



Assessment of Community Impacts

Technical Report

February 2005

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01

Introduction



01

Introduction

- 1.1.1** This report provides a community impact assessment for the proposed works. It addresses the four proposed route sections: from Ladbroke Grove to Maidenhead and Heathrow in the west, the central tunnel from Paddington to the Isle of Dogs and Stratford, and the two eastern routes to Shenfield and Abbey Wood. The ES records all significant residual impacts identified in this technical report. The community assessment also examines the route wide impacts of the scheme, focusing on accessibility changes for local communities to key services.
- 1.1.2** This assessment is presented in two volumes. Volume 1 sets out the methodology used to undertake the assessment. It gives a description of the community baseline and a summary of the direct and cumulative impacts. Volume 2 contains the community database, which identifies all resources and receptors (including the name, address and details of each), and plans showing the location.
- 1.1.3** Appendix 1 provides supporting information about community resources directly affected by the works.

02

Scheme Description



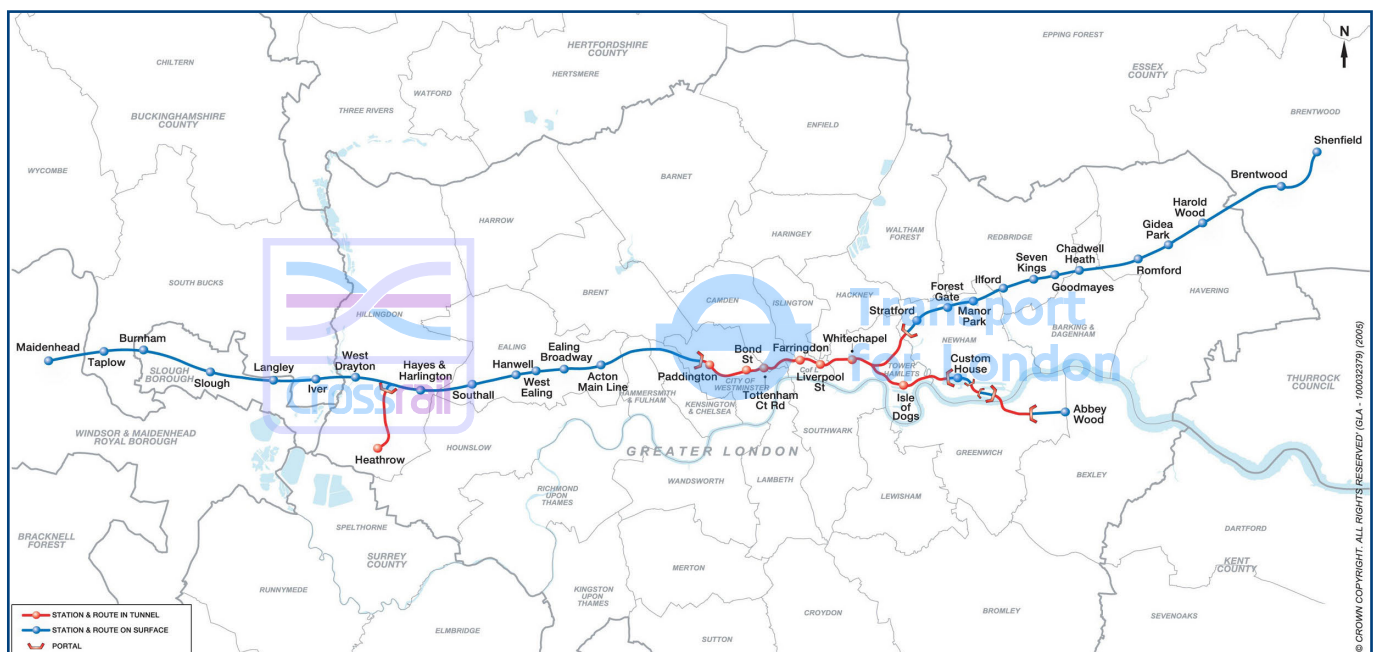
Scheme Description

2.1 Introduction

2.1.1 Crossrail is a major new cross-London rail link project that has been developed to serve London and the southeast of England. Crossrail will support and maintain the status of London as a world city by providing a world class transport system. The project includes the construction of a twin-bore tunnel on an west-east alignment under central London and the upgrading of existing National Rail lines to the east and west. The Crossrail route is shown on Figure 1 below.

2.1.2 The project will enable the introduction of a range of new and improved rail journeys into, and through, London. It includes the construction of seven central area stations, providing interchange with London Underground, National Rail and London bus services, and the upgrading or renewal of existing stations outside central London. Crossrail will provide fast, efficient and convenient rail access to the West End and the City by linking existing routes from Shenfield and Abbey Wood in the east, with Maidenhead and Heathrow in the west.

2.1.3 Crossrail will provide a significant addition to the transport infrastructure of London and southeast England. It will deliver improved services for rail users through the relief of crowding, faster journeys and the provision of a range of new direct journey opportunities. The project will also have wider social and economic benefits for London and the Southeast.



Picture 1: Crossrail Route

2.2 Route overview

2.2.1 Crossrail's route has four distinct sections: western, central London, northeastern and southeastern.

2.2.2 In the west, Crossrail will use the Great Western Main Line between Maidenhead and Westbourne Park. The existing 25 kV overhead electrification between Paddington and Airport Junction will be extended to Maidenhead, and bridge alterations will be undertaken as necessary. The main infrastructure changes comprise: the construction of a flyover structure (the Stockley flyover) to allow Crossrail trains to access the existing tunnelled spur to Heathrow; and the provision of a rail underpass (a dive-under) west of Acton Yard.

2.2.3 A new line, within the existing railway corridor, will be provided between Langley and West Drayton. Enhancements will also be made to stations. The most significant works will be at Ealing Broadway, Southall, Hayes and Harlington, West Drayton, Slough and Maidenhead. New stabling sidings are also proposed at Old Oak Common, West Drayton and west of Maidenhead Station.

2.2.4 The central route section will comprise: a twin-bore tunnel beneath central London with portals at: Royal Oak in the west, Pudding Mill Lane in the northeast and Victoria Dock Road in the southeast. The central route section will extend from around 200m west of the A40 Westway to; around 500m east of the Pudding Mill Lane portal (in the northeast); and just to the east of Poplar Dock in the Isle of Dogs (in the southeast). New stations and associated structures (such as ventilation shafts) will be provided along the route.

2.2.5 Crossrail will use the Great Eastern Main Line between Pudding Mill Lane and Shenfield, on the northeast route section. Main infrastructure changes will comprise a new train maintenance depot west of Romford Station, the reinstatement of a track between Goodmayes and Chadwell Heath and new stabling facilities at Gidea Park. Enhancements will also be made to stations, with the most significant works being proposed at Ilford and Romford. This route has existing 25kV overhead electrification.

2.2.6 The southeast route section runs between the Isle of Dogs Station and the eastern terminus at Abbey Wood. The Abbey Wood Station will be reconstructed. Crossrail will operate in a twin-bore tunnel to Victoria Dock portal where it will serve a reconstructed station at Custom House. The route will then follow the existing alignment (currently used by the North London Line) through the Connaught Tunnel to Silvertown. At North Woolwich, a new twin-bore tunnel to Plumstead, referred to as the Thames Tunnel, will pass beneath the River Thames. Two new tracks will be provided between Plumstead and a point east of Abbey Wood Station to accommodate Crossrail services on the North Kent Line corridor. This route will be provided with 25kV overhead electrification on the Crossrail lines.

03

Scope and Methodology



Scope and Methodology

3.1 Introduction

3.1.1 This Chapter describes the scope and methodology adopted for the assessment of potential impacts on the community.

3.1.2 The practicality of defining specific 'communities' in such a densely developed area as Central London is difficult. However, it is possible to define links between community resources and receptors at a local level. For example, if there is a large residential area, a parade of local shops, a public house, a local open space and a primary school, it can reasonably be assumed the local population would move between these various uses creating 'community' links. These links may not define a 'community' but help to define the network within which the local population functions.

3.1.3 This assessment focuses on these community networks. It identifies the resources and receptors that constitute such networks and examines the way in which the proposed works will affect them. It focuses on changes to the provision of, and access to, community facilities. Facilities are defined as those uses that contribute to the quality of life in the community. They include schools, hospitals, churches, key shops and services, open space, and the accessibility of these facilities to the local population. Residential accommodation is considered where there is a potential for demolition or temporary loss of groups of properties.

3.1.4 Employment and economics are addressed separately under the Socio-Economic Assessment. Other impacts such as noise, traffic, visual amenity, and air quality are addressed in the respective studies and only raised under community as part of the cumulative impact assessment. This avoids double counting of significant impacts.

3.2 Definition of Scope

3.2.1 Potential impacts were considered on resources and receptors within the Limits of Land to be Acquired or Used (LLAU), and any road that gave rise to significant changes in traffic flows during construction. The spatial scope also included:

any locations at which community resources are likely to be subject to other significant impacts (e.g. noise); and

areas or facilities significantly affected by highway severance or road, bridleways or footpath closures, as identified in the Traffic and Transportation Assessment.

3.2.2 Impacts on community facilities were assessed for the construction and early operational stages of the project. Impacts were considered unlikely to persist into the longer-term (i.e. 15 years after opening when design capacity is reached). The community is anticipated to adjust to any impacts over this period, and new or replacement facilities will develop if demand exists.

3.3 Resources and Receptors

3.3.1 The assessment identified the following community facilities and their users:

- nurseries, schools and colleges;
- hospitals, clinics, surgeries and other emergency services;
- residential properties;
- residential homes and care facilities;
- religious meeting places;
- social clubs;
- sports and recreation centres and facilities;
- entertainment facilities (e.g. cinemas, theatres);
- key services serving the local community;
- public rights-of way and other access routes of local importance (e.g. local roads serving community facilities);
- public open space; and
- local communities as a whole.

3.3.2 The assessment focused on key shops and services used on a daily basis by the local community. If a similar shop or service was available within a suitable walking distance then it was not deemed vital to community life and was not considered as a sensitive receptor for the purposes of the assessment.

3.4 Establishment of Baseline

Baseline Resources and Receptors

3.4.1 A community database was prepared which identified key community resources and receptors for the spatial scope outlined above. The information was obtained by on-site survey and supported by additional research where required. The details of the type of use and address were recorded and the locations mapped. The database and mapping is presented in Volume 2. The baseline also identified key planning approvals for community uses.

3.4.2 The following sources were used:

- large-scale OS maps;
- local, structure and unitary development plans;
- field inspection;
- interviews with users and operators of community facilities;
- directories of local services and businesses; and
- societies and user groups.

3.4.3 The baseline conditions were assumed to be those prevailing at the commencement of construction. For the purpose of establishing the baseline, the assessment did not attempt to predict social change or to assume changes in the pattern of use of facilities over time.

Community Policy

3.4.4 Policies at both strategic and local levels help to shape and influence the distribution and function of communities. These were therefore carefully considered as part of the baseline for the assessment.

3.4.5 Planning for London communities starts with the London Plan (February 2004). The Plan sets out a hierarchy and network of Metropolitan, Major and District centres. The Crossrail route spans across such centres providing improved access, reinforcing the community networks and interdependencies.

3.4.6 The Plan provides the framework for the growth and development of these communities. It also identifies policies to assist the regeneration of large areas of central and east London. This assessment identifies London Plan policies where specifically relevant to communities along the Crossrail route. They are described within the route window baselines shown in each of the route sections (Chapters 5 – 8).

3.4.7 The Local Government Act 2000 places a duty on principal local authorities to prepare community strategies for promoting or improving the economic, social and environmental well being of their areas and contributing to sustainable development in the UK. This has had major impacts on the way local communities are planned and managed with a move towards a community-led approach.

3.4.8 This community focus has been developed further with the creation of Local Strategic Partnerships (LSPs) which bring together, at a local level, the different parts of the public and private sectors. The role of LSPs is to create a partnership approach to the management of:

- community strategies;
- rationalisation of separate local partnerships;
- Public Service Agreements (agreements between Central and Local Government which provide minimum standards of achievement for issues such as education, health, crime and transport); and
- Neighbourhood Renewal Strategies (of which Public Sector Service Agreements form part) which narrow the gap between the most deprived neighbourhoods and the rest of the country.

3.4.9 The route window baselines (Chapters 5-8) have reviewed the community strategies and Neighbourhood Renewal Strategies, where relevant. These policies are generally strategic in nature and so have only been documented where they are directly relevant to the works.

3.4.10 Unitary Development Plans (UDPs) contribute to the implementation of the local community strategies through the definition of development control policies and zoning of land. The link between the community strategies and the UDPs has been developed further with the Royal Assent of the Planning and Compulsory Purchase Act in May 2004. The Act replaces the UDPs with Local Development Frameworks (LDFs) supported by statements of community involvement. Although many local authorities have started to prepare LDFs, in most cases the UDPs remain the statutory documents.

3.4.11 The route window baselines have included a review of the adopted UDPs (including latest drafts). Any UDP policies that could affect the understanding and interpretation of the community were identified. In some cases the latest draft (not the adopted draft) has been used as this more accurately reflects the current situation.

3.5 Consultation

3.5.1 Crossrail has undertaken a comprehensive consultation exercise with local communities along the route. This exercise started in September 2003 with a public awareness campaign, which included press releases, leaflets drops, and information packs to 240 stakeholders. Consultation continued with the second phase in October 2003. This included 29 public information centres at key locations along the route, press releases, leaflet drops, a 24hour helpdesk and 300,000 newsletters distributed along school routes. Crossrail also contacted landowners that could potentially be affected by the works. The consultation identified 4,800 issues that were fed back into the design process. The third phase of consultation ran from August to October 2004 with further information centres at key locations.

3.5.2 Additional information on specific community resources that may be directly affected was also collated. In some cases meetings were held with the managers or users. This information is presented in Appendix 1.

3.6 Potential Impacts

3.6.1 The following temporary impacts were assessed:

- temporary closure of, or disruption to, the use and amenity of community facilities;
- temporary severance and /or diversion of public rights-of-way and bridleways;
- temporary displacement of groups of residents; and
- cumulative impacts resulting from construction noise, traffic, visual amenity and dust.

3.6.2 The following permanent impacts were assessed:

- demolition of, and/or permanent landtake from community facilities and residential properties;
- permanent severance and /or diversion of public rights-of-way and bridleways which affect access to community facilities; and
- cumulative impacts resulting from construction noise, traffic, visual intrusion and dust.

3.7 Prediction of Impacts

3.7.1 Impacts were predicted by setting the degree of change due to the project against the type and sensitivity of each resource or receptor within the frame of reference provided by the local community. The definition of sensitivity is varied for each resource or receptor, but took account of the following:

- the level of use of a facility or access;
- availability of alternative facilities or access, either temporarily or permanently; and
- extent of catchment served by a facility.

3.7.2 The community assessment also looked at social inclusion benefits (reported in Chapter 9) . This examined the impact of Crossrail on accessibility to further education, regional hospitals and major centres. TfL's transport model CAPITAL was used to model accessibility changes within isochrones with, and without, Crossrail. Data from the 2001 census was used to capture the demographic and socio-economic characteristics of the population within these isochrones. The following core criteria were used:

- % of 18-24 year olds within 30 and 60 minutes of a further education establishment by public transport;
- % of a) households b) households without access to a car within 30 and 60 minutes of a hospital by public transport; and
- % of a) households b) households without access to a car within 15 and 30 minutes of a major centre by public transport.

3.8 Evaluation of Impacts

Determination of Significance

3.8.1 Significance was determined based on both professional judgement and the use of the criteria laid out in Table 3.1 below. It focused on impacts that are likely to have significant implications for the community as a whole, or for a discreet section of it, rather than for individuals.

3.8.2 The significance of an impact was assessed based on the magnitude of the impact and the nature of the resource/receptor, taking into account the availability of alternative resources in the locality. Specific factors that were considered included:

- the general nature and extent of the works;
- the disturbance to the resource arising from the works; and
- the effectiveness of mitigation proposed by other specialists.

Direct Impacts

- 3.8.3 The assessment reviewed direct impacts. Direct impacts included demolition of, or landtake from, a facility, and severance or diversion of a public right-of-way.
- 3.8.4 The assessment included the impact caused by construction haul routes in residential areas. The assessment looked at roads where there were significant increased in Heavy Goods Vehicles (HGVs) over the construction period, which may affect the general amenity of the local community.
- 3.8.5 The assessment acknowledged a potential community effect could be caused by temporary rehousing due to noise. It was considered that where groups of 10 or more properties were rehoused due to construction noise, there would be a temporary impact on the local community. This would be caused by the impact on the community networks caused by the loss of these people.
- 3.8.6 It was also assumed that where this rehousing was proposed for over three months (in some cases for a number of years) the impact on the community life could be permanent. It was considered permanent because it was not certain that the same population would return, or that the fabric of the community would not have changed considerably in the time that the residents were away.

Cumulative impacts

- 3.8.7 Cumulative impacts were considered where the general impairment of the amenity or well being of the community was affected by multiple impacts that may cause a significant impact on the same resources or receptors. This was applied to impacts resulting from the noise, visual amenity and traffic assessments. The air quality specialists concluded that there were no significant residual impacts on air quality. Air quality was therefore not included as part of the cumulative impact assessment.
- 3.8.8 The results of the cumulative construction impact assessment are reported within the route window assessments (Chapters 5-8).
- 3.8.9 Where there was demolition of residential properties and/or community facilities these were considered as a direct permanent community impact (as explained above). However, although these are permanent community impacts the demolitions were also considered as part of the cumulative assessment of construction impacts because the loss of these residents or facilities would be experienced at the start of the construction period.
- 3.8.10 The results of the cumulative permanent impact assessment are also reported within the route window assessments (Chapters 5-8). The assessment shows there were no areas where it was concluded there would be a negative cumulative permanent impact (during operation of the scheme).

TABLE 3.1 Evaluation criteria for community impacts

Impact	Threshold of significance (at community level)
Permanent loss of residential accommodation	Demolition or displacement (for 3 months or more) of 5 properties or more.
Temporary loss of residential accommodation	Displacement of residents from 10 or more properties for less than 3 months
Community facilities or key services: - closure or rendered unusable - other impairment of use	Assessed based on the availability of alternative facility within a reasonable distance.
Closure or substantial diversion of public footpaths or other access	For more than a few weekends and resulting in a diversion of 500m or more.
Impact on local amenity as a result of Heavy Goods Vehicles (HGVs) during construction	Over 100% increase in lorry number subject to a threshold of at least 5 HGV's a day.
Noise and Vibration	As defined in Noise and Vibration
Visual	As defined in Visual
Atmospheric	As defined in Atmospheric

3.9 Assumptions and Limitations

3.9.1 The following assumptions were made:

- unless stated otherwise, the baseline environment was assumed to remain unchanged from observations during site inspections and from current land use information (exceptions included community facilities which had planning permission but had not yet been constructed); and
- The presence of an alternative comparable facility within walking distance of one affected by the project was regarded as mitigating any loss of use of amenity of that facility.

04 Mitigation



04

Mitigation

4.1 Mitigation Process

- 4.1.1 The impact assessment shown in Chapters 5-8 has identified the potential impacts (positive and negative) that may arise during the construction and operation of Crossrail. This impact assessment has considered mitigation proposed by the project. If the mitigation cannot reduce the impact then a significant residual impact remains. This is recorded as part of the community impact assessment and reported in the main ES.
- 4.1.2 Where Crossrail will directly affect community facilities through landtake or displacement, local authorities have been consulted about ways in which to minimise the extent of impact.

4.2 Mitigation Assumptions

- 4.2.1 The Community Impact Assessment has assumed that each discipline (noise, traffic, visual and air quality) has incorporated the mitigation outlined by Appendix B1 (of the Environmental Statement) into the analysis of environmental impacts. This means that the impacts reported in Chapters 5-8 have been properly considered in terms of incorporated mitigation that will be implemented by the project during construction.
- 4.2.2 Where potential exists to mitigate direct impacts on community facilities, for example, through compensation or use of alternative facilities, this is addressed on a case by case basis. If agreement with the relevant authorities and community facility has not yet been reached, residual impacts have been assumed to persist.

05

Baseline and Environmental Impacts: Maidenhead to Westbourne Park



05

Baseline and Environmental Impacts: Maidenhead to Westbourne Park

5.1 Introduction

5.1.1 This chapter describes the western route section of Crossrail from Maidenhead Station to Portobello Junction (Westbourne Park), and the significant residual temporary and permanent environmental impacts that may arise from construction and operation.

5.1.2 Crossrail will use the existing Great Western relief lines (in normal operations) with additional new tracks at some locations. For example, a new line will be constructed over about 1 km between Langley and West Drayton, to link with existing (but upgraded) freight lines to east and west providing increased track capacity.

