
Environmental & Climate Action Scrutiny Panel

Meridian Water Environment Strategy

Appendix B

Responses to detailed questions

Introduction

Information available now and to follow

1. The answer to many of the questions asked are available on the online planning portal for:
 - Meridian Water Phase 1 planning application
 - Meridian Water Strategic Infrastructure Works and Phase 2 planning application
2. The answer to several questions are available from the Energetik heat network website and the North London Waste Authority
3. Many of these questions are being worked on and will become available:
 - When the Meridian 1b planning application is submitted.
 - When the revised masterplan will be reviewed with Council Cabinet.

Environment Positive

The Quantity of Green Spaces / Public Parkland

4. The total public space provision and layout will be designed to meet National, Regional and Local policy requirements, alongside specific targets set out in the ESS, eg. 30% open space. The masterplan layout is under development and currently comprises interim areas, to be further developed through the ensuing masterplan design process, during which detailed maps will also be provided.
5. The documentation for the Strategic Infrastructure works that provides the two main parks (Brooks park and Edmonton Marshes) is available on the planning portal. Edmonton Marshes is designated green belt but is currently not publicly accessible, partially hard surfaced and contaminated by fly tipping. This land is to be upgraded and made publicly accessible as part of the Meridian Water development.
6. Kenninghall Open Space is not part of the Strategic Infrastructure works. It is currently intended to be improved as part of the Meridian Water development.
7. Reduction of existing greenspace area is to be avoided wherever possible. If deemed unavoidable, any reductions are to be offset by equivalent re-provision elsewhere on site within a similar walking distance, and by upgrading the quality and facilities of the existing amenity space. Any potential reduction of Kenninghall Open Space will be acknowledged and addressed.

Quality of Green Spaces / Public Parkland?

8. The scheme landscape design is part of the planning applications, and the strategy advocates shared space between pedestrians and cyclists in the

parks is to avoid an overly-formal use and aesthetic within a naturalistic environment, to discourage speeding and to avoid unnecessary visual clutter.

9. A landscape and visual impact assessment will be undertaken as part of the masterplan process. The lowering of terrain, planting of trees and creation of a variety of outdoor 'rooms' will enhance the visual experience.
10. Proposals will be designed in detail to reflect the GLA's 'Good Growth By Design, Making London Child Friendly' and the WHO's Global Network for Age-friendly Cities and Communities including Age UK's 'Age Friendly London' Guidance.
11. LBE has been working with the Canal and Rivers Trust (CRT) to establish the most appropriate way to evolve the Towpath to accommodate and maximise the benefits derived from increased footfall. This work includes reviewing CRT's standards and using best practice benchmarking from other waterfront conditions in London and across Europe. Typologies for the segregation and mixing of user groups on the waterfront are being developed, this includes dedicated routes for cycle commuting that are distinct from other modes of transport.
12. The CRT has and will continue to be consulted on their moorings and the requirements of the boating community. An increased number of moorings improves access for the entire boating community on the Lee. There are currently no specialist landside facilities for narrowboats (showers, toilets etc) at Meridian Water, but provision of these are being considered as part of the plans. As the Meridian Water site is currently remote and subject to relatively low pedestrian movement, increased development will increase activity with coincident improvements to personal and boat safety and the feeling of such.

The effect on surrounding green spaces / parkland areas.

13. Maps will be developed as part of the ensuing masterplan process showing connections and routes to existing local and regional parks. Furthermore, work for the vision of the Edmonton area and green spaces and network is ongoing and will include benefits to the residents of Joyce Avenue, Snell's Park, the area between Fore Street and Meridian Water, as well as the wider Edmonton Area.
14. The impact of more people living and visiting Meridian Water has been reviewed this as part of the Environmental Strategy for the Phase 2 planning application and will continue to be monitored and mitigated as required. Natural England will continue to be consulted.
15. The green space increase within the Meridian Water site is conceived to mitigate offsite pressure. Use of the adjacent Lee Valley Regional Park and further afield the Epping Forest SINCS will be studied as part of the ensuing masterplan design process, and appropriate provisions made accordingly, including new public access and improvements to currently inaccessible areas (Edmonton Marshes and potentially Banbury Reservoir) alongside upgrades to current green spaces. A full local assessment and mitigation strategy will be conducted as part of the ensuing masterplan design process, in consultation with Natural England.
16. LBE have met with Thames Water and Waltham Forest with regard to access to and around the Banbury Reservoir. Feasibility work and grant funding workstreams will be ongoing.

