

15. Utilities

15. Thames Water provided a consultation response in relation to the waste water network and Affinity Water provided a response in relation to the potable water network.

Water (Waste): Thames Water¹

- 15.59 Since the 1st April 2018 all off site wastewater network reinforcement works necessary as a result of new development will be delivered by the relevant statutory undertaker. Local reinforcement works will be funded by the Infrastructure Charge which is a fixed charge for water and wastewater for each new property connected. Wastewater treatment works infrastructure upgrades will be funded through water companies' investment programmes which are based on a 5 year cycle known as the Asset Management Plan process. As such no funding would be sought through s106 agreements or CIL contributions. All network enforcement work required will be delivered by Thames Water and funded through the infrastructure charge. Upgrades are funded through water bills in a 5 year Cycle- AMP7 covers 1/4/20 – 31/3/25. Upgrades at Maple Lodge Sewerage Treatment Works- the cumulative impact of growth across the whole catchment and the timing of the growth is the issue – it is necessary to liaise with LPA, monitor and review the growth to determine when upgrades will be required.
- 15.60 Hemel Hempstead, Berkhamsted, Bovingdon, Kings Langley, Markyate are likely to require upgrade to waste water. The scale of the development is likely to require upgrades to the waste water network. *“The plan [AMP7] should determine the magnitude of the spare capacity currently available within the network and what phasing may be required to ensure development does not outpace delivery of essential network upgrades.”* Note: 1. Plan is the Thames Water Asset Management plan. 2. It can take 18 months- 3 years to deliver local upgrades with more strategic upgrades taking 3-5 years from the point of certainty about development occurring.
- 15.61 In relation to timescales for delivery it can take 18 months to three years to deliver local upgrades, with more strategic upgrades taking 3 to 5 years to deliver from the point of certainty about development occurring. As such developers are encouraged to engage with Thames Water at an early stage and ahead of submitting any planning applications to discuss their developments and timescales for delivery.
- 15.62 In relation to the proposed development at the South of Berkhamsted there are concerns from a sewage treatment and odour perspective. The site is located in close proximity to

¹ Nicky McHugh 22/06/20 and 21/08/20 and Thames Water planning policy @ Savills - 22/06/20

Berkhamsted Sewage Treatment Works and further information on the layout of the development would be required and an assessment of the odour impacts to ensure that future occupiers would not be adversely affected by odour. If any assessment identifies any unacceptable impacts in relation to odour then details of any necessary mitigation measures required and how they would be secured and delivered would need to be agreed. Greater understanding would also be required in relation to timescales for delivery so as not to outpace any required upgrades necessary to support development.

- 15.63 In relation to the infilling within Hemel Hempstead and potentially the site 'West of Hemel Hempstead' could be accommodated with local upgrades. Local upgrades can take 18 months to 3 years to plan and deliver and as such developers are encouraged to engage with Thames Water at an early stage to discuss their proposals and timescales for delivery so that development can be aligned with any network reinforcement works required.
- 15.64 The large 'North of Hemel Hempstead' site is likely to require a significant strategic network solution. Such solutions can take 3-5 years to plan and deliver from the point of certainty that development will come forward. It is acknowledged that the development trajectory indicates development from 2025/26. Further details of proposals and engagement with the Council and developers would be required to ensure that the development can be delivered alongside any strategic network solutions required.

South of Berkhamsted

- 15.65 The wastewater network capacity in this area may be unable to support the demand anticipated from this development. Local upgrades to the existing drainage infrastructure may be required to ensure sufficient capacity is brought forward ahead of the development. Where there is a potential wastewater network capacity constraint, the developer should liaise with Thames Water to determine whether a detailed drainage strategy informing what infrastructure is required, where, when and how it will be delivered is required. The detailed drainage strategy should be submitted with the planning application

SA/1 – North of Hemel Hempstead

- 15.66 Strategic drainage infrastructure is likely to be required to ensure sufficient capacity is brought forward ahead of the development. Where there is a wastewater network capacity constraint the developer should liaise with Thames Water and provide a detailed drainage strategy with the planning application, informing what infrastructure is required, where, when and how it will be delivered.

SA/10 – Land at Grange Farm, Green Lane:

- 15.67 Local upgrades to the existing drainage infrastructure may be required to ensure sufficient capacity is brought forward ahead of the development. Where there is a potential wastewater network capacity constraint, the developer should liaise with Thames Water to determine whether a detailed drainage strategy informing what infrastructure is required, where, when and how it will be delivered is required. The detailed drainage strategy should be submitted with the planning application.

LA/3 Land West of Hemel Hempstead:

- 15.68 The scale of development/s is likely to require upgrades to the wastewater network. It is recommended that the Developer and the Local Planning Authority liaise with Thames Water at the earliest opportunity to agree a housing and infrastructure phasing plan. The plan should determine the magnitude of spare capacity currently available within the network and what phasing may be required to ensure development does not outpace delivery of essential network upgrades to accommodate future development/s.

