# **Gloucester City Plan 2011-2031**

**Pre-Submission Regulation 19 Consultation** 



February 2020

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#### 1 INTRODUCTION

#### 1.1 Introduction

- 1.1.1 These representations are submitted by Gladman in response to the current consultation on the Gloucester City Plan 2011 2031 Pre-Submission version. Gladman specialise in the promotion of strategic land for residential development with associated community infrastructure.
- 1.1.2 Gladman has considerable experience in the development industry across a number of sectors, including residential and employment development. From that experience, we understand the need for the planning system to provide local communities with the homes and jobs that are needed to ensure that residents have access to a decent home and employment opportunities.
- 1.1.3 Gladman also has a wealth of experience in contributing to the Development Plan preparation process, having made representations on numerous local planning documents throughout the UK and having participated in many Local Plan public examinations. It is on the basis of that experience that the comments are made in this representation.
- 1.1.4 Through this submission, Gladman have sought to provide our thoughts on a number of the proposed policies and also provided a site submission for land at Hempsted Lane. Gladman submit that the Council will need to carefully consider some of its policy choices and ensure that its evidence base is up-to-date and robust in light of changing circumstances and the changes brought about by the revised National Planning Policy Framework (2019).

#### 1.2 Context

- 1.2.1 Gloucester City Council, Cheltenham Borough Council and Tewkesbury Council have worked in partnership to prepare the Joint Core Strategy (JCS). This is a joint strategic plan that covers the twenty-year period between 2011 and 2031. The JCS covers cross boundary strategic matters such as housing need and Green Belt.
- 1.2.2 The JCS was formally adopted by all three local planning authorities in December 2017. The JCS review has now begun and the issues and options consultation took place earlier this year.
- 1.2.3 The Gloucester City Plan (GCP) sits alongside the JCS and forms the Local Plan for Gloucester. The GCP provides the more detailed development management policies and non-strategic site allocations.
- 1.2.4 The revised Framework (2019) sets out four tests that must be met for Local Plans to be considered sound. In this regard, we submit that in order for it to be sound it is fundamental that the GCP:
  - **Positively prepared** providing a strategy which, as a minimum, seeks to meet the area's objectively assessed needs; and is informed by agreements with other

authorities, so that unmet need from neighbouring areas is accommodated where it is practical to do so and is consistent with achieving sustainable development;

- Justified an appropriate strategy, taking into account the reasonable alternatives, and based on proportionate evidence;
- **Effective** deliverable over the plan period, and based on effective joint working on cross-boundary strategic matters that have been dealt with rather than deferred, as evidenced by the statement of common ground; and
- **Consistent with national policy** enabling the delivery of sustainable development in accordance with the policies in the Framework.

#### 2 NATIONAL PLANNING POLICY

#### 2.1 National Planning Policy Framework

- 2.1.1 On 24<sup>th</sup> July 2018, the Ministry of Housing, Communities and Local Government (MHCLG) published the Revised National Planning Policy Framework which was subsequently updated in February 2019. These publications form the first revisions of the Framework since 2012 and implement changes that have been informed through the Housing White Paper, The Planning for the Right Homes in the Right Places consultation and the draft Revised Framework consultation.
- 2.1.2 The revised Framework (2019) introduces a number of major changes to national policy and provides further clarification to national planning policy as well as new measures on a range of matters. Crucially, the changes to national policy reaffirms the Government's commitment to ensuring up-to-date plans are in place which provide a positive vision for the areas which they are responsible for to address the housing, economic, social and environmental priorities to help shape future local communities for future generations. In particular, paragraph 16 of the Revised Framework (2019) states that Plans should:
  - a) Be prepared with the objective of contributing to the achievement of sustainable development;
  - b) Be prepared positively, in a way that is aspirational but deliverable;
  - c) Be shaped by early, proportionate and effective engagement between plan-makers and communities, local organisations, businesses, infrastructure providers and operators and statutory consultees;
  - d) Contain policies that are clearly written and unambiguous, so it is evident how a decision maker should react to development proposals;
  - e) Be accessible through the use of digital tools to assist public involvement and policy presentation; and
  - f) Serve a clear purpose, avoiding unnecessary duplication of policies that apply to a particular area (including policies in this Framework, where relevant).
- 2.1.3 To support the Government's continued objective of significantly boosting the supply of homes, it is important that the Local Plan provides a sufficient amount and variety of land that can come forward where it is needed, that the needs of groups with specific housing requirements are addressed and that land with permission is developed without unnecessary delay<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Revised NPPF – Paragraph 60

2.1.4 To be considered sound at Examination the emerging Local Plan will need to meet all four of the soundness tests set out in paragraph 35 of the revised Framework (2019).

