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**Date:** 20 March 2015

Dear Anne

### **Welwyn and Hatfield Local Plan consultation**

Thank you for consulting us on this local plan document. We have reviewed the information submitted and have the following comments.

#### **Draft Infrastructure Delivery Plan (Revised January 2015)**

In the section on Waste Water and Utilities (13.24-13.40) we can see that you have recognised there are capacity issues at the receiving Waste Water Treatment Works and sewerage network. We strongly recommend you work with Thames Water on a further study to support your Local Plan and site allocations to ensure that the growth proposed for Welwyn Hatfield can be accommodated by the appropriate infrastructure without detriment to the water environment. The reliance on Grampian conditions to ensure any necessary sewerage upgrades are delivered for individual future developments is not going to be an acceptable approach. This issue needs to be looked at strategically taking into account the growth proposals of neighbouring boroughs to ensure your proposed site allocations are deliverable. The necessary infrastructure requirements are likely to influence the location, timing and delivery of your proposed sites.

The Water Cycle Study Scoping Study (April 2010) jointly commissioned by yourselves and neighbouring councils demonstrates sewerage infrastructure as a constraint/possible showstopper to development and highlights the need for extensive upgrades to take place to support growth. In particular the growth proposed for Hatfield is seen as critical in terms of the impact on the trunk sewer network, Waste Water Treatment Works and the potential for an increase of sewer flooding. The impact on water quality on local watercourses receiving discharge from combined sewers and WwTW requires consideration to ensure Water Framework Directive objectives will not be compromised. Without the evidence to demonstrate that the proposed site allocations can be supported with the appropriate infrastructure without detriment to the water environment we are likely to find the Local Plan unsound. Paragraph 157 of the National Planning Policy Framework states that Local Plans should plan positively for the development and infrastructure required in the area. Paragraph 162 states that Local Planning authorities should work with other authorities and providers to assess the quality and capacity of infrastructure for (amongst other priorities) water supply and waste water and its treatment. St Albans DC, Dacorum BC and



Watford BC are currently working with Thames Water to provide further detailed studies to inform their emerging Local Plans.

### **Water supply infrastructure**

The key paragraphs linked to water supply infrastructure are 13.19 to 31.21. The following measures are recognised:

- 90% of properties to be metered in the WRZ 3 (which includes Welwyn & Hatfield) by 2017
- 13% reduction in water consumption as result of higher percentage of properties being metered
- 27Ml/d reduction in water losses through less leakage within the supply pipe system operated by Affinity Water

The installation of water meters does not guarantee a reduction in water usage but it should make it easier for individuals to manage their water usage. Affinity Water are reliant on both their customers using less water, and by working with other partners who have a role to play in promoting water efficiency. The Council can fulfil its role by having robust water efficiency policies that apply to both new builds and refurbishments beside working with residents (and Affinity Water) on water efficiency initiatives.

The water efficiency targets outlined in the Affinity Water WRMP are an essential component for managing the available water supplies to meet both the existing and proposed development in the borough. Please see our comments on the Development Management Policies for further guidance.

### **Site allocations**

We have some overall comments and site specific comments in relation to your proposed site allocations.

### **Flood risk**

**Our review of the sites indicates that the following are located in flood zones 2 and 3;**

#### **More favourable**

- WGC5 land to south east of WGC
- WeG6 Skinpan's farm
- Cuf1 The Meadway

#### **Finely balanced**

- Hat4 South of Ellenbrook
- Hat5 North of Roehyde

#### **Less favourable**

- Cuf5 Land West of Northaw Road
- Cuf7 Wells Farm

In line with paragraphs 100-102 of the National Planning Policy Framework, your site allocations should be directed away from the areas at highest flood risk, but where development is necessary make it safe without increasing flood risk elsewhere. This means applying both the Sequential Test and (if necessary) Exceptions Test to your site allocations. The Sequential Test and Exceptions Test should be submitted as a standalone document so we can clearly see how the tests have been applied.

