sustainability Framework objectives

The SPD has been assessed and the SA objectives reviewed with amendments made. The design team will consider how the aeronautical history of Colindale can enrich the public realm of the scheme as development comes forward through detailed applications.

Natural England

- Note that the site falls within the Impact Risk Zone of the Brent Reservoir Site of Special Scientific Interest (SSSI) which should be referenced and the likely risk of impact considered in the document.

The assessment has been revised to include reference to the Brent Reservoir

Environment Agency

- Consider re-wording sub-objective 9 from improve to protect the quality of rivers and groundwater to bring in line with guidance and procedures for planning applications as planning applications only aim to protect and not improve.

The objective sub-question has been revised

Figure 2: Contextual Setting of Grahame Park

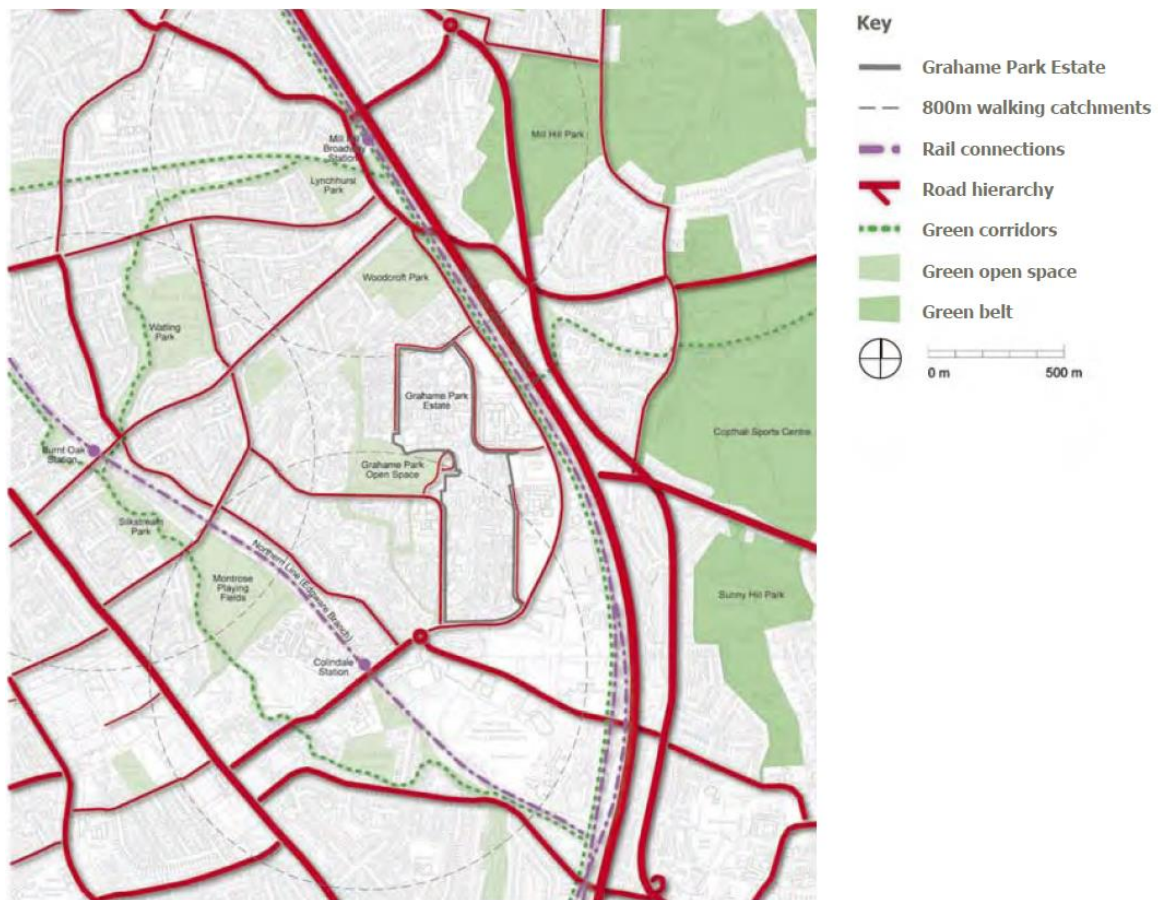
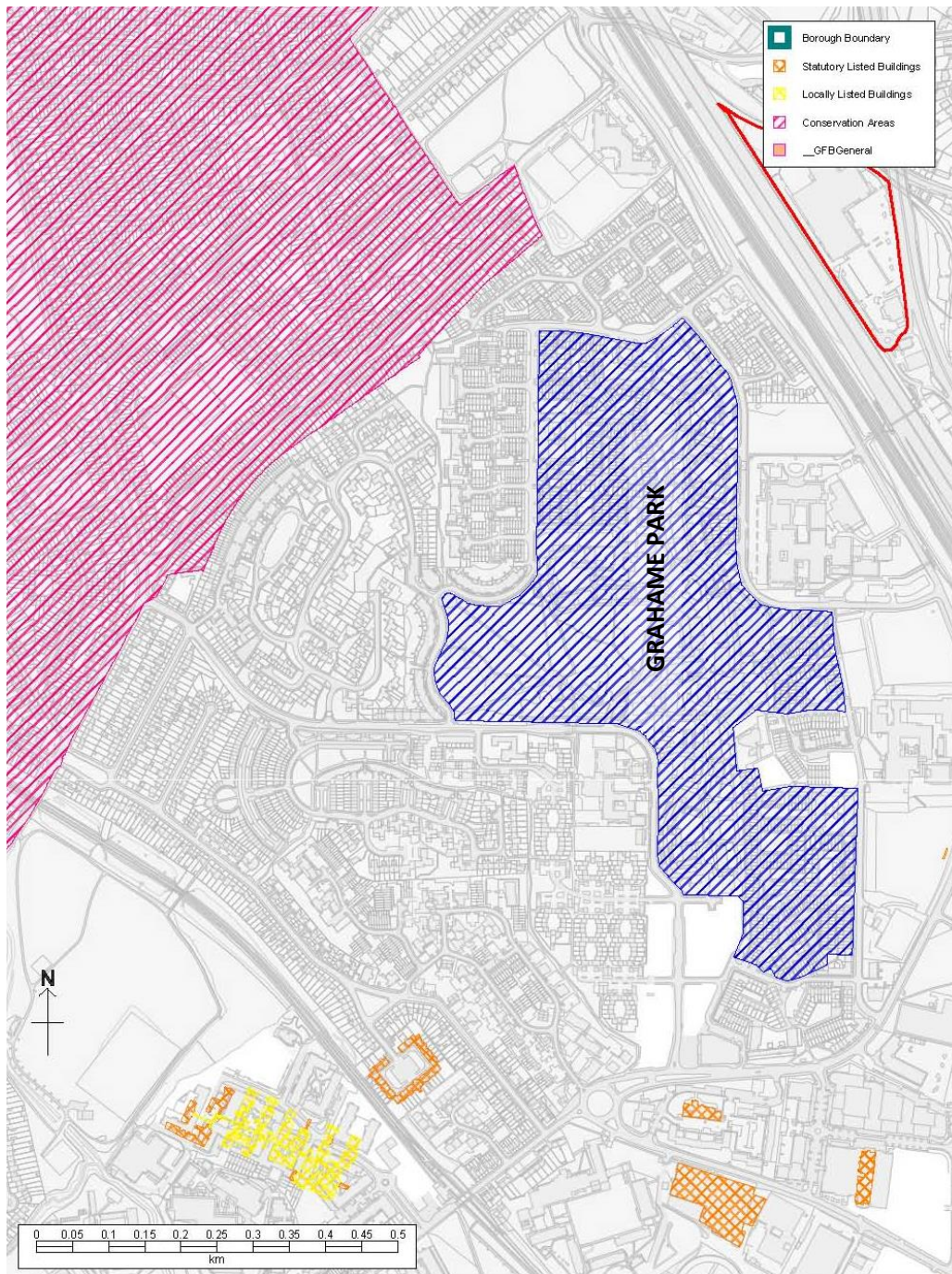


Figure 3: Heritage Context of Grahame Park



Sustainability Issues and Problems

The draft Scoping Report assessed the baseline data and identified key sustainability issues which the sustainability appraisal should aim to address.

These issues have been identified through a survey of existing council baseline data and through monitoring, engagement with stakeholders, a review of relevant policies, strategies and programmes and other information about the borough.

The issues have been set out under the headings of 'economic', 'environmental' and 'social'. Some of the issues do cut across more than one of these categories. To avoid duplication the cross cutting issues have been limited to one category only.

ECONOMIC	
Unemployment and Job Opportunities for local people	<p>The % working age population in work as a percentage of the total population in Colindale is 10% lower than the Barnet figure which is indicative of the long standing economic deprivation in the area.</p> <p>The biggest employer based in Colindale ward is Public Health England which has its Headquarters on Colindale Avenue. The organisation does not appear to employ a significant number of local people. Public services will continue to be subject to cuts in funding from Government.</p> <p>The small business space which will remain in the area will mainly serve local needs and represent a local opportunity. The new retail floorspace and other uses present an opportunity for future employment in the area.</p>
Provision of retail floorspace and the promotion of town centres	<p>The regeneration of Colindale and Grahame Park will provide an increase in retail floorspace which is opposite to Barnet which is experiencing a gradual decline in retail floorspace.</p> <p>The retail opportunities in Grahame Park are dispersed across the major development sites with a new local centre expected in Colindale Avenue, space developing in Beaufort Park and of course the new space in Grahame Park.</p>
Balancing the demand for housing with the protection and provision of employment	<p>The major housing opportunities in Colindale are principally being delivered on land used for public sector community uses and not land being used for employment. Future job provision for the</p>

land	Area Action Plan is estimated at 1,000. The proposal to incorporate London Borough Barnet's headquarters in the Grahame Park regeneration area is a significant change to the AAP and can be viewed as positive bringing a more mixed land use to the area.
Provision of a range of jobs across a range of skills to promote local prosperity.	<p>A considerably larger proportion of the workforce in Barnet and Colindale are employed in unskilled (occupational groups 8-9) occupations when compared with London.</p> <p>Average annual modelled income estimates for Colindale (£22,778) are significantly less than Barnet (£36,325) and London (£35,740) and present an opportunity for increase.</p> <p>Barnet and Colindale has a considerably larger proportion of part-time jobs when compared with London as a whole.</p>
Promote sustainable economic regeneration	<p>Sub regionally Colindale is proximate to the Brent Cross Cricklewood regeneration area which contains potential significant new opportunities both in terms of new retail and commercial floorspace.</p> <p>Locally opportunities will be in new and replacement retail floorspace in Grahame Park.</p>
ENVIRONMENTAL	
Energy use and energy efficiency in residential development	<p>By far the largest contributor to CO₂ emissions in Colindale will be through domestic use.</p> <p>The regeneration of the housing stock in Grahame Park will significantly improve energy efficiency which when combined with a district heating scheme will mean that energy use in Colindale is lower than the rest of the borough.</p>
Sustainable design	Average water consumption in Barnet is much higher than the national average.
Minimising waste arisings	Household waste collected per person is considerably higher than the London average (nb no data available for Grahame Park of Colindale).
Protection, provision and improved access to open space	The SPD for Grahame Park may result in a reduction in total open space however the quality of the remaining open space will be improved and the quantity available across Colindale will increase

	in line with the AAP.
Minimising flood risk	The redevelopment of Grahame Park will provide the opportunity to mitigate the surface water flooding risk identified. There is no flood risk from rivers.
Improvement of air quality	Car ownership in Colindale and Grahame Park is lower than the borough average. Promotion of cycling and other forms of transport to minimise the number of journeys by car will help to improve air quality throughout the borough. Improving Fewer car journeys will also help reduce CO ² emissions and walking and cycling will also contribute to the health and well-being of Barnet residents.
Protection of the historic environment and biodiversity within the borough.	<p>The demand for growth in the borough will create greater need to protect Barnet's heritage and the historic environment.</p> <p>The borough is home to a large number of sites of nature conservations which will need to be afforded greater protection as pressure from development increases. The site is within the Impact Risk Zone of the Brent Reservoir Site of Special Scientific Impact (SSSI) but it is not considered likely to have any adverse impact on the SSSI.</p>
Poor air quality	<p>Car ownership in Barnet is relatively high compared to Colindale where it is lower and close to the London average. Improved public transport and cycling facilities could help to mitigate this issue. The highest levels of air pollution are found close to major traffic routes including the A1/M1/A41/A5 corridors, the A406 corridor and at High Barnet.</p> <p>For Colindale and Grahame Park, borough and city-wide transport connections are good but current movement across the study area is problematic, frustrating pedestrian and traffic flow.</p>
Noise nuisance	The transport corridors pose potential noise nuisance although not to the Grahame Park SPD area.
S O C I A L	
Reduction of deprivation and polarisation	The west of the borough has the highest concentration of Barnet's most deprived LSOAs. In Barnet, 13 lower super output areas are within the 10% most income deprived nationally and

