



High Wood Reservoir – Solar Application

Planning Statement – Full Planning Application

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Basis of Report

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1.0 Introduction

- 1.1. SLR Consulting has been instructed by Brockhampton Solutions Ltd. to prepare a Planning Statement in support of the submission of a full planning application made to Eastleigh Borough Council (hereafter referred to as EBC) for the installation of roof mounted PV panels at the site known as High Wood Reservoir, Allington Lane, Southampton, SO30 3HQ.
- 1.2. This Planning Statement analyses the application site, surrounding areas and locality, and sets out relevant planning history and relevant policy context. It demonstrates why the proposals are appropriate in relation to the site and wider locality. All technical and environmental considerations relevant to the site have been addressed.
- 1.3. Having regard for the site context, site constraints, and local validation requirements, the application, along with this Planning Statement, is supported by, and should be read alongside, the following documentation:
- Application forms and relevant ownership certificates where applicable
 - Planning Statement
 - Landscape Management Plan prepared by Deacon Design
 - Glint and Glare Report prepared by PagerPower
 - Datasheet_Vertex_DE19R_EU_EN_2023_B
 - Renusol MS+ EN System Datasheet

PLANS

- Location Plan
 - I3/23-007-001 REV B Roof layout – Proposed
 - I3/23-007-004 REV A Roof layout – Existing
 - I3/23-007-002 REV B Elevations – Proposed
 - I3/23-007-005 REV A Elevations - Existing
 - Easement Maps
- 1.4. This Planning statement should be read in conjunction with the accompanying plans and technical reports.



2.0 Site and Locality

- 2.1 The site on which the Highwood Reservoir is located is owned by Portsmouth Water Ltd. and is located to the east and south of the Itchen Valley Country Park, approximately 2km to the north-east of Southampton.
- 2.2 The Itchen Valley Country Park comprises approximately 180ha of mainly meadow and mixed woodland and wraps around the site to the west and north. The River Itchen and associated tributaries are located approximately 400m to the west of the site, beyond which lies Southampton International Airport, approximately 1.3 km to the northwest of the site. The M27 motorway is approximately 0.8km to the south and the Hedge End – Eastleigh railway line is approximately 1.4km northeast of the site. Oakdene Caravan Park and residential properties with associated gardens are located approximately 300m to the south of the site along Allington Lane.
- 2.3 The site is located within the jurisdiction of Eastleigh Borough Council and the reservoir is located within woodland on the north side of Allington Lane adjacent to the Itchen Valley Country Park.
- 2.4 The application site is an existing water storage reservoir of approx. 2.4ha in size. It is operated by Portsmouth Water and was constructed in 1982.
- 2.5 Whilst the site itself is not located within any area designated for its nature conservation interest, it is surrounded by a local designation (Local Nature Reserve (LNR) / Site of Importance for Nature Conservation (SINC), which covers a large proportion of the Itchen Valley Country Park. LNR/SINC local designations are also scattered across the local landscape between the M27 and the railway line.
- 2.6 Ancient Woodlands are present within the local area and the nearest such designation is located in close proximity to the west of the site.
- 2.7 There are few Public Rights of Way in the local area, however, the Itchen Valley Country Park contains a dense network of footpaths and public open spaces, which are frequently used. The park covers an area of 440 acres and is widely used for public recreation. Whilst the circular footpath around the reservoir is often used by park visitors, the reservoir and the surrounding embankment are not located within the designated country park.
- 2.8 The site is located in Flood Zone 2, as it is within 20m of a main river. However, as the photovoltaic panels will be sited above the reservoir on the roof, the installation will not be impacted by any flooding, nor will it increase the risk of flooding elsewhere in the surrounding area.



