



Teddington Direct River Abstraction

Preliminary Environmental Information Report
Chapter 8 – Historic Environment

Volume: 1

Date: June 2025

Table of Contents

8. Historic Environment	1
8.1 Introduction	1
8.2 Legislation, policy and guidance	2
8.3 Consultation, engagement and scoping	8
8.4 Embedded design (primary) mitigation and standard good practice (tertiary) ...	10
8.5 Assessment methodology	11
8.6 Study area	15
8.7 Baseline conditions	15
8.8 Preliminary assessment of likely significant effects.....	18
8.9 Additional (secondary) mitigation and enhancement measures.....	40
8.10 Summary of likely significant residual effects.....	41
8.11 Next steps.....	42
8.12 References	43

List of Tables

Table 8.1 NPS requirements for historic environment	4
Table 8.2 Key scoping opinion feedback for historic environment	8
Table 8.3 Criteria used to determine the value of heritage assets	12
Table 8.4 Criteria used to determine magnitude of change in relation to the historic environment	13
Table 8.5 Generic matrix used to determine the significance of predicted effects	14
Table 8.6 Mogden STW site preliminary assessment of construction phase effects	19
Table 8.7 Ham Playing Fields site preliminary assessment of construction phase effects	21
Table 8.8 Burnell Avenue site preliminary assessment of construction phase effects	32
Table 8.9 Tudor Drive site preliminary assessment of construction phase effects.....	34
Table 8.10 Conveyance Tunnel Route Corridor preliminary assessment of construction phase effects	34
Table 8.11 Mogden STW preliminary assessment of operation phase effects	36
Table 8.12 Ham Playing Fields site preliminary assessment of operation phase effects ...	37
Table 8.13 Burnell Avenue site preliminary assessment of operation phase effects	38
Table 8.14 Tudor Drive site preliminary assessment of operation phase effects	40
Table 8.15 Summary of likely significant residual effects for historic environment.....	42

8. Historic Environment

8.1 Introduction

- 8.1.1 This chapter of the Preliminary Environmental Information (PEI) Report provides preliminary environmental information relating to the historic environment to allow stakeholders and the local community to understand and develop an informed view of the likely significant environmental effects of the Teddington Direct River Abstraction (TDRA) Project (hereafter referred to as 'the Project') at this stage of the Project's programme. This should be read in conjunction with the description of the Project as presented in Chapter 2: Project Description.
- 8.1.2 The historic environment is defined by the National Policy Statement for Water Resources Infrastructure (2023) (NPS) (Department for Environment Food and Rural Affairs (Defra), 2023) in paragraph 4.8.2 as follows: '*[it] includes all aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.*'
- 8.1.3 Those elements of the historic environment identified as having a degree of significance meriting consideration in planning decisions because of their historic interest are called 'heritage assets'.
- 8.1.4 Heritage assets are defined in paragraph 4.8.3 of the NPS as: '*buildings, monuments, sites, places, areas or landscapes, or any combination of these. The value of a heritage asset to this and future generations because of its heritage interest is referred to as its significance. The interest may be historic, archaeological, architectural or artistic. Significance derives not only from a heritage asset's physical presence, but also from its setting.*' Within this chapter, the term 'significance' when referring to the value of a heritage asset is avoided to reduce any confusion when discussing significant effects in later sections. Instead, the term 'heritage value' is used throughout.
- 8.1.5 Heritage assets include designated assets (World Heritage Sites, Scheduled Monuments, Listed Buildings, Conservation Areas, Registered Parks and Gardens (RPGs), Registered Battlefields and Registered Historic Wrecks) and non-designated assets identified by the local planning authority (for example locally listed buildings, archaeological sites and monuments identified on the Greater London Historic Environment Record (GLHER), and historic landscapes).
- 8.1.6 The Project has the potential to create effects on both designated and non-designated heritage assets, including potential setting effects. There is also a potential for effects on buried archaeological remains. This chapter should be read in conjunction with the description of the Project as presented in Chapter 2: Project Description. The wider setting effects upon the landscape are considered in Chapter 9: Townscape and Visual. Effects on heritage assets

arising from movements of construction traffic are considered in Chapter 12: Traffic and Transport where applicable. Potential effects on heritage assets from construction noise and vibration are considered in Chapter 14: Noise and Vibration where applicable.

8.1.7 This chapter is supported by the following Volume 2 PEI Report Figures and Volume 3 PEI Report Appendices:

- a. Appendix 8.1: Preliminary Archaeological Assessment
- b. Appendix 8.2: Preliminary Heritage Asset Baseline
- c. Figure 8.1: Designated Heritage Assets
- d. Figure 8.2: Non-designated Heritage Assets

8.2 Legislation, policy and guidance

8.2.1 A summary of legislation and policy is provided in Appendix 1.2: National Planning Policy and Legislation.

8.2.2 Further detail on the legislation, policy and guidance relevant to the historic environment is provided below.

Legislation

8.2.3 Developments of national significance for which development consent is required are determined in accordance with the decision-making framework in the Planning Act 2008 and relevant NPS. The Infrastructure Planning (Decisions) Regulations 2010 set out the legal requirements for the control of development and alterations that affect Scheduled Monuments, Listed Buildings and Conservation Areas (see Regulation 3).

8.2.4 The Ancient Monuments and Archaeological Areas (AMaAA) Act 1979 (as amended) sets out the statutory protection afforded to selected nationally important archaeological assets (structures, buildings or areas). The AMaAA Act details the protection of scheduled sites and the need for Scheduled Monument Consent prior to carrying out any works to a Scheduled Monument that would result in its demolition, destruction or damage. The AMaAA Act does not afford any protection to the settings of such assets.

8.2.5 The AMaAA Act also provides protection to five areas of archaeological importance, comprising the city centres of Canterbury, Chester, Exeter, Hereford and York. Notice must be served on the relevant local authorities prior to undertaking works within the designated areas of archaeological importance.

8.2.6 There are no Scheduled Monuments within the vicinity of the Project and it is not located within any of the five areas of archaeological importance designated under the AMaAA Act.

8.2.7 The Historic Buildings and Ancient Monuments Act 1953 makes provision for the compilation of a register of gardens and other lands (parks and gardens and battlefields).

- 8.2.8 There are a number of RPGs within the vicinity of the Project that could be affected by the Project. Therefore, this chapter and Appendix 8.2 describes the heritage value of these designated assets to allow for an informed decision to be made by the Secretary of State. No Registered Battlefields are present within the vicinity.
- 8.2.9 The Planning (Listed Buildings and Conservation Areas) (PLBaCA) Act 1990 empowers the Secretary of State to maintain a list of built structures of special historic or architectural significance. The PLBaCA Act establishes that it is a criminal offence to carry out any works to a Listed Building without Listed Building Consent. In addition, fixtures and curtilage buildings (which is any object or structure that is fixed to the building or is within the curtilage and forms part of the land and has done so since before July 1948) are also treated as part of the building for the purposes of Listed Building control.
- 8.2.10 Section 66(1), in the determination of applications affecting Listed Buildings, states that in considering whether to grant planning permission for development which affects a Listed Building or its setting, the local planning authority, or as the case may be the Secretary of State, shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest that it possesses.
- 8.2.11 In addition, section 72 of the PLBaCA Act states that in exercising all planning functions, local planning authorities must have special regard to the desirability of preserving or enhancing the character or appearance of Conservation Areas.
- 8.2.12 There are a number of Listed Buildings and Conservation Areas within the vicinity of the Project that could be affected by the Project. Therefore, this chapter and Appendix 8.2 describe the heritage value of these designated assets (as well as non-designated assets, which are also considered) to allow for an informed decision to be made by the Secretary of State.
- 8.2.13 The Hedgerows Regulations 1997 set out criteria for the identification of 'Important Hedgerows'; these include several historic environment criteria. Consent from the local planning authority is usually required for the removal of an 'Important Hedgerow'; however, such removal is deemed to be permitted where a Development Consent Order (DCO) has been granted and the relevant powers have been included in the DCO.

National policy

National Policy Statement for Water Resources Infrastructure

- 8.2.14 Key policies relevant to the historic environment set out in the NPS (Section 4.8) (Defra, 2023) are provided in Table 8.1.