	<p>eight fall within London's 10% most deprived which includes Grahame Park.</p> <p>The regeneration in Colindale and Grahame Park provides the opportunity to provide high quality development which can help reverse deprivation and polarisation in the borough.</p>
Health Inequalities	<p>The difference in life expectancy between the most and least deprived areas in the borough for men is 7.8 years and for women is 5.6 years. Through regeneration in Colindale and Grahame Park there is the opportunity to provide healthier environments through the provision of, for example, high quality green open spaces and sports facilities.</p>
Housing to meet the needs of a diverse community	<p>Housing in Barnet is unaffordable to those on low incomes. In December 2014 average house price in Barnet was over 10 times the Barnet average income and more in Colindale; meaning that for many households home ownership is an unaffordable aspiration. Barnet is delivering below the London average for affordable housing although in Colindale there will be more affordable housing provision than elsewhere.</p> <p>There is a predominance of two bedroom units in new flatted developments in the borough and significantly less 3 bedroom units.</p>
The need to provide high quality housing development.	<p>The regeneration of some of the housing stock in Grahame Park will improve the overall quality of housing stock.</p>
Access to social infrastructure and services.	<p>Ensuring the significant growth in Colindale is managed and needs are met is a major challenge to ensure that the qualities that make Barnet such a desirable place to live and work are created in Colindale during the wards transition. A growing population will need to be supported with the provision of necessary infrastructure and services to create lifetime neighbourhoods. Social infrastructure will include facilities like community centres, schools, health and leisure facilities and meeting spaces (e.g. community buildings and public houses) where people can interact and build social networks. Re-provision of the existing facilities in the Grahame Park concourse will be necessary.</p>
Skills, education and employment	<p>Educational attainment in Colindale is lower than elsewhere in the borough. Educational facilities will be improved as part of the regeneration which may result in better access to opportunities</p>

	for these residents to share in the boroughs success.
Crime and the fear of Crime	Crime and the fear of it can have significant effects on the quality of people's lives in the borough. The inward looking design of Grahame Park Estate has led to an environment which has increased fear of crime exacerbating social and economic exclusion and the sense of physical isolation. It is therefore essential to create new neighbourhoods which also integrate the new Grahame Park with the other regeneration in Colindale.

2.3 The Sustainability Appraisal Framework

2.3.1 A Sustainability Appraisal Scoping Report was produced and consulted upon in May 2015 in order to begin the Sustainability Appraisal process for the adoption of the Grahame Park SPD. The Scoping Report represents Stage A in Table 1 and resulted in the formation of a Sustainability Appraisal Framework. The Sustainability Appraisal Framework is comprised of 16 sustainability objectives against which the Grahame Park SPD will be tested in order to take into consideration any identified sustainability issues with the masterplan.

Table 2 - Grahame Park SPD Sustainability Appraisal Framework

OBJECTIVES	SUB – OBJECTIVES – Will the policy...?
ECONOMIC	
1. Encourage sustainable economic growth and economic regeneration	<p>Improve business development?</p> <p>Enhance the image of the area as a good business location?</p> <p>Help diversify the economy?</p> <p>Assist in providing land and buildings of a suitable type required by businesses for a range of employment uses?</p> <p>Have a positive impact on the local economy?</p>
2. Increase the opportunities for rewarding and satisfying employment	<p>Help to reduce unemployment?</p> <p>Encourage the retention and or/growth of local employment and training opportunities in the most deprived areas?</p> <p>Improve the range of job opportunities for all local people?</p> <p>Result in the loss of employment land?</p> <p>Increase the number of higher paid jobs in the borough?</p>
3. To provide the necessary infrastructure to support existing and future growth	<p>Provide the necessary social infrastructure to meet existing and future local needs?</p> <p>Provide enough green infrastructure for the health and well-being of local residents that also contributes to climate change adaptation, biodiversity and water quality?</p> <p>Provide enough physical infrastructure?</p>
ENVIRONMENTAL	
4. To reduce contributions to climate change	<p>Reduce CO₂ and other greenhouse gas emissions?</p> <p>Reduce consumption of energy resources?</p> <p>Use renewable resources of energy generation?</p> <p>Encourage the reuse or improvement of buildings and land that are vacant, under-utilised or in disrepair?</p> <p>Increase energy efficiency in the borough's housing and other building stocks?</p>
5. To protect and enhance the quality of landscape, townscape and local	<p>Conserve and enhance local landscape and townscape character and visual amenity?</p> <p>Improve the relationship between different buildings, streets, parks and</p>

distinctiveness	<p>waterways and other spaces that make up the townscape character?</p> <p>Have a negative impact on important strategic/local views?</p> <p>Promote high quality design that relates to immediate surroundings?</p>
6. To promote sustainable transport and reduce the need to travel by car	<p>Encourage development at locations that enable walking, cycling and/or the use of public transport?</p> <p>Encourage development at locations connected to local services and facilities?</p> <p>Reduce the need to travel by car?</p> <p>Reduce the number and length of journeys made by car?</p>
7. To conserve and enhance open spaces, green corridors and biodiversity	<p>Encourage development on previously developed land?</p> <p>Improve the quality and access to open spaces in areas of deficiency?</p> <p>Provide a range of play spaces for children and young people?</p> <p>Maintain, enhance and create green infrastructure assets and networks; such as green space, public rights of way, open recreation and sports facilities?</p> <p>Help protect and enhance biodiversity in the area and in particular avoid harm to protected species and habitats?</p> <p>Encourage the creation of new habitats, including through the provision of additional open space and green roofs?</p> <p>Protect and provide opportunities for creating/enhancing/improving sites designated for their nature conservation value?</p>
8. To conserve and enhance the historic environment and cultural assets	<p>Protect, maintain and enhance the condition and setting of features and areas of cultural, historic and archaeological heritage?</p> <p>Promote the historic environment and also contribute to a better understanding of the local historic environment?</p> <p>Maintain and strengthen local distinctiveness and respect diversity of local communities?</p> <p>Maintain or improve access to leisure, sporting, cultural and arts destinations and facilities?</p> <p>Improve leisure, sporting, cultural and arts provision?</p>
9. To reduce the risk of flooding	<p>Minimise the risk of flooding to vulnerable properties?</p> <p>Promote the use of sustainable urban drainage systems?</p> <p>Increase or reduce the risk of flooding to people and property?</p> <p>Limit types of development in areas at risk of flooding?</p>
10. To improve air quality	<p>Improve air quality?</p> <p>Help to reduce emissions of PM₁₀ and NO₂?</p> <p>Minimise construction impacts, such as dust, noise, vibration and odours?</p> <p>Encourage a reduction in the amount and length of journeys made by car?</p> <p>Protect the quality of rivers and groundwater?</p> <p>Prevent the deterioration of the water quality of rivers and groundwater?</p> <p>Avoid areas lacking a sewerage network or areas with network capacity issues?</p>
11. To encourage sustainable use of resources	<p>Encourage the re-use of resources?</p> <p>Encourage the reuse or improvement of buildings and land that are vacant, under-utilised or in disrepair?</p> <p>Encourage remediation of contaminated land?</p> <p>Encourage water efficiency and drought resilience?</p>

	<p>Reduce consumption of energy and reliance on fossil fuels?</p> <p>Promote the reduction of waste during construction/operation?</p> <p>Minimise the production of household and commercial waste?</p> <p>Promote sustainable processing of waste, such as recycling, energy from waste and composting?</p>
S O C I A L	
12. To improve the health of the population	<p>Encourage and facilitate healthy living and active lifestyles amongst different groups?</p> <p>Provide opportunities for sport and recreation?</p> <p>Assist in tackling health inequalities in the borough?</p> <p>Improve access to health and social care services for all sectors of the community?</p> <p>Maintain, enhance and create green infrastructure for recreation, exercise and locally produced food?</p> <p>Help facilitate the supply and availability of locally produced food?</p> <p>Promote non-polluting forms of transport?</p> <p>Help to improve mental and emotional health, reducing social exclusion, especially for those with poor mobility?</p> <p>Reduce exposure to poor air quality?</p>
13. To improve the skills and education of the population	<p>Provide opportunities for improving the skills and qualifications of the population?</p> <p>Help improve employee education/training programmes?</p> <p>Help reduce skill shortages?</p> <p>Help improve access to education for all?</p>
14. To provide everyone with the opportunity to live in a decent and affordable home	<p>Improve the supply of housing?</p> <p>Encourage the range of housing type, size and tenure to meet identified current and future needs of existing and future local residents?</p> <p>Increase access to good quality and more affordable housing for all?</p>
15. To reduce crime and the fear of crime.	<p>Improve safety and security?</p> <p>Encourage measures to reduce crime and the fear of crime?</p> <p>Encourage a strong and cohesive community?</p> <p>Reduce antisocial behaviour by designing out crime?</p>
16. To promote social inclusion, equality, diversity and community cohesion.	<p>Help support the voluntary and community sectors?</p> <p>Support active community engagement?</p> <p>Support a diversity of lifestyles and communities?</p> <p>Promote accessibility for those people who are elderly or disabled?</p> <p>Sustain the provision of community facilities and open space that meets local needs?</p> <p>Improve community cohesion?</p>

2.3 SA of the Grahame Park SPD Core Objectives

2.3.1 For the purposes of the Sustainability Appraisal the Grahame Park vision statement has been summarised into a series of objectives which are set out below.

The objectives of the Grahame Park SPD are:

- A. To create a place that becomes a successful, family friendly neighbourhood, incorporating the highest design standards, a good mix of uses and a layout that will meet the needs of the current and future generations.
- B. To achieve an inclusive community made up of existing residents and new residents living together in a safe and accessible environment.
- C. To provide high quality affordable and private homes that meet the needs of the community including the elderly and vulnerable.
- D. To create an outstanding environment with excellent parks and great streets that are accessible to all.
- E. To create a neighbourhood where people want to stay because of its schools and facilities. A place with a strong sense of community.
- F. To create a neighbourhood that is well integrated with the surrounding area by improving connections with a particular emphasis on walking, cycling and public transport.
- G. To reinforce the role of Grahame Park as a place for families to live and flourish by delivering a range of quality public and private open spaces, new local services and opportunities for shopping, employment and training across three new community hubs
- H. To create a new neighbourhood that will be constructed around a traditional network of streets, reflecting successful Victorian and Edwardian suburban areas with low scale buildings of generally no more than 6 storeys with some taller elements to mark key corners, edges and community uses.
- I. To create an inclusive environment by providing a mixture of residential tenures with some new replacement social rented accommodation, shared ownership and additional social housing where viable, along with enabling private sale housing.

Table X – Sustainability appraisal of the draft Grahame Park SPD objectives

			GRAHAME PARK SPD OBJECTIVES									
			A	B	C	D	E	F	G	H	I	
ENCOURAGE SUSTAINABLE ECONOMIC GROWTH AND ECONOMIC REGENERATION	SUSTAINABILITY OBJECTIVES	1	✓	✓	✓	○	○	○	✓	○	✓	
INCREASE THE OPPORTUNITIES FOR REWARDING AND SATISFYING EMPLOYMENT		2	○	○	○	○	○	○	✓	○	○	
TO PROVIDE THE NECESSARY INFRASTRUCTURE TO SUPPORT EXISTING AND FUTURE GROWTH		3	✓	✓	✓	✓	✓	✓	✓	○	○	
TO REDUCE CONTRIBUTIONS TO CLIMATE CHANGE		4	✓	✓	✓	○	○	✓	✓	○	○	
TO PROTECT AND ENHANCE QUALITY OF LANDSCAPE AND TOWNSCAPE		5	✓	✓	✓	✓	○	○	✓	✓	○	
TO PROMOTE SUSTAINABLE TRANSPORT AND REDUCE THE NEED TO TRAVEL BY CAR		6	✓	✓	○	○	○	✓	✓	○	○	
TO CONSERVE AND ENHANCE OPEN SPACES, GREEN CORRIDORS AND BIODIVERSITY		7	✓	✓	○	✓	○	✓	✓	✓	○	
TO ENHANCE AND CONSERVE THE HISTORIC ENVIRONMENT AND CULTURAL ASSETS		8	○	○	○	✓	○	?	○	✓	○	
TO REDUCE THE RISK OF FLOODING		9	✓	○	○	✓	○	○	○	○	○	
TO IMPROVE AIR QUALITY		10	✓	○	○	✓	○	✓	○	○	○	
TO ENCOURAGE SUSTAINABLE USE OF RESOURCES		11	✓	✓	✓	○	✓	✓	✓	○	○	
TO IMPROVE THE HEALTH OF THE POPULATION		12	✓	✓	?	✓	○	✓	✓	✓	✓	
TO IMPROVE THE SKILLS AND EDUCATION OF THE POPULATION		13	✓	✓	○	○	✓	○	○	○	○	
TO PROVIDE EVERYONE WITH THE OPPORTUNITY TO LIVE IN A DECENT AND AFFORDABLE HOME		14	✓	✓	✓	○	○	○	✓	○	✓	
TO REDUCE CRIME AND THE FEAR OF CRIME		15	✓	✓	✓	✓	✓	✓	✓	✓	✓	
TO PROMOTE SOCIAL INCLUSION, EQUALITY, DIVERSITY AND COMMUNITY COHESION		16	✓	✓	✓	✓	✓	✓	✓	✓	✓	

✓	COMPATIBLE
○	NO LINK
x	INCOMPATIBLE
?	DEPENDENT ON IMPLEMENTATION

- 2.3.2 The Core Objectives of the Draft Grahame Park SPD have proved to be largely positive when tested against the Sustainability Objectives. No negative impacts resulting from the objectives have been identified; there maybe some impacts which could be dependent on how elements of the regeneration would be implemented ie positives could be improved through implementation. Assessment of the future impacts on these objectives through future planning applications and through the discharge of associated planning conditions, where much finer detail would be provided.