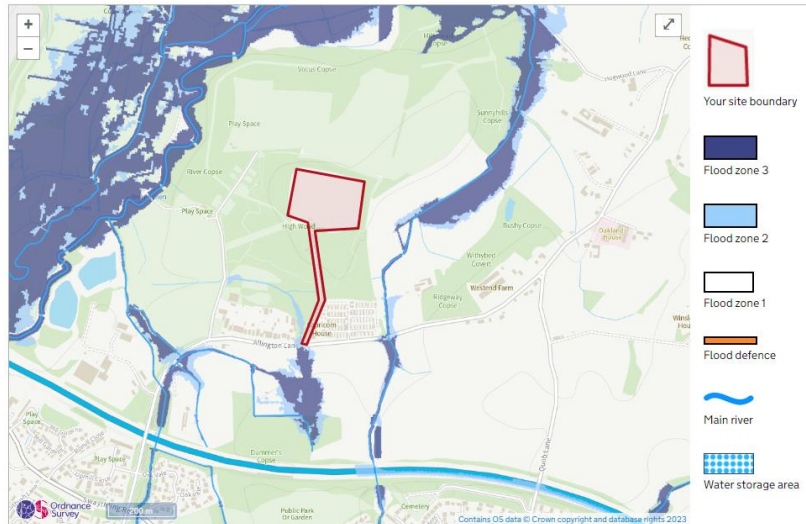


Image showing extent of fluvial flooding, taken from: <https://check-long-term-flood-risk.service.gov.uk>



Image showing extent of surface water flooding taken from: <https://check-long-term-flood-risk.service.gov.uk>

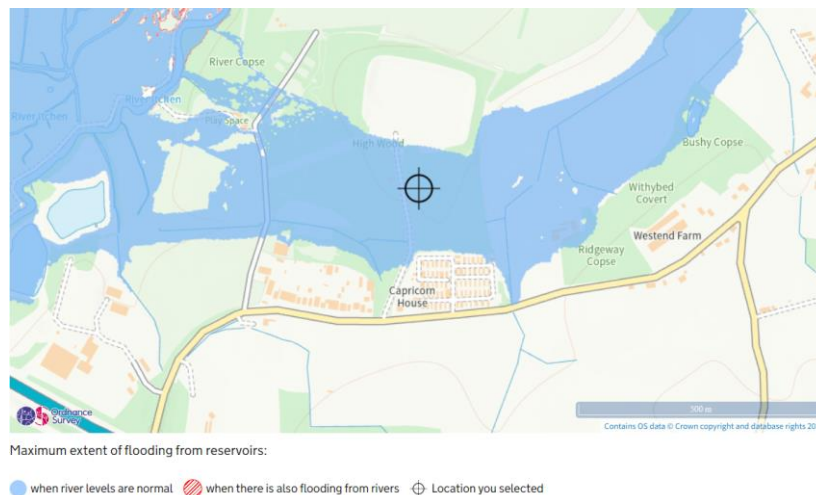


Image showing maximum extent of reservoir flooding taken from: <https://check-long-term-flood-risk.service.gov.uk>



Planning History

- 2.9 F/12/70171 - Construction of building to enclose existing reservoir - Approved March 2012
- 2.10 The Company proposed in 2011 to provide a 'cover' over the raw water reservoir in order to block out sunlight and prevent algal blooms, which had been causing water quality and treatment issues at the nearby Itchen Water Treatment Works (WTW).
- 2.11 At this stage Portsmouth Water were asked to demonstrate that sustainability issues have been considered during the development of the design for the new roof structure. Whilst this was confirmed by Portsmouth Water, because the main reservoir structure, control house and associated infrastructure were already in place, several factors which might normally be considered were not specifically relevant, nor would change, these included water consumption (internal and external), heating, lighting (internal and external) and power consumption.
- 2.12 During this application Portsmouth Water considered the opportunity to install solar panels for energy generation on the roof of the reservoir. At that time, the constraints and costs were considered prohibitive.
- 2.13 Subsequently, it was identified that a more suitable location for the installation of a solar array was available at the nearby Portsmouth Water Itchen WTW, where there was an area of flat open ground close to a suitable power supply. This array was constructed in November / December 2011. Additional solar panels have been erected on that site since then.
- 2.14 F/12/70172 – River Itchen Treatment Works, Allington Lane - Erection of building to enclose concrete clarifier tanks and addition of roof to rapid gravity filter tanks – Approved March 2012.