## 2.2 Planning Practice Guidance

2.2.1 The Government published updates to its Planning Practice Guidance (PPG) on 13<sup>th</sup> September 2018. The updated PPG provides further clarity on how specific elements of the revised Framework should be interpreted when preparing Local Plans.

## 3 LEGAL REQUIREMENTS

#### 3.1 Duty to Cooperate

- 3.1.1 The Duty to Cooperate (DtC) is a legal requirement established through section 33(A) of the Planning and Compulsory Purchase Act 2004, as amended by Section 110 of the Localism Act. The DtC requires local planning authorities to engage constructively, actively and on an ongoing basis with neighbouring authorities on cross-boundary strategic issues through the process of ongoing engagement and collaboration.<sup>2</sup>
- 3.1.2 The revised Framework (2019) has introduced a number of significant changes to how local planning authorities are expected to cooperate including the preparation of Statement(s) of Common Ground (SOCG) which are required to demonstrate that a plan is based on effective cooperation and has been based on agreements made by neighbouring authorities where cross boundary strategic issues are likely to exist. The revised Framework (2019) sets out that local planning authorities should produce, maintain, and update one or more Statement(s) of Common Ground (SOCG), throughout the plan making process<sup>3</sup>. The SOCG(s) should provide a written record of the progress made by the strategic planning authorities during the process of planning for strategic cross-boundary matters and will need to demonstrate the measures local authorities have taken to ensure cross boundary matters have been considered and what actions are required to ensure issues are proactively dealt with e.g. unmet housing needs.
- 3.1.3 As demonstrated through the outcome of the Coventry, Mid Sussex, Castle Point and St Albans examinations, if a Council fails to satisfactorily discharge its DtC a Planning Inspector must recommend non-adoption of the Plan. This cannot be rectified through modifications.

#### 3.2 Sustainability Appraisal

- 3.2.1 In accordance with Section 19 of the Planning and Compulsory Purchase Act 2004, policies set out in Local Plans must be subject to a Sustainability Appraisal (SA), and also incorporate the requirements of the Environmental Assessment of Plans and Programmes Regulations 2004 (the SEA regulations).
- 3.2.2 The SA/SEA is a systematic process that should be undertaken at each stage of the Plan's preparation, assessing the effects of the emerging Local Plan proposals on sustainable development when judged against all reasonable alternatives. The Council should ensure that the future results of the SA clearly justify its policy choices. In meeting the development needs of the area, it should be clear from the results of this assessment why some policy options have progressed, and others have been rejected. This must be undertaken through a comparative and

<sup>&</sup>lt;sup>2</sup> PPG Reference ID: 61-021-20180913

<sup>&</sup>lt;sup>3</sup> PPG Reference ID: 61-001-20180913

equal assessment of each reasonable alternative, in the same level of detail for both chosen and rejected alternatives. The Council's decision-making and scoring should be robust, justified and transparent.

#### 4 HOUSING

#### 4.1 Policy A2: Affordable Housing

- 4.1.1 Policy A2 outlines that the affordable housing requirement for residential sites of 10 dwellings or more or sites with a gross site area of 0.5 hectares or more is 25%. Gladman note that the JCS Policy SD12 set a minimum requirement of 20% affordable housing provision on sites outside of the strategic allocations, and that the GCP evidence base has been used to justify this 25% requirement in the GLP. Given that the JCS policy set its requirement as a minimum figure the proposed 25% requirement in the GCP is not in conflict with this and provides clarity on the percentage that will be sought.
- 4.1.2 Notwithstanding the above support, the Council will need to be able to demonstrate through clear, robust, up-to-date viability assessment that the provision of affordable housing in line with the proposed policy is viable on the majority of schemes. Without a clear evidence base providing support for this percentage requirement the policy would not be justified.
- 4.1.3 This policy also includes a clause whereby if it is apparent that a site has been sub-divided into smaller development parcels, in order to circumvent this policy requirement, the threshold and percentage requirement sought will apply to the whole area in question. Gladman are supportive of this approach as it seeks to ensure the delivery of much needed affordable housing.

