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Havant Thicket Reservoir Project

Farlington Water Treatment Works

Proposed DAF Treatment Building and Associated Facilities

Transport Statement

Portsmouth Water Ltd.

25/09/20

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2. Planning Policy Review

2.1. Introduction

This Chapter provides an overview of the key policy documents which set the context within which this development should be considered. The policy documents considered when developing the assessment include:

- National Policy
 - National Planning Policy Framework;
 - Planning Practice Guidance: Transport evidence bases in plan making and decision taking; and
 - Planning Practice Guidance: Travel plans, transport assessments and statements in decision-taking.
- Local Policy
 - Portsmouth City Local Plan (2006) Saved Policies;
 - The Portsmouth Plan (The Portsmouth Core Strategy) 2012; and
 - Portsmouth Local Transport Plan 3 (LTP3) 2011-2031.

2.2. National Policy

2.2.1. National Planning Policy Framework

The revised National Planning Policy Framework (NPPF) 2019 sets out the requirements and objectives of the Government for planning policies in England and how they should be applied. At the heart of NPPF is a presumption in favour of sustainable development, the three dimensions to which are economic, social and environmental.

The NPPF states that planning policies should:

- Support an appropriate mix of uses across an area, and within larger scale sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities;
- Be prepared with the active involvement of local highway authorities, other transport infrastructure providers and operators and neighbouring councils so that strategies and investments for supporting sustainable transport and development patterns are aligned;
- Identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development;
- Provide for high quality walking and cycling networks and supporting facilities such as cycle parking (drawing on Local Cycling and Walking Infrastructure Plans); and
- Provide for any large-scale transport facilities that need to be located in the area, and the infrastructure and wider development required to support their operation, expansion and contribution to the wider economy.

NPPF states that ‘development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

2.2.2. Planning Practice Guidance: Transport Evidence Bases in Plan Making and Decision Taking

The Planning Practice Guidance (PPG) states that it is important for Local Planning Authorities to undertake assessments of the transport implications in developing or reviewing their Local Plan, so a robust transport evidence base may be developed to support the preparation and / or review of that Plan.

The transport evidence base should identify the opportunities for encouraging a shift to more sustainable transport usage (where reasonable to do so). A robust evidence base can enable assessments of the transport impacts of both existing and proposed developments and can inform sustainable approaches to transport at a plan-making level.

2.2.3. Planning Practice Guidance: Travel Plans, Transport Assessments and Statements in decision-taking

The guidance describes how Travel Plans, Transport Assessments and Statements are ways of assessing and mitigating the negative transport impacts of development in order to promote sustainable development.

Transport Assessments and Statements are described as ‘ways of assessing the potential transport impacts of developments’.

2.3. Local Policy

2.3.1. Portsmouth City Local Plan (2006) Saved Policies

The Portsmouth City Local Plan was adopted on 21 July 2006, when it replaced the previous City Local Plan which was adopted on 22 December 1995. The document has been superseded by The Portsmouth Plan, although many of its policies have been saved and are still of relevance.

The Local Plan provides a framework to guide development in Portsmouth up to 2011 and beyond, its purposes are:

- To develop the strategic policies of the Hampshire County Structure Plan;
- To make proposals for the development and use of land and to allocate land for specific uses to meet current and future needs; and
- To provide a consistent basis to guide development control decisions.

2.3.2. The Portsmouth Plan (The Portsmouth Core Strategy) 2012

The Portsmouth Plan is Portsmouth’s Core Strategy. 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 Portsmouth Plan is designed to:

- Set out a vision and objectives for the development of Portsmouth up to 2027;
- Identify broad locations for development, protection or change and allocate strategic sites;
- Set clear policies that guide decisions on planning applications;
- Indicate how the plan will be implemented; and
- Show how progress will be monitored.

2.3.3. Portsmouth Local Transport Plan 3 (LTP3) 2011-2031

The future transport strategy for South Hampshire is set out in the Local Transport Plan 3 (LTP3), 2011-2031, which has been prepared by Portsmouth and Southampton City Councils and Hampshire County Council as Transport for South Hampshire. The Portsmouth LTP 3 sets out the following vision for transport within the sub region: “A resilient, cost effective, fully-integrated sub regional transport network, enabling economic growth whilst protecting and enhancing health, quality of life and environment.”

