

TECHNICAL NOTE

Non Material Amendment Application - Havant Thicket Reservoir

Non Material Amendment for main reservoir embankment earthworks and reservoir culvert Environmental Statement of Conformity

Introduction

Future Water commissioned Royal HaskoningDHV to prepare an Environmental Statement of Conformity in support of a non material amendment for proposed changes to the design of the Havant Thicket Reservoir Scheme.

This Technical Note has been prepared by an environmental consultant with over 30 years' experience in undertaking environmental impact assessments for a range of major infrastructure projects. Their professional experience includes the preparation of screening applications, scoping reports, environmental statements, environmental masterplans, environmental management plans, compensatory plans, sustainability reviews and environmental designs.

The Havant Thicket Reservoir Scheme was granted planning permission subject to conditions in October 2021, by Havant Borough Council and East Hampshire District Council, Planning Application Refs: APP/20/00990 and 51680/001 respectively. The decision is for a hybrid application and includes full permission for some matters and outline permissions for others.

The Scheme includes the main reservoir and surroundings and a pipeline route located to the south of the reservoir. As the proposed design modifications only apply to the reservoir part of the Scheme, this review excludes the pipeline route corridor.

Description of Scheme approved as part of the hybrid planning permission

The Scheme approved as part of the hybrid planning permission is located close to an area of ancient woodland which forms part of the Grade II* Registered Leigh Park (Staunton Country Park) and the Sir George Staunton Conservation Area.

The southern toe of the embankment extended into an area of a retained woodland spur (The Avenue) which is located in the registered park and garden. Most of The Avenue has already been removed under the current planning permission but the southern end is retained.

In addition, an area of woodland projects northwards from the main woodland block, this being outside the registered park and garden but within the Conservation Area. Some of the existing woodland within the Conservation Area has already been removed under the current planning permission. The southern extent of the embankment also runs relatively close to the edge of the main woodland block, with it being approximately 25m at its nearest point. Within the space between the woodland and embankment toe, a bridleway with pedestrian, cycle and equestrian use is proposed.

Description of Non Material Amendment

An application for a non material amendment to the hybrid planning permission is to be submitted, on behalf of Future Water. A summary of the application for a non material amendment is briefly outlined below:

Main reservoir embankment earthworks and reservoir culvert

Amendments to the position of the southern embankment, requiring slight increases to excavation and embankment earthworks volume. The amended design proposes the southern (external) toe is moved further north and the crest moved further north and extended in length.

As a consequence, the reservoir culvert (which is located below and through the embankment) also relocates to the north. The Control House, Avenue Staircase and Viewing Platform would also move further north.

Environmental appraisal of proposed design changes

The intention to vary the approved Scheme design approved for the hybrid planning permission has required a review of the published Environmental Statement prepared by Atkins (Havant Thicket Reservoir Project, Atkins, 2020). The Environmental Statement adopted the principles of Rochdale Envelope (Planning Inspectorate, 2012) in assessing the Scheme design at that time and defined the design parameters of the Scheme.

The Environmental Statement prepared in 2020 assessed the potential for significant effects arising from the Scheme with respect to: air quality, historic environment, biodiversity, ground conditions, landscape and visual, noise and vibration, traffic and transport, material resources and waste, water (flows, quality and groundwater) climate, climate change vulnerability, population and human health, cumulative effects and vulnerability to major accidents and disasters.

A qualitative review has been undertaken to consider the implications on the findings of the 2020 Environmental Statement and the potential for any new, or materially different significant effects to arise as a result of the proposed changes to the design. The process has involved:

- The identification of those environmental topics which can be screened out and not required to be considered further; and
- The identification of potential issues which need further consideration.