5.1.3 Major new structures or facilities include: a new dive-under (rail underpass) at Acton (W4), a new flyover at Stockley in Hillingdon (W11), a freight loop from Langley to West Drayton (W14, W15, W16); and new or remodelled sidings at Maidenhead (W25), West Drayton (W13) and Old Oak Common depot (W3). Crossrail will require, at several places, changes to the permanent way, such as new track or track realignment. It will also require new or extended station platforms to accommodate Crossrail's 200 m long trains. At nine stations, improved facilities, including new or modified ticket halls, will be provided to accommodate Crossrail passengers.

5.1.4 The GWML between Paddington and the Stockley Road bridge is the only section that is electrified. The remainder of the route west of Stockley Road bridge will require the provision of new 25 kV AC overhead line equipment (OHLE). This will require the raising of some bridges or lowering of track beneath them. In some cases, bridges will require complete reconstruction. In other cases, bridge works will be more limited; for example, the raising of parapets (side walls) for public safety reasons.

5.1.5 Tables 5.1 and 5.2 referred to in each route window summarise the direct and cumulative impact assessment and are found in Chapter 10.

5.2 Portobello Junction and Canal Way (Route Windows W1 and W2)

Baseline

5.2.1 The Grand Union Canal, Kensal Green Cemetery, St Mary's Cemetery and a large supermarket superstore are located to the north of the track. The track is crossed north/south by Ladbrooke Grove. To the east, between Ladbrooke Grove and the Grand Union Canal are light industrial and storage uses with some housing. The community resources include: Middle Row Primary School, St Mary's Primary School, Emslie Horniman Pleasance Sports Grounds, St Thomas' Church, the Acom Community Centre, Kensal Community Centre, St Thomas Primary School and Ainsworth Primary School.

5.2.2 The area to the south of the track is mainly residential with open space provided by Little Wormwood Scrubs. Community resources include: Kensington and Chelsea College, North Kensington Fire Station, Lloyd Williams Primary School, St Pius Church, Barlby Primary School, Barlby Surgery, Barlby Play Centre and the Shaftesbury Centre.

5.2.3 The Grand Union Canal, Kensal Green Cemetery and St Mary's Cemetery are designated 'Metropolitan Open Land', and Little Wormwood Scrubs is designated 'Open Space' in the Hammersmith and Fulham UDP (Adopted August 2003). The Plan also designates a 'Longer Distance Canal Side Walk' and 'Strategic and Local Cycle Routes' along the Grand Union Canal.

Main Works

5.2.4 The four tracks on the GWML corridor increase to six at Ladbrooke Grove (in Route Window W1). The point at which the tracks widen to six will be moved eastwards to Subway Junction, east of Westbourne Park. This will provide space for a reversing facility at Westbourne Park.

5.2.5 The final track arrangement will result in the northern pair of tracks being used by Crossrail for empty stock movements to, and from, Old Oak Common depot. The middle pair will be used for relief lines and the southern pair will be used for mainlines. The track layout at Portobello Junction will also be modified to permit Crossrail services to cross between the dedicated Crossrail lines and the GWML relief lines.

5.2.6 The track layout at Canal Way will be modified to permit Crossrail services to access Old Oak Common Depot, and to reduce conflict with other services accessing the depot.

5.2.7 The works will be within the railway corridor with no large construction sites. Main access and egress will be from Canal Way.

Significant Residual Impacts

5.2.8 Table 5.1 summarises the assessment of impacts for this route section. There will be no significant residual impacts.

Cumulative Impacts

5.2.9 Table 5.2 summarises the cumulative impact assessment. There will be no cumulative impact.

5.3 Old Oak Common Depot (Route Window W3)

Baseline

5.3.1 The Old Oak Common Depot is located on a large area of railway sidings and railway land to the north of Wormwood Scrubs Park (comprising stabling sidings, engine sheds and workshops). The area is mainly railway and light industrial uses, with small pockets of residential development to the west (Wells House Road, Shaftesbury Gardens and Midland Terrace). John Perryn School is located on Long Drive to the south. Willesden Station is located to the north, with Oak Common Station to the south. The Grand Union Canal runs along the north-eastern boundary of the sidings.

5.3.2 Wormwood Scrubs Park (to the south of the depot) is designated 'Metropolitan Open Land' by the Hammersmith and Fulham UDP (Adopted August 2003).

Main Works

5.3.3 Fourteen new stabling sidings will be provided within Old Oak Common depot, with a further siding incorporating a train-washing plant within the site of Old Oak Common depot. This will require some remodelling of existing trackwork to accommodate the needs of other existing users within the depot. The future sidings site will also be used temporarily as a tunnel construction and fit-out depot. The main access and egress will be from Old Oak Common Lane.

Significant Residual Impacts

5.3.4 Table 5.1 summarises the assessment process for this route section. There will be no significant residual impacts.

Cumulative Impacts

5.3.5 Table 5.2 summarises the cumulative impact assessment. There will be no cumulative impact.

5.4 Acton Main Line Station and Yard (Route Window W4)

Baseline

5.4.1 Acton Mainline Station is located at the junction of Friary Road and Horn Lane. It lies to the south of Acton Freight Yard, an area of extensive railway sidings and railway uses. There are retail and commercial uses along Horn Lane near the Station. The North Acton Recreation Ground, several playfields and sports grounds are located off Noel Road and Lowfield Road to the north of the freight yard. Community resources include: a post office and shops along Horn Lane; and St Gabriel's Church, a Day Nursery, West Acton Primary School and allotments off Lowfield Road. There are more allotments to the east opposite Ellen Wilkins School for Girls (which has extensive playing fields). The area to the south of the tracks is mainly residential and includes the Japanese School and playing fields.

5.4.2 North Acton Recreation Ground is designated 'Public Open Space', and the green space to the north of the railway which includes the playing fields, allotments and land at Acton School area designated 'Community Open Space' by Ealing UDP (Adopted October 2004).

Main Works

5.4.3 The main works will include:

- the construction of a new rail underpass at Acton Yard; and
- a new ticket hall, footbridge, platform canopies, and platform extensions at Acton Main Line Station.

5.4.4 A new rail underpass will be constructed to provide paths for freight trains going to, and from, Acton Yard without disrupting Crossrail trains and other services. This will take the eastbound relief line beneath the tracks that connect with Acton Yard. Track remodelling will require some demolitions within the Acton Yard.

5.4.5 The Acton dive-under and track work will be constructed from Acton Mainline Station Worksite West. The two goods lines and three depot reception lines will need to be realigned considerably north of their current location to accommodate the rail underpass. This will require sidings and facilities (used by NTS or their tenants) to be moved north. The precise location for this has not yet been agreed with EWS.

5.4.6 The worksite will require the landtake of allotments (off Alwyn Gardens), part of the open space adjacent to West Acton Primary School and part of the sports ground off Noel Road. The main access will be from Noel Road and Horn Lane. Although it is likely that the land will only be required temporarily, this is subject to discussion with various bodies. The assessment has therefore assumed the landtake will be permanent.

5.4.7 A new ticket hall will be constructed at 267 Horn Lane to the south of the existing station. The existing facility on Horn Lane may be converted to commercial use. A new ticket hall will lead to a new footbridge, which will provide access to each platform. New canopies will be provided and platforms three and four will be extended west by 57m.

5.4.8 The works at Acton Mainline Station will be constructed from Acton Mainline Station Worksite (requiring the demolition of 267 Horn Lane (mainly office use). Access will be from Horn Lane.

Significant Temporary Residual Impacts

5.4.9 Table 5.1 summarises the assessment process for this route section.

5.4.10 The increase in HGV (Heavy Goods Vehicles) on Noel Road (over 100%) will be a significant temporary negative impact. This is a primarily residential street with relatively low traffic flows and the additional lorry traffic during the peak period of construction will generate a significant adverse impact on the residential community.

Significant Permanent Residual Impacts

5.4.11 The landtake from allotments off Alwyn Gardens, the open space of West Acton Primary School and all of Lowfield sports ground will be a permanent negative residual impact. Mitigation of this impact is subject to ongoing design work and consultation with the relevant authorities.



Picture 1: Allotments, sports ground and playing fields

Cumulative Impacts

5.4.12 The cumulative impact assessment is presented in Table 5.2.

5.4.13 There will be a cumulative impact on the local community during construction. This will result from the significant increase in HGV traffic on Noel Road, significant noise and visual impacts on surrounding residents, and impacts on rail users due to the closure of the station during the Paddington blockade.

5.4.14 This will also include the permanent landtake of the allotments of Alywn Gardens, part of the open space by West Acton Primary School and of the Lowfield Sports Ground (as outlined in 5.4.11 above). These impacts are included within the cumulative construction impact assessment because, although permanent, they will actually commence during the construction period.

5.5 Ealing Broadway Station (Route Window W5)

Baseline

5.5.1 Ealing Broadway Station serves the District Line, Central Line and Network Rail. It provides an important local transport connection to London and the west. Ealing is a regional centre with a wide range of shopping facilities located to the south of the station. These include the Water Glade Centre and other shops on The Broadway. There are a number of community facilities and services near the Station including: a police station, Christchurch junior school and several churches. Open space is provided by Haven Green to the north of the track; and Walpole Park and Ealing Common to the south.

5.5.2 Ealing is designated a 'Metropolitan Centre' by the London Plan and the Ealing UDP (Adopted October 2004). This means it serves a wide area covering several boroughs, and offers a high level range of goods with a significant employment leisure and retail function.

5.5.3 The Water Glade Centre and other shops on The Broadway are 'Designated Shopping Frontage' and Haven Green is designated 'Public Open Space' by the Ealing UDP (Adopted October 2004). The UDP also designates Walpole Park and Ealing Common as 'Metropolitan Open Land'.

Main Works

5.5.4 The main works will include:

- platforms one to four will be extended at the eastern end by between 10m and 40m with provision of shelters and canopies;
- a new ticket hall will be provided on the site of the existing retail units south of Villiers House. It will replace the existing facility, which will be converted to storage and commercial use;
- a new station footbridge, including three new escalators and lifts to create step-free access to all platforms; and
- a new interchange footbridge with emergency escape at the east end of the main line platforms.

5.5.5 There will be three worksites. The Haven Green Worksite will occupy some of the grassed area of Haven Green local open space. Access will be from Haven Green. There will be a second worksite on Ealing Station forecourt with access from the Haven Green. The third worksite will be located to the south east of the station off The Mall (the site is currently carparking for some flats). The works will require the demolition of retail units and kiosks within the station complex.

Significant Residual Impacts

5.5.6 Table 5.1 summarises the assessment process for this route section. There will be no significant residual impacts.

Cumulative Impacts

5.5.7 Table 5.2 shows the cumulative impact assessment.

5.5.8 There will be a cumulative impact during construction. This will be caused by:

- noise impacts on residents and a surgery at the Mall and Madeley Road as well as users of Haven Green and the Feathers Public House;
- visual impacts on residents around Haven Green, at Green Law Court and at College Court;
- a loss of parking spaces south of the tracks;
- and delays for train passengers travelling to, and from, the station.

5.6 West Ealing Station (Route Window W6)

Baseline

5.6.1 West Ealing Station is located in a residential area. It is served by shops along the Avenue, and at the junction of The Avenue and Alexandria Road. The railway over-bridge also accommodates a number of single storey retail units. The Station is separated from Manor Road to the north by a derelict former siding and small workshops. Manor Road is mainly residential. Resources to the north of the tracks include: a preschool playgroup at Drayton Green and Drayton Green Primary School. A supermarket, car park and light industrial units separate the rail corridor from a residential area to the south. Resources to the south include: Dean Hall Community Hall, a church and Ealing Magistrates Court.

5.6.2 West Ealing station falls within the 'Metropolitan Centre' designated by the Ealing UDP (Adopted October 2004). The retail resources at The Avenue, and at the junction of The Avenue and Alexandria Road are 'Designated Shopping Frontage'; and Drayton Green and Dean Gardens are designated 'Public Open Space' by the Ealing UDP. The Royal Borough of Kensington and Chelsea Cemetery to the west is designated 'Metropolitan Open Land' (MOL) by the UDP.

Main Works

5.6.3 The main works will include:

- provision of new track and bay platform for the Greenford Branch;
- platform extensions; and
- construction of a new ticket hall and new footbridge with lifts.

5.6.4 Approximately 250m of new track will be introduced west of West Ealing Station (to accommodate the Greenford Branch). Passengers using the Greenford Branch will be required to change at West Ealing (because the through services to, and from, Paddington will no longer be available). Greenford services will use a new 50m long bay platform, located on the north side of the station over some disused sidings.

5.6.5 The existing ticket hall located on the road overbridge at the east end of West Ealing Station will be converted to commercial use. A new facility will be constructed on the north side of the station, adjacent to the taxi rank off Manor Road.

5.6.6 Both platforms will be extended at the western end by 65m. New canopies will be constructed over part of the platforms.

5.6.7 The West Ealing Station Worksite will be located to the north of the tracks and west of the station. It will use railway land that was previously used as a milk dock for servicing London with fresh milk. The main access will be from Manor Road.

Significant Temporary Residual Impacts

5.6.8 Table 5.1 summarises the assessment process for this route section.

5.6.9 Construction traffic will generate over 100% increase in HGV traffic on Manor Road. This is a residential street with low traffic flows and the additional traffic during a 12 week period will generate a significant impact on the amenity of the community.

Cumulative Impacts

5.6.10 Table 5.2 summarises the cumulative impact assessment. There will be no cumulative impact.

5.7 Hanwell Station (Route Window W7)

Baseline

- 5.7.1 Hanwell Station is located in a residential area. The Brent Valley to the west is an important green corridor. Kensington Cemetery, a synagogue, health centre and Hanwell Library are all located south of the railway; with Ealing Hospital to the southwest. The residents are served by shops along Church Road, the Uxbridge Road and Greenford Avenue. St Joseph's and St Ann's Primary are located to the south of the Station. Open space is provided by Churchfields Recreation Ground and Brent Valley Golf Course to the north of the tracks.
- 5.7.2 The Ealing UDP (Adopted October 2004) designates Churchfields Recreation Ground as 'Public Open Space and MOL, and Brent Valley Golf Course as MOL. The UDP designates Hanwell as a District Centre with the shops on Uxbridge Road and Greenford Avenue as 'Designated Shopping Frontage'.

Main Works

- 5.7.3 Both platforms will be extended westwards by approximately 65 m to accommodate Crossrail trains. There will also be various minor track modifications. The works will be constructed from three sites. Churchfields Gardens Worksite will be located on part of the recreation ground land to the north of the railway (accessed from Golden Manor). Golden Manor worksite will be located on railway embankment to the rear of houses on Campbell Road (also accessed from Golden Manor); and Hanwell Station Forecourt Worksite will be located in a builders yard (now derelict) adjacent to Hanwell Station forecourt (accessed from Campbell Road).

Significant Residual Impacts

- 5.7.4 Table 5.1 summarises the assessment process for this route section. There will be no significant residual impacts.

Cumulative Impacts

- 5.7.5 Table 5.2 summarises the cumulative impact assessment. There will be no cumulative impact.

5.8 Southall Station (Route Window W8)

Baseline

- 5.8.1 Southall Station is located adjacent to a Sikh Temple within an area of mixed residential/light industrial use. Southall is a large local centre with a wide range of shopping, recreation and other social facilities. Shopping facilities are located along South Road near the station and on King Street. Southall Park (to the north) provides large areas of open space and a bowling green. Other facilities include: Villiers School, Hambrough Primary School, and a methodist church to the north of the station; and Southall Norwood Hospital to the south. The Southall Park and residential areas to the north of the tracks are linked to the Glade Way Sports Ground and BMX track in the south via the Green Drive pedestrian subway.
- 5.8.2 Southall is designated a 'Major Centre' by the London Plan and the Ealing UDP (Adopted October 2004). The UDP designates Southall Park as 'Public Open Space' and the shops on King Street as 'Designated Shopping Frontages'.

Main Works

- 5.8.3 The main works will include:
- reconstruction of Southall Station, including provision of new ticket hall and footbridge;
 - minor realignment of the westbound relief line track;
 - platform extensions; and
 - track modifications to the east.
- 5.8.4 The works will be constructed from Southall Station Worksite located to the north of the tracks on railway land (with access from South Road and Park Avenue). A worksite will also be located on a light industrial yard/storage site off Park Avenue.

Significant Residual Impacts

- 5.8.5 Table 5.1 summarises the assessment process for this route section. There will be no significant residual impacts.

Cumulative Impacts

- 5.8.6 Table 5.2 summarises the cumulative impact assessment. There will be no cumulative impact.

5.9 Southall West Sidings (Route Window W9)

Baseline

5.9.1 Southall Sidings divide a former gas works site and large areas of contract parking to the north, from residential uses to the south. The two areas are linked by the White Street Subway, which passes north-south under the tracks. The Spencer Street play area is located to the south of the tracks on Spencer Street. It provides open space and basketball courts for local use. Corridors of open land define the floodplains of Yeading Brook to the west. The residential area of Southall Green lies to the south. Shopping facilities are provided along Dudley Road. Other services include the Southall and West London College and Beaconsfield Primary School on Beaconsfield Road, and the British Legion on Dominion Road.

5.9.2 The retail provision on Dudley Road is a 'Designated Shopping Frontage' by the Ealing UDP (Adopted October 2004).

Main Works

5.9.3 There are no works in this route section other than some minor resignalling.

5.10 Hayes and Harlington Station (Route Window W10)

Baseline

5.10.1 Hayes & Harlington Station is located between the urban areas of Hayes (to the north) and Harlington (to the south). The two towns combined provide a district centre with a range of retail services and community uses. The area surrounding the centre is mainly residential with Victorian terraced housing and some more recent estates to the north of the tracks and pre-war housing to the south. The land to the east is mainly industrial and storage. The residential uses to the south are served by a number of community facilities including: Elim Pentecostal Church, Hayes Spiritualist Church, a Nursery and Early Years Centre, several surgeries and a local community centre.

5.10.2 Hayes & Harlington retail area is designated Town Centre by Hillingdon UDP (Adopted 1998).

Main Works

5.10.3 The main works will include:

- extension of the existing freight line and creation of a new northern span for Station Road Bridge to accommodate this;
- provision of a new ticket hall at Hayes & Harlington Station to replace the existing one;
- a new passenger overbridge with stairs and a lift to all platforms; and
- track and platform modifications at the station.

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5.10.4 The works will be constructed from three sites. The Hayes & Harlington Station Worksite North will be located off Station Approach. It will be accessed from Station Road and will require the demolition of the current station building, the office/retail buildings known as Bridge House and numbers 107 – 131 Station Approach (which includes three dental surgeries and a dental technician).

5.10.5 The Hayes & Harlington Station Road Bridge Worksite is located on railway land to the south of the tracks and to the rear of properties on Keith Road (also accessed from Station Road). The Hayes & Harlington Station Worksite South will be within the station carpark to the rear of properties on Viveash close.

Significant Residual Impacts

5.10.6 Table 5.1 summarises the assessment process for this route section.

5.10.7 The permanent closure of three dental surgeries and a dental technician at 115 and 117 Station Approach will have a significant permanent negative impact. Although there are other alternatives within a reasonable distance, this represents a considerable proportion of the total number of dentists in the area and is therefore considered significant.



Picture 2: W10 Hayes Dentists

Cumulative Impacts

5.10.8 Table 5.2 summarises the cumulative impact assessment. There will be no cumulative impact.

5.11 Stockley Flyover (Route Window W11)

Baseline

- 5.11.1 The track runs east-west parallel with the Grand Union Canal (located to the north). The Stockley Flyover (which carries train services to Heathrow) runs parallel to Stockley Road branching east to join the mainlines. The area is industrial/storage to the north and south-west of the tracks with housing to the south-east and allotments immediately south of the tracks. Stockley Ponds, trees and open land bound the Stockley Flyover to the west. Open space borders the Grand Union Canal to the north.
- 5.11.2 The open space to the north of the Grand Union Canal is designated 'Green Belt', and the ponds are designated 'Green Belt' and part of an 'Area forming a link in a Green Chain' by Hillingdon UDP (Adopted 1998).

