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Farlington Water Treatment Works

Farlington WTW Proposed DAF Treatment Building & Associated Facilities Planning, Design and Access Statement

Portsmouth Water Ltd.

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Executive Summary

<p>The Application</p>	<p>Portsmouth Water is submitting an outline planning application with all matters reserved, for the construction of a new treatment building and associated facilities at Farlington Water Treatment Works (WTW), alongside existing water treatment assets (hereafter referred to as the Proposed Scheme).</p> <p>The site is located at Farlington WTW, Gillman Road, Farlington, Portsmouth, Hampshire. It lies within the administrative boundary of Portsmouth City Council, which is the local planning authority for the determination of the application.</p> <p>The proposed improvements at Farlington WTW are required to improve the efficient treatment of water supplies and to support the operation of the proposed Havant Thicket Reservoir and associated pipeline, which will be located to the east of the A3(M) within Havant Borough and East Hampshire District.</p> <p>This outline application provides details of the site layout, the footprint, height and scale of the proposed DAF Treatment Building and associated facilities, and access to the SSF basin and service yard. Outline planning consent is sought with a 5-year start date for the submission of reserved matters, in order to provide flexibility in terms of the start of construction at the WTW, as the new plant will not be needed until the HTR is constructed. This approach will provide the flexibility required for the ongoing design development of the Scheme.</p>
<p>The Proposed Scheme</p>	<p>The proposed building will accommodate new Dissolved Air Flotation (DAF) plant equipment to be provided in a new building constructed within the old Slow Sand Filter (SSF) basin, which comprises an existing concrete structure currently used as a very occasional overflow tank facility.</p> <p>The proposed associated facilities include a service/delivery yard for the building, a sludge storage tank, underground pipework and chamber connections, and temporary construction compounds, materials storage and parking areas.</p> <p>The footprint of the proposed DAF Treatment Building is approximately 1290m² and the building structure will be approximately 43m long, 30m wide and 12m high (from the floor of the SSF basin), with 9m visible above the existing basin wall. The size and scale of the building has been engineered to provide the minimum capacity for the safe operation of the treatment facilities.</p> <p>The height of the building is governed by the required water tank levels to achieve a gravity flow into the remaining (existing) treatment process to avoid the need for additional pumping and associated environmental and sustainability penalties. Sufficient headroom is needed for a travelling overhead crane that provides a safe lifting facility for all required maintenance and plant replacement needed.</p> <p>The fabric of the proposed DAF Treatment Building will be steel framed and industrial in appearance and design, with a low angled pitched roof for the main section of the building. The building structure will be 'stepped' so that a section of the roof facing south towards Woodfield Avenue will be lower than the main section of the building, to help reduce its overall scale and appearance. The external elevations will feature a cladding system of brick and varied panels of muted colours to help assimilate the building within the rising ground of the local landscape.</p>
<p>Purpose of this Report</p>	<p>This combined Planning, Design and Access Statement has been prepared to support the planning application and provides background details to the Scheme, its environmental context, a description of the proposals and a development appraisal of the potential impacts of the development, the proposed mitigation measures and compliance with planning policy.</p> <p>In accordance with the LPA's pre-application response, the key matters considered as part of the development appraisal focus upon:</p> <ul style="list-style-type: none"> • Design and visual impact, including impact on Public Rights of Way; • Ecological and environmental impacts; • Impact on heritage assets; • Impact on the amenity of neighbouring residents (including noise and air quality);

	<ul style="list-style-type: none"> • Traffic generation; • Drainage; and • Contaminated land.
EIA Screening	<p>An Environmental Impact Assessment (EIA) screening assessment has been carried out of the potential environmental impacts of the Proposed Scheme, focusing primarily on the effects upon ecology, cultural heritage, land contamination, transport, landscape and visual amenity. A request for an EIA screening opinion for the proposed development was submitted to the LPA on 15 August 2020. The LPA confirmed the proposal was not EIA development in their Screening Opinion dated 22 September 2020.</p>
Pre-application Consultation	<p>The Proposed Scheme has been the subject of pre-application public consultation. A leaflet, with integral response form, was distributed to 357 properties surrounding the Application Site. The consultation period ran from 24 July to 7 August 2020, with 37 responses received.</p> <p>In addition, a request for pre-application planning advice was submitted to the LPA on 11 March 2020, which was followed by a series of discussions with the Planning Case Officer on various aspects of the draft Scheme. The LPA's written pre-application response was received on 16 June 2020, which has helped to inform the scope and content of the application.</p>
Results of the Assessments	<p>The results of the assessments show that the Proposed Scheme is not likely to cause significant impacts. Mitigation measures will be further developed at the Reserved Matters stage, with selected assessments and strategies undertaken to inform the detailed design. Traffic impacts will be negligible on the local road network due to the minimal increase in additional vehicle movements to the Site. Residential amenity will be protected in terms of minimising noise and air quality impacts during construction and operation. The visual impacts of the DAF Treatment Building will be diminished by assimilating the structure into Portsdown Hill as far as possible, with use of a stepped roofline and materials appropriate to the site context.</p> <p>The Proposed Scheme aligns with relevant policies of the adopted development plan and national planning policy and there are no impediments to the progression of the Proposed Scheme.</p>

1. Introduction

The Application

- 1.1 On behalf of Portsmouth Water ('the Applicant'), Atkins Ltd, member of the SNC-Lavalin group, is seeking outline planning permission with all matters reserved, for the construction of a new treatment building and associated facilities located at Farlington Water Treatment Works (WTW), Gillman Road, Portsmouth, alongside existing water treatment assets (hereafter referred to as 'the Proposed Scheme').
- 1.2 The proposed building will accommodate new Dissolved Air Flotation (DAF) plant equipment and the associated facilities include a new access leading to a service/delivery yard adjacent to the building, a sludge storage tank, underground pipework and chamber connections, and temporary construction compounds, materials storage and parking areas.
- 1.3 The Application Site is illustrated on the submitted Location Plan (Drawing Reference: 5169117-ATK-PT-FR-DR-A-0001) and shown in Appendix A for ease of reference. The Application Site lies within the administrative boundary of Portsmouth City Council (PCC), which is the local planning authority (LPA) for the determination of the application.
- 1.4 The proposed improvements at Farlington WTW are required to improve the efficient treatment of water supplies and to support the operation of the proposed Havant Thicket Reservoir and associated pipeline (the 'HTR Scheme'), which will be located to the east of the A3(M) within Havant Borough and East Hampshire District.

Content of Application

- 1.5 In preparing the content of the outline planning application, reference has been made to the national mandatory drawing and document requirements for outline planning applications, including the relevant section of the local mandatory application requirements set out in PCC's Validation Checklist for Planning Applications, October 2017. The scope of the application has been discussed and agreed with PCC, as part of the pre-application consultation process.
- 1.6 The application comprises the following documentation and drawings:
 - Covering Letter;
 - Completed Application Form, Ownership Certificate and Agricultural Land Declaration;
 - Application fee of £7,854, based on a total site area of 16,783m² / 1.68 hectares (ha).

Table 1.1 – Submitted documents and drawings

Document / Drawing Title	Reference Number
Heritage Assessment	HTR-ATK-WZ-FR-RP-Z-0001
Planning, Design and Access Statement	HTR-ATK-XX-XX-RP-T-0002
Ecological Impact Assessment	HTR-ATK-XX-FR-RP-Z-0003
Habitats Regulations (Screening) Assessment	HTR-ATK-XX-FR-RP-Z-0004
Biodiversity Net Gain Assessment	HTR-ATK-XX-FR-RP-Z-0005
Landscape and Visual Impact Appraisal	HTR-ATK-XX-XX-RP-L-0003
Transport Statement	HTR-ATK-XX-XX-RP-Z-0068
Land Contamination Desk-top Study	HTR-ATK-WZ-FR-RP-Z-0003
Location Plan	5169117-ATK-PT-FR-DR-A-0001
Existing Site Plan	5169117-ATK-PT-FR-DR-A-0002
Proposed Site Plan	5169117-ATK-PT-FR-DR-A-0003

Existing General Arrangement (GA) Block Plan	5169117-ATK-PT-FR-DR-A-0004
Proposed GA Block Plan	5169117-ATK-PT-FR-DR-A-0005
Pipework Modifications	5169117-ATK-PT-FR-DR-A-0007
Cross Sections – Existing and Proposed	5169117-ATK-PT-FR-DR-A-0010
Proposed Outline Elevations (Sheet 1 of 2)	5169117-ATK-PT-FR-DR-A-0022
Proposed Outline Elevations (Sheet 2 of 2)	5169117-ATK-PT-FR-DR-A-0023
3D Visualisations	5169117-ATK-PT-FR-DR-A-0050

Structure of the Statement

- 1.7 This combined Planning, Design and Access Statement has been prepared to support the planning application and provides a review of the proposals for additional water treatment facilities at Farlington WTW.
- 1.8 This Statement is divided into the following sections:
- Section 2 sets out the background to the Proposed Scheme and the context of the development in terms of the need for the Scheme, the need for planning permission and the planning strategy for the outline application and future reserved matters. This section includes a summary of the EIA screening process and the pre-application consultation undertaken;
 - Section 3 provides a description of the site and its surrounding, the environmental context and the planning history of Farlington WTW;
 - Section 4 identifies national and local planning policy and supplementary guidance with relevance to the Proposed Scheme;
 - Section 5 details the development proposals, with a description of the site layout, the scale and appearance of the proposed DAF Treatment Building, and the proposed access arrangements. A summary of the site options appraisal and the design principles adopted is also provided;
 - Section 6 provides a development appraisal, with a summary of the assessments undertaken of the potential impacts of the development, proposed mitigation measures and compliance with planning policy; and
 - Section 7 concludes the findings of the Statement.

2. Scheme Background

Need for the Proposed Scheme

- 2.1 The proposed development at Farlington WTW is required to improve the efficient treatment of water supplies and will support the operation of the proposed HTR Scheme. The new reservoir is required to safeguard the water supply for Portsmouth Water and Southern Water customers and to support additional housing growth in the wider Portsmouth Water supply area.
- 2.2 The HTR site and associated pipeline are allocated in the Havant Borough Council and East Hampshire District Council Local Plans to ensure that there will be adequate provision to meet water supply needs during the plan period and to secure sub-regional supplies in the medium and longer term. The HTR Scheme will provide improved resilience for existing Portsmouth Water customers and support additional housing growth in the wider Portsmouth Water supply area. The HTR planning application is due to be submitted in autumn 2020.
- 2.3 The increase in drinking water supplies available to Portsmouth Water on completion of the HTR Scheme will also enable additional water to be supplied to Southern Water. Southern Water has a forecast deficit in water resources in the Hampshire area which has been created by the reduction of its abstraction licences on the River Itchen imposed by the Environment Agency.

The Need for Planning Permission

- 2.4 The works at Farlington WTW require a new DAF treatment plant and associated equipment which will be housed in a new building. Under Part 13, Class A (g) of the Town and Country Planning (General Permitted Development) (England) Order 2015 (the 'GPDO 2015'), a new building is not permitted development and planning permission is required.
- 2.5 An overview of the other proposed facilities is provided in section 5 of this Statement. The replacement of the media¹ in the existing Farlington rapid gravity filters with Granulated Activated Carbon (GAC), and associated refurbishment / plant upgrade works would fall under Schedule 2, Part 13, Class A (g) of the GPDO 2015, and would be permitted development. The new chemical delivery area and thickened sludge holding tank adjacent to the proposed DAF Treatment Building; the new access road to the SSF basin; the potential above-ground water pipeline connection; and the temporary contractors' compound, parking areas and materials storage area, would all fall within Schedule 2, Part 13, Class A (g) of the GPDO 2015, as permitted development. The underground water pipelines, chambers and connections between the new treatment building and existing treatment facilities would also be defined as permitted development, under Schedule 2, Part 13, Class A (a) of the GPDO 2015.
- 2.6 Notwithstanding the above, the principal development associated with the Proposed Scheme is the new DAF Treatment Building and it is considered appropriate to include all the related facilities as part of the planning application, to ensure the potential impacts of the proposals are assessed together and any required mitigation measures identified.

Planning Strategy

- 2.7 This is an application for outline planning permission, with all matters reserved. This will provide the flexibility required for the ongoing design development of the Proposed Scheme and to deal with any unknown issues or technical challenges that may emerge in providing the necessary linkages between Farlington WTW and the HTR Scheme.
- 2.8 Outline planning permission is sought with a 5-year start date for the submission of reserved matters, in order to provide flexibility in terms of the start of construction, as the new plant will not be needed until the HTR is constructed.
- 2.9 The outline application provides details of the site layout, the footprint, height and scale of the proposed DAF building and associated facilities, including the proposed access to the new building.
- 2.10 It is proposed that the details to be considered for future reserved matters applications will include detailed elevation drawings, external materials, detailed site access design, the renewable energy profile of the building in accordance with BREEAM, detailed landscape plans, enhancement of SINC²

¹ GAC media is a black grainy sand-like substance. Pesticides and organic compounds bind to its surface so are removed from the onward flowing water

² The East and West of Gillman Road Site of Importance for Nature Conservation

habitat, assessment of construction noise, surface water drainage and the preparation of a Construction Management Plan.

EIA Screening

- 2.11 The proposals have been assessed to determine whether a statutory EIA is required.
- 2.12 The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (“the EIA Regulations 2017”), defines “EIA development” as either:
- Schedule 1 development; or
 - Schedule 2 development likely to have significant effects on the environment by virtue of factors such as its nature, size or location.
- 2.13 The proposed works at Farlington WTW do not fall into any of the categories for Schedule 1. However, the proposals could be defined as Schedule 2 development under Part 10(o) of the EIA Regulations 2017, as an infrastructure project involving works for the transfer of water resources.
- 2.14 As defined in the EIA Regulations 2017, if any part of the development is to be carried out in a ‘sensitive area’, or the area of works exceeds the 1 hectare (ha) threshold for Schedule 2 Part 10(o) infrastructure works, then the proposed development will be defined as Schedule 2 development and EIA screening would be required.
- 2.15 Farlington WTW does not lie within an environmental ‘sensitive area’ as defined by the EIA Regulations 2017 (these include SSSI, National Park, World Heritage Site, Scheduled Monuments, Area of Outstanding Natural Beauty, and European protected nature conservation sites). However, the total works area including temporary contractor site compounds is approximately 1.67ha and exceeds the 1ha threshold under Schedule 2 Part 10(o), requiring EIA screening.
- 2.16 A request for an EIA screening opinion for the proposed development was submitted to the LPA on 15 August 2020, supported by a screening assessment report which described the potential environmental impacts of the Proposed Scheme. The results of the screening assessment showed that the Proposed Scheme is not likely to cause significant impacts on ecology, heritage assets, flood risk, drainage, nitrates or land contamination. Traffic impacts will be negligible on the local road network due to the minimal increase in additional vehicle movements to the Site. Residential amenity will be protected in terms of minimising noise and air quality impacts during construction and operation. The assessment concluded that the application of suitable standard mitigation measures would be sufficient to ensure that no residual adverse construction and operational effects would be anticipated.
- 2.17 The LPA confirmed in their Screening Opinion, dated 22 September 2020, that the Proposed Scheme would not be classed as EIA development and would not require the submission of an Environmental Statement.

Pre-application and Public Consultation

- 2.18 A request for pre-application planning advice was submitted to PCC on 11 March 2020. The submission included a draft Design and Access Statement, incorporating a Location Plan, Site Plan and Environmental Constraints plan of the Application Site.
- 2.19 A series of discussions was held with the Planning Case Officer on various aspects of the draft Scheme, with pre-application comments received from a range of local authority specialist officers, relating to ecology, landscape, land contamination and design.
- 2.20 The Planning Officer’s written pre-application response was received on 16 June 2020 (a copy of which is provided at Appendix B). This included advice relating to the design and visual impact of the proposed DAF Treatment Building, ecological impacts upon the designated East and West of Gillman Road Site of Importance for Nature Conservation (SINC), impact on heritage assets including Fort Purbrook Scheduled Monument, traffic generation, site drainage and contaminated land. The Planning Officer’s detailed comments and recommendations are set out and addressed in each relevant section of the development appraisal in section 6 of this Statement.
- 2.21 In addition, pre-application public consultation was carried out in July/August 2020, with details presented in a leaflet with integral feedback form, distributed to 357 properties surrounding the Application Site. A copy of the consultation leaflet and feedback form is attached at Appendix C. A pre-paid envelope was provided for the completed forms to be posted directly to Portsmouth Water. Responses were also invited via email to an address created specifically for the consultation: farlington@atkinsglobal.com.

- 2.22 The consultation period ran from 24 July to 7 August 2020, with 37 responses received in total, comprising 36 feedback forms and 1 email, representing a 10.4% response rate. The results of the consultation and the comments received are set out in detail in Appendix C. The responses to the two questions presented in the feedback form show that of the 36 feedback forms received, 61.1% (22 respondents) strongly agreed or agreed with the proposed plans for the new treatment building and related facilities. A further 22.2% (8) responded they were neutral about the proposals, with a total of 13.9% (5) who either disagreed or strongly disagreed. One respondent (2.8%) ticked 'Don't Know'.
- 2.23 In response to the second question regarding the proposed appearance of the building and location of the facilities, 54.3% indicated they were neutral about the proposals, while 30.9% either agreed or strongly agreed, and 13.9% either disagreed or strongly disagreed.
- 2.24 A summary of the issues raised in the comments and the Applicant's responses and actions are presented in Table 2.1 below.

Table 2.1 – Consultation issues raised and Applicant's responses

Summary of issues raised	Responses and actions
Support was expressed for the proposed development on the basis that the existing treatment facilities need to be updated to provide a water supply to existing and new residential properties to meet future demand.	The proposed improvements at Farlington WTW are required to improve the efficient treatment of water supplies and to support the operation of the proposed HTR Scheme, which will provide a secure water supply for current and future Portsmouth Water and Southern Water customers.
Concerns about the height and scale of the proposed new treatment building and its prominence in the local landscape and adjacent residential area, representing over development. Suggestions include matching the height of the proposed building with the existing buildings on the WTW site.	<p>Due to the topography of the WTW site and the existing concrete basin, the new DAF Treatment Building will be set back within the landscape as far as possible, to reduce its impact on views from properties and homes surrounding the WTW.</p> <p>The size and scale of the proposed DAF Treatment Building is governed by the necessary capacity of the water treatment plant and the space needed to safely maintain it. The building will accommodate water tanks, chemical storage equipment, and associated general mechanical and electrical equipment. The intent is to provide a largely automated un-manned plant subject to operator monitoring and maintenance only.</p> <p>The height of the building is governed by the required water tank levels to achieve a gravity flow into the remaining (existing) treatment process to avoid the need for additional pumping and associated environmental and sustainability costs. Sufficient headroom is needed for a travelling overhead crane that provides a safe lifting facility for the required maintenance and plant replacement.</p> <p>The proposed building is currently designed at its maximum size and scale to accommodate the anticipated water treatment equipment. However, there is potential that the building can be reduced in size at the detailed design stage, once the equipment requirements and capacity of the treatment facilities are finalised. The intention will be to submit the amended building envelope as part of a subsequent Reserved Matters application.</p>
Mixed opinions were expressed about the appearance of the proposed building, such as the design is too industrial and not innovative, it does not blend into the environment and needs to be light	The proposed DAF Treatment Building will be of a similar scale and design to the existing built form, extending the existing cluster of treatment buildings and facilities on the WTW site. The scale and industrial appearance of the building has been guided by its functional requirements and the size of the

green or a similar colour to the existing buildings.

A tree line was suggested along the ridge between the houses on Woodfield Avenue and the WTW, to assist in screening the development.

internal plant, driven by the safe operation and maintenance of the water treatment equipment within the building.

Notwithstanding the influence that functionality has had on the size and scale of the building, it is acknowledged that design and appearance are important factors in this location set within the rising ground of Portsdown Hill. The intention is to ensure the proposed building is sympathetic to the local character, history and geography of the area, to fit in with its surroundings.

It is considered that an innovative design may detract from its location in terms of drawing too much visual attention and 'standing out' in the landscape, which may negatively impact upon important views of Fort Purbrook Scheduled Monument and the wider landscape value. Therefore, the design concept is to assimilate the proposed building within its site context, and to ensure the design and materials are of high quality. This has been achieved by reducing the scale of the southern elevation with a stepped roof profile and proposing an external cladding system of varied muted colours and textures. Screen planting will also be considered as part of detailed design.

Figures 5.6 and 5.7 in chapter 5 below, provide an indication of the external materials for the proposed new building. The external elevations would feature a brick cladding system on the eastern and southern elevations, to 'wrap' the lower section of the building, in keeping with the existing brick boundary wall and adjacent building. The cladding for the remaining areas of the building would comprise varied panels of a mixed grey, brown and green, to visually break up the massing of the elevations. The panels will help to provide some tonal colour variance against the backdrop of the surrounding grassland, the skyline and existing building group.

Queries as to whether the proposed building would incorporate sustainable design features such as a green or planted roof and the use of solar energy.

PCC requires that all non-domestic development with a net increase in floorspace of more than 500m² should contribute to addressing climate change in Portsmouth and, unless otherwise agreed with the City Council, must achieve a BREEAM standard of 'excellent'. The Council's planning policy guidance has informed the design development of the Proposed Scheme and the application of BREEAM standards will be integral to the detailed design of the proposed DAF Treatment Building, to be submitted at the Reserved Matters stage. This process will ensure the proposed DAF Treatment Building is energy efficient, with consideration given to introducing features such as a green roof and solar energy capture.