If you are looking to allocate sites for development in flood zone 2 and 3 (even if the site is partially in these flood zones) a Level 2 Strategic Flood Risk

Assessment (SFRA) is required to look in detail at the level of flood risk. A level 2 SFRA assesses the risk of flooding at the local level (consider flood depths, velocities, rate of onset, duration of flooding) and will help determine the sites deliverability and Exceptions Test (paragraph 102 of the NPPF). Guidance on SFRA's can be found on Gov.uk at <https://www.gov.uk/government/publications/strategic-flood-risk-assessments-sfra-flood-and-coastal-risk>

The National Planning Policy Framework (NPPF) and associated National Planning Policy Guidance (NPPG) states that flooding from all sources must be taken into account when a site is allocated for development, therefore a Level 2 SFRA should look at sites affected by surface water flood risk as well. Until you have completed a level 2 SFRA and are aware of the specific site conditions it is not appropriate to allocate housing within the above sites and we are likely to find the document unsound without evidence of Sequential Test and an appropriate SFRA.

If following the Sequential Test and assessment of flood risk, you continue to allocate sites in flood zones 2/3 you need to ensure the site allocation design principles and Development Management Policies reflect the recommendations from the Level 2 SFRA. You will need to ensure that the sequential approach is used to inform the layout of development on these sites so that the more vulnerable uses such as residential are located in the areas of the site at least risk of flooding – this should be reflected in the design considerations/principles. You will also need to be satisfied that these developments minimise the risk of flooding both on and off site.

### **Watercourses**

The Water Framework Directive (WFD) requires the restoration and enhancement of water bodies to prevent deterioration and promote recovery of water bodies. Some of the proposed sites are located either on or adjacent to main rivers and where this is the case we will expect any development to leave an appropriate naturalised buffer strip to these watercourses. This will help to protect biodiversity and improve your green infrastructure; rivers provide important green corridors for the movement of a variety of important species. Where watercourses are currently in culvert we would expect these to be deculverted wherever possible and re-naturalised as part of a development to re-establish river and bankside habitat and the continuity of the river corridor.

The following sites are either on or adjacent to a main river:

#### **More favourable**

- WGC5 land to south east of WGC
- Cuf1 The Meadway

#### **Less favourable**

- Cuf5 Land West of Northaw Road
- Cuf7 Wells Farm

Many of your proposed allocations have an ordinary watercourse on site, these fall under the jurisdiction of Herts County Council as Lead Local Flood Authority (LLFA). The LLFA will have requirements for development around ordinary watercourses that are similar to our requirements for Main Rivers.

Sites which contain ordinary watercourses:

- WGC5 land to south east of WGC
- Hat1 North West Hatfield
- Hat2 West Hatfield

- WeG6 Skinpans farm
- GTLAA001 Foxes lane
- No02 36 the Ridgeway
- BrP4 West of Brookmans Park
- BrP6 Land at Bluebridge Road
- BrP10 Raybrook Farm

### **Surface water flooding**

Many of your proposed sites have issues with surface water flooding. Given the space on site, the use of green sustainable drainage features such as ponds, swales and green roofs should be maximised for the additional water quality, biodiversity and amenity benefits they provide. This should be reflected in a Development Management policy (see our later comments on this) so that applicants are given clear standards and principles against which a development should be designed.

As of the beginning of April 2015 we will no longer be statutory consultees for surface water. Hertfordshire County Council as Lead Local Flood Authority will be responsible for surface water as well as ordinary watercourses.

### **Specific site comments:**

#### **WGC5 land to south east of WGC**

There are some significant environmental constraints at this site which will require careful consideration before the site is allocated. This site has the Hatfield Hyde Brook (Main River) running along the Western boundary and through the middle of the site in culvert. There are sections of flood zone 2, 3 and 3b (the functional floodplain as defined your SFRA) located on site and this would need a detailed assessment in a Level 2 SFRA. Any development would need to leave a large naturalised buffer to these watercourses and deculvert where necessary. The Hatfield Hyde Brook is currently at poor ecological status. To comply with the requirements under the Water Framework Directive you should be ensuring that any development on this site would be taking account of this and looking to improve it.