Main Works

- 5.11.3 New OHLE will be provided on the Crossrail route. A new grade separated junction (flyover) will be constructed to the north and west of the existing Stockley Flyover. The new flyover will accommodate the eastbound Crossrail/Heathrow Express line. This will also required substantial tracks realignments to provide for Heathrow Express and other services.
- 5.11.4 Structures will be built to convey a new track onto a new viaduct along the north side of the existing rail corridor. This northern viaduct will be about 400m long. A new bridge deck will be built at each end over the existing lines.
- 5.11.5 A western structure will be constructed northwest of the existing flyover, about 300m east of Stockley Road Bridge. This transfer structure will comprise to bridge decks that will carry a new track over all of the low level tracks in the GWML corridor. Another small viaduct will then carry it to a point north of the airport tunnel. This new track will accommodate all trains travelling from Heathrow.
- 5.11.6 At the eastern end the viaduct widens as a the single track diverges into two, opposite Swallowfield Way. An eastern transfer structure will be constructed to accommodate the new tracks and carry one of them to a new alignment between the low level tracks, the second Crossrail track will remain on the north side of the rail corridor. The two tracks will reach ground level just west of Dawley Road Bridge on 300m long ramps.
- 5.11.7 Various track alignments will be required for this new arrangement. Eastbound Heathrow Express trains will be transferred from the existing Stockley flyover onto the new structure. The Stockley flyover will then be used to accommodate westbound Crossrail airport trains. Westbound Heathrow express trains will continue to use the dedicated track on the south side of the rail corridor. Other alignments will be required to take low level tracks beneath the new bridge decks.
- 5.11.8 The works will be constructed from four sites. The Dagenham Motors Worksite will be located to the north of the tracks within the Aberglen Industrial Estate. It will be accessed from Dawley Road. Two worksites will occupy part of HG Timber and All Point Packaging and will be accessed from the industrial estate service road. The fourth worksite will be located at Stockley Close and will be accessed from Stockley Road. The works will require the demolition of Dagenham Motors, All Point Packaging, Wackenshut (at Stockley Close), KGM transport and HG Timber.

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Significant Residual Impacts

5.11.9 Table 5.1 summarises the impact assessment process.

5.11.10 The construction of a landscape bund will require the permanent landtake of the allotments immediately south of the railway. The loss of the allotments will cause a significant permanent adverse impact on the local community.

Cumulative Impacts

5.11.11 Table 5.2 shows the cumulative impact assessment. There will be no cumulative impact.

5.12 Horton Road and Old Stockley Road Bridge (Route Window W12)

Baseline

5.12.1 Horton Bridge lies to the west of the route window linking industrial areas to the north of the tracks with residential areas to the south. Old Stockley Road Bridge lies to the east. It runs parallel to Stockley Road and links Stockley Country Park and industrial land to the north, with residential areas to the south. The Grand Union Canal runs parallel to the tracks on the north side. The main community resource is Jigsaw Day Nursery located within Stockley Country Park.

5.12.2 Stockley Country Park is designated 'Green Belt' by Hillingdon UDP (Adopted 1998).

Main Works

5.12.3 This route section will require overhead electrification, which will necessitate works to bridges. Old Stockley Road bridge marks the start of this electrification to the west.

5.12.4 In order to accommodate the OHLE, bridge modifications will be required. Kingston Lane footbridge. It will be replaced by a new footbridge immediately to the west. The works will be constructed from Kingston Lane Worksite on a redevelopment site (to the south of the tracks and west of the current bridge).

5.12.5 The works will be accessed from the West Drayton to Horton Bridge Worksite, which will use land to the north currently occupied by a plant hire firm (the Drayton end) and scrub land (the Horton end). The new bridge will accommodate the utilities that are contained within the current bridge.

5.12.6 Old Stockley Road Bridge will be demolished and replaced by a foot/cycle bridge. The works will be constructed from Stockley Road Bridge Worksite to the south of the tracks and accessed from Stockley Road.

Significant Residual Impacts

5.12.7 Table 5.1 summarises the assessment process for this route section. There will be no significant impacts.

Cumulative Impacts

5.12.8 Table 5.2 shows the cumulative impact assessment. There will be no cumulative impact.

5.13 West Drayton Station (Route Window W13)

Baseline

5.13.1 West Drayton Station is located in West Drayton Town Centre, and surrounded by residential areas. The West Drayton Sidings are occupied by a coal depot and other open storage uses. The sidings are bound to the south by the Great Western Main Line and to the north partly by Fray's River and partly by the Poyle Branch Line. The Colne Valley and River Colne provide open space to the north. There are a number of community facilities which include: the Ivy Leaf Club and health centre to the north of the railway; and a dentists, various health services and a post office to the south.

5.13.2 West Drayton is designated Town Centre by the Hillingdon UDP. The UDP designates the Colne Valley as 'Green Belt'.

Main Works

5.13.3 The main works will include:

- construction of a new stabling facility on the site of the former West Drayton Station;
- redevelopment of West Drayton Station; and
- introduction of OHLE throughout.

5.13.4 The works to the station will include track and platform works. Platform four will be lengthened at the eastern end by 62m. The curvature of the goods line behind platform four will be adjusted to allow for the provision of a new face to platform five. Platform three will be extended east by 65m.

5.13.5 The works to the station will be constructed from the West Drayton to Horton Bridge Worksite. This will include land railway land north of the tracks between West Drayton Station and Horton Bridge. This land is currently occupied by a plant hire firm (the Drayton end) and scrub land (the Horton end). It will be accessed from Station Approach.

5.13.6 A new stabling facility will be constructed on the site of the former West Drayton coal concentration depot, west of the station. The facility will comprise 22 sidings with low height lighting, train washing facilities and staff accommodation buildings. The sidings will require the removal of light industrial units, the provision of a new bridge over the Frays River and the realignment of an access road.

5.13.7 The works at the sidings will be constructed from West Drayton Stabling Worksite which will comprise the whole of the West Drayton Yard area (previously a coal concentrate depot and some light industrial uses). The work will be accessed from Tavistock Road.

Significant Residual Impacts

5.13.8 Table 5.1 summarises the assessment process for this route section.

5.13.9 The construction works along the canal between West Drayton Station and Kingston Lane Bridge may provide an opportunity to create a public canalside walk to the station after completion of the works. This would be a significant permanent beneficial impact.

Cumulative Impacts

5.13.10 Table 5.2 summarises the cumulative impact assessment.

5.13.11 There will be a cumulative impact on the community during construction caused by: noise at Warwick Road, Knowles Close, the High Street and Tavistock Road; and visual impacts at Weirside Gardens, Humber Close, Knowles Close and Warwick Road.

5.14 Iver Station (Route Window W14)

Baseline

5.14.1 Iver Station is located to the west of Thorney Lane. Open grassland lies to the north of the station with a large concrete batching plant to the west. The haul road for this plant runs along the north side of the tracks and onto Thorney Lane. The area to the south of the Station is mainly residential and forms part of the Richings Park residential area. Shops are provided along Bathurst Walk and services include a pharmacy, library and post office.

5.14.2 The open area is designated 'Green Belt' by the South Buckinghamshire District Local Plan (Adopted March 1999)

Main Works

5.14.3 The main works will include:

- Thorney Lane road bridge will be replaced with a new steel structure to accommodate overhead electrification (the new bridge will be built before the existing bridge is dismantled);
- Thorney Lane footbridge will be retained but the parapets will be raised.
- extension of platforms two, three and four at Iver Station eastwards by approximately 30 m;
- conversion of platform 4 to an island platform and reconstruction of the north facing side to create a new platform 5
- the new platform 5 will serve the new relief line created by upgrading the existing freight loop and realigning it north; and
- a new ticket office on the existing site.

5.14.4 The works will be constructed from three sites. Thorney Lane North Worksite East will be located to the north of the tracks and east of the road on open land. It will be accessed from Thorney Lane. Thorney Lane North Worksite West will be located to the north of tracks and west of the road on open land. It will be accessed from the haul road currently used by the Bison Concrete Works. The Thorney Hill Golf Course Electricity Pylon Worksites will be located on open land to the south of the railway and east of the road.

5.14.5 At Iver station, the Iver Station Worksite will be located on the open land to the north of the station with access from the existing haul road.

Significant Residual Impacts

5.14.6 Table 5.1 summarises the assessment process for this route section.

5.14.7 Thorney Lane will be realigned to create an improved junction with the haul road to the north of the railway. This will move the heavily trafficked road further away from the residential area and provide an improved road junction with the haul road to the cement works. This would provide a significant permanent beneficial impact for local residents.

Cumulative Impacts

5.14.8 Table 5.2 summarises the cumulative impact assessment. There will be no cumulative impact.

5.15 Dog Kennel Bridge (Route Window W15)

Baseline

5.15.1 The railway corridor crosses an area of open countryside in shallow cutting and then a low embankment with areas of mature trees. A large open arable field lies to the north of the tracks, which extends south of the railway to the North Park Road and Thorney Park Golf Course. Residential areas and the periphery of Slough Town Centre lie to the west. Dog Kennel footbridge links the open areas north and south of the railway. It is used by pedestrians and horseriders.

5.15.2 The open areas are designated 'Green Belt' by the South Buckinghamshire District Local Plan (Adopted 1999).

Main Works

5.15.3 A new single-track relief line will be constructed on the northern side of the tracks. It will be approximately 1.2 km and run between Chequer Bridge (in Route Window W16) and Dog Kennel Bridge. The embankment between Chequer Bridge and Dog Kennel Bridge will be widened by approximately 7m to accommodate the new track.

5.15.4 Dog Kennel Bridge will be demolished with no replacement footbridge. This will be constructed from Dog Kennel Bridge Worksite South. This will require a small area of land to the south of the tracks. A narrow strip of land will also be required to the north of the tracks between Dog Kennel Bridge east to Hollow Hill Lane.

5.15.5 Chequer Bridge will be replaced with a new single track railway bridge to the north. The Hollow Hill Lane to Dog Kennel Bridge Worksite will be located to the north of the tracks with access from Market Lane. It will use some open land from Richings Park.

5.15.6 The works will include the diversion of two gas mains and an oil pipeline. This will be carried out from the Chequer Bridge Pipeline Diversion Worksite.

Significant Residual Impacts

5.15.7 Table 5.1 summarises the assessment process for this route section.

5.15.8 Dog Kennel footbridge is a permissive footpath used by pedestrians and horse riders. It also links two public paths. The permanent loss of this bridge will be a significant negative impact.



Picture 3: Aerial view of dog kennel bridge

Cumulative Impacts

5.15.9 Table 5.1 summarises the cumulative impact assessment. There will be no cumulative impact.

5.16 Langley Station (Route Window W16)

Baseline

5.16.1 Langley Station lies within the built up area of Langley. There are industrial estates to the north of the station and housing/industrial land to the south. Langley Shopping Centre is located to the south on the High Street. The Grand Union Canal lies to the north of the tracks, with Iver Golf Course and Sawyer Green Farm to the far north.

5.16.2 The shopping area is designated “primary and secondary shopping frontages” by the Slough Local Plan (Adopted March 2004).

Main Works

5.16.3 New OHLE will be provided on the Crossrail route. Relief line platforms at Langley Station will be extended eastwards by about 42m to accommodate Crossrail trains. The down main platform will be extended eastwards by 20m to allow for use by five-car Crossrail trains during the maintenance periods for the relief lines. In addition, some track works will also be required to the east of Langley Station, with the provision of a new junction to the east of Langley Station, and a new junction for the Langley-West Drayton Loop (Route Window W15).

5.16.4 A small worksite is planned on industrial land east of the station (the site of the former Total GB Ltd oil terminus). This will be accessed from Station Road.

Significant Residual Impacts

5.16.5 Table 5.1 summarises the assessment process for this route section. There will be no significant residual impact.

Cumulative Impacts

5.16.6 Table 5.2 summarises the assessment process for this route section. There will be no cumulative impact.

5.17 Middlegreen Road, St Mary's Road and Trenches Bridges (Route Window W17)

Baseline

5.17.1 Middlegreen Road Bridge, St Mary's Road Bridge and Trenches Bridge all link housing to the south of the railway to; industrial space, the Grand Union Canal and Middle Green open space to the north. Residential areas and smaller areas of open space are located to the south. There are several areas of formal open space, allotments, community facilities and St Mary's Church to the south; and Manor Tree Group Langley Nursery School and Junior School to the north.

5.17.2 The Slough Local Plan (Adopted March 2004) designates the formal open spaces as 'Public Open Space/ Allotments'.

Main Works

5.17.3 New Overhead line equipment will be provided on the Crossrail route. Bridge works will be required at some locations to accommodate this. The brick arches of both Middlegreen Road (Langley Down) Bridge and St Mary's Road (Church Lane) Bridge will be demolished and replaced with new bridge decks. Trenches footbridge will be partially demolished and replaced with a new two-span steel superstructure.

5.17.4 Trenches Bridge Worksite North will be located on the vacant land east of the bridge (part of Langley Business Park site). Access will be from the east, using Waterside Drive. St Mary's Road Bridge Worksite South will occupy grassed recreation space that forms part of Springate Fields with access from St Mary's Road.

5.17.5 Middlegreen Road Bridge Worksite North will be located on public open space (Bloom Park) north of the railway and accessed from Middlegreen Road.

Significant Residual Impacts

5.17.6 Table 5.1 summarises the assessment process for this route section.

5.17.7 The five week closure of Middlegreen Bridge will be a temporary significant impact. The temporary closure of the heavily used Trenches Bridge for approximately three weeks will also be a significant negative residual impact.

5.17.8 Construction will required the temporary landtake of approximately 20% of Bloomfield Park, given the large remaining park area this is not considered a significant impact. It has been assumed that the landtake at Bloom Park will not effect the yearly canal festival.

Cumulative Impacts

5.17.9 Table 5.2 summarises the cumulative impact assessment. There will be no cumulative impact.

5.18 Slough Station (Route Window W18)

Baseline

5.18.1 Slough Station is located on the northern edge of the town centre. The town centre lies mainly to the south of the station comprising offices and retail uses. It includes a superstore, hotel, and St Bernard's School. Business uses predominate to the north of the railway (offices, light industry and distribution) with housing beyond in Stoke Gardens and Petersfield Road.

5.18.2 The town centre is designated 'Town Centre Commercial Area' and 'Shopping Centre' by Slough Local Plan (adopted March 2004).

Main Works

5.18.3 The main works will include:

- upgrading of Slough Station including a new bay platform, platform extensions and modifications to the ticket halls;
- a new footbridge at the western end of the station with lift access to all platforms;
- provision of a Slough goods loop; and
- introduction of OHLE throughout the route window, and changes to three road bridges to accommodate this.

5.18.4 The works to Uxbridge Road Bridge will be carried out from a small worksite to the east of the road adjacent to the tracks. Electrification works at Wexham Bridge will take place from Wexham Road Bridge Worksite South on a strip of open scrub land south of the tracks and Wexham Road Bridge Worksite North on a carpark to the north. They will be accessed from Wexham Road.

5.18.5 At Slough Station, several small work sites are planned on car parking areas and railway land to the north at Railway Terrace Worksite West and Slough Station Worksite North. To the south worksites will be located at William Street Bridge, Brunel Way and Slough Station South.

Significant Residual Impacts

5.18.6 Table 5.1 summarises the assessment process for this route section. There will be no significant impacts.

Cumulative Impacts

5.18.7 Table 5.2 summarises the cumulative impact assessment. There will be no cumulative impact.

5.19 Stoke Poges Lanes Bridge (Route Window W19)

Baseline

5.19.1 The railway passes through mainly residential areas. Godolphin Playing Fields to the north are linked to the Salt Hill Pleasure Ground to the south by a railway underpass. Slough Town Centre is located to the south-east. There are a number of community resources to the south which include: the Bharami Health Centre on Lansdowne Avenue, the Polish Roman Catholic Church on Pitts Road and Thames Valley University on Wellington Road. Acorn dental surgery on Stoke Poges Lane is located to the north. Industrial uses lie between the residential areas and Farnham Road to the west. The Rotunda Stadium and Youth Community Centre are located within this industrial area.

5.19.2 The open spaces are designated 'Public Open Space' and Slough Town Centre is designated 'primary and secondary shopping frontages' by Slough Local Plan (Adopted March 2004).

Main Works

5.19.3 OHLE will be introduced throughout this route window. Bridge modifications will be required to accommodate this. At Stoke Poges Lane, the road bridge will be raised to provide sufficient clearance. This will require two work sites, one to the north east of the bridge on a carpark area (Stoke Poges Lane Bridge Worksite North) and one to the south west in Salt Hill Pleasure Grounds (Stoke Poges Lane Bridge Worksite South). The worksites will be accessed from Stoke Poges Lane.

5.19.4 At Farnham Road Bridge the parapets will be raised and the track will be lowered beneath the bridge. Two small work areas are planned: one to the north on a small patch of open land (Farnham Road Bridge Worksite North) and one to the south on part of a car park (Farnham Road Bridge Worksite South). The worksites will be accessed from Farnham Road.

Significant Residual Impacts

5.19.5 Table 5.1 summarises the assessment process for this route section. There will be no significant residual impacts.

Cumulative Impacts

5.19.6 Table 5.2 summarises the cumulative impacts assessment. There will be no cumulative impact.

5.20 Dover Road and Leigh Road Bridges (Route Window W20)

Baseline

5.20.1 The Dover Road and Leigh Road bridges provide access across the railway within Slough Trading Estate.

5.20.2 There are no community policies that directly affect this area.

Main Works

5.20.3 The Crossrail track will be electrified throughout the route window. This will require works to bridges. The parapets of Dover Road Bridge will be raised. Dover Road Bridge works will be constructed from three sites: the Dover Road Bridge Worksite North, Dover Road Bridge Worksite South East and the Dover Road Bridge Worksite South West all of which are located within the grounds of light industrial buildings. The works will be accessed from Ipswich Road and Deal Avenue.

5.20.4 The Leigh Road Bridge will be replaced with a new steel single 25m span bridge. The new bridge will accommodate a pavement and two traffic lanes. The Leigh Road Bridge works will take place from three construction sites: the Leigh Road Bridge Worksite North located on railway scrub, the Leigh Road Bridge Worksite South East located to the south of the tracks on a carparking area; and the Leigh Road Bridge Worksite South West within the grounds of a light industrial building. Access to Leigh Road Bridge will be from Bedford Avenue to the north of the tracks and Argyll Avenue and Leigh Road to the south.

Significant Residual Impacts

5.20.5 Table 5.1 summarises the assessment process for this route section.

5.20.6 Leigh Road Bridge will be closed for approximately five months. This will have a significant negative impact on pedestrian access.

Cumulative Impacts

5.20.7 Table 5.2 summarises the cumulative impact assessment. There will be no cumulative impact.

5.21 Burnham Station (Route Window W21)

Baseline

5.21.1 Burnham Station is located in the district centre of Burham. The area to the north of the railway is mainly residential. Residential uses are mixed with commercial and light industrial sites (including Slough Trading Estate) to the south and east. Open space is provided by open land to the north and a recreation ground to the south of the tracks. The local centre of Cippenham lies to the south with shops along Elmshott Road. Community resources include: Haymill Community Centre, Haymill Youth Centre, Haymill After School Club a doctors surgery on Burnham Lane, and Dragons Health Club within the Slough Trading Estate.

5.21.2 The retail facilities to the south of the station are designated 'primary and secondary shopping frontages' by the Slough Local Plan (Adopted March 2004). The open space is designated 'Public Open Space' by the Local Plan.

Main Works

5.21.3 Crossrail lines will be electrified through this route window. The island platform at Burnham Station will be extended westwards by about 26m to accommodate Crossrail trains. The works will be constructed from Burnham Lane Worksite (accessed from Burnham Lane) and Sandringham Court Worksite North (accessed from Sandringham Court).

Significant Residual Impacts

5.21.4 Table 5.1 summarises the assessment process for this route section. There will be no significant residual impacts.

Cumulative Impacts

5.21.5 Table 5.2 summarises the cumulative impact assessment. There will be no cumulative impact.

05

5.22 Lent Rise (Route Window W22)

Baseline

5.22.1 This route window includes the western part of Slough, which comprises mainly residential uses.

5.22.2 There are no community policies that are directly relevant to works in this area.

Main Works

5.22.3 Crossrail lines will be electrified through this route window.

Significant Residual Impacts

5.22.4 Table 5.1 summarises the assessment process for this route section. There will be no significant residual impacts.

Cumulative Impacts

5.22.5 Table 5.2 summarises the cumulative impact assessment. There will be no cumulative impact.

5.23 Taplow Station (Route Window W23)

Baseline

5.23.1 The railway runs across the Thames floodplain on embankment arriving at Taplow Station at ground level. The surrounding area is mainly countryside and urban fringe residential uses. Taplow Station lies on the edge of Burnham Town within the Green Belt. Taplow village is 1km to north-west. The Bishops Centre, a busy local shopping centre is to the east. Taplow Lake and open space is located to the south; and playing fields, two sports grounds and allotments are to the north. There are a number of community facilities to north which include: two community halls on Instate Road, Phoenix and Claire's Court Sports Ground, Taplow and Hitcham recreation ground and Taplow and Hitcham Women's Institute. The Penstone veterinary clinic lies to the south.