3.0 Planning Policy

- 3.1. This section sets out the relevant planning policy at national and local levels and how the proposal accords with the outlined policy in more detail.
- 3.2. Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that, in the determination of planning applications, decisions are made in accordance with the Development Plan unless material considerations indicate otherwise.
- 3.3. This section will first note the national policies of relevance before focusing on the local policies considered of most relevance to the consideration of the proposal for the site.

National Policy

- 3.4. The most recent National Planning Policy Framework (NPPF) was updated in September 2023 and establishes a presumption in favor of sustainable development. **Paragraph 2** states that the NPPF is a material consideration in planning decisions.
- 3.5. **Paragraph 8** confirms that there are three dimensions to sustainable development - economic (building a strong, competitive economy); social (providing the supply of housing required to meet needs and creating a high quality-built environment); and environmental (protecting and enhancing the natural, built and historic environment).
- 3.6. **Paragraph 9** confirms that these roles should be delivered through the preparation and implementation of plans and the application of policies but also taking into account local circumstances to reflect the need and opportunities in each area.
- 3.7. **Paragraph 11** stresses that plans and decisions should apply a presumption in favor of sustainable development. Development plans should positively seek opportunities to meet the development needs of the area, and proposals should accord with an up-to-date development plan.
- 3.8. **Paragraph 20** relates to strategic policies where it is set out that these policies should make sufficient provision for: housing (including affordable housing), employment, commercial development and infrastructure.
- 3.9. In terms of determining applications, **paragraph 38** states that it is a requirement for Local Planning Authorities to approach decisions in a positive and creative way. Planning Authorities should also work proactively with applicants to secure developments that will improve the economic, social and environmental conditions of the area, whilst seeking to approve applications for sustainable development where possible.
- 3.10. **Paragraph 47** states that planning law requires applications for planning permission to be determined in accordance with the development plan unless material considerations indicate otherwise, including whether the policies of the local plan are up to date. It encourages that decisions on applications should be made as quickly as possible.



- 3.11. **Paragraph 55** maintains that local planning authorities should consider using conditions to assist in making developments acceptable.
- 3.12. Design is covered in **Section 12**, where the Government attaches great importance to the design of the built environment. This policy emphasises that good design is an important component of sustainable development and that it should be inseparable from good planning, which should improve the quality of life in communities.
- 3.13. Section 14. Meeting the challenge of climate change, flooding and coastal change, **paragraph 155** states that plans should help to increase the use and supply of renewable and low carbon energy, whilst ensuring that any adverse landscape and visual impacts are addressed. It also goes on to say that plans should consider suitable areas for renewable and low carbon energy sources and supporting infrastructure, where this would help secure their development; and identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems.
- 3.14. **Section 15. Conserving and enhancing the natural environment - Paragraph 174** emphasises the importance of conserving and enhancing the natural environment.
- 3.15. **Paragraph 177** stresses the importance of protecting and safeguarding ecological networks, including national and locally designated sites of importance to biodiversity, wildlife corridors. Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection of priority species.
- 3.16. **Paragraph 179** states that developments that conserve or enhance biodiversity should be supported and that opportunities to incorporate biodiversity improvements in and around developments should be encouraged.