Concerns regarding potential odours generated from the proposed sludge storage tank and arrangements for disposal. Assurances sought that the new treatment building will not be treating sewage or industrial wastewater.

Farlington WTW supplies drinking water only and the new treatment building will not be treating sewage or industrial wastewater.

The drinking water treatment and filtering process to be undertaken within the proposed DAF Treatment Building will produce sludge which will be stored in an enclosed tank in the service yard next to the proposed building. The sludge will be removed from site by a tanker via a fully enclosed system to manage any potential odour.

The route of the construction and operational traffic was queried, with concerns raised regarding traffic impacts on Gillman Road and on residential properties to the south of

Potential traffic and transport impacts during construction include increased traffic on local roads from construction vehicles, heavy equipment, construction workforce movements and delivery of materials. It is proposed that construction related traffic will access the site via Portsdown Hill Road and

the WTW. Concerns were also raised regarding the potential hazard of heavy vehicles exiting Gillman Road onto Portsdown Hill Road.

Gillman Road, avoiding the residential roads to the south of the Site. The priority will be to avoid residential areas. Construction traffic will be subject to detailed traffic management measures, to be agreed with PCC. Particular attention will be given to safety on Gillman Road, with a banksman deployed to manage deliveries and temporarily stop walkers and cyclists while HGV movements are underway.

While the DAF Treatment Plant is operational, chemical deliveries will be required, and sludge will be generated as a result of the water treatment process, which will need to be removed from site daily. Traffic movements are likely to be minimal and will be required during operation of the DAF process only, with two sludge tankers per day visiting the WTW to take the sludge off site, accessed from Crookhorn Lane via Portsdown Hill Road to the north. Chemical deliveries to support the DAF process would utilise this same approach route (which is the same route used for current chemical deliveries to the WTW) and be expected to be up to twice weekly while the DAF plant is running.

The expected usage of Havant Thicket Reservoir water will be occasional, e.g. for drought relief and maintenance runs, and therefore tanker movements and additional chemical deliveries to Farlington WTW would similarly be occasional.

Construction noise and disturbance from site compounds, including operational noise and vibration generated by the new plant in the proposed building, were issues of concern raised by residents living close to the WTW.

Noise and vibration impacts during construction will be temporary and localised to the working area of the new DAF Treatment Building, the area adjacent to the existing WTW buildings and the underground pipe works. As the rear elevation of the residential property closest to the Site is located approximately 100m away, the construction noise and vibration effects during construction will be within acceptable levels. (Please refer to chapter 6 for more details, relating to residential amenity).

The site compound closest to residential properties on Woodfield Avenue will be dedicated to site offices, with the heavy construction equipment and materials to be stored further north within the WTW site.

Construction hours were queried including whether any works would take place at night.

Standard construction working would be Monday to Friday. In exceptional circumstances, night-time works may be required, and such works would require suitable mitigation. Where impacts from noise and vibration cannot be effectively mitigated, night-time works will not be carried out.

Potential impacts on local wildlife were queried, including whether any investment (or mitigation) measures are proposed.

The principal impacts from the Proposed Scheme are the permanent and temporary loss of grassland habitat, as well as habitat degradation of the wider East and West of Gillman Road Site of Importance for Nature Conservation (SINC). The Proposed Scheme will see the permanent loss of 0.0217ha of calcareous grassland from within the SINC boundary as a result of the development and the temporary loss of approximately 0.299ha of calcareous grassland.

This will be mitigated by the translocation of topsoil to a species-poor area of grassland within the SINC, to improve the quality of grassland in this area and maintain the overall species diversity of the SINC. For areas of temporary loss, a similar methodology for the reinstatement of grassland will be applied. The turf from the area of calcareous grassland to be temporarily removed, will be carefully stripped, stored, and managed to maintain condition, before being reinstated. Bare soil areas will be left to recolonise naturally.

3. Site Context

Site Location and Description

- 3.1 Farlington WTW is located at the north eastern extent of the administrative boundary of PCC, approximately 4.5 miles north-east of Portsmouth city centre. The primary access to the WTW is provided via a barrier entry from Gillman Road, with a secondary access from Gillman Road further to the south. The WTW is bordered by Portsdown Hill Road (B2177), Portsmouth Golf Course to the north of the B2177 and residential areas to the east and south. The boundary with Havant Borough Council lies just north of the B2177.
- 3.2 Farlington WTW treats spring water pumped from Bedhampton and Havant springs to provide drinking water. The WTW provides a cumulative flow to four adjacent service reservoirs, two of which are located at either side (west and east) of Farlington WTW.
- 3.3 The Farlington WTW property comprises existing treatment equipment housed within a series of buildings, a concrete basin within a brick boundary wall (a former Slow Sand Filter), a bulk fuel tank located on a reinforced concrete slab and several underground reservoirs and pipework.
- 3.4 The site gently slopes north to south, with the water treatment buildings and facilities set within the gradient of the site, interspersed with open areas of grassland.

Environmental Context

- 3.5 A desk top review of the designations and environmental constraints affecting the Application Site and surroundings has been carried out and is included at Appendix D. The Site is located within the 'East and West of Gillman Road Site of Importance for Nature Conservation' (SINC), which is recognised for its semi-improved calcareous grassland. There are 12 other SINC's located within 500m of the Site. One low-use Brent Goose Strategic Site is located 60m to the north of the Application Site, with two others located within 500m. The Application Site also lies within an area classified as a Site of Special Scientific Interest (SSSI) Impact Risk Zone (England).
- 3.6 The Chichester and Langstone Harbours Ramsar and Special Protection Area (SPA) site, the Langstone Harbour SSSI and the Farlington Marshes Local Nature Reserve (LNR), are all located 850m south of the Application Site. The Solent Maritime Special Area of Conservation (SAC) lies approximately 1.05km to the south of the Site.
- 3.7 There are no designated heritage assets within the Application Site. There are no World Heritage Sites, Registered Parks and Gardens or Registered Battlefields in the 1km Study Area. In the Study Area, there are nine designated heritage assets, these comprise Fort Purbrook, which is a Scheduled Monument, a Grade II* Listed Building (Fort Purbrook that part in Portsmouth Church Parish), and a further eight Grade II listed buildings.
- 3.8 A Public Right of Way (PRoW) lies close to the WTW, leading from Gillman Road to Portsdown Hill Road.
- 3.9 The WTW is allocated within lands identified as a Nitrate Vulnerable Zone (NVZ). These zones were set up under Council Directive 91/676/EEC and have been established in areas where nitrate from agricultural land could cause pollution of the water environment. In these zones Action Programmes of compulsory measures apply. These measures include a requirement for farmers to limit their applications of livestock manure and, in some circumstances, to observe closed periods for the application of organic manure to agricultural land.

Planning History

- 3.10 A search of the PCC website has been carried out to gather details of relevant planning applications determined at Farlington WTW, with the results shown in the table below.
- 3.11 The majority of recent applications in the residential areas south of the WTW are small scale householder applications, which would not result in any significant cumulative impacts in combination with the proposed development.

Table 3.1 – Planning History

Application Reference	Description	Status	Date Approved
16/01471/VOC	Application to vary condition 2 of planning permission 15/00427/FUL to approve amended drawings showing revised design incorporating centrifuge plant and skip building into one building and relocation of lamella plant	Conditional Planning Permission	21 Nov 2016
15/01157/ADJ	Variation of condition 9 of permission 10/00141 (to increase permitted throughput)	No Objection	10 Aug 2015
15/00427/FUL	Construction of 6.4m high Centrifuge plant building and 6.1m high Skip building and associated facilities including a new paved extension to the existing access road	Conditional Planning Permission	18 May 2015
A*24844/AG	Construction of detached building to accommodate membrane filter equipment adjacent to an existing reservoir east of Gillman Road with associated access road and landscaping.	Conditional Planning Permission	30 October 2001
A*24844/AF	Construction of detached building to accommodate membrane filter equipment adjacent to an existing reservoir east of Gillman Road with associated access road and landscaping.	Conditional Planning Permission	6 July 2001

4. Planning Policy Context

- 4.1 Planning law requires that applications for planning permission be determined in accordance with the development plan, unless material considerations indicate otherwise. The National Planning Policy Framework (NPPF) must be taken into account in preparing the development plan and is a material consideration in determining planning applications. This chapter sets out the national and development plan policies which are considered of most relevance to the Proposed Scheme.
- 4.2 The Site lies within the administrative area of PCC. The planning policy framework for Portsmouth is currently provided by:
- The Portsmouth Plan (the Portsmouth Core Strategy) adopted in January 2012;
 - The adopted Southsea Town Centre Area Action Plan (2007) and the adopted Somerstown and North Southsea Area Action Plan (2012);
 - A number of saved policies from the adopted Portsmouth City Local Plan (2006).

National Policy

NPPF (2019)

- 4.3 The revised NPPF published in February 2019, establishes the national planning policies for England, recognising that the purpose of the planning system is to contribute to the achievement of sustainable development.
- 4.4 At the heart of the framework is a presumption in favour of sustainable development, requiring the planning system to secure net gains across the following objectives:
- An economic objective – contributing to building a strong, responsible and competitive economy;
 - A social objective – supporting strong, vibrant and healthy communities; and
 - An environmental objective – contributing to protecting and enhancing our natural, built and historic environment.
- 4.5 The NPPF sets out 16 key policies. Those of relevance to the Proposed Scheme include:
- Building a strong, competitive economy – significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development.
 - Making effective use of land – promote an effective use of land in meeting requirements for homes and other uses, whilst safeguarding and improving the environment.
 - Achieving well-designed places – ensuring the creation of high-quality buildings, which incorporate good design. Development should be a result of good architecture, layout and appropriate and effective landscaping.
 - Conserving and enhancing the natural environment – protecting and enhancing valued landscapes, as well as preventing unacceptable levels of pollution or land instability. A key aspect of this is to provide net gains for biodiversity.
 - Conserving and enhancing the historic environment – conserving heritage assets in a manner appropriate to their significance, as well as ensuring development makes a positive contribution to local character and distinctiveness.
- 4.6 Paragraph 102 provides guidance on how proposals should consider transport networks and infrastructure. Consideration should be given to the environmental impacts of traffic and transport infrastructure as a result of a proposed development. Furthermore, opportunities to avoid and mitigate any adverse effects should be considered throughout the proposals.
- 4.7 Paragraph 122 outlines the requirement for planning policies and decisions to support development, which makes efficient use of land, taking into account ‘the availability and capacity of infrastructure and services – both existing and proposed – as well as their potential for further improvement’.
- 4.8 Paragraph 127 promotes the requirement for development to ‘function well and add to the overall quality of the area’ over the lifetime of the development. Furthermore, the building design should be ‘visually attractive as a result of good architecture, layout and appropriate and effective landscaping’, as well as being ‘sympathetic to local character and history’.

- 4.9 Paragraph 130 directs decision makers to avoid objecting to development on the grounds of design where the proposals conform to design standards set out in plan policies. Paragraph 131 builds on this notion, stating that, whilst ‘great weight should be given to outstanding or innovative designs’, development should ‘fit in with the overall form and layout of their surroundings’.
- 4.10 Paragraph 170 states that valued landscapes and sites of biodiversity should be protected and enhanced ‘in a manner commensurate with their statutory status or identified quality’. Development should also, ‘wherever possible, help to improve local environmental conditions such as air and water quality.’
- 4.11 Paragraph 189 states that an applicant should describe any affected heritage asset at a level of detail ‘proportionate to the assets importance and no more than is sufficient to understand the potential impact of the proposal on their significance.’ Paragraph 196 goes on to state that any resulting harm on a heritage asset that is less than substantial should be ‘weighed against the public benefits of the proposal.’

Local Policy

The Portsmouth Plan (2012)

- 4.12 The Portsmouth Plan (Core Strategy) was adopted on 24 January 2012 and sets the planning strategy to 2027. It is the overarching planning policy document, which forms part of a wider set of local planning policy documents known as the Local Development Framework (LDF). The Plan sets out a vision for Portsmouth to be the ‘premier waterfront city, with an unrivalled maritime heritage - a great place to live, work and visit.’
- 4.13 Policy PCS12 – Flood Risk, states that the council will reduce flood risk through:
- Assess the level of flood risk in making allocations and considering planning applications, in particular by reference to strategic and site-specific flood risk assessments; and
 - Permitting new developments only where the necessary surface water drainage, foul drainage and sewage treatment capacity is available.
- 4.14 Policy PCS13 – A Greener Portsmouth, states that the City Council will work collaboratively to protect, enhance and develop Local Wildlife Sites by:
- Recognising the benefits of local sites for nature conservation and its enjoyment for residents and visitors;
 - Designating sites through the site allocations plan;
 - Ensuring that the intrinsic habitat value of the site can be retained or enhanced through development proposals; and
 - Allowing development only if it clearly outweighs the substantive nature conservation value of the site, an impact on the site cannot be avoided or mitigated and compensatory measures are provided.
- 4.15 The policy seeks enhancement of the quality of existing green infrastructure and improved public linkages as part of development proposals. The policy also ensures that all new development ‘retains and protects the biodiversity value of the development site and produces a net gain in biodiversity wherever possible. Any unavoidable negative impacts on biodiversity as a result of development should be appropriately mitigated.’
- 4.16 Policy PCS14 – A Healthy City, states that the Council will improve health and wellbeing through ‘improving air quality in the city through implementing the Council’s Air Quality and Air Pollution SPD and Air Quality Action Plan.’
- 4.17 Policy PCS15 – Sustainable Design and Construction, sets out that all new development should contribute to addressing climate change unless otherwise agreed with the Council. The policy states that all non-domestic development with a net increase in floorspace of more than 500m² should contribute to addressing climate change in Portsmouth and, unless otherwise agreed with the City Council, must achieve a BREEAM standard of ‘excellent’.
- 4.18 Policy PCS16 – Infrastructure and Community Benefit, states that development will be required to provide or contribute towards the provision of infrastructure needed to support the development strategy set out in the Portsmouth Plan.
- 4.19 Policy PCS17 – Transport, addresses a strategy to ‘reduce the need to travel and provide a sustainable and integrated transport network’ through ‘locating development where there is the

potential to improve accessibility for all through walking, cycling and by public transport.’ The policy goes on to state that land will be safeguarded for a future station at Farlington.

- 4.20 Policy PCS23 – Design and Conservation, states that development will need to be of high quality, relate well to areas of heritage value and protect and enhance Portsmouth’s cultural and natural heritage. The policy seeks to protect the City’s important views and settings of key buildings across the sea, harbours and from Portsdown Hill. It seeks to ensure that the design of new development relates well to the geography and history of Portsmouth, including in relation to scheduled ancient monuments. New development should be of the appropriate scale, density, layout, appearance and materials in relation to its particular site context.
- 4.21 The Council is currently preparing the Portsmouth Local Plan, which will set out the planning strategy for meeting future development needs in Portsmouth for the period up to 2036. Once adopted, the Portsmouth Local Plan will replace the Portsmouth Plan, the adopted Area Action Plans and the saved policies of the Portsmouth City Local Plan (2006).
- 4.22 The background paper Biodiversity and Portsmouth (February 2019) provides evidence for the new Local Plan and identifies the majority of the Farlington WTW site as a designated Site of Importance for Nature Conservation (SINC)/Local Wildlife Site. The site area identified for the Proposed Scheme lies predominantly outside the designated SINC area, with potential effects largely limited to temporary impacts during the construction period. This document also identifies the site as a priority habitat area and Biodiversity Opportunity Area (according to the Hampshire Biodiversity Information Centre, but there are no Local Plan policies relating to these designations).
- 4.23 SINC/Local Wildlife Sites are designated at a local level as they contain features of substantive nature conservation value. The purpose of designation is to provide recognition of this value, to give sites a degree of protection and to encourage access to wildlife and nature.

Portsmouth City Local Plan (2006) – Saved Policies

- 4.24 The Portsmouth City Local Plan was adopted on 21 July 2006. Many of its policies were deleted in July 2009 when the Portsmouth Plan was adopted in January 2012. Saved policies of relevance to the Scheme are outlined below.
- 4.25 Policy DC21 – Contaminated Land, states that ‘permission will only be granted for development on or near contaminated land where appropriate and sufficient measures can be taken to deal with the contamination. Such measures must address the long term safety of the development, including the future management of the site.’
- 4.26 Policy CM8 – Portsdown Hill, sets out that proposals for development of previously developed sites will be permitted, provided that the new use is compatible with its location and does not detract from the landscape value of the Hill, having regard to matters of visual impact and prominence. The development must be evaluated in terms of design, landscape and conservation impact.

Air Quality and Air Pollution SPD (2005)

- 4.27 The Air Quality and Air Pollution SPD provides further guidance for developers on the way in which air quality and air pollution issues will be dealt with by PCC.
- 4.28 The SPD states that the type of Air Quality Assessment (AQA) submitted within a planning application should be ‘proportionate to the likely significance of any air quality impact that may be presented.’
- 4.29 Paragraph 1.5.2 states that developers are encouraged to ‘formulate development proposals which seek to minimise additional air pollution and to preserve or enhance the existing air quality in the City and provide the highest quality environment for people to live and work.’

Sustainable Design and Construction SPD (2013)

- 4.30 The Sustainable Design and Construction SPD provides guidance for developers to achieve high standards of sustainable design and construction within development proposals. It provides practical advice to help developers comply with the Portsmouth Plan’s sustainable design and construction requirements.
- 4.31 Paragraph 1.14 states that applications for the development of more than 500m² of non-residential floorspace must meet the Building Research Establishment’s Environmental Assessment Method (BREEAM) ‘excellent’ standard.
- 4.32 Paragraph 2.12 states that outline applications will be addressed on a case-by-case basis as the amount of detail which is provided varies. Although the council expects a pre-assessment estimator or

design stage assessment to be submitted, this is not a requirement. Furthermore, this would not be expected when most matters are to be reserved.

- 4.33 Paragraph 4.3 underlines policy PCS15 of the Portsmouth Plan, which requires all new build non-residential development to comply with certain BREEAM levels. Paragraph 4.5 goes on to state that a tenth category for innovation, on top of the nine BREEAM construction categories, is included to support innovation within the development industry.
- 4.34 Whilst this SPD has been identified to inform the design of the Proposed Scheme, the application of BREEAM design standards will be included as part of the detailed design of the proposed DAF Treatment Building, to be submitted at the reserved matters stage.

Developing Contaminated Land SPD (2004)

- 4.35 The Developing Contaminated Land SPD is taken into account as a material consideration when determining planning applications where land contamination is an issue.
- 4.36 The SPD states that the City Council will, in the first instance, encourage developers to seek to address contamination issues via both the appropriate use of sites and via design and layout.
- 4.37 Any land which may contain potentially harmful substances must therefore be subject to a formal risk assessment prior to its development. All risks, both short and long term, must be identified and addressed by the developer via an appropriate risk management process, in order for the LPA to be confident that the site is suitable for its proposed end use.
- 4.38 The document states that 'choosing a sensible land use in areas of contamination, to minimise or remove the need for remediation', will ensure that a site is suitable for the intended use.

Interim Nutrient Neutral Mitigation Strategy for New Dwellings (2019)

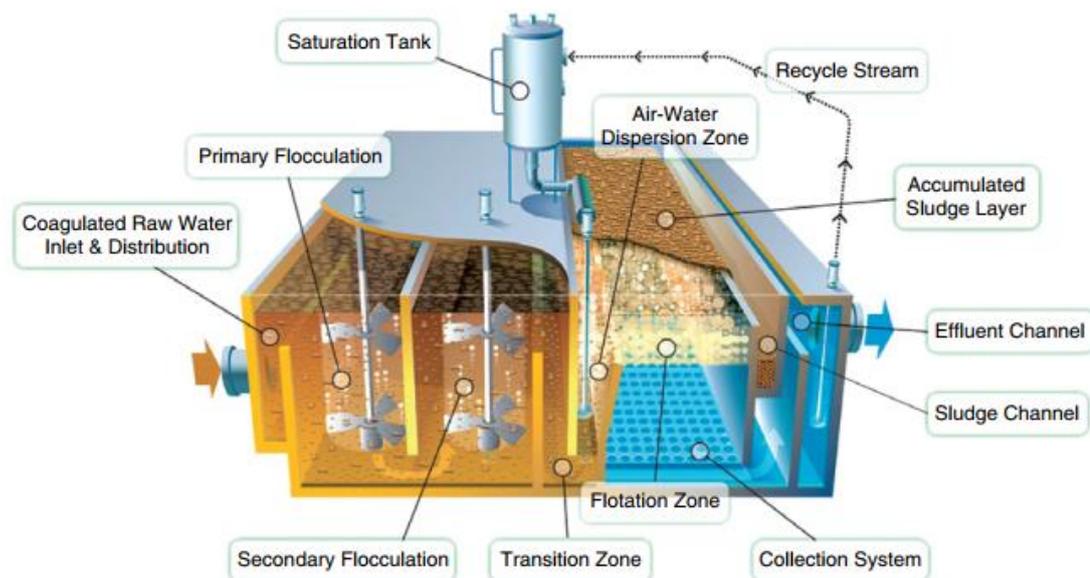
- 4.39 Portsmouth City Council's Nutrient Neutral Mitigation Strategy sets out the ways in which the Council will meet the tests of the Habitat Regulations in perpetuity, avert the potential risk of legal challenge and provide certainty for applicants regarding proposals achieving nutrient neutrality.
- 4.40 Following changes in European Case law, Natural England has advised Local Planning Authorities that all new development involving, or generating additional, overnight stays should be 'nutrient neutral', as one means of ensuring that development does not add to the existing nutrient burdens.