17. Natural England and the EA have been - and will continue to be - consulted throughout the masterplan design process regarding any wider impacts of the development. LBE is in consultation with Waltham Forest, Haringey and other local authorities regarding any impacts on surrounding Metropolitan Open Land (MOL), regional and district parks etc. A habitat regulation assessment will be conducted, and mitigation strategy developed, to include provision of Suitable Alternative Natural Greenspace (SANGs) and/or financial contributions to greenspace improvements as appropriate.
18. The masterplan process to date has reviewed the surrounding towpaths and will continue to review these in consultation with the Canal and River Trust.

Water bodies and flooding

19. The parks are to be designed to contain flooding in designated areas in the extreme 1/100 year + 35% climate change flood scenario, achieved through terrain design. Accessible areas and key pedestrian/cycle routes are to be ensured throughout this flood scenario in Brooks Park, the Flood Conveyance Channel and Edmonton Marshes, and experienced as a semi-accessible seasonal wetland parklands. In the 1/10 scenario, flood area will be less extensive. Refer to consented SIW detailed planning application scheme for terrain and path design, landscape drawings.
20. Primary paths sit outside of flood zone, refer to consented SIW detailed planning application scheme for the landscape drawing set for terrain strategy, path locations and tree planting.
21. The Pymmes Brook Water quality is variously recorded over the past 5 years. The Meridian Water team is working with the Council as the Lead Local Flood Authority (LLFA) to review and potentially use developer and other contributions to implement series of offsite works in order to improve the quality of water arriving at Meridian Water. The naturalisation of the Pymmes Brook onsite (delivered through the Strategic Infrastructure Works programme and funded via Housing Infrastructure Fund) will also improve water quality on site and the masterplan design team is exploring further naturalisation options for the Pymmes Brook within the Meridian Water site boundary.
22. It should also be noted that Deephams Sewage treatment works has recently completed a £250m upgrade, Deephams outfalls into the Salmon's Brook north of the Meridian Water site and the investment has significantly improved the outfall water quality and therefore the overall water quality in the Salmons Brook.
23. The Lead Local Flood Authority (LLFA) are currently in dialogue with the Meridian Water team regarding re-baselining the river water quality in light of the above.
24. It is currently intended that the Environment Agency will manage and monitor the flood defences, and this is the national standard approach. It is currently intended that the LLFA and Meridian Water will agree the type and frequency of monitoring and mitigation. The PymmesBrookERS organisation have also been involved in citizen science projects with Thames 21 along the Pymmes and may be involved at Meridian Water through ongoing discussions.

25. The flood mitigation solution has been designed to avoid mobilisation of groundwater contaminants. It is a requirement of the Environment Agency that the detailed technical design is submitted to them for approval in advance of the works.
26. Part of the monitoring and mitigation will involve tabulating and reporting any risks to public health. The Pymmes Brook is accessible via naturalised and channels elsewhere. Firs Farm Wetlands, with school children access, is within the Pymmes Catchment.

Wind

27. Please see the 'Environmental Wind' Chapter of the Environmental Statements in the Phase 1 (MW12 Environmental Statement) and Phase 2 (MWP2-2 Environmental Statement) planning submissions.
28. Continued wind testing and analysis will be undertaken as part of the masterplan design process to mitigate issues.
29. Each Reserved Matters Application (RMA) or Planning Application looks at wind conditions in terms of the effects and impacts nearby and within the development and where mitigation is required then recommendations will be made.
30. The impact on more open space further away from the development has yet to be assessed and we will review the need for this as part of the ongoing masterplan work.