SA/9 South of Bovington:

- 15.69 Local upgrades to the existing drainage infrastructure may be required to ensure sufficient capacity is brought forward ahead of the development. Where there is a potential wastewater network capacity constraint, the developer should liaise with Thames Water to determine whether a detailed drainage strategy informing what infrastructure is required, where, when and how it will be delivered is required. The detailed drainage strategy should be submitted with the planning application

Two Waters (Broad Location):

- 15.70 Local upgrades to the existing drainage infrastructure may be required to ensure sufficient capacity is brought forward ahead of the development. Where there is a potential wastewater network capacity constraint, the developer should liaise with Thames Water to determine whether a detailed drainage strategy informing what infrastructure is required, where, when and how it will be delivered is required. The detailed drainage strategy should be submitted with the planning application

Tring (Dunsley Farm)- response to 2019 consultation²:

- 15.71 The scale of development/s is likely to require upgrades to the wastewater network. It is recommended that the Developer and the Local Planning Authority liaise with Thames Water at the earliest opportunity to agree a housing and infrastructure phasing plan. The plan should determine the magnitude of spare capacity currently available within the network and what phasing may be required to ensure development does not outpace delivery of essential network upgrades to accommodate future development/s. Failure to liaise with Thames Water will increase the risk of planning conditions being sought at the application stage to control the phasing of development in order to ensure that any necessary infrastructure upgrades are delivered ahead of the occupation of development. The developer can request information on network infrastructure by visiting the Thames Water website <https://developers.thameswater.co.uk/Developing-a-large-site/Planning-your-development>.

- 15.72 The scale and phasing of growth at Berkhamsted will need further consideration regarding phasing and timing of likely upgrades.

Re-consultation on Option 3³

² Thames Water -Nicky McHugh -21/08/20

- 15.73 The Additional Site – Symbio Place and Heart of Maylands in Hemel Hempstead aren't of concern. However, even though the 2 sites have been removed in Bovingdon, upgrades may be required.
- 15.74 In Tring, the wastewater network capacity is unlikely to be able to support the demand anticipated from this development. Strategic drainage infrastructure is likely to be required to ensure sufficient capacity is brought forward ahead of the development. Where there is a wastewater network capacity constraint the developer should liaise with Thames Water and provide a detailed drainage strategy with the planning application, informing what infrastructure is required, where, when and how it will be delivered.

Water (potable): Affinity Water⁴

- 15.75 Affinity water have indicated that some land parcels allocated for development have water mains crossing them. Where necessary these mains will need to be diverted or protected. Once planning permission is granted and the Developer contacts our Developer Services (DS) Team for a new connection, protection of these water mains must be agreed.
- 15.76 Sites of particular concern from a water quality perspective are included below with ones of the greatest concern in **bold**
- 15.77 It is essential that we are informed and involved in all parts of the development to ensure the protection of public water supply. We will require further detailed information on the developments as they occur in order to make a more informed assessment of the impact of these developments.
- **HGC Phase 1: Large area within that extends to the more sensitive SPZ1**
 - GB/1-LA1 Marchmont Farm: Near to SPZ
 - **Land off Dacorum Way (2 & 3): Within more sensitives SPZ1.**
 - Hamilton House 111 Marlowes: Near to SPZ
 - Hemel Hempstead Hospital Site: Near to SPZ
 - **MU/9 Berkhamsted Civic Centre: Within more sensitive SPZ1.**
 - **Gossoms End/Billet Lane: SPZ2 on contaminated land.**
 - MJ/6 Land at Durrants Lane: Near to SPZ2
 - Haslam Playing Fields: Near to SPZ2
 - Land at and to the r/o Hanburys, Shootersway: Near to SPZ2
 - British Film Institute: Near to SPZ2
 - South of Berk – GUI: Near to SPZ2
 - Rectory Farm: Within SPZ2
 - **Bovingdon Brickworks: Within SPZ2 upon historic landfill.**
 - Grange Farm: Within SPZ2

⁴ Response from Affinity 05 October 2020

- 15.78 The performance of our network has been assessed under 2 different scenarios:
1. Current demand –to establish the baseline
 2. Future demand (including future developments in AW records and Dacorum sites listed in the table on slide 2&4 (option 3)). All developments are in place at the time specified.
- 15.79 All the assessed scenarios have been scaled to reflect peak summer demand conditions. According to the simulation results:
- The demand increase due to the Dacorum **Domestic sites Option 1** will be approximately 9.2 MI/d (20,337 domestic units)
 - The demand increase due to the Dacorum **Domestic sites Option 1** will be approximately 5.6 MI/d (12,445 domestic units)
 - The demand increase for the Dacorum Employment-Office sites will be approximately 6.2 MI/day (216,000sqm)
 - **Option 2 (Domestic)** has not been considered as not allocation data was found.
 - The pressures at the critical points in the network due to the new developments are such that major reinforcements in the network in the Dacorum area will be required. This normally means new pipelines although in some cases new pumping stations will also be required. There is sufficient water supply in the region. Transfer capacity and reservoirs balance would need to be studied.
- 15.80 All the proposed reinforcements will aim to recover the current level of service and the loss of capacity in the network due to the additional load imposed by all projected development. Our current plan considers reinforcements to be installed in the following years, and the new infrastructure will be available for the initial housing planning that may be used to absorb some initial phases of total growth.
- 15.81 However, the North Hemel Development and SADC are major developments, and together with other big projects occurring in the area the overall scheme design and construction programme will depend on the location and phasing of these. Also, the increase of industrial development land is significant and demand estimations are based on industrial usage. Depending on the industrial use the figures might vary.
- 15.82 This means our current plan may need to be reviewed due to the big increase of demand in the area. Any early information concerning this (phasing domestic/employment demand and industrial use) will help our planning.
- 15.83 This is subject to developers and customers reducing their PPC (*Per Capita Consumption*) according to our WRMP (*Water Resources Management Plan*) through the development of water-efficient buildings; and encouraging customers to save water. Our WRMP can be viewed at the link below:

https://www.affinitywater.co.uk/docs/Affinity_Water_Final_WRMP19_April_2020.pdf