Table 8.1 Key policy from the NPS for Water Resources Infrastructure

Paragraph	Requirement	How this is addressed for the Project
4.8.5	Non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to Scheduled Monuments should be considered subject to the policies for designated heritage assets. The absence of designation for such heritage assets does not indicate lower significance.	A detailed archaeological desk-based assessment and appropriate field evaluation, where necessary, will be undertaken as part of the Project to address the potential for unknown archaeological remains to be affected. The value of any assets identified will be assessed. A preliminary archaeological desk-based assessment is provided in Appendix 8.1.
4.8.6	The Secretary of State will also consider the effects of the proposed development on other non-designated heritage assets in determining applications for development consent. Any non-designated heritage assets would be identified either through the development plan process by local authorities, including 'local listing', or through the nationally significant infrastructure project examination and decision-making process.	Section 8.7 and Appendix 8.2 describe the known heritage assets within the study area (both designated and non-designated) and their heritage value.
4.8.7	Where the development is subject to Environmental Impact Assessment (EIA) the applicant should undertake an assessment of any likely significant heritage impacts, including cumulative impacts, as part of the Environmental Statement (ES).	This chapter provides preliminary information to allow for an understanding of the potential impact of the Project on the heritage value of identified heritage assets. This will enable informed decisions in relation to the historic environment matters to be made as the Project progresses. The requirement to address impacts to heritage assets in terms of harm will be fully considered within the ES.
4.8.8	The applicant should provide, as part of the ES, a description of the significance of the heritage assets affected by the proposed development, and the contribution of their setting to that significance. The level of detail should be	Section 8.7 and Appendix 8.2 describe the known heritage assets within the study area and their heritage value. The GLHER and National Heritage List for England (NHLE)

Paragraph	Requirement	How this is addressed for the Project
	proportionate to the asset's importance, and no more than is sufficient to understand the potential impact of the proposal on the significance of the asset. As a minimum, the relevant Historic Environment Record and National Heritage List for England should be consulted, and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, the applicant should include an appropriate desk-based assessment and, where necessary, an appropriate level of field evaluation. The applicant should ensure that the extent of the impact of the proposed development on the significance of any heritage asset affected can be adequately understood from the application and supporting documents.	(Historic England, 2025) have been consulted to inform the assessment. A detailed archaeological desk-based assessment and appropriate field evaluation, where necessary, will be undertaken as part of the Project to address the potential for unknown archaeological remains to be affected. A preliminary archaeological desk-based assessment is provided in Appendix 8.1.
4.8.10	Careful consideration in preparing the scheme will be required on whether the impacts on the historic environment will be direct or indirect, temporary or permanent.	A preliminary assessment of likely significant effects is provided in Section 8.8.
4.8.11	A documentary record of our past is not as valuable as retaining the heritage asset, and therefore the ability to record evidence of the asset should not be a factor in deciding whether such loss should be permitted, and whether or not consent should be given.	Proposed mitigation measures are outlined in Sections 8.4 and 8.9.
4.8.12	Where the loss of the whole or part of a heritage asset's significance is justified, the Secretary of State will require the applicant to record and advance understanding of the significance of the heritage asset before it is lost (wholly or in part). The extent of the requirement should be proportionate to the asset's importance and significance and the impact. The applicant should be required to publish this evidence and to deposit	Proposed mitigation measures are outlined in Sections 8.4 and 8.9.

Paragraph	Requirement	How this is addressed for the Project
	copies of the reports with the relevant Historic Environmental Record. They should also be required to deposit the archive generated in a local museum or other public repository willing to receive it.	
4.8.13	Where appropriate, the Secretary of State will impose requirements on the Development Consent Order to ensure that the work is undertaken in a timely manner, in accordance with a written scheme of investigation that complies with the policy in the National Policy Statement and which has been agreed in writing with the relevant local authority, and to ensure that the completion of the exercise is properly secured.	Proposed mitigation measures are outlined in Sections 8.4 and 8.9.
4.8.14	Where there is a high probability (based on an adequate assessment) that a development site may include, as yet undiscovered heritage assets with archaeological interest, the Secretary of State will consider requirements to ensure appropriate procedures are in place for the identification and treatment of such assets discovered during construction.	Proposed mitigation measures are outlined in Sections 8.4 and 8.9.
4.8.15 to 4.8.29	Focus on the Secretary of State's decision-making on a DCO application and the conservation of heritage assets, irrespective of the levels of harm ascribed in assessment, as well as the way in which asset preservation is weighed against the public benefits of the project in question.	This chapter provides preliminary information to allow for an understanding of the potential impact of the Project on the heritage value of identified heritage assets. This will enable informed decisions in relation to the historic environment matters to be made as the Project progresses. The requirement to address impacts to heritage assets in terms of harm will be fully considered within the ES.

National Planning Policy Framework

8.2.15 Section 16 of the National Planning Policy Framework (NPPF) (updated 2024) (Ministry of Housing, Communities and Local Government, 2024) addresses the historic environment. The policies provided in paragraphs 202 to 221 broadly mirror those within the NPS. They require an applicant to describe the

significance of any heritage assets affected, including any contribution derived from setting, and where there is a potential for buried archaeological remains to provide a supporting desk-based assessment, and where necessary, the results of a field evaluation (paragraph 207). The Project and this chapter address these requirements. The heritage value of any heritage assets affected is described in Appendix 8.2. A preliminary archaeological assessment (desk-based assessment) is provided at Appendix 8.1. Appropriate field evaluation, where necessary, will be undertaken as part of the Project to address the potential for unknown archaeological remains to be affected. In accordance with the NPS and NPPF requirements, impacts to heritage assets will be equated with levels of harm (either substantial or less than substantial) within the ES.

Regional and local policy

- 8.2.16 In addition to the national policy set out above, the Project must also have regard to relevant regional and local plans and policy.
- 8.2.17 Policy HC1 (Heritage Conservation and Growth) of the London Plan 2021 (Greater London Authority, 2021) addresses the historic environment and states that development proposals affecting heritage assets, and their settings, should seek to conserve their significance. In addition, it is stated that development proposals should identify assets of archaeological significance and use this information to minimise or avoid harm through design or mitigation.
- 8.2.18 Policy CC4 (Heritage) of the London Borough of Hounslow (LBH) Local Plan (2015) and emerging LBH (Regulation 19) Local Plan 2020 – 2041 (2024) addresses the historic environment and requires developments to conserve and enhance heritage assets in a manner appropriate to their significance. Requirements in relation to archaeological evaluation are also identified. The emerging policy highlights the need for consultation of the GLHER when developing proposals. The GLHER data is referenced within this chapter and appendices.
- 8.2.19 Policies LP 3 (Designated Heritage Assets), LP 4 (Non-Designated Heritage Assets), and LP 7 (Archaeology) of the London Borough of Richmond (LBR) Local Plan (2018a) address the historic environment and require developments to conserve and enhance designated and non-designated heritage assets, including the locally adopted list of Buildings of Townscape Merit (BTMs). Requirements in relation to archaeological evaluation are also identified. Policies 29, 30 and 33 of the emerging LBR Publication Draft (Regulation 19) Local Plan (2023) mirror the existing adopted policies.
- 8.2.20 Policies CS 8 (Character, Design and Heritage) and DM 12 (Development in Conservation Areas and Affecting Heritage Assets) of the Royal Borough of Kingston upon Thames (RBK) Core Strategy (2012) address the historic environment. Policies KD12 (Heritage Assets), KD13 (Development affecting Heritage Assets), and KD14 (Archaeology) of the emerging draft (Regulation 18) Kingston Local Plan 2019 – 2041 are also material considerations (RBK, 2023).

Guidance

- 8.2.21 Relevant guidance in relation to the historic environment provided in Planning Practice Guidance (PPG) (Ministry of Housing, Communities and Local Government, 2019) has been taken into consideration during the preparation of this chapter.
- 8.2.22 Supplementary Planning Guidance in relation to Conservation Areas (LBR, 2018b) and Listed Buildings (LBR, 2005) provided by LBR has also been reviewed.
- 8.2.23 Additional relevant guidance used in the preparation of this chapter and supporting appendices is highlighted in paragraph 8.5.1.

8.3 Consultation, engagement and scoping

- 8.3.1 Table 8.2 identifies the key feedback received from the Planning Inspectorate in the EIA Scoping Opinion.