3.1 Sustainability Appraisal of the Draft Grahame Park SPD

- 3.1.1 Sustainability appraisal has been carried out against three different criteria or scenarios.
- 3.1.2 The first is an appraisal of the Draft Grahame Park SPD and this is laid out in the first table. The sustainability appraisal process dictates that alternative options must also undergo sustainability appraisal so that comparisons can be made. The sustainability appraisal considers two alternative options. These are
- 3.1.3 The 'Do Nothing' approach – where no regeneration takes place; and
- 3.1.4 Stage B continues - this alternative compares the difference between Stage B of the approved outline planning permission for Grahame Park from 2007 and the current draft Grahame Park SPD. (Called Stage B in Table X)
- 3.1.5 Each scenario has been tested against the Grahame Park Sustainability Appraisal Framework. The framework is a set of objectives and sub-objectives. The following symbols have been used as a part of the appraisal process.

Table 4: Symbols used in the appraisal

Symbol	Significance
++	A very positive effect
+	A positive effect
?	Uncertain effect or lack of information to predict the effect
x	A negative effect
xx	A very negative effect

- 3.1.6 As part of the assessment any identified effects have been categorised as permanent or temporary. Any identified effects have also been categorised as short, medium or long term.

Table 5: Appraisal of Draft Grahame Park SPD

APPRAISAL OF DRAFT GRAHAME PARK SPD							
SA Objectives	Sub-objectives	Assessment of the Effect					Comments
	Will the SPD...?	Short	Medium	Long	+/-	Perm/Temp	
ECONOMIC	1. Encourage sustainable economic growth and economic regeneration						
	Improve business development?			✓	+	Perm	The SPD proposes a mix of non-residential uses including retail and other community uses. 1,770 m2 of retail floorspace and 3,800m2 of community floorspace is proposed in the SPD and this will provide some opportunities for business development.
	Enhance the image of the area as a good business location?			-	?	-	The SPD is primarily concerned with residential development and the delivery of 2,161 new homes for Barnet's residents. Enhancing Grahame Park as a desirable place for business location is not an objective of the SPD. However, the regeneration of the Grahame Park and the wider area could promote the locality as a good business location.
	Help diversify the economy?			-	?	-	The SPD is primarily concerned with residential development and the delivery of 2,161 new homes for Barnet's residents. Diversification of Barnet's economy is not an objective of the SPD. However, a range of retail offerings forms an element of the non-residential component of the SPD and this may provide opportunities to create a diverse local economy.
	Assist in providing land and buildings of a suitable type required by businesses for a range of employment uses?			✓	x	Perm	The residential led SPD for Grahame Park provides a limited number of land and buildings for businesses suitable for supporting the Grahame Park community at a neighbourhood level. Stage A of the Grahame Park regeneration will provide a new office HQ for the Council – this element presents a departure from the original masterplan. This part of the regeneration will provide local employment opportunities. Employment uses created during Stage B of the regeneration will be limited to retail and community type work only. Therefore regeneration of the wider area will provide a higher amount of land for businesses and employment uses that are within walking distance from the Stage B area of Grahame Park.
	Have a positive impact on the local economy?			✓	+	Perm	The proposed non-residential element of the SPD will have a limited positive impact over the long term for the local economy through the creation of a limited number of local employment opportunities.
	2. Increase the opportunities for rewarding						
	Help to reduce unemployment?		✓		+	Temp/per m	The proposed non-residential element of the SPD will have a limited positive impact over the long term in reducing unemployment through the creation of a limited number of local employment opportunities. It will also help reduce unemployment through the development phase where opportunities in construction will arise. Through Barnet's

and satisfying employment							SPD on Skills, Enterprise, Employment and Training there may be the opportunities for the creation of apprenticeships and other forms of training.
	Encourage the retention and or/growth of local employment and training opportunities for all local people?		✓		+	Temp	Through Barnet's SPD on Delivering Skills, Employment, Enterprise and Training local employment agreements will be sought to secure a range of employment opportunities. A range of retail employment opportunities will be created through the regeneration of Grahame Park. Adjacent developments to Grahame Park will be providing high quality employment space which will serve to provide employment opportunities for Grahame Park residents and working population. It will also help reduce unemployment through the development phase where opportunities in construction will arise. Through Barnet's SPD on Skills, Enterprise, Employment and Training there may be the opportunities for the creation of apprenticeships and other forms of training.
	Result in the loss of employment land?			✓	+	Perm	The Grahame Park SPD and its regeneration will not lead to the loss of employment land. None of the land in the SPD area is currently classified as designated employment land.
	Increase the number of higher paid jobs in the borough?			✓	x	Perm	It is not an objective of the SPD to promote or create higher paid employment opportunities within the Grahame Park regeneration. It is unlikely that the non-residential component of the SPD will lead to the creation of higher paid jobs in the borough.
3. To provide the necessary infrastructure to support existing and future growth	Provide the necessary social infrastructure to meet existing and future local needs?			✓	++	Perm	As well as providing local shops the SPD proposes to deliver a range of other social infrastructure including a Health Centre, a Children's Centre, a Community Centre, a Combined Church and Community Facility and a Low Cost Gym. This mix of community facilities will provide for the necessary social infrastructure to serve existing and future local needs.
	Provide enough green infrastructure for the health and well-being of local residents that also contributes to climate change adaptation, biodiversity and water quality?			✓	++	Perm	The proposed SPD is supported by a strong open space strategy based upon identified Fixed and Unfixed Open Spaces. The strategy is based on the existing green infrastructure at Grahame Park and seeks to enhance it. The key aspect is the Grahame Park Open Space. Green spaces will be provided according to standards based on walking distances from all dwellings over a range of age groups starting with the under-5s. The result will be the provision of high quality green spaces throughout Grahame Park including the introduction of pocket parks. This strategy will enhance opportunities for biodiversity and also reduce the risk of flooding. Green infrastructure will also reduce instances of the heat island effect and make the development resilient to climate change. The SPDs site-wide sustainability and environmental aims sets out an approach that will lead to improved health and wellbeing through the provision of formal or informal green play space in each residential block; that green spaces and trees should be clearly visible from every dwelling; and that good levels of interior daylight are to be targeted.
	Provide enough physical			✓	++	Perm	Grahame Park is located approximately 670m away from Colindale Underground Station

ENVIRONMENTAL		infrastructure?						which is on the Northern Line. There are also 3 bus routes which provide direct connections to Brent Cross, Edgware, Hendon, Wembley, Harrow and Mill Hill. However, PTAL ratings across Grahame Park vary from 1a to 2 and illustrate poor accessibility to public transport. Roads will be improved and a new primary route will be created which will be wide enough to accommodate a bus route through the site. This will have a very positive effect on the regeneration of Grahame Park allowing it to fully connect with the wider area. A range of other physical infrastructure will be provided, including a health centre, a children's centre, a community centre, a combined church and community facility and a low cost gym.
	4. To reduce contributions to climate change	Reduce CO2 and other greenhouse gas emissions?			✓	++	Perm	The SPD sets out a clear approach to the reduction of energy demand through the generation of on-site power through a replacement of the existing central boiler with a Combined Heat and Power energy centre and other renewable sources. Reduction of CO2 emissions will be achieved through the use of passive solar design, the use of carbon negative materials or low embodied energy materials wherever this is possible. High levels of energy efficiency will be sought in line with the London Plan and the Mayors Energy Hierarchy which will reduce CO2 emissions and other greenhouse gas emissions over the long term. The SPD promotes the use of walking and cycling in order to reduce the need for local residents to travel by car.
		Reduce consumption of energy resources?			✓	++	Perm	The effective use of passive solar design will maximise solar gain in winter reducing the amount of energy needed to heat a property in winter. The SPD promotes the use of walking and cycling in order to reduce the need for local residents to travel by car. The site – wide sustainability objectives seek to reduce water demand through the promotion of the sustainable management and reuse of water. The target for water consumption will be set at a maximum of 105 litres of water per person per day. High levels of energy efficiency will be sought in line with the London Plan and the Mayors Energy Hierarchy. The replacement energy centre will improve the efficiency of the existing central boiler system through providing electricity as well as heat.
		Use renewable resources of energy generation?			✓	?	Perm	The SPD mentions renewable sources of energy but does not specify or prioritise types of renewables that could potentially be used in development proposals. However, the Mayors Energy Strategy will be followed and targets set out in London Plan Policy 5.2 will be applied. Outcomes will depend on how this aspect of the SPD is delivered through subsequent planning applications.
		Encourage the reuse or improvement of buildings and land that are vacant, under-utilised or in disrepair?			✓	++	Perm	The regeneration of Grahame Park estate will be delivered through a combination of comprehensive redevelopment and mixed retention and renewal to ensure integrated, sustainable and viable regeneration and urban renewal. However, the SPD seeks to reuse existing open spaces throughout the site enhancing them so that they contribute a valuable asset to the neighbourhood that will be created.
		Increase energy efficiency in			✓	+	Perm	The SPD applies site wide sustainability aims that apply to all new buildings. This

	the borough's housing and other building stocks?						includes maximising solar gain in winter without causing overheating through passive solar design solutions. The Mayor's energy hierarchy will be followed which seeks to reduce energy usage in buildings through incorporating energy efficiency measures within the design of buildings.
5. To protect and enhance the quality of landscape, townscape and local distinctiveness	Conserve and enhance local landscape and townscape character and visual amenity?			✓	++	Perm	The SPD contains three strategies in order to enhance local landscape and townscape. These strategies are Site-wide Streetscape, Site-wide urban design strategy and Site-wide open space strategy. The SPD will significantly improve the urban realm and local townscape character which is currently inhospitable and suffering from long term dilapidation.
	Improve the relationship between different buildings, streets, parks and waterways and other spaces that make up the townscape character?			✓	++	Perm	The SPD sets out to improve the relationship between different buildings, parks and other urban elements that make up the townscape character through the creation of three different character areas. The Southern, Northern and Central Character Areas. The quality of each character area relates contextually to the provision of mixed uses, landscape and open space, movement routes, the relationship to the surrounding street network and buildings, heights and densities and building form and articulation. The SPD aims to integrate Grahame Park into the wider area as this is currently lacking due to existing ill-conceived Radburn layout of buildings.
	Have a negative impact on important strategic/local views?			✓	++	Perm	Grahame Park sits within the scope of a locally important view from Mill Field to Harrow on the Hill. However, Grahame Park sits in a valley floor and therefore tall buildings ranging from 8 to 11 storeys are considered acceptable and unlikely to have a significant impact on key views from elevated vantage points.
	Promote high quality design that relates to immediate surroundings?			✓	+	Perm	The SPD includes a Site Wide Streetscape strategy – this is a design code for the public realm of Grahame Park. It sets out principles for the design of all outside spaces in the regeneration area. Design of public realm space will relate to the wider area through the use of common materials used in adjacent streets. The palette of materials to be used will be simple in order for Grahame Park as a neighbourhood to merge with the wider area.
6. To promote sustainable transport and reduce the need to travel by car	Encourage development at locations that enable walking, cycling and/or the use of public transport?			✓	++	Perm	One of the key objectives of the SPD is to promote walking, cycling and the use of public transport. A component of the proposal is to broaden streets allowing access by buses and thereby improving public transport. PTAL ratings are very low for Grahame Park and disguise the fact that the regeneration area is located within walking distance of Colindale Underground Station to the south west. Through better integration with surrounding neighbourhoods existing routes will be enhanced for pedestrians, cyclists and public transport.
	Encourage development at locations connected to local services and facilities?			✓	+	Perm	Local services and facilities will be delivered as part of the whole regeneration of the Grahame Park area. The SPD ensures good connectivity between residents and these services and facilities making certain that they are accessible to all. The Grahame Park site itself is located close to Colindale Underground Station and local services in the