#### 4.2 Policy A5: Specialist Housing

- 4.2.1 Policy A5 relates to the provision of specialist housing to meet the needs of older people, disabled people and vulnerable people with specific housing needs. Gladman are supportive of the GCP including a policy in relation to this type of housing provision.
- 4.2.2 The provision of specialist housing to meet the needs of older people is of increasing importance and the Council need to ensure that this is reflected through a positive policy approach within the GCP. The Council needs a robust understanding of the scale of this type of need across the district.
- 4.2.3 Specialist housing with care for older people is a type of housing which provides choice to adults with varying care needs and enables them to live as independently as possible in their own self-contained homes, where people are able to access high quality, flexible support and care services on site to suit their individual needs (including dementia care). Such schemes differ from traditional sheltered/retirement accommodation schemes and should provide internally accessible communal facilities including residents' lounge, library, dining room, guest suite, quiet lounge, IT suite, assisted bathroom, internal buggy store and changing facilities, reception and care manager's office and staff facilities.
- 4.2.4 Notwithstanding the support for the inclusion of Policy A5, Gladman note and object to the part of the policy which outlines that these developments, when they fall within use class C3, will be

expected to contribute to affordable housing provision as set out in Policy A2. Gladman object to this approach as these schemes are already providing a type of housing to meet a specialist need and therefore should not be subject to affordable housing requirements on top of this.

#### 4.3 Policy A6: Accessible and Adaptable Homes

- 4.3.1 Part 1 of Policy A6 relates to M4(2) 'accessible and adaptable dwellings' and requires that 50% of housing should be built to this standard. Part 2 relates to M4(3) 'wheelchair user dwellings' and requires 4% of affordable rented housing to meet M4(3).
- 4.3.2 With regards to the provision of accessible and adaptable homes, Gladman refer to the PPG which provides additional guidance on the use of these optional standards. The Council would need to ensure that any such policy in the GCP is in line with the guidance and that the justification and specific details of the policy take account of the various factors that the PPG refers to:

"Based on their housing needs assessment and other available dataset it will be for the local planning authority to set out how they intend to approach demonstrating the need for Requirement M4(2) (accessible and adaptable dwellings), and/or M4(3) (wheelchair user dwellings), of the Buildings Regulations. There is a wide range of published official statistics and factors which local planning authorities can consider and take into account, including:

- The likely future need for housing for older and disabled people (including wheelchair user dwellings).
- Size, location, type and quality of dwellings needed to meet specifically evidenced needs (for example retirement homes, sheltered homes or care homes).
- The accessibility and adaptability of existing housing stock.
- How needs vary across different housing tenures.
- The overall impact on viability." (ID 56-007-20150327)
- 4.3.3 In order to be able to include specific requirements in relation to M4(2) and M4(3) the Council will need to be able to robustly justify the inclusion and demonstrate that consideration has been given to these requirements within the viability study. The provision of M4(3) wheelchair user dwellings is far more onerous in terms of size requirement therefore it is crucial that the implications of any proposed policy requirement have been properly considered.
- 4.3.4 Furthermore, with regards to M4(3) Gladman refer again to the PPG which states:

"Part M of the Building Regulations sets a distinction between wheelchair accessible (a home readily useable by a wheelchair user at the point of completion) and wheelchair

adaptable (a home that can be easily adapted to meet the needs of a household including wheelchair users) dwellings.

Local Plan policies for wheelchair accessible homes should be applied only to those dwellings where the local authority is responsible for allocating or nominating a person to live in that dwelling." (ID 56-009020150327)

- 4.3.5 This clearly demonstrates that M4(3) should only be applied to affordable homes or homes which the LPA is responsible for allocating. Gladman note that Part 2 of Policy A6 recognises this point as the requirement for M4(3) relates solely to the affordable rented housing component of housing schemes.
- 4.3.6 The supporting text within paragraph 3.1.43 refers to a toolkit which has been used to provide the methodology for calculating the number of wheelchair user households with unmet housing needs and that this demonstrated the need for the 4% requirement on affordable homes.