Within the strategy seven outcomes have been developed which are:

- Reduced dependence on the private car through increased number of people choosing public transport and active travel modes i.e. walking and cycling;
- Improved awareness of the different travel options available to people for their journeys, enabling informed choices about whether people travel and how;
- Improved journey time reliability for all modes;
- Improved road safety within the sub region;
- Improved accessibility within and beyond the sub region;
- Improved air quality and environment, and reduced greenhouse gas emissions; and
- Promoting a higher quality of life.

2.3.4. Summary

A review of local transport policy has indicated that there are no specific policies relevant to the FWTW. Local policy is centred on improving the quality of Portsmouth as a place to live and work, with transport policy focussing on improving the integrated transport network. The purpose of the proposed facilities at FWTW is to improve

water supplies to the area, and will not be used by members of the public once complete. In addition, the FWTW will continue to operate with a minimal staff roster; therefore the local transport policy aspirations do not apply. This TS, however, has been prepared in accordance with national guidance and best practice.

3. Existing Transport Conditions

3.1. Introduction

This Chapter provides a summary of the existing transport conditions surrounding the site, including sustainable travel modes, and the highway network, which consists of residential streets, local distributor roads and trunk roads.

3.2. Accessibility by Sustainable Modes

Walking

There is no footway along the northern section of Gillman Road (near the site), although due to the low vehicle numbers it does represent a viable walking route.

The residential streets to the south of the site are well lit and have footways on both sides which are generally of suitable width and condition. Dropped kerbs and tactile paving are provided at crossing points although they are often in need of upgrade, such as at the southern arm of the Gillman Road / Woodfield Road / Grant Road junction.

There is a Public Right of Way (PRoW) which links Gillman Road, at the north-western site boundary, to Portsdown Hill Road. This footpath will not be impacted by the development proposals.

Cycling

The residential nature of the area and the 20mph speed limit in place creates an environment which is conducive to cycling. On-street parking does reduce the width available for on-road cycling on some streets within the vicinity of the site; however, this does act as a speed management measure.

Gillman Road is signed as an advisory cycle route and provides a suitable route for cyclists due to the low number of vehicles utilising the road at this location. The route links to existing shared use paths (SUPs) along Crookhorn Lane. The routes along Gillman Road and Crookhorn Lane form part of National Cycle Network (NCN) Route 222. This route is made up of on-road and off-road sections and connects Portsmouth in the south to Waterlooville and beyond to the north.

Public Transport

The closest bus stops to the site are located on Crookhorn Lane, approximately 250m to the north-west of the site. However, accessing these stops would require undertaking an informal crossing of the busy B2177 (Portsdown Hill Road). There are bus stops located on Havant Road to the south, approximately 350m from the site, which avoid the need for instances of informal crossing. These bus stops are well equipped with shelters, timetables and easy access kerbing. They provide access to services 21, 22 and 23. These local services provide regular connectivity (up to 4 services per hour) throughout the Portsmouth area and the neighbouring residential areas and towns.

The nearest rail station to the site is Bedhampton which is located approximately 2km to the east of the site. The station can feasibly be accessed from the site using active travel modes, the journey takes approximately 25 minutes to walk and 7 minutes to cycle. The local bus service 23 can also be utilised.

Bedhampton Rail Station is managed by South Western Railway and provides one service per hour to London Waterloo.

Summary

The nature of the development, an expansion of an existing Water Treatment Works, is such that a large proportion of trips to and from the site will be made by specialist motor vehicles. However, it is considered that there are suitable opportunities for staff and visitors, where appropriate, to travel to the site sustainably using active travel modes, public transport, or both as part of a sustainable multi-modal journey.

3.3. Local Highway Network

Gillman Road

Gillman Road is a rural road with a speed limit of 20mph. It provides access to the development site and links to the residential streets of Grant Road and Woodfield Avenue to the south and onto Havant Road. To the north it

links to the B42177. Its junction with the B42177 is gated, with the gate set back approximately 18 metres from the B42177. Vehicles exiting Gillman Road onto the B2177 are prohibited from turning right and crossing oncoming traffic. From the south (at its junction with Grant Road / Woodfield Avenue) signing informs users that it is not a through-route.