5.23.2 The South Buckinghamshire local Plan (Adopted March 1999) designates the green space as 'Green Belt'.

Main Works

5.23.3 The Crossrail track will be electrified. This will require works to bridges. The station footbridge will be modified to accommodate overhead wires. Taplow station platforms will be extended west by approximately 26m to accommodate Crossrail trains.

5.23.4 The works will be constructed from two sites: Taplow Station Approach Road North (accessed from Approach Road) and Taplow Station Footbridge Worksite South (accessed from Bath Road) both are within carparks.

Significant Residual Impacts

5.23.5 Table 5.1 summarises the assessment process for this route section. There will be no significant residual impacts.

Cumulative Impacts

5.23.6 Table 5.2 outlines the cumulative impact assessment. There will be no cumulative impact.

05

5.24 Maidenhead Railway Bridge (Route Window W24)

Baseline

5.24.1 This section of the route runs across the Thames floodplain on embankment with Brunel's bridge carrying the railway over the river. The embankment is densely vegetated. The area to the west of the river is built-up with mixed residential and business uses. To the east of the river the area between the railway and Bath Road, and to the south of the railway is predominantly open and rural.

5.24.2 There are no community policies that are directly relevant to works in this area.

Main Works

5.24.3 Crossrail lines will be electrified through this route window. This will be carried out using portal frames, although masts with cantilevers will be used over Maidenhead Bridge. Some utility diversions will be required to enable the installation of the OHLE on the bridge.

Significant Residual Impacts

5.24.4 Table 5.1 summarises the impact assessment. There will be no significant residual impacts.

Cumulative Impacts

5.24.5 Table 5.2 summarises the cumulative impact assessment. There will be no cumulative impact.

5.25 Maidenhead Station (Route Window W25)

Baseline

5.25.1 Maidenhead town centre lies to the north of the station. The centre comprises extensive retail and office based uses. Grenfell Park residential area lies to the north west. There are large areas of open space to the south including: golf courses, playing fields, allotments and open space. There are a number of community resources in the north which include the David Lloyd Health and Fitness Club, Desborough Bowling Club, Maidenhead Dental Centre, and Maidenhead United Football Club. Desborough School and Maidenhead Golf Club lie to the south.

5.25.2 The Royal Borough of Windsor and Maidenhead Adopted Local Plan July 1999 designates the retail areas as 'Shopping Area and Secondary Shopping Core'. It proposes a number of local cycle routes around and through the town and designates the open space to the south as 'Green Belt'.

Main Works

5.25.3 A new 70 m long bay platform (platform six) will be constructed on the north side of the station and a new track will be provided to accommodate Marlow branch line trains. Island platform two/three will be extended westwards by 10m to accommodate Crossrail trains.

5.25.4 The existing ticket hall will be demolished and replaced by a larger facility that will extend into the station forecourt area. The eastern subway will be extended southwards to platform one, and new stair and lift access will be provided to all Crossrail platforms; passive provision will be made for a lift to platform one.

5.25.5 The western subway (which currently provides access to the platforms) will be changed to a subway linking the north side of the station with a new entrance on the south side.

5.25.6 Stabling facilities will be constructed about 350 m west of Maidenhead Station on a site currently occupied by a car park and an industrial unit. They will comprise six 250 m long sidings with low height lighting. New staff accommodation buildings with associated car parking will be located at the west end of the site.

5.25.7 The works will be constructed from six worksites. The Northern Station Car Park Worksite will be located to the east within the station forecourt and accessed from Braywick Road. The Shoppenhanger's Road Worksite and Southern Station Car Park Worksite will be located to the south of the tracks and will be accessed from Shoppenhanger's Road. The Maidenhead Sidings Worksite will be located on the sidings to the west of the station and the Northern Platform Worksite will be located to the north of the stations both will be accessed from Grenfell Road. The Maidenhead Yard Sewer Diversion Worksites will be located to the north and south of the track, west of the Station.

Significant Residual Impacts

5.25.8 Table 5.1 summarises the assessment process for this route section. There will be no significant residual impact.

Cumulative Impacts

5.25.9 Table 5.2 summarises the cumulative impact assessment. There will be no cumulative impacts.

06

Baseline and Environmental Impacts: Westbourne Park to Pudding mill Lane



Baseline and Environmental Impacts: Westbourne Park to Pudding Mill Lane

6.1 Introduction

- 6.1.1 The central area works comprise a new tunnel across London that will connect existing railways to the west and east. The route will comprise two ("twin bore") tunnels that will accommodate west and east bound Crossrail trains. At a point beneath Stepney Green, the new alignment will branch: one route will continue north-east towards Stratford, the other will head south-east towards the Isle of Dogs.
- 6.1.2 Crossrail stations will be provided at Paddington, Bond Street, Tottenham Court Road, Farringdon, Liverpool Street and Whitechapel. Each station will have two entrances and ticket halls to provide access to the east and west ends respectively. A further station will be provided on the southeast branch, at Canary Wharf.
- 6.1.3 The tunnel portals will be located at Royal Oak (Paddington) in the west and Pudding Mill Lane (Stratford) in the east, with the south-eastern branch continuing in tunnel beyond the Isle of Dogs. The tunnels will require access and/or ventilation shafts. The twin bore tunnels will be excavated using tunnel boring machines with excavated material removed at the west and east portals. Excavated material will also be removed via a temporary tunnel linking Hanbury Street shaft to a temporary shaft on Pedley Street. It will then be taken by conveyor to a holding site in Mile End Park waiting for removal by rail.

6.2 Royal Oak Portal (Route Window C1)

Baseline

- 6.2.1 The Royal Oak route section is dominated by the elevated A40 Westway, the Grand Union Canal, and the Mainline and London Underground tracks into Paddington Station. There are various commercial land uses to the north of the railway which include: a concrete batching plant, taxi garage and Westbourne Park Bus Garage. The rest of the area is residential with large areas of social housing including high and medium-rise blocks to the north and more traditional rows of terraces to the south.
- 6.2.2 Neighbourhood shopping facilities are provided on the Harrow Road to the north and Westbourne Park Road to the south. There are a number of community facilities to the south of the railway which include: St Mary the Angel Roman Catholic Primary School, the Brunel Family Centre, St Stephens Church of England Primary School, the West London Buddhist Centre, St Stephen's Church, Westbourne Park Baptist Church, Westbourne Park Family Centre, Paddington Children's Library, Harrow Road Health Centre and Warwick Community Centre.
- 6.2.3 Facilities to the north are also quite varied and include: Parkview Lodge pre School, Our Lady of Dolous School, Our Lady of Sorrows Church, Warwick Nursery, Paddington Community Mental Health Service, St Mungo's Association, post offices (on Harrow Road and Sutherland Avenue), doctors surgeries, Paddington Arts Centre, Edward Wilson Primary School and a police station. There are also several leisure facilities including: Meanwhile Gardens play area, Westbourne Green Park and Westbourne Green sports complex. Facilities also include the Stowe Boys Youth Club at 258 Harrow Road. This has recently been granted planning permission for demolition and replacement by a new building to accommodate an improved youth club and health centre.

6.2.4 The Royal Oak worksite is within the North West Westminster Special Policy Area (emerging UDP). The Special Policy Area aims to promote the regeneration of the area, develop business, improve the environment, strengthen shopping frontages, provide a mix of housing tenure and improve the pedestrian environment. It also highlights the need for a range of related community facilities to support this growth.

6.2.5 Westminster City Council, in conjunction with the Westminster City Partnership (key public and private sector partners) published a community strategy titled the Westminster City Plan in 2002. The plan aims to improve access to education, the safety of the local population, people's health, the quality of the local environment and improvements to transport infrastructure.

6.2.6 Westminster City Council's Neighbourhood Renewal Strategy (NRS) builds on this framework and aims to tackle deprivation targeting vulnerable groups and individuals including many local people living in and around Paddington. Groups that assist include the Paddington Development Trust, Paddington Regeneration Partnership, Paddington First, and investment through the Paddington Social and Community Fund.

Main Works

6.2.7 The Crossrail route runs along the surface railway within the existing rail corridor through the western part of the route window. The route then passes into tunnel at Royal Oak. The permanent works will comprise:

- taxi servicing facilities buildings (below Westway);
- a train reversing facility at Westbourne Park and track alternatives to the Great Western Main Line;
- an approach ramp, a portal at Royal Oak, a cut and cover tunnel, and twin bore tunnel commencing at Westbourne Park; and
- a Westbourne Bridge shaft containing intervention and ventilation facilities.

6.2.8 The works at Royal Oak will be constructed from four sites. The Royal Oak Worksite West will be located adjacent to the Westbourne Park Bus Garage (with access from Alfred Road and Great Western Road). Royal Oak Worksite East will be located north of the track under the Westway. The Platform 1A Worksite will be located to the south of the tracks (accessed from Gloucester Terrace) and north of the tracks will be the Paddington Central Worksite used for delivery and storage (although it appears in C2).

6.2.9 The majority of these works are on railway land, however, they will require the demolition of:

- ↳ buildings associated with, and including, the Great Western Studios (formerly the parcels office and Network Rail lost property);
 - ↳ buildings located in Murphy's Yard;
 - ↳ bus washing facilities; and
 - ↳ temporary closure of the Tarmac Topmix concrete ready-mix plant.
- Significant Residual Impacts

6.2.10 Table 6.1 summarises the assessment process for this route section. There will be no significant impacts in this route section.

Cumulative Impacts

6.2.11 Table 6.2 summarises the assessment process for this route section. There will be no cumulative impact in this route section.

6.3 Paddington Station (Route Window C2)

Baseline

- 6.3.1 The Paddington area is dominated by the railway, which provides services into Paddington Station, one of London's main rail termini. The surrounding uses reflect this travel function with the Hilton International Hotel, a YWCA and YMCA, numerous shops and services located within the station, and several smaller hotels in the surrounding streets. Praed Street provides the main local shopping facilities catering for the densely populated surrounding residential area and the staff of St Mary's Hospital and medical school. There are several day care nurseries, doctor's surgeries and a number of churches and religious institutions. Leisure facilities include the Imperial College Recreation Centre and several small open spaces.
- 6.3.2 Paddington is identified as an Opportunity Area by the London Plan with proposals for the renewal of St Mary's Hospital and relocation of the Royal Brompton Hospital and Harefield Hospital which will support the creation of the largest health campus in London.
- 6.3.3 The Westminster Unitary Development Plan (notice of intention to adopted in 2004) designates Paddington as a 'Special Policy Area'. The Special Policy Area is targeted for high-density good quality business and housing which will develop and strengthen the local community and range of facilities available.
- 6.3.4 The UDP identifies Praed Street as a district centre, which traditionally provides convenience goods and services for local communities. The UDP notes that the environment is poor and it forms part of the Circle of Initiative for planned management improvements. It also identifies local shopping and services at Craven Place/Craven Terrace.

Main Works

- 6.3.5 The twin-bore tunnels will pass beneath the surface railway lines that run into Paddington station. The route will then follow the alignment of Eastbourne Terrace before continuing under Spring Street and Sussex Square in twin-bore tunnels, with rails at a depth of between approximately 20 and 30 m below street level.
- 6.3.6 The new Crossrail station will be constructed under Eastbourne Terrace. It will provide an interchange with London Underground and National Rail services. Above-ground, the station will consist of a narrow glazed structure, between 6 m and 8 m high, referred to as the 'light spine'. This will run the length of the station and separate the existing Departures Road (for taxi access) and Eastbourne Terrace. Street level access will be provided from Eastbourne Terrace into the western ticket hall and access to the eastern ticket hall will be provided from the mainline concourse. Streetscape enhancement works will also be implemented.
- 6.3.7 Two ventilation structures will be constructed at the eastern and western ends of the box. These will include emergency intervention facilities.
- 6.3.8 The Paddington works will be constructed from four sites. The Redstar Parcel Deck Worksite will be located on the site of the former parcels deck to the north of the station (it will be accessed from Bishop's Bridge Road). The Eastbourne Terrace Worksite will require the use of Eastbourne Terrace and will be also accessed from Bishop's Bridge Road. The Circle Line Link Worksite will be located at the junction of Praed Street and Craven Road. The works will also use the Platform 1A Worksite identified in Route Window C1.

6.3.9 The works will require the following demolitions:

- retaining wall and railings between Eastbourne Terrace and Departures Road;
- canopy over Departures Road;
- 191 to 195 Praed Street;
- internal demolition works within MacMillan House; and
- GWML parcels office at 4 to 18 Bishopsbridge Road.

Significant Residual Impacts

6.3.10 Table 6.1 summarises the assessment process for this route section. There will be no significant direct community impacts.

Cumulative Impacts

6.3.11 Table 6.2 summarises the cumulative impact assessment. There will be a cumulative impact on the community during construction caused by:

- visual impacts on residents and pedestrians around the work sites and occupants of the Hilton Hotel;
- noise disruption to 20 residential properties, St Mary's Hospital and the Hilton Hotel; and
- delays to train users, loss of car parking and disruption to users of Paddington Station.

6.4 Hyde Park and Park Lane Shafts (Route Window C3)

Baseline

- 6.4.1 Hyde Park covers most of the route window. It provides a substantial recreation space in the heart of London. The Park is used for informal sports, walking, picnicking and horse riding. Park Lane runs north-south at the eastern boundary of Hyde Park. Oxford Street, which provides both regional and international shopping facilities, is located to the north-east. These retail and recreation functions support London's role as an international centre.
- 6.4.2 The community uses reflect this international function. They include the Royal Lancaster Hotel, Grosvenor Hotel, Victory Services Club and Mayfair Conference Centre. Local facilities include the shopping centre at Connaught Street, Ravenstone pre-Preparatory School, a NHS clinic, Albermarle College, Marylebone Police Station and Tyburn Convent (near the site of Tyburn Gallows). Local open space is provided by Sussex Gardens.
- 6.4.3 The emerging Westminster UDP designates Hyde Park as 'Metropolitan Open Land'. It also designates Oxford Street as 'Primary Shopping Frontage' (a role supported by the designation of an 'International Shopping Centre' by the London Plan). The emerging UDP identifies the shops at Connaught Street as 'Local Shopping Frontage' and target Sussex Gardens to the north as a 'Priority Area for Open Space'.

Main Works

- 6.4.4 The twin-bore tunnels will pass between Lancaster Gate in the west and Park Street in the east with the rails at an approximate depth of between 27 m and 34 m below street level. East of Lancaster Gate the alignment will run under Hyde Park roughly parallel with Bayswater Road, and then parallel to Oxford Street. Other permanent works will consist of a shaft in Hyde Park and another shaft at Park Lane.

Hyde Park Shaft

- 6.4.5 A ventilation and emergency intervention shaft will be constructed on the northern boundary of Hyde Park, in the vicinity of the Victoria and Clarendon Gates. A ventilation terminal will be constructed immediately west of Victoria Lodge. The structure will be approximately 15 m by 10 m in area by 12 m deep (protruding about 2 m above-ground level) and will contain service equipment. It will be concealed by a low wall.
- 6.4.6 A horizontal tunnel (the ventilation passage) of between 8 and 13 m width will run eastwards from the ventilation terminal to a vertical shaft, located under North Carriage Drive. An intervention passage will run from the shaft to an entrance hatchway adjacent to Bayswater Road. The vertical shaft to the twin-bore tunnels will be 13 m in internal diameter. The bottom of the shaft will be connected to the twin-bore tunnels by adits. Two permanent access points to mechanical and electrical equipment and the ventilation fans will be constructed north of the shaft, at the edge of the park boundary.
- 6.4.7 The Hyde Park Worksite will be located within the northern boundary of Hyde Park. It will include footpaths, part of North Carriage Drive (between Victoria Gate and Clarendon Gate), parkland open space, and part of the North Ride (used by horses). Heavy goods vehicles will access the site using North Carriage Drive (from Park Lane).

Park Lane Shaft

6.4.8 A second ventilation and emergency intervention shaft is required in the Park Lane area. It is required because the tunnelled distance between Bond Street station and the Hyde Park shaft will be around 1500m which does not meet safety requirements.

6.4.9 It will be constructed within the central reservation of Park Lane immediately south of Marble Arch and opposite Green Street. The terminal will be 7.5 m in diameter and 2 m height and will be constructed over the shaft, with equipment rooms provided in a concrete box below. The access stair to the surface will be provided. The Park Lane Worksite will occupy the entire landscaped central reservation site (with access direct from Park Lane).

Significant Residual Impacts

6.4.10 Table 6.1 (Chapter 10) summarises the assessment process for this route section.

6.4.11 The north ride will be diverted around the construction site. The noise caused by general construction activity and the movement of lorries will result in a significant temporary adverse residual impact on the users of the diverted North Ride and the users of the riding school training ring. Appendix 1 provides more details on Hyde Park Stables.



Picture 4: Hyde Park north ride and training ring

6.4.12 Construction vehicles are currently prohibited from using North Carriage Drive. The introduction of construction lorries during the works will lead to a significant impact on the users of this part of Hyde Park.

6.4.13 The temporary closure of Victoria Gate will require the horse riders to use Clarendon Gate. Clarendon Gate does not have a specific horse crossing and cars drive faster at location at this location on the Bayswater Road. It has been assumed that safe crossing for horses will be ensured.

Cumulative Impacts

6.4.14 Table 6.2 (Chapter 10) summarises the cumulative impact assessment. There will be no cumulative impact.

6.5 Bond Street Station (Route Window C4)

Baseline

6.5.1 Bond Street Station provides the main public transport access to the major retail areas of Oxford Street, Bond Street and South Molton Street. These streets form part of the London 'Central Activities Zone' which supports London's role as an international centre. The main uses are high-order serving international and national visitors. They include: department stores (e.g. Selfridges, John Lewis, the House of Fraser), hotels (Claridges), Wigmore Hall, the Handel House Museum and the Palladium Theatre. There are three London squares: Grosvenor Gardens (which fronts onto the American Embassy), Hanover Square and Cavendish Square. Residential areas comprise large and exclusive private apartments and houses. There are a number of supporting community uses which include: St Peter's Church, the Ukrainian Catholic Cathedral, the Greek Orthodox Church of the Annunciation of the Virgin Mary, Mayfair Medical Centre, the Porchester Public Library and West End Central Police Station. Educational buildings include the London College of Fashion, the London College of Music, two primary schools and one nursery school.

6.5.2 The London Plan identifies Oxford Street, Regent Street and Bond Street as part of an 'International Centre'. This is reflected by the emerging Westminster UDP which designates these streets as 'Primary Shopping Frontages'.

Main Works

6.5.3 The permanent works will consist of new twin-bore tunnels and a new station at Bond Street featuring two ticket halls. The tunnels will pass between Park Street in the west and Poland Street in the east, roughly parallel to Oxford Street with rails at an approximate depth of 26 m to 32 m below street level.

6.5.4 The new station will be located to the south of Oxford Street between Gilbert Street to the west, and Hanover Square to the east. Two new ticket halls will be constructed, in the west at 65 Davies Street and the east at 18/19 Hanover Square.

6.5.5 The station will include two platforms fitted out to a length of 210 m, although the station tunnels will be constructed to facilitate extensions to 245 m should the need to operate longer trains arise. Ventilation and emergency intervention facilities will be provided at each ticket hall location.

Western Ticket Hall

6.5.6 Access from the west will be from a street level ticket hall located at 65 Davies Street, in a block bounded by Davies Street, St. Anselm's Place, Gilbert Street and Weighhouse Street. Access to the platforms will be provided by two flights of escalators and an intermediate concourse. Ventilation and emergency intervention facilities will be included within a box located beneath the ticket hall. A sewer diversion will be carried out from the Davies Street Sewer Diversion Worksite.

6.5.7 The Davies Street Worksite will be located at 65 Davies Street with access from Weighhouse Street and egress via Davies Street. It will require the demolition of 65 Davies Street.

Eastern Ticket Hall

6.5.8 The eastern ticket hall will be located at street level at 18 and 19 Hanover Square, at the corner of Tenterden Street. Access to the platforms will be provided by a single flight of escalators. Ventilation and emergency intervention facilities will be adjacent to the ticket halls.

6.5.9 The Hanover Square worksite will require the demolition of 18-19 Hanover Square and 1a Tenterden Street. It will include the western part of the square and gardens. Access to the site will be from Brook Street and egress via Hanover Street to the south.

Temporary Significant Residual Impacts

6.5.10 Table 6.1 (Chapter 10) summarises the assessment process for this route section.

6.5.11 Construction traffic will lead to more than 100% increase in HGV traffic on Davies Street and Weighhouse Street. This will be a significant negative temporary impact.

