

Havant Thicket Reservoir

Construction Environment Management Plan

Addendum to the Phase 1 - Northern Access Route and
B2149 Junction Works



REPORT

Havant Thicket Reservoir Scheme

Construction Environmental Management Plan –
Addendum to the Phase 1 - Northern Access Route and
B2149 Junction Works

Client: Future Water

Reference: Addendum to the Phase 1 - Northern Access Route
and B2149 Junction_ CEMP-RHD-ZZ-XX-RP-Z-0001

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1 INTRODUCTION

1.1 Purpose of the Report

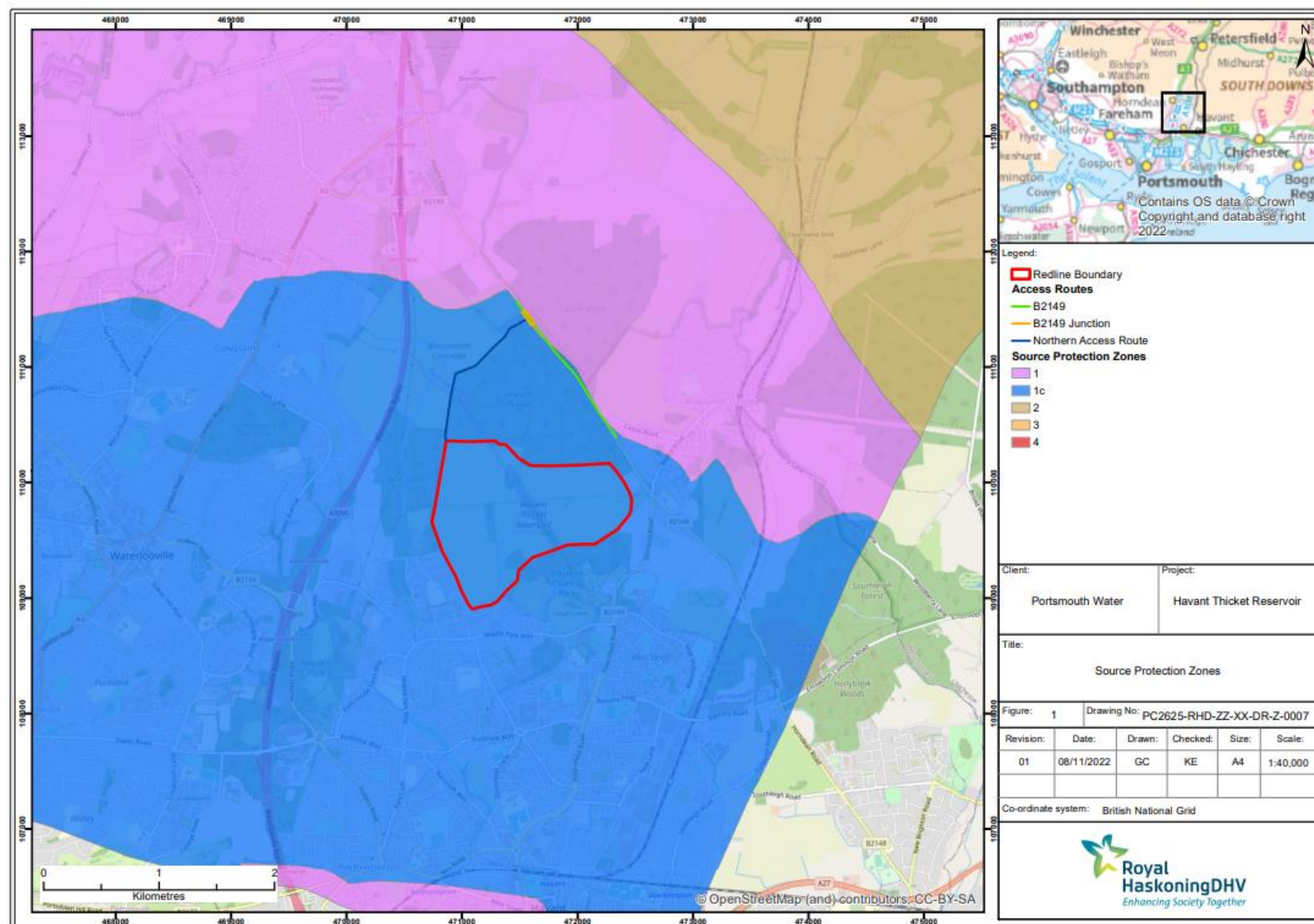
- 1.1.1 In 2020, planning applications (reference APP/20/00990 and 51680/001) were submitted to Havant Borough Council and East Hampshire District Council for permission to develop a reservoir for raw water storage with a minimum storage capacity of 8,700 million litres. Planning permission was granted in October 2021 subject to conditions and including full permission for a new road junction off the B2149 to facilitate access north of the reservoir site and an outline permission for an access route from the northern junction to the location of the visitor car park in the north-west of the reservoir site (herein referred to as the Northern Access Route).
- 1.1.2 This document forms an addendum to the Construction Environmental Management Plan (CEMP) for the Phase 1 works at Havant Thicket (*PC2625-RHD-ZZ-XX-RP-Z-0001-HTR-Northern Access + B2149_CEMP*), which has been submitted to support the partial discharge of Condition 5 of the planning permission.
- 1.1.3 The information provided within this addendum relates to the potential impact of the Phase 1 works on the Source Protection Zones (SPZ) within and surrounding the reservoir site and associated mitigation measures, to address comments made by the Environment Agency in response to the Phase 1 CEMP.
- 1.1.4 It is pertinent to note that for subsequent phases of the Havant Thicket Reservoir Scheme, where excavations will be undertaken to a depth that could potentially impact upon groundwater, the applicable Phase CEMP will detail the appropriate mitigation in such circumstance.

