

EDC Project Review Summary: Crossrail Project

Project Description	Construction, operation and maintenance of a 118 km commuter rail line and associated facilities, rolling stock and depot in London, England
Sponsor	Transport for London
Country	United Kingdom
Project Category	A
Canadian Exporter(s)	Bombardier Inc. – Mass Transit
Description of capital goods and/or services	Sale of 65 Aventra trains and construction of a rail car maintenance depot
EDC Product	Financing
Date of publication on EDC's website (dd/mm/yy)	05/02/2015
Date of Signing (dd/mm/yy)	05/05/2015

Project Categorization

The Project includes the development of 76 km of above-ground rail and 42 km of underground rail through central London. The west-east rail line, will be used for commuter purposes only, to alleviate existing road and rail congestion into the central business district. Rail cars will run on standard gauge track and will be powered by 25 kV overhead wires. Additional Project infrastructure includes the construction of approximately 40 stations; emergency intervention points; escape and ventilation shafts; train depot and stabling facilities; a control center; and signaling and communication systems. The Project has been under construction since 2009 and is expected to be fully operational in 2019. The Project was classified as Category A. (Category definitions can be found [here](#), see D3 Environmental & Social Reporting).

Summary of EDC's Review

EDC reviewed the project in accordance with our *Environmental and Social Review Directive* and the *Equator Principles*. Environmental Advisory Services determined that the project has been designed in compliance with applicable host country environmental requirements and the Equator Principles. To reach this conclusion, EDC reviewed a project Environmental Impact Assessment and host-country permit approval documentation.



Key environmental and social issues associated with the project, and related mitigation measures reviewed by EDC include, but are not limited to, the following:

Cultural Heritage Impacts: While the Project has sought to avoid adverse impacts on listed heritage buildings wherever practicable through the consideration of alternative routing options, its construction is expected to result in the demolition of three Grade II listed heritage buildings and modifications to a further 18, which include both Grade I and II buildings.¹ The Project will also result in the demolition of approximately 20 non-listed buildings in or adjacent to historical Conservation Areas.

Mitigation measures include: The Project must sign heritage agreements for each impacted building with the Secretary of State for Transport, English Heritage and the relevant local authority as appropriate. These agreements describe the required mitigation measures for the impacts to each building, as well as the urban design measures to preserve or enhance the character and appearance of Conservation Areas. The Project has appointed external design and heritage advisors to provide advice on such issues during the construction phase.


Involuntary Resettlement and Economic Displacement: It is anticipated that the Project's construction will require the permanent acquisition of approximately 20 residential units and the temporary resettlement of approximately 200 individuals despite best efforts to minimize such impacts. In addition, numerous businesses will be permanently displaced along the proposed rail line.

Mitigation measures include: Permanent and temporary resettlement as a result of the Project will be managed in accordance with the National Compensation Code, Compulsory Purchase Act (1965), and Land Compensation Act (1973). Potentially affected landowners will be notified by the Secretary of State as soon as possible and assistance will be available via a 24-hour hotline accessible 7 days a week. The Secretary of State, in collaboration with property agents, developers and local authorities, will establish an agency service to assist impacted business relocate to meet their accommodation needs.

Noise and Vibration: Increased noise and vibration as a result of the Project's construction will be experienced by surrounding residential and commercial receivers. It is anticipated that airborne noise levels emanating from construction sites and related traffic will be most prominent. To a lesser extent, vibration impacts associated with tunneling and blasting are also expected. Above ground works will be undertaken predominantly during standard daytime construction hours, while tunneling and associated support activities will be undertaken up to 24 hours a day, seven days a week.

Mitigation measures include: To mitigate construction noise impacts, the Sponsor will erect noise insulation structures around construction areas, offer noise insulation packages to affected properties, restrict noisy works to daytime hours only, and provide construction respite periods and temporary accommodation when required. With respect to vibration, high risk areas will be actively monitored to ensure levels do not exceed safe and acceptable limits. Significant operational impacts regarding noise and vibration are not anticipated; however, in the event they do occur, floating slab track technology will be installed in problem areas as a mitigating measure.

¹ Grade I buildings are of exceptional interest, sometimes considered to be internationally important; Grade II buildings are nationally important and of special interest.



Construction Traffic: Construction of the Project will require a range of vehicle movements involving light, heavy and specialized vehicles. This Project-related traffic is likely to create high levels of congestion on surrounding roadways and adversely impact on intersection performance. It is also anticipated that it will impact bus services, pedestrians, cyclists and existing on and off street car parking.

Mitigation measures: To mitigate the Project's impacts on traffic during construction, a series of Traffic Management Plans will be implemented in coordination with highway and traffic authorities, as well as emergency service providers. Further, the Project has committed to moving excavated and construction materials by rail and barge as much as possible to minimize truck traffic. Per the overarching Project Management Plan, truck drivers will also receive specialized training focusing on cyclist and pedestrian safety.

Documentation Reviewed:

- *Crossrail Environmental Statement*. Prepared by Environmental Resources Management. February 2005.
- *Crossrail Environmental Statement: Non-Technical Summary*. Prepared by Environmental Resources Management. February 2005.
- *Crossrail Supplementary Environmental Statements (1-4)*. Prepared by Environmental Resources Management. May 2005 - May 2007.
- *Crossrail Information Papers*. Prepared by Crossrail. November 2007 – April 2008.
- *Crossrail Act*. Prepared by Her Majesty's Government. 22 July 2008.

Applicable International Finance Corporation (IFC) Environmental and Social Standards used by EDC (in addition to host country requirements):

- N/A