Table 8.2 Key scoping opinion feedback for historic environment

PINS ID reference	Comment	Response
PINS (ID 3.3.2)	In the absence of detailed evidence regarding land stability and noting that the scoping boundary includes several listed buildings, under which the proposed tunnel would run, the Inspectorate is not able to agree to scope this matter out [impacts to above ground heritage assets along the tunnel route] at this stage. The ES should assess impacts on above ground heritage assets within the tunnel route study area unless robust justification is provided to demonstrate that significant effects are unlikely to occur. Agreement should be sought with the relevant statutory consultation bodies.	Further evidence is required to demonstrate no impact on above ground heritage assets along the route of the conveyance tunnel. The route of the conveyance tunnel has been included as part of the study area. Heritage assets along the route of the conveyance tunnel are identified within this chapter and will be included in the assessment until further evidence can be provided to scope this matter out (if appropriate).
PINS (ID 3.3.3 and 3.3.8)	Effects to non-designated archaeological remains and Archaeological Priority Areas (APA) during operation. Due to the lack of justification, the Inspectorate does not agree to scope this matter out.	The presence/absence of archaeological remains within the footprint of the Project is yet to be determined, and the nature of the operational activities is only initially understood. This matter is considered within this chapter and will

PINS ID reference	Comment	Response
		be included in the assessment until further evidence can be provided to scope this matter out.
PINS (ID 3.3.5)	Effects to designated heritage assets near to Mogden Sewage Treatment Works (STW). Inspectorate does not agree to scope these matters out.	A preliminary assessment of effects to designated assets within the vicinity of Mogden STW is provided within this chapter.
PINS (ID 3.3.11)	500m study area. The ES should establish the study area with reference to the extent of the likely impacts and informed by fieldwork and the likely zone of visibility. Effort should be made to agree this study area with relevant consultation bodies.	500m study area around above ground infrastructure is used for this PEI Report chapter, with the addition of the conveyance tunnel route (no buffer). Study area to be agreed with stakeholders in advance of the preparation of the ES.
PINS and LBR (ID 3.3.16)	The Inspectorate considers that there is potential for significant effects to the setting of the Grade II* Marble Hill Registered Park and Garden, Grade II Teddington footbridge and Broom Water Conservation Area during the construction phase of the Proposed Development. These heritage assets should be considered for the relevant impact pathways scoped into the ES.	These assets are considered within this chapter.
PINS (ID 3.3.18)	The ES should confirm if there are any non-designated or locally listed buildings within the study area and indicate their location on a plan. Where significant effects are likely to any assets identified, these should be assessed in the ES.	Non-designated historic buildings, including BTMs, are considered within this chapter and are shown on the accompanying Figure 8.2.

8.3.2 Engagement with the statutory consultees Historic England and the Greater London Archaeological Advisory Service (GLAAS) has been limited in advance of the preparation of this chapter due to the requirement for an Enhanced Advisory Service (EAS) agreement.

8.3.3 However, the EAS has been put in place for the Project to support preparation of the DCO application. An initial meeting with GLAAS was held on 11 April 2025 to provide an update on the Project and present the findings of the

preliminary archaeological assessment. It was agreed that scopes for future assessment and survey work would be shared with GLAAS for discussion. Further regular meetings will be held with GLAAS and Historic England. The Local Authority Conservation Officers will also be included in future engagement.

8.4 Embedded design (primary) mitigation and standard good practice (tertiary)

Embedded design (primary) mitigation

- 8.4.1 The Applicant has worked through the design process to avoid or reduce environmental impacts through the use of embedded design (primary) mitigation in the Project. Chapter 3: Consideration of Alternatives details the design alternatives that have been considered, including the environmental factors which have influenced the decision making.
- 8.4.2 Embedded design (primary) mitigation relevant to the historic environment aspect includes:
- Permanent concrete shaft caps at the Ham Playing Fields and Burnell Avenue sites would be positioned below the ground surface to minimise visual impacts on heritage assets with replanting where appropriate/practicable to match the existing site conditions
 - Construction of the conveyance tunnel using a tunnel boring machine rather than by way of pipejacking, with all the material excavated from the conveyance tunnel being transferred to the Mogden STW site rather than being removed from each of the shaft sites. This reduces potential impacts on heritage assets at both Ham Playing Fields and Burnell Avenue from additional HGV movements
 - The reduction in the number of intermediate shafts from five to one limits the impact on potential buried archaeological remains as the shaft sites would have the biggest potential impact on below-ground deposits of archaeological interest
 - The outfall structure options being taken forward would be located near bank or in bank reducing potential visual effects to heritage assets in the vicinity

Standard good practice (tertiary)

- 8.4.3 Standard good practice (tertiary) relevant to this aspect will include:
- Protection of known heritage assets, for example the Grade II listed boundary wall around Ham House that runs parallel to Ham Street. Where designated heritage assets are present in close proximity to work sites, the construction contractor will be made aware of such assets and protection measures, such as speed limits, cones and signage, will be implemented to reduce the risk of accidental damage. Specific assets will also be subject to monitoring to ensure that they will not be affected by noise or vibration, where necessary (Appendix 4.2 Commitments Register, Provisional Commitment Reference (PCR) PCR 90).

- b. A protocol for unexpected archaeological discoveries (PAD) will be implemented to allow for archaeological remains outside of identified areas of specific mitigation to be appropriately investigated and recorded if they are encountered during construction activities (PCR 91).
- c. Noise reduction measures will be implemented to minimise impacts to nearby heritage assets, where necessary.
- d. Dust control measures will be implemented to minimise impacts to nearby heritage assets, where necessary.
- e. Lighting control measures will be implemented to minimise impacts to nearby heritage assets, where necessary.
- f. Land temporarily impacted by the Project, for use as construction compounds or as a result of utility diversions or access tracks, haulage road or materials storage, will be fully reinstated following the construction phase of the Project. This includes those areas that fall within a designated Conservation Area or within the setting of a designated heritage asset.

8.4.4 These measures are detailed in the draft Code of Construction Practice (CoCP) which is included as Appendix 4.3 in this PEI Report.

8.5 Assessment methodology

General approach

8.5.1 The approach to the EIA assessment for the historic environment will follow the methodology and principles described in Chapter 4: Approach to Environmental Assessment and as set out in Chapter 8 (Historic Environment) of the EIA Scoping Report. The historic environment assessment, and supporting studies, will be carried out in line with the relevant standards and guidance. It will follow good practice methodologies as appropriate, including:

- a. Design Manual for Roads and Bridges (DMRB) LA 106 Cultural heritage assessment (National Highways, 2020)
- b. Standards and Guidance for Historic Environment Desk-Based Assessment (Chartered Institute for Archaeologists (CIfA), 2020)
- c. Statements of Heritage Significance: Analysing Significance in Heritage Assets (Historic England, 2019)
- d. The Setting of Heritage Assets (Historic England, 2017)
- e. Managing Significance in Decision-Taking in the Historic Environment (Historic England, 2015a)
- f. Principles of Cultural Heritage Impact Assessment in the UK (Institute of Environmental Management and Assessment (IEMA), Institute of Historic Building Conservation (IHBC) and CIfA, 2021)
- g. Geoarchaeology – Using Earth Sciences to understand the Archaeological Record (Historic England, 2015b)

8.5.2 This approach has been used in the preliminary assessment presented in this chapter.

Assessing the significance of effects

- 8.5.3 The criteria for assigning the heritage value of the receptor (or asset 'significance' in planning policy terms) are set out below in Table 8.3. The criteria presented in Table 8.3 and Table 8.4 are based on the guidance provided by the DMRB¹ and the IEMA².
- 8.5.4 To align with the wider approach adopted by the Project, the very high value category of receptor that was presented at scoping has been removed. There are no assets within the study area that are identified to fall within this category. As such, this change will not affect the outcome of the assessment presented in this chapter.

Table 8.3 Criteria used to determine the value of heritage assets

Value of receptor	Criteria
High	<p>World Heritage Sites (including nominated sites).</p> <p>Scheduled monuments (including proposed sites). Undesignated assets of schedulable quality and importance.</p> <p>Assets that can contribute significantly to acknowledged national research objectives.</p> <p>Grade I, Grade II* and Grade II listed buildings.</p> <p>Conservation Areas containing very important buildings (Grade I and II* Listed Buildings).</p> <p>Undesignated structures of clear national importance.</p> <p>Designated historic landscapes of outstanding interest (Grade I and II* RPG). Undesignated landscapes of outstanding interest.</p> <p>Undesignated landscapes of high quality and importance, and of demonstrable national value.</p> <p>Well preserved historic landscapes, exhibiting considerable coherence, time-depth or other critical aspect(s).</p>
Medium	<p>Non-designated assets that contribute to regional research objectives.</p> <p>Historic (unlisted) buildings that can be shown to have exceptional qualities in their fabric or historical associations.</p> <p>Conservation Areas containing buildings which contribute significantly to their historic character, but not containing assets of the highest importance (Grade I or II* Listed Buildings).</p> <p>Listed structures such as historic milestones which are not in their original location might warrant this value.</p> <p>Designated special historic landscapes (Grade II RPG).</p> <p>Undesignated historic landscapes that would justify special historic landscape designation, landscapes of regional value.</p>

¹ LA106 Cultural Heritage Assessment (National Highways, 2020)

² Principles of Cultural Heritage Impact Assessment in the UK (IEMA, IHBC and CIfA, 2021)