							wider area
	Reduce the need to travel by car?			✓	++	Perm	One of the key objectives of the SPD is to promote walking, cycling and the use of public transport. A component of the proposal is to broaden streets allowing access by buses and thereby improving public transport. PTAL ratings are low for Grahame Park and disguise the fact that the regeneration area is located within walking distance of Colindale Underground Station to the south west. Through better integration with surrounding neighbourhoods existing routes will be enhanced for pedestrians, cyclists and public transport.
	Reduce the number and length of journeys made by car?			✓	++	Perm	One of the key objectives of the SPD is to promote walking, cycling and the use of public transport. A component of the proposal is to broaden streets allowing access by buses and thereby improving public transport. PTAL ratings are very low for Grahame Park and disguise the fact that the regeneration area is located within walking distance of Colindale Underground Station to the south west. Through better integration with surrounding neighbourhoods existing routes will be enhanced for pedestrians, cyclists and public transport. The creation of a bus route through the centre of the site will improve PTAL helping people access public transport and potentially reduce car journeys.
7. To conserve and enhance open spaces, green corridors and biodiversity	Encourage development on previously developed land?			✓	++	Perm	The whole of Grahame Park is brownfield land i.e. previously developed land. The Grahame Park SPD seeks to make better and more efficient use of the existing site.
	Improve the quality and access to open spaces in areas of deficiency?			✓	++	Perm	The SPD sets out a site-wide open space strategy which will provide better connectivity and enhancement of existing green spaces. The green spaces component of the SPD forms the backbone of the Grahame Park regeneration and has been a principle driver of the SPD.
	Provide a range of play spaces for children and young people?			✓	++	Perm	The site-wide open space strategy sets out the parameters for open space and play provision in order to create a safe and accessible network of open spaces, integrated with play areas, connected by attractive walking and cycling routes. Play provision is distributed so that it is accessible to all and has been based on standards that are set out in the SPD.
	Maintain enhance and create green infrastructure assets and networks; such as green space, public rights of way, open recreation and sports facilities?			✓	++	Perm	The open space strategy within the SPD provides for fixed and unfixed spaces. Fixed public open spaces are areas of accessible public amenity based on existing green assets. Whereas unfixed public open space identify opportunities for green assets and play spaces within the regeneration area. This approach plans for the enhancement and increase in green space provision throughout the area.
	Help protect and enhance biodiversity in the area and in particular avoid harm to protected species and			✓	?+	Perm	The site-wide sustainability and environmental aims of the SPD provides direction regarding biodiversity. The strategy aims to support biodiversity of native planting and the nurturing of bird, mammals and insects. The SPD aims to provide green corridors through the establishment of parks, open spaces and hedging to link together through

8. To conserve and enhance the historic environment and cultural assets	habitats?						the site to form a green corridor. The regeneration will provide the opportunity to create diverse habitats by providing a mixture of landscape treatments and natural habitats. The environmental aims of the SPD are to provide both green and brown roofs as well as wildlife boxes. Existing trees will be maintained wherever possible to continue to support existing wildlife and these trees will be protected during construction from traffic and building works. Rear courts and gardens will also provide further opportunities to create natural habitat for wildlife in Grahame Park.
	Encourage the creation of new habitats, including through the provision of additional open space and green roofs?			✓	?+	Perm	The site-wide sustainability and environmental aims of the SPD provides direction regarding biodiversity. The strategy aims to support biodiversity of native planting and the nurturing of bird, mammals and insects. The SPD aims to provide green corridors through the establishment of parks, open spaces and hedging to link together through the site to form a green corridor. The regeneration will provide the opportunity to create diverse habitats by providing a mixture of landscape treatments and natural habitats. The environmental aims of the SPD are to provide both green and brown roofs as well as wildlife boxes. Existing trees will be maintained wherever possible to continue to support existing wildlife and these trees will be protected during construction from traffic and building works. Rear courts and gardens will also provide further opportunities to create natural habitat for wildlife in Grahame Park.
	Protect and provide opportunities for creating/enhancing/improving sites designated for their nature conservation value?			✓	?	Perm	Grahame Park public open space itself is a site of importance for nature conservation. Part of the park will be given over to the creation of new play space in the area closest to residential blocks. Although the SPD will provide and enhance natural green spaces the strategy does lack a specific biodiversity strategy. In light of the fact that Grahame Park is a Site of Importance for Nature Conservation it would be advisable that a biodiversity strategy forms a part of the Grahame Park SPD in order to identify what wildlife exists in this area but also to identify sensitivities and opportunities to enhance and protect.
	Protect, maintain and enhance the condition and setting of features and areas of cultural, historic and archaeological heritage?			✓	?	Perm	Grahame Park is not in a conservation area and contains no assets of historic or cultural value. However, Colindale has a rich aeronautical history and the SPD has attempted to capture this.
	Promote the historic environment and also contribute to a better understanding of the local historic environment?			✓	?	Perm	Grahame Park is not in a conservation area and contains no assets of historic or cultural value. However, Colindale has a rich aeronautical history and the SPD has attempted to capture this.
	Maintain and strengthen local distinctiveness and respect			✓	?	Perm	The SPD employs inclusive design ensuring that homes and outside spaces will meet the needs of the elderly and less mobile. An Equalities Impact Assessment will be conducted

	diversity of local communities?						as part of the SPD preparation in order to identify any issues which will then be addressed in an iterative process.
	Maintain or improve access to leisure, sporting, cultural and arts destinations and facilities?			✓	+	Perm	The SPD proposes the creation of Heybourne Park, a public open space, located in the north east corner of Grahame Park Open Space, for the local community which will provide a range of multi-use games areas. This approach will increase access opportunities for local residents to sports facilities.
	Improve leisure, sporting, cultural and arts provision?			✓	+	Perm	The SPD proposes the creation of Heybourne Park, a public open space for the local community which will provide a range of multi-use games areas. This approach will increase access opportunities for local residents to sports facilities.
9. To reduce the risk of flooding	Minimise the risk of flooding to vulnerable properties?			✓	?	Perm	Grahame Park is not in an area which is at risk of fluvial flooding. However, there may potentially be a risk of surface water risk. The Barnet Surface Water Management Plan (2011) identified a Critical Drainage Area focused on Colindale. The main source of flood risk in this area is from a combination of overland flow and ponded flooding. Two Local Flood Risk Zones have been designated within this CDA which cover the areas with the largest number of properties at risk of surface water flooding – one of these covers Grahame Park. It should be noted that no historic surface water flooding incidents have been recorded in this area. Barnet's Lead Local Flood Risk Authority will play an active role in identifying opportunities to minimise surface water flood risk in the future as detailed proposals are submitted.
	Promote the use of sustainable urban drainage systems?			✓	?	Perm	The SPDs Site-Wide Sustainability and Environmental Aims promote the use of sustainable urban drainage systems and permeable landscape treatments to act as soakaways for surface water. This issue would be dealt with during the planning application process and is likely to form the basis of a planning condition.
	Increase or reduce the risk of flooding to people and property?			✓	?	Perm	The SPDs Site-Wide Sustainability and Environmental Aims promotes the use of sustainable urban drainage systems and permeable landscape treatments to act as soakaways for surface water.. This issue would be dealt with during the planning application process and is likely to form the basis of a planning condition.
	Limit types of development in areas at risk of flooding?			✓	?	Perm	Grahame Park is not in an area of fluvial flood risk and the SPD makes provision for the use of SUDS to minimise surface water flood risk. . This issue would be dealt with during the planning application process and is likely to form the basis of a planning condition.
10. To improve air quality and prevent the pollution of and improve the water quality of	Improve air quality?			✓	+	Perm	Cars contribute greatly to the deterioration of air quality. In order to improve air quality the SPD promotes the use of walking, cycling and public transport in an attempt to reduce the need to make journeys by car. Local schools, community facilities and shops will be located within the Grahame Park neighbourhood which complies with the notion of Lifetime Neighbourhoods and also reduces the need to travel by car. The SPD should have a positive effect over the long term in improving air quality. A bus route through the centre of the site will be created which will lead to reductions in the number of journeys made by car.

rivers and groundwater	Help to reduce emissions of PM10 and NO2?			✓	+	Perm	The largest source of PM10s and NO2 is through combustion and exhaust fumes from motor vehicles. As the Grahame Park SPD promotes the use of other forms of transport such as walking, cycling and public transport it is likely that this will result in the reduction of both PM10s and NO2. The SPD should have a positive effect over the long term in improving air quality.
	Minimise construction impacts, such as dust, noise, vibration and odours?			✓	?	Perm	The Grahame Park SPD provides no clarification on construction methods or examples of best practice. The SPD does however, specify the Considerate Contractors Scheme, aiming to achieve a score of 35, scoring at least 7 in each section. In this respect any forthcoming planning applications would have standard conditions imposed requesting further details regarding construction methodologies and highlighting the need to minimise dust, noise and negative impacts on local residents.
	Encourage a reduction in the amount and length of journeys made by car?			✓	+	Perm	Cars contribute greatly to the deterioration of air quality. In order to improve air quality the SPD promotes the use of walking, cycling and public transport in an attempt to reduce the need to make journeys by car. Local schools, community facilities and shops will be located within the Grahame Park neighbourhood which complies with the notion of Lifetime Neighbourhoods and also reduces the need to travel by car.
	Protect the quality of rivers and groundwater?			✓	?	Perm	The Grahame Park site contains areas of historic landfill and this will have implications for any future planning applications. All risks to groundwater and surface waters from contamination need to be identified in any forthcoming planning applications so that appropriate remedial action can be taken, Risk Assessments and reports will need to be prepared in line with the Environment Agency's 'Groundwater protection: Principles and Practice' document (GP3) and CLR 11 (Model Procedures for the Management of Land Contamination). This specific issue will be addressed in forthcoming planning applications and would be subject to planning conditions on any grant of permission.
	Prevent the deterioration of the water quality of rivers and groundwater?			✓	?	Perm	The Grahame Park site contains areas of historic landfill and this will have implications for any future planning applications. All risks to groundwater and surface waters from contamination need to be identified in any forthcoming planning applications so that appropriate remedial action can be taken, Risk Assessments and reports will need to be prepared in line with the Environment Agency's 'Groundwater protection: Principles and Practice' document (GP3) and CLR 11 (Model Procedures for the Management of Land Contamination).
	Avoid areas lacking a sewerage network or areas with network capacity issues?			✓	?	Perm	Sewerage and network capacity has not been highlighted in the SPD and would be dealt with at the planning application stage through the use of planning conditions requesting further detail regarding sewerage and network capacity.
11. To encourage sustainable use of	Encourage the re-use of resources?			✓	++	Perm	The SPD promotes the requirement of a Site Waste Management Plan to be implemented, in order to Monitor, reduce, sort and divert from landfill site construction and demolition waste, such that 85% of non-hazardous waste is diverted from landfill. Such a plan should include where reuse of construction waste should take place.

SOCIAL	resources						The draft SPD maximises the use of brownfield land which is re-using land resources as much as possible.
	Encourage the reuse or improvement of buildings and land that are vacant, under-utilised or in disrepair?			✓	++	Perm	The SPD aims to reuse previously built on land – brownfield land in order to make more efficient use of this site.
	Encourage remediation of contaminated land?			✓	+	Perm	The Grahame Park site contains areas of historic landfill and this will have implications for any future planning applications. All risks to groundwater and surface waters from contamination need to be identified in any forthcoming planning applications so that appropriate remedial action can be taken, Risk Assessments and reports will need to be prepared in line with the Environment Agency’s ‘Groundwater protection: Principles and Practice’ document (GP3) and CLR 11 (Model Procedures for the Management of Land Contamination). The draft SPD would lead to decontamination of land where this is identified.
	Encourage water efficiency and drought resilience?			✓	++	Perm	The SPD aims to limit water consumption to 105 litres/person/day in line with current optional building regulations. This will need to be made conditional on the grant of any forthcoming planning applications.
	Reduce consumption of energy and reliance on fossil fuels?			✓	++	Perm	Buildings are to be situated to maximise solar gain in winter without causing overheating. The SPD promotes the use of carbon negative materials or low embodied energy materials to be used wherever possible. The SPD will follow the Mayor’s Energy Hierarchy as set out in the London Plan. The replacement energy centre will improve the efficiency of the existing central boiler system through providing electricity as well as heat.
	Promote the reduction of waste during construction/operation?			✓	++	Perm	The SPD promotes the requirement of a Site Waste Management Plan to be implemented, in order to Monitor, reduce, sort and divert from landfill site construction and demolition waste, such that 85% of non-hazardous waste is diverted from landfill. Such a plan should include where reuse of construction waste should take place.
	Minimise the production of household and commercial waste?			✓	?	Perm	Recycling details will be required as part of any residential or commercial planning applications. This will normally take the form of a planning condition accompanying any grant of planning permission.
	Promote sustainable processing of waste, such as recycling, energy from waste and composting?			✓	?	Perm	Details of recycling will be required as part of any residential or commercial planning applications. This will normally take the form of a planning condition accompanying any grant of planning permission.
	12. To improve the health of the	Encourage and facilitate healthy living and active lifestyles amongst different			✓	++	Perm