The road is single width with passing places at appropriate locations and is currently used by HGVs that service the existing FWTW.

[B2177 \(Portsdown Hill Road\)](#)

The B2177 runs along the northern boundary of the site, it links to Havant in the east and Cosham to the west. It is a single carriageway road with a speed limit of 40mph. The road is of sufficient width for two-way traffic movements and is well-lit along its length.

[Grant Road / Woodfield Avenue / Beverley Grove](#)

These are residential streets that border the south / east of the site. As with Gillman Road, a 20mph speed limit is in place. There are no parking restrictions in place meaning on-street parking is prevalent throughout. Street lighting is provided, and the roads are of suitable width, although the on-street parking does prohibit two-way movements in places requiring vehicles to give-way.

[A3](#)

The A3 is located approximately 0.8km to the east of the site, it can be accessed via the A2030 (Havant Road) to the south via a priority roundabout junction. It is a dual carriageway forming part of the trunk road network and has a speed limit of 70mph. It provides access towards London to the north and merges with the A27 to the south of the roundabout junction where it links towards Chichester to the east and Southampton to the west.

3.4. Collision Data

In the absence of recorded collision data from the LHA, a review has been undertaken using the 'Crashmap' online database of vehicle collisions. The assessment covers the most recent five-year period available between January 2015 and December 2019. The results show that no collisions have occurred on Gillman Road near the site access, or on the residential streets to the south of the site.

One serious collision occurred on Gillman Road; however, this was to the south at its junction with Havant Road and not within the immediate vicinity of the site. There is one small cluster of collisions on the B2177 near its junction with Gillman Road; however, these incidents are associated with vehicle movements from Crookhorn Lane onto the B2177 and not Gillman Road. The majority of the collisions at this location were slight in nature.

It is suggested that based on the low number of collisions in the vicinity of the site and the low proportion of serious incidents, along with the lack of obvious clusters, there are no existing underlying issues associated with the local highway network that could be exacerbated by the development proposals.

