

# Crossrail Environmental Statement

# Volume 8b

# **Appendices**

Transport assessment: central route section

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# **Crossrail Environmental Statement**

Volume 8b - Appendices **Transport Assessment: Central Route Section** 

February 2005





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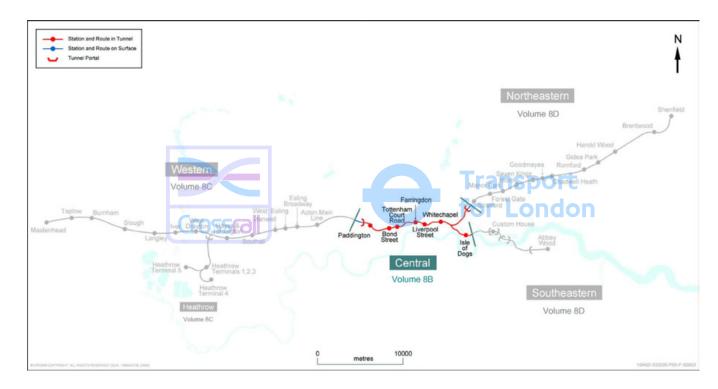
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#### 1 Introduction

- 1.1 This document is Volume 8*b* of the Transport Assessment Report and deals with the Central route section. This section extends from Westbourne Park in the west to Whitechapel in the east where it branches off to Pudding Mill Lane in the northeastern branch and to Isle of Dogs in the southeastern branch.
- 1.2 This volume should be read in conjunction with Volume 8a which includes the following:
  - Scope and methodology for the Transport Assessment
  - Baseline
  - Scheme-wide impacts and mitigation measures
  - Principal findings and conclusions
  - Mapping sources
  - Glossary and list of abbreviations
- 1.3 The Central section has been subdivided into fifteen route windows, these being C1 to C8, C8a, C9 to C13, and C13a. This volume assesses each route window separately by chapter. The final chapter provides a summary of the principal findings and conclusions for this route section.



### **Temporary impacts of Crossrail**

1.4 The Central route section incorporates significant underground tunnel construction with new Crossrail stations at Paddington, Bond Street, Tottenham Court Road, Farringdon, Liverpool Street, Whitechapel and Isle of Dogs, tunnel portals and strategically located intermediate service and ventilation shafts.

- 1.5 Such major construction work in the central area of London will inevitably result in a number of significant impacts. The assessment has shown that these will mainly relate to the setting up and operation of the worksites. The assessment has also identified the significant impacts by category these primarily relate to loss of parking and loading, traffic levels and delays to occupants, delays to vulnerable road users and loss of amenity, and public transport delays.
- 1.6 In order to reduce the potential impact on the road network in the central route section, excavated material will be removed from a number of central route section worksites by rail and barge where reasonably practical.

#### **Cumulative construction effects**

- 1.7 Excavated material from the construction of the twin bore tunnels which will carry Crossrail across central London (route windows C2 to C8) will be removed by rail. However works at each station and the shaft sites, will have to be constructed from the surface and generally excavated materials will be removed by road from these sites. In order to meet the programme it will be necessary for work to proceed on all sites at basically the same time. This gives rise to the possibility that there could be significant cumulative effects on traffic in central London. So, in addition to the local assessment of each site, consideration has been given to cumulative effects in this area.
- 1.8 Although the removal of carriageway space is normally the main factor leading to traffic delays it is possible that a heavy flow of lorries to and from a site would also lead to congestion. Both aspects have therefore been considered. Most sites will be located off the highway and so they will have no direct effect on traffic flows, however it has been necessary for some sites to be sited wholly or partly on the highway.
- 1.9 The individual analyses suggest that the effects of the worksites in route windows C1 (Royal Oak), C2 (Paddington), C3 (Hyde Park), C4 (Bond Street) and C8 (Whitechapel) should be contained within their respective local areas.
- The sites that are expected to have the most significant effect on traffic are the Tottenham Court Road Eastern Ticket Hall worksite in C5, the Farringdon Crossover worksite in Aldersgate Street in C6 and the Moorgate worksite in C7.
- 1.11 It is anticipated that the works at Tottenham Court Road will lead to significant local effects and transfer of traffic to north-south main roads in the surrounding area, but that there should be no significant interaction between this site and the sites in C6 and C7.
- The sites in Moorgate and Aldersgate Street are close together and both require the diversion of sewers, followed by major excavation. The assessment has shown that with suitable traffic management arrangements at the junctions, the loss of capacity can be managed as efficiently as possible. This will involve some retiming of traffic signals and diversion of some of the existing traffic movements to suitable alternative routes. Thus, the risk of traffic delays spreading to a wider area will be minimised. The final arrangements will be discussed with the relevant highway authorities.

## **Permanent impacts of Crossrail**

1.13 Permanent transport impacts of Crossrail once operational are identified in route windows. These include impacts on road traffic (including buses), pedestrians as well as on rail passengers. They are generally at and around stations. There are measures that can be carried out for the benefit of road users and pedestrians that will mitigate these impacts, however these will require further consents to be obtained before they can be implemented. In line with the approach set out in Volume 8a, an assessment of the impact of Crossrail has generally been carried out which assumes that such measures are in place. Various general and specific mitigation measures are recommended as appropriate.