

Mr Matthew Randall
London Borough of Haringey
Planning Policy Team

Our ref: NE/2006/000070/SL-02/IS1-L01

Date: 20 March 2014

By email:

Matthew.Randall@haringey.gov.uk

Dear Matthew

Site Allocations DPD Regulation 18 Consultation & Tottenham Area Action Plans Regulation 18 Consultation

Thank you for consulting us on the above planning policy documents. We are pleased to enclose a copy of our comments. I have commented on each plan document separately under headings below. As the Sustainability Appraisals are broadly similar our comments are provided for both appraisals under a one heading.

Site Allocations

Having reviewed the site allocations document there are 13 sites that lie within Flood Zones 2 and 3. We are very concerned that the allocation of these sites has not been underpinned by a sequential test. For these sites to be acceptable you will need a thorough evidence base in the form of a sequential test supported by your Level 1 and 2 Strategic Flood Risk Assessments (SFRAs). A sequential test is an essential part of your evidence base and without it your site allocations will be found unsound. We acknowledge that a sequential test was undertaken for your Core Strategy in identifying areas of growth. However we advised in our responses at that stage the sequential test would also need to be applied to individual site allocations. This is to determine whether it is possible to deliver new development in areas at low risk of flooding, in preference to areas of medium or high risk of flooding.

We recommend you undertake the sequential test considering all sources of flooding as guided by the National Planning Practice Guidance, particularly as many of the sites which are within Flood Zone 1 are also defined as critical drainage areas in your Surface Water Management Plan (SWMP). The sequential test is a requirement under the paragraphs 100 - 104 of the National Planning Policy Framework (NPPF) for Local Plans in allocating sites.

You have produced a level 2 SFRA which is referenced within the Sustainability Appraisal; however it does not appear to have informed your site allocations. The level 2 SFRA also states that we were consulted on the document (paragraph 1.6, page 10); however we do not appear to have any records of this consultation. I would be grateful if you can provide further details as to when this happened and who was consulted so that we can check our records.

Cont/d..



Within the sustainability appraisal page A-27 (appendix) there is reference to the sequential test which was applied to the growth areas for the Core Strategy and summarises that it is possible to deliver all development required within the borough without the need to develop within Flood Zones 2 and 3. This observation in the SA is not reflected in the draft Site Allocations document which has allocated sites in Flood Zones 2 and 3.

Our following comments are on the specific sites identified in the document. Please note that even if the changes recommended below are made, we would still find the document unsound without a sequential test covering all your site allocations in Flood Zones 2 and 3 forming part of the evidence base for the document.

Sites over 1ha in size;

TH1, TH3, TH4, TH5, TH6, TH7, TH8, TH9, HH1, HH2, HH3, HH5, WG1, WG3, WG4, WG5, WG7, NT1, NT2, NT3, THR4, THR6, THR7, THR8, THR9, HG1, HG3, HG4, HG5, MH1, MH3, HO1, HO3, AP1, S1, S2, S3, S4

It is a requirement of London Plan policy 5.13 that all sites over 1ha in size shall make use of Sustainable Drainage Systems (SuDS). This needs to be included in the design principles for all site allocations over 1ha. Haringey's Local Plan strategic policy SP5 also places a requirement on all development to implement SuDS to improve water attenuation, quality and amenity.

Flood Risk Assessments should show how Sustainable Drainage Systems (SUDS) such as permeable pavements, filter drains and strips, swales, temporary basins, ponds, wetlands and green/brown roofs will be maximised on site, with any obstacles to their use clearly justified. Development should also demonstrate that a reduction in run off rates for all events up to the 1 in 100 year storm (including climate change) has been achieved in accordance with the requirements of the London Plan policy 5.13.

We are pleased to see that the SWMP designated Critical Drainage Areas have been included within the considerations for the allocated sites where they are present.