National Planning Policy Guidance (NPPG)

- 3.17. Planning Practice Guidance (PPG) was published online in March 2014, with periodic updates occurring as national policy is changed, refined or reformed. It advises that:
- “The National Planning Policy Framework represents up-to-date Government planning policy and must be taken into account where it is relevant to a planning application or appeal. If decision takers choose not to follow the National Planning Policy Framework, clear and convincing reasons for doing so are needed. A development that is consistent with the National Planning Policy Framework does not remove the requirement to determine the application in accordance with the development plan unless there are other material considerations that indicate otherwise.”*
- 3.18. Planning Policy Statements (PPSs), set out the Government’s national policies on different aspects of land use planning in England.
- 3.19. PPS1 – Delivering Sustainable Development sets out the government’s objectives for the planning system, including sustainable development, Development plans should ensure



sustainable development is pursued in an integrated manner, in line with the principles for sustainable development as set out in the UK strategy. LPAs should ensure development plans contribute to global sustainability by addressing the causes and potential impacts of climate change.

- 3.20. PPS1 Supplement: Planning and Climate Change sets out how planning should contribute to reducing emissions and stabilising climate change and take into account the unavoidable consequences.
- 3.21. PPS9 - Biodiversity and Geological Conservation Sets out how planning should protect, enhance and restore biodiversity and geological interests, promote sustainable development, sustain physical processes and contribute towards rural renewal and urban renaissance by enhancing biodiversity in greenspaces, recognising that functional ecosystems contribute towards quality of life and well-being.
- 3.22. Paragraph 10 of the 'Natural Environment' section emphasises that development plans and planning decisions have the potential to affect biodiversity and that it is useful to consider the opportunities to restore or enhance local ecological networks and how to secure net gains for biodiversity.

Local Policy

- 3.23. The site is situated within the jurisdiction of Eastleigh Borough Council (EBC) where the adopted development plan comprises of the Eastleigh Local Plan 2016 – 2036 which was adopted on the 25 April 2022.
- 3.24. The Local Plan sets out the short and long-term vision for the district including their strategy towards managing development. The plan not only allocates sites for development, but also sets out detailed planning policies which cover such matters as design, layout, ecology, flood risk, infrastructure and open space. The detailed policies considered of relevance to this reserved matters application are as follows:
- Strategic policy S1, Delivering sustainable development
 - Strategic policy S5, New development in the countryside
 - Policy DM1, General criteria for new development
 - Policy DM2, Environmentally sustainable development
 - Policy DM3, Adaptation to climate change
 - Policy DM4, Zero or low carbon energy
 - Policy DM11, Nature conservation
- 3.25. The Council has also adopted a number of Supplementary Planning Documents and Guidance (SPDs & SPGs). of relevance to this development proposal and which form a material consideration in the determination of this application.



- 3.26. Strategic policy S1, Delivering sustainable development states that to be sustainable developments should have regard to the potential impacts of climate change, and the need to limit greenhouse gas emissions including through carbon sequestration and by promoting measures to design buildings and spaces which are adaptable to predicted climate change, and restrict development in areas at risk from flooding, minimise energy use and encourage the generation of renewable energy, and by minimising emissions from motorised transport, industrial activity and domestic uses.
- 3.27. Strategic policy S5, New development in the countryside restricts development in the countryside, unless it is essential for the provision of a public utility service, which arguably this is. The policy relates to development in the countryside and criterion 'g' allows development which is "...essential public utilities". The proposal is for a utility service, meaning that principle is likely to be acceptable, subject to considerations of design, visual impact and ecological interests.
- 3.28. The policy states that in permitting new development in the countryside the Borough Council will seek to:
- a. avoid adverse impacts on the rural, woodland, riparian or coastal character, the intrinsic character of the landscape including the avoidance of adverse landscape impacts on areas adjoining national parks and their settings, the significance of heritage assets and on the biodiversity of the area;
 - b. secure long-term beneficial management practices that will enhance the landscape and biodiversity of the countryside and coast;
 - c. avoid sterilisation of mineral resources, in accordance with the Hampshire Minerals and Waste Plan;
 - d. safeguard the best and most versatile agricultural land unless the benefit of the development clearly outweighs the loss; and
 - e. protect soils during construction wherever possible in line with the 'Defra code of practice for the sustainable use of soils on construction sites'.
- 3.29. Policy DM1, General criteria for new development confirms that the Borough Council is strongly committed to promoting good design in all new developments and to improving the quality of public spaces, as well as making sure that so far as possible new developments fit in with their surroundings.
- 3.30. Policy DM3, Adaptation to climate change states that all development should be designed to adapt to the predicted climate change impacts for the Borough. Buildings and spaces that are able to adapt to changing circumstances or that can serve a variety of user are inherently sustainable and help future proof development. The use of trees, shading, landscaping and building design as part of a cooling strategy will also have a range of positive impacts including on air quality and quality of life.