5. Description of the Proposed Scheme

Overview

- 5.1 Portsmouth Water is seeking to locate additional water treatment equipment, comprising a new Dissolved Air Flotation (DAF) plant, in a new building on the Farlington WTW site alongside existing water treatment assets.
- 5.2 The following works are proposed:
 - A new building to provide Dissolved Air Flotation (DAF) treatment plant for HTR water only, complete with pH correction and coagulant chemical dosing facilities;
 - Replacement of the media in the existing Farlington rapid gravity filters with Granulated Activated Carbon (GAC) media, and associated refurbishment / plant upgrade works;
 - New chemical delivery area adjacent to the proposed DAF Treatment Building;
 - Thickened sludge holding tank (approximately 140m³ in volume), to be located adjacent to the proposed building;
 - Vehicle access from Gillman Road to a service yard adjacent to the proposed building to empty the sludge holding tank and to allow direct access to the floor level of the building for deliveries;
 - Potential above-ground water pipeline from the existing site inlet overflow into an underground reservoir to the south of the proposed building;
 - Underground water pipelines, chambers and connections between the new treatment building and existing treatment facilities; and
 - Temporary contractors' compound, parking areas and a construction materials storage area within the Application Site.
- 5.3 It is proposed that the new DAF plant and chemical dosing and storage assets are housed in a new building on the existing Farlington WTW site in order to assimilate with the existing treatment assets on site. The location for the construction of the proposed building is within an existing concrete basin (the former Slow Sand Filter (SSF) basin) which is currently used very occasionally as an overflow tank facility.

Figure 5.1: Example of DAF plant (Image from Twort’s Water Supply, 6th Edition, Plate 12)



(a) Schematic of AquaDAF® flotation clarifier. (Courtesy of Infilco Degremont Inc. VA USA)

Figure 5.2: Image of Farlington WTW and proposed DAF Treatment Building*



* The image above does not illustrate the final materials and colour of the proposals. We will ensure that the materials and colour treatment within the final design reflect the character of the surrounding area.

Site Options Appraisal

- 5.4 The new DAF Treatment Building will provide the enclosure for an additional pre-treatment stage at Farlington WTW required to ensure that water is suitable for public drinking water supply. The treatment process was selected following an in-depth feasibility study assessing water treatment requirements, including those of the HTR Scheme.
- 5.5 The SSF basin was identified as the preferred location for the proposed building following assessment of a number of different locations across the Farlington WTW site against a range of engineering, landscape and environmental criteria. It provides the opportunity to re-use an existing hardstanding area within the site and minimises potential impacts on the SINC. The remainder of the existing basin hardstanding will be utilised to site the proposed new waste holding tank and chemical delivery area, as well as providing for the on-going operation and maintenance of the plant in the long term. By locating these facilities inside the basin, further reduction of impact on the SINC is achieved. During construction, the available hardstanding within the basin will provide some of the necessary supporting area for the safe and efficient construction of the new building. The location within the SSF basin should also mitigate some of the visual impact of the new building. Additional surveys and studies (e.g. structural assessments) are in progress to inform the detailed design.
- 5.6 The proposed siting and access arrangements are provided in the Site Plan attached at Appendix A (5169117-ATK-PT-FR-DR-A-0003). The site layout has been developed through outline design to provide safe vehicular access to the basin floor level for construction, operational deliveries and maintenance. The layout also offers visual continuity with the existing buildings on site.

Site Layout

- 5.7 As outlined previously, the location for the new building is within an existing concrete basin which is currently used very occasionally as an overflow tank facility. The building will be located between the existing group of buildings at the WTW site and Gillman Road. The main reason for positioning the building within the concrete basin is to re-use land that has previously been developed within the WTW and avoid the protected grassland of the East and West of Gillman Road SINC.
- 5.8 Due to the topography of the Site and the existing concrete basin, the building will be set back within the landscape to reduce its impact on views from properties and homes surrounding the WTW, including Fort Purbook Scheduled Monument to the north, the Public Right of Way from Gillman Road to Portsdown Hill Road, and Langstone Harbour to the south.

- 5.9 The layout of the new DAF Treatment Building within the SSF basin has been designed to connect to existing underground pipework routes, chemical delivery fill points and access points at both the existing road level adjacent to the basin and building base level for maintenance vehicles.
- 5.10 Figure 5.3 provides an extract from the Proposed GA Block Plan (Drawing Number 5169117-ATK-PT-FR-DR-A-0005). This shows the proposed DAF Treatment Building on the eastern side of the SSF basin, allowing the remaining area of the basin to be used as a service yard for vehicles to empty the sludge holding tank and access the building directly via an internal loading bay for deliveries and maintenance purposes. A short new access road will be provided directly from Gillman Road to the basin, requiring the existing basin wall to be cut to create a suitable opening. Figure 5.3 shows the proposed new pipework connections to the north side of the proposed building from existing facilities (the dashed green line is the existing spring water main to the site).
- 5.11 The Proposed Site Plan (5169117-ATK-PT-FR-DR-A-0003) illustrates the indicative underground pipework connections between the DAF Treatment Building and existing treatment facilities at the WTW, all of which will be located within the grass bank along the northern boundary of the WTW.

Construction compounds and parking areas

- 5.12 A construction materials laydown area will be located on the grassland adjacent to the western access track, conveniently located opposite the SSF basin and construction area. The existing southern access road into the WTW will provide access to a construction compound for the siting of portable site cabins and welfare facilities for the construction workers. Parking areas for construction vehicles will be located on the grass areas at the top of the southern access road adjacent to existing buildings and facilities, with grass crete used to protect the ground surface.

Scale of Proposed DAF Treatment Building

- 5.13 The size and scale of the proposed DAF Treatment Building is governed by the necessary capacity of the water treatment plant and the space needed to safely maintain it. It will be an industrial type building housing water tanks, chemical storage equipment, and associated general mechanical and electrical equipment. The intent is to provide a largely automated un-manned plant subject to operator monitoring and maintenance only.
- 5.14 The height of the building is governed by the required water tank levels to achieve a gravity flow into the remaining (existing) treatment process to avoid the need for additional pumping and associated environmental and sustainability costs. Sufficient headroom is needed for a travelling overhead crane that provides a safe lifting facility for the required maintenance and plant replacement.
- 5.15 The current footprint of the proposed DAF Treatment Building is approximately 1290 square metres (m²). The building structure will be approximately 43m long, 30m wide and 12m high (from the floor of the SSF basin), with 9m visible above the existing basin wall. This could be subject to change through the design development process but will not be any larger than that currently proposed. The size and scale of the building have been engineered to provide the minimum capacity for the safe operation of the treatment facilities. Figures 5.4 and 5.5 illustrate the scale of the proposed building in relation to existing buildings on the WTW site and residential properties on Woodfield Avenue (extracts from Drawing Number 5169117-ATK-PT-FR-DR-A-0010).

Design Concept

- 5.16 The fabric of the proposed DAF Treatment Building will be steel framed and industrial in appearance and design, with a low angled pitched roof for the main section of the building. The building structure will be 'stepped' so that a section of the roof facing south towards Woodfield Avenue will be lower than the main section of the building, to help reduce its overall scale and appearance. There are currently no plans to introduce windows to the building, for reasons of security and to avoid sunlight entering the building, which could encourage the growth of algae in the treated water.
- 5.17 The images under Figure 5.6 below provide an indication of the external materials for the proposed new building which would feature a brick cladding system on the eastern and southern elevations, to 'wrap' the lower section of the building, in keeping with the existing brick boundary wall and adjacent building. The cladding for the remaining areas of the building would comprise varied panels of a mixed grey, brown and green colour palette, to visually break up the massing of the elevations. The panels will help to provide some tonal colour variance against the backdrop of the surrounding grassland, the skyline and existing building group.

Figure 5.3: Block Plan of proposed DAF Treatment Building and related facilities

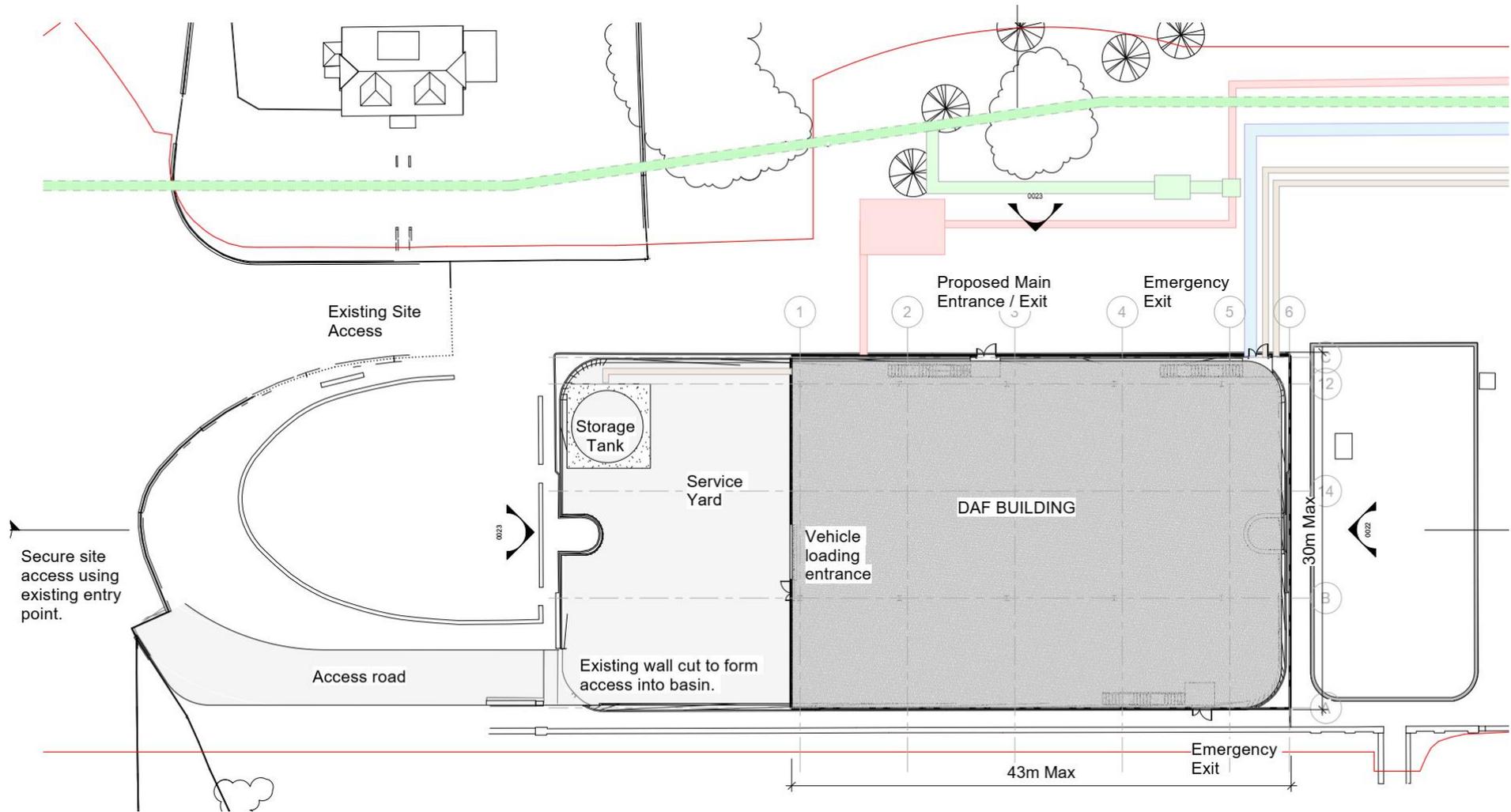


Figure 5.4: Long section of new DAF Treatment Building and existing plant buildings on the WTW site (from the south looking north)

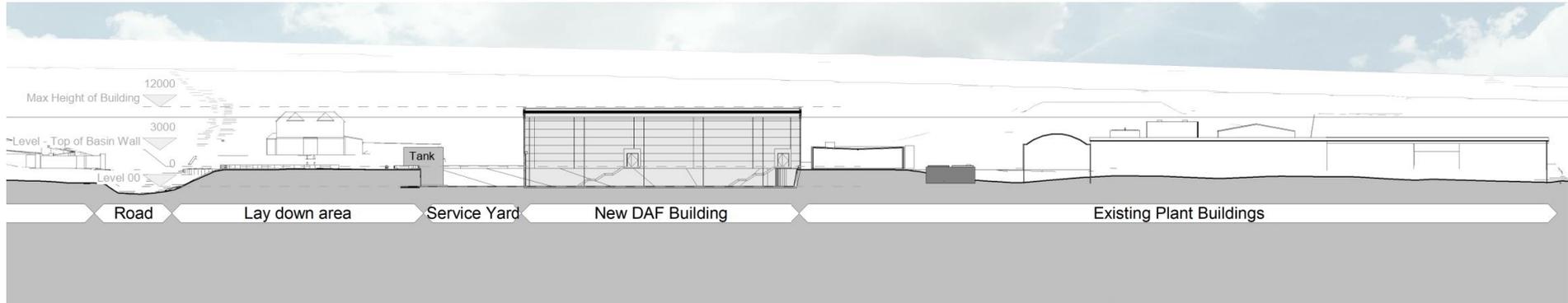


Figure 5.5: Cross section of new DAF Treatment Building and existing buildings (from the east looking west)

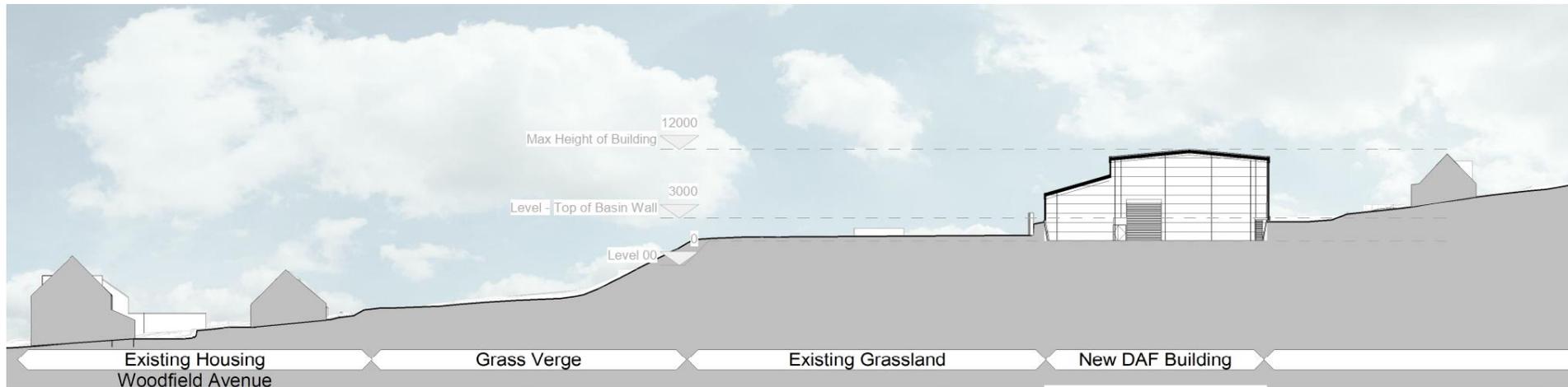
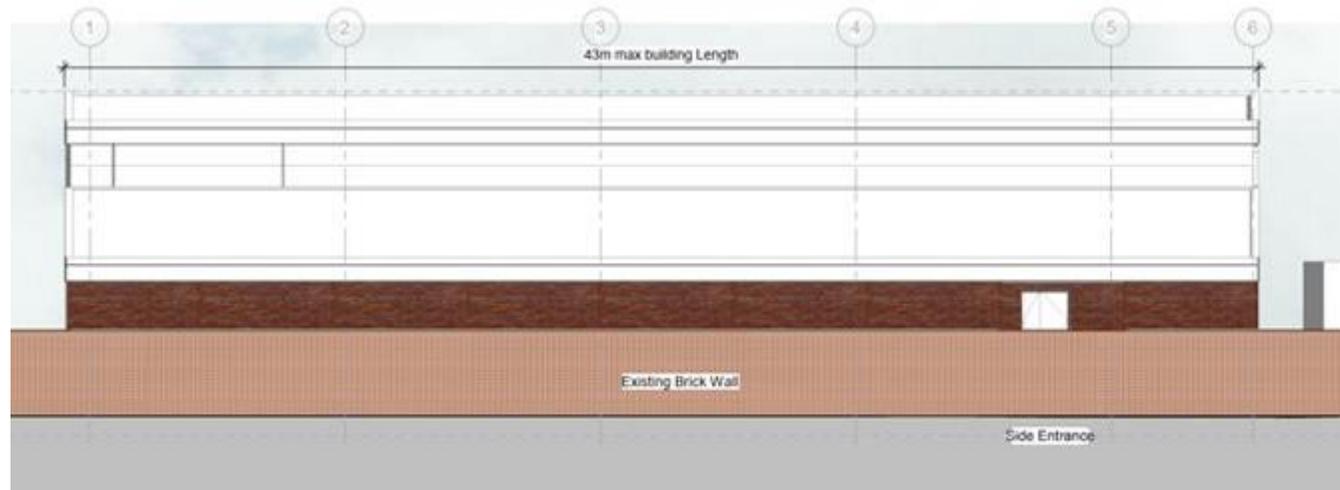


Figure 5.6: Images illustrating use of cladding system of brick and varied panels of a mixed colour palette





Proposed Access

- 5.18 Access to the northern entrance of the proposed building will be from the existing site entrance off Gillman Road via Portsdown Hill Road. The design intent is to provide pedestrian access points to the proposed building at the existing road level adjacent to the basin for routine operational pedestrian access.
- 5.19 A new access road from Gillman Road will be provided for vehicular access to the building base level (the SSF basin floor) for maintenance vehicles, chemical deliveries and tankers to remove sludge from the holding tank located west of the new building. The access road will slope upwards from Gillman Road to the basin and will be permanently surfaced in tarmacadam for the safe passage of vehicles servicing the building on a daily basis.
- 5.20 A variety of vehicles are expected to access and egress the site using the new access road into the SSF basin. The largest of which are Heavy Goods Vehicles (HGVs) associated with the chemical deliveries, which have an overall length of 10m. Swept path assessments have been carried out which demonstrate that a range of vehicles can safely access, manoeuvre internally, and egress the new access from Gillman Road into the basin. A summary of the swept path assessment is presented in Figure 4-2 of the Transport Statement (HTR-ATK-XX-XX-RP-Z-0068).

6. Development Appraisal

6.1 In accordance with PCC's pre-application response received on 16 June 2020 (Appendix B), the development appraisal focusses on the following key matters for consideration:

- Design and visual impact, including impact on Public Rights of Way;
- Ecological and environmental impacts;
- Impact on heritage assets;
- Impact on the amenity of neighbouring residents (including noise and air quality);
- Traffic generation;
- Drainage; and
- Contaminated land.

Principle of Development

6.2 The Proposed Scheme will form part of the existing Farlington WTW to provide additional water treatment facilities and is therefore appropriate for the proposed end use. The proposals will also support the operation of the proposed HTR Scheme which is an allocated site in the Havant Borough Council and East Hampshire District Council Local Plans. The new reservoir is required to safeguard the water supply for Portsmouth Water and Southern Water customers and to support additional housing growth in the wider Portsmouth Water supply area. A planning application is currently being prepared for the new reservoir, to be submitted later in 2020.

6.3 The Proposed Scheme will help to address a forecast deficit in water resources in the Hampshire area and contribute towards an increase in drinking water supplies available to Portsmouth Water's customers, resulting in a direct benefit to the community in terms of securing long term water supply, in conformity with Policy PCS16 of the Portsmouth Plan.

6.4 In conformity with saved policy CM8 of the Portsmouth City Local Plan, the development of the proposed DAF Treatment Building, sludge holding tank and service yard will take place within the existing SSF basin, making use of a previously developed site, compatible with the existing WTW. Policy CM8 requires that new development does not detract from the landscape value of Portsdown Hill, which is explored in the 'Design' and 'Landscape and Visual Amenity' sections below.

Design, Scale and Appearance

6.5 The proposed DAF Treatment Building will be of a similar scale and design to the existing built form, extending the existing cluster of treatment buildings and facilities on the WTW site. As recognised by PCC in their pre-application response, the scale and industrial appearance of the building has been guided by its functional requirements and the size of the internal plant. This is explained in detail in the section above which describes the reasons for the proposed footprint and scale of the building, which are driven by the safe operation and maintenance of the water treatment equipment within the building.

6.6 Notwithstanding the influence that functionality has had on the size and scale of the building, it is acknowledged that design and appearance are important factors in this location set within the rising ground of Portsdown Hill. The design intention is to ensure the proposed building is sympathetic to the local character, history and geography of the area, to fit in with the overall form and layout of its surroundings, in line with paragraphs 127 and 130 of the NPPF and Policy PCS23 of the Portsmouth Plan. It is considered that an innovative design may detract from its location in terms of drawing too much visual attention and 'standing out' in the landscape, which may negatively impact upon important views of Fort Purbrook Scheduled Monument and the wider landscape value. Therefore, in accordance with Policy PCS23, the design concept is to assimilate the proposed building within its site context, and to ensure the design and materials are of high quality to respect Portsmouth's cultural and natural heritage. This has been achieved by reducing the scale of the southern elevation with a stepped roof profile and introducing an external cladding system of varied muted colours and textures.