There is an active waste site situated to the south west of the development site, any development should be set back as far as possible to prevent future residential complaints regarding the ongoing waste activities.

### **Finley balanced**

#### **Southern part of WGC5**

There are issues with this site regarding the presence of the Historic landfill. Further work will be needed to ensure that development is located in areas which minimise any potential risk.

### **Cemetery sites**

The burial of human remains results in the release of a variety of substances and organisms into the subsurface. These may, in time, find their way into the groundwater. Therefore, groundwater can be at risk of pollution from human burials where the numbers are sufficient and the protection afforded by the subsurface geology is poor.

In general, we have no objections to the use of sites CEMO1 & 02 for cemetery development. We will expect a scheme to assess the risk to the water environment and provide suitable measures to mitigate those risks at the application stage.

## **CEM01**

This site is located within a Source Protection Zone 3 (SPZ3), which means the groundwater underneath the site is ultimately used for public drinking water supply. There is no drift layer on top of the Lambeth group rock formation, and the site is located near to swallow holes. This means that there could potentially be shorter travel time for contaminants entering the ground to reach groundwater.

## **CEM02**

This site is also located within SPZ3. However, the geology here may offer some protection for groundwater. There appears to be a superficial layer of gravels over chalk. This would imply that the groundwater is at a sufficient depth to reduce the risk of potential contamination.

## **Development Management Policies**

It is hard to provide comments on the Development Management (DM) plan policies as there are no draft policies provided.

In terms of what we would expect from DM policies in your area these are the items which need to be covered:

### **Flood Risk**

- Any policy should look to ensure development is located at the lowest risk of flooding, in line with the sequential test.
- Developments must be located, designed and laid out to ensure the risk of flooding is reduced whilst not increasing the risk of flooding elsewhere.
- Developments must avoid and reduce the risk of flooding, and not increase the risk elsewhere by
- Ensuring that proposals are located in the lowest appropriate flood risk zone with regard to the guidance in the NPPF and Welwyn Hatfield's Strategic Flood Risk Assessment (SFRA) and through the application of the Sequential Test (ST) and, where applicable, the Exception Test (ET).
- Preserving overland flow routes, where applicable.
- Ensuring there is no net loss of flood storage on site, or in exceptional circumstances, providing adequate compensatory storage.
- Implementing Sustainable Drainage Systems as part of all developments to ensure a greenfield runoff rate.
- Preventing the loss of permeable surfaces/ areas of soft landscaping, and maximising the use of green infrastructure as a potential source of flood storage
- Where development is located in the flood plain (after satisfying the ST and ET ), flood risk will be minimised by the management and reduction of flood risk through flood resilient and resistance design and construction.
- Ensuring that proposals are supported by a site specific Flood Risk Assessment to accord with the criteria set in the NPPF and Welwyn Hatfield's SFRA.

This is applicable to major developments in Flood Risk Zone 1 and all types of development in flood risk zones 2 and 3. The FRA should demonstrate that the ST and ET (where applicable) has been applied.

### **Rivers and chalk streams**

Rivers and watercourses enhance the quality of the environment within the Borough. Their protection and enhancement will improve the enjoyment for everyone, whether for residents or visitors. The principle watercourses in the

borough comprise the River Lee, the Upper Colne, the Mimshall Brook and the Mimram (chalk).

Rivers and waterbodies are a key asset of Welwyn Hatfield. The Borough's Chalk Streams are a habitat of international importance. Chalk Streams are only found in the south east of England, some parts of North West Europe and in New Zealand. They are identified as a habitat of Principle Importance for England in the Natural Environment and Rural Communities Act (NERC) 2006, section 41. They are a globally scarce habitat and their importance should be reflected here.