Sites with potentially contaminated land in sensitive locations:

TH1, TH3, TH4, TH5, TH6, TH7, TH8, Employment Land in Tottenham Hale, HH1, HH2, HH3, HH4, HH5, HH6, HH7, WG7, NT1, NT2, NT3, Employment Land in North Tottenham/Northumberland Park, THR1, THR2, THR3, THR4, THR5, THR6, THR7, THR8, THR9, MH3, HO1, HO2, AP1, S1, S2, S3, S4

National Planning Practice Guide paragraph 005 states that Local Plans should be clear on the role of developers and requirements for information and assessments in considering land contamination. The supporting text would be improved by including these requirements for the above sites. Sites in these locations will be expected to submit a preliminary risk assessment/desktop study with their planning applications to assess if land contamination may be present at the site, including information on past and current uses and sensitive controlled waters receptors, in line with paragraph 007 of the National Planning Practice Guide. Any sites with former contaminative uses would be subject to land quality conditions and further investigation work depending on the findings of the initial study. Infiltration SUDs will only be permitted where it has been demonstrated that it is through clean ground.

Some of these sites also lie within Source Protection Zones 1 and 2. Our Groundwater Protection: Principles and practice (GP3) includes advice and position statements on the appropriateness of certain uses within these zones.

Sites in Flood Zone 2:**TH1, TH2, TH3, TH4, TH5, TH6, TH8, TH9, NT4, MH3 and HO2**

These sites are in Flood Zone 2. Notwithstanding our previous comments on the sequential test, we are pleased that flood risk has been included in the implementation considerations for the majority of the sites listed above. The supporting text would be improved by including opportunities to reduce flood risk by implementing Sustainable Drainage Principles and finished floor levels within the design principles for each of the allocations. The supporting text should also reference the requirement that design, layout and measures to reduce flood risk should be in accordance with the SFRA principles.

Sites with Main watercourse:**TH7, TH8, HH3, HH4, WG4, WG5, NT2, NT3, THR1, THR8, MH3, HO1,**

All of the above sites have a main watercourse within the identified red line boundary. The watercourses on all of these sites apart from TH7 are in culvert. We are pleased to see a commitment to deculvert the watercourses for some of these sites and feel that the investigation into the feasibility of deculverting should be incorporated within the design principles for all of these sites, with a view to improving the status of the waterbodies (as designated under the Water Framework Directive). Where it is demonstrated that it is not practically feasible to deculvert, the design principles should include a robust SuDS scheme to secure alternative environmental enhancements that provide multiple benefits.

In addition to investigating the feasibility of deculverting development on sites with watercourses are expected to include a set back to incorporate at least an 8m buffer zone. Buffer zones:

- Provide habitat and 'green corridors' for flora and fauna
- Support the ecology and natural functioning of the watercourse
- Allow safe access to the watercourse and provide sufficient space for machinery to work alongside the watercourse (e.g. to remove obstructions that could cause flooding)
- Help prevent chemicals, rubbish and other waste from entering the watercourse (rubbish can block watercourses and thus increase flood risk)
- Stabilise and maintain the banks of the watercourse
- Attenuate surface water flows and can contribute to an overall sustainable drainage system (SuDS).

Please note that development within these sites may also require Flood Defence Consent under the Land Drainage Byelaws from the Environment Agency.

TH7

This site includes an area of Flood Zone 3b as designated in Haringey's Strategic Flood Risk Assessment. Some of the site also lies within the 1 in 100 year flood event including an allowance for climate change modelled extent. The allocation does reflect the site as being in an area of high flood risk, however Table 3 of the Planning Practice Guidance indicates that more vulnerable development (residential) is not appropriate in Flood Zone 3b. Noting our previous comments on applying the Sequential Test, development on this site should be avoided or less vulnerable alternative uses should be considered for this site.

As there is main watercourse on this site the design principles should include a commitment to ensuring that the river banks are re-naturalised and enhanced where necessary to adhere to policy SP5 of Haringey's strategic policy and the objectives of the RBMP.

Employment Land in north Tottenham/ Northumberland Park

Some of these sites are in flood zone 2 (listed under the heading 'sites in Flood Zone 2' and 3 (TH7). Some sites include an area within the 1 in 100 in any given year, including an allowance for climate change floodplain; development in this area should be avoided. If developing this part of the site cannot be avoided then level for level, volume for volume flood storage compensation must be provided.

Flood risk must be included in the implementation considerations, based on the principles of the evidence base; SWMP and SFRAs.

The site allocation area includes the culverted Moselle Brook. Opportunities to deculvert the brook and other ecological improvements should be explored in the design principles (see further details under comments for sites with main watercourses on the previous page).