6.7 Policy PCS15 and the Sustainable Design and Construction SPD state that all non-domestic development with a net increase in floorspace of more than 500m² should contribute to addressing

climate change in Portsmouth and, unless otherwise agreed with the City Council, must achieve a BREEAM standard of 'excellent'. This guidance has informed the design development of the Proposed Scheme and the application of BREEAM standards will be integral to the detailed design of the proposed DAF Treatment Building, to be submitted at the reserved matters stage.

Landscape and Visual Amenity

- 6.8 A Landscape and Visual Appraisal (LVA) has been prepared to support the application (Document Number HTR-ATK-XX-XX-RP-L-0003), it assesses the effects of the Proposed Scheme upon nearby residential properties, the Fort Purbrook Scheduled Monument and public rights of way north and south of the Application Site.
- 6.9 The local landscape is dominated by existing residential areas to the south of the Site, and Portsmouth Golf Course and Fort Purbrook Scheduled Monument, located to the north of Portsdown Hill Road, which are surrounded by hedges and mature trees. Open fields lie to the east of Farlington WTW, with residential areas beyond.
- 6.10 Farlington WTW is located immediately south of Portsdown Hill Road/B2177 and is situated at a lower ground level than the Portsmouth Golf Course and Fort Purbrook and at a higher elevation than its residential neighbouring properties.
- 6.11 The Farlington WTW site pattern includes mostly brick-clad and industrial style buildings, including various above ground equipment structures located on concrete slabs. The buildings and facilities are clustered towards the centre of the site. At its closest point, the Farlington WTW buildings are 70m north of the residential property boundaries of Woodfield Avenue, providing adequate separation distance from the WTW.
- 6.12 The primary receptors to the Proposed Scheme include existing residential properties, the Portsmouth Golf Club, Fort Purbrook Scheduled Monument, the open access land along Portsdown Hill, the Public Rights of Way (PRoW) located to the north of the Site (routes 512, 513 and 514), and long-distance routes Wayfarers and Solent Way. In addition, PRoW number 5, leading from Gillman Road to Portsdown Hill Road.
- 6.13 The Site lies on high ground to the north of an established residential area. While the external boundary walls of the SSF basin are approximately 3.0m high and can provide an element of visual screening, the proposed DAF Treatment Building is likely to extend approximately 9m in height above the south-facing wall of the basin, with a footprint of approximately 1290m², which will be visible from nearby properties, including the PRoW and other public viewpoints.
- 6.14 Based on an initial desk-based study and field work, it is considered that a 2km study area offset from the red line boundary, is appropriate in order to identify likely significant effects on landscape and visual amenity as a result of the proposals within this land parcel. This has been identified following the Guidelines for Landscape and Visual Impact Assessment (2013) and takes into account:
- The topography of much of the surrounding areas;
 - The presence of numerous intervening elements such as buildings and tree belts, which limit longer range views from areas around the proposed development;
 - The nature of the proposals, (which share the inherent characteristics of the elements that comprise the immediately surrounding areas); and
 - The scale and massing of the proposals, which are of a similar scale than many of the surrounding existing built elements.
- 6.15 At distances beyond 2km the proposed DAF Treatment Building and associated elements may be visible, but they would be barely perceptible, with effects of limited significance.
- 6.16 The design development will consider the visual impact of the new building and potential mitigation measures will be explored, such as tree planting, fencing and materials. Figures 6.1 to 6.5 below, show that the new building can be assimilated into the local landscape, aided by the rising ground levels. Note that the colours shown in the Figures below are intended to highlight the location of the proposed new DAF Treatment Building and sludge holding tank and are not representative of the final building materials.

Figure 6.1: View of proposed DAF Treatment building from residential areas to the south

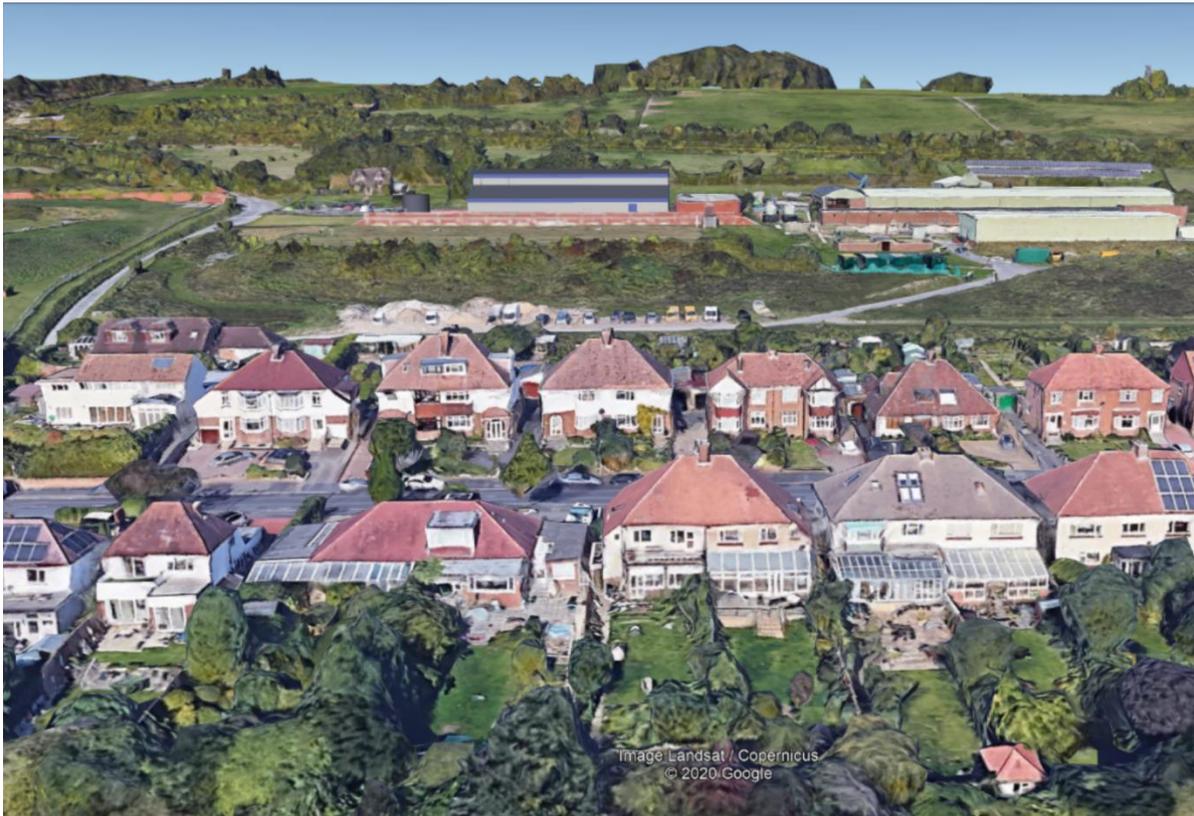


Figure 6.2: North side view of proposed DAF Treatment Building from golf course



Figure 6.3: East side view of proposed DAF Treatment Building and sludge holding tank



Figure 6.4: West side view of proposed DAF Treatment Building

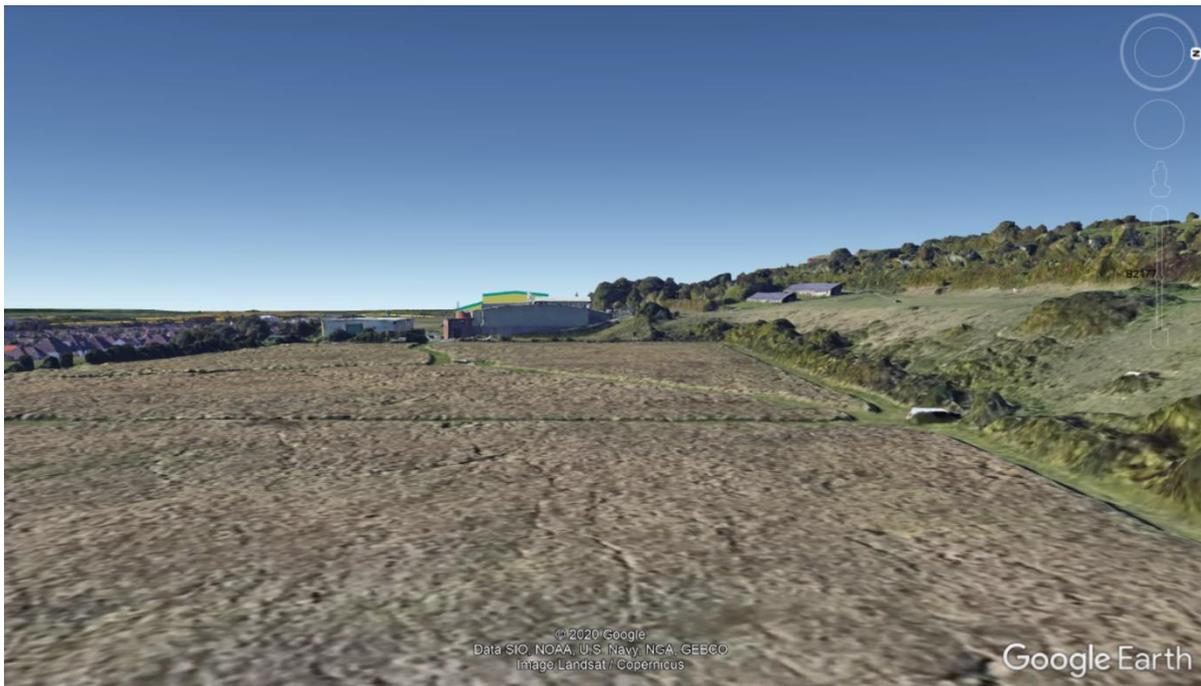


Figure 6.5: View of proposed DAF Treatment Building from Fort Purbrook Scheduled Monument footpath



Potential impacts during construction

- 6.17 Key construction impacts relating to landscape are expected to be limited to the presence of construction machinery and the introduction of man-made features. In particular, the presence of construction plant and compounds, as well as the removal of grassland vegetation, has the potential to alter the local landscape character within the study area. However, these adverse effects on local landscape are not likely to be on a wider than local level. The proposed relocation and reinstatement of impacted SINC grassland (as described in detail in the Ecology and Biodiversity section below) will reduce any adverse impacts relating to vegetation removal.
- 6.18 Existing trees within the Site are limited to a small cluster located on the grass bank to the north of the existing building group. There are four trees that could be affected by the excavation required for the underground pipework. These are two small Sycamore, a White Beam and a Beech, all of which are 1m or less in height. The minimal extent of their root systems is unlikely to be undermined during the excavation works.
- 6.19 Temporary impacts to visual receptors during construction are most likely to affect residential receptors in proximity to the Site due to construction activities associated with the main building being prominent. The alteration of existing views during the construction stage would also occur to wider local views and receptors. However, temporary visual effects relating to site traffic are assumed to be low at this stage.
- 6.20 Due to existing vegetation and site topography, it is likely that the temporary construction effects on pedestrian users of the Wayfarer's way at Portsdown Hill Road will be negligible but will have a greater effect on views from the path near to Fort Purbrook. This is also representative of effects on views from the scheduled ancient monument itself, the open access land along Portsdown Hill to the Fort's immediate south and public rights of way 512 and 514 to the north of the site. It is likely however that the sweeping character of these views out to the south coast and beyond will be largely maintained and effects are likely to be minor, with the new development becoming partially set into the existing industrial development to the east and residential settlement to the south. The character of the views out from Portsmouth Golf Course will largely be maintained, with any effects likely to be minor.

Potential impacts during operation

- 6.21 Key operational landscape impacts are likely to include disruption to landscape character through the introduction of a new large building, as well as the introduction of built form into the setting of the Fort Purbrook scheduled ancient monument. The operational effects will be long-term and permanent. The

effects are likely to be most prevalent on the existing grassland character, requiring replacement of any grassland habitat removed. Most of the proposed works will be located within the existing, disused filtration basin, making use of previously developed land and setting the main massing of the proposed built form against the existing industrial-style treatment buildings, which are of a similar scale. Due to the distance between the proposed works and the designation sites of Farlington Marshes and Chichester and Langstone Harbours, combined with the intervening existing urban settlements and vegetation, it is likely that any effect the proposed works will have on these sites will be negligible.

- 6.22 Key operational visual impacts are likely to be related to the permanent alteration of existing views through the introduction of the proposed DAF Treatment Building, the sludge holding tank and new access road. This is likely to have the greatest effect on the visual amenity of receptors in the residential property 45m north west of the proposed works (Waterworks Lodge, owned by Portsmouth Water) and residential properties to the south of the site along Woodfield Avenue and Grant Road and on residential properties to the west off Farlington Avenue and to the east along Beverly Grove.
- 6.23 While located in an elevated position, the proposed building will be set back within the rising ground of Portsdown Hill, as part of the terracing of existing buildings and facilities within the WTW. Suitable mitigation measures are recommended in section 8 of the LVA, where it is possible to reduce any potential adverse effects. These include the relocation of SINC grassland habitat elsewhere within the WTW site, potential planting of trees or shrubs of native species to enhance visual screening (mindful of potential impacts on the SINC grassland) and the use of appropriate building materials to allow the DAF Treatment Building to integrate into the landscape.
- 6.24 Local views will also be impacted within the study area, including views of and from Portsmouth Golf Course, users of Wayfarer's Way adjacent to Fort Purbrook, users of the open access land to the south of Fort Purbrook, users of Hampshire public rights of way 512 and 514. The almost complete retention of the wide sweeping views that characterise this location, combined with their elevated position and the screening nature of existing vegetation, is likely to mean that effects will not be severe on visual amenity from these assets.
- 6.25 The LVA confirms that the Proposed Scheme is unlikely to result in any significant adverse landscape and visual effects both at the construction and operational stages. In accordance with Policy PCS23 of the Portsmouth Plan and saved policy CM8 of the Portsmouth City Local Plan, the Proposed Scheme will not adversely affect the cultural and natural heritage of the Site and its surroundings, particularly the views and setting of Fort Purbook scheduled ancient monument and Portsdown Hill. The scale and appearance of the proposed DAF Treatment Building, combined with the selection of suitable high quality external materials, is considered appropriate to its particular site context.

Ecology and Biodiversity

- 6.26 An Ecological Impact Assessment (Document Number: HTR-ATK-XX-FR-RP-Z-0003) has been prepared to support the planning application for the DAF Treatment Building and associated facilities, including an assessment of the potential impacts of the Proposed Scheme on the non-statutory designated East and West of Gillman Road SINC and other designated sites.
- 6.27 The EclA report describes the ecological baseline and evaluates the nature conservation importance of ecological features present within the zone of influence for the Proposed Scheme. The assessment identifies impacts (both positive and negative) on important ecological features, sets out agreed mitigation measures and provides details on the significance of effects for each important ecological feature.
- 6.28 The EclA has been informed by a series desk studies and field surveys. A desk study was completed in April 2020, reviewing biological records from Hampshire Biodiversity Information Centre (HBIC), including statutory sites within 1 km, non-statutory sites within 500 m, protected and notable species records within 2 km. A review was also made of a 2016 National Vegetation Classification (NVC) report and Invertebrate survey report, and 2019 NVC monitoring data for the wider SINC. An ecology walkover survey was undertaken in February 2020, and a building survey for roosting bats was undertaken in April 2020, both by Portsmouth Water. An extended Phase 1 Habitat Survey was also undertaken in June 2020 by ECOSA.

Habitats and Species

- 6.29 There are 4 statutory designated sites within 1km (located 850m south) of the Application Site as follows:
 - Chichester and Langstone Harbours Wetland of International Importance (Ramsar site);

- Chichester and Langstone Harbours SPA;
 - Langstone Harbour SSSI; and
 - Farlington Marshes LNR.
- 6.30 The Ramsar site, SPA and SSSI feature estuarine basins and include features such as intertidal mudflats, sandflats, saltmarsh, coastal lagoons, coastal grazing marsh, shingle ridges, sand and shingle spits, and sand dunes. The habitats support internationally and nationally important numbers of overwintering wildfowl and waders, including breeding bird species. The Farlington Marshes LNR is a flower-rich grazing marsh, internationally important for the bird populations that it supports.
- 6.31 The Solent Maritime Special Area of Conservation (SAC) lies 1.05km south of the Site. This is a major estuarine system with extensive estuarine flats, featuring significant areas of cord-grass and the second-largest aggregation of Atlantic salt meadows in south and south-west England.
- 6.32 The Application Site is located within the Land East and West of Gillman Road SINC. Within the boundaries of the Farlington WTW and the SINC, there is a mosaic of calcareous grassland, lowland meadow and neutral grassland, with calcareous grassland also sitting within the Application Site boundary itself. Notable species include corn parsley and flattened meadow-grass which are county scarce species.
- 6.33 There are 12 other SINC located within 500 m of the Application Site, most of which feature semi-improved grassland with significant element of unimproved grassland. One low-use Brent Goose Strategic Site is located 60m to the north of the Application Site, with two others located within 500m.
- 6.34 HBIC provided records for the 10 species of bats within 2 km, with no records within the Application Site. The buildings on Site were inspected for roosting potential for bats and all features identified were considered to have negligible potential.
- 6.35 HBIC also provided records for 125 bird species notable for their protection status or conservation concern, with no records within the Application Site. The buildings on Site may provide nesting habitat for common species. Scrub and hedgerows are present in the wider WTW site.
- 6.36 There are records of common reptiles within 1km, all beyond 500m from the Application Site. Habitats immediately outside and along the edges of the Application Site boundary offer suitability for supporting common reptile species.
- 6.37 The 2016 Invertebrate survey recorded one notable species of invertebrate within the Application Site, and a further eight notable species were recorded within the boundaries of the WTW site. HBIC provided records for 39 species of invertebrates listed on Schedule 5 of the WCA 1981 within 2 km. Habitats within the Application Site are considered suitable for notable invertebrate species.
- 6.38 There are no suitable habitats for great crested newts, otter, water vole or dormice within the Application Site boundary, and no records for these species within 2km.

Potential impacts and proposed mitigation

- 6.39 Due to the scale and nature of the proposals, it is considered that the impacts of the proposed works will not extend beyond the Application Site and its immediate surroundings.
- 6.40 The principal impacts from the Proposed Scheme are the permanent and temporary loss of grassland habitat, as well as habitat degradation of the wider East and West of Gillman Road SINC. The Proposed Scheme will see the permanent loss of 0.0217ha of calcareous grassland from within the SINC boundary as a result of the development of the new access road from Gillman Road to the SSF basin and the hatch covers to proposed underground chambers north of the proposed facilities. There will also be the temporary loss of approximately 0.299ha of calcareous grassland, for the proposed new pipework to be laid leading into the new DAF Treatment Building. The permanent and temporary of calcareous grassland will potentially result in an adverse impact on the SINC.
- 6.41 In accordance with the objectives for enhancing the habitat value of the development site under Policy PCS13 of the Portsmouth Plan, proposed mitigation measures for areas of permanent loss of calcareous grassland will involve the translocation of topsoil to a species-poor area of grassland within the SINC, to improve the quality of grassland in this area and maintain the overall species diversity of the SINC. The location of the translocated topsoil is to be confirmed in consultation with Portsmouth Water ecologists.
- 6.42 For areas of temporary loss, a similar methodology for the reinstatement of grassland will be applied, as well as the utilisation of pollution prevention guidelines to minimise dust pollution from construction. The turf from the area of calcareous grassland to be temporarily removed, will be carefully stripped, stored, and managed to maintain condition, before being reinstated over the new pipeline route. Bare

soil areas will be left to recolonise naturally. The exact process will be detailed in consultation with Portsmouth Water ecologists. The time period between loss and reinstatement will be approximately 1 month. The condition of the grassland is not considered to significantly deteriorate in this time frame, if managed correctly.

- 6.43 An Ecological Clerk of Works will oversee the grassland strip on Site under a method statement and provide pre-construction checks for protected species.
- 6.44 Given the compensation and mitigation measures proposed, and the permanent loss of a small area of calcareous grassland from the SINC, impacts through habitat loss and disturbance of diverse grassland habitats on the integrity of the SINC will not be significant. In accordance with Policy PCS13 of the Portsmouth Plan, no significant residual effects are predicted on the intrinsic value of the habitats on the Application Site nor on the conservation status of the populations of protected species that may be associated with these habitats.

Biodiversity Net Gain

- 6.45 The NPPF encourages net gains for biodiversity to be sought through planning policies and decisions on development proposals. An initial assessment of the measures that will be required to achieve biodiversity net gain has therefore been included as part of the outline planning application. The Biodiversity Net Gain Assessment (Document Number HTR-ATK-XX-FR-RP-Z-0005) identifies the baseline biodiversity value (in biodiversity units) and discusses the avoidance, mitigation and compensation hierarchy. The assessment should be viewed in conjunction with the submitted EclA.
- 6.46 The approach for achieving biodiversity net gain for the Proposed Scheme follows the Lawton principles (the qualitative measures) by improving the quality of the Site, increasing the size of the site and increasing connectivity across the Site.
- 6.47 As identified in the EclA, The Proposed Scheme will see the permanent loss of 0.0217ha of calcareous grassland from within the SINC boundary, and the temporary loss of approximately 0.299ha of calcareous grassland, potentially resulting in an adverse impact on the SINC.
- 6.48 In accordance with the biodiversity objectives of Policy PCS13 of the Portsmouth Plan, a fully detailed enhancement strategy for the Application Site and the wider SINC, is proposed to be created in collaboration with the Portsmouth Water Environment Team and ecologists. This will detail areas where enhancements can be made to the existing habitats on the Application Site, that go beyond the current management strategy of the Site.
- 6.49 There are a number of other SINCS in the local area, which have similar calcareous and neutral grassland habitats to those within the Application Site to be lost. The Biodiversity Opportunity Network map can be utilised to identify potential suitable receptors of an enhancement strategy. A project that increases an area of priority habitat and improves connectivity of priority habitat even if it is still less than 10% is making a contribution to local biodiversity and should be classed as net gain.
- 6.50 This approach for seeking 'off-site' mitigation can be combined with the compensation measures sought for the wider Havant Thicket Reservoir project, as similar sites are likely to be identified.
- 6.51 It is considered that this strategy could be part of a planning condition or reserved matter, to be produced after detailed design for the Proposed Scheme has been finalised.