Value of receptor	Criteria
	Averagely well-preserved historic landscapes with reasonable coherence, time-depth or other critical aspect(s).
Low	<p>Non-designated assets of local importance.</p> <p>Assets compromised by poor preservation and/or poor survival of contextual associations.</p> <p>Assets of limited value, but with potential to contribute to local research objectives.</p> <p>‘Locally listed’ buildings. Historic (unlisted) buildings of modest quality in their fabric or historical association.</p> <p>Robust undesigned historic landscapes.</p> <p>Historic landscapes with importance to local interest groups.</p> <p>Historic landscapes whose value is limited by poor preservation and/or poor survival of contextual associations.</p>
Negligible	<p>Assets with very little or no surviving archaeological importance.</p> <p>Buildings of no architectural or historical note; buildings of an intrusive character.</p> <p>Landscapes with little or no significant historical interest.</p>

8.5.5 Specific criteria relating to impacts on heritage assets are described in Table 8.4.

Table 8.4 Criteria used to determine magnitude of change in relation to the historic environment

Magnitude of change		Description of change
Large	Adverse	Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements
Large	Beneficial	Large scale or major improvement of resource quality; extensive restoration; major improvement of attribute quality
Medium	Adverse	Loss of resource, but not adversely affecting the integrity; partial loss of/damage to key characteristics, features or elements
Medium	Beneficial	Benefit to, or addition of, key characteristics, features or elements; improvement of attribute quality
Small	Adverse	Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements
Small	Beneficial	Minor benefit to, or addition of, one (maybe more) key characteristics, features or elements; some beneficial impact on attribute or a reduced risk of negative impact occurring
Negligible	Adverse	Very minor loss or detrimental alteration to one or more characteristics, features or elements

Magnitude of change		Description of change
Negligible	Beneficial	Very minor benefit to or positive addition of one or more characteristics, features or elements
No change	N/A	No change to characteristics, features or elements

8.5.6 The value of the receptor and the magnitude of change are combined to indicate the significance of predicted effects. This would follow the generic matrix presented in Table 8.5, informed by professional judgement.

Table 8.5 Generic matrix used to determine the significance of predicted effects

Receptor value/ sensitivity	Magnitude of change				
	No change	Negligible	Small	Medium	Large
Negligible	No change (not significant)	Neutral (not significant)	Neutral or Minor (not significant)	Neutral or Minor (not significant)	Minor (not significant)
Low	No change (not significant)	Neutral or Minor (not significant)	Neutral or Minor (not significant)	Minor (not significant)	Minor (not significant) or Moderate (significant)
Medium	No change (not significant)	Neutral or Minor (not significant)	Minor (not significant)	Moderate (significant)	Moderate or Major (significant)
High	No change (not significant)	Minor (not significant)	Minor (not significant) or Moderate (significant)	Moderate or Major (significant)	Major (significant)

8.5.7 The degree of harm to heritage assets affected by the Project will be described in full in the ES informed by the results of the assessment and professional judgement.

Assumptions and limitations

8.5.8 Detailed assessment of the potential archaeological effects of the Project is ongoing. As such, the potential for unknown archaeological remains to be affected cannot be fully described at this stage.

8.5.9 Site inspections and detailed setting assessments are in progress, therefore the description of the contribution of setting to the significance of any heritage assets affected by the Project has not yet been determined.

8.5.10 The design of the Project is ongoing, therefore the nature of all impacts on heritage assets is not confirmed and is based on the current design available at the time of writing. Where an lack of evidence has been identified by the Planning Inspectorate in relation to a particular matter, the issue is included

within this chapter and remains in the assessment until additional information becomes available to scope the issue out (if appropriate) in agreement with the relevant stakeholders.

- 8.5.11 Data provided by third parties is assumed to be accurate and fit for purpose.

8.6 Study area

- 8.6.1 A 500m study area around key above ground infrastructure sites has been used to identify heritage assets that could be affected by the Project (hereafter the 'study area'). The key sites comprise: Mogden STW (drive shaft, interception shaft and tertiary treatment plant (TTP)); Ham Playing Fields (intermediate shaft); Burnell Avenue (reception shaft, connection shaft, outfall and intake); and Tudor Drive (Thames Lee Tunnel connection shaft). The study area does not extend around proposed road modifications as part of the Project as it is considered there would be no significant effects on heritage assets from such changes. The road modifications would comprise very minor changes to existing highway infrastructure that would not have any direct physical impact on heritage assets. The potential for previously unknown archaeological assets to be affected by these changes is considered to be negligible given past impacts from highway construction.
- 8.6.2 In addition, the route of the conveyance tunnel is also included within the study area (without a buffer) in response to comments from the Planning Inspectorate in respect of identifying above ground heritage assets that could be affected by possible impacts related to land stability.
- 8.6.3 The study area is considered appropriate to capture all heritage assets that could be affected, either physically or as a result of changes to their settings, considering the nature of the Project and the surrounding built-up urban environment. The study area is also considered sufficient to assess the potential for previously unknown archaeological assets to be present, also referred to as archaeological potential. The extent of the study area is in accordance with the information provided by the GLHER and will be agreed with the heritage stakeholders through further engagement.
- 8.6.4 Plans 8.1 and 8.2 in Appendix 1.1: Plans show the designated and non-designated heritage assets in relation to above ground sites and the study area. As noted in paragraph 8.6.2, the 500m study area does not extend around the conveyance tunnel or proposed road junction modifications. The only potential effects within the tunnel route corridor will be those related to settlement to above ground assets and this potential impact will not extend beyond the identified corridor. All heritage assets that may be affected by settlement are captured by the study area used.

8.7 Baseline conditions

- 8.7.1 The following sources have been consulted to provide the baseline:

- a. Information on nationally designated sites from Historic England's NHLE³
- b. GLHER as held by GLAAS (data purchased in August 2024)
- c. Details of Archaeological Priority Areas (APAs) as held by GLAAS⁴
- d. Information on locally or regionally designated sites, for example Conservation Areas, Local Areas of Special Character (LASCs) and Locally Listed Buildings, as available from the respective London Boroughs, including the LBR register of BTMs⁵

8.7.2 Additional sources used to inform the preliminary assessment of archaeological potential are described in Appendices 8.1 and 8.2.

National designations summary

8.7.3 There are no World Heritage Sites, Scheduled Monuments or Historic Battlefields present within the study area.

8.7.4 There are 87 Listed Buildings within the study area. These comprise two Grade I Listed Buildings (Ham House (NHLE 1080832) and Orleans House (NHLE 1250280)), 11 Grade II* Listed Buildings, and 74 Grade II Listed Buildings. Most of the Listed Buildings fall within three main clusters including:

- a. Twickenham Riverside Conservation Area, which is located on the north bank of the River Thames, north of Ham Street Car Park, and contains 27 Listed Buildings
- b. Ham House Conservation Area, which is located in the central part of the study area to the immediate east of the proposed Ham Playing Fields site and contains nine Listed Buildings
- c. Ham Common and Parkleys Estate Conservation Areas, which are located at the southern end of the study area, approximately 370m north-east of Burnell Avenue and approximately 130m north and north-east of the Tudor Drive site and contain 31 Listed Buildings. The Ham Common and Parkleys Estate Conservation Areas and associated Listed Buildings have been scoped out of further consideration within this chapter as no likely significant effects are predicted as there would be very limited intervisibility with the Project due to the existing built form. This was agreed by the Planning Inspectorate in the EIA Scoping Opinion.

8.7.5 All Listed Buildings are identified to be of high value.

8.7.6 In the central part of the study area, three RPGs are present including:

- a. Grade II* Ham House (NHLE 1000282), which is located to the immediate south and east of the Ham Playing Fields site
- b. Grade II* Marble Hill (NHLE 1000400), which is located on the north bank of the River Thames within the Twickenham Riverside Conservation Area in the central part of the study area, approximately 250m to the north-east of the Ham Playing Fields site

³ The National Heritage List for England (Historic England, 2025)

⁴ Great London Archaeological Priority Area Guidelines (Historic England, 2016)

⁵ Buildings of Townscape Merit register (LBR, 2025)

- c. Grade II York House (NHLE 1001548), which is also located on the north bank of the River Thames within the Twickenham Riverside Conservation Area in the central part of the study area, approximately 160m to the north-west of the Ham Playing Fields site

8.7.7 The Grade II* RPG are identified to be of high value. The Grade II York House RPG is identified to be of medium value.