3.31. Policy DM4, Zero or low carbon energy states that the borough Council will permit the development of infrastructure to:

- a. generate zero or low carbon energy; and/or
- b. make more efficient use of energy sources.

This is provided that the development has no significant adverse impact on the landscape or landscape features, biodiversity or the significance of heritage assets.

3.30. The policy goes on to say that there are many ways in which low or zero carbon energy can be generated, ranging from photovoltaic panels installed on house roofs to larger-scale power generating installations such as solar farms. The policy is intended to enable such installations in line with current government initiatives, subject to other policies protecting local amenities, recreational, landscape, biodiversity and heritage interests and the best and most valuable agricultural land. The Borough Council will give priority to the generation of electricity from renewable sources.

3.31. Policy DM11, Nature conservation states that The Council will work with statutory and voluntary agencies and developers, and will determine planning applications, to:

- a. protect, conserve and enhance all:
 - i. international, national and local nature conservation designations; and
 - ii. networks of natural habitats and features, including the Local Ecological Network, Priority Biodiversity Areas and Priority Biodiversity Links, watercourses, wetland complexes, woodland trees, and trees and hedgerows important to biodiversity and local character;

And facilitate their adaptation to climate change wherever possible.

3.32. Eastleigh Borough Council also have the following Supplementary Planning Documents which are relevant to this application:

- Environmentally sustainable development and appendices, adoption statement and consultation responses - March 2009
- Character Area Appraisals - December 2007
- Biodiversity - December 2009



4.0 Proposed Development

- 4.1. The proposal is to install an array consisting of solar panels, installed in eleven banks of panels on each side of the roof (with the exception of the southernmost row, where three shorter panels would be installed).
- 4.2. In a previous application, back in 2011, for the installation of the roof over the reservoir, the Council's Design Officer recommended the installation of solar panels on the roof for the generation of PV electricity. At that time the installation was deemed to be financially unviable and technically unfeasible, however, due to changes in the cost, and particularly the construction and weight of the panels, this option is now possible.
- 4.3. The High Wood storage reservoir site comprises of an open hard engineered concrete storage tank which is accessed, under a right-of-way easement, via a single gravel track which adjoins Allington Lane located to the south. The reservoir comprises a concrete tank which is split into two compartments with an overall size of plan dimensions 190m x 125m.
- 4.4. The concrete walls of the reservoir extend to a height of approximately 4m above surrounding ground level and the roof extends to a height of 9.9m above the top of the existing walls at its highest point. The structure is a profile steel clad barrel roof, supported on a steel framework.
- 4.5. It is proposed to install panels to the north and south roof pitches with 11 banks of panels on each pitch. The total output for these panels would amount to a maximum peak output of 4.094MWp.
- 4.6. The panels would be Trina Vertex 585W modules; technical specifications sheets have been submitted to support this application.
- 4.7. A proposed roof layout has been submitted as part of this application (ref: I3-23-007-001-B Roof layout); this layout is indicative only and can be adjusted in line with statutory consultees' suggestions.