Permanent Significant Residual Impacts

6.5.12 The western ticket hall will require the permanent acquisition of 65 Davies Street. This building houses the headquarters of the University of the Arts and teaching facilities for the London College of Fashion. It also contains a gallery which is open to the public, exhibiting works by local artists and students. The facility caters for a wide range of students, 25% of whom are from overseas (see Appendix 1 for further information). The loss conflicts with the UDP planning policy. The loss will be a significant negative permanent impact.

6.5.13 There are likely to be 31 dwellings around the Davies Street Worksite which may qualify for rehousing for a period of greater than three months. Residents may be absent from the community for a relatively long period, it is therefore assumed that there will be a significant permanent impact.



Picture 5: London College of Fashion, 65 Davies Street

Cumulative Impacts : Davies Street

6.5.14 Table 6.2 (Chapter 10) summarises the cumulative impact assessment.

6.5.15 There will be a cumulative impact on the local community at Davies Street during construction caused by

- increased HGV movements on Davies Street and Weighhouse Street;
- disruption to road users and bus users on Davies Street;
- noise disruption to one dwelling, the Ukrainian Catholic Cathedral and Regent Hall Church, users of the Hanover Square open space; and
- visual impacts on residents surrounding the worksite.

6.5.16 This also includes the potential rehousing of 31 dwellings for over 3 months and the demolition of 65 Davies Street, although permanent, these impacts will commence during the construction period.

Cumulative Impacts: Hanover Square

6.5.17 Users of Hanover Square and residents will also experience a cumulative impact resulting from a combination of noise and visual amenity impacts on users and residents of Hanover Square; and the loss of on-street parking spaces.

6.6 Tottenham Court Road Station (Route Window C5)

Baseline

6.6.1 The area along Oxford Street and Charing Cross Road is a major commercial and tourist destination, with numerous retail outlets. It houses a mixture of local, national and international facilities which include: international shopping along Oxford Street, the clubs, bars and restaurants of Soho, the theatres on Charing Cross Road, the Astoria night club and the British Museum. These uses play a vital role in the success of London as an international and national centre for leisure and entertainment. The residential community is small comprising mainly flats above retail uses, the YMCA, the YWCA and a number of hotels. It is served by the churches of St Patrick's and St Giles in the Fields, open space on Soho Square and Bedford Square, sports facilities at the University of London, the CentrePoint Snooker Club and numerous local shops.

6.6.2 Tottenham Court Road Station is at the junction of Tottenham Court Road, Charing Cross Road, Oxford Street and New Oxford Street. It lies within 'Central Activities Zone' (as designated by the London Plan). The area is highlighted by the Plan as 'an area of mixed uses with strong arts, cultural or entertainment character'. It also targets Tottenham Court Road as an 'Area of Intensification' to accommodate growth with higher density development and good accessibility.

6.6.3 The open space at Soho Square is designated by the UDP as a priority area for additional playspace and targeted by the Westminster City Plan (the community strategy) for the creation of safe and secure places for children to play.

6.6.4 Route window C5 also includes the proposed Fisher Street vent shaft. This area is mainly commercial with many retail outlets on High Holborn and Kingsway. The main residential uses are the Chancery Court Hotel and Holborn Hotel. Educational uses include the St Martins College of Art and Design and several buildings linked to the University of London. Open space is provided by Bloomsbury Square Gardens and Red Lion Square Gardens.

Main Works

6.6.5 The twin-bore tunnels will pass between Poland Street in the west and Jockey's Fields in the east with rails at a depth of approximately 24 m below street level. East of Poland Street the alignment will run under Soho, approximately parallel with Oxford Street, towards Charing Cross Road. The alignment will then move northeast and pass under New Oxford Street into Holborn.

6.6.6 The permanent works will include:

- twin-bore tunnels;
- a new station at Tottenham Court Road consisting of a new box at Goslett Yard and two new ticket halls;
- ventilation and EIP facilities at Fareham Street and Goslett Yard;
- a ventilation and EIP at Fisher Street; and
- the closure of Andrew Borde Street and streetscape enhancement.

Tottenham Court Road Station

6.6.7 The station will be located between Great Chapel Street and Charing Cross Road, to the South of Oxford Street.

Two new ticket halls will be constructed, one at Dean Street and the other beneath the plaza at the front of Centre Point. The station will consist of two platforms fitted out to 210 m, although the tunnel will be constructed to facilitate extensions to 245 m should the need to operate longer trains arise.

6.6.8 Western Ticket Hall: A new ticket hall will be constructed on a site bounded by Oxford Street to the north, Great Chapel Street to the west, Dean Street to the east and Diadem Court to the south. This site at 93-96 Dean Street and 3-9 Diadem Court is occupied predominantly by media and property companies. A bank of four escalators will provide access to the ticket hall from an entrance building on Oxford Street. Two further banks with three escalators each will provide access down to the Central line interchange level and Crossrail platforms.

6.6.9 Fareham Street Shaft: A shaft will be sunk to the immediate south of the western ticket hall. The shaft will be 19 m in diameter and will be used for ventilation and emergency intervention.

6.6.10 Plaza (Eastern) Ticket Hall: An extension to the existing basement level ticket hall will be constructed beneath the plaza at the front of Centre Point and beneath Charing Cross Road. The existing Hornes Corner entrance will be permanently closed. The Dominion Theatre entrance on Tottenham Court Road will be retained and three new entrances will be provided at:

- the corner of Oxford Street and Charing Cross Road containing three escalators and a lift that will replace the existing station entrance;
- the front of Centre Point and facing northwards containing a fixed stair and a lift; and
- the front of Centre Point and pointing southwards containing two escalators and a fixed stair.

6.6.11 Two new shafts each containing three escalators will be provided down to the Northern line and Crossrail platforms. Andrew Borde Street will be permanently closed and landscaped and 148 Charing Cross Road will be demolished to allow for temporary diversion of Charing Cross Road.

6.6.12 Goslett Yard Shaft: A temporary shaft will be sunk, within a permanent box immediately to the south of the Astoria Theatre to facilitate construction work prior to its use as a ventilation and emergency intervention shaft.

6.6.13 The above works will be constructed from four worksites. The Astoria and Goslett Yard Worksites are both accessed from Charing Cross Road; and the Charing Cross Worksite is accessed from Charing Cross Road and Oxford Street. The Fareham Street Worksite will be accessed from Great Chapel Street. In addition to these main worksites there will be two lorry holding areas (Tottenham Court Road East and Newman Street (also a worksite); and a utilities worksite called Dean Street Sewer Diversion Worksite.

6.6.14 These worksites will require the demolition of Goslett Yard, the Astoria, the CentrePoint Snooker Club and a number of residential/retail/ office buildings on Dean Street, Great Chapel Street, Charing Cross Road, Fareham Street, Oxford Street, Sutton Row, Falconberg Court and Diadem Court.

Fisher Street Shaft

6.6.15 A ventilation and emergency intervention shaft will be located between Catton Street and Fisher Street.

6.6.16 The work site will be located at Fisher Street (with access from Southampton Row and egress onto Catton Street and Fisher Street). This will require the demolition of 2-6 Catton Street and 1-2 Fisher Street as well as 8-10 Southampton Row although the façade will be retained as a frontage for a future over-site development. There will also be a lorry holding area at Fisher Street.

Significant Temporary Residual Impacts: Tottenham Court road

6.6.17 Table 6.1 (Chapter 10) summarises the assessment process for this route section.

6.6.18 During construction there will be a significant adverse impact on pedestrian circulation and amenity in the St Giles Circus area (reported in the traffic impact assessment).

Significant Permanent Residual Impacts: Tottenham Court road

6.6.19 There will be a number of permanent significant impacts. The works will lead to the loss of the Astoria, the Mean Fiddler and Rouge nightclubs (Appendix 1 provides more detail on these facilities). The Astoria is one of the largest club and concerts venues in the UK. There are no comparable venues in the area. The loss of this, the Rouge and the Mean Fiddler from the same area is considered a significant permanent impact.

6.6.20 The loss of the Centre Point Snooker Club is also considered significant as there are no similar facilities in the area.



Picture 6: The Astoria

6.6.21 The works also require a number of residential demolitions at Diadem Court and the Bath House (Dean Street). Together the loss totals 10 dwellings. This is considered a significant negative permanent residual impact.

6.6.22 Noise disruption will significantly affect the West End Hostel for the homeless at Diadem Court for 11 months. This may render the hostel inoperable. This will be a significant negative permanent impact.

6.6.23 There will be a permanent beneficial impact on pedestrian circulation and amenity in the area with, amongst other measures, the pedestrianisation of Andrew Borde Street.

Cumulative Impacts : Tottenham Court Road

6.6.24 Table 6.2 (Chapter 10) summarises the cumulative impact assessment.

6.6.25 There will be a cumulative impact on the local community during construction. This will be caused by the combination of the impacts on pedestrian flows and amenity at St Giles Circus (outlined above) and:

- disruption to bus and underground users and road closures at Sutton Row, Fareham Street and Falconberg Court;
- disruption to pedestrians around St Giles Circus;
- noise disruption at St Patrick's Church, a medical centre and a residential unit;
- visual impacts on residents surrounding the worksites, visitors to the Dominion Theatre and CentrePoint, users of Soho Square; and
- visual impacts on pedestrians along Oxford Street, Great Chapel Street, Dean Street, Diadem Court and in the vicinity of the Eastern Ticket Hall worksite

6.6.26 This will also include the potential loss of the use of the West End Hostel, the loss of three nightclubs, the snooker club and 19 dwellings outlined as permanent impacts above. Although the loss of these uses are permanent, the effects will commence at the beginning of the construction period.

Significant Temporary Residual Impacts: Fisher Street

6.6.27 Construction works will generate over 100% increase in HGV traffic on Fisher Street and Catton Street. These streets currently have low traffic flows, additional lorry traffic will cause a significant impact on the local community.

Significant Permanent Residual Impacts: Fisher Street

6.6.28 The permanent loss of 9 dwellings at 8-10 Southampton Row and the Student Union and teaching Rooms of the Central St Martins College of Art and Design in Catton Street are both considered significant permanent negative impacts. Appendix 1 provides more information on Central St Martins College.

Cumulative Impacts : Fisher Street

6.6.29 There will be a cumulative impact during construction caused by:



Picture 7: Central St Martins College of art and design, 2-6 Catton Street

- the increase in HGV flows down Fisher Street and Catton Street;
- noise impacts on students and teachers at the nearby University of Westminster and Central St Martins College buildings; and
- visual impacts on pedestrians along Catton Street and Procter Street and students and teachers at the University of Westminster and Central St Martins College.

6.6.30 This will include the loss of the 9 dwellings on Southampton Row and the Central St Martins College's building at 2-6 Catton Street. They are considered as part of the cumulative construction assessment because although the loss of these uses is permanent, the effects will commence at the beginning of the construction period.

6.7 Farringdon Station (Route Window C6)

Baseline

- 6.7.1 Farringdon Station is located on Cowcross Street within a mix of offices, restaurants, retail outlets and Smithfield wholesale market. The street forms an important pedestrian route with the station and between surrounding shops and offices.
- 6.7.2 The area has a special character and appearance, which stems from its mix of uses, architecture and history. This character is derived from incremental and sustained development over nine centuries from Norman times to the present day. This has produced a unique layout of narrow streets.
- 6.7.3 There are large established social housing estates to the west of Hatton Garden, the Peabody Estate to the north, and several modern residential developments on Turnmill Street and Farringdon Road. These are supported by dental and doctors' surgeries and a school. The area has seen the development and growth of the Hatton Garden jewellery trade (with associated workshops). The jewellery trade is focused on Hatton Garden with shops and workshops on most of the surrounding streets. The traders are supported by shops and cafés along Grenville Street, St Cross Street, Cowcross Street and Farringdon Road. Smithfield Market is located on Charterhouse Street to the south. It is one of London's oldest markets, where meat has been bought and sold for over 800 years. St Bartholomew's Hospital and Medical College are located to the north and south of the market.
- 6.7.4 Over the last ten years many jewellery workshops and former industrial buildings have been converted to residential properties and offices. These have attracted a range of health clubs, bars and several nightclubs on Turnmill Street, Cowcross St, St Johns St and Charterhouse Street. Farringdon Station (main line trains and underground) is the main local transport link. These facilities also serve the Barbican residential and cultural complex to the north.
- 6.7.5 The main works are located in the London Borough of Islington and some of the works fall within the City of London to the south. The Islington UDP was adopted in June 2002. It designates a Clerkenwell and Smithfield Special Policy Area (SPA) based on the history, range and mix of uses. The SPA aims to protect the special character of the Clerkenwell and Smithfield area. The Council wishes to prevent excessive growth of new residential units and not to marginalise the existing commercial activities or impose environmental requirements that force them to leave. It also strives to ensure that the specialist workshop uses, which are essential to the character of Clerkenwell as a cultural quarter, are not forced out by high land prices.
- 6.7.6 The UDP designates the station as an 'Area of Opportunity' where the council wishes to see investment during the plan period, under the direction of a planning brief. The plan designates shops on Farringdon Road as a 'Protected Local Shopping Area'.
- 6.7.7 The City of London UDP was adopted in April 2002. It designates Smithfield Market as an Economic Activity Zone. It identifies strategic cycle routes across the Farringdon area.
- 6.7.8 The Neighbourhood Renewal Strategy and Community Strategy processes have been combined in Islington to create one strategy implemented through an action plan. The first Islington Community and Neighbourhood Renewal Strategy Action Plan was finalised in March 2003.

6.7.9 It is based on the Islington Community and Neighbourhood Renewal Strategy developed by Islington Strategic Partnership, after extensive consultation with local organisations and residents. The Action Plan promotes neighbourhood renewal across the poorest communities addressing: crime and safety, education and lifelong learning, health and well-being, housing, business, jobs and training, environment and sustainability. It also promotes active citizenship and community empowerment, and sustainable development. Responsibility for implementation is with the Islington Strategic Partnerships Board (ISPB).

Main Works

6.7.10 The tunnels will pass from Holborn, beneath the Fleet Valley and Smithfield, and then to Aldersgate and the Barbican, with the rails at a depth of about 31m. The permanent works will consist of a twin-bore tunnel, and a new station at Farringdon with western and eastern ticket halls and integrated ventilation and emergency access. A new rail crossover will also be constructed between Farringdon and Liverpool Street Stations, beneath the Barbican.

Farringdon Station

6.7.11 The station will serve the western edge of the City, providing an interchange with London Underground and Thameslink. The station will be located between Farringdon Road and Lindsey Street. Two new ticket halls will be constructed in the west at Farringdon Road and the east at Lindsey Street (Barbican). The station will consist of two platforms fitted out to 210 m although the tunnel will be constructed to facilitate extensions to 245 m should the need to operate longer trains arise. Interchange with London Underground will be provided from Lindsey Street ticket hall. Cowcross Street will be pedestrianised between the London Underground station at Farringdon and the Crossrail western ticket hall.

6.7.12 Farringdon Road Ticket Hall: will be at street level and will be built to approximately the same height as the existing London Underground ticket hall (approximately 8 m high) on the site of Cardinal House. A bank of three escalators will descend from the ticket hall to platform level. The escalators will be housed in a deep box that will also include ventilation and emergency intervention equipment. To the southwest of the structure, a construction shaft will be built and then back filled upon completion of the station works.

6.7.13 Lindsey Street Ticket Hall: will be located at street level in a block bounded by Charterhouse Street, Hayne Street, Long Lane and Lindsey Street. A bank of three escalators will descend to an intermediate concourse from which stairs to Barbican Underground station will be provided. A further bank of three escalators will descend to a further concourse beneath the London Underground and Thameslink tunnels before a third bank connects with the Crossrail platforms. A separate shaft will be constructed on this site that will contain ventilation and emergency intervention access. Emergency escape from the Crossrail platforms will be provided in a new shaft in 38-42 Charterhouse Street (this is also known as Fox and Knot Street).

6.7.14 The works will be carried out from four sites. The Cardinal House Worksite uses the railway land running parallel to Farringdon Road (it will be accessed from Farringdon Road and West Smithfield). The Smithfield Market Basement Worksite which uses the market basement will be accessed from the ramp in West Smithfield. The Lindsey Street Worksite (which will be accessed from Cowcross Street with egress onto West Smithfield) occupies Lindsey Street. The Fox and Knot Street Worksite will occupy the area bounded by Charterhouse Square, Charterhouse Street and Fox and Know Street.

6.7.15 There will also be a lorry holding area on Snow Hill (south of Farringdon Station), a Farringdon Crossover Worksite and an Aldersgate Street Sewer Diversion Worksite.

6.7.16 The works will require the following demolitions:

- Cardinal House on the corner of Cowcross Street and Farringdon Road;
- 54, 56 and 58-64 Charterhouse Street, 3, 8 to 9 and 10 Hayne Street, 2a, 3, 4 and 5 Lindsey Street (including Smithfield House), 20 to 23 Long Lane;
- 33-35 and 36-37 Charterhouse Square;
- 38-42 Charterhouse Street; and
- Charterhouse Square and Hayne Street bridges spanning Circle and Metropolitan Lines.

Temporary Significant Residual Impacts

6.7.17 Table 6.1 (Chapter 10) summarises the assessment process for this route section. There will be no temporary significant residual impacts.

Permanent Significant Residual Impacts

6.7.18 The demolition of the Lindsey Street Hotel will be a permanent significant negative residual impact as there are no other low cost hotels within the area.

6.7.19 The pedestrianisation of Cowcross Street will be a beneficial significant impact on the amenity and circulation of the pedestrians. (Appendix 2 – Picture 9).

Cumulative Impacts

6.7.20 Table 6.2 (Chapter 10) summarises the cumulative impact assessment. There will be a cumulative impact on the local community surrounding the Eastern Ticket Hall caused by:

- noise impacts on local residents, pupils and teachers at Charterhouse School and patients and doctors at a surgery on Long Lane;
- loss of car parking and traffic impacts on pedestrians; and
- visual impacts on local residents, users of Charterhouse Gardens, occupants of Charterhouse College and the City University Medical College and pedestrians on streets around the worksites



6.7.21 This will also include the loss of the Lindsey Street Hotel. Although this is a permanent impact the effect will commence at the beginning of construction.

Picture 8: Lindsey Street Hotel

6.8 Liverpool Street Station (Route Window C7)

Baseline

- 6.8.1 The area surrounding Liverpool Street Station and Blomfield Shaft mainly comprises office and office services which provide for the 210,000 people employed within the catchment of the station. Although this does not constitute a residential based community the Corporation of London make it very clear in the City of London UDP that social, retail and transport services are vital to support this population. Finsbury Circus and the area around Liverpool Street Station provide the mix and range of shops and services to serve the office-based population.
- 6.8.2 Due to the commercial nature of the area there are relatively few community facilities, they include the University and several health centres. The bowling green and local open space at Finsbury Circus provide the main recreation space.
- 6.8.3 Bishopsgate and Shoreditch to the east of the station fall within the Borough of Tower Hamlets. They are designated an 'Opportunity Area' by the London Plan. The Plan states that the Mayor will work with partners to draw up planning frameworks to inform UDP reviews and broader regeneration and community strategies.
- 6.8.4 The City of London UDP designates Finsbury Circus, Liverpool Street Station (mainly south of the station at The Arcade, Old Broad St and Blomfield St) and the Moorgate/London Wall as 'Principal Shopping Centres'. The UDP aims to reduce traffic and create better facilities for pedestrians to support this. It also provides 'Strategic Cycle Routes' that link a network of cycle ways around the City.
- 6.8.5 At Moorgate the UDP supports that redevelopment opportunities will improve the streetscape through good urban design and that traffic management policies will help create better conditions for shoppers including more space for seating and pedestrians. Open spaces are recognised as limited and are therefore important resources in the area. Policy Rec4 states 'resist the loss and encourage the provision of recreation and sports facilities.

Main Works

- 6.8.6 The twin-bore tunnels will pass between Moorgate in the west and Commercial Street in the east. East of the Barbican the alignment will run approximately parallel with, and north of, the London Wall, before swinging northwards beyond Liverpool Street Station. The permanent works will consist of twin-bore tunnels, a new station at Liverpool Street with a new ticket hall at Moorgate, and a separate shaft structure on Blomfield Street.
- 6.8.7 A new station will be constructed to serve the City and provide interchange with Underground and national rail services at Liverpool Street and Moorgate Stations. The station will be located between Liverpool Street and Moorgate with a new ticket hall. The existing London Underground ticket hall will be modified to provide access to the east end of the Crossrail platforms. Crossrail passengers will use two banks of three escalators to reach the existing Central, Metropolitan & Circle line ticket hall adjacent to the mainline concourse.
- 6.8.8 The new basement level ticket hall (approximately 8 m deep) will be provided next to the existing London Underground station with two street-level entrances, one between Moorfields and Moorgate and one from a pedestrian area off Moorfields, opposite the Moorhouse development. A bank of two escalators will descend from street level to the ticket hall where a bank of a further three will connect with the Crossrail platforms. There will be an interchange passage between the Crossrail platforms and the London Underground Northern line platforms. There will be access to London Underground Metropolitan line platforms. Ventilation and emergency intervention facilities will be incorporated into the new ticket hall box.