1.2 Phase 1

- 1.2.1 The Northern Access route provides the main access and egress route for construction traffic to reach the works site from the B2149. A new junction is to be constructed on the B2149 linking to the Northern Access. The access route then also provides the main access and egress route for the reservoir once it becomes operational.

- 1.2.2 The scope of works to be undertaken for the Phase 1 works comprise construction of a new junction off the B2149 including carriageway re-profiling, construction of new access road (Northern Access Route) into the reservoir site from the new B2149 junction and establishment of the site compound in the north-west corner of the reservoir site. Further details of the works are provided in the *Main Reservoir Works Phase 1 Construction Method Statement* (see HTR-MRW-CMS-v1.1).
- 1.2.3 The works activities for the new junction and running surface will involve carriageway excavations, drainage, kerbs and sub-base laying, installation of gullies, construction of islands and re-profiling and resurfacing of the existing carriageway. The site compound will be constructed by stripping topsoil, excavating sub-soil, laying ground ducts for services and drainage, followed by sub-base material, tarmac surfacing, foundation forming for the project accommodation and utility connections preparations.
- 1.2.4 A Geology and Hydrogeology Desk Study (*HTR-ATK-ZZ-ZZ-RP-C-0001*) was undertaken as part of the Environmental Statement for the Havant Thicket Reservoir Scheme. The study identified that an Inner Zone (Zone 1) SPZ is located approximately 254m north-east of the reservoir site, associated with the Chalk principal aquifer. The reservoir site is also located within an Inner Zone (Zone 1c) SPZ.
- 1.2.5 The footprint of the reservoir site is located within a Zone 1c SPZ (See *Figure 1: Source Protection Zones*). This footprint comprises the main site compound location and associated materials and fuel storage areas. The Zone 1c SPZ, means that the groundwater zone is of high sensitivity. However, the “c” denotes that the aquifer is situated between a protective cover, in this case, a considerable thickness of clay.
- 1.2.6 These works activities will not involve deep excavations or deep intrusions into the ground. It is anticipated that the maximum depth of the excavation works will be 1.2m. With the thickness of the clay in the area of the works being c.50m, it is unlikely that excavation works will breach this, and will not therefore expose the Chalk aquifer to pollution. However, if any cracks or voids in the clay are discovered during the shallow excavations, work will be paused, and attempts will be made to ascertain their depth and therefore connectivity to the Chalk aquifer and establishment of mitigation measures.

