

THE MERSEY GATEWAY PROJECT

DELIVERY PHASE

INTRODUCTION

CHAPTER 1.0

INTRODUCTION

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1. INTRODUCTION

1.1 Introduction

- 1.1.1 This environmental statement (ES) accompanies certain applications ([Further Applications](#)) relating to the delivery phase of ~~and orders that are required to authorise the construction of~~ the Mersey Gateway Project (the “Project”). The principle of the Project was established, and certain details approved, by a number of permissions, deemed permissions, consents and Orders (the Permissions and Orders). These are listed at paragraph 1.3. The details of the Project and the Further Applications are set out in Chapter 2 of this ES. This ES has been prepared on behalf of Halton Borough Council (the “Council”) by its professional team. The applications ~~and orders~~ to which this ES relates include:
- a. An application for planning permission in respect of certain works to the highway network Widnes (known as the Widnes Approach Application);
 - b. An application for planning permission in respect of certain works to the highway network in Runcorn (known as the Runcorn/Central Expressway Application);
 - c. An application for planning permission in respect of the proposed new bridge over the River Mersey that is part of the Project (known as the New Bridge Application).
- 1.1.2 The Council is now advancing the Project to its delivery phase. It will let a contract to a Project Company (likely to be a consortium) for the design, build, finance, operation and maintenance of the Project.
- 1.1.3 The Permissions and Orders establish the principle of the Project. They grant: planning permission; powers to acquire land compulsorily; powers to charge tolls; and other powers. The Permissions and Orders relate to specific forms of development known as the Reference Design. As the Project moves into its delivery phase, the Council must have regard to what must be achieved to secure the implementation of the Project and also to address changes in circumstances since the Permissions and Orders. Therefore, these Further Applications will:
- a. allow design changes to accommodate newly available technology such as open road tolling;
 - b. permit the Project Company flexibility to construct the Project in a manner that is as economically advantageous to the Council as possible; and
 - c. secure the quality of the design of the Project that is actually delivered.
- 1.1.4 The basis of the Further Applications is a development of the Reference Design to produce a design known as the Updated Reference Design.
- 1.1.5 For the purposes of the Further Applications ES, the Project with the Updated Reference Design is known as the Project including the Proposals.

1.2 Background

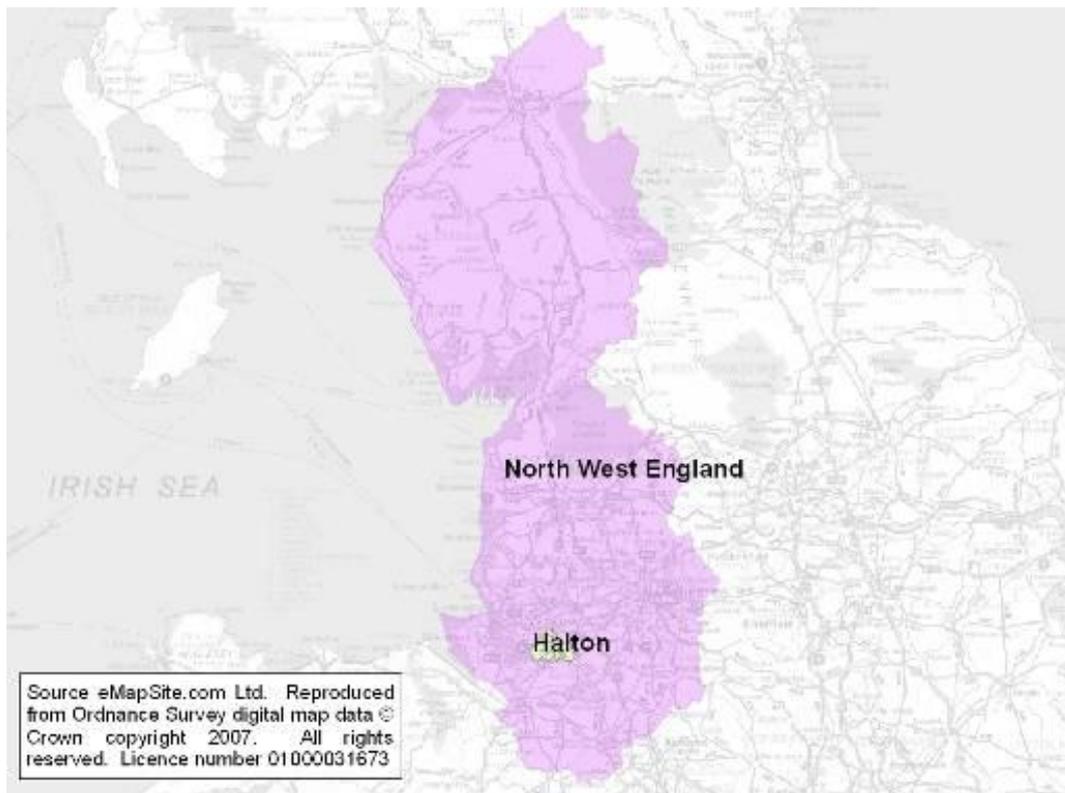
- 1.2.1 The Borough of Halton (“Halton Borough” or the [Borough](#)) is located in the North West of England¹ (Figures 1.1 and 1.2), at a strategic crossing point of the Mersey Estuary (the “Estuary”).