Habitats Regulations Assessment

- 6.52 A Habitat Regulations (Screening) Assessment has been undertaken (Document Number HTR-ATK-XX-FR-RP-Z-0004) due to the presence of European designated Sites located within 2 km of the Proposed Scheme, including the Chichester and Langstone Harbour SPA and Ramsar site, the Solent Maritime SAC and the Solent and Isle of Wight Lagoon SAC. Additional SAC's within 30 km where bat species are a qualifying feature have also been assessed.
- 6.53 The Chichester and Langstone Harbour SPA is located 0.8 km south of the Application Site, which is beyond the threshold for disturbing any of the qualifying species associated with the SPA with the European site itself. The habitats within the Proposed Scheme footprint are managed calcareous grassland, hardstanding and buildings. The grassland habitat is potentially suitable for foraging waterfowl species at high tide, however there no records of any of the qualifying features (bird species) within 500m of the Application Site.
- 6.54 There is a network of non-designated terrestrial wader and brent geese sites that support the Chichester and Langstone Harbour SPA. Most are greater than 400m from the Application Site, enabling them to be scoped out from further assessment. The closest site (P02) is located

approximately 60m north of the Application Site, which has records of birds in low numbers (for instance, just 1 brent goose recorded and no recent records after 2002). This site is already subject to noise and disturbance from various sources, including the existing operational activities of the Farlington WTW site, traffic noise from the Portsmouth Hill Road B2177 immediately south, and the A3 motorway 890m west. Construction noise and vibration impact levels are unknown but would be localised to the working area of the new DAF Treatment building and would be temporary only, with the construction predicted to last 8 to 12 months. The impact to the population of brent geese associated with the SPA is considered to be negligible.

- 6.55 Any impacts of the Proposed Scheme on air quality would be associated with the construction phase, and in particular relating to dust generation. Air quality and dust impacts have been valued at negligible. Once the improvements to Farlington WTW are complete, no air quality impacts are expected during the operational phase.
- 6.56 The Chichester and Langstone Harbour Ramsar Site is located 0.8 km south of the Application Site. This distance is beyond the threshold for disturbing any of the qualifying assemblages associated with Criterion 5 and 6 of the Ramsar, within the European site itself, during both construction and operation. This site has recorded single birds only, and not a significant number to impact the assemblages associated with the Ramsar site. Construction noise and vibration impact levels are currently unknown but would be localised to the working area of the new DAF Treatment building and would be temporary. Furthermore, any impacts of the Proposed Scheme on air quality would be associated with the construction phase only and have been valued at negligible.
- 6.57 The Biddlesford Copse SAC is located 19.1 km from the Site. There are no features such as watercourses or continuous stretches of hedgerows connecting this European Site to the Scheme. The permanent loss of grassland within the Scheme footprint is very small in extent and therefore will not undermine the population associated with this designated site. Furthermore, the designation is subject to a negligible air quality and dust impact.
- 6.58 The Singleton and Cocking Tunnels SAC is located 20.3 km from the Site. There are no features such as watercourses or continuous stretches of hedgerows connecting this European Site to the Scheme. The permanent loss of grassland within the Scheme footprint is very small in extent and will not undermine the population associated with this designated site. The designation would be subject to a negligible air quality and dust impact during the construction stage of the Proposed Scheme.
- 6.59 As outlined above, potential impact pathways have been identified for Chichester and Langstone Harbour SPA and Ramsar Site, Briddlesford Copse SAC and Singleton and Cocking Tunnels SAC. These potential impact pathways have been assessed and no likely significant effects from the Scheme alone or in-combination with other plans and projects are anticipated. As such, the Scheme is in accordance with Policy PCS13 of the Portsmouth Plan due to the proposals retaining the intrinsic habitat value of these designated sites. The proposals also align with key air quality policies such as Policy PCS14 of the Portsmouth Plan, as well as the guidance set out in the Air Quality and Air Pollution SPD, due to the negligible air quality and dust impacts envisaged across all four designated sites.

Cultural Heritage

- 6.60 A Heritage Assessment (Document Number HTR-ATK-WZ-FR-RP-Z-0001) has been completed as part of the outline planning submission. The appraisal includes a settings assessment with specific reference to long-range views of Fort Purbrook.
- 6.61 The assessment found that there are no designated heritage assets within the Application Site. There are no World Heritage Sites, Registered Parks and Gardens or Registered Battlefields in the 1km Study Area.
- 6.62 Farlington WTW is located in relative proximity to a variety of designated heritage assets, including Listed Buildings and Scheduled Monuments. These are set out below:
- Fort Purbrook Scheduled Monument, located 300 m north west of the Scheme;
 - Fort Purbrook that part in Portsmouth Church Parish Grade II* Listed Building, located 300 m north west of the Scheme;
 - The Old Rectory Grade II Listed Building, located 310m south of the Scheme;
 - Milestone, East of Junction with Rectory Avenue Grade II Listed Building, located 310m south of the Scheme;
 - Bridges and Faulkner Monument Grade II Listed Building, located 310m south of the Scheme;

- Knight Monument Grade II Listed Building, located 310m south of the Scheme;
 - Prince Monument Grade II Listed Building, located 310m south of the Scheme;
 - Church of St Andrew Grade II Listed Building, located 310m south of the Scheme;
 - Boundary Stone Grade II Listed Building, located 310m south of the Scheme; and
 - Grig and Swale Monument Grade II Listed Building, located 310m south of the Scheme.
- 6.63 The setting of the Listed Buildings will not be affected as a result of the Proposed Scheme due to their distance from the Site.
- 6.64 There are no non-designated heritage assets within the Application Site. There are 11 non-designated heritage assets within the Study Area with a further seven findspots comprising of prehistoric pottery sherds. The non-designated heritage assets consist of:
- Field System – Iron Age;
 - Farlington – Medieval;
 - Underground Royal Observer Corps Monitoring Post – Modern;
 - Iron Age Pit and Ditch – Iron Age;
 - Roman Pit – Roman;
 - Camp Down – Post Medieval;
 - Site of Farlington Redoubt – Modern;
 - Prehistoric Pit – Iron Age;
 - Defensive Ditch Associated with Fort Purbrook – Modern;
 - Remain of Lane – Post Medieval; and
 - WWII Spigot Mortar Gun Emplacement – Modern.
- 6.65 The Heritage Assessment confirms that there is very limited potential for archaeological remains within the Site, due to the proposed use of the former SSF basin for the development of the DAF Treatment Building and sludge tank, and that the Farlington WTW site has already been disturbed with previous development. Any archaeological assessment has therefore been excluded from the Heritage Assessment.
- 6.66 The assessment has confirmed that no impact is predicted on the significance of Fort Purbrook. The Scheme will not affect how the wider historic landscape is properly understood or appreciated, or specific industrial and military assets, which are defined within the landscape. In relation to the setting of Fort Purbrook, its setting is not only formed by visual relationships but also other factors such as historical associations. Although the building would be a new element within the view from the Scheduled Monument, it will be embedded within the already existing 20th century development which plays a detracting role in its setting. It would not additionally detract from the contribution of the Fort's setting to its significance. The assessment concludes that there will not be an appreciable loss to the significance of any of the heritage assets identified, which equates to less than substantial harm.
- 6.67 The Proposed Scheme complies with the requirements of Policy PCS23 of the Portsmouth Plan and saved policy CM8 of the Portsmouth City Local Plan, in terms of protecting important views and settings of key buildings from and to Portsdown Hill, including Fort Purbrook scheduled monument. The proposed DAF Treatment Building adopts the appropriate scale and appearance to assimilate with the existing built context of the WTW site, to ensure it does not detract from the setting of the Fort. The proposed facilities will provide a clear public benefit in securing future water supplies, whilst ensuring that any harm on the designated heritage asset is less than substantial, to reflect the principles set out in Paragraph 196 of the NPPF.

Residential Amenity

- 6.68 This section provides an appraisal of the likely impacts of the Proposed Scheme on the amenity of residential properties located to the south of the Application Site, particularly on Woodfield Avenue and Grant Road, relating to privacy, light, noise, vibration and air quality.
- 6.69 Consideration has been given to the location, height and scale of the proposed DAF Treatment Building in terms of the relationship to existing buildings within Farlington WTW and the wider site and surroundings. It is recognised that the proposed DAF Treatment Building will be visible from residential properties to the south of the WTW site located on Woodfield Avenue or Grant Road. However, due to the distance of these properties from the Site (a minimum of 70m), there would be no

direct impact upon residential amenity as the building will not cause an over-bearing impact, light pollution or over shadowing of the properties. Mitigation measures will be incorporated into the detailed design at the Reserved Matters stage, such as screen planting and the selection of high quality external cladding materials of brick and varied muted colour panels, to assist in visually screening the proposed building from the properties directly to the south.

- 6.70 The underground construction, including pipework and chambers, will take place well within the Site envelope, to minimise adverse effects on neighbouring residential properties during construction.
- 6.71 Portsmouth Water will engage with local residents on the construction programme and ensure construction causes the least impact and disruption. These measures will be set out in a Construction Management Plan, to be produced by the contractor at the Reserved Matters stage.
- 6.72 The PRoW number 5/Gillman Path, from Gillman Road to Portsdown Hill Road, will remain open during the construction works and therefore users should not be impacted by the proposals. Suitable mitigation measures will also be incorporated into the design at the Reserved Matters application stage to assist in visually screening the proposed building from the properties directly to the south on Woodfield Avenue.

Noise and Vibration

- 6.73 Noise and vibration impacts during construction will be temporary and localised to the working area of the new DAF Treatment Building, the area adjacent to the existing WTW buildings and the underground pipe works. As the rear elevation of the residential property closest to the Site is located approximately 100m away, the construction noise and vibration effects during construction will be within acceptable levels.
- 6.74 Residential and commercial receptors to the west, south and east of Farlington WTW will be temporarily impacted by the noise and vibration associated with the excavation works and construction of the new building and associated facilities. With regard to potential impacts to users of Portsmouth Golf Course to the north of Portsdown Hill Road/B2177, the noise from the highway is expected to buffer the noise associated with the construction works at Farlington WTW.
- 6.75 The appointed contractor will adopt a series of control measures to reduce and minimise noise and vibration exposure levels wherever possible, such as:
 - Works to take place in accordance with BS 5228:1997 “Noise and Vibration Control on Construction and Open Sites, Part 1: Code of Practice for Basic Information and Procedures for Noise and Vibration Control”;
 - Appropriate selection of plant to minimise noise emissions, properly maintained and used in accordance with the manufacturer’s recommendations;
 - Use of suppressors, silencers and other means of noise reduction on air operated equipment and exhausts;
 - Breakers to be fitted with mufflers;
 - Where plant is used intermittently, this should be shut down or throttled back during periods of non-use;
 - Compressors should be covered and insulated except when access is required;
 - Noise barriers/acoustic screens should be provided around the working area where compressors or breakers are in use; and
 - Where a generator is required to power plant on site, due regard will be given to residential and other sensitive receptors and be acoustically screened if required.
- 6.76 It is anticipated that a construction noise assessment would be prepared by the appointed contractor, to be submitted either at the Reserved Matters stage or in response to a planning condition attached to any grant of outline planning permission.
- 6.77 During operation, the proposed plant to be included within the DAF Treatment Building is expected (pending detailed design) to include:
 - 2 No. recycle pumps (including anti-vibration mounting) – approximately 70dB at 1m each;
 - 2 No. compressor with acoustic hood – approximately 70dB at 1m each; and
 - Ventilation fans with attenuators –noise levels TBC during detailed design.
- 6.78 From the source noise level data provided above, this gives a total source noise level of 76dB at 1m distance from the noise generating plant.

- 6.79 The closest receptors to the Site are approximately 45m to the north-west (Waterworks Lodge) and approximately 100m to the south (Woodfield Avenue). Applying distance attenuation corrections to the total source noise level gives levels of approximately 43dB at Waterworks Lodge, and approximately 36dB at Woodfield Avenue.
- 6.80 Assessment of this type of plant would normally follow the methodology set out in BS4142 2014 + A1 2019, which allows for the application of corrections to account for tonality and intermittency. As details of operation pattern are not available, a +3dB correction has been applied for intermittency. A +4dB correction has been applied for tonality as BS4142 states this is the correction to use when a source “is clearly perceptible”. It should be noted that these corrections have been applied to assess a ‘worst case’ scenario. The corrections give total rating noise levels of 50dB at Waterworks Lodge and 43dB at Woodfield Avenue.
- 6.81 However, according to the strategic noise maps produced by DEFRA, baseline noise measurements in the area around the Site are in the range 55-60dB LAeq,16h in the daytime and 50-55dB Lnight at night. A BS4142 assessment would typically be undertaken against background noise levels (LA90,T). In the absence of any other data, 10dB has been subtracted from the LAeq and Lnight values to give an approximation of LA90. This gives background noise levels of 45dB LA90 in the day and 40dB LA90 at night.
- 6.82 Comparing the rating noise levels to background noise levels shows that noise emissions from the site may exceed background levels at night by up to 10dB at Waterworks Lodge and 3dB at Woodfield Avenue. In the daytime, the rating noise levels may exceed the background noise levels by up to 5dB at Waterworks Lodge but may be 2dB below background levels at Woodfield Avenue. Therefore, the proposed plant has the potential to give rise to significant effects at the nearest receptors.
- 6.83 These initial calculations have not taken into account:
- Screening from potential barriers (existing built development);
 - Soft ground attenuation;
 - Attenuation due to the DAF Treatment Building envelope;
 - Noise from ventilation fans; and
 - Noise emitted from the plant on the existing site.
- 6.84 It has also been assumed that all plant will be located close together and have therefore been considered as a single point source of noise.
- 6.85 Based on the level of detail available at this outline stage of the development, it is proposed that a more detailed noise assessment is undertaken at the detailed design stage, when relevant information on the final plant to be operated within the DAF Treatment Building is available.
- 6.86 In practice, the building envelope itself should be sufficient to reduce the background noise levels when the plant is operational. The building will be designed and constructed to include suitable mitigation to bring the background noise to acceptable levels and the plant will be housed within acoustic containers, to ensure noise and vibration is minimised at source. The Proposed Scheme will accord with Policy PCS23 of the Portsmouth Plan, in terms of protecting the amenity of residents surrounding the Site and maintaining a good standard of living environment through the effective mitigation of potential adverse noise impacts incurred by the development during construction and operation.

Air Quality

- 6.87 Any impacts of the Proposed Scheme on air quality would be associated with the construction phase, and in particular relating to dust generation.
- 6.88 Receptors sensitive to air quality surrounding Farlington WTW include the residential and commercial properties to the east, south and west, employees and visitors of Portsmouth Golf Club and Fort Purbrook Activity Centre to the north, users of footpaths in the area, and ecology receptors including the SINC designation.
- 6.89 Dust is likely to be generated during the excavation of the existing concrete base layer within the SSF basin and construction of the reinforced concrete slabs for the new DAF building, including excavation and laying of pipework, and the removal and storage of topsoil, spoil and other materials elsewhere on site. Construction vehicles are also likely to generate dust, including vehicles used to transport construction materials to Farlington WTW. The operation of the construction plant and equipment may result in exhaust emissions.

- 6.90 Mitigation measures to minimise dust generation during construction would include:
- During pipelaying, topsoil will be stripped and stored within the Site;
 - Barriers will be erected between the work area and sensitive receptors where considered necessary;
 - A water bowser should be used on site to dampen areas at risk of creating dust and on unsurfaced routes when working alongside properties, where considered necessary;
 - Cutting equipment should use water as a dust suppressant or should use a suitable local exhaust ventilation system;
 - Maintaining all material handling areas and medium to heavily used vehicle routes in a dust free state as far as is practicable;
 - Spoil and other material will be reused in the scheme as far as possible, limiting road transfer of dusty material;
 - Excavation works will not be undertaken on very windy, dry days;
 - Vehicles removing excavation materials will have their loads effectively sheeted;
 - Installation of wheel washing facilities as appropriate, and a requirement for all heavy vehicles leaving the pipeline route onto highways to use them as necessary;
 - Consideration given to cleaning the public highway at route access points using vacuum sweeper brushes or other specialised road cleaning equipment as necessary, subject to approval from the Highway Authority.
- 6.91 Impacts upon air quality as a result of the construction of the Proposed Scheme are likely to be minimal and temporary, with the appointed contractor able to mitigate dust generation using standard construction methodologies such as the measures outlined above.
- 6.92 Once the improvements to Farlington WTW are operational, no air quality impacts are expected.
- 6.93 In accordance with paragraph 1.5.2 and the guidance set out in the Air Quality and Air Pollution SPD, including Policy PCS14 of the Portsmouth Plan, the appointed contractors will ensure that air pollution is minimised during construction, and once operational, the new facilities will preserve the existing air quality in the local area for residents and other sensitive receptors.

Traffic and Transport

- 6.94 Potential traffic and transport impacts during construction include increased traffic on local roads from construction vehicles, heavy equipment, construction workforce movements and delivery of materials. It is proposed that construction related traffic will access the site via Portsdown Hill Road and Gillman Road, avoiding the residential roads to the south of the Site.
- 6.95 Two construction compounds will be provided within the existing site boundary of Farlington WTW to enable materials and construction equipment to be stored on site, to avoid additional trips.
- 6.96 While the DAF Treatment Plant is operational, chemical deliveries will be required, and sludge will be generated as a result of the water treatment process, which will need to be removed from site on a daily basis. Traffic movements are likely to be minimal and will be required during operation of the DAF process only, with two sludge tankers per day visiting the WTW to take the sludge off site, accessed from Crookhorn Lane via Portsdown Hill Road to the north. Chemical deliveries to support the DAF process would utilise this same approach route (which is the same route used for current chemical deliveries to the WTW) and be expected to be up to twice weekly while the DAF plant is running. The priority will be to avoid residential areas, to reduce local traffic impacts. It is noted that the expected usage of Havant Thicket Reservoir water will be occasional, e.g. for drought relief and maintenance runs, and therefore tanker movements and additional chemical deliveries to Farlington WTW would similarly be occasional.
- 6.97 A Transport Statement (Document Number HTR-ATK-XX-XX-RP-Z-0068), has been prepared to support the planning application. This sets out the transport issues relating to the Proposed Scheme during construction and operation and identifies measures to deal with the anticipated transport impacts of the development.
- 6.98 The assessment states that the existing site access from Gillman Road is to be maintained. It is considered that the proposals are unlikely to exacerbate the existing visibility constraint at the access, with operations broadly expected to be consistent with the existing situation, albeit with a marginal increase in vehicle numbers.

- 6.99 A variety of vehicles are expected to access and egress the Site, the largest of which are HGV's associated with the chemical deliveries. Swept path assessments have been carried out which demonstrate that HGVs can safely access, manoeuvre internally, and egress the site access from Gillman Road and the new access road into the basin.
- 6.100 It is anticipated that the construction of the new DAF Treatment Building will be in line with a full Construction Management Plan, to be prepared and submitted to the LPA by the appointed construction contractor at the Reserved Matters stage. It is expected that the broad majority of construction materials will be brought on-site using typical articulated HGVs, consistent with some of the vehicles currently accessing the Site.
- 6.101 The Proposed Scheme is expected to result in up to three additional daily vehicular movements, which is considered a negligible increase. Furthermore, the numbers of vehicular movements on a typical day would be lower than this figure, as the forecasts presented are based on a 1-in-20 drought year. Therefore, the Scheme will not materially impact on the operation of local junctions and the local highway network.
- 6.102 The Transport Statement concludes that the proposals will generate a marginal increase in vehicle numbers accessing the Site. Appropriate space exists on site for all materials and operatives parking to be accommodated within the existing curtilage. The Transport Statement confirms that the outline application should be considered acceptable from a transport perspective due to the limited extent of impacts upon traffic and transport infrastructure as a result of the Scheme. This accords with paragraph 102 of the NPPF, by ensuring the development will not adversely affect the local road network, by giving rise to a negligible increase in daily vehicle movements to the Site.