8.7.8 A detailed summary of the designated assets within the study area is provided in Appendix 8.2.

Regional and local designations summary

8.7.9 Nine Conservation Areas are located within the study area. These are shown on Plan 8.1 in Appendix 1.1: Plans. The majority of these are located within the central and southern parts of the study area along the river frontages and encompassing historic estates and settlement cores and include:

- a. The Isleworth Riverside Conservation Area, which extends into the north-east extent of the 500m study area around Mogden STW
- b. Twickenham Riverside Conservation Area, which covers an extensive area on the north bank of the River Thames in the central part of the study area, approximately 250m to the north-east of the Ham Playing Fields site
- c. Ham House Conservation Area, which is located in the central part of the study area to the immediate east of the proposed Ham Playing Fields site
- d. Ham Common and Parkleys Estate Conservation Areas, which are located at the southern end of the study area, approximately 370m north-east of Burnell Avenue and approximately 130m north and north-east of the Tudor Drive site. As described in paragraph 8.7.4, the Ham Common and Parkleys Estate Conservation Areas have been scoped out of further consideration within this chapter.
- e. Teddington Lock Conservation Area, which is located to the north-west of Burnell Avenue
- f. Broom Water Conservation Area, which extends to the centre of the River Thames opposite Burnell Avenue
- g. Riverside North Conservation Area, which extends along the north bank of the River Thames into the area of Burnell Avenue
- h. King Edwards Grove Conservation Area, which is located south of Broom Road within Teddington approximately 400m south of Burnell Avenue

8.7.10 Detailed assessment of the heritage value of the Conservation Areas affected by the Project is provided in Appendix 8.2. The Isleworth Riverside, Twickenham Riverside, Ham House and Teddington Lock Conservation Areas are all identified to be of high value as they contain Grade I and Grade II* Listed Buildings. The Broom Water, Riverside North and King Edwards Grove Conservation Areas are identified to be of medium value as they do not contain Listed Buildings of the highest grades.

- 8.7.11 There are 11 APAs located within the study area, including ten Tier II APAs and one Tier III APA. The APAs are concentrated within the central and southern parts of the study area as shown on Plan 8.2 in Appendix 1.1: Plans.
- 8.7.12 There is one LASC (Tudor Estate) within the study area which lies adjacent to the Tudor Drive site within the RBK.
- 8.7.13 A detailed summary of non-designated assets recorded by the GLHER and Buildings of Townscape Merit recorded by LBR is provided in Appendix 8.2. Non-designated assets are shown on Plan 8.2 in Appendix 1.1: Plans.

Future baseline

- 8.7.14 Future changes to the baseline for historic environment could include updates to the list of designated heritage assets, for example, additional designations of Listed Buildings or amendments to descriptions of the heritage assets and/or areas covered by the existing designations such as Conservation Areas. The understanding of the archaeological potential of the Project area may also be enhanced by additional investigations undertaken in the future.
- 8.7.15 No changes in statutory legislation on historic environment issues are currently anticipated, although this could alter at any time. Additional guidance may be issued by national and/or statutory advisors, or others, including guidance on the assessment process.
- 8.7.16 In general, climate change is expected to lead to an increase in temperatures, with a greater frequency of hotter, drier summers and warmer, wetter, winters. Climate change is also expected to lead to sea level rise, which will affect tide levels and associated flood risk within the tidal section of the River Thames as far west as Teddington Weir. Further information on projected changes in climate parameters is provided in Chapter 18: Climate Change. Projected future changes in climate (e.g. increase in temperatures) have the potential to interact with effects identified within some environmental aspects and exacerbate or diminish their impact. Such combined impacts are termed In-Combination Climate Impacts (ICCI). Consideration of the potential ICCI associated with the historic environment receptors is provided in Section 8.8 of this chapter.
- 8.7.17 No significant changes to the future historic environment baseline are anticipated.

8.8 Preliminary assessment of likely significant effects

Construction phase

- 8.8.1 This section sets out the likely significant effects on historic environment during construction. The assessment assumes that embedded design (primary) mitigation and standard good practice (tertiary) measures in the draft CoCP are in place, and the results of the assessment then inform the need for any additional (secondary) mitigation requirements during construction.

- 8.8.2 No impacts considered equivalent to substantial harm to a designated or non-designated heritage asset have been identified at this stage, albeit less than substantial harm is likely. A full assessment of the degree of harm to heritage assets will be presented in the ES chapter informed by the results of future assessment and surveys.
- 8.8.3 The preliminary assessment of effects for the construction phase is presented in Table 8.6 to Table 8.10 for each of the main construction sites and the conveyance tunnel.
- 8.8.4 Site inspections and detailed setting assessments are in progress, therefore the description of the contribution of setting to the significance of any heritage assets affected by the Project has not yet been determined. Therefore, identified effects related to changes to setting are preliminary.

Table 8.6 Mogden STW site preliminary assessment of construction phase effects

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
Mogden House (NHLE 1240831)	The asset will be subject to a negligible adverse impact as a result of a temporary change to its setting during the construction period. The asset will be screened from the proposed works by a large existing earthwork bund and associated vegetation.	High	Negligible adverse	Minor adverse (not significant)
Worton Hall (NHLE 1261035)	The asset will be subject to a negligible adverse impact as a result of a temporary change to its setting during the construction period. The asset will be screened from the proposed works by intervening buildings and vegetation.	High	Negligible adverse	Minor adverse (not significant)
Church of St Mary the Virgin (NHLE 1416210)	The asset will be subject to a negligible adverse impact as a result of a temporary change to its setting during the construction period. The asset will be screened from the proposed works by intervening buildings and vegetation.	High	Negligible adverse	Minor adverse (not significant)

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
Garvin House (NHLE 1261018)	This asset is sufficiently removed and screened from the Project and will therefore be unaffected. The asset lies approximately 370m to the north-east of the STW at its nearest distance.	High	No change	No change (not significant)
Butlers Almshouses (NHLE 1389414)	This asset is sufficiently removed and screened from the Project and will therefore be unaffected. The asset lies approximately 440m to the north-east of the STW at its nearest distance.	High	No change	No change (not significant)
The George Inn (NHLE 1261015)	This asset is sufficiently removed and screened from the Project and will therefore be unaffected. The asset lies approximately 440m to the north-east of the STW at its nearest distance.	High	No change	No change (not significant)
Isleworth Riverside Conservation Area	This asset is sufficiently removed and screened from the Project and will therefore be unaffected. The asset lies approximately 150m to the north-east of the STW at its nearest distance.	High	No change	No change (not significant)
Prehistoric findspot (GLHER 95356)	The asset has been removed and cannot be affected.	Negligible	No change	No change (not significant)
Former landfill site (GLHER 147808)	This asset is recorded to lie outside of the footprint of the proposed work areas.	Negligible	No change	No change (not significant)
Unknown archaeological remains	Groundworks within both work areas have little potential to truncate or remove unknown archaeological remains. There has been significant previous disturbance within the Mogden STW work areas and the potential for unknown archaeological	Unknown	No change	No change (not significant)

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
	remains to survive is considered to be negligible (see Appendix 8.1).			

Table 8.7 Ham Playing Fields site preliminary assessment of construction phase effects

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
Ham House Conservation Area	<p>The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period.</p> <p>This will include a small area of temporary works within the Conservation Area itself at Ham Street Car Park. However, no features of historical or architectural interest within the asset itself will be subject to direct physical impacts. The Ham Street Car Park is not considered to be a feature of any architectural merit.</p>	High	Small adverse	<p>Minor adverse (not significant).</p> <p>A minor adverse effect is identified based on professional judgment considering the temporary nature of the proposed works and absence of any direct physical impact to the asset.</p>
Ham House (NHLE 1080832)	<p>The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period.</p> <p>This will include some changes to views to and from the asset due to the presence of construction plant and associated activities. However, the asset benefits from screening in the form of a large tree avenue that helps limit the visual impact.</p>	High	Small adverse	<p>Minor adverse (not significant).</p> <p>A minor adverse effect is identified based on professional judgment considering the temporary nature of the proposed</p>

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
				works and absence of any direct physical impact to the asset.
Ham House Stables (NHLE 1080790)	<p>The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period.</p> <p>This will include some changes to views to and from the asset due to the presence of construction plant and associated activities.</p>	High	Small adverse	<p>Minor adverse (not significant).</p> <p>A minor adverse effect is identified based on professional judgment considering the temporary nature of the proposed works and absence of any direct physical impact to the asset.</p>
Garden Walls and Gate Piers (NHLE 1080833)	<p>The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period.</p>	High	Small adverse	<p>Minor adverse (not significant).</p> <p>A minor adverse effect is identified based on professional judgment considering the temporary nature of the proposed works and absence of any direct</p>

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
				physical impact to the asset.
Forecourt of Ham House (NHLE 1192685)	<p>The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period.</p> <p>This will include some changes to views to and from the asset due to the presence of construction plant and associated activities.</p>	High	Small adverse	<p>Minor adverse (not significant).</p> <p>A minor adverse effect is identified based on professional judgment considering the temporary nature of the proposed works and absence of any direct physical impact to the asset.</p>
Tea Room (NHLE 1192746)	<p>The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period.</p> <p>This will include some changes to views to and from the asset due to the presence of construction plant and associated activities.</p>	High	Small adverse	<p>Minor adverse (not significant).</p> <p>A minor adverse effect is identified based on professional judgment considering the temporary nature of the proposed works and absence of any direct physical</p>