6.8.9 A new 37 m deep box will be sunk at 10-11 Blomfield Street to provide ventilation, escape and EIP facilities to the Crossrail station tunnels. This will include a 28 m high ventilation stack.

6.8.10 The scheme will be constructed from four worksites. The Moorgate Worksite will be located at Moorgate Station (accessed from Moorgate). The Finsbury Circus Worksite will be located on Finsbury Circus open space and bowling club area. The Liverpool Street Worksite and Blomfield Street Worksites will both be accessed from Blomfield Street. There will also be two lorry holding areas, one on Finsbury Circus and at London Wall.

6.8.11 The works require the demolition of:

- Moorgate Box: 91-109 Moorgate;
- Blomfield Street Shaft; 11-12 Blomfield Street; and
- Finsbury Circus Worksite: bowling green, pavilion and gardens.

Temporary Significant Residual Impacts

6.8.12 Table 6.1 (Chapter 10) summarises the assessment process for this route section.

6.8.13 The temporary loss (over five year period) of the open space at Finsbury Circus will be a significant negative residual impact. The open space is used all year round by office workers and local residents. It is the largest open space in the City and provides a bandstand with outdoor concerts. The loss of both the recreation and open space functions is in direct conflict with local planning policy and will be a significant negative impact.

6.8.14 The open space includes a bowling green used by the City of London Bowling Club (Appendix 1 provides more details on the Bowling Club). The construction will require the temporary use of the Green. It has been assumed that the Green will be re-instated at the end of the construction period, however the temporary loss of this facility is considered a significant negative impact. It may be possible to mitigate this loss by using the nearby green at Finsbury Square as an alternative. This is subject to an agreement between the Corporation of London and the London Borough of Islington.

6.8.15 Construction traffic will generate over 100% increase in HGV traffic on Circus Place. This will be a significant negative temporary impact.



Picture 9: Finsbury Circus

Permanent Significant Residual Impacts

6.8.16 Table 6.1 (Chapter 10) summarises the assessment process for this route section. There will be no permanent significant impacts.

Cumulative Impacts

6.8.17 Table 6.2 (Chapter 10) summarises the cumulative impact assessment. There will be a cumulative impact on the community around Moorgate and Finsbury Circus during the construction period.

6.8.18 This will be caused by the combination of the direct temporary impacts outlined above and:

- noise disruption on one residential property, the London Metropolitan University, a dental practice and medical clinic;
- adverse impacts on the visual amenity of pedestrians in the area, students at the University and occupants of the Great Eastern Hotel; and
- disruptions for bus users.

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6.9 Whitechapel Station (Route Window C8)

Baseline

- 6.9.1 Whitechapel Station is located on Whitechapel Road, east London. The Whitechapel area is a vibrant multicultural mix with a street market and the wide range of Bangladeshi restaurants and shops on Brick Lane. The main shopping facilities are provided along Whitechapel Road and Brick Lane. There are a number of community uses near Whitechapel Station including the Whitechapel Sports Centre, several dental surgeries, the Eastenders Snooker Club, the Albion Health Centre and a young people's centre. There are also many residential streets and the Royal London Hospital to the south.
- 6.9.2 Hanbury Street forms part of a residential area to the east of Brick Lane (which accommodates one of the largest Bangladeshi communities in London). The community uses reflect the ethnic diversity of this neighbourhood with facilities such as the Kobi Nazul Centre, the Hanbury Community Project and Spitalfield Society, the HEBA Women's Project, the London Jamme Masjid Mosque, the Bangladesh Welfare Association, Christ Church with gardens and community centre and primary school, Bongobir Osman Centre, the Bradbury Centre and St Anne's R.C. Church.
- 6.9.3 The Network Rail tracks runs east-west to the north of Pedley Street. To the west of Pedley Street is the extensive Bishopsgate redevelopment area. Community facilities in this area include: Spitalfields City Farm, Hague Primary School, The Good Shepherd Mission, Weavers Community Space, St Matthews Social Club and Repton Boys Club.
- 6.9.4 The London Plan identifies East London as a priority area for development, regeneration and infrastructure improvements. Whitechapel/Aldgate are designated as an 'Opportunity Area' where the Mayor will work with partners to draw up planning frameworks to inform UDP reviews and broader regeneration and community strategies. The Plan strives to find a balance between the developing business community and sustaining and strengthening existing communities.
- 6.9.5 The Plan also identifies Whitechapel as a district centre, which provides convenience goods and services for the local community, it proposes to develop the capacity of this centre.
- 6.9.6 The Tower Hamlets UDP was adopted in December 1998. A revised draft was put on deposit in May 2004. The policies below have been taken from the deposit draft, which provides the most up to date information on the local community. The vent shaft and the station works are within the City Fringe Action Area. This includes Aldgate, Bishopsgate and Whitechapel and is described by the UDP as 'one of the most dynamic and vibrant London precincts with its rich blend of old and new buildings and existing communities'.
- 6.9.7 The Action Area seeks to balance the pressure for large-scale redevelopment with the need to maintain the economic and social vitality of the area.
- 6.9.8 The UDP identifies 'Development Nodes' as the focus for intensive redevelopment whilst ensuring impacts on the surrounding community are minimised. It also identifies 'Activity Nodes' where activities will be sustained, promoted and any new development should enhance, promote and complement the identified activities. Two such nodes in Brick Lane and Spitalfields (with the unique retail, restaurant and residential character) are near the works and Whitechapel, which is developing as a creative industry area, is also identified. The Plan also mentions community areas where creation of new housing and social facilities are priorities; one such area is almost opposite Whitechapel Station on Whitechapel Road. Whitechapel is identified as a 'District Centre' in the Plan with key shopping facilities along Whitechapel Road outside the station.

6.9.9 Brick Lane is identified as a 'Restaurant Zone' and 'Local Shopping Parade' and classified as a 'Neighbourhood Centre'. There are also neighbourhood centres at Wentworth Street and O'Leary Square. The Royal London Hospital opposite the station is identified as a social facility.

6.9.10 The first community plan for Tower Hamlets was launched in May 2001 setting out a vision for the future of Tower Hamlets to 2010. The current plan reports on progress in Year 3 identifying what was achieved in 2003-2004. Tower Hamlets also has a Young People's Community Plan. The Plan targets safety, housing, health and social care, business investment, education and leisure, and public services. In the last 10 years organisations have been set up to look at the problems of the City Fringe area and ways to integrate and link the local population into benefits available from proximity to the City. Training has also been targeted at the youth population in Spitalfields Banglatown and Whitechapel where there is a large proportion of people under 20 (mainly Bangladeshi).

6.9.11 Tower Hamlets has been targeted by Central Government for neighbourhood renewal. Tower Hamlets partnership, launched in 2001; has designed a neighbourhood renewal strategy to produce more measurable improvements in housing, health, employment, crime and education using the neighbourhood renewal fund grant. Local Area Partnership (LAP2) Bethnal Green South Spitalfields and Banglatown prioritises improvement of services and facilities and community involvement and engagement and improvement in the quality of the local environment.

Main Works

6.9.12 The twin-bore tunnels will pass between Commercial Street in the west and Stepney Green in the east with the rails at an approximate depth of between 26m and 31m from street level. East of Commercial Street the alignment will run approximately parallel with, and south of, the Great Eastern Main line (GEM), before swinging southeastwards beyond Whitechapel station.

6.9.13 The scheme main works will consist of:

- a permanent shaft at Hanbury Street;
- a new station at Whitechapel with an interchange concourse beneath Durward Street and, shaft structures, all integrated with the station; and
- a temporary shaft at Pedley Street.

Hanbury Street Shaft

6.9.14 A shaft will be constructed between Liverpool Street and Whitechapel Station (to comply with safety standards). It will measure 32m in length, 14m in width and 37m in depth and will be constructed at the junction of Hanbury Street, Spelman Street and Princelet Street. The shaft will contain EIP and ventilation equipment. The surface level structures will include a ventilation stack and maintenance building approximately 12 m high. The work will be carried out from a worksite that will occupy an area between Hanbury Street, Spelman Street and Princelet Street. Access will be from Whitechapel Road via Greateorex Street and Hanbury Street.

6.9.15 The works will require the demolition of:

- 68-80 Hanbury Street;
- Britannia House at 80-102 Hanbury Street; and
- ground floor rear extensions of 63, 65 and 67 Princelet Street.



Whitechapel Station

6.9.16 Crossrail will construct a new station to provide interchange with the District line and East London line and in the 2016 baseline the Metropolitan Line replacing the current Hammersmith and City services. The Station will also improve transport links to the local area. The new station will be constructed between Court Street and Cambridge Heath Road.

6.9.17 Three scenarios were assessed for ticket halls at Whitechapel Station. The first is the preferred solution because this performs best in transport terms. However, it depends on further work by London Underground and possibly a Transport and Works Act Order to allow the London Underground works. Under these circumstances the Crossrail project cannot rely on this going ahead. Therefore two additional scenarios were considered.

6.9.18 All three scenarios can be constructed, subject to the London Underground works, under the powers in the Bill. The three scenarios are described in full in the main Environmental Statement. The first scenario (which is preferred) is outlined here. The other two scenarios are not explained in detail because the community impacts are the same.

6.9.19 Scenario 1 - A new western ticket hall would be provided over the District line east of Court Street. The western end of the Crossrail platforms will be accessed from this ticket hall via the District line platforms, then escalators to an interchange concourse within a box under Durward Street providing interchange to the District line and the East London line. A further bank of escalators will descend from this interchange concourse to the Crossrail platforms. This western ticket hall will require demolition of London Underground accommodation over the District line and removal of three District line tracks; the northernmost and southern two (by London Underground).

6.9.20 Removal of the District line tracks may require London Underground to provide facilities for reversing trains at an alternative location, powers for which would need to be obtained by London Underground separately to the Bill. The ventilation, escape and EIP infrastructure will be constructed at the east end of the Crossrail platforms to the west of Cambridge Heath Road at the junction with Whitechapel Road.

6.9.21 A shaft at Durward Street would be required for all three scenarios. This will include the Whitechapel station interchange concourse (providing access to London Underground East London line platforms) escape, EIP and ventilation equipment at the west end of the Crossrail platforms. The shaft will be constructed at Essex Wharf.

6.9.22 The following worksites will be required at Whitechapel:

- The eastern part of the Durward Street Worksite will occupy Swanlea School carpark, open amphitheatre, caretakers house, play area, garden area, staff parking and a small store room of the sports centre. This site will be accessed from Durward Street. The western part of the Durwood Street worksite will temporarily occupy the staff carpark of a sports centre:
- the Sainsbury's Car Park Worksite and Sainsbury's Car Park Temporary Shaft Site will require a large proportion of the carparking area and will be accessed from Cambridge Heath Road with egress onto Brady Street; and
- the District Line worksite will be located on Durwood Street and includes an area used as a bus stand and bus turning area.

6.9.23 The Whitechapel works will require the demolition of:

- the school caretaker's house at the Essex Wharf worksite; and
- London Underground signalling accommodation over District line south of Durward Street - for scenarios 1 & 2 only; and
- a conservatory to the Blind Beggar pub, and a section of Sainsbury's supermarket car park and adjacent wall at Sainsbury's Car Park worksite.

Pedley Street Shaft

6.9.24 A temporary shaft at Pedley Street (which will be connected to the Hanbury Street Shaft via a temporary tunnel under Spital Street). It will be used for the delivery and removal of materials during the tunnelling phase. The temporary shaft at Pedley Street will be backfilled and the site reinstated during the construction phase of the running tunnels. The Pedley Street worksite will occupy land on the south side of the GEML between the eastern end of Pedley Street and the western end of Tent Street, which lies just to the west of Bethnal Green station.

6.9.25 Demolitions at Pedley Street will comprise:

- the western part of the disused viaduct between Pedley Street and the active GEML lines, currently occupied by Banjax Motorcycles;
- the remaining section of the disused railway viaduct, located to the north of Weaver House between Pedley Street and the active GEML lines;
- minor structures at 73-74 Vallance Road, currently occupied by Forest Reclaim; and
- the end of the disused Railway Viaduct between Hemming Street and Tent Street.

Significant Temporary Residual Impacts: Hanbury Street

6.9.26 Table 6.1 (Chapter 10) summarises the assessment process for this route section.

6.9.27 There will be increases in lorry traffic on Greatorex Street, Hanbury Street, Spital Street and Buxton Street.

Whilst containing some commercial uses, these streets are primarily residential with some community facilities. Current traffic flows are low and the additional lorry traffic during the 11 month peak period of construction will generate a significant adverse community impact.

Significant Permanent Residual Impacts: Hanbury Street

6.9.28 Table 6.1 (Chapter 10) summarises the assessment process for this route section.

6.9.29 There are likely to be 20 dwellings around Hanbury Street which may qualify for re-housing for a period of greater than three months. Due to the fact that residents may be absent from the community for a relatively long period, it is assumed that there will be a significant permanent impact.

Cumulative Impacts: Hanbury Street

6.9.30 Table 6.2 (Chapter 10) summarises the cumulative impact assessment. In addition to the direct temporary impacts outlined above there will be a cumulative impact arising from noise and visual impacts during construction. This will also include the potential rehousing of 20 residential properties for a period of greater than three months. Although this is reported as a permanent impact the effect will commence during construction.

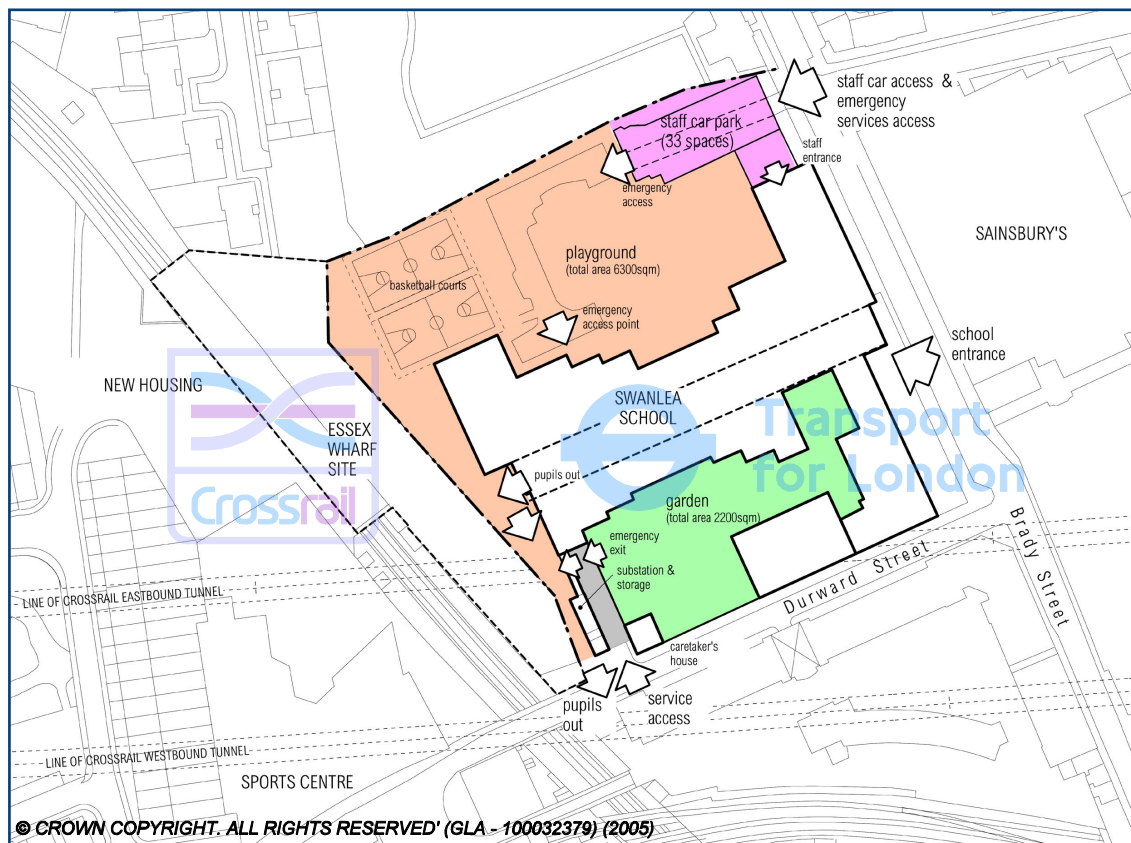
Significant Temporary Residual Impacts: Whitechapel Station

6.9.31 Table 6.1 (Chapter 10) summarises the assessment process for this route section.

6.9.32 Construction works will require the temporary acquisition of a garden area, playground space, outdoor amphitheatre and caretaker's house at Swanlea school. Appendix 1 provides additional information on Swanlea school.

6.9.33 Residents at 11 dwellings on Durward Street are likely to require re-housing for less than three months. This will be a significant negative impact on the local community.

6.9.34 There will also be an increase in lorry traffic on Durward Street because it is currently closed to through traffic and will be opened up to provide a route for construction traffic. There will also be a significant increase of HGV traffic on Brady Street which currently has relatively low traffic flows. This additional HGV traffic during construction will generate a significant adverse community impact.



Picture 10: Swanlea school existing layout (Source: Crossrail)

Significant Permanent Residual Impacts: Whitechapel Station

6.9.35 Table 6.1 (Chapter 10) summarises the assessment process for this route section.

6.9.36 There are two options for the reinstatement of open space at Swanlea School which are subject to on-going discussions with the school. The first option reinstates the open space lost during construction. The second option which includes the use of Essex Wharf site would provide a net increase in the school playground space. The selection of which option is dependant on discussions with the local authority and school, neither option will result in a significant permanent impact on the school.

Cumulative Impacts: Whitechapel Station

6.9.37 Table 6.2 (Chapter 10) summarises the cumulative impact assessment.

6.9.38 There will be a cumulative impact on the local community at Whitechapel caused by a combination of the direct temporary impacts outlined above and:

- noise impacts on local residents, pupils at Swanlea school, users of the Young People Centre (2a-12 Cambridge Heath Road) and patients and doctors at the Albion Health Centre;
- visual impacts on residents, users of the youth centre and pupils at Swanlea school; and
- loss of car parking and localised traffic congestion.

Significant Temporary Residual Impacts: Pedley Street

6.9.39 Table 6.1 (Chapter 10) summarises the assessment process for this route section. There will be no temporary significant impacts.

Significant Permanent Residual Impacts: Pedley Street

6.9.40 Table 6.1 (Chapter 10) summarises the assessment process for this route section.

6.9.41 It is likely that 17 dwellings round Pedley Street may qualify for re-housing for a period of greater than three months. Due to the fact that residents may be absent from the community for a relatively long period, it is assumed that this will be a significant permanent impact.

Cumulative Impacts: Pedley Street

6.9.42 Table 6.2 (Chapter 10) summarises the cumulative impact assessment. At Pedley Street, there will be a cumulative impact resulting from a combination of increased noise, the loss of visual amenity. This cumulative impact will also include the potential rehousing of 17 residential properties for a period of greater than three months. Although this is reported as a permanent impact the effect will commence during construction.

6.10 Mile End Corridor Conveyor (Route Window C8A)

Baseline

- 6.10.1 The area to the south of the railway is mainly residential. Meath Gardens and Mile End Park lie to the north with the Regents Canal to the east (along the western boundary of Mile End Park). Community resources include several play areas, the Morpeth Secondary School, Bethnall Green Goodwill Centre, Wessex Community Centre, Bangabhanu Infants School and Baitul Aman Mosque and Cultural Centre.
- 6.10.2 The area is within the London Borough of Tower Hamlets. The UDP designates Mile End Park and Meath Gardens as 'Metropolitan Open Land'.

Main Works

- 6.10.3 This route window contains the eastern part of the conveyor from Pedley Street, Mile End (Devonshire Street) sidings at which excavated material will be loaded onto trains, and the northern part of Mile End Park, which will form a stockpiling area for excavated material. The temporary Mile End conveyor will run along the south side of the existing railway corridor. It will be used to carry excavated material removed through the Pedley Street temporary shaft (see Route Window C8) to Mile End (Devonshire Street) sidings and a holding area located within part of Mile End Park.
- 6.10.4 In order to accommodate the works at this worksite, it will be necessary to demolish Globe New Furniture on Globe Road.
- 6.10.5 The Mile End Park Excavated Material Handling Site will be fully restored and no permanent structures will be constructed on the site. The conveyor will be dismantled following completion of the works.