Minor comments on site allocations

Sites TH6, TH7, TH8, HH2 & HH3 all appear to have a different site area to the figures given within the document.

Tottenham Area Action Plans

This document focuses on the issues and challenges for Tottenham, South Tottenham and Northumberland Park areas. Having reviewed the Area Action Plan (AAP) we are very concerned that there are a number of environmental issues, challenges and opportunities which have not been included within the document. This is of particular concern as we note the next stage of consultation will be the regulation 19 proposed submission consultation timetabled for Autumn this year. We recommend you continue to liaise with us on an informal basis when developing the AAPs objectives, policies and potential strategic sites.

Page 2 of the document outlines the relationship of the AAP to other documents and the evidence base documents upon which the AAP will be based. We are pleased to see the council is updating the evidence base particularly with the Open Space and Biodiversity Study. However there are a number of documents which should be used in the preparation of the AAPs which have not been referred to. The sequential test will also be required if any further sites are to be allocated within the AAPs itself, however we have made the assumption that all the sites are to be allocated in the Site Allocations document. We would be grateful if you could provide further clarification on this matter.

We strongly recommend that you make reference to the Strategic Flood Risk Assessment (SFRA) and the Surface Water Management Plan (SWMP) within the AAPs. The sustainability appraisal incorporates a large section which draws on both SFRAs which has not been reflected in the AAP. Our main concern is that you should use the findings and recommendations from this evidence to inform your spatial plans for regeneration taking into account the risk of flooding from the River Lee and its tributaries. This is to ensure, where possible, vulnerable development is not located in these areas and developments reduce the risk of flooding. The sequential test will need to be applied if in either of the AAPs, specific sites are allocated in areas of flood zone 2 and 3. We are likely to find the AAPs unsound if the sequential test has not been applied or the evidence from the SFRAs for these areas have not been used to inform the objectives and policies. Evidence from both of these documents including access/egress, warning, emergency planning, flood resilient design, finished floor levels, flood storage surface water management and critical drainage areas should be used to inform the AAPs.

A significant proportion of land allocated for development within Tottenham falls within Flood Zone 2 (medium risk of fluvial flooding) and Flood Zone 3 (high risk of fluvial flooding). There are also a number of sites in Flood Zone 1 which also fall within Critical Drainage Areas as identified in Haringey's Surface Water Management Plan. The AAPs should identify these challenges and draw upon the relevant evidence documents.

The Thames River Basin Management Plan is another important evidence base which should be used to inform the AAP, as identified in the sustainability appraisal scoping report. Haringey lies within the Lower Lee river catchment. The Lower Lee river system has historically suffered from poor water quality. It has been heavily modified over the last 100 years to cope with urbanisation and reduce flood risk in the Lee Valley. As a result, many tributaries are confined to concrete open channels or in some cases hidden underground in culverts or pipes. This led to widespread pollution from sewage misconnections that went undetected. Urban diffuse pollution is also a big problem in this catchment, as the rivers respond very quickly to rainfall.

Within Tottenham and Northumberland Park the Moselle Brook and Stonebridge brook are both heavily modified waterbodies, which are largely in culvert. They are both tributaries of the Lower Lee River, classified as 'poor' ecological status and failing to meet 'Good ecological potential' under the Water Framework Directive. The AAPs should support objectives within the River Basin Management Plan to re-open existing culverts within these areas, where feasible, as supported by strategic policy SP5 of Haringey's Local Plan which encourages all development to restore and enhance the Blue Ribbon Network. All development on sites with culverted watercourses will be expected to investigate the feasibility of deculverting. Deculverting not only provides opportunities to reduce sewage pollution through rectification of misconnections but can also deliver the following wider benefits to the area:

- Enhancing the Blue Ribbon Network by providing valuable aquatic habitat, aiding fish passage, and significantly adding to the visual attractions of an area.
- Offering educational and play opportunities for children, enhancing pedestrian and cycle routes and giving people a touch of the countryside and its seasons in the town.
- Using water in motion to mask city noise and provide an atmosphere of quiet and calm.
- Complementing other urban regeneration initiatives, giving a place a sense of identity and bringing commercial benefits such as enhanced image for properties and up to 20% increase in land values or rents.
- Reducing maintenance and construction costs by using natural bioengineering techniques rather than concrete constructions.
- Reducing flood risk, and creating balancing ponds to help reduce flooding downstream.