Figure 1.1 - Location of Halton in the UK



¹ The North West of England is comprised of five sub regions: including Cheshire, Cumbria, Greater Manchester, Merseyside and Lancashire.

Figure 1.2 - Location of Halton in the North West



- 1.2.2 The Borough comprises two principal towns of Runcorn and Widnes either side of the River, together with the four parishes of Daresbury, Hale, Moore and Preston Brook. At one point, known as the 'Runcorn Gap', the Estuary narrows significantly and provides a long-used crossing point. This is now spanned by the main rail connection between Liverpool and the West Coast Main Line (via the Aethelfleda railway bridge) and the A557 road link between the M62 and the M56, via the Silver Jubilee Bridge (SJB). The M62 and M56 motorways pass to the north and south of the Borough respectively with connections via the A562/A5300 and A557 to the M62, and via the A557 and the A558 to the M56. To the west of Widnes the A562, Speke Road, links Widnes and the SJB crossing point to south Liverpool. This provides a connection to nationally significant ports and Liverpool John Lennon Airport. The M62 to the north of the Borough links the Liverpool City Region² to Manchester and thereafter crosses the Pennines to the Yorkshire conurbations. To the south, the M56 links North Wales and Cheshire³ to Manchester. Halton is therefore located at the convergence of a number of strategic transport links in the North West of England, a number of which rely upon the River crossings at this point. Chief among these converging routes is the A557 crossing the SJB.
- 1.2.3 The SJB was opened in 1961 with two lanes of traffic and an opening year flow of less than 10,000 vehicles per day (vpd). When it was widened to four sub-standard lanes in 1977, the design capacity (measured using current maximum throughput standards) was increased to approximately 65,000 vpd. ~~At present it regularly carries in excess of 80,000 vpd on weekdays.~~ **Currently, it carries 80,000 vpd on weekdays** (and a figure of 91,000 vpd was recorded in 2007). ~~These traffic flows~~ **This level of traffic**, combined with the four sub-standard lanes and absence

² The Liverpool City Region comprises the Core City of Liverpool and local authority districts of St Helens, Wirral, Knowsley, Sefton, and Halton plus the adjacent areas of Warrington, Chester, Ellesmere Port and Neston (West Cheshire), North Wales and West Lancashire.

³ Cheshire is split into 2 6 administrative regions: **Cheshire West and Chester, and Cheshire East** ~~Crewe and Nantwich, Chester, Congleton, Macclesfield, Vale Royal and Ellesmere Port and Neston.~~

of any hard shoulder on the bridge, ~~have inevitably led~~ **leads** to regular service breakdowns on the SJB. These include:

- a. Routine Congestion during peak travel periods;
- b. Delays to local connecting roads due to queuing;
- c. Safety hazards;
- d. Poor regional road **network** resilience to accidents and other incidents;
- e. Difficulties in maintenance; and
- f. Unreliable journey times.

1.2.4 These service failings have an adverse effect on travel within the Borough, undermine the City Region's connectivity with the rest of the United Kingdom's (UK) road transport links, and the local community surrounding the SJB suffers a degraded environment and quality of life. The breakdown in transport connectivity and access is widely accepted as a threat to the economic prosperity of the sub-region. This ~~is~~ **was** manifest in the Project being identified as a key 'Transformational Project' in the North West Regional Economic Strategy (RES) by the **former** Northwest Regional Development Agency.