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
				impact to the asset.
Entrance Gates and Railings of Forecourt (NHLE 1358078)	<p>The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period.</p> <p>This will include some changes to views to and from the asset due to the presence of construction plant and associated activities.</p>	High	Small adverse	<p>Minor adverse (not significant).</p> <p>A minor adverse effect is identified based on professional judgment considering the temporary nature of the proposed works and absence of any direct physical impact to the asset.</p>
Ice House (NHLE 1358079)	<p>The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period.</p>	High	Small adverse	<p>Minor adverse (not significant).</p> <p>A minor adverse effect is identified based on professional judgment considering the temporary nature of the proposed works and absence of any direct physical impact to the asset.</p>

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
Service Yard Entrance (NHLE 1358096)	The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period.	High	Small adverse	Minor adverse (not significant). A minor adverse effect is identified based on professional judgment considering the temporary nature of the proposed works and absence of any direct physical impact to the asset.
Boundary Wall (NHLE 1358098)	This asset forms the eastern boundary of Ham Street adjacent to the Project. The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period. There is a possibility of impacts to the asset arising from noise and vibration due to HGV movements and construction activities within its vicinity.	High	Small adverse	Minor adverse (not significant). A minor adverse effect is identified based on professional judgment considering the temporary nature of the proposed works and absence of any direct physical impact to the asset.

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
Ham House (NHLE 1000282) RPG	The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period. This will include a small area of temporary works within the Conservation Area itself at Ham Street Car Park.	High	Small adverse	Minor adverse (not significant). A minor adverse effect is identified based on professional judgment considering the temporary nature of the proposed works and absence of any direct physical impact to the asset.
Beaufort House and Manor House asset group (designated assets)	This asset group may be affected by a change to its setting due to construction traffic.	High	Negligible adverse	Minor adverse (not significant)
Beaufort House and Manor House asset group (non-designated BTM)	This asset group may be affected by a change to its setting due to construction traffic.	Low	Negligible adverse	Minor adverse (not significant)
Twickenham Riverside Conservation Area	The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period. This will include some changes to views from the asset to the south towards Ham due to the presence of construction plant and associated activities.	High	Small adverse	Minor adverse (not significant)

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
Orleans House (NHLE 1250280)	The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period. This will include some changes to views from the asset to the south towards the river and Ham due to the presence of construction plant and associated activities.	High	Small adverse	Minor adverse (not significant)
Riverside House (NHLE 1250281)	The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period. This will include some changes to views from the asset to the south towards the river and Ham due to the presence of construction plant and associated activities.	High	Small adverse	Minor adverse (not significant)
Ferryside (NHLE 1250317)	The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period. This will include some changes to views from the asset to the south towards the river and Ham due to the presence of construction plant and associated activities.	High	Small adverse	Minor adverse (not significant)
White Swan Inn (NHLE 1250319)	The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period. This will include some changes to views from the asset to the south towards	High	Small adverse	Minor adverse (not significant)

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
	the river and Ham due to the presence of construction plant and associated activities.			
The Anchorage (NHLE 1250320)	The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period. This will include some changes to views from the asset to the south towards the river and Ham due to the presence of construction plant and associated activities.	High	Small adverse	Minor adverse (not significant)
Aubrey House (NHLE 1250321)	The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period. This will include some changes to views from the asset to the south towards the river and Ham due to the presence of construction plant and associated activities.	High	Small adverse	Minor adverse (not significant)
Willow Bank (NHLE 1250322)	The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period. This will include some changes to views from the asset to the south towards the river and Ham due to the presence of construction plant and associated activities.	High	Small adverse	Minor adverse (not significant)
Langham Cottage (NHLE 1250323)	The asset will be subject to a small adverse impact as a result of a temporary change	High	Small adverse	Minor adverse (not significant)

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
	to its setting during the construction period. This will include some changes to views from the asset to the south towards the river and Ham due to the presence of construction plant and associated activities.			
Sion House (NHLE 1252847)	The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period. This will include some changes to views from the asset to the south towards the river and Ham due to the presence of construction plant and associated activities.	High	Small adverse	Minor adverse (not significant)
Sion Cottage (NHLE 1262088)	The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period. This will include some changes to views from the asset to the south towards the river and Ham due to the presence of construction plant and associated activities.	High	Small adverse	Minor adverse (not significant)
3-12 Sion Road (NHLE 1262089)	The asset will be subject to a negligible adverse impact as a result of a temporary change to its setting during the construction period.	High	Negligible	Minor adverse (not significant)
Ferry House (NHLE 1263339)	The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period.	High	Small adverse	Minor adverse (not significant)

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
	This will include some changes to views from the asset to the south towards the river and Ham due to the presence of construction plant and associated activities.			
York House and garden and boundary walls (NHLE 1263365)	The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period. This will include some changes to views from the asset to the south-east towards the river and Ham due to the presence of construction plant and associated activities.	High	Small adverse	Minor adverse (not significant)
Fountain at west corner of York House Gardens (NHLE 1250324)	The asset will be subject to a negligible adverse impact as a result of a temporary change to its wider setting during the construction period.	High	Negligible	Minor adverse (not significant)
Church of St Mary (NHLE 1080852)	The asset will be subject to a negligible adverse impact as a result of a temporary change to its wider setting during the construction period.	High	Negligible	Minor adverse (not significant)
Brick Wall to south and east of Church of St Mary (NHLE 1286899)	The asset will be subject to a negligible adverse impact as a result of a temporary change to its wider setting during the construction period.	High	Negligible	Minor adverse (not significant)
York House (NHLE 1001548) RPG	The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period. This will include some changes to views from the	Medium	Small adverse	Minor adverse (not significant)

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
	asset to the south-east towards the river and Ham due to the presence of construction plant and associated activities.			
Marble Hill (NHLE 1000400) RPG	The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period. This will include some changes to views from the asset to the south-west towards the river and Ham due to the presence of construction plant and associated activities.	High	Small adverse	Minor adverse (not significant)
Marble Hill Listed Building group	The asset will be subject to a negligible adverse impact as a result of a temporary change to its setting during the construction period.	High	Negligible adverse	Minor adverse (not significant)
Twickenham Riverside Listed Building group	The asset group will be subject to a negligible adverse impact as a result of a temporary change to its setting during the construction period.	High	Negligible adverse	Minor adverse (not significant)
Twickenham Riverside Local List BTM group	The asset group will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period. This will include some changes to views from the group to the south towards the river and Ham due to the presence of construction plant and associated activities.	Low	Small adverse	Minor adverse (not significant)
Ham Lands (Prehistoric Artefacts)	Groundworks have the potential to truncate or	Low	Medium adverse	Minor adverse (not significant)

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
Scatter) (GLHER 146124)	remove any evidence of this asset remaining.			
Jetty (GLHER 113743)	This asset will not be physically affected by the Project.	Low	No change	Neutral (not significant)
Unknown archaeological remains	Groundworks within both work areas have the potential to truncate or remove unknown archaeological remains.	Unknown	Large adverse	Moderate to Major adverse (significant) (predicted)

Table 8.8 Burnell Avenue site preliminary assessment of construction phase effects

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
Riverside North Conservation Area	The asset will be subject to a small adverse impact as a result of construction activities being undertaken within the Conservation Area and its immediate setting.	Medium	Small adverse	Minor adverse (not significant)
Broom Water Conservation Area and BTM group	The asset group will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period. This will include some changes to views to and from the asset across the river due to the presence of construction plant and associated activities.	Medium	Small adverse	Minor adverse (not significant)
Teddington Lock Conservation Area	The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period. This will include some changes to views to and from the asset along the	High	Small adverse	Minor adverse (not significant)

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
	river to the east of the Conservation Area due to the presence of construction plant and associated activities.			
Teddington Footbridge (NHLE 1391392)	The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period. This will include some changes to views to and from the asset along the river to the east of the Conservation Area due to the presence of construction plant and associated activities.	High	Small adverse	Minor adverse (not significant)
The Boathouse, 27 Ferry Road (NHLE 1400150)	The asset will be subject to a negligible adverse impact as a result of a temporary change to its setting during the construction period.	High	Negligible adverse	Minor adverse (not significant)
King Edwards Grove Conservation Area	The asset will be subject to a negligible adverse impact as a result of a temporary change to its setting during the construction period.	Medium	Negligible adverse	Neutral (not significant)
The Lensbury Club BTM	The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period. This will include some changes to views to and from the asset across the river due to the presence of construction plant and associated activities.	Low	Small adverse	Minor adverse (not significant)
Unknown archaeological remains	Groundworks within the Burnell Avenue site (main works areas) have the potential to truncate or	Unknown	Large adverse	Moderate to Major (significant) (predicted)