population	groups?						
	Provide opportunities for sport and recreation?			✓	++	Perm	The SPD will provide spaces for outdoor sport and recreational activities.
	Assist in tackling health inequalities in the borough?			✓	++	Perm	The SPD promotes walking and cycling and provides outdoor space for sports and recreation. The SPD does not specify the uses of proposed community buildings – which could provide the opportunity for various classes including health and fitness activities. Promotion and good management of these facilities could help to reduce health inequalities across the borough.
	Improve access to health and social care services for all sectors of the community?			✓	++	Perm	One of the objectives of the SPD is to deliver 3,800m ² of D1/D2 floor space. There is the potential that some of this floor space could be allocated specifically for the purposes of delivering health and social care services to residents of Grahame Park.
	Maintain, enhance and create green infrastructure for recreation, exercise and locally produced food?			✓	++	Perm	A site wide green space strategy forms the heart of the Grahame Park SPD and has been discussed earlier. The site-wide sustainability and environmental aims of the SPD promote local and sustainable food. It proposes the use of food growing planters to be included within the proposals where possible based on the needs of residents. Where sites are to be left empty for a period of years, these should be used as food growing areas where this is possible.
	Promote non-polluting forms of transport?			✓	++	Perm	Any proposals for Grahame Park, once the SPD is adopted, will have to comply with London Plan policy 6.13. This sets out a requirement that 1 in 5 parking spaces provided in development provides an electrical charging point to encourage the uptake of electric vehicles.
	Help to improve mental and emotional health, reducing social exclusion, especially for those with poor mobility?			✓	++	Perm	One of the objectives of the SPD is to deliver 3,800m ² of D1/D2 floor space. There is the potential that some of this floor space could be allocated specifically for the purposes of services that would lead to improvements in mental and emotional health and reduce social exclusion.
	Reduce exposure to poor air quality?			✓	+	Perm	Promoting walking, cycling and the use of public transport should have a positive effect on air quality in the Grahame Park area.
13. To improve the skills and education of the population	Provide opportunities for improving the skills and qualifications of the population?			✓	?	Perm	The D1 element of the SPD proposals could provide facilities dedicated to education and training. This has not been specified in the SPD and remains a possibility. Any forthcoming planning applications will trigger planning obligations and those contained in Barnet's SPD on Skills, Enterprise, Employment and Training.
	Help improve employee education/training programmes?			✓	?	Perm	The D1 element of the SPD proposals could provide facilities dedicated to education and training. This has not been specified in the SPD and remains a possibility. Any forthcoming planning applications will trigger planning obligations and those contained in Barnet's SPD on Skills, Enterprise, Employment and Training.
	Help reduce skill shortages:			✓	?	Perm	The D1 element of the SPD proposals could provide facilities dedicated to education and training. This has not been specified in the SPD and remains a possibility. Any forthcoming planning applications will trigger planning obligations and those

							contained in Barnet's SPD on Skills, Enterprise, Employment and Training.
	Help improve access to education for all?			✓	?	Perm	The D1 element of the SPD proposals could provide facilities dedicated to education and training. This has not been specified in the SPD and remains a possibility. Any forthcoming planning applications will trigger planning obligations and those contained in Barnet's SPD on Skills, Enterprise, Employment and Training. A public library will be delivered as part of Stage A of the Grahame Park regeneration.
14. To provide everyone with the opportunity to live in a decent and affordable home	Improve the supply of housing?			✓	++	Perm	The SPD has been prepared on the basis that 2,161 homes for the area will be delivered. This figure is indicative and may vary slightly with subsequent planning applications.
	Encourage the range of housing type, size and tenure to meet identified current and future needs of existing and future local residents?			✓	++	Perm	The SPD provides limited information regarding the range of housing type, size and tenure. Priority has been given to larger unit sizes of 3 and 4 bedrooms. An indicative breakdown of housing type and an indicative breakdown of affordable housing is not provided as a part of the SPD. The SPD does not include an accessibility strategy and does not commit to a level of wheelchair adaptable dwellings (Part M4(3) of the Building Regulations).
	Increase access to good quality and more affordable housing for all?			✓	+	Perm	An indicative breakdown of affordable housing is not provided as a part of the SPD. However, the delivery of housing will conform with current Local Plan and London Plan policy and will be subject to viability. This will form the basis of a S106 agreement which will be determined as part of any future planning applications.
15. To reduce crime and the fear of crime	Improve safety and security?			✓	++	Perm	Design principles are embodied in the SPD which will help to reduce crime – these are set out in the Site-wide housing principles. It must be borne in mind that many aspects of security in new development has been absorbed into the Building Regulations and will be delivered to minimum standards unless higher standards are specified in forthcoming planning applications.
	Encourage measures to reduce crime and the fear of crime?			✓	+	Perm	Design principles will create an environment where properties will have direct views onto the street and therefore enhance natural surveillance. The same principle will apply to public and children's play spaces. Such design principles are embodied in the draft SPD and will help to reduce crime and the fear of crime.
	Encourage a strong and cohesive community?			✓	++	Perm	The SPD aims to provide a strong element of non-residential uses. Such an approach will help to provide the opportunities to grow social capital and develop social networks. 3,800m2 of D1/D2 use will be provided as a part of the development framework – D1/D2 uses are community focused and presents development opportunities for a range of different uses which could enhance the opportunities for community cohesion.
	Reduce antisocial behaviour by designing out crime?			✓	++	Perm	Design principles will create an environment where properties will have direct views onto the street and therefore enhances natural surveillance. The same principle will apply to public and children's play spaces.
16. To promote	Help support the voluntary and community sectors?			✓	++	Perm	The D1/D2 uses presents the opportunity to create community facilities and the opportunity for develop local community groups.

social inclusion, equality, diversity and community cohesion	Support active community engagement?			✓	++	Perm	The D1/D2 uses presents the opportunity to create community facilities and the opportunity for develop local community groups.
	Support a diversity of lifestyles and communities?			✓	++	Perm	The D1/D2 uses presents the opportunity to create community facilities and the opportunity for develop local community groups.
	Promote accessibility for those people who are elderly or disabled?			✓	++	Perm	The D1/D2 uses presents the opportunity to create community facilities and the opportunity for develop local community groups.
	Sustain the provision of community facilities and open space that meets local needs?			✓	++	Perm	The D1/D2 uses presents the opportunity to create community facilities and the opportunity for develop local community groups.
	Improve community cohesion?			✓	++	Perm	The D1/D2 uses presents the opportunity to create community facilities and the opportunity for develop local community groups.

3.2 Summary of the main issues

- 3.2.1 When considered, the appraisal of the draft Grahame Park SPD (referred to as the draft SPD) is very positive. The positive outcome of this appraisal reflects the current poor condition of the estate public realm, housing stock and the fact that its design was poorly conceived; based upon the Radburn layout of residential development. It is therefore important to consider the SA in its entirety taking into account the alternatives that have been appraised in the next part of this report.
- 3.2.2 A range of employment opportunities will be available through the regeneration with employment opportunities in replacement retail floorspace and the new Council HQ office.
- 3.2.3 The draft SPD is positive through consideration/use of renewable sources of energy and the use of electric vehicles.
- 3.2.4 In terms of the historic environment the future development should explore how the regeneration can promote the historic environment and the areas connection with aeronautical history.
- 3.2.5 Grahame Park is in a critical drainage area so future detailed application will cover this issue. The draft SPD provides the opportunity to promote more favourable types of sustainable urban drainage systems over others. Green open spaces also provide the opportunity to create water retention areas in times of storms and heavy rainfall – this is one type of strategy that may have be employed .
- 3.2.6 The draft SPD promotes inclusivity throughout the strategy and will ensures access to community hubs and environments is level access

3.3 Sustainability Appraisal of alternative approaches

- 3.3.1 For the purpose of this Sustainability Appraisal of the Draft Grahame Park SPD alternative scenarios have been appraised against the draft SPD. The alternatives considered are 'Do nothing', and Stage B.
- 3.3.2 The 'do nothing' alternative is based on Grahame Park as it exists right now. This alternative considers the sustainability effects of not continuing with Stage B of the original outline permission granted in 2007 and not following the proposals outlined in the Draft Grahame Park SPD.
- 3.3.3 The Stage B alternative considers the sustainability effects of continuing with the original outline planning permission that was granted in 2007. Essentially it tests whether the draft Grahame Park SPD goes further in terms of sustainability, than Stage B of the original Masterplan.
- 3.3.4 The evaluation of the alternative scenarios has provided us with the opportunity to make comparisons and test one scenario against another. The outcomes of the assessment have been discussed in full later in the report.

Table 6: Sustainability appraisal of ‘do nothing’ approach

SUSTAINABILITY APPRAISAL OF ‘DO NOTHING’ APPROACH								
SA Objectives	Sub-objectives	Assessment of the Effect					Comments	
	Will the SPD...?	Short	Medium	Long	+/-	Perm/Temp		
ECONOMIC	1. Encourage sustainable economic growth and economic regeneration	Improve business development?			✓	x	Perm	Not redeveloping Grahame Park may mean that the land is not used to its maximum potential. Additional opportunities that can be achieved through regeneration will not be realised.
		Enhance the image of the area as a good business location?			✓	x	Perm	The Grahame Park precinct is listed as a neighbourhood centre. There are 29 units on the main concourse. There is a high level of vacancy within the precinct with up to a third of units vacant in recent years. The image of the area as a business location is likely to decline if no regeneration takes place.
		Help diversify the economy?			✓	x	Perm	The precinct services the estate with convenience stores, fast food outlets, bakery, chemist, post office, book makers, charity shop and a number of units related to the concentration of social housing. In the absence of regeneration it is likely that the presence of hot food take aways and book makers in the precinct is likely to continue.
		Assist in providing land and buildings of a suitable type required by businesses for a range of employment uses?			✓	x	Perm	The current vacancy rate in the main precinct of Grahame Park is currently high and this level of decline may continue or worsen over time if regeneration does not take place. This decline may be enhanced with the continuing regeneration of the rest of Colindale providing new space for businesses and retail businesses leaving Grahame Park behind. The decline in the neighbourhood centre may reflect the fact that business units are not fit for purpose or are not suitable for a variety of business types.
		Have a positive impact on the local economy?			✓	x	Perm	The current vacancy rate in the main precinct of Grahame Park is currently high and this level of decline is likely to continue or worsen over time if regeneration does not take place. The ‘do nothing’ alternative would have a negative impact on the local economy over the short and long term.
	2. Increase the opportunities for rewarding and satisfying employment	Help to reduce unemployment?			✓	?	Perm	In 2013/14 6.6% of the economically active were registered as unemployed. The ‘do nothing’ scenario is likely to result in no change in the short term. However, this could improve or worsen depending on the changes in the UK economic climate. Longer term no regeneration is unlikely to help with the opportunity lost for new economic activity which may provide the opportunity for long term unemployed to get into work.
		Encourage the retention and or/growth of local employment and training opportunities for all local people?			✓	x	Perm	There are a limited number of employers in Grahame Park with commercial units located in the main precinct area. Due to the currently high vacancy rate in these retail units there are very limited opportunities for employment and training. This scenario would continue under the ‘do nothing’ approach.
		Result in the loss of			✓	?	Perm	The ‘do nothing’ approach would not result in the loss of any employment land.

ENVIRONMENTAL		employment land?						
		Increase the number of higher paid jobs in the borough?			✓	x	Perm	The 'do nothing' approach would not lead to an increase in the number of higher paid jobs in the borough. Longer term no regeneration is unlikely to help with the opportunity lost for new economic activity which may provide higher paid jobs in the borough.
	3. To provide the necessary infrastructure to support existing and future growth	Provide the necessary social infrastructure to meet existing and future local needs?			✓	+	Perm	Currently there appears to be good social infrastructure provision including a community centre, library, a vacant public house and adult learning facilities. These facilities would continue to operate as they are now although there is no information on their current upkeep and whether there are any maintenance issues.
		Provide enough green infrastructure for the health and well-being of local residents that also contributes to climate change adaptation, biodiversity and water quality?			✓	x	Perm	Grahame Park currently incorporates a number of open spaces, both public and private. Grahame Park Open Space makes up 4.25 ha. Other more informal areas of public open space are scattered across the site and there are also a substantial number of private gardens associated with the existing houses. There currently appears to be an adequate amount of green open space to serve Grahame Park's resident population and which also contributes to local biodiversity and climate change adaptation. However, much of the green space is based around Radburn layouts which have led to these spaces having very little amenity value.
		Provide enough physical infrastructure?			✓	x	Perm	Existing physical infrastructure is based on Radburn layouts and therefore road access around the current estate is confusing and too narrow for access by buses. The overall layout has led Grahame Park to become isolated from neighbouring areas and disconnected from surrounding physical infrastructure.
	4. To reduce contributions to climate change	Reduce CO2 and other greenhouse gas emissions?			✓	xx	Perm	The current housing stock is old having been constructed in the 1970's by the GLC. The materials, design and construction methods used are not as energy efficient as what we can currently deliver and Building Regulations supersede whatever was constructed so many decades ago. The 'do nothing' approach would lead to a greater amount of CO2 and other greenhouse gasses despite the estate being heated through a district heating network.
		Reduce consumption of energy resources?			✓	xx	Perm	The current housing stock is old having been constructed in the 1970's by the GLC. The materials, design and construction methods used are not as energy efficient as what we can currently deliver and Building Regulations supersede whatever was constructed so many decades ago. The 'do nothing' approach would lead to a greater consumption of energy resources.
		Use renewable resources of energy generation?			✓	xx	Perm	The current housing stock is old and does not have any renewable energy technology having been constructed in the 1970's by the GLC. The materials, design and construction methods used are not as energy efficient as what we can currently deliver and Building Regulations supersede whatever was constructed so many decades ago. The 'do nothing' approach would lead to a greater consumption of non-renewable energy resources.
		Encourage the reuse or improvement of buildings and			✓	xx	Perm	The 'do nothing' approach would not encourage the reuse or improvement of any existing buildings on the Grahame Park Estate.