Environmental topics considered unchanged by the non material amendment

Following a review of the scale and nature of the proposed design changes against the detail and flexibility of the assumptions utilised as the basis of the 2020 Environmental Statement, it is considered the following assessments would remain unchanged, and the findings of the 2020 Environmental Statement remain valid:

- Historic environment, ground conditions, air quality, noise and vibration, biodiversity, population and human health, traffic and transport, material resources and waste, water (flows, quality and groundwater), climate and climate change vulnerability, cumulative effects and vulnerability to major accidents and disasters. All mitigation, both assumed and

prescribed in the published Environmental Statement for these topic areas will remain deliverable and appropriate, to control the likely impacts of the slightly revised scheme.

A summary of the environmental topic assessments considered unchanged by the proposed changes subject to the non material amendment is provided in Table 1.

Table 1 - Summary of environmental topics considered unchanged by the proposed changes subject to the non material amendment

Environmental Statement Topic	Commentary
Historic environment	The 2020 Environmental Statement reported that the approved Scheme resulted in a significant, moderate adverse effect on the Grade II* Registered Leigh Park (Staunton Country Park) and the Sir George Staunton Conservation Area during construction and operation. The proposals would not materially change the construction phase footprint, operations, nor associated visual impacts upon the setting of the Staunton Country Park or the Sir George Staunton Conservation Area. The minor and imperceptible changes in operational landscaping/visual amenity effects would be consistent, and fall within the granularity and flexibility of the published Environmental Statement methodology, which both acknowledged and allowed for a degree of detailed design development. As such, no new, or materially different significant effects on the historic environment would arise as a result of the proposed changes to the design. Consequently, there would no change to the significance of effects reported in the 2020 Environmental Statement.
Ground conditions	No change to the significance of effects reported in the 2020 Environmental Statement. Slight increases to the excavation and embankment earthworks volume would be reflected in the final Materials Management Plan submitted as part of the CL:AIRE Definition of Waste: Code of Practice (DoWCoP) process. The Scheme promotes sustainable waste and material resource management in line with the Government's waste hierarchy to allow the re-use of suitable materials during the construction works.
Air quality	The 2020 Environmental Statement reported that temporary localised construction phase changes in air quality were not considered likely to result in significant indirect impacts on ancient woodland with appropriate mitigation measures in place.

Environmental Statement Topic	Commentary
	Although the design changes include the southernmost embankment moving by up to 45m further to the north, the construction processes, intensity, and plant would remain unchanged by the proposals. The slight change in location of the embankment would remain within the broad assumptions utilised for the published environmental assessment. As such, no change to the significance of effects are anticipated from air emission and dust sources during construction on ecological / arboricultural receptors in the retained woodland to the south.
Noise and vibration	The 2020 Environmental Statement reported that construction noise levels from the reservoir works were not predicted to exceed the threshold for potential impacts during the majority of the construction period. Where construction noise levels were predicted to exceed the thresholds, they can be mitigated through good communication with residents and the employment of Best Practical Means. The construction works, intensity, and plant would remain unchanged by the proposals. The slight change in location of the embankment would remain within the broad assumptions utilised for the published environmental assessment. As such, no change to the significance of effects reported in the 2020 Environmental Statement is anticipated for properties to the south (e.g. on Winterslow Drive) and the users of the registered park and garden of Staunton Country Park to the south.
Biodiversity	No change to the significance of effects reported in the 2020 Environmental Statement. It is noted that a minimum 25m separation would be maintained from the ancient woodland to the south. As such, there would be no new effects on ancient woodland or veteran trees arising from the proposed design changes. There would also be no additional loss of existing habitat beyond that assumed within the 2020 Environmental Statement and would be in line with the Biodiversity Mitigation and Compensation Strategy.
Population and human health	No change to the significance of effects reported in the 2020 Environmental Statement.