Figure 1: Source Protection Zones



2 Water Environment

- 2.1.1 To prevent pollution of the water environment, the construction works will be undertaken in accordance with industry guidance set out in *Pollution Prevention Guidance* (PPG5) which was produced by the Environment Agency¹, *Protect Groundwater and Prevent Groundwater Pollution* (March 2017) and the Environment Agency's *Approach to Groundwater Protection* (Feb 2018 Version 1.2).
- 2.1.2 Procedures to deal with accidental leakages or spillages of hydrocarbons and oils, or accidental release of hazardous substances during construction works will be established. These will include:
- Provision of spill kits and drip trays on site at all times and training of operatives on their use
 - Provision of signage which highlight hazardous nature of specific substances and the sensitivity of the SPZ within the reservoir site
 - Implementing the *Emergency Preparedness and Response* procedures as set out in *Section 2 of the Enabling Works Phase CEMP (PC2625-RHD-ZZ-RP-Z-0001-HTR-EW-CEMP)*, in the event of a pollution incident, which will include notifying the Environment Agency.
- 2.1.3 Best practice measures will be adopted to avoid pollution of watercourses. This is to include, but is not limited to, adherence to Guidelines for Pollution Prevention (GPP), latest Environment Agency pollution guidance available from data.gov, and Construction Industry Research and Information Associated (CIRIA) guidance on the control of water pollution from construction sites.
- 2.1.4 The nearest watercourses to the works are located in Bells Copse, approximately 370m to the west, and Headwater Stream 1 which flows from Havant Thicket, down to Riders Lane Stream, approximately 100m to the east of the site compound. Headwater Stream 1 will be diverted during the Phase 1 works.
- 2.1.5 All oil or chemical storage areas will be bunded and lined in order to contain pollutants in the event of leakage. These will have a primary container manufactured with integral secondary containment that holds a minimum of 110% of the volume of the inner tank. There will be no storage of materials or chemicals or refuelling within 8m of any watercourse. The locations of storage areas will be contained within the site compound.

- 2.1.6 Implementation of appropriate and safe storage of fuel, oils and equipment during construction in accordance with the COSHH Regulations will be adopted.
- 2.1.7 Implementation of working methods during earthworks to manage groundwater and surface water appropriately and ensure that there is no uncontrolled run-off from the works, any material / waste stockpiles, and storage containers into adjacent surface watercourses.
- 2.1.8 If unidentified contamination is encountered, works will be suspended in the area and appropriate investigations and remediation will be discussed and agreed with stakeholders and completed in accordance with current best practice.

3 Discovery Strategy

3.1.1 The discovery strategy sets out actions that must be taken to avoid the potential risk of polluting the groundwater supply within the SPZ during the development stages of the project. **Table 3-1 Discovery Strategy** Table 3-1 details actions and responsibilities in the event that a pollution incident is observed.

Table 3-1 Discovery Strategy Actions and Responsibilities

Person observing pollution	Reporting lines	Action to be taken
Site visitor	Report observations to the construction manager	None
Sub-contractor	Report observation to the construction manager	Stop work and safely secure the area where possible prior to reporting to construction manager
Construction Manager / Environmental Health Safety and Welfare Manager	Report observation to project manager, ECoW, Portsmouth Water and Environment Agency	Stop work and safely secure the area where possible prior to reporting to others
Environmental Clerk of Works (ECoW)	Report observation to construction manager, project manager and Environment Agency	Advise that work stops and where possible that the area is safely secured before reporting to others

3.1.2 Table 3-2 identifies other organisations that may need to be contacted in an emergency or where pollution of controlled waters is occurring.

Table 3-2 Contact Organisations

Occurrence	Description	Contact
Risk to the public	Risk to members of the public as a result of pollution during the course of works.	Emergency Services Portsmouth Water Local Planning Authority Health & Safety Executive
Pollution of controlled waters	Contamination of surface or groundwater – for example chemical spillage, contaminated soil/water or slurry entering a water body	Portsmouth Water Environment Agency Local Planning Authority
Pollution of adjacent/adjoining land	Pollution of land outside the reservoir site boundary as a result of site activities.	Portsmouth Water Landowner Local Planning Authority

