



Preliminary Environmental Information Report

Volume 4 Appendix 8.1

Climatic Factors Summary Tables for Likely Significant and
Non-Significant Environmental Effects

Climatic Factors Summary Tables

1 Potential Likely Significant Construction Effects

Table 1: Potential Likely Significant Construction Effects

Receptor Name	Project Component	Project Activity	Description of Effects	Secondary Mitigation
All receptors	Off-site car parks for construction workers	Establishment and use of off-site car parks including associated traffic movements	Potential temporary (short-term) impacts during construction on all receptors.	No further mitigation identified. The selection and design of these car parks is yet to be undertaken, at which point the need for and nature of any secondary mitigation will be considered.
Global atmosphere	All project components	Demolition of buildings ; Material excavation (contaminated); Material excavation (natural ground); General construction activities (land); General construction activities (water); Movement of construction vehicles, equipment and operatives (on site); Movement of construction vehicles, equipment and operatives (off site); Processing / placement of hazardous waste; Processing / placement of non-hazardous waste; Bed lowering; Creation/use of construction compounds; Use of materials processing sites; Tree/vegetation removal; Construction of road bridges; Use of excavated material on-site; Erection of temporary screens/fences; use of temporary wharfs and mobile pontoons; Temporary stockpiling of materials; Habitat improvements and planting; Construction of new pedestrian / cycle bridges at Chertsey and Desborough; Sheet piling	Negative Potential temporary (short-term) significant increase in greenhouse gases (GHGs) in the atmosphere from site compounds, material movements and management sites, construction plant and traffic, material excavation, removal of vegetation, soil and landfill disturbance, and embodied carbon within design elements.	No secondary mitigation is identified as it is considered likely that the primary and tertiary mitigation will be sufficient at Environmental Statement (ES) stage. However, the primary and tertiary mitigation are not sufficiently developed to assume their full achievement in this Preliminary Environmental Information Report (PEIR) preliminary assessment. Hence this effect is currently assessed as likely to be significant.

2 Potential Likely Significant Operational Effects

Table 2: Potential Likely Significant Operational Effects

Receptor Name	Project Component	Project Activity	Description of Effects	Secondary Mitigation
Global atmosphere	Temporary material storage sites; Permanent maintenance compounds; Temporary wharfs (River Thames); Road realignments; Beasley's Ait fish passage; Chertsey Weir fish passage; Teddington Weir; Molesey Weir; Sunbury Weir; Bed lowering downstream of Desborough Cut; Flood embankments and; Flow Control Structures; Abbey Meads Floodway; Spelthorne Channel; Runnymede Channel	Use of flow control structures; Channel maintenance to restore design profile; Maintenance of structures; Maintenance activities; Energy use; Operational traffic; Placed material on landfill areas	Negative; Neutral Channel maintenance to restore design profile, operation of weir gates, operatives and visitors transport, altered traffic flows due to infrastructure provision, energy in buildings, provision of habitats and renewable energy could significantly permanently contribute to GHG value.	No secondary mitigation is identified as it is considered likely that the primary and tertiary mitigation will be sufficient at ES stage. However, the primary and tertiary mitigation are not sufficiently developed to assume their full achievement in this PEIR preliminary assessment. Hence this effect is currently assessed as likely to be significant.

3 Non-Significant Construction Effects

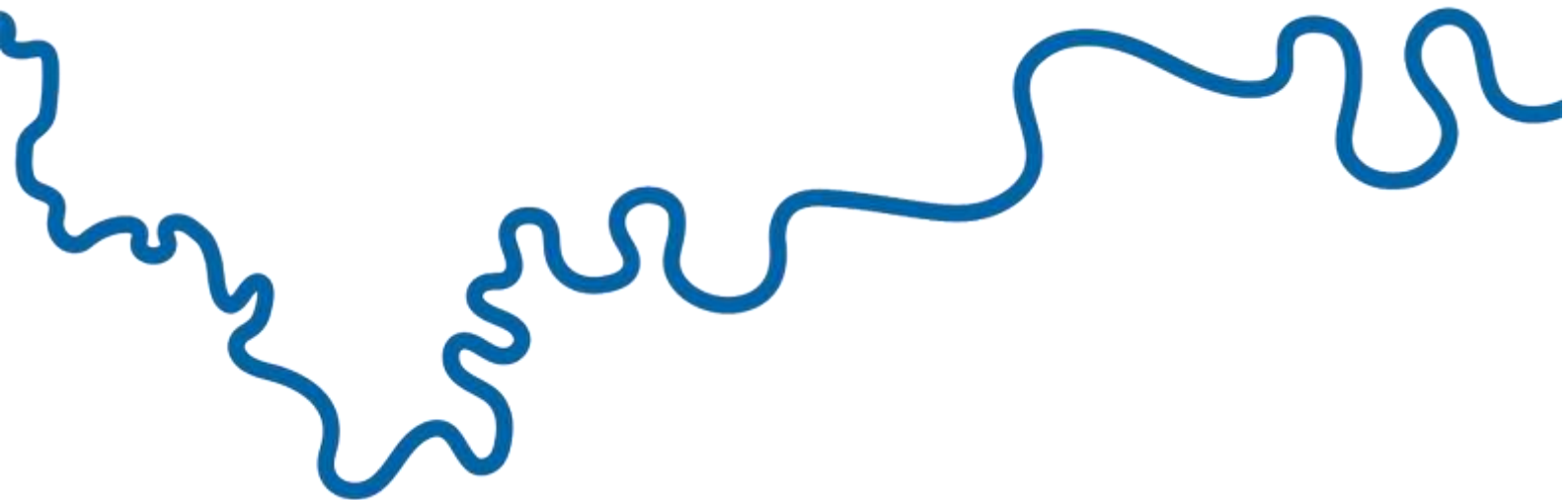
Table 3: Non-Significant Construction Effects

Receptor Name	Project Component	Project Activity	Description of Effects	Secondary Mitigation
Global atmosphere	Temporary materials processing sites; Runnymede Channel; Spelthorne Channel	Material excavation (natural ground); Demolition of buildings; Use of excavated material on-site	Neutral Excavated material (including gravel) will be produced as a by-product of the project, and re-used within the project, causing a temporary (short-term) avoidance of GHG emissions from excavating and transporting material from elsewhere. Projects that actively reverse (rather than only reduce) the risk of severe climate change can be judged as having a beneficial, significant effect; this impact is therefore considered not significant.	No mitigation is considered necessary to reduce negative effects to an acceptable level.

4 Non-Significant Operational Effects

Table 4: Non-Significant Operational Effects

Receptor Name	Project Component	Project Activity	Description of Effects	Secondary Mitigation
Global atmosphere	New green open spaces; Areas of enhanced public connection; Priority areas for habitat creation, enhancement or mitigation; Abbey River watercourse improvements; New blue open spaces	New/enhanced habitat (terrestrial); New/enhanced habitat (aquatic); Energy generation; L&GI provision	<p>Neutral</p> <p>Potential for positive permanent impacts on the global atmosphere through: habitat planting acting as a sink for carbon, generation of renewable energy, active travel provision and reduction in the number of properties flooding reducing need for replacement of materials. Only projects that actively reverse (rather than only reduce) the risk of severe climate change can be judged as having a beneficial, significant effect; this impact is therefore considered not significant.</p>	<p>No secondary mitigation required as the effect is currently neutral.</p> <p>Designs will continue to be developed with the aim to result in positive impacts on the global atmosphere.</p>



The River Thames Scheme represents a new landscape-based approach to creating healthier, more resilient and more sustainable communities by reducing the risk of flooding and creating high quality natural environments.