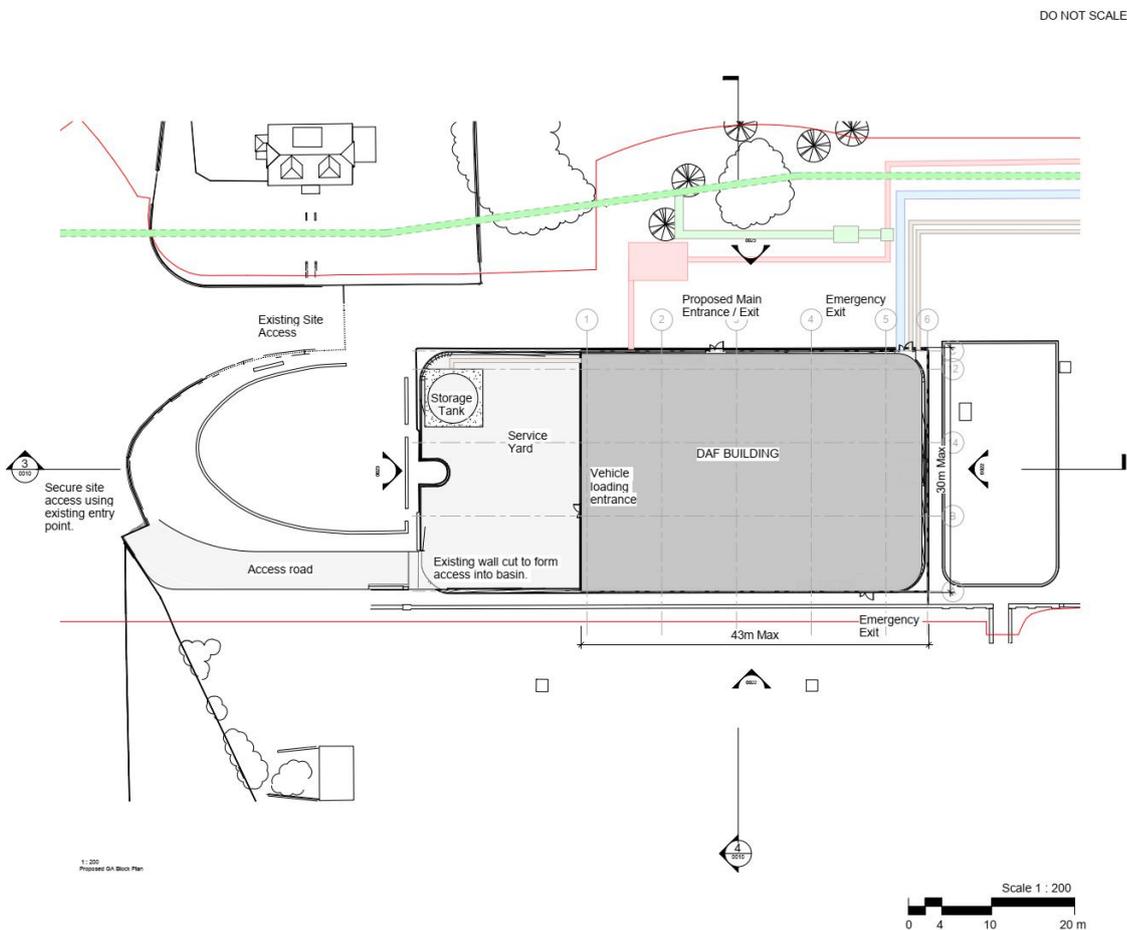
4. Development Proposals

4.1. Site Layout

The proposals include the development of a new water treatment building within the existing filtration basin and provision of an area for a service/delivery yard and sludge storage tank at FWTW.

The existing site access into the FWTW will not be altered. There is an additional secure site access further south on Gillman Road which currently provides access to the WTW for grounds maintenance purposes. This access is to be maintained utilising the existing entry point and a surfaced access road will be provided into the filtration basin, requiring the existing wall into the basin to be cut at its south-western corner. The existing concrete staircase providing access to the perimeter walkway within the basin will be retained. The new service yard and sludge storage tank are to be located at the western section of the basin. The proposed site layout is illustrated in **Figure 4-1**.

Figure 4-1 - Proposed Site Layout



The new access road will enable vehicular access to the basin floor level for construction and maintenance traffic and for chemical deliveries / sludge tankers. Large roller-type shutter doors will be provided to allow direct vehicular access for equipment and chemical deliveries to an internal laydown area within the building, these would be accompanied by a side pedestrian access at basin floor level.

4.2. Vehicular Access

The existing secure site access from Gillman Road described above is to be maintained and a review of the existing visibility splay has been undertaken. Based on the speed limit of 20mph, the required safe stopping

distance (SSD) is 25m according to Manual for Streets (MfS), this represents the 'Y' distance. This measurement can be taken from a distance of 2m from the edge of the major road (Gillman Road) as it is a low trafficked rural route, this represents the 'X' distance. Due to the size of the existing junction/entrance, the required visibility (2m x 25m) is easily achieved looking right but the visibility splay to the left is partially obstructed by the existing embankment and the fact that Gillman Road slopes down towards the south.