Flood Risk and Drainage

- 6.103 The Farlington WTW site lies in Environment Agency Flood Zone 1 and is, therefore, not subject to fluvial or tidal flooding at least up to the 1 in 1000 (0.1%) annual probability. There are no known watercourses in the near vicinity of the site. The risk of groundwater flooding is expected to be low due to highly permeable chalk geology. No historical fluvial/tidal or groundwater flooding incidents have been recorded at the site. However, surface water flooding incidents have been recorded south of the site along Woodfield Avenue and Grant Road.
- 6.104 As the Proposed Scheme is located within the existing water treatment works that needs to remain operational at times of flood, it falls within the 'essential infrastructure' classification of the NPPF.
- 6.105 The Site is at low risk of surface water flooding. The increase in hardstanding area due to the Scheme will be minimal, confined to the proposed access road into the SSF basin. The DAF Treatment Building will be constructed within the existing concrete SSF basin.
- 6.106 The southern end of Gillman Road is at risk of surface water flooding and there is a possibility that the WTW site might be cut-off during an extreme rainfall event. However, any vehicles visiting the site for maintenance or deliveries during such an event would use the northern end of Gillman Road, directly off Portsdown Hill Road, and avoid the southern access to the WTW.
- 6.107 Since the Proposed Scheme is located in Flood Zone 1, the Sequential Test is deemed to be passed, and being categorised as essential infrastructure, no Exception Test is required.
- 6.108 Based on the guidance provided in paragraph 163 and footnote 50 of the NPPF 2019, it is not considered necessary to prepare a site-specific Flood Risk Assessment to support the planning application. This is based on the location of Farlington WTW within Flood Zone 1; the site has not been identified by the Environment Agency as having critical drainage problems; and the land has not been identified in Portsmouth's Strategic Flood Risk Assessment as being at increased flood risk in future.

Drainage

- 6.109 There will be no requirement for foul sewage drainage connections as no new permanent welfare facilities are to be provided in the new DAF Treatment Building. Suitable existing toilet facilities are available in the existing control building on the WTW site.
- 6.110 It is proposed to connect the surface water drainage from the new DAF Treatment Building to the existing site surface water drainage system, which is understood to discharge via the local storm water drainage to an existing outfall to the estuary. The new building at Farlington WTW will be located in the existing old SSF basin, which comprises an extensive concrete base with walls around the perimeter. The new access road to the basin and DAF Treatment Building will be constructed with a permanent

hard surface. The remainder of the development site comprises a number of temporary compounds and parking areas required for the construction stage, which will be surfaced with a permeable sub-base material or protective grasscrete. The development is therefore not expected to result in significant additional impermeable areas and surface water run-off. Therefore, given that the proposed DAF Treatment Building will connect to the existing surface water drainage infrastructure already available at the site, the proposals conform with Policy PCS12 of the Portsmouth Plan.

- 6.111 A Surface Water Drainage Strategy is expected to be developed at detailed design stage, which would be submitted to the LPA for approval at the Reserved Matters stage, or in response to a planning condition attached to any grant of outline planning permission.

Nitrates

- 6.112 It is recognised that the national and international designated habitats located to the far south of the Site at Langstone Harbour and the Solent are the subject of unfavourable conservation status under the Habitats Regulations, due to the impact of nitrates leaching into water courses that enter the sea. The Proposed Scheme will generate additional wastewater as a result of the DAF treatment process, but due consideration has been given to nutrient neutrality. The very nature of the proposed water treatment process is to provide a drinking water supply and the technical design of this process has ensured that it will not add to existing nutrient burdens.
- 6.113 With reference to the guidelines set out in PCC's Interim Nutrient Neutral Mitigation Strategy for New Dwellings, the Scheme will not result in overnight stays and given the proposed use at the Application Site, mitigation will not be required for domestic wastewater arisings.

Land Contamination

- 6.114 Potential contamination impacts may occur during the construction and operation of the Proposed Scheme. Construction activities could potentially introduce new sources of contamination and disturb and mobilise existing sources of contamination, which may pose a risk to human health and controlled water receptors. The operation of the Proposed Scheme may potentially introduce new sources of contamination and below ground services could create additional potential pathways for the migration of potential contamination.
- 6.115 A Land Contamination Desk-top Study (Document Number: HTR-ATK-WZ-FR-RP-Z-0003) has been prepared to support the planning application. The stated purpose of the report is to identify potential contamination risks associated with the Proposed Scheme through the preparation of a factual summary of the available information and a Preliminary Conceptual Site Model (PCSM) developed through the identification and assessment of risk presented by potential contaminant linkages.
- 6.116 Section 3 of the report provides a review of the historical and current land use of the Site and surrounding area (within 500m of the Site) to identify the nature and location of potentially contaminative activities that may have taken place on or adjacent to the site. The Site forms part of the Farlington WTW which dates back to 1908 and provides potable water to the Portsmouth and Havant area. Prior to the construction of the WTW, the site was predominantly farmland. Development from 1898 to 2020 has comprised the construction of a series of reservoirs, filtration beds, a pumping station and various treatment buildings. An old quarry (Farlington Farm Chalk Pit), and a chalk pit, gravel pit and associated air shafts were present 500m to the north and north west of the site, but the pits and quarry are assumed to have been infilled.
- 6.117 Section 3 also provides details of the environmental setting of the Site, with the following findings:
- Made Ground is expected to be present on the Site, associated with the existing SSF basin and other infrastructure. The SSF basin is expected to have been constructed out of concrete, brick and graded stone with Portland cement rendering. The existing structure was built on slightly sloping ground and the southern part of the existing structure may have been founded on a layer of fill used to even up the site. The quality and nature of this fill is unknown.
 - Reference to British Geological Society (BGS) mapping indicates that no superficial deposits are recorded to be present underlying the site.
 - The bedrock underlying the site is expected to comprise the White Chalk Sub-Group, comprising Newhaven Chalk Formation.
 - The Envirocheck report (appended to the Desk-top Study) indicates that the Site is in an area unlikely to be affected by coal mining and there are no natural cavities with the White Chalk Sub-Group within the Site boundary.

- There are a number of former chalk, sand and gravel sites within 500m of the Site which have ceased production. There is an aggregates for recycling site (Farlington Redboubt) which is currently active, located 168m north east of the site, north of Portsdown Hill Road.
- Ground stability conditions at the Site range from low, to very low, to no hazard.
- The Envirocheck report states that the Site is in a lower probability radon area, as less than 1% of homes are above the action level. Therefore, no radon protective measures are necessary in the construction of new buildings on site.
- The bedrock underlying the site is classified by the Environment Agency as a Principal Aquifer and the Head deposits are classified as a Secondary Undifferentiated Aquifer. The site is not indicated to be located within a groundwater Source Protection Zone.
- There are no licensed groundwater abstractions located within 500m of the Site.
- There is one licensed discharge consent to groundwater located 163m to the north east of the Site at a machinery hire operator for the discharge of trade effluent / site drainage to land via soakaway.
- In terms of hydrology, there are no surface watercourses, surface water abstractions, current licensed discharge consents, or pollution incidents to controlled waters located within 500m of the Site.
- The Site is located within a Nitrate Vulnerable Zone.
- The Farlington WTW site lies in Environment Agency Flood Zone 1 and is therefore not subject to fluvial or tidal flooding at least up to the 1 in 1000 (0.1%) annual probability. There are no known watercourses in the near vicinity of the site. There is also limited potential for groundwater flooding to occur at the site.
- Reference to Envirocheck report [1] indicates that there is a historic registered landfill (pumping station) located on Eveleigh Road 390m to the south of the site which received inert waste from 1 May 1984. Authorised waste included excavated natural materials and road making materials.
- There are three licensed waste management sites located within 500m of the Site, identified as a physical waste treatment facility (163m north east), a registered waster transfer site (183m north east) and a metal recycling site / scrap yard (275m south east).
- The Envirocheck report indicates that there is a Local Authority Pollution Prevention and Control site located 117m to the east of the site. It is licensed for PG3/1 blending, packing, loading and use of bulk cement.
- There are other trade sites located within 500m of the Site with the potential to use contaminants of concern, which include a landfill site, upholstery cleaners, fuel station, tyre dealer, concrete producer and commercial vehicle dealer.
- Unexploded ordnance (UXO) risk maps for the site are included in Appendix E of the Desk-top Study. The site is recorded as being at a high risk of encountering UXO due to Farlington WTW being a bombing target during WWII. It should be noted that Portsmouth Water have operated the Farlington WTW site from before WWII and Atkins have not received any records from Portsmouth Water to indicate that the area received any bomb hits, nor is there a change in the structure that would indicate such an event. However, it is recommended that a detailed UXO desk study is undertaken prior to breaking ground.

6.118 Based upon the historical and present land uses identified in the Envirocheck report and other desk study sources, a PCSM has been produced, identifying potential sources of contamination, migration or exposure pathways and receptors for the Site.

6.119 Section 4 of the Desk-study Report describes the potential source – pathway – receptor PCLs (potential contaminant linkages), which are defined by interpretation of the information contained within the desk study and the details of the Proposed Scheme. Potential contaminants are listed in Table 4.3 of the Desk-study Report, identified based on the on-site features (Made Ground) and off-site activities or features (which include Made Ground, a bulk fuel tank on the wider WTW, a landfill site, former mineral sites, waste management sites, former fuel station and industrial/commercial uses located within 500m of the Site). Potential receptors are identified as site operatives, maintenance workers and visitors to the Site and wider WTW, occupants of surrounding residential and commercial properties, groundwater within aquifers, existing and proposed services and structures, East and West of Gillman Road SINC and Purbrook Park Ancient Woodland. Potential migration and exposure pathways are then identified for each group of receptors, such as dermal contact or inhalation of contaminants, and migration of contaminated water, ground gas, vapours, dust or fibres.

- 6.120 The assessment of the PCSM upon each source, pathway and receptor is presented in Table 4.5 of the Desk-study Report. The assessment shows that the risks to human health are considered to be very low to low; the risks to controlled waters are moderate/low; risks to property / services are identified to be very low to low; and the risks to ecology are very low.
- 6.121 In terms of impacts on human health, there will be short term exposure of soils during construction although best practice site management procedures are likely to be implemented which will minimise short term exposure risk. Post construction, the site will comprise hardstanding or grassed areas minimising potential for end users to come into direct contact with soils or for dust to be generated. Ground gases are unlikely to be a significant concern as infrastructure is likely to be vented. Future maintenance on the site may require localised excavation with potential for workers to come into direct contact with soils or inhale soil derived dusts. This work is likely to be short term and infrequent. It been assumed that PPE and health and safety best practices will be adopted to manage acute risks to operatives, maintenance workers and site visitors. Following the construction of the DAF plant ground cover at the site will comprise hardstanding or grassed areas with minimal areas of exposed bare soil or dust, therefore it is unlikely that off-site human health receptors will be come into contact / ingest potential soil contaminants or dust which may have migrated off-site.
- 6.122 In relation to on-site controlled waters, the works are likely to result in disturbance of soils and unknown Made Ground / fill material during excavation and construction which may result in the release of contaminants in unsaturated Made Ground soils with potential migration to groundwater. Best practice procedures are required to be implementation to minimise leaching of unsaturated soils in excavations and stockpiles into underlying aquifers. In relation to off-site controlled waters, potentially contaminated groundwater may migrate to the Site from off-site sources. However, given the distance from potential off-site receptors to the site, risks are considered to be low.
- 6.123 In relation to property/services, current and future below ground infrastructure is assumed to have been / will be constructed to appropriate standards for the site to withstand attack from soil chemistry. Ground gases may be generated from areas of infilled ground. Ground gas has the potential to migrate into proposed on-site structures in permeable strata. However, ground gases are unlikely to be a significant concern as infrastructure is likely to be vented.
- 6.124 In relation to ecology receptors off-site, the works are likely to result in disturbance of soils and unknown Made Ground / fill material during excavation and construction which may result in the release of contaminants in unsaturated Made Ground soils with potential migration to groundwater. Best practice procedures required to be implemented to minimise migration of contaminated waters / dust / fibres. Following the construction of the DAF Treatment Building, ground cover at the Site will comprise hardstanding or grassed areas with minimal areas of exposed bare soil therefore it is unlikely that off-site ecological receptors will be come into contact / ingest potential soil contaminants which may have migrated off-site.
- 6.125 Potential waste soils will be generated during construction through excavations and during installation of services. Excavated soils may be re-used on site, if required. However, where excess soils are generated or where soil arisings generated from the earthworks are classified as unsuitable for re-use on site, these materials may require disposal off-site.
- 6.126 If material is proposed to be removed or re-used off-site or reused on-site as part of the works, it will require appropriate classification and / or sorting to demonstrate suitability. The actual material to be excavated should be analysed and assessed as suitable for re-use by assessing potential risk to human and controlled water receptors. There should also be a clear requirement for reuse in the scheme design and may require consideration as part of a materials management plan or U1 exemption. It is the Contractor's responsibility to appropriately classify material excavated and ensure adequate testing is completed.
- 6.127 The PCSM assessment set out in the Desk-top Study demonstrates that the Proposed Scheme is unlikely to have significant impacts in relation to land contamination and appropriate standard mitigation measures will be incorporated to deal with any potential contamination, in compliance with saved Policy DC21 of the Portsmouth City Local Plan (2006). Notwithstanding the findings of the assessment, as a precautionary measure, the report recommends that further assessment of the ground conditions underlying the Site through additional ground investigation including contamination chemical testing is carried out to confirm the contamination status of the site and inform the potential for material re-use.

7. Conclusion

Summary of Assessment Results

- 7.1 The results of the assessments show that the Proposed Scheme is not likely to cause significant impacts on ecology or heritage assets, landscape quality, visual and residential amenity or the local road network.
- 7.2 In summary, the findings of the assessments demonstrate the following;
- Design, Scale and Appearance
 - The proposed DAF Treatment Building will be of a similar scale and design to the existing built form, extending the existing cluster of treatment buildings and facilities on the WTW site. The scale and industrial appearance of the building has been guided by its functional requirements and the size of the internal plant, driven by the safe operation and maintenance of the water treatment equipment within the building.
 - The proposed design concept is to assimilate the proposed building within its site context, and to ensure the design and materials are of high quality to respect Portsmouth's cultural and natural heritage. This will be achieved by reducing the scale of the southern elevation with a stepped roof profile and introducing an external cladding system of brick and panels of varied muted colours.
 - Landscape and Visual Amenity
 - While located in an elevated position, the DAF Treatment Building will be set back within the rising ground of Portsdown Hill, as part of the terracing of existing buildings and facilities within the WTW. Suitable mitigation measures are recommended in section 8 of the LVA, where it is possible to reduce any potential adverse effects.
 - The LVA confirms that the Proposed Scheme is unlikely to result in any significant adverse landscape and visual effects both at the construction and operational stages. The Scheme will not adversely affect the cultural and natural heritage of the Site and its surroundings, particularly the views and settings of Fort Purbook scheduled ancient monument and Portsdown Hill. The scale and appearance of the proposed building, combined with the selection of suitable high quality external materials, is considered appropriate to its particular site context.
 - Ecology and Biodiversity
 - The principal impacts from the Proposed Scheme are the permanent and temporary loss of grassland habitat, as well as habitat degradation of the wider East and West of Gillman Road SINC. The Proposed Scheme will see the permanent loss of 0.0217ha of calcareous grassland from within the SINC boundary as a result of the development and the temporary loss of approximately 0.299ha of calcareous grassland.
 - This will be mitigated by the translocation of topsoil to a species-poor area of grassland within the SINC, to improve the quality of grassland in this area and maintain the overall species diversity of the SINC. For areas of temporary loss, a similar methodology for the reinstatement of grassland will be applied. The turf from the area of calcareous grassland to be temporarily removed, will be carefully stripped, stored, and managed to maintain condition, before being reinstated. Bare soil areas will be left to recolonise naturally.
 - In relation to Biodiversity Net Gain, a fully detailed enhancement strategy for the Application Site and the wider SINC will be developed, which will detail areas where enhancements can be made to the existing habitats on the Application Site and other SINC's in the local area, in order to increase the area of priority habitat and improve connectivity of priority habitat to achieve a net gain.
 - The Habitats Regulations (Screening) Assessment demonstrates that potential impact pathways have been identified for Chichester and Langstone Harbour SPA and Ramsar Site, Briddlesford Copse SAC and Singleton and Cocking Tunnels SAC. These potential impact pathways have been assessed and no likely significant effects from the Scheme alone or in combination with other plans and projects are anticipated.

- Cultural Heritage
 - The Heritage Assessment has confirmed that no impact is predicted on the significance of Fort Purbrook or the setting of Fort Purbrook. Although the building would be a new element within the view from the Scheduled Monument, it will be embedded within the already existing 20th century development which plays a detracting role in its setting. The assessment concludes that there will not be an appreciable loss to the significance of any of the heritage assets identified, which equates to less than substantial harm.
- Residential Amenity
 - Consideration has been given to the location, height and scale of the proposed DAF Treatment Building in relation to existing buildings within Farlington WTW and the wider surroundings. It is recognised that the proposed DAF Treatment Building will be visible from residential properties to the south of the WTW site located on Woodfield Avenue or Grant Road. However, due to the distance of these properties from the Site (a minimum of 70m), there would be no direct impact upon residential amenity as the building will not cause an over-bearing impact, light pollution or over shadowing of the properties.
 - Mitigation measures will be incorporated into the detailed design, such as screen planting and the selection of high quality external materials, to assist in visually screening the proposed building from the properties located directly to the south.
 - Noise and vibration effects during construction will be temporary and managed by the contractor through the adoption of a series of control measures to reduce and minimise noise and vibration exposure levels wherever possible. Once operational, the noise generating equipment within the DAF Treatment Building will be fitted within acoustic containers to minimise the noise impacts at source.
 - Air quality impacts as a result of the construction of the Proposed Scheme are likely to be minimal and temporary, with the appointed contractor able to mitigate dust generation, using standard construction methodologies. Once the Proposed Scheme is operational, no air quality impacts are expected.
- Traffic and Transport
 - Potential traffic and transport impacts during construction include increased traffic on local roads from construction vehicles, heavy equipment, construction workforce movements and delivery of materials. It is proposed that construction related traffic will access the Site via the route - Crookhorn Lane, Portsdown Hill Road and Gillman Road to the north, avoiding the residential roads to the south of the Site.
 - During operation, the proposals will generate a marginal increase in vehicle numbers accessing the Site (up to 3 additional traffic movements per day to serve the DAF treatment plant). The Transport Statement confirms that the outline application should be considered acceptable from a transport perspective due to the limited extent of impacts upon traffic and transport infrastructure as a result of the Scheme.
- Flood Risk and Drainage
 - Farlington WTW is located within Flood Zone 1; the site has not been identified by the Environment Agency as having critical drainage problems; and the land has not been identified in Portsmouth's Strategic Flood Risk Assessment as being at increased flood risk in future.
 - The development is not expected to result in significant additional impermeable areas and surface water run-off, given the majority of the development will take place within the existing old SSF basin. It is proposed to connect the surface water drainage from the new DAF Treatment Building to the existing site surface water drainage system, which is understood to discharge via the local storm water drainage to an existing outfall.
- Nitrates
 - The Proposed Scheme will generate additional wastewater as a result of the DAF treatment process, but due consideration has been given to nutrient neutrality. The very nature of the proposed water treatment process is to provide a drinking water supply and the technical design of this process has ensured that it will not add to existing nutrient burdens.
- Land Contamination
 - The Land Contamination Desk-top Study demonstrates that the Scheme is unlikely to have significant impacts in relation to land contamination and appropriate standard mitigation measures will be incorporated to deal with any potential contamination.

Reserved Matters

- 7.3 It is anticipated that the following details will be provided at the Reserved Matters stage or to address planning conditions attached to any grant of outline planning permission:
- **Design** – Detailed elevation drawings and an external materials schedule will be provided, based on the design concepts proposed as part of this outline application. The application of BREEAM standards will be integral to the detailed design of the proposed DAF Treatment Building. Detailed access design drawings will be provided to complement the outline design.
 - **SINC Habitat Enhancement Strategy** – A fully detailed enhancement strategy which will identify areas where enhancements can be made to the existing habitats on the Application Site and other SINC in the local area, to increase the area of priority habitat and improve connectivity.
 - **Construction Noise Assessment** – It is anticipated that the appointed contractor will provide an assessment to support an application under Section 61 of the Control of Pollution Act 1974, to agree the detail of measures to reduce noise from the construction works.
 - **Noise Impact Assessment** – It is proposed that a more detailed noise assessment is undertaken at the detailed design stage, when relevant information on the final plant to be operated within the DAF Treatment Building is available.
 - **Construction Management Plan** – Construction traffic will be managed by the appointed contractor, to be set out in a CMP to be produced by the contractor.
 - **Surface Water Drainage Strategy** – Details of the proposed surface water drainage incorporating sustainable drainage systems will be provided at the detailed design stage.
 - **Ground Investigation** – Further assessment of the ground conditions underlying the Site through additional ground investigation including contamination chemical testing to confirm the contamination status of the Site and inform the potential for material re-use.

Case for the Development

- 7.4 The principle of development has been established by the need to address a forecast deficit in water resources in the Hampshire area and contribute towards an increase in drinking water supplies available to Portsmouth Water and Southern Water customers, resulting in a direct benefit to the community in terms of securing long term water supply.
- 7.5 The development of the proposed DAF Treatment Building, sludge holding tank and service yard will take place within the existing SSF basin, making use of a previously developed site, compatible with the existing WTW. This will reduce impacts on the SINC habitat which is confined to the formation of the new access road and excavation of the underground pipework. A mitigation strategy is proposed that will lead to the reinstatement of calcareous grassland and the enhancement of the wider SINC habitat.
- 7.6 Consideration has been given to the design of the proposed DAF Treatment Building in terms of assimilating the structure into the landscape, with proposals to reduce visual impact with the use of a stepped roof line and a cladding system to provide some tonal colour variance against the backdrop of the surrounding grassland, the skyline and existing building group.
- 7.7 The results of the assessments show that the Proposed Scheme is not likely to cause significant impacts on ecology, heritage assets, flood risk, drainage, nitrates and land contamination. Traffic impacts will be negligible on the local road network due to the minimal increase in additional vehicle movements to the Site. Residential amenity will be protected in terms of minimising noise and air quality impacts during construction and operation. Mitigation measures will be further developed at the Reserved Matters stage, with selected assessments and strategies undertaken to inform the detailed design.
- 7.8 The Proposed Scheme aligns with relevant policies of the adopted development plan and national planning policy and there are no impediments to the progression of the Proposed Scheme. It is respectfully requested that the application is supported to enable the grant of outline planning permission with a 5-year start date for the submission of Reserved Matters, in order to provide flexibility in terms of the ongoing design development of the Scheme and the start of construction.