1.3 The Permissions and Orders

1.3.1 The Council secured the following regulatory approvals for the Reference Design under the decisions by the Secretaries of State for Transport and Communities and Local Government (Secretaries of State).

- a. The River Mersey (Mersey Gateway Bridge) Order 2011 – An order under Sections 3 and 5 of the TWA 1992 was made by the Secretary of State for Transport on 11 January 2011 authorising the Council to construct, maintain and operate the new crossing and related works including associated highways and compulsory purchase powers (the TWA Order). It also provides for the charging of tolls to use the bridge. The Order came into force on 1 February 2011.
- b. Deemed planning permission was also deemed to be granted by the Secretary of State for Transport for the works authorised by the TWA Order.
- c. Two Compulsory Purchase Orders (CPOs) – The Halton Borough Council (The Mersey Gateway – Queensway) Compulsory Purchase Order 2008 and The Halton Borough Council (The Mersey Gateway – Central Expressway) Compulsory Purchase Order 2008, were made by the Council and subsequently confirmed with minor modifications by the Secretary of State for Transport to enable the compulsory acquisition of land and rights not covered by the TWA Order but required for the Project.
- d. The Council has also made two side road orders – The Halton Borough Council (A533 Queensway) Side Roads Order 2008 and The Halton Borough Council (A533 Central Expressway) Side Roads Order 2008. These orders were confirmed by the Secretary of State for Transport with minor modifications. The side road orders address changes to the highway network which are not addressed by the TWA Order.
- e. Planning permissions have been granted for engineering operations and related highway infrastructure works not covered by the deemed planning permission in relation to works and improvements to the Central Expressway, Weston Link, the Weston Point Expressway and M56 Junction 12, and for modifications to the northern approaches to the SJB.
- f. A listed building consent has also been granted to allow for the proposed modifications to the carriageway of the SJB which is a Grade 2 listed structure.
- g. The A533 (Silver Jubilee Bridge) Road User Charging Scheme Order 2008, a road user charging order pursuant to the Transport Act 2000, was made by the Council on 5 December 2008. The A533 (Silver Jubilee Bridge) Road User Charging Scheme Order 2008 was confirmed by the Secretary of State for Transport authorising the Council to make charging schemes for imposing charges in respect of the use of the SJB.
- h. An Exchange Land Certificate was issued by the Secretary of State for Communities and Local Government concerning open space land on the north side of the St Helen's Canal at Widnes Loops. A certificate for open space on the Runcorn side of the Mersey, Wigg Island, was also issued on 20 December 2010.

1.3.2 The boundaries of the Planning Applications and TWA Order associated with the Permissions and Orders are shown in Figure 1.3 (Appendix 1.1).

1.4 The Mersey Gateway Project

1.4.1 The ~~aim of the Project is to~~ will deliver a new crossing of the River in Halton that links into the existing principal road network. It ~~aims to~~ will provide effective road connections to the Liverpool City area from north Cheshire in the south, thereby providing effective connectivity for the sub-region and removing congestion from the Borough. The new road capacity ~~provides an opportunity to~~ will re-balance the transportation infrastructure within Halton towards delivering local sustainable transport and economic goals. The proposed alignment of the Project ~~including the Proposals~~ is shown on Figure 4.3 1.4 (Appendix 1.1).

1.4.2 The Project's scope covers the following:

- a. The delivery of a new road crossing of the River in Halton, known as the Mersey Gateway Bridge (referred to as the "New Bridge" throughout this ES);
- b. Incorporation of the New Bridge in the existing highway network. These works are known as the Remote Highway Works;
- c. Modification and de-linking of the SJB (excluding the asset management of the SJB works);
- d. Integration of the revised networks with public transport, cycle and pedestrian links across Halton;
- e. Integration with the surrounding environment through landscaping;
- f. Implementation of tolling and development of associated infrastructure; and
- g. Letting a ~~Concession Contract~~ contract for the ~~design, build, finance, construction,~~ operation and maintenance of the Project.