Air Quality

31. Please see the 'Air Quality' Chapter of the Environmental Statements in the Phase 1 (MW12 Environmental Statement) and Phase 2 (MWP2-2 Environmental Statement) planning submissions.
32. For issues about the EcoPark, the NLWA please refer to the publically available documentation for this project.
33. An air quality assessment will be undertaken as part of the Environmental Assessment to identify air quality issues, locations and set out mitigation measures as required.
34. Air quality impacts will be reviewed as part of the masterplanning process at both the outline and detailed planning phases to ensure vulnerable users including schools, health facilities etc. are located away from any areas with poor air quality.
35. A major upgrade by Thames Water on Deephams Sewage Works has been undertaken. This in part is designed to reduce odour issues and computational fluid dynamic modelling (CFD) has been commissioned. We will look into the outcome of this work and respond as necessary.

Noise

36. On-going monitoring of noise in park areas will be developed with contractors and proposals designed to meet all the regulations.
37. A noise impact assessment was included in the Environmental Statement of the consented SIW detailed planning application scheme and will be revised as part of the masterplan design process.
38. Noise impacts will be monitored as part of all construction activities and across the site in general. An assessment of their impact on the wider masterplan will be assessed to ensure that noise sensitive uses are located in areas that are not directly impacted by high levels of noise or vibration and measures will be taken to minimise the impact on

- development located close to areas with high noise levels. These will be addressed through the masterplan, outline and detailed planning process.
39. The masterplan will include an assessment of noise and vibration on different areas of the development and appropriate measures to mitigate noise will be adopted including for example tree planting if needed.

Food growing spaces

40. A mapping has been conducted of current local allotment provision within a 3km radius, this has been used to inform the proposed allotment positions and sizes. Demand and local provision will continue to be monitored and allowed for within the masterplan design process. No assessments have been conducted to assess these impacts as yet.
41. On-plot growing space is not included in park area and the current masterplan proposal meets the ESS target of 1.5% GDA, this equates to total 1.2ha.
42. We have not developed the detailed design of the allotments, nor have the management of the allotments been decided, but initial consideration is that composting in allotments will be done within the allotment 'common areas', and its location, size, storage and its operation will be decided by the management body of each allotment space.

Play spaces

43. The GLA standard of 10sqm per child is the standard being followed and is provided through a combined strategy of on-plot and in parks. A detailed strategy and breakdown are to be further developed in the ensuing masterplan process to ensure targets are met both numerically and in their quality.

Zero Waste and Circular

Household waste and recycling

44. Regarding recycling rates in buildings taller than houses, we don't break the data into the tall buildings vs houses - it's a combined total. Pandemic aside, one would ordinarily expect recycling rates for houses to be c.55-60% and for tall buildings anywhere between c.15-30% - the rates for taller buildings are lower but there is a lot of good work being done in this area.
45. We are aware that the recycling rates are challenging, but there are many opportunities to raise this to the rate suggested in the ESS. We are currently looking at several recycling strategies that can boost these levels for the wider site.
46. Meridian One and Two have been focussing on raising recycling rates. For Meridian Three and Four, 3 bins will be provided in homes, and for food recycling storage will be provided in bin stores. These will be then taken to the waste storage/collection facilities.
47. The proposals for neighbourhood material exchange on the Meridian One have not yet been studied in detail but ground floor community space is being provided and discussions around provision of a material exchange and potentially maker spaces will be explored in due course. Potentially, areas for material exchange and bulky waste can be demarcated in bin stores or each building.

48. Library of things / repair care provision will be a part of the emerging masterplan
49. Buying in bulk and other initiatives are best managed at a community scale. This can either form part of a FM/management service or through developing an active community group. Discussions about this type of initiative are ongoing as part of the estate management strategy.