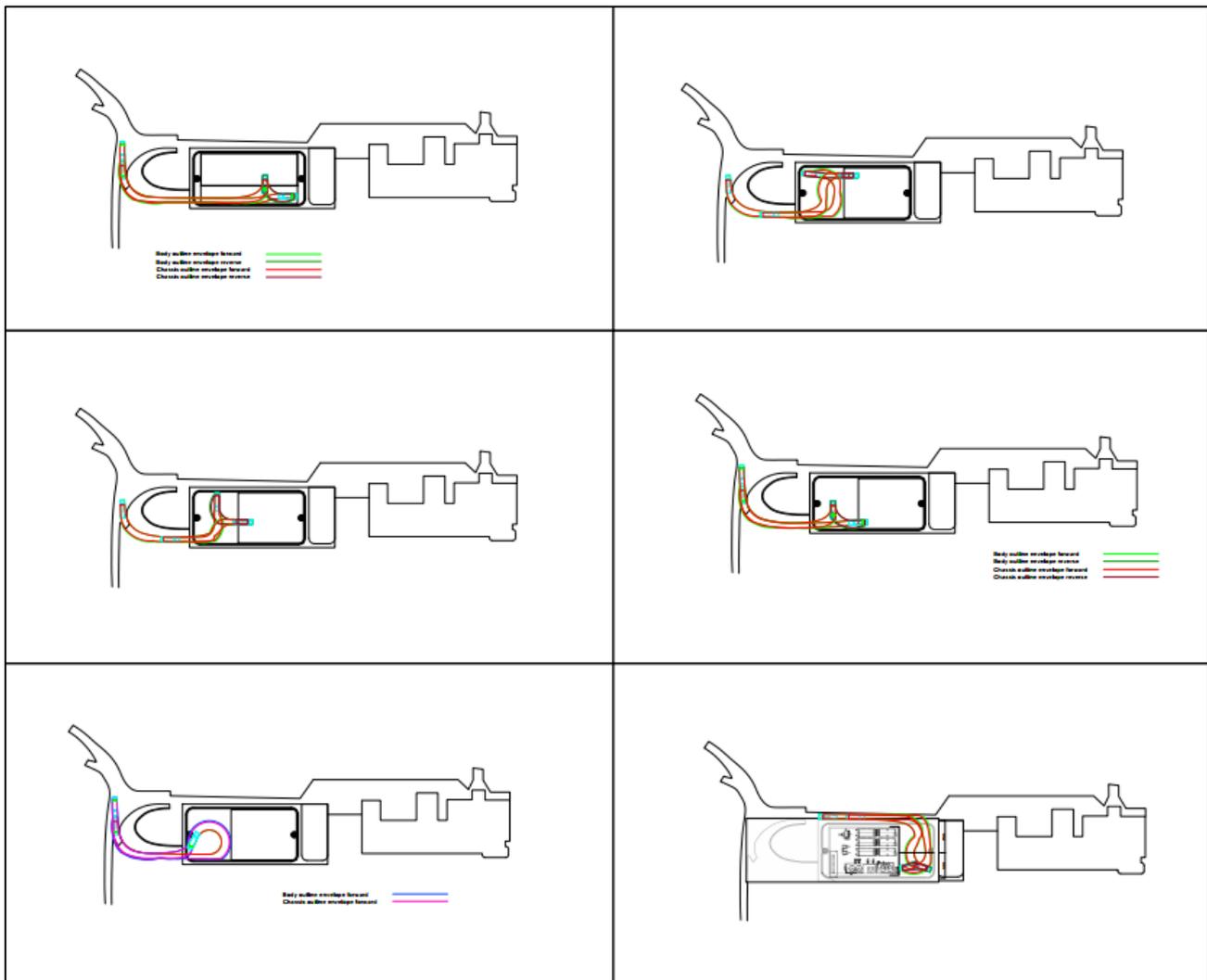
This is when the 'target' object on the Gillman Road is set to have a height of 0.6m. For the full 25m visibility splay to be achieved, the target object will have to be approximately 1.17m high.

Paragraph 10.5.9 in Manual for Streets 2 (MfS2) states that although the Y distance should be based on the recommended SSD values, "a reduction in visibility below recommended levels will not necessarily lead to a significant problem".

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 (set out in Chapter 5). Therefore, no alterations are proposed at the access.

A variety of vehicles are expected to access and egress the site using the new access road into the filtration basin. The largest of which are Heavy Goods Vehicles (HGV's) associated with the chemical deliveries, these vehicles have an overall length of 10m. 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 into the basin. A summary of the swept path assessment is presented in **Figure 4-2**.

Figure 4-2 – Swept Path Analysis



4.3. DAF Treatment Building Construction

The construction sequencing proposals are currently being developed, and it is anticipated that a full construction management plan (CMP) would be submitted to the LPA for approval, by the appointed construction contractor. However, consideration has been given to potential construction methodologies for the purposes of this application.