1.4.3 The Council has established a number of strategic objectives for the Project, which are:

- a. To relieve the congested SJB, thereby removing a ~~the~~ constraint on local and regional development and better provide for local transport needs;
- b. To apply ~~minimum~~ toll and road user charges to both the ~~New Mersey Gateway Bridge~~ and the SJB consistent with the level required to satisfy ~~viability~~ the ~~affordability~~ constraints;
- c. To improve accessibility in order to maximise local development and regional economic growth opportunities;
- d. To improve local air quality and enhance the general urban environment;
- e. To improve public transport links across the River;
- f. To encourage the increased use of cycling and walking; and
- g. To restore effective network resilience for ~~road~~ transport across the River Mersey.

1.4.4 ~~The processes that led to the grant of the Permissions and Orders have established the viability of the Project. In considering the viability of the Project it was determined that funding of the works would require the imposition of tolls / charges for the use of both the New Bridge and the SJB. The Council is promoting an approach to tolling that is intended to allow successful delivery of the Project within funding limits agreed with central government. The principal considerations in seeking tolling powers are listed below.~~

- a. ~~To operate a toll concession scheme, within the limits of affordability, so as to mitigate the impact of tolls on local users who are currently able to use the SJB free of charge, many of whom cross the river frequently and some of whom fall within social inclusion target groups;~~
- b. ~~To manage demand to ensure the delivery of transport and environment benefits, by maintaining free flow traffic conditions on the New Bridge and SJB and delivering priority for public transport on the SJB; and~~

- c. ~~To transfer demand risk to the Concessionaire for the duration of the Concession Contract, by allowing the operator to manage that demand through the toll charged, within the constraints of the legal powers and the regulations agreed in the Concession Contract, consistent with the objective of protecting local users.~~

1.5 Environmental Impact Assessment

- 1.5.1 In accordance with European and UK law certain projects must be the subject of a particular process of assessment by reason of their size, nature and the likelihood that they will have significant effects upon the environment. This assessment process is known as environmental impact assessment (“EIA”). Some projects are subject to an automatic requirement for EIA, principally those of very large size or with all-but-inevitable adverse effects on the environment. Others, of a lesser size, are tested against a number of criteria to identify whether EIA is required. This is considered in greater detail in relation to the Project [including the Proposals](#) at Chapter 3 ~~below~~.
- 1.5.2 [The applications that led to the Permissions and Orders were accompanied by an environmental statement \(the “Orders ES”\). Therefore, the Project has already been subject to environmental impact assessment. However, because the Further Applications, to which this ES relates, would allow the Project to be delivered in a different form to that provided in the Reference Design, it is necessary for the environmental impact assessment to be refreshed.](#)
- 1.5.3 Aside from its size the Project is located close to a number of sensitive features, including residential and employment areas, areas of ecological importance, areas of cultural heritage interest, areas of contaminated land and important landscape feature areas. As a result EIA has assumed to be required for the Project [including the Proposals](#) in line with [the Town and Country Planning (Environmental Impact Assessment) ~~(England and Wales)~~ Regulations ~~1999~~ [2011](#) (the “EIA Regulations”)]. This requirement is also discussed in more detail in Chapter 3.

1.6 Purpose of this Environmental Statement (the Further Applications ES)

1.6.1 This Further Applications ES documents the overall findings of the EIA for the Delivery phase of Project. It is a legal requirement for applications relating to EIA projects to be accompanied by an ES.

1.6.2 The Further Applications ES consists of three parts:

- a. The Further Applications ES itself - a comprehensive document drawing together all the relevant information about the project;
- b. A Non-Technical Summary (NTS) - a brief report summarising the principal sections of the Further Applications ES in non-technical language, which should be readily understandable by a wide audience, easily distributed and accessible in a range of different media types and formats; and
- c. Appendices to the Further Applications ES.

1.6.3 In addition to the main body of the Further Applications ES and its appendices, certain other information accompanies this ES. This includes:

- a. A Construction Methods Report: This is appended to Chapter 2 of this ES document and establishes the manner in which the Project including the Proposals will be constructed and therefore forms the basis of construction assessments provided within Chapters 7 to 20 of this ES document; and
- b. A Flood Risk Assessment: This is appended to Chapter 8 of this ES document and provides an assessment of the effect of the Project including the Proposals on, and vulnerability to, flood risk.