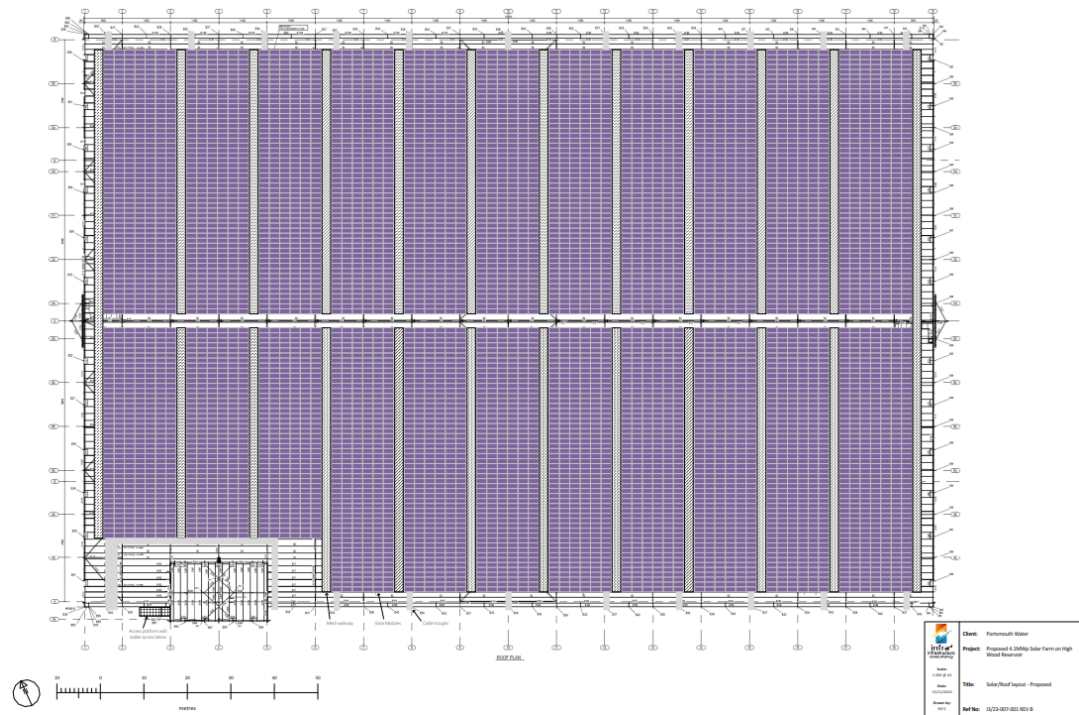


Image showing proposed roof layout.



Image showing similar arrangement at PW Itchen site



5.0 Technical Constraints

- 5.1. Portsmouth Water recognise the sensitivity of the site being adjacent to the Itchen Valley Country Park and a Site of Importance for Nature Conservation. A key objective throughout the design has been to minimise the impact on the adjacent habitats as much as possible.

Highways and access

- 5.2. The site access track easement deed makes provision for a 10m width along the access track to be maintained open.
- 5.3. The access track to the reservoir from Allington Lane is crossed by a bridleway that circles the site. It is intended that full use of this bridleway should not be impeded by the proposed construction work. Access for construction traffic will be along the existing access track.
- 5.4. To provide safe movement of construction traffic, a traffic management system will be introduced. Large deliveries will be timed to avoid the peak traffic hours and will be controlled by time slots to avoid queuing vehicles at the access on Allington Lane.

Glint and Glare

- 5.5. The solar photovoltaic glint and glare report as prepared by PagerPower should be read in conjunction with the summary below. PagerPower has undertaken assessments of the potential impacts on aviation activity at the following adjacent sites:
- Southampton Airport - Southampton Airport is approximately 1.3km northwest of the proposed development;
 - Hill Farm Airfield - Hill Farm Airfield is approximately 5.2km east of the proposed development;
 - Lower Upham Airfield - Lower Upham Airfield is approximately 7.1km northeast of the proposed development;
 - Roughay Farm Airfield - Roughay Farm Airfield is approximately 7.8km northeast of the proposed development –
 - Southampton University Hospital Helipad is utilised by helicopter emergency medical services including Hampshire and Isle of Wight Air Ambulance (HIOWAA). The helipad is approximately 6.4km west of the proposed development.
- 5.6. The report's overall conclusion states that there will be no significant impact upon aviation activity associated with the aforementioned sites and that further mitigation is not required.
- 5.7. We understand that consultation feedback will be requested from Southampton Airport and we look forward to receiving their feedback and working with them accordingly should there be any queries.