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
	remove unknown archaeological remains.			
Unknown archaeological remains	Groundworks within southern part of the Burnell Avenue site have little potential to truncate or remove unknown archaeological remains. The site has been subject to previous archaeological investigation and limited archaeological evidence was recorded.	Unknown	No change	No change (not significant)

Table 8.9 Tudor Drive site preliminary assessment of construction phase effects

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
Tudor Estate LASC	The asset will be subject to a small adverse impact as a result of a temporary change to its setting during the construction period.	Low	Small adverse	Minor adverse (not significant)
Unknown archaeological remains	Groundworks within this area have a limited potential to truncate or remove unknown archaeological remains. Archaeological potential is deemed to be low, given previous development impacts within the site.	Unknown	Small adverse	Minor adverse (not significant) (predicted)

Table 8.10 Conveyance Tunnel Route Corridor preliminary assessment of construction phase effects

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
Mogden House (NHLE 1240831)	Physical impact to the asset as a result of settlement/land stability changes as a result of tunnelling activities should the final conveyance tunnel	High	Unknown	Unknown

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
	alignment pass under the receptor.			
Orleans House (NHLE 1250280)	Physical impact to the asset as a result of settlement/land stability changes as a result of tunnelling activities should the final conveyance tunnel alignment pass under the receptor.	High	Unknown	Unknown
Riverside House (NHLE 1250281)	Physical impact to the asset as a result of settlement/land stability changes as a result of tunnelling activities should the final conveyance tunnel alignment pass under the receptor.	High	Unknown	Unknown

8.8.5 The preliminary assessment of the construction phase effects has identified potential significant effects arising from impacts to archaeological remains (known and unknown) at the Ham Playing Fields and Burnell Avenue (main construction compound) sites. Minor adverse (not significant) effects are also identified to a number of designated and non-designated heritage assets, such as Ham House, as a result of temporary changes to their settings during the construction period. No significant effects are identified for the Mogden STW site. Further assessment is being undertaken and will be outlined in the ES.

8.8.6 Effects to above ground heritage assets as a result of tunnelling activities currently remain unknown. Further assessment will be undertaken when the settlement modelling has been completed and will be reported in the ES.

Operation phase

8.8.7 The preliminary assessment of effects for the operation phase is presented in Table 8.11 to Table 8.14 for each of the main sites.

8.8.8 Impact to above ground heritage assets within the recycled water conveyance tunnel route corridor are not considered here as there is no impact pathway during operation. This matter was agreed to be scoped out by the Planning Inspectorate in the EIA Scoping Opinion (ID 3.3.4).

8.8.9 Site inspections and detailed setting assessments are in progress, therefore the description of the contribution of setting to the significance of any heritage assets affected by the Project has not yet been determined. Therefore, identified effects related to changes to setting are preliminary.

Table 8.11 Mogden STW preliminary assessment of operation phase effects

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
Mogden House (NHLE 1240831)	There will be no change to this asset as a result of the operation of the Project. The TTP will not be visible from the asset and there will be no noticeable change to its setting.	High	No change	No change (not significant)
Worton Hall (NHLE 1261035)	There will be no change to this asset as a result of the operation of the Project. The Project elements will not be visible from the asset and there will be no change to its setting.	High	No change	No change (not significant)
Church of St Mary the Virgin (NHLE 1416210)	There will be no change to this asset as a result of the operation of the Project. The Project elements will not be visible from the asset and there will be no change to its setting.	High	No change	No change (not significant)
Garvin House (NHLE 1261018)	There will be no change to this asset as a result of the operation of the Project. The asset is sufficiently removed and screened and will therefore be unaffected.	High	No change	No change (not significant)
Butlers Almshouses (NHLE 1389414)	There will be no change to this asset as a result of the operation of the Project. The asset is sufficiently removed and screened and will therefore be unaffected.	High	No change	No change (not significant)
The George Inn (NHLE 1261015)	There will be no change to this asset as a result of the operation of the Project. The asset is sufficiently removed and screened and will therefore be unaffected.	High	No change	No change (not significant)
Isleworth Riverside	There will be no change to this asset as a result of the operation of the Project. The	High	No change	No change (not significant)

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
Conservation Area	asset is sufficiently removed and screened and will therefore be unaffected.			
Prehistoric findspot (GLHER 95356)	Asset cannot be affected by the operation of the Project as it has been removed.	Negligible	No change	No change (not significant)
Former landfill site (GLHER 147808)	Asset will not be affected by the operation of the Project as excavation works will not be undertaken as part of the operation of the Project and the mapped extent of the asset lies outside the footprint of any above ground sites.	Negligible	No change	No change (not significant)
Unknown archaeological remains	There will be no impact to unknown archaeological remains during the operation of the Project. No excavation works will be required. Any remains present will have been removed during the construction phase.	Unknown	No change	No change (not significant)

Table 8.12 Ham Playing Fields site preliminary assessment of operation phase effects⁶

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
Unknown archaeological remains	There will be no impact to unknown archaeological remains, including in the Ham Fields APA and Ham House APA, during the operation of the Project. No excavation works will be required. Any remains present will have been removed during the construction phase.	Unknown	No change	No change (not significant)

⁶ Other receptors referenced in the construction phase table for the Ham Playing Fields site have been scoped out of any operational effects due to the limited nature of the permanent infrastructure at this location. The Planning Inspectorate agreed to this approach in the scoping opinion (ID 3.3.7).

Table 8.13 Burnell Avenue site preliminary assessment of operation phase effects

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
Riverside North Conservation Area	The asset will be subject to a small adverse impact as a result of a slight visual change resulting from the presence of the intake structure and outfall structure (bankside option). In-river protection measures associated with the outfall option will also have a small adverse visual impact.	Medium	Small adverse	Minor adverse (not significant)
Broom Water Conservation Area and BTM group	The asset group will be subject to a small adverse impact as a result of a slight visual change resulting from the presence of the intake structure in views to the east and outfall structure (bankside option). In-river protection measures associated with the outfall option will also have a small adverse visual impact.	Medium	Small adverse	Minor adverse (not significant)
Teddington Lock Conservation Area	The asset will be subject to a negligible adverse impact as a result of a slight visual change resulting from the presence of the intake structure in wider views to/from the asset along the river and outfall structure (bankside option). In-river protection measures associated with the outfall option will also have a small adverse visual impact.	High	Negligible adverse	Minor adverse (not significant)
Teddington Footbridge (NHLE 1391392)	The asset will be subject to a negligible adverse impact as a result of a slight visual change resulting from the presence of the intake structure and outfall structure (bankside option). In-river protection measures	High	Negligible adverse	Minor adverse (not significant)

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
	associated with the outfall option will also have a small adverse visual impact.			
The Boathouse, 27 Ferry Road (NHLE 1400150)	The asset will be subject to a negligible adverse impact as a result of a slight visual change resulting from the presence of the intake structure and outfall structure (bankside option). In-river protection measures associated with the outfall option will also have a small adverse visual impact.	High	Negligible adverse	Minor adverse (not significant)
King Edwards Grove Conservation Area	No change. The asset is sufficiently screened and removed from the Project so as to be unaffected during operation.	Medium	No change	No change (not significant)
The Lensbury Club BTM	The asset will be subject to a small adverse impact as a result of a slight visual change resulting from the presence of the intake structure and outfall structure (bankside option). In-river protection measures associated with the outfall option will also have a small adverse visual impact.	Low	Small adverse	Minor adverse (not significant)
Unknown archaeological remains	There will be no impact to unknown archaeological remains during the operation of the Project. No excavation works will be required. Any remains present will have been removed during the construction phase.	Unknown	No change	No change (not significant)

Table 8.14 Tudor Drive site preliminary assessment of operation phase effects

Receptor	Impact assessment	Sensitivity of receptor	Magnitude of impact	Likely significance of effect
Tudor Estate LASC	There will be no change to the Tudor Estate LASC during the operation of the Project.	Low	No change	No change (not significant)
Unknown archaeological remains	There will be no impact to unknown archaeological remains during the operation of the Project. Any remains present will have been removed during the construction phase.	Unknown	No change	No change (not significant)

8.8.10 The preliminary assessment of the operation phase effects has not identified any significant effects to the historic environment. Minor adverse (not significant) effects are identified for a number of designated and non-designated heritage assets in the vicinity of the Burnell Avenue site as a result of the presence of new infrastructure elements. This includes elements within the Riverside North Conservation Area and as part of the setting of other surrounding assets.

Cumulative effects

8.8.11 A preliminary assessment of intra-project and inter-project cumulative effects (excluding climate change) for aquatic ecology is contained in Chapter 19: Cumulative Effects.