	land that are vacant, under-utilised or in disrepair?						
	Increase energy efficiency in the borough's housing and other building stocks?			✓	xx	Perm	The current housing stock is old having been constructed in the 1970's by the GLC. The materials, design and construction methods used are not as energy efficient as what we can currently deliver and Building Regulations supersede whatever was constructed so many decades ago. The 'do nothing' approach would lead to a greater consumption of energy resources.
5. To protect and enhance the quality of landscape, townscape and local distinctiveness	Conserve and enhance local landscape and townscape character and visual amenity?			✓	xx	Perm	The 'do nothing' approach would not enhance local town and landscape character and visual amenity. The existing pedestrian concourse can be considered a failure in design terms therefore there is no opportunity to conserve or enhance the existing buildings.
	Improve the relationship between different buildings, streets, parks and waterways and other spaces that make up the townscape character?			✓	xx	Perm	The 'do nothing' approach would fail to provide opportunities to improve the urban landscape including the relationship between buildings, streets, parks and waterways and other spaces in the Grahame Park area and improve upon the issues created by the Radburn layout.
	Have a negative impact on important strategic/local views?			✓	+	Perm	Grahame Park is set within a wide valley and has no buildings tall enough to impact on important strategic/local views.
	Promote high quality design that relates to immediate surroundings?			✓	xx	Perm	The current Grahame Park estate does not promote high quality design and relates poorly to immediate surroundings. This would continue under the 'do nothing' scenario.
6. To promote sustainable transport and reduce the need to travel by car	Encourage development at locations that enable walking, cycling and/or the use of public transport?			✓	xx	Perm	The current layout of Grahame Park is based on Radburn principles and therefore segregates cars and pedestrians. The Grahame Park estate does enable walking however the public environment is unwelcoming and public amenity is of low quality. This objective is not relevant as it doesn't involve development.
	Encourage development at locations connected to local services and facilities?			✓	xx	Perm	The 'do nothing' approach will not encourage development that is well connected to local services and facilities. This objective is not relevant as it doesn't involve development.
	Reduce the need to travel by car?			✓	xx	Perm	The 'do nothing' approach will not reduce the need to travel by car and maintain a layout which is designed to encourage car use.
	Reduce the number and length of journeys made by car?			✓	xx	Perm	The 'do nothing' approach will not reduce the number and length of journeys made by car and maintain a layout which is designed to encourage car use..
7. To conserve and enhance open spaces, green corridors and	Encourage development on previously developed land?			✓	xx	Perm	The 'do nothing' approach will prevent development on previously developed land.
	Improve the quality and access to open spaces in areas of deficiency?			✓	x	Perm	The 'do nothing' approach will not improve the quality and access to open spaces in areas of deficiency with much of the space around the estate probably not used to its best potential.

biodiversity	Provide a range of play spaces for children and young people?			✓	?	Perm	The current distribution and level of play facilities in Colindale and Burnt Oak indicate a deficiency in play facilities in the north Colindale area (north of the Underground line) for all age groups of children. This is likely to continue in the short term under the 'do nothing' scenario.
	Maintain, enhance and create green infrastructure assets and networks; such as green space, public rights of way, open recreation and sports facilities?			✓	?	Perm	The 'do nothing' approach will not present opportunities to enhance and create green infrastructure assets. Maintaining the status quo will only maintain the existing green infrastructure.
	Help protect and enhance biodiversity in the area and in particular avoid harm to protected species and habitats?			✓	?	Perm	The 'do nothing' approach could provide opportunities to protect existing biodiversity but opportunities to enhance biodiversity would be very limited.
	Encourage the creation of new habitats, including through the provision of additional open space and green roofs?			✓	x	Perm	The 'do nothing' approach will not provide opportunities to create new habitats through the provision of new open space and green roofs.
	Protect and provide opportunities for creating/enhancing/improving sites designated for their nature conservation value?			✓	x	Perm	The 'do nothing' approach will not present opportunities to create or improve the adjacent SINC at Grahame Park Open Space.
	Protect, maintain and enhance the condition and setting of features and areas of cultural, historic and archaeological heritage?			✓	x	Perm	Grahame Park is not within or adjacent to a conservation area or listed buildings. The nearest conservation area is Watling Estate to the north west but is of sufficient distance as not to be affected by development at Grahame Park.
	Promote the historic environment and also contribute to a better understanding of the local historic environment?			✓	x	Perm	Grahame Park is not within or adjacent to a conservation area or listed buildings. The nearest conservation area is Watling Estate to the north west but is of sufficient distance as not to be affected by development at Grahame Park.
	Maintain and strengthen local distinctiveness and respect diversity of local communities?			✓	x	Perm	Grahame Park is not within or adjacent to a conservation area or listed buildings. The nearest conservation area is Watling Estate to the north west but is of sufficient distance as not to be affected by development at Grahame Park.
	Maintain or improve access to leisure, sporting, cultural and arts destinations and facilities?			✓	?	Perm	The 'do nothing' approach will maintain but not improve existing access to leisure, sporting, cultural and arts destinations and facilities.

	Improve leisure, sporting, cultural and arts provision?			✓	?	Perm	The 'do nothing' approach will not provide opportunities to improve leisure, sporting, cultural and arts provision at Grahame Park.
9. To reduce the risk of flooding	Minimise the risk of flooding to vulnerable properties?			✓	x	Perm	The 'do nothing' approach will maintain the status quo and will not present new opportunities to minimise the risk of flooding and may increase the risk of flooding elsewhere through surface water run-off.
	Promote the use of sustainable urban drainage systems?			✓	x	Perm	The 'do nothing' approach will not present opportunities to promote the use of sustainable urban drainage systems.
	Increase or reduce the risk of flooding to people and property?			✓	x	Perm	The 'do nothing' approach will not provide opportunities to reduce the risk of flooding to people and properties.
	Limit types of development in areas at risk of flooding?			✓	x	Perm	The 'do nothing' approach will not present opportunities to limit development in areas at risk of flooding.
10. To improve air quality and prevent the pollution of and improve the water quality of rivers and groundwater	Improve air quality?			✓	x	Perm	The 'do nothing' approach will not present opportunities to improve air quality which is exacerbated by an estate layout which encourages car use.
	Help to reduce emissions of PM10 and NO2?			✓	x	Perm	The 'do nothing' approach will not present opportunities to reduce emissions of PM10s and NO2s which is exacerbated by an estate layout which encourages car use..
	Minimise construction impacts, such as dust, noise, vibration and odours?			✓	?	Perm	The 'do nothing' approach will not lead to any construction within Grahame Park and therefore there will be no instances of construction impacts.
	Encourage a reduction in the amount and length of journeys made by car?			✓	x	Perm	The 'do nothing' approach will maintain the existing numbers of journeys made by car. As car ownership increases this is likely to worsen slowly over the longer term. This is exacerbated by an estate layout which encourages car use.
	Protect the quality of rivers and groundwater?			✓	?	Perm	The 'do nothing' approach will not lead to any construction within Grahame Park and therefore there will be no requirement to protect rivers/groundwater.
	Prevent the deterioration of the water quality of rivers and groundwater?			✓	?	Perm	The 'do nothing' approach will not lead to any construction within Grahame Park and therefore there will be no requirement to protect rivers/groundwater.
	Avoid areas lacking a sewerage network or areas with network capacity issues?			✓	?	Perm	The 'do nothing' approach will not lead to any construction within Grahame Park and therefore there will be no increase in need for sewerage capacity, nb not known if there are known capacity issues.
11. To encourage sustainable use of resources	Encourage the re-use of resources?			✓	?	Perm	The 'do nothing' approach would provide opportunities to retrofit existing properties to enhance their environmental and energy performance. This could have a positive effect over the short term.
	Encourage the reuse or improvement of buildings and land that are vacant, under-utilised or in disrepair?	✓			?	Perm	The 'do nothing' approach would provide opportunities to reuse or improve buildings and land that are vacant. This could have a positive effect over the short term.

SOCIAL		Encourage remediation of contaminated land?			✓	x	Perm	The 'do nothing' approach will not present opportunities for the remediation of contaminated land.
		Encourage water efficiency and drought resilience?			✓	x	Perm	The 'do nothing' approach may present the opportunity to retrofit properties leading to better levels of water efficiency and drought resilience. This could have short term positive effects.
		Reduce consumption of energy and reliance on fossil fuels?	✓			?	Perm	The 'do nothing' approach may present the opportunity to retrofit properties leading to better levels of energy efficiency and lesser reliance on fossil fuels. This could have short term positive effects. The existing district heating scheme dates from the construction of the estate and is inefficient so redevelopment would provide the opportunity to improve this through provision of a new energy centre.
		Promote the reduction of waste during construction/operation?			✓	x	Perm	The 'do nothing' approach will not lead to construction and will therefore not be relevant.
		Minimise the production of household and commercial waste?			✓	x	Perm	The 'do nothing' approach will not present opportunities for composting and recycling thereby minimising the production of household and commercial waste.
		Promote sustainable processing of waste, such as recycling, energy from waste and composting?	✓			?	Perm	The 'do nothing' approach could provide limited opportunities to promote recycling, energy from waste and composting. This could lead to short term positive effects.
	12. To improve the health of the population	Encourage and facilitate healthy living and active lifestyles amongst different groups?			✓	x	Perm	The 'do nothing' approach would not provide further opportunities to facilitate healthy living and active lifestyles amongst different groups.
		Provide opportunities for sport and recreation?			✓	x	Perm	The 'do nothing' approach would not provide any opportunities to improve sport and recreation.
		Assist in tackling health inequalities in the borough?			✓	x	Perm	The 'do nothing' approach would not assist in tackling health inequalities in the borough.
		Improve access to health and social care services for all sectors of the community?			✓	x	Perm	The 'do nothing' approach would not provide opportunities to improve access to health and social services for all sectors of the community.
		Maintain, enhance and create green infrastructure for recreation, exercise and locally produced food?			✓	?	Perm	The 'do nothing' approach would maintain current provision of green infrastructure but would not present opportunities to create or enhance green infrastructure for recreational purposes or for exercise and locally produced food.
		Promote non-polluting forms of transport?			✓	x	Perm	The 'do nothing' approach would probably lead to an increase over the long term of car ownership and car generated trips. The existing layout is designed to encourage car use. This approach would not create opportunities for cycling or the promotion of walking as

							an alternative to driving. Roads throughout the estate are not wide enough to accommodate buses and public transport accessibility is likely to remain poor or worsen over the long term.
	Help to improve mental and emotional health, reducing social exclusion, especially for those with poor mobility?			✓	x	Perm	The 'do nothing' approach is likely to lead to a decline in mental and emotional health due to the deterioration of the neighbourhood and a poor quality public realm. The Radburn layout that exists at Grahame Park is known to exacerbate anti-social behaviours and crime. This too could lead to a deterioration of mental and emotional health of residents over the long term.
	Reduce exposure to poor air quality?			✓	x	Perm	As car ownership increases over time and access to public transport remains poor, it is likely that exposure to poor air quality over the long term is likely to worsen. Opportunities to promote walking and cycling will not be realised and this will also contribute to a worsening situation.
13. To improve the skills and education of the population	Provide opportunities for improving the skills and qualifications of the population?			✓	x	Perm	The 'do nothing' approach will not provide further opportunities to improve the skills and qualifications of the population. This lack of opportunity may be enhanced with the continuing regeneration of the rest of Colindale providing new space for businesses and retail businesses leaving Grahame Park behind.
	Help improve employee education/training programmes?			✓	x	Perm	The 'do nothing' approach will not provide further opportunities to improve employee education/training programmes.
	Help reduce skill shortages:			✓	x	Perm	The 'do nothing' approach will not provide further opportunities to help reduce skills shortages.
	Help improve access to education for all?			✓	x	Perm	The 'do nothing' approach will not provide further opportunities to improve access to education for all.
14. To provide everyone with the opportunity to live in a decent and affordable home	Improve the supply of housing?			✓	x	Perm	The 'do nothing' approach will not provide further opportunities to improve the supply of housing, in particular private sector housing.
	Encourage the range of housing type, size and tenure to meet identified current and future needs of existing and future local residents?			✓	x	Perm	The 'do nothing' approach will not provide further opportunities to meet the housing needs of existing and future local residents.
	Increase access to good quality and more affordable housing for all?			✓	x	Perm	The 'do nothing' approach will not provide further opportunities to improve access to good quality affordable housing for all. Existing dwellings are now old and in state of deterioration and are far below today's building standards in relation to energy. Some of the units do not meet the decent homes standard.
15. To reduce crime and the fear of crime	Improve safety and security?			✓	x	Perm	The 'do nothing' approach will not improve safety and security at Grahame Park. The Radburn layout has been criticised over the years for contributing community issues including antisocial behaviour and crime. There is the possibility that anti-social behaviour and crime may continue or even worsen over the long term.