(Source: <http://www.ciwem.org/policy-and-international/policy-position-statements/de-culverting-of-watercourses.aspx>)

Green infrastructure should be a key aim of the AAPs because a network of green spaces, green roofs and river corridors can not only provide flood storage and provide habitat for wildlife, but also increase resilience to future climate change and recreational spaces for people. Paragraphs 114 and 117 of the NPPF advocate this approach and the link with climate change adaptation is highlighted in paragraph 004 ([Climate Change](#)) in the National Planning Practice Guidance.

We are currently scoping the feasibility of works along the Moselle Brook to maintain the current standard of protection offered by the flood defences.

Urban Diffuse Pollution is another key issue within this catchment to which the use of SuDS provides an opportunity to improve water quality. Any improvements will not only provide benefits in the immediate locality but will also have benefits further down the catchment. Developers should be encouraged to incorporate SuDS in any development, which is also supported by strategic policy SP5 of Haringey's Local Plan. There are a wide range of SuDS available which can be used for both new development and retrofitting of existing stock.

We note in Northumberland Park and South Tottenham that there are opportunities to improve existing housing stock, which also provides an opportunity to incorporate retrofitting of SuDS. SuDS can not only help reduce flood risk and address water quality issues, but can also improve the urban environment and air quality creating better places to live and work. An example of where this has been achieved in an urban context is Day Brook Rain Gardens in Nottingham http://www.susdrain.org/case-studies/case_studies/nottingham_green_streets_retrofit_rain_garden_project.html. Further advice and examples of retrofitting of SuDS can also be found on <http://www.susdrain.org/delivering-suds/retrofitting/why-retrofit/why-change.html>. Derek Drew-Smith at Haringey (Lead Local Flood Authority) is currently working with architects in Hornsey on a retrofitting of SuDS project who will also be able to provide further information and advice.

We note that the AAPs identifies that new development has the potential to help deliver sustainable forms of energy and promotion of low and zero carbon energy generation. We encourage you to explore whether there is the potential for the development of district heating networks within the AAP areas (<http://www.sutton.gov.uk/CHttpHandler.ashx?id=14088&p=0>). Water efficiency can also be linked to carbon reduction and reduction in energy use and minimising water use will also decrease the quantity of water that needs to be treated at the Sewage Treatment works. More information on the links between water efficiency and reducing energy use can be found on <http://www.waterwise.org.uk/pages/hot-water-and-energy.html>.

The plan identifies that a significant number of new houses are proposed - over 10,000. The sewage network in this area is currently already stretched, which has not been identified as an issue within the plan. We therefore have concerns surrounding the additional burden which would be created from the number of new houses. We would like to see evidence that there has been some discussion with Thames Water over the ability of the sewage infrastructure to cope with the additional properties.

Haringey is located in the Thames Water supply zone and in an area of serious water stress, which has not been identified as an issue or challenge in the plan. It is therefore Thames Water's responsibility to manage the demand for water. Every five years, Thames Water publish a Water Resources Management Plan in which they assess future water demand over the next 25 year period. We review and discuss any proposals to meet additional water requirements. The plan put forward by Thames Water has a strong emphasis on demand management and water efficiency to help meet future water supply requirements. The Environment Agency does support this approach but it will require others to contribute for these aims to be achieved. With such a significant increase in the number of houses, we would expect the AAPs to include a policy reflecting the requirements of London Plan policy 5.15 water use and

supplies, for residential development to be designed so that water consumption would be 105 litres or less per head per day.

Sustainability appraisal scoping report

We have the following comments below with regards to the Sustainability appraisal scoping report.

Plans and Programmes

The Technical Guidance to National Planning Policy Framework has been included within Page A-8, however it has now been superseded by the National Planning Practice Guidance.

Baseline Data, Sustainability Objectives and Indicators

We are pleased to see that the number of green roofs has been included as an indicator in protecting and enhancing biodiversity for Sustainability Objective 11 (SO).

Unfortunately we do not hold any baseline data ourselves, however page 12 of 'Living Roofs and Walls, Technical Report' by the Greater London Authority has estimates for the potential area available in London for Green roofs and the potential energy saving and rainwater storage this would provide

(<http://www.london.gov.uk/sites/default/files/living-roofs.pdf>). We also understand that the GLA have plans to produce a Green roofs interactive map so they may be able to provide some baseline data to you.