#### 4.4 Policy A7: Self Build and Custom Build Homes

- 4.4.1 Policy A7 outlines a requirement for all housing sites (allocated or windfall except for flats / apartments) which comprise 20 or more dwellings to set aside a minimum of 5% of the net developable area for serviced plots to be offered for self-build.
- 4.4.2 Gladman object to the inclusion of fixed percentage requirement in relation to the provision of serviced self-build plots.
- 4.4.3 Whilst Gladman recognise the importance of including a policy in relation to self-build, we do not consider the inclusion of a requirement for all housing schemes over 20 dwellings to deliver a certain percentage of serviced plots is the most appropriate approach.
- 4.4.4 Gladman believe that those wishing to bring forward a self-build or custom build house are unlikely to wish to do this alongside a large scale housing development. Consequently, rather than including a strict requirement for this provision Gladman would recommend the policy encourages the consideration of the provision of self-build plots in locations where the demand exists.
- 4.4.5 Gladman recommend that any policy requirement in relation to self-build housing has an element of flexibility built in to allow for negotiation over self-build plots on the basis of viability to ensure that site delivery is not delayed or prevented from coming forward. Any specific requirement to include self-build plots should be tested through the Council's viability assessment of the Local Plan policies to ensure that the cumulative impacts of all proposed local standards and policy requirements do not put the implementation of the Plan as a whole at risk.
- 4.4.6 Gladman note that the proposed policy does include a mechanism which allows developers the opportunity after 12 months to either continue to market the plots for self-build or to revert back to them being delivered as part of the wider market housing scheme. Gladman support the

inclusion of this policy mechanism as it is necessary to ensure that housing land is not unnecessarily prevented from being brought forwards. This helps to provide flexibility and helps to ensure that the required housing is delivered. If there is genuine demand for self-build housing it is likely that these plots would be brought forward relatively quickly.

#### 5 HEALTHY COMMUNITIES

#### 5.1 Policy C6: Cordon Sanitaire

- 5.1.1 Gladman have commissioned specialist consultants (BLBB Consulting) to review Policy C6 and its supporting text and provide comments regarding the soundness of the policy and the robustness of the evidence base supporting this. This critical review can be found at appendix 1 of this submission and provides Gladman's comments on Policy C6.
- 5.1.2 This critical review highlights how the Cordon sanitaire in its current state appears to be disproportionately large for a works like Netheridge and that the data being used to calculate the Cordon Sanitaire boundary is based on a very old data set from 2008 and does not represent the current position at the works.
- 5.1.3 The BLBB report provides clear evidence that the model outputs are not representative of the prevailing situation at the works and that the Phlorum report is not using the latest guidance. The Cordon Sanitaire being recommended within the Phlorum report will needlessly prevent development of certain areas to the north of the works where nuisance is less likely but will allow development of other areas to the south where nuisance is already being suffered by existing residents.
- 5.1.4 On the basis of the critical review, Gladman recommend that there is a need for a new data set to be produced that would take account of the current operation and processes employed at the works, ensuring that the Cordon Sanitaire and policy C6 are based on robust up-to-date evidence and that this policy does not unnecessarily restrict sustainable development from being brought forward.

#### **6 HISTORIC ENVIRONMENT**

#### 6.1 Policy D1: Historic Environment

6.1.1 Policy H1 relates to the historic environment and outlines that development involving substantial harm to or loss of a designated heritage asset will only be granted in exceptional circumstances. Gladman recommend that in order to ensure consistency with national policy, that Policy D1 should also make reference to circumstances whereby development would achieve substantial public benefits that outweigh any less than substantial harm to heritage assets (NPPF 19, paragraph 195).

#### 6.2 Policy D2: Non-Designated Heritage Assets

- 6.2.1 Policy D2 relates specifically to development affecting non-designated heritage assets and outlines that proposals for demolition or loss of a non-designated heritage asset will be subject to a balanced assessment taking into account the significance of the asset, the scale of harm or loss, and that all reasonable steps have been taken to retain the asset.
- 6.2.2 Gladman support the use of the term 'balanced assessment' within this policy as this aligns with national policy with regards to non-designated heritage assets as set out in the NPPF 19 (paragraph 197).