It is expected that the majority of construction materials will be brought on-site using typical articulated HGVs, consistent with some of the vehicles currently accessing the WTW. At this stage, it is not expected that a significant volume of abnormal loads will be required, and the suitability of any oversized vehicle access would be assessed in full once the requirements following the detailed design are known. This will be included within the CMP.

It is expected that all parking for construction staff will be provided internally within the site, and appropriate laydown areas for materials have been identified, as shown in **Figure 4-3**.

Appropriate measures will be taken to ensure the local highway network is not negatively impacted, including scheduled deliveries and the provision of wheel washing facilities on site.

It would be expected that construction vehicles would follow the route via Crookhorn Lane / College Road to the north, avoiding the narrower residential streets to the south of the site. This route is suitable for HGVs, is already utilised for servicing and deliveries to the WTW and provides access to the A3 (M). The proposed construction route is illustrated in Figure 4-4.

Figure 4-3 – Potential Site Set Up for Construction

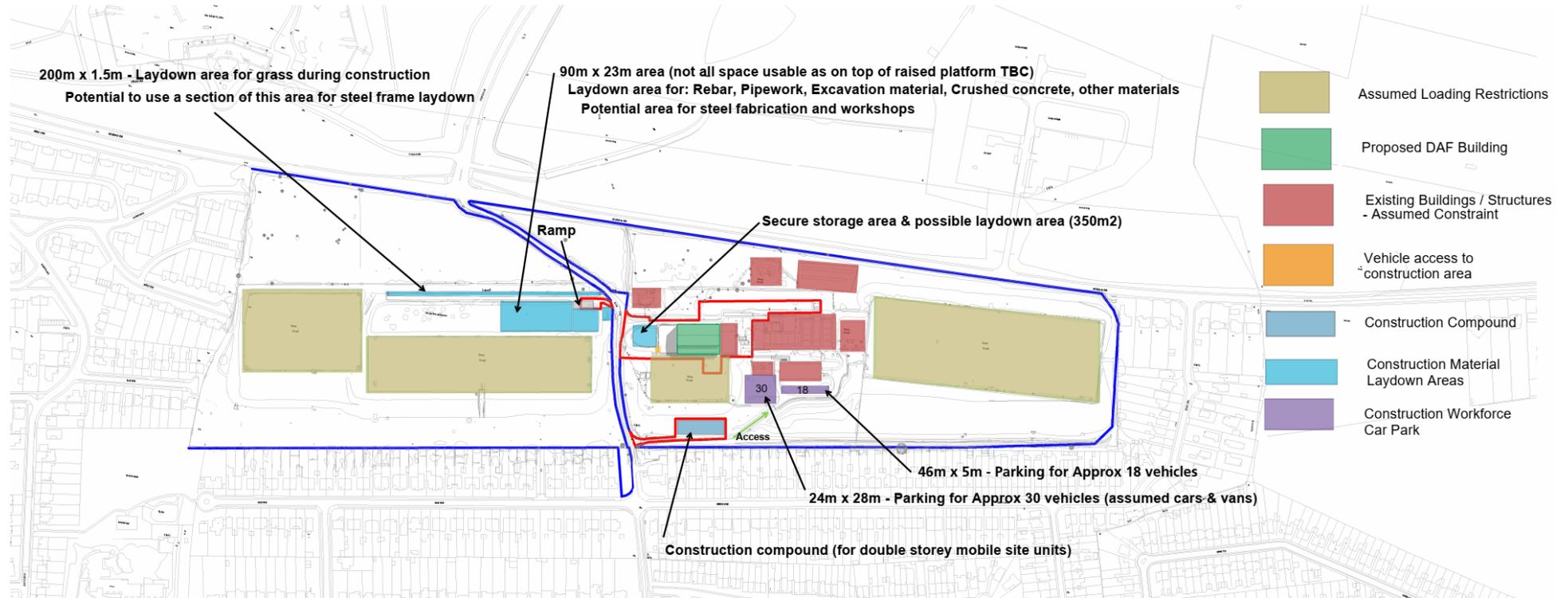


Figure 4-4 - Proposed Construction Route



5. Trip Generation

5.1. Introduction

The trip generation associated with the existing and proposed development is summarised in this chapter. Based on the nature of the development it is assumed that all trips are vehicular, although it is noted that some operational staff could travel to the site by alternative means. In addition, many of the HGV movements have a less than daily frequency; in order to provide a robust assessment, it has been assumed that all of the ‘less than daily’ visits occur on the same day.