Environmental Statement Topic	Commentary
	The greater separation of the main construction works from public areas could be a further benefit in maintaining public safety.
Traffic and transport	No change to the significance of effects reported in the 2020 Environmental Statement. There are anticipated to be minor changes in the pattern of internal site vehicle movements, however, the overall numbers of offsite construction vehicles movements would be as per the approved Scheme.
Material resources and waste	No change to the significance of effects reported in the 2020 Environmental Statement, as excavated materials from the reservoir site and access road that are suitable for use would be reused on-site, thereby preventing the generation of excavation wastes that would otherwise need removal and management off-site.
Water (flows, quality and groundwater)	No change to the significance of effects reported in the 2020 Environmental Statement. The slight increase in excavations that would be needed may generate additional water for abstraction and discharge. As this would likely be a negligible increase from the water volumes currently expected to be generated, it is not likely to result in any changes to the site drainage strategy or the abstraction / discharge volumes.
Climate	No change to the significance of effects reported in the 2020 Environmental Statement. Materials would be sourced on-site as far as possible as per the approved Scheme, to reduce greenhouse gas emissions associated with the production and transportation of materials.
Vulnerability to climate change	No change to the significance of effects reported in the 2020 Environmental Statement. The proposed design amendments would have a similar vulnerability to climate change, as per the approved Scheme.
Cumulative effects	No change to the significance of effects reported in the 2020 Environmental Statement. The assessment of in-combination effects remains unchanged, as per the approved Scheme.
Vulnerability to major accidents and disasters	No change to the significance of effects reported in the 2020 Environmental Statement.

Environmental Statement Topic	Commentary
	The proposed design amendments would have a similar vulnerability to major accidents and disasters, as per the approved Scheme.

Landscape and visual effects

The potential for landscape and visual effects has been given greater consideration due to the nature of the proposed design changes.

Visual effects

From the nearest viewpoints within Staunton Country Park to the south, the amended location of the embankment would be visible but set further to the north from the viewpoints and with a wider level buffer between the woodland edge and the embankment base. Overall, the change to views from Staunton Country Park are small in comparison to the wider effect of the construction of the reservoir. As such, the change to views from Staunton Country Park are not material and will have no effect on the predicted level of visual effects set out in the published 2020 Environmental Statement.

Other visual receptors surrounding the reservoir site include residential properties on Swanmore Road, the west side of the southern end of Manor Lodge Road, Well Meadow, Winterslow Drive and Public Rights of Way. Views of the amended position of the southern embankment will either only appear marginally nearer and the change to the view will be small in extent, or there will be no discernible views at other visual receptors due to intervening screening. The Crest level will not change in height compared to the outline design submitted for hybrid planning permission.

The southernmost embankment would move by up to 45m further to the north and would therefore move further from the registered park and garden of Staunton Country Park, which is also a Conservation Area. Consequently, there would be more space for recreation and potentially a habitat/landscape zone. This would have local benefit to users of the reservoir, the landscape and visual receptors.

Landscape effects

The proposed design changes are located within a small part of the following landscape character areas:

- Havant Landscape Character Area 11: A3(M) Eastern Corridor (adjacent the reservoir site and access roads);
- Havant Landscape Character Area 20: Staunton Country Park (covering the reservoir site and access roads);
- Local Landscape Character Sub Area 10aiii West: Wooded Claylands – Havant Thicket and Gypsies Plain (covering the reservoir site and access roads).

With respect to the above landscape character areas, there would be a local improvement to the southern edge of the reservoir site where the southernmost embankment would be moved further

from the registered park and garden of Staunton Country Park, which is also a Conservation Area. There will be consequently more space for a woodland buffer and recreation/habitat zone.

Overall, the changes to the Scheme assumed for the purpose of the published 2020 Environmental Statement assessment are comparatively minor in scale and fall both within the granularity of the assumptions for the Environmental Statement methodology, as well as its inherent flexibility to accommodate the design changes proposed.

Conclusion

The proposed changes fall within the parameters of the Rochdale Envelope. All mitigation, both assumed and prescribed in the published 2020 Environmental Statement for the topic areas will remain deliverable and appropriate to control the likely impacts of the Scheme.

As such, no new or materially different significant effects on the environment are considered to arise based on the design evolution presented in the non material amendment.