#### 7 NATURAL ENVIRONMENT

#### 7.1 Policy E1: Landscape Character and Sensitivity

7.1.1 Gladman note and support the reference made within Policy E1 to the need to take a balanced approach to providing for housing, employment and other needs, whilst seeking to protect and enhance features of local landscape. It is important when development proposals are assessed that a balanced view is taken, weighing up various benefits and harms that would stem from the proposals before reaching an overall conclusion.

#### 7.2 Policy E2: Biodiversity and Geodiversity

- 7.2.1 Policy E2 outlines that development proposals must demonstrate the conservation of biodiversity, in addition to providing net gains appropriate to the ecological network. Whilst Gladman accept this reference to biodiversity net gains it is important that long term impacts are considered when reviewing proposals for biodiversity net gain taking into account that many of the measures provided as part of the development will need to mature beyond the build period.
- 7.2.2 Gladman also take the opportunity to note that if off-site mitigation provides the best opportunity for biodiversity gain, then the policy should be flexible enough to allow for this and it should not be ruled out from the planning application process.

#### 8 DESIGN

#### 8.1 Policy F6: Nationally Described Space Standards

- 8.1.1 Policy F6 outlines that development proposals for new residential development (including change of use or conversions) must meet Nationally Described Space Standards (NDSS).
- 8.1.2 Gladman make reference to the Written Ministerial Statement (WMS) dated 25th March 2015 which confirms that "the optional new national technical standards should only be required through any new Local Plan policies if they address a clearly evidenced need, and where their impact on viability has been considered, in accordance with the NPPG". Furthermore, with particular reference to the nationally described space standard the NPPG (ID: 56-020-20150327) confirms "where a need for internal space standards is identified, local planning authorities should provide justification for requiring internal space policies". If the Council wishes to adopt this standard it should be justified by meeting the criteria set out in the PPG including need, viability and impact on affordability.
- 8.1.1 The Council has not provided sufficient evidence to justify adoption of these proposed standards.

  The supporting text to policy F6 merely refers to the fact that the City Council places great weight on the quality of life and health and wellbeing of its residents
- 8.1.2 Gladman recommend that rather than including this as a strict policy requirement the NDSS could be something that the Council could actively encourage.

# 9 SUSTAINABLE LIVING, TRANSPORT AND INFRASTRUCTURE

## 9.1 Policy G2: Charging Infrastructure for Electric Vehicles

9.1.1 Policy G2 requires that an electric vehicle charging point/socket will be provided at every new residential property which has a garage or dedicated residential car parking space within its curtilage. Whilst Gladman recognise that electric charging points are becoming of increasing importance it is fundamental that the Council have a clear understanding of the costs associated with this policy requirement and that this is built into viability assessments.

### 10 SITE SUBMISSION

## 10.1 Land off Hempsted Lane

10.1.1 Gladman are promoting land off Hempsted Lane for a residential development of up to 245 new homes. A site location plan is included below (Figure 1) and a vision document providing further details of the proposals for this site is included as Appendix 2 to this submission.

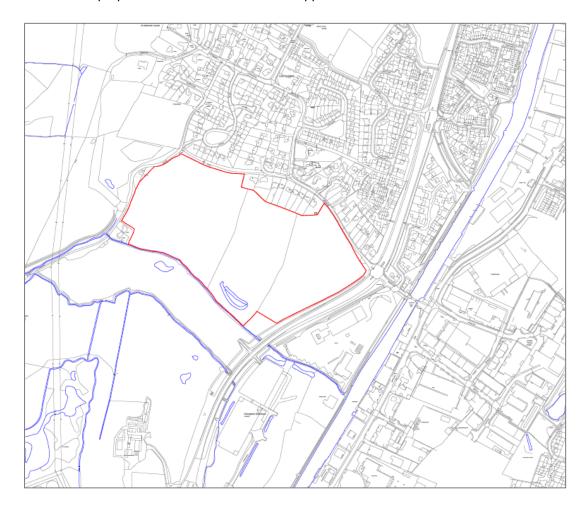


Figure 1. Hempsted Lane – Location Plan

10.1.2 Gladman submit that this is a suitable, sustainable site, which is both available and achievable and should be allocated for residential development within the GCP.