Design

- 5.8. The panels have been chosen to have the least impact on the surrounding area and the wider environment.

Landscape

- 5.9. A Landscape and Visual Statement has been prepared by Deacon Design to support this application and should be read in conjunction with the comments below.
- 5.10. The Highwood Reservoir is surrounded by mature coniferous woodland belt, which dates back to the original reservoir construction in the 1980s and together with other surrounding woodlands, now fully mature, provides a very effective and almost impermeable visual barrier to views from the wider landscape.
- 5.11. There are no views of the reservoir even from areas of higher topography to the northeast of the site. Whilst occasional glimpses of the building from the parkland are possible, the site survey and viewpoint analysis proved that these glimpses are insignificant and the building is barely perceptible from public open areas in the park.
- 5.12. More importantly, the roof surface is not visible from the east and west due to its axis (facing north-south). The only area of the roof surface visible is in the immediate vicinity of the reservoir: the embankment to the north and south of the building, and an access track leading to the reservoir from the south. It is a very small geographical area and most of it is not located within the country park itself.
- 5.13. Therefore, the addition of solar panels will have hardly any discernible impact on the overall visual amenity for Itchen Valley Park users.
- 5.14. This roof-mounted solar array would be an opportunity to promote green energy generation (this is highly appropriate in the Itchen Valley park context) and to add interest and attract the public to the existing building.

Sustainability

- 5.15. The proposed development aspires to provide a high-quality sustainable development that aids the region's commitment to ongoing sustainability targets. It will allow the site to make more efficient use of renewable energy sources and reduce the need to rely on fossil fuels.
- 5.16. There will be no new hard standing areas created during the development.
- 5.17. Rainwater currently falling on the roof is collected and discharged through an existing 300mm sludge pipe which flows into the existing settlement lagoon present at the Itchen Water Treatment works, this will continue to provide a sustainable solution for the disposal of any additional surface water. Maintenance of the pipe work and lagoon is ensured as Portsmouth Water must maintain the pipework and lagoon to support de-silting operations at the Highwood Reservoir site.



Noise

- 5.18. These activities will generate some construction noise. However, noise levels at the site boundary are not expected to be high. There will be no additional noise associated with the proposal once the work is complete. Therefore, given the remote nature of the site a Noise Impact Assessment is not considered necessary.

Ecology

- 5.19. The proposed works will have a negligible ecological impact at the Highwood Reservoir due to its low ecological value. There will be no impact on the River Itchen SAC / SSSI or on the SINIC (Ancient Woodland). It is recognised that the proposed development is located adjacent to an environmentally sensitive area and consideration will be given to preventing the disturbance of any nesting birds.



6.0 Conclusion

- 6.1. SLR Consulting have prepared this statement in support of a full planning application for the installation of PV solar panels mounted on the roof of High Wood Reservoir, Allington Lane, Southampton, SO30 3HQ.
- 6.2. The proposals positively respond to the economic, social and environmental strands of sustainability set out in the NPPF. In summary:
- Economic: The proposals will provide a temporary boost to the local economy during the construction period.
 - Social: the proposals will support the local community by ensuring that the proposals deliver a well-designed proposal and by reducing the site's carbon footprint.
 - Environmental: The proposed development aspires to provide a high-quality sustainable development that aids the region's commitment to ongoing sustainability targets.
- 6.3. This statement and accompanying technical reports have demonstrated how the proposal would satisfy the aims and objectives of the local and national planning policies highlighted in section 3.
- 6.4. On this basis, the council is respectfully asked to grant planning permission for this application without delay.

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Making Sustainability Happen