In combination effects with climate change

8.8.12 Projected future changes in climate have the potential to interact with effects identified upon historic environment receptors. No significant ICCI impacts are predicted in relation to the Historic Environment.

8.8.13 Further details and descriptions of the identified ICCI are provided in Appendix 18.1.

8.9 Additional (secondary) mitigation and enhancement measures

Additional (secondary) mitigation

8.9.1 Details of embedded design (primary) mitigation and standard good practice (tertiary) specific to this aspect are provided in Section 8.4.

8.9.2 A programme of archaeological mitigation may be required, subject to the findings of future assessment and appropriate field evaluation, where necessary, at the main works sites (Ham Playing Fields and Burnell Avenue)

where ground breaking will be undertaken. The scope of any archaeological mitigation will be developed with GLAAS and detailed in the Archaeological Mitigation Strategy and supporting Outline Written Scheme of Investigation (WSI) to be submitted with the DCO application and secured through the DCO requirements. Site specific WSI(s) will then be prepared by the appointed archaeological contractor in advance of the mitigation works being undertaken either in advance of, or during, construction activities (PCR 92).

8.10 Summary of likely significant residual effects

- 8.10.1 A summary of the identified likely significant residual effects in relation to the historic environment is provided in Table 8.15.
- 8.10.2 Table 8.15 only addresses those receptors where additional (secondary) mitigation is proposed beyond the embedded design (primary) mitigation and standard good practice (tertiary) measures.
- 8.10.3 In relation to archaeological mitigation, it is accepted that for non-designated assets (specifically those not considered of equivalent value to designated remains) the process of investigation and recording, while ultimately destructive, will reduce the magnitude of impact by one level. This is as a result of the advancement of the understanding of the significance of the heritage asset before it is lost (wholly or in part) (see NPS paragraph 4.8.12 (Defra, 2023)). As a consequence, this may also result in a reduction in the degree of harm identified for such assets.
- 8.10.4 For designated assets, or assets of equivalent significance, while proper investigation and recording may be required as mitigation, the degree of harm experienced by the asset will unlikely be reduced by the mitigation where substantial harm has been recognised.

Table 8.15 Summary of likely significant residual effects for historic environment

Site	Description of effect	Likely significance of effect	Additional (secondary) mitigation and enhancement measures	Residual effects
Intermediate shaft site (Ham Playing Fields site) (Construction Phase)	Groundworks within Ham Playing Fields have the potential to truncate or remove unknown archaeological remains.	Moderate to Major (predicted and subject to the outcome of further assessment and appropriate field evaluation, where necessary)	Archaeological investigation and recording	Minor adverse (not significant)
Burnell Avenue site (Construction Phase)	Groundworks have the potential to truncate or remove unknown archaeological remains.	Moderate to Major (predicted and subject to the outcome of further assessment and appropriate field evaluation, where necessary)	Archaeological investigation and recording	Minor adverse (not significant)

8.11 Next steps

- 8.11.1 A detailed archaeological desk-based assessment will be undertaken to inform the potential for previously unknown archaeological remains to survive at each of the respective Project sites, building upon the initial findings of the preliminary assessment presented at Appendix 8.1. This will also include an assessment of geoarchaeological potential.
- 8.11.2 A built heritage assessment will be undertaken incorporating the results of site inspection to determine the contribution of setting to the significance of the heritage assets to further inform potential impacts from the construction of the Project. This will enhance the preliminary baseline provided at Appendix 8.2.
- 8.11.3 A programme of non-invasive geophysical survey will be agreed with GLAAS and implemented at the main construction sites (Ham Playing Fields and Burnell Avenue). A WSI will be prepared by the appointed archaeological contractor for the geophysical survey.
- 8.11.4 Effects to above ground heritage assets as a result of tunnelling activities currently remain unknown. Further assessment will be undertaken when the settlement modelling has been completed and will be reported in the ES.
- 8.11.5 All identified impacts will be considered in terms of harm (substantial/less than substantial) in accordance with NPS (and NPPF/PPG) requirements within the

ES chapter. This will allow for all parties to review the nature of the impacts of the Project on the historic environment within the context of substantial or less than substantial harm to facilitate informed decision making in the overall planning balance.

8.12 References

ClfA (2020). Standards and Guidance for Historic Environment Desk-Based Assessment. Reading: [online] Available at: <https://cifa.hosted.york.ac.uk/sites/default/files/2023-11/ClfA-SandG-DBA-2020.pdf> [accessed May 2025]

Department for Environment, Food and Rural Affairs (2023). National Policy Statement for Water Resources Infrastructure. https://assets.publishing.service.gov.uk/media/6437e3a2f4d420000cd4a1a7/E02879931_National_Policy_Statement_for_Water_Resources.pdf [Accessed May 2025].

Environment Agency (2024) River Thames Scheme – Preliminary Environmental Information Report. <https://www.riverthamesscheme.org.uk/document-library#peir1> [Accessed March 2025].

Greater London Authority (2021). The London Plan. Available at: https://www.london.gov.uk/sites/default/files/the_london_plan_2021.pdf [Accessed May 2025].

Historic England (2015a). Managing Significance in Decision-Taking in the Historic Environment. London: Historic England. [online] Available at: <https://historicengland.org.uk/images-books/publications/gpa2-managing-significance-in-decision-taking/> [accessed May 2025]

Historic England (2015b). Geoarchaeology – Using Earth Sciences to understand the Archaeological Record. London. Historic England. [online] Available at: <https://historicengland.org.uk/images-books/publications/geoarchaeology-earth-sciences-to-understand-archaeological-record/> [accessed May 2025]

Historic England (2016). Greater London Archaeological Priority Area Guidelines. London: Historic England. [online] Available at: <https://historicengland.org.uk/images-books/publications/greater-london-archaeological-priority-area-guidelines/> [accessed May 2025]

Historic England (2017). The Setting of Heritage Assets. London: Historic England. [online] Available at: <https://historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/> [accessed May 2025]

Historic England (2019). Statements of Heritage Significance: Analysing Significance in Heritage Assets. London: Historic England. [online] Available at: <https://historicengland.org.uk/images-books/publications/statements-heritage-significance-advice-note-12/> [accessed May 2025]

Historic England (2025). National Heritage List for England database. <https://historicengland.org.uk/listing/the-list/> [Accessed May 2025].

IEMA, IHBC and ClfA (2021). Principles of Cultural Heritage Impact Assessment in the UK. [online] Available at: <https://www.iema.net/articles/principles-of-cultural-heritage-impact-assessment> [accessed May 2025]

LBH (2015). Hounslow Local Plan 2015 - 2030. [online] Available at: https://www.hounslow.gov.uk/info/20167/local_plan/1108/local_plan [accessed May 2025]

LBH (2024). Local Plan 2020 – 2041. Proposed Submission Version (Regulation 19) [online] Available at: <https://friendsofhattonfields.co.uk/wp-content/uploads/2024/07/Hounslow-Local-Plan-2020-2041-Regulation-19-Version.pdf> [accessed May 2025]

LBR (2005). Planning Information for Listed Buildings. https://www.richmond.gov.uk/media/7648/listed_buildings_spd.pdf [Accessed May 2025].

LBR (2018a). London Borough of Richmond upon Thames Local Plan 2018 – 2033. [online] Available at: https://www.richmond.gov.uk/local_plan [accessed May 2025]

LBR (2018b). Planning Information for Conservation Areas. https://www.richmond.gov.uk/media/7644/conservation_areas_spd.pdf [Accessed May 2025].

LBR (2023). Richmond Local Plan. Publication (Regulation 19) Consultation Version. [online] Available at: https://www.richmond.gov.uk/services/planning/planning_policy/local_plan/draft_local_plan/draft_local_plan_submission [accessed May 2025]

LBR (2025). Buildings of Townscape Merit register. https://www.richmond.gov.uk/media/ndnhtyo4/btm_register.pdf [Accessed May 2025].

Ministry of Housing, Communities and Local Government (2019). Planning Practice Guidance. <https://www.gov.uk/guidance/conserving-and-enhancing-the-historic-environment> [Accessed May 2025].

Ministry of Housing, Communities and Local Government (2024). National Planning Policy Framework. [online] Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2> [accessed May 2025]

National Highways (2020) DMRB LA 106 Cultural heritage assessment. [online] Available at: <https://www.standardsforhighways.co.uk/dmrB/search/8c51c51b-579b-405b-b583-9b584e996c80> [accessed May 2025]

RBK (2012) Core Strategy. [online] Available at: <https://www.kingston.gov.uk/downloads/file/36/core-strategy> [accessed May 2025]

RBK (2023) Kingston's Local Plan. First Draft of the Local Plan Consultation (Regulation 18). [online] Available at: <https://www.kingston.gov.uk/policy/new-local-plan> [accessed May 2025]