The Thames River Basin Management Plan (RBMP) has been identified within the plans and programmes, and should be included as baseline data to reflect aquatic ecology/biodiversity to support sustainability objectives 11 and 14. The RBMP can also be used for indicators for ecological status and chemical status. The RBMP also provides a greater level of detail as to the element that a particular waterbody is failing on. We are currently working on identifying actions to improve waterbodies and their status under WFD which will be published in the next round of RBMPs. The extent of new/existing buffer zones preserved, length of watercourses deculverted/restored, area of new habitat created could also be considered as indicators for enhancing biodiversity.

The Thames River Basin Management Plan can be used as baseline data for assessing groundwater quality. You can also obtain reports from our website for baseline groundwater quality information at <http://cdn.environment-agency.gov.uk/scho0207blyd-e-e.pdf> and datasets from the Geostore website.

Sustainability Indicator (SI) 14.2 states that 'Haringey specific data is unavailable for water use' for Sustainability Objective 14 'To protect and enhance the quality of water features and resources'. This information can be obtained from the State of the Environment report for London at http://www.environment-agency.gov.uk/static/documents/Research/Haringey_2013.pdf which states that the average consumption for household water use was 165 litres per head per day (l/p/d) for 2011/12 and the five year average was 163 l/h/d. It is important to recognise that whilst Haringey specific data is useful in some respects, the issue of serious water stress has is an issue with more of a regional focus. Therefore it is also appropriate to use regional evidence bases to measure the impact of policies on water resources.

SIs 15.2 & 15.3 for SO15 'To encourage the use of previously developed land' do not have any baseline data or comparators and targets. We will be able to provide data to show the amount of contaminated land remediated by Borough in the next couple of weeks. Please contact NETenquiries@environment-agency.gov.uk to obtain this data.

SO16 'To mitigate and adapt to climate change' does include indicators for flood risk, however as there is such a significant proportion of growth intended in areas of Flood Zones 2 & 3 we recommend that there is a separate objective for flood risk which looks at reducing flood risk from all sources. The SFRA's and SWMP can be used as the evidence base in addition to data and information which we hold.

We are pleased to see that SI 16.1 'no. properties in flood risk zones' has been included and that it refers to SFRA 1 and states planning permissions should not be granted contrary to EA advice. The number of planning permissions granted contrary to EA advice can also be included as a separate indicator and we are able to provide you with Haringey specific data to use as a baseline.

SI 16.2 'no. of flooding incidents' draws on evidence in SWMP, and should also consider flooding incidents from other sources; not just pluvial flooding.

We are pleased to see the inclusion of indicator 16.3 'no. of planning applications incorporating SuDS', although we note there are no comparators or targets. Policy 5.13 could be used to include a target to reduce surface water run-off rates to Greenfield, particularly for sites located in Critical Drainage Areas.

SO 19 limit cc by reducing CO2 emissions.

SI 19.4 'no developments connected to decentralised energy networks'. There may be scope for us to identify sites which we regulate where this opportunity could be promoted.

Sustainability Issues and Objectives

Page 31 Environmental – Biodiversity. We recommend that the final point is amended to include blue chains to reflect the aims of the Water Framework Directive and Blue Ribbon Network policies of the London plan.

Page 32 Flood Risk and Water. We recommend that critical drainage areas as defined in SWMP are included to cover all sources of flood risk.

Sustainability Appraisal Framework

Section 6.2 in the Sustainability Appraisal for the Site Allocations includes a table with site allocations and potential key social, economic and environmental impacts that will need to be assessed, however there is no key to accompany the table or explanation as to how the impacts have been identified.

As the local plan documents are refined and policies developed we will be able to advise further with regards to the appropriateness of the framework.

I hope the above comments are helpful and clear and look forward to meeting with you on 1 April to discuss our response. If you have any queries in the meantime please do not hesitate to contact me on the below details or my colleague Keira Murphy (0203 263 8057).

Yours sincerely

Ms Jane Wilkin
Planning Advisor

Telephone: 020 3263 8052
E-mail: northlondonplanning@environment-agency.gov.uk
Based at: Ergon House, Horseferry Road, London, SW1P 2AL