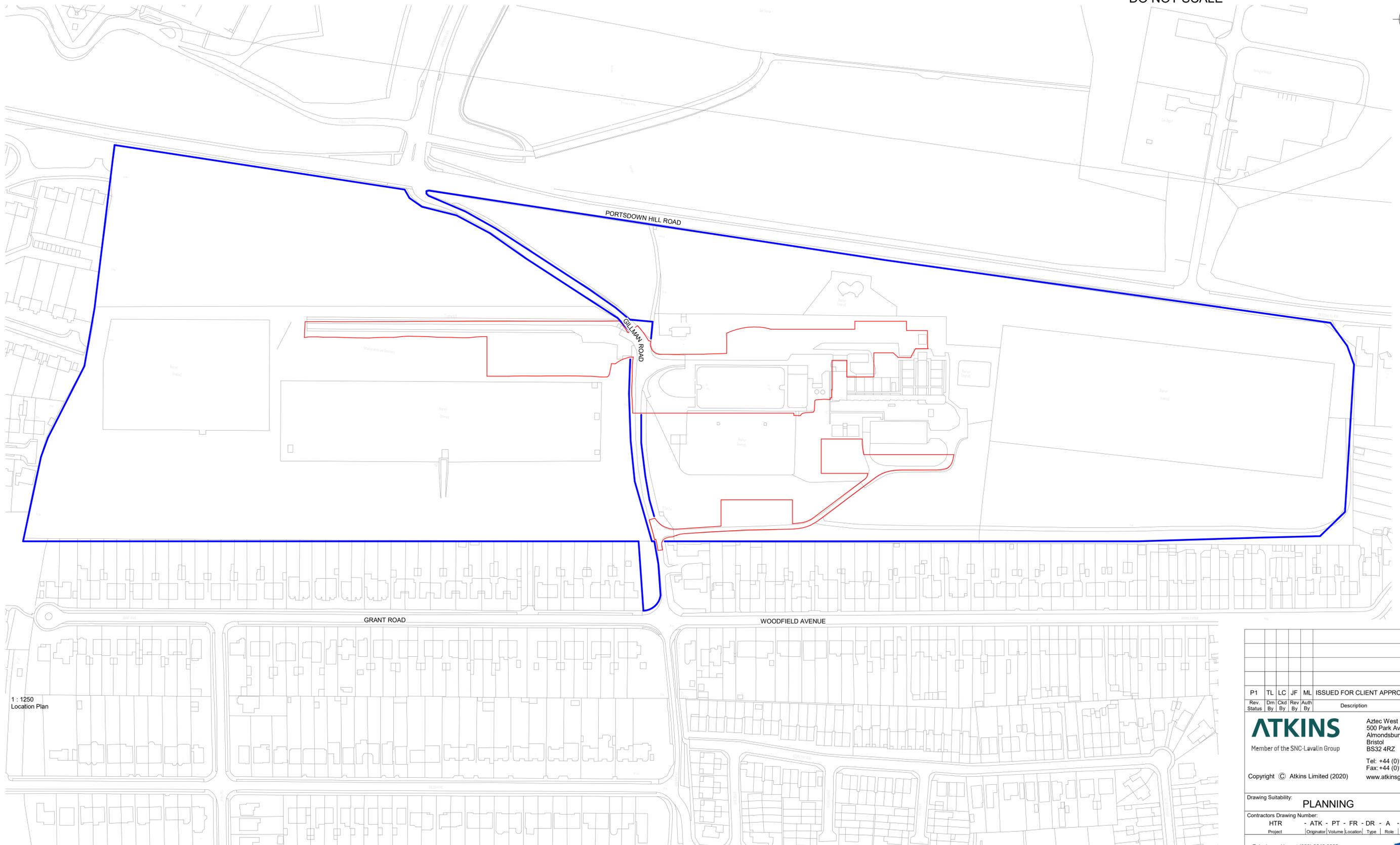
Appendices

Appendix A. Location and Site Plans

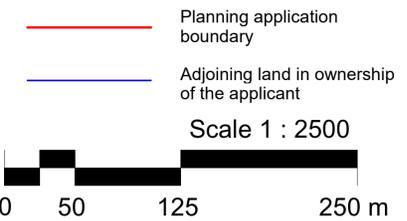
A.1. Location Plan

A.2. Proposed Site Plan

DO NOT SCALE



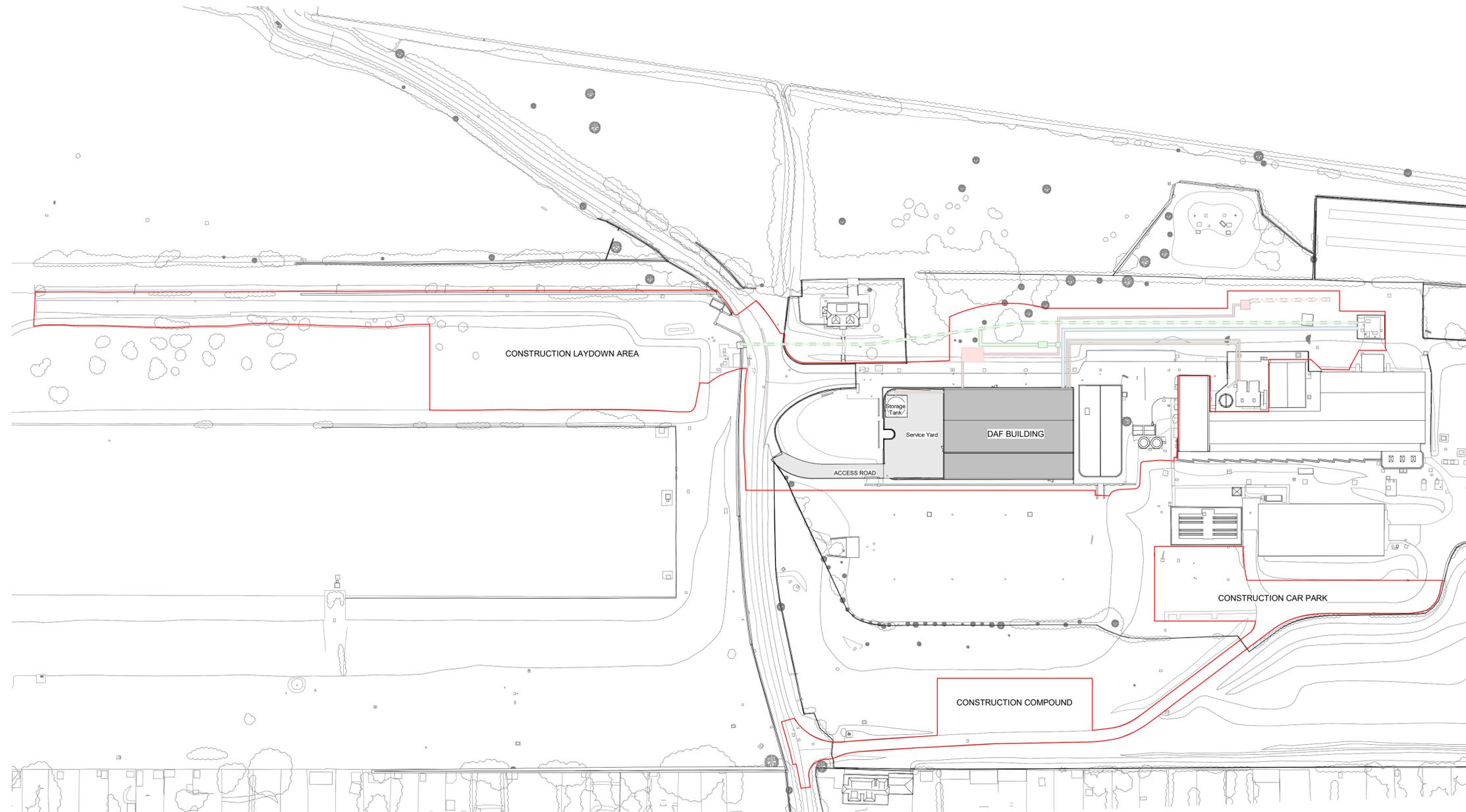
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Location Plan



P1		TL	LC	JF	ML	ISSUED FOR CLIENT APPROVAL	10.07.20
Rev. Status	Dm. By	Ckd. By	Rev. By	Auth. By	Description	Date	
							Aztec West 500 Park Avenue Almondsbury Bristol BS32 4RZ Tel: +44 (0)1454 662000 Fax: +44 (0)1454 663333 www.atkinsglobal.com
Copyright © Atkins Limited (2020)							
Drawing Suitability: PLANNING							Status: S2
Contractors Drawing Number: HTR - ATK - PT - FR - DR - A - 0001							
Telephone: Havant (023) 9249 9888 Fax: Havant (023) 9245 3632 Website: www.portsmouthwater.co.uk Registered Office: PO Box 8 West Street Havant Hampshire PO9 1LG REGISTERED IN ENGLAND No. 2536455							
Project Ref. No: HTR		Sheet: 1 of 1		Scale: 1 : 1250		Sheet Size: A1	
Project Title: FARLINGTON WATER TREATMENT WORKS							
Drawing Title: Farlington WTW Proposed Dissolved Air Flotation (DAF) Treatment Facilities Location Plan							
Portsmouth Water Drawing Number:							Rev: P1



DO NOT SCALE



BELOWGROUND SITE PIPEWORK

- New below ground pipework connection chambers
 - Existing raw reservoir water pipeline
 - New raw reservoir water pipeline
 - New spring water main pipeline to site
 - Existing spring water main pipeline to site
 - New DAF treated water
 - New below ground sludge pipework
- Refer to drawing 0007 for more detail

General Note:

Scale @ A3: 1:1500

Planning application boundary

1 : 750
Proposed Site Plan

P1	TL	LC	JF	ML	ISSUED FOR CLIENT APPROVAL	10.07.20
Rev. Status	Drn. By	Ckd. By	Rev. By	Auth. By	Description	Date

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Drawing Suitability:	PLANNING	Status:	S2
Contractors Drawing Number:	HTR - ATK - PT - FR - DR - A - 0003		
Project:	Originator	Volume	Location

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Portsmouth Water

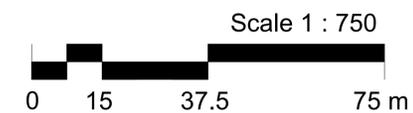
Registered Office: PO Box 8 West Street
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REGISTERED IN ENGLAND No. 2536455

Project Ref. No:	Sheet:	Scale:	Sheet Size:
HTR	1 of 1	As indicated	A1

Project Title:
FARLINGTON WATER TREATMENT WORKS

Drawing Title:
Farlington WTW
Proposed Dissolved Air Flotation (DAF) Treatment Facilities
Proposed Site Plan

Portsmouth Water Drawing Number:	Rev:	P1
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Appendix B. PCC Pre-application Response

Planning and Economic Growth

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Our Ref: 20/00450/PAPA05
Your Ref:

16 June 2020

Dear Laura

LOCATION: Pumping Station, Farlington Water Treatment Works, Gillman Road, Portsmouth, PO6 1BL

PROPOSAL: Construction of new building and associated works (20/00450/PAPA05)

I am writing to provide you with pre-application advice in relation to the above. This letter should be read in conjunction with my emails dated 19 and 29 May 2020.

Site

Farlington Water Treatment Works lies on the north-east side of Portsmouth, to the east of Gillman Road and to the south of Portsdown Hill Road. The land levels on the site rise from south to north and vehicle access is from Gillman Road. The site lies within the East and West of Gillman Road Site of Importance for Nature Conservation (SINC), recognised for its semi-improved calcareous grassland. The site also has archaeological potential and there is the potential for contamination to exist. A public right of way runs close to the site, from Gillman Road to Portsdown Hill Road (Ref. number 5).

As identified within the submitted Design and Access Statement, there are also a number of other protected areas and buildings within 2km of the site, including:

- Farlington Marshes Local Nature Reserve;
- Solent Special Protection Areas (SPAs);
- Langstone Harbour Site of Special Scientific Interest (SSSI);
- Solent Maritime Special Area of Conservation (SAC);
- Portsdown SSSI;
- Fort Purbrook Grade II* Listed Building and Scheduled Ancient Monument (SAM)
- Bevis's Grave long barrow and early medieval cemetery SAM (within Havant Borough)

Proposal

The proposal is for the construction of a new building to accommodate a Dissolved Air Flotation (DAF) plant for the treatment of wastewater, along with associated works relating to the upgrade of existing plant and equipment at the site. The

building would be located to the east of Gillman Road on an existing concrete basin, which currently has limited use, and would measure approximately 43m in length, 30m in depth and up to 12m in height. Indicative plans show a rectangular building with a shallow pitched roof, stepping down in height on its southern side and set partially into the rising land on the northern side. To facilitate the proposed development, two temporary construction compounds would be required.

The development is essential for the operation of the proposed Havant Thicket Reservoir (HTR) and Pipeline, which is allocated within the neighbouring Havant and East Hampshire Local Plans and is required to ensure long term water supply needs are met. The HTR project would also improve the resilience of the Portsmouth water supply and support housing growth. The wider benefits of the proposal are therefore recognised.

The application is proposed to be submitted in outline form with some matters reserved, including detailed appearance. However, given the significant scale of the proposed building and its sensitive location, it is considered that an assessment of the appearance would be fundamental to the determination of the application. It is therefore the Council's view that 'appearance' should be included as one of the matters considered at outline stage.

Planning history

A summary of the planning history for the site dating back to 2001 is set out within Table 2.1 of the submitted Design and Access Statement and this has been corroborated against the Council's records. The water treatment works itself was given permission in 1978 (ref. A*24844/A), and there are some other applications relating to the site dating back to the early 1990's.

Key considerations and relevant policies

The key matters for consideration in the determination of an application would be:

- Design and landscape visual impact, including impact on public right of way
- Ecology / Environmental impact
- Impact on heritage assets
- Impact on the amenity of neighbouring residents (e.g. through noise/vibration and during construction);
- Traffic generation
- Drainage
- Contaminated land

Relevant policies within the Portsmouth Plan (2012) and saved policies from the Portsmouth City Local Plan (2006) would include: PCS13 - a greener Portsmouth; PCS15 - sustainable design and construction; PCS17 - transport; PCS23 - design and conservation; DC21 - Contaminated Land and CM8 - Portsdown Hill.

Design and visual impact

Saved policy CM8 states that development on previously developed sites on the Hill will be permitted provided that the new use is compatible with its location and does not detract from landscape value. Policy PCS23 of the Portsmouth Plan requires all exceptional quality design in new developments, as supported by the objectives of the National Planning Policy Framework (NPPF).

The submitted plans highlight the significant scale of the building, the visual impact of which would be exacerbated by its location on rising land. The importance of a

detailed Landscape and Visual Impact Assessment to accompany the application has been recognised and specific advice has been provided by the Council's Landscape Architects regarding the scope of this assessment (email dated 19 May 2020).

In terms of design, it is recognised that to a large extent, the scale and appearance of the building will be guided by its functional requirements and the size of the internal plant. The submitted plans indicate a fairly standard rectangular shaped building, albeit with a reduced height on the southern side. It is accepted that it may not be possible to physically 'break up' the mass of the building, but there would be the opportunity to reduce its visual mass through the use of innovative design features and appropriate materials and colour treatment. It is understood that the potential for a Green Roof is being considered, which could have benefits for both visual impact and biodiversity net gain. If time permits, the Council would very much encourage further discussion on such design matters prior to an application submission.

Ecology

There is a designated SINC on the site and the site also lies close to a number of statutory and non-statutory areas of ecological value. An assessment of the impact of the development on these protected areas will therefore be fundamental to the determination of the scheme.

As the main development would predominantly be located on an existing concrete basin, there is not anticipated to be a significant direct impact on the grassland habitat of the SINC. If any impacts are identified, these would need to be suitably mitigated or, if necessary, compensated for. Further advice is set out in the email dated 29 May 2020, which includes comments from the County Ecologist. The development will also need to achieve a net gain in biodiversity in accordance with the objectives of the NPPF.

It is noted that an Ecological Appraisal, Phase 1 Habitat Survey and Habitats Regulations Screening Assessment relating to the potential impact on the Solent Special Protection Areas are being prepared to accompany the application.

Impact on heritage assets

There are two listed buildings/Scheduled Ancient Monuments (SAMs) within 850m of the application site, along with a number of other smaller listed buildings within 1km. The Design and Access Statement provides an initial analysis of the impact on these heritage assets, which determines that the development has the potential to impact on the setting of the SAMs, but is unlikely to affect the setting of the other listed buildings due to the distances involved. A detailed Heritage Impact Assessment would be required for the application. If any harm to the setting of the SAMs or other heritage asset were identified, a detailed assessment of that harm weighed against public benefits would be required in accordance with paragraphs 193 - 202 of NPPF.

The site also has archaeological potential, but your comment is noted that due to the presence of the existing concrete basin and ground disturbances by other previous development on the site, it is unlikely that any significant archaeology would be present. The potential archaeology impact should be covered within the Heritage Statement and the County Archaeologist would be consulted on the application.

Transport matters

The development is not anticipated to result in a significant increased level of traffic to the site. Reference is made to the potential for 1 tanker per day to remove sludge

from the site and that access would be via Portsdown Hill Road from the north, avoiding residential streets. It is recommended that a Transport Statement is included with the application submission to cover these matters in more detail.

The main traffic impact would be during construction. Given the proximity of residential properties, a Construction Environmental Management Plan would need to be prepared to include mitigation measures to reduce impacts of vehicle traffic movements, noise, dust/debris, vibration and air quality.

Drainage

The site does not lie in an area at risk of fluvial or tidal flooding but there are parts of the site that are understood to be at risk of surface water flooding. The application would therefore need to be accompanied by Drainage Strategy and the Council's Drainage Engineer, as Lead Local Flood Authority, would be consulted as part of the application process.

Nitrates

You have noted within the Design and Access Statement that the site lies on land identified as a Nitrate Vulnerable Zone (NVZ), which were established in areas where nitrate from agricultural land could cause pollution of the water environment. It is understood that the proposed development itself would not have a direct impact in terms of nitrate pollution. However, it may be worth liaising with Natural England and including a statement within the application submission on this matter.

Environmental Impact Assessment (EIA)

You consider that the development falls within the definition in Schedule 2, column 10(o), of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017, and that an EIA would not be required. It also seems that the development could fall within the definition in Schedule 2, Column 11(c), 'waste water treatment plants'. It has been agreed that an EIA Screening Opinion will be submitted for a formal assessment.

Documents to accompany a planning application

Along with the relevant plans the following documents would be considered necessary to accompany the application:

- Design and Access Statement
- Heritage Impact Assessment (to include reference to archaeology)
- Ecological Appraisal/ Surveys and HRA Assessment
- Drainage Strategy
- Transport Statement
- Contaminated Land Desk Top Study
- Framework Construction Environmental Management Plan

I trust this information is of assistance. Please accept these comments without prejudice to any future decision of the Local Planning Authority.

Yours sincerely



Rebecca Altman
Principal Planning Officer

Appendix C. Public Consultation

- C.1. Public Consultation Leaflet
- C.2. Results of Public Consultation



VIEW FROM THE WEST (LOOKING EAST) OF THE PROPOSED BUILDING, SLUDGE STORAGE TANK AND ACCESS ROAD



VIEW OF THE PROPOSED BUILDING AND SLUDGE TANK FROM THE SOUTH (LOOKING NORTH), WITH WOODFIELD AVENUE IN THE FOREGROUND

Portsmouth Water is preparing an outline planning application for a new building and related facilities, to be located at the existing Farlington Water Treatment Works (WTW).

The building will provide additional water treatment facilities comprising new Dissolved Air Flotation (DAF) plant, and the proposals will include a sludge storage tank, service/delivery yard, underground pipework and temporary construction compounds and parking areas. The proposals will sit within a major operational water treatment works site.

The proposed development at Farlington WTW is required to improve the efficient treatment of water supplies and will support the operation of the proposed Havant Thicket Reservoir and pipeline, which will be located to the east of the A3(M) within Havant Borough and East Hampshire District. The new reservoir is required to safeguard the water supply for Portsmouth Water and Southern Water customers and to support additional housing growth in the wider Portsmouth Water supply area.

THE PROPOSED BUILDING

The location for the new building is within an existing concrete basin which is currently used very occasionally as an overflow tank facility. The building will be located between the existing group of buildings at the WTW site and Gillman Road.

The building will be approximately 43 metres long, 30 metres wide and 12 metres high, although only 9 metres will be visible above the existing basin wall. The roof will be 'stepped' so that a section of the roof facing south towards Woodfield Avenue will be lower than the main section of the building, to help reduce its overall scale and appearance. The images provided above do not illustrate the final materials and colour of the proposals. We will ensure that the materials and colour treatment within the final design reflects the character of the surrounding area.

The main reason for positioning the building within the concrete basin is to re-use land that has previously been developed within the site, and avoid the protected grassland that lies within and around the WTW, known as the 'East and West of Gillman Road Site of Importance for Nature Conservation' (SINC).