Under the Water Framework Directive (WFD), which has been part of UK law since 2003, all rivers, lakes, streams, canals, estuaries, coastal and groundwater (known as waterbodies) must be in good ecological status (i.e. clean and healthy) by 2027. The UK has a legal obligation to meet this target and Local Authorities have a duty to work to achieve this

None of your watercourses are currently achieving 'good' ecological status. To comply with your requirements under the Thames River Basin Management Plan you should be seeking to improve this status

The WFD is explicit on what actions need to be carried out at each river at particular sites (removing hard structures, deculverting, non-native species removal etc) to get rivers up to good standard.

We would expect the following in any watercourse policy:

- 1) All new development shall seek to make space for water and shall maintain a minimum 8 metre buffer zone to designated main rivers and 5 metre buffer zone to all ordinary watercourses within the Borough to enhance and protect local biodiversity and wildlife corridors.
- 2) Where proposals are considered to effect nearby watercourses or sites that are close to a river, the Council will seek river enhancement and/ or restoration as part of the proposal. In some instances, financial contributions may be appropriate towards the restoration of rivers. The council will seek improvements to:
  - a. River's Beane and Mimram – as with the actions identified in River Beane and Mimram Rivers Partnership Plan, and the projects identified in the Draft Infrastructure plan.  
(<http://www.riverleacatchment.org.uk/index.php/river-mimram-home>)
  - b. Any main river in line with actions identified for the watercourse in the River Basin Management Plan.
- 3) The council should investigate and, where feasible, secure the implementation of a scheme for restoring culverted sections of river or watercourse.

### **Contamination**

We are interested in any development that negatively impacts upon water quality or waterbodies. There is specific focus around contaminated sites because of the potential to mobilise contaminants and consequently cause pollution.

You must ensure that a robust policy is in place to ensure that risks to groundwater are minimised as much as possible. This is especially important as Welwyn and Hatfield are located over the Upper Lee Chalk a Drinking Water Protected Area. This is currently at poor chemical status and there are existing issues with the Bromate plume.

A policy should state that; all land previously used for industrial, commercial or utility or land which is considered to be contaminated will require a Preliminary Contaminated Land Risk Assessment to be submitted as part of the planning application. Planning permission will not be granted for development that poses a threat to the quality of surface and/ or groundwater. The Environment Agency will be consulted on such proposals.

### **Water quality**

A policy should be developed that is focused purely on sustainable drainage (SuDS) and greenfield runoff rates. This is because effective management of surface water not only reduces the risk of flooding, but provides a number of other benefits in terms of water quality and biodiversity. Hertfordshire County Councils '*Interim SuDS Policy Statement*' (November 2012) should be used as a reference. To comply with this you will need to ensure that water quality, biodiversity, amenity and recreation are all considered.

You may want to include a separate policy on green roofs and green walls. These fulfil a number of requirements including enhancing biodiversity and decreasing the energy needed for heating and cooling. They also provide valuable Green Infrastructure.

### **Water efficiency**

Water use accounts for 27% of all carbon emissions. Building a house to 105l/p/d will save 79kg of carbon dioxide and 15 cubic metres of water per house, per year. It is important that future proposals for residential development contribute towards the reduction of these emissions.

Increased growth and population will place further pressure on our region's limited and over-consumed water resources. During years with hot/dry summers, which are expected to increase in frequency with the impacts of climate change, average consumption figures could increase even further. A policy requiring developers to achieve 105 l/p/d (at least until such time as other requirements supersede this figure) will help to mitigate for some of the impacts of over-consumption and ultimately lead to a reduction in water use across the district.

I have included with this response an attachment containing several good policies from a number of different local authorities which you may find useful as you look to draft your policies.

We note from your website that the next stage would be to consult on a final draft before examination. We are concerned if the next opportunity we have to comment on the Local Plan is the pre-submission (regulation 19) stage without having seen a draft of your policies beforehand. We recommend you consult us informally on any draft versions of policies to ensure they are acceptable. We also urge you to consider a further draft consultation is carried out before a pre-submission consultation is carried out. I hope these comments have been helpful. Should you have any queries please feel free to contact me.

Yours sincerely

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