#### 11 CONCLUSION

#### 11.1 Overall Conclusion

- 11.1.1 Gladman welcome the opportunity to comment on the Gloucester City Plan Pre-Submission version. For the GCP to be found sound at Examination it must be able to meet the four tests of soundness set out in the Framework. This will require the plan to be positively prepared, justified, effective and consistent with national policy.
- 11.1.2 As outlined above Gladman are promoting land at Hempsted Lane for a residential development of up to 245 new homes. This site is in a sustainable location and is both available and deliverable. Gladman, in conjunction with the landowners, are keen to work with the Council to bring forward a high quality residential development in this location. Gladman recommend that the Council include this site as an additional residential allocation within the GCP. This would provide further flexibility and contingency to help ensure that the overall housing need is met across the plan period,
- 11.1.3 Gladman have raised objections and concerns regarding a number of policies and believe that modifications are needed to ensure that the plan is capable of being found sound at examination
- 11.1.4 Given the content of this submission, Gladman request to participate at the relevant EiP hearing sessions in due course.

## **APPENDIX 1**

Critical Review – Policy C6

Response for Gladman Developments Limited prepared by BLBB Consulting to Policy C6 Cordon Sanitaire as detailed in the Pre-Submission Gloucester City Plan 2011 - 2031 Regulation 19 of the Town and Country Planning (Local Planning) (England) Regulations 2012

September 2019

#### Policy C6:

Cordon sanitaire Development likely to be adversely affected by smell from Netheridge Sewage Works, within the Cordon Sanitaire defined on the policies map, will not be permitted.

3.3.31 "Severn Trent Water PLC (Severn Trent) is responsible for sewerage and sewage disposal. They operate Netheridge Sewage Treatment Works (NSTW) south of Hempsted, a facility that processes a significant amount of waste from Gloucester City and beyond. The fields adjoining Netheridge are used for sludge disposal that, in addition to the works itself, create unavoidable smell problems within the area. In order to reasonably prevent development that would be adversely affected by smell, a cordon sanitaire area is shown on the proposals map within which development will not be permitted."

#### Notes relating to 3.3.31 Above:

We believe that the comments made above stating that "the fields adjoining Netheridge are used for sludge disposal" are out of date and relate to an approach that may have been in operation many years ago. We believe that Severn Trent Water no longer uses the adjacent fields for sludge disposal and certainly not for liquid sludge disposal as it may have done in the past. The processes used on site currently include a dewatering facility where liquid digested sludge is processed to create a sludge cake that is stored on concrete storage pads prior to it being removed for recycling on to third party farmland well away from the works.

Our understanding is that liquid sludge has not and would not be disposed of onto the adjoining land as described above. Stringent controls and limits are imposed by the Environment Agency. Our understanding is that STW complies fully with these requirements. Recycling sludge back to land is highly regulated and the adjoining land could not be used for sludge recycling on a regular basis.

The Cordon Sanitaire proposed appears to be disproportionately large for a works like Netheridge. Most water companies use a risk-based methodology based on works size and complexity. However, the maximum expected size is up to around 500 meters from the works boundary. The area being described by this cordon sanitaire is up to 1000 meters from the works boundary and is unusually large. We believe that the data being used to calculate the Cordon Sanitaire boundary is based on a very old data set from 2008 and does not represent the current position at the works.

We are surprised that the LPA are simply prepared to accept what appears to be a very high level of odour emissions from the Netheridge. More discussion is required with STW to establish why the level of odour produced at the works is much greater than current best practice guidelines would deem acceptable for a works of this size and complexity. It seems odd that the LPA appear to accept that the works will create "unavoidable smell problems" but have not discussed what Odour Management Plans are in place at the works to minimise the odour and level of nuisance created by the works and thus minimise the amount of land required to be included within the Cordon Sanitaire.

3.3.32 "To support this policy, an assessment of odour nuisance arising from NSTW has been undertaken and has informed the boundary on the policies map. The study is informed by a review of odour complains, odour surveys, a detailed dispersion model assessment and a review of a previous model assessment. Severn Trent were engaged in the review process in order to understand currently and future operations, including plans for any proposed future infrastructure improvements to accommodate additional waste and/or to reduce the impact of odour on the surrounding area. It categorises likely odour nuisance on the basis of odour contours from the sewage works."