Due to the topography of the site and the existing concrete basin, the building will be set back within the landscape to reduce its impact on views from homes surrounding the WTW, including Fort Purbook Scheduled Monument to the north, the Public Right of Way from Gillman Road to Portsdown Hill Road, and Langstone Harbour to the south.





THE PLANNING APPLICATION

The application is currently being prepared and will be submitted to Portsmouth City Council in the next few months. Pre-application consultation is underway with the local planning authority, to ensure the scope and content of the application is acceptable. We are preparing a set of drawings and reports to assess potential impacts on ecology, the landscape and visual value of the area, heritage assets and local traffic to submit with the application.

HOW TO MAKE COMMENTS

We'd very much welcome your feedback. If you have any questions or concerns about the proposals, or would like to make comments, please contact us as follows:

- › Complete the attached response form and post it back to us using the pre-paid envelope.
- › Email us at farlington@atkinsglobal.com.

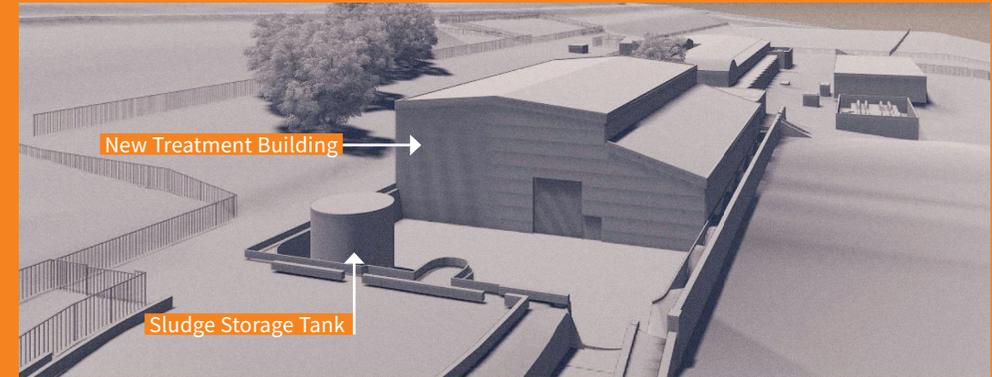
Please could we receive your responses by Friday 7 August, to enable us to consider and take on board your comments before the application is submitted.

Farlington Water Treatment Works

Proposed New Treatment Building and Related Facilities



PROPOSED SITE PLAN



TRAFFIC MOVEMENTS

Construction traffic will only be permitted to use Portsdown Hill Road and the northern end of Gillman Road to access the WTW site and will not travel through the residential areas to the south.

Current traffic movements to the WTW are very light, comprising typically 4 vehicles per day. This will increase by 2 additional trips per day when the new building is in operation, for chemical deliveries to the building and removal of sludge from the tank. The vehicles will only be permitted to enter the site from the northern end of Gillman Road.

ENVIRONMENTAL IMPACTS

There will be minor noise and vibration impacts to properties closest to the building site during construction, due to the excavation and building works. The contractor will adopt measures to reduce and minimise noise and vibration levels wherever possible. Once the new building is completed, the machinery within the building will generate some noise while in operation, however the building envelope will reduce the noise levels and the equipment will be housed within acoustic containers. The detailed design of the building will ensure any noise impacts are suitably mitigated.

There will be no impacts on air quality once the building is in operation, but some dust is likely to be generated during the construction process. This will be carefully mitigated by the contractor to ensure this is minimised.

Impacts on the East and West of Gillman Road SINC will be minimal, with the only permanent loss of grassland caused by development of the new access road and hatches to underground chambers. The construction compounds and new pipework will cause a temporary loss to the grassland, but this will be cut and stored elsewhere on the WTW site, to be reinstated once construction is complete.

No adverse impacts have been predicted on the protected nature conservation sites and areas of ecological value further south of the WTW, such as Farlington Marshes and Langstone Harbour, mainly due to the long distances between these sites and the WTW.

RELATED FACILITIES

In addition to the new treatment building, the proposals include the following facilities:

- › Sludge storage tank, adjacent to the proposed building;
- › Vehicle access from Gillman Road to a service/delivery yard adjacent to the proposed building to empty the sludge storage tank and to allow direct access to the floor level of the building;
- › Potential above-ground water pipeline from the existing site inlet overflow into an existing underground reservoir to the south of the proposed building;
- › Underground water pipelines, chambers and connections between the new treatment building and existing treatment facilities; and
- › Temporary contractors compound, contractors parking area and a construction materials storage area within the WTW site.





HAVE YOUR SAY ON THE PROPOSALS AT FARLINGTON WTW

Portsmouth Water is preparing a planning application for a new drinking water treatment building and related facilities at Farlington WTW. This is required to improve the efficient treatment of water supplies and will support the proposed new Havant Thicket Reservoir in Hampshire, to secure reliable drinking water for years to come. Let us know your thoughts using the form below.

Please provide your name, address and details, or if you would prefer to remain anonymous, please just give your postcode.

Name							
Age	Under 18 <input type="checkbox"/>	18-24 <input type="checkbox"/>	25-34 <input type="checkbox"/>	35-44 <input type="checkbox"/>	45-54 <input type="checkbox"/>	55-64 <input type="checkbox"/>	Over 65 <input type="checkbox"/>
Address							
Telephone							
Postcode							
Email							
Organisation or Business name (if applicable)							

We'll store your information securely, won't share it with 3rd parties for marketing and won't send you any spam. Read our full privacy policy at portsmouthwater.co.uk/about-us/legal-notice.

To what extent do you agree or disagree with our plans for the new treatment building and related facilities at Farlington WTW? Please tick the appropriate box.

Strongly Agree <input type="checkbox"/>	Agree <input type="checkbox"/>	Neutral <input type="checkbox"/>	Disagree <input type="checkbox"/>	Strongly Disagree <input type="checkbox"/>	Don't Know <input type="checkbox"/>
Please give your reasons					

To what extent do you agree or disagree with our plans for the different aspects of the proposals below? Please tick the appropriate boxes.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Don't Know
1. The appearance of the new building	<input type="checkbox"/>					
2. The size and scale of the new building	<input type="checkbox"/>					
3. The location of the sludge storage tank and service yard	<input type="checkbox"/>					
4. The location of the temporary construction compounds	<input type="checkbox"/>					
5. The location of the temporary construction parking areas	<input type="checkbox"/>					
Please give your reasons						

Do you have any concerns about the proposals that you would like to let us know about? For example, construction, the environment, or traffic?

Please give your reasons		
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Would you like us to contact you to follow up on your feedback?

If yes, please tick the appropriate box

Post <input type="checkbox"/>	Phone <input type="checkbox"/>	Email <input type="checkbox"/>
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Thank you for taking the time to fill in this form. Please return it in the envelope provided (the postage is already paid) or send comments via email to farlington@atkinsglobal.com

Farlington WTW: Results of Public Consultation

Pre-application public consultation was carried out from 24 July to 7 August 2020, with details presented in a leaflet with integral feedback form, distributed to 357 properties surrounding the Application Site. A pre-paid envelope was provided for the completed response forms to be posted directly to Portsmouth Water. Responses were also invited via email to an address created specifically for the consultation: farlington@atkinsglobal.com.

A total of 37 responses were received, comprising 36 feedback forms and 1 email, representing a 10.4% response rate. The following details provide a record of the comments received on the completed feedback forms and the single email. All comments are recorded verbatim, based on the order the responses were received. The two tables provide the results of the tick box questions included on the feedback form.

1. To what extent do you agree or disagree with our plans for the new treatment building and related facilities at Farlington WTW?

	Number of Responses	Percentage %
Strongly agree	9	25.0
Agree	13	36.1
Neutral	8	22.2
Disagree	2	5.6
Strongly Disagree	3	8.3
Don't Know	1	2.8
Total	36	100

Please give your reasons:

We have lived next door to PWC now for 56 years and now know you as a responsible company that looks ahead.
Something that is required for local generations.
The plans look ok. The facilities are in keeping with the water needs and plans for future usage supply.
If needed, you are the experts, location is on your land and I think it will have minimal impact (especially as away from the houses).
The new proposed building is too large in respect to its visible height as it sits within a residential area and due to its location is very prominent.
The building should be not higher than the existing building roof line.
Any sludge should be pumped away to a more suitable location for disposal – the road access is not suitable.
We all require water and with increasing demand, I understand that Portsmouth Water will need to expand or use new techniques. Portsmouth Water also appear to be taking the environment into consideration.
We are great fans of Portsmouth Water. You provide an excellent service at reasonable cost and use your resources wisely to plan for the future, unlike other water companies that are shareholder and not service driven. We support your application.
No doubt the facility is necessary for the reasons which are stated but is just like any industrial building of the past century – merely an industrial blot on the landscape with little sympathy for environment or natural contours of the land.
Traffic at the top of Gillman Road. More traffic at that junction and you will put lights there too!
Too much.
Always best to upgrade, especially with new dwellings being built.
Re-use of existing developed land.
No environmental impact.
Visually pleasing to the eye.
We need the best facilities for managing our water supply and you appear committed to keeping disruption to local residents to the minimum.
We need it.

Good use of existing concrete basin.
Hope this doesn't lead to future over development of the site.
With the existing buildings I can see no argument for view or being an eyesore.
Ideally it would have been ideal if the slope hid the whole development, much as the Fort is hidden from view on the northern side.
Sounds like good use of existing ground to support future infrastructure demand.
Much needed.
With the amount of Government imposed housing, water will be required.
It appears to be a necessary investment for the future of water supplies in Portsmouth and the surrounding areas.
Why now? Why do we need to build a new one?
The building is ugly and too tall for the area.
What could the money be better spent on? Maybe more or better information/utilities within homes, especially when you talk of all the new homes.
I do not disagree with the plans, however the size should be in keeping with the existing structure and less obtrusive with landscaping.
Concern over height of building.
Concern regarding colour, should be same as other.
Lorry access should <u>only</u> be from top of Gillman Road via key.
We need water and the design is reasonable.
All facilities need to develop and evolve over time – Portsmouth Water obviously considers this necessary.
The height of the building will be directly in view from our house, steps must be taken to develop the ridge to mitigate.
The noise from the plant could be problem – directly behind our garden and home office.
Negative effect on our house value.
Potential odour from sludge tank.
Over development so close to residential.
Destruction of environment in area.
May spoil the area.
If it's needed, it's needed.
Generally agree but see comment on height.
Rationale and location perfectly sensible.
Does not blend into the environment though, what about a green/planted roof?
We are not anticipating being too inconvenienced by it, providing you stick to your plans.
We need to change to update existing facilities to service residential properties.

2. To what extent to you agree or disagree with our plans for the different aspects of the proposals below?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Don't Know	Total
Appearance of new building	4	10	10	6	5		
Size and scale of new building	4	9	12	3	5	2	
Location of sludge storage tank and service yard	6	9	13	3	3	1	
Location of temporary construction compounds	3	10	19	2	1		

Location of temporary construction parking areas	3	10	19	3			
Total	20	48	121	17	14	3	223
Percentage %	8.9	21.5	54.3	7.6	6.3	1.4	100

Please give your reasons:

The building and amenities appear to blend in with local scenery.
Consideration for site seems appropriate – re-use of original workings - as little impact on the environment [has been] taken into account.
Building should be light green as per the other buildings.
I am further down the street, so it will have minimal impact on my house.
Couldn't Portsmouth Water come up with an innovative design or at least one that is interesting to look at? An environmentally grass covered roof would be a start.
Building is too big.
Parking means more traffic.
A sludge tank near a reservoir is wrong.
It all seems fine. None of the construction work will have any direct impact on me, as Blake Road is a lane and 4 reservoirs away from the proposed work.
The proposals appear reasonable.
New treatment building looks imposing (too tall). South facing 'stepped' roof looks a better height.
All sounds reasonable, and in-keeping with surrounding areas.
The scheme fits in with the topography.
The information given says the design of the building isn't reflected on the information given so it's hard to comment on design and appearance.
The size of the building should be reduced and similar to the adjacent building.
Building height concern.
Building colour should match other building.
Well thought out plan that minimises disruption.
The development seems reasonable and proportionate.
The construction compound is too close to our property, noise and security issues.
The lane will be busier with vans and this is one of the few safe areas for your children to walk/cycle.
Very concerned about the potential smell. Havant and Rowner Sludge Works make local life unviable.
Paint it to blend with hillside – green.
Either build it below ground level or make it interesting to look at. I don't think this will affect us.
Height of the new building is more imposing than the existing building. Suggest same height if possible.
Appearance too industrial. Would like to see greater consideration of making this less conspicuous and improve environmental impact.
Bit concerned new facilities closer to Gillman Road and the potential increased noise and pollution to neighbouring properties.

3. Do you have any concerns about the proposals that you would like to let us know about?

Comments:

Not really because it doesn't look as if we are likely to be affected much in Grant Road – either during works or on completion. However, PWC has always been a good neighbour to us in the past and we would hope you will be to the residents of Woodfield Avenue as well.
Traffic minimised on Gillman Road.
Building in light green.

Gillman Road is suitable for pedestrians/cyclist only.
The building is just too high in this area of grassland beauty.
The sludge should be pumped away from the river.
I need confidence that the new treatment building will not be treating sewage or industrial wastewater.
You answered mine in this leaflet, the work traffic will be using the north end of Gillman Road, as that would have been a concern.
Will you be manning the gate at the top of Gillman Road so that it is south of the access to the new development, to prevent the use of Gillman Road by through traffic?
Heavy vehicles exiting Gillman Road into Portsdown Hill Road will be a hazard because of gradient.
Gillman Road is a quiet side road. Lorries from the top requires a new road. Too much traffic.
I had no bother 20+ years ago when all 8(?) reservoirs were replaced, so no problems with me regarding this proposal.
No, if the extra traffic is not allowed to use Woodfield Avenue.
Thank you for the opportunity to feedback.
Will pedestrian access be affected from Gillman Road to Portsdown Hill Road either temporarily or permanently?
Could the sludge tank be hidden behind the new building?
As explained, please keep all traffic away from residential areas and keep main construction activities to normal day working hours.
Construction traffic should only access site from the Cosham end of Portsdown Hill Road as the Bedhampton end is too narrow.
Construction workers to only use northern end of Gillman Road for site access.
Construction work to take place only between hours 7.30 a.m. to 6.00 p.m. No night construction.
Concern about smell from sludge storage tank.
Will the new treatment works smell when in operation – it doesn't currently?
Will the building be made of sustainable materials?
Will it use any eco-friendly features in its operation e.g. will it incorporate solar energy?
Will the colour etc be sympathetic to the landscape around it and the Fort behind?
Will there be any investment in local wildlife?
The environment. The only thing you have mentioned is the noise during construction and what about the long-lasting implications or the future of the site?
What materials are you using? What are you doing to make the building and construction 'Green.' Not a lot according to this very basic leaflet.
Assurance that construction traffic will approach from Portsdown Hill Road and not the Havant Road.
Access by lorries should only be from top of Gillman Road via key access and not from bottom, crossing Grant Road and Woodfield Avenue.
The construction process will be noisy and disruptive to home working from our office, this needs to be mitigated by developing the ridge between the site and the houses and long-term development of a tree line.
Please don't spoil a nice area with a terribly smelling waste plant.
Noise in operation e.g. vibration/hum through the bedrock. We already suffer from a hum from somewhere (pumping sound).
Height of the new building is more imposing than the existing building. Suggest same height if possible.
Building is too conspicuous. What are its environmental features? These are not clear aside from sound proofing.
Excessive noise or smells.
Please could we have a copy of the Woodfield Avenue photo in your leaflet?
The noise and pollution of traffic, the spillage onto roads.
I appreciate I'm the lower end of the road, but all impacts the look of area and my neighbours.

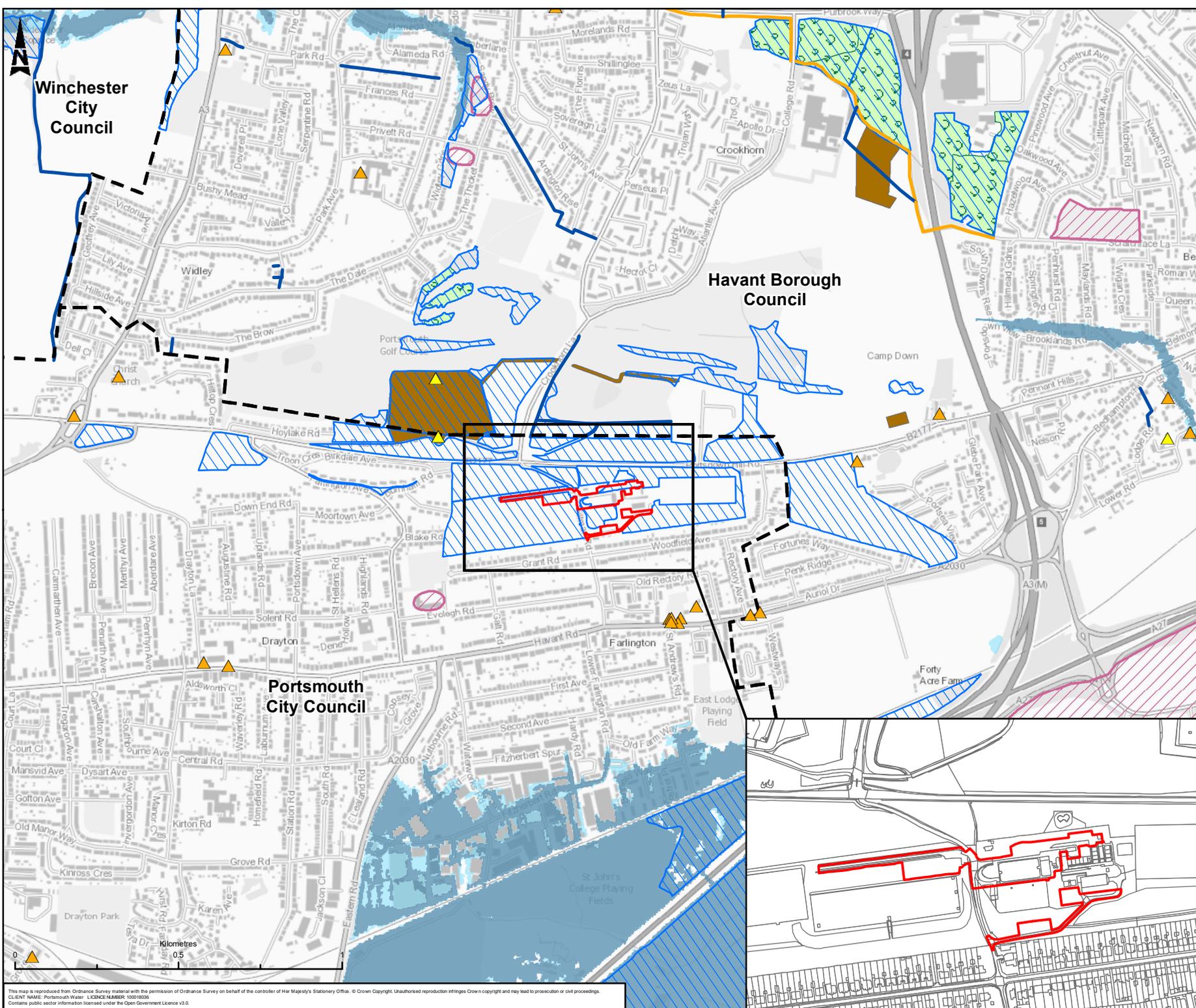
Email response received 27 July 2020:

Thank you for your leaflet concerning the proposed new treatment building and related facilities at Farlington Water Treatment Works and inviting questions and feedback.

I and my family live at *[address redacted]*, which is adjacent to the North East corner of the water treatment site. Please may I seek answers to the following initial questions. I may have more questions at a later date.

1. Is this a sewage treatment facility?
2. Will there be any smell from the new facility?
3. You refer in your leaflet to the “protected grassland that lies within and around the WTW, known as the East and West of Gillman Road Site of Importance for Nature Conservation” (SINC). Where is that SINC please? Is there a map showing its location in relation to our house?
4. Who would I contact about the use / ownership of the land immediately adjacent to our house?

Appendix D. Environmental Constraints Plan



- Red Line Boundary
- ▲ Grade II Listed Building
- ▲ Grade II* Listed Building
- Bridleway
- Footpath
- Ancient Woodland
- Historic Landfill
- Flood Zone 2
- Flood Zone 3
- Local Authority Districts
- Scheduled Monuments
- Site of Importance for Nature Conservation

P1	FD	ML	LC	JF	PLANNING	11/03/2020
Rev.	Drn By	Out By	Rev By	Auth By	Description	Date

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Drawing Subtitle	Status
PLANNING	S2

Contractors Drawing Number:					
HTR - ATK - PT - FR - GS - Z - 0002					
Project	Originator	Volume	Location	Type	Role / Number

Telephone: Havant (023) 9249 9888
 Fax: Havant (023) 9245 3632
 Website: www.portsmouthwater.co.uk
 Registered Office: PO Box 8 West Street
 Havant Hampshire PO9 1LG
 REGISTERED IN ENGLAND No. 2536455



Project Ref. No.	Sheet	Scale	Sheet Size
5169117	1 of 1	1:15,000	A4

FARLINGTON WATER TREATMENT WORKS

Drawing Title
FARLINGTON WATER TREATMENT WORKS ENVIRONMENTAL CONSTRAINTS

Portsmouth Water Drawing Number	Rev
	P1

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