16. To promote social inclusion, equality, diversity and community cohesion	Encourage measures to reduce crime and the fear of crime?			✓	x	Perm	The 'do nothing' approach will not encourage measures to reduce crime and the fear of crime. Fear of crime is likely to remain the same or worsen over the long term as the estate fall into further decline.
	Encourage a strong and cohesive community?			✓	x	Perm	Due to the deterioration of the estate and it's 'isolating' layout Grahame Park has become disconnected from the wider area. It does not present a welcoming environment and this is likely to worsen over the long term. This decline is very likely to lead to a weakened sense of community over the long term.
	Reduce antisocial behaviour by designing out crime?			✓	x	Perm	The 'do nothing' approach will not improve safety and security at Grahame Park. The Radburn layout has been criticised over the years for contributing community issues including antisocial behaviour and crime. There is the possibility that anti-social behaviour and crime may continue or even worsen over the long term.
	Help support the voluntary and community sectors?			✓	x	Perm	The 'do nothing' approach will not further contribute towards helping support the voluntary and community sectors.
	Support active community engagement?			✓	x	Perm	The current environment is of a very poor quality and provides an equally poor outlook for residents and visitors alike. In its current state it is unlikely that the Grahame Park environment is conducive to creating positive active community engagement.
	Support a diversity of lifestyles and communities?			✓	x	Perm	The 'do nothing' approach will not further contribute towards helping support a diversity of lifestyles and communities.
	Promote accessibility for those people who are elderly or disabled?			✓	x	Perm	The current estate was built in the 1970's and building standards, especially those regarding accessibility have improved since then. The 'do nothing' approach will not provide opportunities to address accessibility issues and provide dwellings suitable for older residents.
	Sustain the provision of community facilities and open space that meets local needs?			✓	x	Perm	The 'do nothing' approach will maintain the current provision of community facilities and open spaces. However, the quality of these spaces have deteriorated over time and in light of more up-to-date standards some of these spaces may no longer be fit for purpose and may no longer be able to meet the needs of the local community.
	Improve community cohesion?			✓	x	Perm	The 'do nothing' approach will not further contribute towards helping support the voluntary and community sectors.

3.4 'Do nothing approach - Summary of main issues

3.4.1 The 'do nothing' approach results in a very negative sustainability appraisal which reflects the currently very poor condition of the estate. The results are consistently poor over the economic, social and environmental aspects of the appraisal. The sustainability appraisal suggests the 'do nothing' approach is not a constructive option and would lead to a number of negative issues for Grahame Park residents.

Table 7 – Sustainability appraisal of draft SPD compared to Stage B

SUSTAINABILITY APPRAISAL OF DRAFT SPD VS STAGE B							
SA Objectives	Sub-objectives	Assessment of the Effect					Comments
	Will the SPD...?	Short	Medium	Long	+/-	Perm/Temp	
ECONOMIC 1. Encourage sustainable economic growth and economic regeneration	Improve business development?				?		Both the masterplan and the draft SPD will provide a range of non-residential uses. Regeneration will lead to an improvement in the public realm and the general environment. This in itself should generally help to improve business development. There is no perceptible difference between the plans.
	Enhance the image of the area as a good business location?				?		Both the masterplan and the draft Grahame Park SPD will provide a range of non-residential uses. Regeneration will lead to an improvement in the public realm and the general environment. This in itself should generally help to improve business development.
	Help diversify the economy?				?		Although both the masterplan and the draft SPD propose retail and non-residential uses there appears to be no coherent approach considering the quantum and types of uses that should be delivered. Retail provision in Grahame Park has declined considerably in recent years resulting in a number of vacant retail units. Whether this is due to a general decline in the neighbourhood and local area or due to some other factors is not apparent and may have been investigated as a part of both plans. What retail and non-residential uses exist in the wider area? What is the demand for retail provision at Grahame Park? These questions may be considered on receipt of forthcoming planning applications.
	Assist in providing land and buildings of a suitable type required by businesses for a range of employment uses?				?		Both the masterplan and the draft SPD will provide land and buildings for businesses and employment uses. Both plans have not set out minimum floor areas and design parameters for retail units and other non-residential uses. This sub-objective may only be answered once individual planning applications are received by the council.
	Have a positive impact on the				?		It is difficult to compare both plans against each other and how they may impact on the

	local economy?						local economy. Further detail may only be provided on receipt of planning applications for the regeneration of Grahame Park.
2. Increase the opportunities for rewarding and satisfying employment	Help to reduce unemployment?				?		The current level of employment at Grahame Park has not been determined and it is difficult to determine whether the number of jobs created as a direct result of the regeneration will be more than exists at present when comparing both plans. However, an SPD on Skills, Enterprise, Employment and Training was adopted in 2014 and a number of local employment agreements are likely to come about through the regeneration as a result of that SPD. Numbers of local employment agreements that will be created will be determined on receipt of forthcoming planning applications and may reduce levels of unemployment.
	Encourage the retention and or/growth of local employment and training opportunities for all local people?				?		The current level of employment at Grahame Park has not been determined and it is difficult to determine whether the number of jobs created as a direct result of the regeneration will be more than exists at present when comparing both plans. However, an SPD on Skills, Enterprise, Employment and Training was adopted in 2014 and a number of local employment agreements are likely to come about through the regeneration as a result of that SPD. Numbers of local employment agreements that will be created will be determined on receipt of forthcoming planning applications and may reduce levels of unemployment.
	Result in the loss of employment land?				?		Grahame Park contains no designated employment land and both plans for regeneration will not lead to any losses.
	Increase the number of higher paid jobs in the borough?				?		Increasing the number of higher paid jobs is not a driver for the regeneration of Grahame Park and it is likely that neither regeneration plan would contribute to an increase in higher paid jobs in Barnet.
3. To provide the necessary infrastructure to support existing and future growth	Provide the necessary social infrastructure to meet existing and future local needs?				?		Both the draft SPD and the original masterplan propose to deliver not only retail provision but also a range of other non-residential uses including a Health Centre, a Children's Centre, a church(es) and community facility. It appears that both plans would deliver a similar level of non-residential uses albeit that the masterplan would have delivered a little more including one more church. Due to a lack of information it has been difficult to make comparisons between the two plans. However, both plans do not assess demand for a variety of social infrastructure and both do not assess what social infrastructure exists in the wider area. The original masterplan would create a central circus or square which may have acted as a focal point for the neighbourhood and would have included a concentration of social infrastructure. The draft SPD does not provide this central square. It is uncertain how this absence will affect local needs in the future.
	Provide enough green infrastructure for the health and well-being of local				?		The difference between the masterplan and the draft SPD is the central square and circus. Comparison of both plans it apparent that the absence of the central square and circus in the draft SPD will result in the provision of less green and open space.

ENVIRONMENTAL		residents that also contributes to climate change adaptation, biodiversity and water quality?						However, total figures for green and open spaces are given in the original masterplan but not in the draft SPD making comparison difficult.
		Provide enough physical infrastructure?				?		There appears to be little difference in the provision of physical infrastructure in both plans.
	4. To reduce contributions to climate change	Reduce CO2 and other greenhouse gas emissions?			✓	✓	Perm	Both plans adopt a very similar approach. The original masterplan sets out a Sustainability Strategy which adopts measures to reduce greenhouse gas emissions including renewable sources of energy and the promotion of cycling, walking and public transport. .
		Reduce consumption of energy resources?			✓	✓	Perm	Both plans adopt a very similar approach. The original masterplan sets out a Sustainability Strategy which adopts measures to reduce greenhouse gas emissions including renewable sources of energy and the promotion of cycling, walking and public transport.
		Use renewable resources of energy generation?				?		Both plans promote the use of renewable sources of energy.
		Encourage the reuse or improvement of buildings and land that are vacant, under-utilised or in disrepair?				?		Both plans adopt a very similar approach to the reuse or improvement of buildings and land. Both plans intend to retain existing spaces and buildings. This approach is more clearly defined in the masterplan than the draft SPD.
		Increase energy efficiency in the borough's housing and other building stocks?				?		Both plans intend to meet current housing standards for energy efficiency. However, both plans do not state that retained housing stock energy efficiency will be improved.
	5. To protect and enhance the quality of landscape, townscape and local distinctiveness	Conserve and enhance local landscape and townscape character and visual amenity?				?		Both plans intend to conserve and enhance landscape and townscape.
		Improve the relationship between different buildings, streets, parks and waterways and other spaces that make up the townscape character?				?		Both plans intend to improve the relationship between different buildings and spaces within the neighbourhood and with the wider area.
		Have a negative impact on important strategic/local views?				?		Both plans will not have a negative impact on important strategic/local views.
		Promote high quality design that relates to immediate surroundings?				?		Both plans promote high quality design which relates to immediate and wider surroundings.

6. To promote sustainable transport and reduce the need to travel by car	Encourage development at locations that enable walking, cycling and/or the use of public transport?				?		Both plans promote cycling, walking and the use of public transport both within the Grahame Park neighbourhood and in relation to the wider area e.g. Colindale Underground Station.
	Encourage development at locations connected to local services and facilities?				?		Both plans take advantage of the location of the nearby Colindale Underground Station.
	Reduce the need to travel by car?				?		Both plans promote cycling, walking and the use of public transport both within the Grahame Park neighbourhood and in relation to the wider area e.g. Colindale Underground Station.
	Reduce the number and length of journeys made by car?				?		Both plans promote cycling, walking and the use of public transport both within the Grahame Park neighbourhood and in relation to the wider area e.g. Colindale Underground Station.
7. To conserve and enhance open spaces, green corridors and biodiversity	Encourage development on previously developed land?				?		Both plans seek to maximise the use of brownfield land whilst improving standards and living conditions for the entire neighbourhood.
	Improve the quality and access to open spaces in areas of deficiency?				?		Both plans have strategies to improve the quality and access to open spaces.
	Provide a range of play spaces for children and young people?				?		Both plans would provide a good range of play spaces for children and young people.
	Maintain enhance and create green infrastructure assets and networks; such as green space, public rights of way, open recreation and sports facilities?				?		Both plans provide well considered strategies to enhance and create green infrastructure.
	Help protect and enhance biodiversity in the area and in particular avoid harm to protected species and habitats?				x		The masterplan sets out an ecology strategy of sorts whereas the draft SPD adopts a broader non-strategic approach. The draft SPD does not demonstrate a well-considered biodiversity plan and this may lead to a decline in the variety and quality of habitats within Grahame Park.
	Encourage the creation of new habitats, including through the provision of additional open space and green roofs?				x		The draft SPD includes a statement that an Ecology Report will be produced. In the absence of this report the creation of new habitats is broadly promoted. The masterplan although not burdened with detail intends to introduce new habitat through a variety of measures including the diversification of shrubs and trees.

	Protect and provide opportunities for creating/enhancing/improving sites designated for their nature conservation value?				xx		The original masterplan considered ecology across the whole of Grahame Park whereas the draft SPD does not. The draft SPD does not attempt to link together with what has been delivered at development Stage A of the Grahame Park regeneration.
8. To conserve and enhance the historic environment and cultural assets	Protect, maintain and enhance the condition and setting of features and areas of cultural, historic and archaeological heritage?				?		Both plans could recognise the surrounding historic environment and the heritage of Graham Park as a place of aviation pioneering.
	Promote the historic environment and also contribute to a better understanding of the local historic environment?				?		Both plans could do more to recognise the surrounding historic environment and the heritage of Graham Park as a place of aviation pioneering.
	Maintain and strengthen local distinctiveness and respect diversity of local communities?				?		Both plans attempt to strengthen local identity and provide opportunities for social cohesion. It may be argued that one would be more successful than the other but this would be difficult to determine in the absence of further details which will form the basis of future planning applications.
	Maintain or improve access to leisure, sporting, cultural and arts destinations and facilities?				?		Both plans promote social infrastructure which could be used for a variety of community uses. Other spaces may be capable of multiple types of community uses including indoor/outdoor sports and performance spaces. Planning applications would provide the necessary detail to determine the nature of these spaces. Both plans are similar in this respect.
	Improve leisure, sporting, cultural and arts provision?				?		Both plans promote social infrastructure which could be used for a variety of community uses. Other spaces may be capable of multiple types of community uses including indoor/outdoor sports and performance spaces. Planning applications would provide the necessary detail to determine the nature of these spaces. Both plans are similar in this respect.
9. To reduce the risk of flooding	Minimise the risk of flooding to vulnerable properties?				?		The draft SPD does note that there are some areas within Grahame Park which are at risk of surface water flooding. However, it lacks a strategy which attempts to tackle this issue. Flood risk for both plans would be a consideration in forthcoming planning applications.
	Promote the use of sustainable urban drainage systems?				?		Both plans mention sustainable urban drainage systems but lack detail which would be provided as part of future planning applications.
	Increase or reduce the risk of flooding to people and				?		Both plans mention sustainable urban drainage systems but lack detail which would be provided as part of future planning applications.