Significant Residual Impacts

- 6.10.6 Table 6.1 (Chapter 10) summarises the assessment process for this route section.
- 6.10.7 The temporary loss of a large area of open space at Mile End Park for approximately 26 months is considered a temporary negative residual impact. This is an area of informal open space, distinct from neighbouring areas of the park which are used for specific activities (Artpark to the south and the ecology park to the north).



Picture 11: Mile End Park spoil handling area

Cumulative Impacts

6.10.8 Table 6.2 summarises the cumulative impact assessment.

6.10.9 The combination of the direct community impact outlined above, noise impacts on the University Halls of Residence, the London Hospital, residents of 45 dwellings and visual impacts on users of the Park and residents around the Mile End Park worksite will cause a cumulative impact on the local community.

6.11 Stepney Green Shafts (Route Window C9)

Baseline

6.11.1 This area is mainly residential with some industry. The main recreation area is provided by Stepney Green which houses an all weather sports pitch. There are a number of community facilities, which include Stepping Stones Farm, Sir John Cass's Foundation, Rolan Philips Scot Centre and Redcoat Secondary School. St Dunstan's Church and grounds are located to the east of Stepney High Street.

6.11.2 There are no community policies that directly affect this area.

Main Works

6.11.3 The twin-bore tunnels will pass between Stepney Green in the west and the Regent's Canal in the east. East of Stepney Green the alignment will divide into two, the northern tunnel continuing eastwards towards the southern end of Mile End Park and the southern tunnel running southeast towards Limehouse and the A13, Commercial Road. The new Stepney Green shaft structures are the only above-ground Crossrail features within this route window.

6.11.4 Crossrail will construct two shafts to provide facilities for EIP, escape and ventilation. Two 16 m diameter shafts will be constructed on Stepney Green, immediately west of Garden Street. EIP, ventilation and escape facilities will be provided. Two 7.5 m high surface structures will be constructed along with an area of hardstanding.

6.11.5 The shafts will be constructed within one large worksite located on Stepney Green. The worksite will require Stepping Stones Farm grazing area and the astroturf on Stepney Green. Construction access will be from Stepney Green.



PICTURE 12 – AERIAL VIEW OF STEPNEY GREEN



PICTURE 13 – STEPPING STONES FARM GRAZING AREA

Significant Residual Impacts

6.11.6 Table 6.1 (Chapter 10) summarises the assessment process for this route section. The temporary loss (for up to six years) of the astroturf will be a significant negative impact. There are no alternative facilities locally and it is in conflict with local planning policy.

6.11.7 The temporary loss of the grazing area of the city farm will be a significant negative impact. It will change the function of the farm from small and large animals to just small animals. Appendix 1 provides more information on Stepping Stones Farm.

6.11.8 Garden Street will be closed for 5 years requiring pedestrians to be diverted. This will be a significant negative temporary impact.

Cumulative Impacts

6.11.9 Table 6.2 (Chapter 10) summarises the cumulative impact assessment. The combination of the direct community impacts outlined above, noise impacts on residents on local residents; and visual impacts on pupils at Sir John Cass's Foundation and Red Coat Secondary School, residents, pedestrians and users of the Green and Stepping Stones Farm will cause a significant cumulative impact on the local community during construction.

6.12 Lowell Street Shaft (Route Window C10)

Baseline

6.12.1 Lowell Street is located to the north of the DLR (which runs east-west across the route window). To the south is Limehouse Basin with boat docking facilities. Retail facilities are located along Salmon Lane to the north, other community facilities include Tower Hamlets Homeless Hostel Limehouse Library and Our Lady Immaculate Roman Catholic Church.

6.12.2 The area lies within the London Borough of Tower Hamlets. The UDP identifies Salmon Lane near Lowell Street shaft as a 'Neighbourhood centre'. The shaft lies to the immediate east of a 'Green Chain' a linear open area linking open space, canals, river and parks for nature and recreation functions.

6.12.3 The area lies within the Local Action Plan area 7 (LAP7) East India and Lansbury, Limehouse. The Plan aims to improve educational achievements and lifelong learning opportunities, increase employment for local people, and promote healthy living.

Main Works

6.12.4 The Docklands Light Railway (DLR) runs east-west on a Victorian viaduct through this route window, which lies within LB Tower Hamlets. The twin-bore tunnels will pass beneath Commercial Road before swinging southwards to pass beneath the DLR between Limehouse and Westferry stations.

6.12.5 The Lowell Street shaft and surface building are the only permanent works within this route window. An 18.8 m diameter shaft will be constructed on undeveloped land at the corner of Commercial Road and Basin Approach (at 610 Commercial Road). EIP, ventilation and escape facilities will be provided. The ventilation structures will be about 15 m in height. One approximately 25 m long surface structure will be constructed along with an area of hardstanding.

6.12.6 Beneath the surface, a concrete box will contain ventilation equipment. Construction of the Lowell Street shaft works will be carried out from an area of undeveloped land located at No. 610 Commercial Road, which is bounded by a DLR viaduct to the south and a disused railway viaduct to the east. Access will be from Commercial Road. There will also be a lorry holding area along West India Dock Road

Significant Residual Impacts

6.12.7 Table 6.1 (Chapter 10) shows the assessment process. There will be no significant residual impacts.

Cumulative Impacts

6.12.8 Table 6.2 (Chapter 10) summarises the assessment of cumulative impacts in this route section. There will be no cumulative impact.

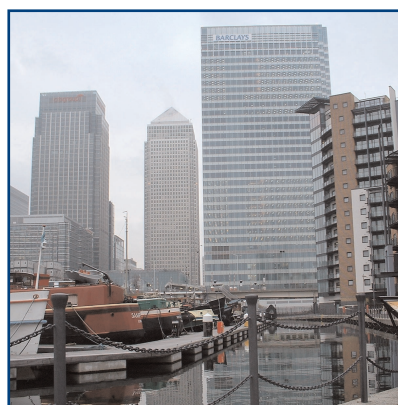
6.13 Isle of Dogs Station (Route Window C11)

Baseline

- 6.13.1 The Isle of Dogs is dominated by the Canary Wharf office and retail complex and Billingsgate Fish Market (the largest inland fish market in the UK). Given the strong commercial nature of the area there are limited community resources but they do include: the Limehouse Practice and Emmanuel Miller Centre, sheltered accommodation on Gill Street, St Anne's Church, Lambeth Consultation and Participation Team and the Cruising Association.
- 6.13.2 The London Plan designates the Isle of Dogs as an 'Opportunity Area'. It states the Mayor will work with partners to draw up planning frameworks to inform UDP reviews and broader regeneration and community strategies. The Isle of Dogs and Poplar are also designated as 'District Centres', which, according to the London Plan provide convenience goods and services for the local community. The London plan proposes to develop the capacity of these centres.
- 6.13.3 The Tower Hamlets UDP has produced an outline Area Action Framework for the Isle of Dogs. It recognises issues raised by the London Plan including the increasing isolation of local communities in the Isle of Dogs. The Area Action Framework proposes to ensure new development contributes to the social and physical infrastructure required to stop this isolation. The UDP identifies the area to the north as 'Primary Shopping Frontage' i.e. a district centre. It identifies the docks as 'Activity Areas' to promote the development of leisure opportunities in the area to the north of the Crossrail works. It also identifies 'Community Areas' to the south, with a priority to identify community needs including services, facilities and public realm improvements.
- 6.13.4 The area falls within LAP 8 Blackwall/ Cubitt Town, Millwall. The Plan aims to raise the standard of healthy living, enhance quality of local environment by resisting inappropriate development and improve lifelong learning and achievement.



Picture 14: Blackwall Basin



Picture 15: Poplar Basin

06

Main Works

6.13.5 The twin-bore tunnels will pass under the northern part of the Isle of Dogs between Westferry Road in the west and the Blackwall Tunnel in the east with the rails at a depth of about 30 m below street level. East of Westferry Road, the alignment will run under West India Docks and North Dock (roughly parallel with the Docklands Light Railway (DLR)) and Aspen Way.

6.13.6 The main permanent features comprise the Hertsmere Road shaft and the Isle of Dogs Station.

Hertsmere Road Shaft

6.13.7 A 9 m diameter shaft (with emergency ventilation facilities) will be constructed on a car park between the Cannon Workshops on Cannon Drive and Hertsmere Road. A 5 m high building will be constructed on the surface with a basement containing plant equipment. The worksite will include a lorry holding area. The Cannon workshop car park will be reinstated on completion of the works.

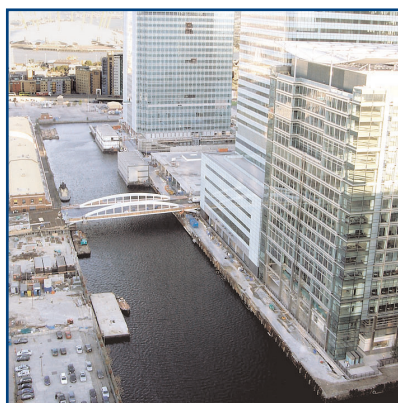
Isle of Dogs Station

6.13.8 A new station will be constructed beneath and within the West India North Dock. The station will extend from east of the DLR bridge to the east end of the dock. The station will be constructed within a 475 m long concrete box with a 245 m long island platform. This will be fitted out to 210 m with the potential for extension should the need to operate longer trains arise. A 165 m long scissor crossover at the western end of the box will enable trains to terminate at the station and return either to central London or to Abbey Wood.

6.13.9 Access to and from the station will be via a re-built Great Wharf bridge. A bank of escalators will be provided from the bridge down to a landing at the same level as the dockside where a further bank will connect with the ticket hall located within the station box beneath the water level. Further escalators will be provided to platform level.



Picture 16: St Peter's barge area



Picture 17: Great Wharf Bridge

6.13.10 Escape and ventilation structures will be constructed at each end of the station box. The station will have one ticket hall, with passive provision for a second.

6.13.11 There will be three construction sites: the North Quay (accessed from Aspen Way), Billingsgate market carpark (accessed from Aspen Way) and a conveyor worksite at Bellmouth passage to the north of the southern dock (using part of the water area).

Significant Residual Impacts

6.13.12 Table 6.1 (Chapter 10) summarises the impact assessment.

6.13.13 The closure of the West India North Dock, will block access to the Blackwall Basin and Poplar Basin. It is likely that, with no other means of access, 20 vessels moored in Blackwall Basin and 90 vessels moored in Poplar Dock may have to find alternative moorings. Given the shortage of alternative moorings in Central London this will result in a significant temporary impact. Appendix 1 provides more details on the uses of Poplar and Blackwall Basins.

6.13.14 The closure of West India North Dock will also effectively 'lock in' St Peter's barge, which accommodates St Helen's Church. It is likely that this barge will have to find an alternative mooring during the construction works. The potential temporary loss of the use of the barge by the Church would be a significant impact.

6.13.15 The construction works will also require the closure of Great Wharf Bridge resulting in a considerable diversion for pedestrians. A significant adverse impact will therefore occur.

Cumulative Impacts

6.13.16 Table 6.2 (Chapter 10) summarises the assessment of cumulative impacts in this route section. There will be no cumulative impact.

6.14 Mile End and Eleanor Street Shafts (Route Window C12)

Baseline

- 6.14.1 Mile End Park is in a predominantly residential area with large areas of social housing, two primary schools, one secondary school and Avery Hill College (Mile End Annex). Mile End Park provides a district leisure and recreation facility which includes the East London Stadium.
- 6.14.2 Mile End Park is designated as 'Metropolitan Open Land' (strategically important open space unique to London) in the Tower Hamlets UDP. There is a presumption against development unless it is for leisure recreation sport or culture. It is proposed to launch the Football at Mile End (FAME) development in 2005, to open a Mile End leisure centre in 2006 and complete the redevelopment of York Hall by 2007.
- 6.14.3 Eleanor Street Shaft is located within a 'railway triangle' with tracks on three sides. The main use is storage and warehousing, but there is also a traveller's site, which accommodates 19 residential caravans. Several local open spaces, the Wellington primary school and isolated local shops are located within the wider area.
- 6.14.4 Eleanor Street is within Local Area Partnership 6 and Mile End Park shaft is in Local Area Partnership 7. Both partnerships work with the local communities on urban renewal.

Main Works

- 6.14.5 The twin-bore tunnels will broadly follow beneath the London, Tilbury and Southend (LT&S) Line in this route window, with the rails at an approximate depth of between 23 m and 28 m from street level. Other permanent works within this route window will comprise the Mile End Park shaft and Eleanor Street shaft.

Mile End Shaft

- 6.14.6 A 16 m diameter shaft will be constructed in the southeast corner of Mile End Park bounded by Burdett Road and the mainline railway viaduct that carries the LT&S line to and from Fenchurch Street. The shaft will have emergency escape, EIP and ventilation facilities which will be housed in a structure approximately 8 m high, 38 m wide and 52m long. The surface structure will be shaped as a green mound. A hardstanding area will be provided for emergency assembly and for use by emergency and maintenance vehicles.
- 6.14.7 The twin bore tunnels will broadly follow the existing railway corridor. Mile End Shaft will be constructed in the south east corner of Mile End Park (bound by Burdett Road and the viaduct to Fenchurch Street). Access will be from Burdett Road. The area is currently being developed for seven games pitches (as part of the Tower Hamlets Stadium Development). A lorry holding area will be in place along Burdett Road, north of the worksite.

Eleanor Street Shaft

6.14.8 A 15 m diameter shaft will be constructed within the eastern extent of the current caravan park site at the eastern end of Eleanor Street. The site is in an area of land bounded by London Underground's District line and the LT&S line to Fenchurch Street. Ventilation and emergency intervention facilities will be provided. A surface structure of 11 m height, 17.5 m width and 35.5 m length will be constructed and set within an area of hardstanding for emergency and maintenance vehicles.

6.14.9 The Eleanor Street shaft will be constructed in land bound by the District line and Mainlines (to, and from, Fenchurch Street). The worksite will be located on a traveller's site. Access will be from Eleanor Street. There will be a lorry holding located on Eleanor Street.

Significant Temporary Residual Impacts: Mile End Park

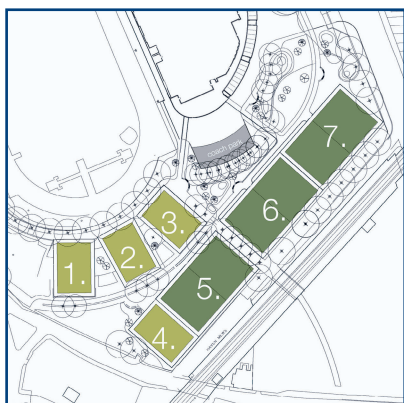
6.14.10 Table 6.1 (Chapter 10) summarises the assessment process for this route section. The construction of the Mile End Park shaft will result in the temporary loss of a football pitch. The pitch will be reinstated on completion of the works however, its loss will be a significant adverse impact on the community. Appendix 1 provides more information on the pitches at Mile End Park.

Significant Permanent Residual Impacts: Eleanor Street

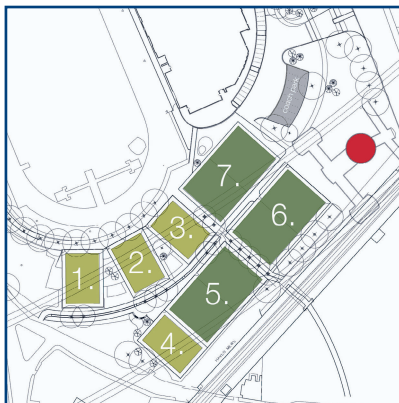
6.14.11 Table 6.1 (Chapter 10) summarises the assessment process for this route section. The loss of 19 dwellings at the Eleanor Street travellers' will be a significant permanent negative impact. There is currently no agreement in place for the reinstatement of these units. It is proposed that a compensation payment could be made to the LB Tower Hamlet to permanently relocate the travellers' caravan park. Further discussions will be required with Tower Hamlets to progress this proposal. At this stage a significant adverse impact is predicted. See Appendix 1 for more information on the caravan park.

Cumulative Impacts

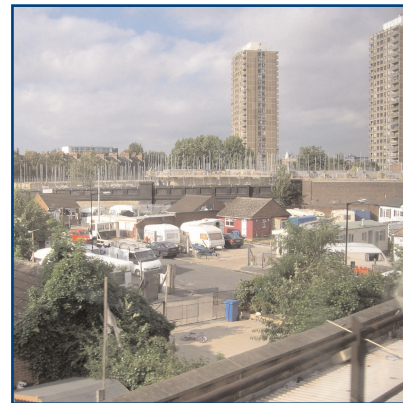
6.14.12 Table 6.2 (Chapter 10) summarises the assessment of cumulative impacts in this route section. There will be no cumulative impact.



Picture 18: Mile End Park proposed mini soccer pitches area



Picture 18: Mile End Park, layout of reinstated mini soccer pitches area



Picture 20: Traveller's caravan park

6.15 Pudding Mill Portal (Route Window C13)

Baseline

6.15.1 This area is mainly light industrial (including the Heron Industrial Estate) and railway lands with some residential to the west.

6.15.2 The area falls within the London Borough of Newham. The UDP was adopted in June 1997 and the review has not yet been published. The only community related designations include a proposed cycle route and the existing Green Chain.

Main Works

6.15.3 The twin-bore tunnels will pass between the A11, Bow Road and under the River Lea at a depth of about 17 m from street level, before emerging from the ground near Pudding Mill Lane. The Docklands Light Railway (DLR) station will be replaced and the existing railway realigned. The alignment will run parallel with the DLR corridor (north of Bow Road) towards Pudding Mill Lane Station. The alignment will then use the existing surface railway corridor to the east. There are substantial enabling works including sewer diversions.

6.15.4 The works are located between the River Lea in the west and Marshgate Lane in the east. The twin-bore tunnel emerges at the tunnel eye, immediately east of the River Lea, where a ramp will rise through a cut and cover box to a portal and up to the track level of the GEML west of the DLR station. Permanent works will consist of:

- β Pudding Mill Lane portal, covered ramp and cut and cover box;
- β a new Pudding Mill Lane DLR station and alignment on viaduct;
- β re-alignment of the westbound (up line) electric track of the GEML;
- β twin-bore tunnels; and
- β permanent closure of Pudding Mill Lane to road traffic and the opening up of Marshgate Lane to road traffic;

6.15.5 There will be EIP and escape facilities at the portal.

6.15.6 The works will be constructed from three sites: Puddingmill Lane Worksite on Heron Industrial Estate, Bow Midland Yard Worksite and Bow Midland Yard West Worksite (all the works will be accessed from Pudding Mill Lane and Marshgate Lane).

6.15.7 At the Pudding Mill Lane and Bow Midland Yard worksites, the following structures will be demolished:

- Units 1 to 9, Heron Industrial Estate, Barbers Road;
- Unit 1, Heron Industrial Estate, Bridgewater Road;
- 8 Barbers Road;
- Unit 1, 50b Marshgate Lane;
- 22, 47, 51 and 53 Marshgate Lane;
- the forecourt of 20 Marshgate Lane;
- Marlborough House, Unit C The Gatehouse and Capital Print and Display, all on Barbers Road;
- BBL building, Cooks Road;
- Kierbeck Coil Compound, Pudding Mill Lane;
- the DLR bridge; and

6.15.8 buildings within the Bow Midland Yard worksite.

Significant Residual Impacts

6.15.9 Table 6.1 (Chapter 10) summarises the assessment process for this route section.

6.15.10 Construction work will require the closure of the City Mill River footpath for approximately one year and three months, and utilities work and general construction will require the closure of the River Lea footpath for at least six months. As there are no alternative routes within a reasonable distance, these will generate a significant adverse impact for pedestrians.

Cumulative Impacts

6.15.11 Table 6.2 (Chapter 10) summarises the assessment of cumulative impacts in this route section. There will be no cumulative impact.



Picture 21: River Lea footpath area

6.16 Abbey Mills (Route Window C13A)

Baseline

6.16.1 The site is located at Abbey Mills Pumping Station. This lies within an area called Mill Meads which comprises the old pumping station, a new pumping station, allotments and some green space. Residential streets lie to the north-west with railway land and a gas depot to the east. The Three Mills Wall River lies to the west, and the Prescott Channel to the south.