We have some significant concerns about the report that has been produced for the LPA by Phlorum. Most notably the use of a data set from 2008. The data being used is not representative of the current situation at Netheridge and there have been significant changes in the process plant used at the works since 2008, which means that the odour levels currently produced at the works are likely to be very different to the situation prevailing in 2008.

The Phlorum report in paragraph 4.78 states that there have been no major changes to the works in the past 10 years and concludes that the reports and their results should be comparable. We understand that a major improvement scheme took place in 2016 which refurbished the sludge handling and storage equipment. Since 2008 the operation of the primary sedimentation tanks desludging has been improved considerably and these tanks are regularly desludged and fresh thin sludge is thickened using mechanical sludge thickening equipment. Liquid digested sludge is now dewatered using centrifuges and is stored on concrete sludge storage pads. Since the changes that have taken place involve the PST's and the sludge route it is inevitable that the nature and level of odours produced at the works with be significantly different than those produced in 2008 when the previous data set was produced.

3.3.33 "The extent of the cordon sanitaire has been drawn on the basis the area most likely to be affected by odour nuisance, within the 3-5 odour contour area. This boundary does not represent the absolute limit of the area where smells can be detected but is drawn so as not unreasonably to constrain development in the existing built-up area."

The way the boundary is drawn does indeed constrain a large area of land due to the very large distance that the Cordon Sanitaire runs to the north of the works. The data used indicates a very high concentration of odour at the boundary of the works and we believe that there should be further discussion with STW at this stage to better understand why such a high emission rate is coming from the works.

We are concerned that the odour emissions if the data is actually found to be reliable are out of step with currently accepted best practice target levels and cannot understand why the LPA is not challenging STW on why they are apparently producing such high odour levels from their activities at the works.

The Phlorum report does not address the issues of odour fully. The report states at paragraph 4.75 that "the contour fits the complaints record particularly well in Hempsted where all 4 residential complaints fit within the 1.5 Odour unit threshold for potential nuisance advocated in the EA H4 Guidance". This a true statement but misses the point

that to the south there are 5 complaints that all fall outside the 1.5 Odour unit contour and are not addressed by Phlorum. This suggests that either the odour contour is not an accurate representation of the actual odour nuisance caused by the works or as we believe that the data set being used is not representative of the current situation.

At paragraph 4.77 Phlorum conclude that "As complaints can provide the most compelling evidence as to the reasonableness of any offensive odours, this suggests that the model might be under predicting odour concentrations to the south and south-east. It should be noted that there are four residential complaints just outside (within 200m) of the 1.5 Odour units' contour."

However even though Phlorum have correctly concluded that the model is not reliable at predicting a representative odour contour they ignore this fact when making conclusions and recommend a Cordon Sanitaire that is possibly too large to the north of the works and to small on the south side of the works.

We believe that the Phlorum report has missed the point that the current operation of the works is such that the sludge treatment and storage is now mostly taking place on the south and western side of the works and as such it is not surprising that the level of complaint is far higher on the southern side of the works. This is further endorsed when we consider the results of the Odour (sniff) Survey undertaken by Phlorum where in paragraph 4.69 they state that "the strongest odours emanating from the STW (5 on the VDI odour Intensity scale) were detected at the Fishing Lake roughly 120m to the south-east of the STW boundary and at the end of Rea Lane, within 50 m of the western boundary of the site. The odours detected at these locations were at times considered to be very strong with reference to the VDI intensity scale". Paragraph 4.70 states "During the third survey and 470m to the south-east of the STW a weak odour associated with the STW could be detected. This is the furthest that **ANY** odour associated with STW could be detected." We believe it is no surprise that odours could be detected on the south and western side of the works as this is where all the sludge treatment and storage activities now take place.

Further to this when we look at the complaints data we can see that since 2016 there have been no odour complaints reported on the north side of the works. In 2018 there are 6 reported complaints, and all of these are from residents on the south side of the works. This seems to indicate that odour from the works is far stronger on the southern side and would suggest a requirement for a Cordon Sanitaire that is smaller on the northern side of the works but larger on the southern side.