General recycling

50. Proposals about the provisions of waste, recycling and dog waste bins in the public realm within and surrounding Meridian Water are being discussed with the relevant council teams. Enfield don't generally have on street recycling bins other than in some town centres. A further roll out is under consideration.
51. The only green waste on the majority of the development is from management of the public realm and arrangements for its collection and composting will be decided as the estate management strategy progresses.
52. Decisions about drinking water fountains have not yet been finalised but will be considered and included in the public realm as appropriate.

Climate Positive

Carbon emissions from the building of the homes

53. At Meridian One, tall buildings in Plots B (24 storey) and D (30 storey) are now proposed to increase density adjacent to a transport node, without compromising the level of public open space coverage. The decision to allow Vistry to replan part of the site with a new planning application for Phase 1b was approved by Cabinet, on the basis that an increase in the number of homes, more affordable homes and more Council homes would be delivered. We know embodied carbon is greater in taller buildings, and Vistry will be required to report on their embodied carbon for the Phase 1b application under the New London Plan.
54. Vistry will be required to report on their embodied carbon for the Phase 1b application under the New London Plan, however there are no contractual commitments around embodied carbon. LBE as Landowner will continue to monitor to understand how Meridian One performs against the wider ESS. We have target reductions for the embodied carbon of the Strategic Infrastructure Works.

Energy for homes

55. As set out in the Energy Statement (MW19) dated March 2016, it was agreed that Photovoltaic panels will be installed across the whole Phase 1 site. For Phase 1a, approximately 100kWp of PV is proposed across Blocks A1, A2, E1.1. & E2. The remaining PV to be agreed will be located in Phase 1B to meet the aspiration of the MW19 report in the Outline Permission - likely to mean a total net PV installation of 670m2 generating approximately 98MWh/year.
56. The Photovoltaics will be connected to the landlord supply and battery storage for the scheme. LBE is looking at how this is managed as part of its Estate Management Strategy for Meridian Water, and how savings are shared - for example savings to communal lighting costs which would result in lower service charges for residents.

57. Please refer to Energetik publicly accessible documentation regarding their provision of heating and district heat network.
58. The development of large wind turbines has been discounted on Meridian One as impractical as they cannot be located close to buildings in case blades break and fall off or the tower falls over etc. There are issues with erecting large wind turbines in the Lea Valley including their impact on bat and bird populations. Unlike pylons and chimneys, blades move, and it is this that impacts on wildlife. Detailed work was done on the Olympic Park to determine whether it was possible to install large turbines in Hackney Marshes within the LVRP and the conclusion was that the impact on wildlife was unacceptable.
59. We are not focusing on micro turbines as onsite PV and offshore large-scale wind power provide more investable and risk free models of green energy.
60. The current plans for the Energetik heat network will be to use the waste heat for the EcoPark. Energetik and Enfield council are looking at long term alternative solutions for the heat source for the heat network, which could include canals, reservoirs, but also ground and air source possibilities. The outcome of this work has not been reached yet.

Comfort in the home

61. Regarding increasing the area of homes for home-working, Meridian One is being designed to comply with relevant GLA space standards which demonstrate that bedrooms should be large enough to accommodate desk space. Increasing the level of floorspace above GLA standards would not be financially viable.
62. Meridian One has approximately 70% dual aspect homes, and we are working with the later projects to meet the ESS requirements. LBE has worked with Vistry to get to this level though this was largely determined by the existing parameter plans and viability requirements.
63. Vistry have submitted their overheating assessment, which uses the methodology described in CIBSE TM 59 (2017 version) as per the London Plan. The assessment demonstrates that all rooms comply with overheating criteria under DSY1 weather scenario provided that some apartments are installed with blinds. DSY2 and DSY3 are also modelled. These weather events are extreme. Under these conditions some apartments fail. However, the requirement in the London Plan is to comply with DSY1. Efforts are being made to reduce solar gain as far as possible by optimizing glazing ratios and by using solar coatings to reduce solar gains.
64. Leases and tenancy agreements are likely to prevent line drying on balconies - shared appliances may be encouraged in later phases