1.6.4 This Further Applications ES is structured as follows:

- a. *Introduction and Project Information:* Chapters 1 to 4 provide the background to the Project, set out the details of the Project and the requirements for an EIA in relation to the Project's nature and location.
- b. *Alternatives:* Chapter 5 outlines the main alternatives studied and an indication of the main reasons for choices, taking into account environmental effects.
- c. *Technical Assessments:* Chapters 6 to 20 summarise the findings of a series of detailed environmental impact assessments undertaken as part of the EIA. A list of the detailed assessments of environmental effects considered are as follows:
 - i. Planning Policy;
 - ii. Hydrodynamics and Estuarine Processes;
 - iii. Surface Water Quality;
 - iv. Land Use;
 - v. Terrestrial and Avian Ecology / Information for Appropriate Assessment;
 - vi. Aquatic Ecology;
 - vii. Landscape and Visual Amenity;
 - viii. Cultural Heritage;
 - ix. Contamination of Soils, Sediments and Groundwater;
 - x. Waste;
 - xi. Transportation;
 - xii. Air Quality and Climate;
 - xiii. Noise and Vibration;
 - xiv. Navigation; and
 - xv. Socio-Economics.

- 1.6.5 The structure of each of these chapters is set out as follows:
- i. *Introduction* - Each chapter is led by a short introduction which introduces the topic and explains why it is relevant to the Project **including the Proposals**.
 - ii. *Purpose of the Study* - A short section outlining the reasons why the study described in that chapter was undertaken.
 - iii. *Study Area* - A detailed description of the study area considered in the chapter under discussion, with an explanation of the reasons for doing so.
 - iv. *Relevant Legislation and Planning Policy* – Outline of relevant legislation and planning policy related to each topic.
 - v. *Assessment Methodology* – Outline of methodology applied to the assessment.
 - vi. *Baseline and Results of Investigations* – Details on the results of investigations and baseline details specific to each topic.
 - vii. *Effects Assessment* – Identification of likely receptors to effects associated with the Project **including the Proposals** along with an assessment of the magnitude and subsequent significance of effects.
 - viii. *Mitigation, Compensation, Enhancement and Monitoring* – Outline of measures to mitigate, compensate, enhance and monitor those significant effects identified in the impact assessment.
 - ix. *Residual Effects* – Identification of residual effects following implementation of mitigation, compensation and enhancement measures.
- d. *Conclusions*: Chapters 21 to 23 provide a summary of the residual effects of the Project **including the Proposals**, information on cumulative effects and methods for the implementation of recommended mitigation, compensation and enhancement measures through a Construction Environmental Management Plan (CEMP).
- 1.6.6 The Project has already been subject to EIA as reported in the Orders ES. As a result, it is relevant to consider how this ES and its conclusions differ from those contained in the Orders ES. To assist in this, changed text is indicated by strikethrough (thus, ~~strikethrough~~) and new text by a change to blue font colour. Where more extensive changes have been made, this is noted accordingly.
- 1.6.7 Figures, diagrams, tables and plates are numbered according to the chapter to which they relate. Where possible, figures are contained within the ~~ES~~-text of this ES. However, where this is not possible as a consequence of their size, they are presented within the first appendix to the chapter to which they relate. **Where figures, diagrams, tables or plates have been updated, these have been marked (updated) at the end of the title.**
- 1.6.8 With regard to additional figures, diagrams, tables, plates, appendices and references, these have been inserted in the relevant part of the document but numbered sequentially following on from the highest previous number. Therefore, if the last table in a chapter was numbered Table 6.4, for example, new tables will be numbered from 6.5 onwards and inserted in the relevant place in the text.
- 1.6.9 All appendices to ~~the~~ this ES are contained within a separate volume for ease of reference. A glossary of terms used throughout ~~the~~ this ES has been provided in Appendix 1.2. For ease of reference items within lists are identified by lower case letters, rather than bullet points. It should be noted that this does not imply any prioritisation of the list's contents.
- 1.6.10 Since the final detailed design and methodology for construction and operation of the Project will be settled in the future, assumed quantities and dimensions should be considered to be realistic approximations, unless stated otherwise in the particular context in which they are quoted. So that decision-makers and the general public may be confident as to the assumptions used, a realistic pessimistic scenario has been adopted.