10. To improve air quality and prevent the pollution of and improve the water quality of rivers and groundwater	property?						
	Limit types of development in areas at risk of flooding?				?		Both plans mention sustainable urban drainage systems but lack detail which would be provided as part of future planning applications.
	Improve air quality?				?		Both plans would promote walking, cycling and public transport which would lead to improved air quality.
	Help to reduce emissions of PM10 and NO2?				?		Both plans would promote walking, cycling and public transport which would lead to improved air quality.
	Minimise construction impacts, such as dust, noise, vibration and odours?				?		This information would be requested in the form of a planning condition on the grant of planning permission for either plan.
	Encourage a reduction in the amount and length of journeys made by car?				?		Both plans promote walking, cycling and the use of public transport in an attempt to reduce the amount and length of journeys made by car. There is little difference between either of the plans in this regard.
	Protect the quality of rivers and groundwater?				?		Both plans would have to consider all risks to groundwater and surface waters from contamination need to be identified in any forthcoming planning applications so that appropriate remedial action can be taken, Risk Assessments and reports will need to be prepared in line with the Environment Agency's 'Groundwater protection: Principles and Practice' document (GP3) and CLR 11 (Model Procedures for the Management of Land Contamination).
	Prevent the deterioration of the water quality of rivers and groundwater?				?		Both plans would have to consider all risks to groundwater and surface waters from contamination need to be identified in any forthcoming planning applications so that appropriate remedial action can be taken, Risk Assessments and reports will need to be prepared in line with the Environment Agency's 'Groundwater protection: Principles and Practice' document (GP3) and CLR 11 (Model Procedures for the Management of Land Contamination).
	Avoid areas lacking a sewerage network or areas with network capacity issues?				?		Sewerage and network capacity has not been highlighted in the SPD and would be dealt with at the planning application stage through the use of planning conditions requesting further detail regarding sewerage and network capacity.
	Encourage the re-use of resources?				?		Both plans will maximise the use of previously developed land.
11. To encourage sustainable use of resources	Encourage the reuse or improvement of buildings and land that are vacant, under-utilised or in disrepair?				x		Both plans will maximise the use of previously developed land and will retain some of the existing buildings. The masterplan intends to retain more existing properties than the draft SPD. However information on the condition of the existing buildings is not available. The retention of buildings which are not in good repair would not be appropriate.
	Encourage remediation of contaminated land?				?		With regard to both plans treatment of any land contamination would form part of future planning applications.

SOCIAL		Encourage water efficiency and drought resilience?				?		With regard to both plans water conservation measures set out in the Building Regulations must be complied with. Details are set out in the National Housing Standards.
		Reduce consumption of energy and reliance on fossil fuels?				?		Both plans promote walking, cycling and the use of public transport in an attempt to reduce the amount and length of journeys made by car. There is little difference between either of the plans in this regard and both would lead to a reduced consumption of fossil fuels.
		Promote the reduction of waste during construction/operation?				✓		The draft SPD states that the site will be registered with the Considerate Contractors Scheme and that 85% of construction waste be diverted from landfill. The masterplan does not propose a construction waste plan.
		Minimise the production of household and commercial waste?				?		Refuse and recycling storage will be considered on a case by case basis when individual planning applications are submitted for both the masterplan and the draft SPD.
		Promote sustainable processing of waste, such as recycling, energy from waste and composting?				?		Recycling of waste will be promoted through the provision of opportunities for this type of waste management in both regeneration plans.
	12. To improve the health of the population	Encourage and facilitate healthy living and active lifestyles amongst different groups?				?		Both plans promote cycling and walking as an alternative to car travel. The masterplan proposes a health centre and is described as a health hub in the wider plan. The draft SPD also proposes a health centre which will be run by the NHS.
		Provide opportunities for sport and recreation?				?		Both plans consider there to be adequate sports provision in the surrounding area. However both plans do provide outdoor green space for passive recreation. Class D uses created by both plans will provide opportunities for there to be some indoor sports facilities. The nature of D uses will become more specific when planning applications are submitted for individual elements of the regeneration of Grahame Park.
		Assist in tackling health inequalities in the borough?				?		Both plans will provide a health centre run by the NHS which will help tackle health inequalities in Grahame Park.
		Improve access to health and social care services for all sectors of the community?				?		Both plans will provide a health centre run by the NHS which will help tackle health inequalities in Grahame Park. The masterplan proposes the provision of a welfare centre whilst the draft SPD does not.
		Maintain, enhance and create green infrastructure for recreation, exercise and locally produced food?				?		Both plans contain strategies to maintain, enhance and create green infrastructure which will provide space for the local community for recreation, exercise. The draft SPD does promote the idea of using green spaces to grow locally produced food.
		Promote non-polluting forms of transport?				?		Both plans promote cycling and walking and also the use of public transport.

	Help to improve mental and emotional health, reducing social exclusion, especially for those with poor mobility?				x		Both plans make provision for a health centre and also welfare centre. The range of non-residential uses in both plans should provide many opportunities for promoting social capital. Retail and other community uses provided in both schemes should provide spaces where people can meet and develop social relationships. Only the masterplan promotes wheelchair friendly neighbourhoods but provides very little detail how this would be achieved.
	Reduce exposure to poor air quality?				?		Both plans promote walking, cycling and public transport. This may reduce exposure to poor air quality.
13. To improve the skills and education of the population	Provide opportunities for improving the skills and qualifications of the population?				?		Both plans provide a range of community uses which could potentially be used for training purposes among other alternatives. Both plans also provide a library facility.
	Help improve employee education/training programmes?				?		Both plans provide a range of community uses which could potentially be used for training purposes among other alternatives. Both plans also provide a library facility.
	Help reduce skill shortages:				?		Both plans provide a range of community uses which could potentially be used for training purposes among other alternatives. Both plans also provide a library facility.
	Help improve access to education for all?				?		Both plans provide a range of community uses which could potentially be used for training purposes among other alternatives. Both plans also provide a library facility.
14. To provide everyone with the opportunity to live in a decent and affordable home	Improve the supply of housing?				?		Both plans are predominantly focussed on delivering much needed housing within Barnet. The draft SPD would deliver the number of homes approved in the 2007 outline planning permission for Grahame Park.
	Encourage the range of housing type, size and tenure to meet identified current and future needs of existing and future local residents?				?		Both plans promote the idea of providing a mixed tenure scheme and also providing a range of different housing sizes.
	Increase access to good quality and more affordable housing for all?				?		In its entirety the masterplan would deliver 1053 affordable homes over a range of sizes. The draft SPD contains no such breakdown – however, the number of affordable homes agreed in the 2007 outline planning permission is still binding so this proposal would deliver the same number of affordable homes.
15. To reduce crime and the fear of crime	Improve safety and security?				?		Secure by Design accreditation will be sought in the masterplan. However, some elements of this are now redundant as they have been absorbed by the Building Regulations. Secure by Design principles for outside spaces are still relevant and do not form part of the Building Regulations. The draft SPD sets out design principles which will create safer environments by maximising natural surveillance.

16. To promote social inclusion, equality, diversity and community cohesion	Encourage measures to reduce crime and the fear of crime?				?		Secure by Design accreditation will be sought in the masterplan. However, some elements of this are now redundant as they have been absorbed by the Building Regulations. Secure by Design principles for outside spaces are still relevant and do not form part of the Building Regulations. The draft SPD sets out design principles which will create safer environments by maximising natural surveillance.
	Encourage a strong and cohesive community?				?		Site Wide Sustainability and Environmental aims of the draft SPD is to foster cultural identity and cohesion. However, this strategy provides little in the way of specific detail. The masterplan would attempt to provide optimum conditions for a socially cohesive neighbourhood through the provision of mixed tenure housing.
	Reduce antisocial behaviour by designing out crime?				?		The masterplan will follow principles set out in Secure by Design to discourage anti-social behaviour. It would follow advice such as ensuring that refuse areas are not neglected as this is thought to encourage anti-social behaviour. The draft SPD intends to reduce anti-social behaviour through the introduction of better natural surveillance.
	Help support the voluntary and community sectors?				?		The masterplan states that it will maintain continuity of voluntary service provision by ensuring that services are relocated prior to any demolition. The draft SPD does not consider this issue.
	Support active community engagement?				?		Prior to drafting both plans a series of consultation and engagement events have taken place which sought to involve all sectors of the Grahame Park community.
	Support a diversity of lifestyles and communities?				?		The draft Grahame Park SPD in its Site Wide Sustainability and Environmental Aims states that it intends to maximise the cultural diversity of the place and its people. It does not provide a strategy of how this is to be achieved. A range of community facilities would be provided through the delivery of both plans. The specific use of these spaces would be determined on the merits of forthcoming planning applications but could potentially be used for cultural purposes which support and reflect the local community.
	Promote accessibility for those people who are elderly or disabled?				?		Both plans provide little detail regarding accessibility for the elderly or disabled.
	Sustain the provision of community facilities and open space that meets local needs?				?		Both plans intend to provide a wide variety of community facilities and open spaces that meet local needs.
	Improve community cohesion?				x		Both plans intend to provide a range of community uses and much depends on how these are delivered and managed. These facilities may provide opportunities to develop community cohesion. The masterplan also intends to provide a central circus which would have provide a well-defined community centre and a community hub where non-residential uses would have been concentrated. The central circus may have provided a more successful attempt to create a community 'heart' where cultural activities could

							be organised in order to bring the community together to celebrate different events.
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3.5 Stage B comparison - Summary of main issues

- 3.5.1 In the absence of specific data an appraisal was conducted which compared the overall 2008 Masterplan (Stage A and Stage B) with the draft SPD. The appraisal reveals that many sustainability aspects of both schemes actually revealed little difference; which is not surprising given the starting point for both proposals. There were several positive results indicating that the new draft SPD would improve upon some sustainability aspects.
- 3.5.2 Like the original Masterplan the draft SPD proposes combined heat and power and replacement of the existing energy centre. This is likely to lead to a reduction of CO₂ emissions and the consumption of energy resources over the long term.
- 3.5.3 Stage A of the regeneration enhanced the Grahame Park Open Space, which is a site of importance for nature conservation including physical changes to the park. Stage B is not proposing further work to the park therefore impacts will be less direct and biodiversity impacts are considered less.
- 3.5.4 Both the original masterplan and SPD retain existing buildings which is the starting point. Essentially the approach is the same for both SPD and original masterplan with a mixture of building retention and comprehensive redevelopment. The difference lies in the objective to create a more urban and street based 'feel' in the SPD focused around three distinct community hubs.3.5.5 The draft SPD goes beyond the original masterplan and sets out a commitment to register with the considerate contractor's scheme and seeks to prevent 85% of construction waste going to landfill.
- 3.5.5 The original masterplan would have created a focal point for the neighbourhood in the form of the Public Square / central circus. The draft SPD has an alternative vision , identifying three community hubs linked by green walkways. There will be opportunities at the planning application stage to review these links further to help bring these community hubs closer together.

4.1 Conclusions and Recommendations

- 4.1.1 The SA demonstrates that regeneration of Grahame Park would positively promote many different aspects of sustainability and deliver a new exemplar community in Colindale replacing a poor quality estate.
- 4.1.2 The 'do nothing' approach demonstrates that regeneration is required to contribute positively to sustainability objectives.
- 4.1.3 A comparison of the two regeneration plans has revealed minor actual differences in terms of likely sustainability outcomes. The draft SPD provides the vital contemporary Masterplan necessary to deliver the regeneration area which helps realise some marginally more positive outcomes than the original Masterplan delivered. For example the draft SPD makes a commitment to register the site with the Considerate Contractors Scheme and states that 85% of construction waste will be diverted from landfill. This would contribute positively to sustainability outcomes.
- 4.1.4 The original Masterplan would have created a focal point for the neighbourhood in the form of the Public Square / central circus. The draft SPD has an alternative vision, identifying three community hubs linked by green walkways. There will be opportunities at the planning application stage to review these links further to help bring these community hubs closer together.
- 4.1.5 In conclusion, the SA has not identified strategic approaches which would result in direct negative impacts on sustainability that in turn would require mitigation measures. Further clarity will of course be delivered through the planning consents.
- 4.1.6 The final sustainability appraisal report which accompanies the adopted SPD includes consultation feedback from the statutory consultees in section 2.3. The statutory consultees all made minor comments to improve the assessment framework. In addition reference was made by Historic England to ensuring that the rich aeronautical history of Colindale was reflected in the scheme going forward. It was considered that this aspect would be best dealt with through detailed design through the planning application process.