Pholrum state in paragraph 4.4 that "2012 and 2018 were the worst years for odour complaints made against the STW".

However, in 2012 only 2 of the 10 complaints came from the north (Hempsted) area all the others were from the southern side of the works.

As stated above in 2018 there were no complaints documented from the northern side of the works all 6 were from the south side. We believe this is all strong evidence to suggest that the recommended Cordon Sanitaire is not reflective of the current situation of the works.

We are also concerned that although the Phlorum report refers to the Institute of air Quality management (IAQM) guidance on the assessment of odour for planning dated 2014 it does not appear to be referring to the latest version of the IAQM report dated 2018 which gives useful guidance on the "weight of evidence approach" that should be used when using several assessment tools.

The Phlorum conclusions appear to be based solely on the use of the odour modelling data which as we have stated above makes use of an out of date set of data from 2008. The latest IAQM guidance advocates the use of several odour assessment tools and a 'weight of evidence'

approach. So, where there is an existing odour source, empirical observations will normally be possible of what is happening on the ground. The IAQM report states that "Considerable weight" should normally be given to the observational findings of community-based tools and sensory assessments (such as sniff tests). These may be supported by the findings of any dispersion modelling if these add tangible value to the study.' It seems that the Phlorum report does not attach considerable weight to the sniff tests but appears to ignore them.

We believe that there is an obvious mismatch in the Phlorum report between the recommendation to retain a similar size and shape of Cordon Sanitaire as previously in place when the sniff tests together with the complaint history clearly indicate a higher incidence of odour being identified on the south side of the works. All of the 2018 complaints are on the south side of the works and there are 5 complaints that fall outside of the modelled 1.5 Odour unit contour on the south side of the works. This is all clear evidence that the model outputs are not representative of the prevailing situation at the works and that the Phlorum report is not using the latest guidance to make best use of their own observational findings in the conclusions reported within their report.

We feel that the current Cordon Sanitaire being recommended within the Phlorum report will needlessly prevent development of certain areas to the north of the works where nuisance is less likely but will allow development of other areas to the south where nuisance is already being suffered by existing residents and if further development is allowed to proceed will provide unacceptable air quality and amenity for future residents.

This further underlines the requirement for a new data set to be produced that would then take account of the current operation and processes employed at the works.

#### Conclusion

- 1. It is very unlikely that the fields adjacent to Netheridge are used for 'sludge disposal'. As we have explained the biosolids are recycled under strict regulations and in any case is of anaerobically digested, dewatered sludge cake not 'sludge' which implies liquid. The dewatered sludge cake after anaerobic digestion has relatively little odour.
- 2. The Phlorum report is a poor summary of the odour position at Netheridge. Primarily it reuses data from the 2008 Odournet report. This report is certainly out of date as significant plant modifications have occurred since that date including new reception facilities for imported sludges with odour treatment provision. In addition, the model inputs e.g. emission rates have been selected to reflect the 'worst-case' (see para 3.27) situation.

As a general point, these odour surveys tend to be carried out by air quality experts who have no knowledge of sewage treatment and therefore pick published odour emission rates on the basis of 'worst case' rather than on what is most appropriate from a sewage treatment point of view. With a wide range of published data for odour emission rates this can lead to a gross over-estimate of the odour footprint.

3. The Phlorum report cites the IAQM report 'Guidance on the assessment of odour for planning', 2014. It is odd that they haven't used the latest IAQM report, Bull et al., 'IAQM Guidance on the assessment of odour for planning', Institute of Air Quality Management, London, 2018.

In this report at Section 6 (Drawing Conclusions from Assessment Results) it advocates the use of several odour assessment tools and a 'weight of evidence' approach. So, where there is an existing odour source, empirical observations will normally be possible of what is happening on the ground. The IAQM report states that "Considerable weight should normally be given to the observational findings of community-based tools and sensory assessments (such as sniff tests). These may be supported by the findings of any dispersion modelling if they add tangible value to the study." It seems that the Phlorum report does not attach considerable weight to the sniff tests but appears to ignore them.

BLBB CONSULTING Limited 6<sup>th</sup> December 2019

## **APPENDIX 2**

Vision Document – Land south of Hempsted Lane, Gloucester