5.2. Existing

Portsmouth Water has provided a broad summary of existing operations at the site, which includes:

- Operational staffing – at least 1 daily visit from operational staff between 8am-4pm Monday to Friday. In the next 2 years this is expected to be 2 people with separate transport for training purposes, and visits could last all day;
- Sampling visits – daily visits occur 7 days per week, typically between 6.30am-10.30am on weekdays and 8am-1pm on weekends;
- Mechanical & Electrical (M&E) visits – as a guide, in 2018 there were 214 work orders but often multiple work orders were completed on the same day and did not involve separate visits;
- Grounds maintenance – 20 visits per year, which may occur on 2 days in a row and are more frequently from April to October;
- Chemical deliveries – 21 in total in 2019, comprising 14 bulk chemical deliveries (alum & ortho) and 7 instrument chemical deliveries (typically carboys);
 - o Alum is typically delivered in 8000L batches and stored in two 15m³ tanks; and
 - o Ortho is typically delivered in 8000L batches and stored in one 13m³ tanks.

An existing average annual and average annual daily trip generation has been derived from the information above and is presented in **Table 5-1**.

Table 5-1 - Existing Trip Generation

Trip Generation Type	Average Annual Trip Generation (arrivals and departures)	Average Annual Daily Trip Generation (arrivals and departures)
Operational staff	1,460 (assuming it increases to 2 staff members travelling individually)	4
Sampling visits	730	2
M&E visits	428 (based on 2018 figures and assuming all are separate visits)	2
Grounds maintenance	40	>1
Chemical deliveries	40	>1
Total	2,698	8

5.3. Proposed

The proposed additional operational activities, expected once the development proposals are in place are summarised as follows:

- Chemical deliveries – including Coagulant, Acid and Polymer, an additional 5 trips per year
- Sludge collection – 120 trips per year based on a typical sludge tanker with capacity of ~20m³
- Operational traffic – maximum of 4 additional trips per day when the DAF Treatment Building is in operation (which is for 112 days during a 1-in-20 drought year)

An additional average annual and average annual daily trip generation has been derived from the information above and is presented in **Table 5-2**.

Table 5-2 - Proposed Additional Trip Generation

Trip Generation Type	Average Annual Trip Generation (arrivals and departures)	Average Annual Daily Trip Generation (arrivals and departures)
Chemical deliveries	10	>1
Sludge collection	240	1
Operational Traffic	896	2
Total	1,146	3

The figures presented within **Table 5-2** are based on a 1-in-20 drought year when a higher number of deliveries will occur in order to ensure a robust estimate. Whilst there may be individual days where higher numbers of vehicular movements could occur; they would be expected to be within the same order of magnitude as the numbers presented and would be carefully managed with delivery times staggered.

The proposed development is expected to result in only three additional daily vehicular movements, which is considered a negligible increase. It is also pertinent to note that 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. It is therefore concluded that the proposed development would not materially impact on the operation of local junctions and the local highway network in general.

6. Summary

This Transport Statement has been prepared in support of a planning application for the proposed development of a new water treatment building and associated facilities at FWTW. A review of existing operations at the site has informed an understanding of existing conditions, with it being established that the site currently operates without a notable impact on the transport network.

The proposed building will accommodate a new Dissolved Air Flotation (DAF) plant and the associated facilities include a service/delivery yard, sludge storage tank, underground pipework and temporary construction compounds and parking areas, all of which will be included within the existing site curtilage. The development proposals are expected to generate a marginal increase in vehicle numbers accessing the site, which over a typical year equate to approximately three a day.

Consideration has been given to the construction of the development, and it is considered that appropriate space exists on site for all materials and operatives parking to be accommodated within the existing curtilage. It is expected that construction vehicles would follow established routes used by HGVs, which will be set out in full within a construction management plan (CMP).

On this basis, it is considered that the outline application should be considered acceptable from a transport perspective.



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