6.16.2 The works are in the London Borough of Newham. The Newham UDP (Adopted June 2001). It designates Mill Meads area as 'Green Space to be protected' and as Major Opportunity Zone 3 (MOZ3). The MOZ covers West Ham Mills (including Three Mills Island, land at Sugar House Lane and Hunts Lane. It proposes high quality mixed use employment which would include heritage, leisure and recreation uses. The Plan also designates a proposed 'Recreational Footpath Network' with routes along the boundary of Mill Meads

Main Works

6.16.3 The works comprise the diversion of the Hackney to Abbey Mills and Wick Lane sewers, as a result of alignment of the Crossrail running tunnels at Pudding Mill Lane (Route Window C13). The works will take approximately fifteen months to complete.

6.16.4 The works will involve two shafts, one of which is required for the insertion or recovery of a TBM; the other shaft is for access during and after the works. A new pumping station will be constructed at the Abbey Mills site. Material, including excavated material, will be transported by road.

Significant Residual Impacts

6.16.5 Table 61 (Chapter 10) summarises the impact assessment. There will be no significant impacts.

Cumulative Impact

6.16.6 Table 6.2 (Chapter 10) summarises the cumulative assessment. There will be no cumulative impact.

07

Baseline and Environmental Impacts: Stratford to Shenfield



Baseline and Environmental Impacts: Stratford to Shenfield

7.1 Introduction

7.1.1 This chapter describes the north-eastern route section from Stratford to Shenfield, and the temporary and permanent environmental impacts that will arise from the construction and operation.

7.1.2 Crossrail will use the Great Eastern mainline. Additional track will be required to provide a freight loop between Goodmayes and Chadwell Heath. This will replace an existing loop at Manor Park, which will be removed. Crossrail will require new or extended platforms at several stations in order to accommodate 200 m long trains. New station buildings and other facilities will be provided at Romford and Ilford.

7.1.3 There will also be a new depot and stabling sidings to the west of Romford Station and south of the GEML. These will be linked to the eastbound and westbound Crossrail running lines by a dive-under (rail underpass) enabling Crossrail trains to access the depot without affecting services on the mainlines.

7.1.4 Stabling sidings will also be provided on re-modelled existing sites at Gidea Park and Shenfield. New sidings will be constructed at Aldersbrook (near Ilford) to facilitate fit-out of the Crossrail tunnels, and at Pitsea for disposal of excavated material.

7.2 Stratford Station (Route Window NE1)

Baseline

7.2.1 Stratford is a major transport interchange in East London served by the Docklands Light Railway, London Underground, Network Rail and in the near future the Channel Tunnel Rail Link. The Stratford Shopping Centre is located to the immediate south of the station and accommodates major retail outlets, a cinema and theatre. The surrounding area comprises a local market on the Broadway, a museum, large areas of social housing, a community centre, play area, the Building Crafts College and protected open space. The area to the north of the station is mainly railway land and the Channel Tunnel construction site.

7.2.2 The London Plan designates Stratford as an 'Opportunity Area'. It promotes a new business quarter between Stratford Station and the future Channel Tunnel Terminus. This regeneration focus is also supported by the Newham UDP (Adopted June 2001) which designates Stratford rail lands as a Major Opportunity Zone 1 (MOZ). The MOZ has a draft urban development framework which promotes the wider regeneration of East London a range of local, regional and international uses enhance the role of Stratford as a shopping, entertainment and cultural centre.

Main Works

7.2.3 Platform five, which forms part of the island platform three/four and five, will be widened to accommodate Crossrail trains. Some refurbishment works and fitting out of new platform furniture will also be carried out.

7.2.4 The Stratford Station Worksite will be located on the triangle of land at the corner of Angel Lane and Great Eastern Road (an undeveloped railway site). Access will be from Meridian Square.

Significant Residual Impacts

7.2.5 Table 7.1 (Chapter 10) summarises the assessment process for this route section. There will be no significant residual impacts.

Cumulative Impacts

7.2.6 Table 7.2 (Chapter 10) summarises the cumulative impact assessment. There will be no cumulative impact.

7.3 Forest Gate (Route Window NE2)

Baseline

7.3.1 The area is mainly residential with social housing and rows of traditional terraces. Woodgrange Road provides local shopping facilities. Wanstead Flats and the smaller Forest Lane Park are located to the north of the station. The Durning Hall Community Centre is located to the immediate south of the Station on Earlham Grove, and the Forest Gate Community School is to the north on Forest Street. Other resources have been identified as the Forest Gate Methodist Church, Kaye Rowe Nursery School and the Lord Lister Health Centre.

7.3.2 Forest Gate forms part of the East London Sub-region in The London Plan. It is a priority area for development, regeneration and infrastructure improvement. Woodgrange Road is designated a 'Primary and Secondary Shopping Frontage' by the adopted Newham UDP. The UDP also proposes cycle routes along Forest Lane and Woodgrange Road.

Main Works

7.3.3 The works will comprise platform extensions including the extension of GEML platforms (platforms 1, 2 and 3) west by 19 m to 205 m to accommodate 10 car Crossrail trains. Forest Gate Station Worksite East will be located on railway land south of Forest Lane on open railway land, and Forest Gate Station Worksite West will be on a strip of railway bank located to the south of the station buildings and accessed from Earlham Grove.

Significant Residual Impacts

7.3.4 Table 7.1 (Chapter 10) summarises the assessment process for this route section. There will be no significant residual impacts.

Cumulative Impacts

7.3.5 Table 7.2 (Chapter 10) summarises the cumulative impact assessment. There will be no cumulative impacts.

7.4 Manor Park Station (Route Window NE3)

Baseline

7.4.1 The area comprises housing with some light industrial/storage uses. Manor Park and Manor Park Cemetery lie to the north of the station with a post office, several churches and a dental surgery to the south. Local shopping is provided along Romford Road.

7.4.2 Manor Park forms part of the East London Sub-region in The London Plan. It is a priority area for development, regeneration and infrastructure improvement. Romford Road and the junction with Station Road is designated a 'Local Centre' by the Newham UDP. The UDP also designates Station Road, Forest Drive, Forest View Road and Romford Road as cycle routes.

Main Works

7.4.3 The main works in this route window comprise platform extensions. The GEML platforms (platforms 1, 2 and 3) will be extended westwards by 22 m to 205 m to accommodate 10 car Crossrail trains.

7.4.4 Platform 1 will be widened and the track that passes to the south of platform one (the 'up independent goods loop') will be removed from Forest Gate to the east of Manor Park Station. A replacement goods loop will be provided between Goodmayes and Chadwell Heath.

7.4.5 Manor Park Station Worksite will be located on railway land to the south of the station. It will be accessed from Station Road.

Significant Residual Impacts

7.4.6 Table 7.1 (Chapter 10) summarises the assessment process for this route section. There will be no significant residual impacts.

Cumulative Impacts

7.4.7 Table 7.2 (Chapter 10) summarises the cumulative impact assessment. There will be no cumulative impact.

7.5 Ilford Station (Route Window NE4)

Baseline

7.5.1 Ilford provides regional shopping and employment to the area. The main shopping facilities are provided by the Exchange Shopping Centre and individual shops/services along Cranbrook Street and High Road. The area to the north of the station is mainly residential. It includes the Maytime Preparatory and Montessori Nursery School, the Clark's preparatory Montessori school and the Geoffrey Lloyd Foulkes Clinic of Complementary Medicine on York Road. The area to the south is a mix of uses with some storage and light industry, a supermarket, police station, post office, Buddhist temple and local health surgeries.

7.5.2 The London Plan designates Ilford as a 'Metropolitan Centre' and an 'Opportunity Area'. These designations highlight the regional role of the area and the key focus on regeneration, renewal and development. The main shopping facilities are designated as 'Primary Shopping Frontage' by the Redbridge UDP, adopted November 2003.

Main Works

7.5.3 The works will include the provision of a new station building accessible from Cranbrook Road, York Place and Ilford Hill, and temporary sidings for the construction and fit out of the central section tunnels. The sidings will be located on derelict land at the Aldersbrook sidings site to the west of the North Circular Road. The works to Ilford Station will be undertaken within a railway cutting. The works will require the demolition of 27-29 Cranbrook Road.

7.5.4 The proposed station building will be located west of the existing building. It will comprise: a public concourse area in the existing station entrance to Cranbrook Road, a walkway along the north boundary extending over platform five, a main ticket hall and concourse area over the five tracks (to access a new entrance from York Place). The staff accommodation and operations room will be situated above the ticket hall.

7.5.5 Platforms two, three and four will be extended west by 19m to 205m and platforms four and five to 5m in width.

7.5.6 Ilford Station Worksite North will be located on railway land to the north of the tracks to the rear of properties on York Way. Access will be from York Way. The Ilford Station Worksite South will be located to the west of the station and south of the tracks.

7.5.7 Crossrail will rebuild the disused Aldersbrook sidings to the west of Ilford Station. These will be used during the construction phase as a tunnelling logistics site. The buildings formerly used as the railway training school will be demolished and a new access road will be provided.

7.5.8 The Aldersbrook Sidings Worksite will be located to the west of the station on the site of the former British Railways training school. It will be accessed from Romford Road.

Significant Residual Impacts

7.5.9 Table 7.1 (Chapter 10) summarises the assessment process for this route section. There will be no temporary significant impacts.

7.5.10 There will be 18 dwellings which may qualify for rehousing for a period of greater than three months. As this is likely to be for a relatively long period of time, the loss of these residents to the local community is considered a permanent impact.

Cumulative Impacts

7.5.11 Table 7.2 (Chapter 10) summarises the cumulative impact assessment.

7.5.12 There will be a significant cumulative impact on the local community caused by a combination of the noise and visual amenity impacts on surroundings residents.

7.5.13 This cumulative impact will also include the potential rehousing of 18 dwellings outlined above, the effects of which will commence at the beginning of the construction period.

7.6 Seven Kings Station (Route Window NE5)

Baseline

7.6.1 The area around the station is mainly residential. Shopping services are provided along Cameron Road. The Canon Palmer School is located to the immediate north of the station on Lombard Avenue. Other community resources which have been identified include sheltered accommodation, a doctor's surgery and a dentist's surgery on Cameron Road. To the south there is a church on Seven King's Road, and a health centre and leisure centre on High Road.

7.6.2 Cameron Road is designated 'Primary Shopping Frontage' by the Redbridge UDP. The UDP also designates Cameron Road and High Road as cycle routes.

Main Works

7.6.3 GEML platforms 2,3 and 4 will be extended west by 18 m to 205 m to accommodate 10 car Crossrail trains. Platform works will be carried out in conjunction with track alignments, OHLE and signal works.

7.6.4 The Seven King's Worksite will be located to the north of the station and will require part of the Palmer School grassed area. Access will be from Lombard Avenue.

Significant Residual Impacts

7.6.5 Table 7.1 (Chapter 10) summarises the assessment process for this route section. There will be no significant residual impact.

Cumulative Impacts

7.6.6 Table 7.2 (Chapter 10) summarises the assessment process for this route section. There will be no cumulative impact.

7.7 Goodmayes Station (Route Window NE6)

Baseline

7.7.1 Goodmayes Station is in a residential area bordered by large retail superstores on High Road. Shops along Goodmayes Road outside the station provide the main retail facilities. The Barley Lane Recreation Ground and Thackeray Community Centre (opposite Tesco supermarket on High Road), Eastcourt Independent School, Maytime Montessori nursery, Ansar Islamic Centre and Goodmayes Medical Centre are located to the north of the station. The Animal Ark veterinary centre, Grace Church and Goodmayes Baptist Church (on Goodmayes Road) are located to the south.

7.7.2 The retail facilities along Goodmayes Road outside the station entrance are designated Primary Retail Frontage by the UDP.

Main Works

7.7.3 The main works comprise platform extensions at Goodmayes Station, including the extension east of GEML platforms (platforms 2, 3 and 4) by 6 m and 205 m to accommodate 10 car Crossrail trains.

7.7.4 The currently disused Goodmayes to Chadwell Heath freight loop will be reinstated to replace the goods loop at Manor Park. This work will include the removal of the existing redundant loop track. The track bed will need to be lowered at the bridge at both Goodmayes and Chadwell Heath stations.

7.7.5 The Goodmayes Station worksite will be located on railway land to the east of the station, with access through Goodmayes retail park. The Chadwell Heath Loop Worksite West will be located to the south of the tracks on railway land with access from Express Drive.

Significant Residual Impacts

7.7.6 Table 7.1 (Chapter 10) summarises the assessment process for this route section. There will be no significant residual impacts.

Cumulative Impacts

7.7.7 Table 7.2 (Chapter 10) summarises the cumulative impact assessment. There will be no cumulative impact.

7.8 Chadwell Heath Station (Route Window NE7)

Baseline

7.8.1 Chadwell Heath Station is in a mainly residential area. The key shopping resources are located on High Road and Station Road. A police station, chapel and bingo hall are all located north of the track with sheltered accommodation to the south. Chadwell Heath provides the main open space.

7.8.2 The key shopping resources are located on High Road which is designated 'Primary Shopping Frontage' in the Redbridge UDP, and along High Road and Station Road which are designated 'Retail' in the Barking and Dagenham UDP adopted October 1995.

Main Works

7.8.3 The main works comprise platform extensions. The GEML platforms 2,3 and 4 will be extended west by 16m to 205 m to accommodate 10 car Crossrail trains. New platform furniture and lighting will be provided and minor station refurbishment will be carried out.

7.8.4 The Chadwell Heath Station Worksite will be located on an old railway goods yard (partially converted to industrial use) to the south of the station with access from Station Road.

7.8.5 The currently disused single line to the south of the main lines will be reinstated to replace the goods loop at Manor Park. These works will include the removal of the existing redundant track. Once trackbeds are prepared and the new track is laid, OHLE and signalling will be installed. A new drainage system and walkway will also be installed adjacent to the tracks.

7.8.6 Chadwell Heath Loop Worksite East will be located on railway land to the south of the tracks and east of the station. It will also be accessed from Station Road.

Significant Residual Impacts

7.8.7 Table 7.1 (Chapter 10) summarises the assessment process for this route section. There will be no significant impacts.

Cumulative Impacts

7.8.8 Table 7.2 (Chapter 10) summarises the cumulative impact assessment process. There will be no cumulative impact.

7.9 Romford Depot (West) (Route Window NE8)

Baseline

7.9.1 In this route window, the rail tracks cross a mainly residential area with large areas of open space. The main recreation space is provided by Westland's Playing Field, Crowland's Heath Golf Course, Jutsum's recreation ground and Romford Stadium. St Edwards School (which borders Westland's Playing Fields) is located to the west.

7.9.2 The West Ham United Football Club training grounds, Westland's Playing Field and Crowland's Heath Golf Course are designated 'Green Belt' and 'Metropolitan Open Land' by the Barking/Dagenham and Havering UDPs.

Main Works

7.9.3 The main works comprise: the construction of a rail underpass (a dive-under) in order to reduce the conflicting movements between trains on the GEML and those moving to, and from, a new Romford depot. This will also require works to Jutsum's Lane bridge.

7.9.4 Romford Depot Underpass: a new junction will be created to the east of the bridge over Whalebone Lane South. The alignment of the GEML will be extended to the north to accommodate two tracks that will be used to access a depot site from the west.

7.9.5 The works, involving provision of a widened embankment and new retaining wall from Whalebone Lane South to the Jutsum's Lane Bridge, will require acquisition of the southern edge of the West Ham United FC training ground and part of Westland's Playing Fields.

7.9.6 The two new tracks will continue to the eastern border of the West Ham United FC training ground where they will descend through a new rail underpass beneath the GEML before accessing the depot on the south side.

7.9.7 The works will be located on two sites: Romford Diveunder Worksite North, occupying part of Westland's Playing Fields and some railway land and Romford Diveunder Worksite South located on railway land and an area of open land to the rear of 208 Crow Lane.

7.9.8 Jutsum's Lane Bridge Works: once passing through the new underpass the tracks will climb a new ramp to cross an extended bridge over Jutsum's Lane. A new retaining wall and embankment will be constructed on the southern boundary of this new alignment. A new departures and arrivals road will also be constructed between Jutsum's Lane and east of the underbridge to allow access between the depot and the fast lines.

Significant Temporary Residual Impacts

7.9.9 Table 7.1 (Chapter 10) summarises the assessment process for this route section.

7.9.10 The loss of the open space, the gymnasium and the all weather sports pitch at West Ham FC Training Grounds will be a significant adverse impact.

7.9.11 The works will also require a substantial part of Westland's Playing Fields for a worksite and an access haul road from London Road. The playing fields have recently been relaid according to Sports England standards with 12 pitches of various sizes for different sports (and age groups) and two training grids. The works will temporarily affect up to 8 pitches and one training grid. The sports ground is a heavily used local resource. Appendix 1 provides full details of who the pitches are used by and the pitch details. The loss of the sports area will be a temporary significant adverse impact. Ongoing consultation with the relevant authorities will seek to reduce this loss.

7.9.12 The path immediately north of the tracks linking Whalebone Lane to residents between this road and the West Ham FC training grounds will be closed to pedestrians for up to a year. This would cause a substantial diversion for pedestrians and is considered a significant adverse impact.

Significant Permanent Residual Impacts

7.9.13 The landtake required for the permanent dive-under structure will result in the loss of three pitches at Westland's Playing Fields will be a permanent significant impact. Ongoing consultation with the relevant authorities will seek to reduce or mitigate this loss.

Cumulative Impacts

7.9.14 Table 7.2 (Chapter 10) summarises the cumulative impact assessment. There will be a cumulative impact on the local community during construction caused by:

- noise disruption on local residents and the users of Jutsum's recreation ground;
- visual impacts on the users of local open space, pupils and teachers at St Edwards School and some local residents: and
- the landtake of recreation space and footpath closures outlined above in the significant residual impacts.



Picture 22: West Ham FC training grounds and Westlands playing fields



Picture 23: Footpath off Whalebone Lane area

7.10 Romford Station and Depot (East) (Route Window NE9)

Baseline

7.10.1 Romford Station serves a large retail centre and residential area. The Brewery Shopping and Leisure Centre (to the north of the station) is the main retail/recreation node. It provides a bowling alley, fitness centre, cinema and snooker centre. Oldchurch Hospital is located to the south west of the station.

7.10.2 Romford is the largest retail centre in the Thames Gateway (Havering Community Strategy 2002). It is designated as a 'Metropolitan Centre' by the London Plan and is targeted for urban renewal through the Havering Strategic Partnership (HSP). The HSP has developed a framework for improving the quality of life in Havering in economic, social, and environmental terms; in close consultation with the public and private sector. This is implemented through six community committees that develop local service centres and information points. This section of the route passes through Romford Central Community Committee Area.

7.10.3 The UDP identifies 'Core Retail' along South Street. The Community Strategy outlines plans to completely upgrade the existing Oldchurch Hospital by 2006, combining Old Church and Harold Wood Hospitals to provide 895 beds.

Main Works

7.10.4 The main works will include a new depot and stabling sidings located on the old goods yard site to the west of Romford Station and on the south side of the GEML. The works will include a reconstruction of, and extension to, Romford Station.

7.10.5 Romford Depot (East): a new maintenance depot building will be constructed between Sandgate Close and Nursery Walk, to the north of the gas works site. It will consist of eight tracks contained in a building. Romford Depot Worksite will be located to the west of the Station on railway land and Romford Route Control Centre Worksite will be on land currently occupied by a part of the Royal Mail sorting office parking area. Access will be via Sandgate Close.

7.10.6 Romford Station: platform five will be extended west by 18m to 205m to accommodate Crossrail trains. The island platforms three and four will be extended by 21.5m. Numbers 110-116 South Street will be demolished and replaced by a new ticket hall which will serve as an extension to the existing ticket hall.

7.10.7 There will be four station worksites at Romford Station. Romford Station Exchange Street Worksite will be located on Exchange Street. Romford Station Worksite North will be located off South Street and will require the demolition of numbers 110, 112, 114 and 116 and will be accessed from Havana Close. Romford Station Worksite South will be located to the south of the station with access from the bus station. Romford Station Worksite West will be located to the west of the station with access from Romford Ring Road. Footpath 123, between Jutsum's Lane and Nursery Walk situated just south of the existing tracks (spanning both route window NE8 and NE9) will be permanently diverted through the existing entrance into Beechfields Gardens down to Crow Lane where it will rejoin Nursery Walk.

Significant Residual Impacts

7.10.8 Table 7.1 (Chapter 10) summarises the assessment process for this route section. There will be no significant residual impacts.

Cumulative Impacts

7.10.9 Table 7.2 (Chapter 10) summarises the cumulative impacts. There will be no cumulative impact.

7.11 Gidea Park Station and Stabling Sidings (Route Window NE10 and NE11)

Baseline

7.11.1 The area is mainly residential with some warehouses and industrial sites. Resources that have been identified to the north include: St Mary's Hare Park School and the Royal Liberty School on South Drive, Balgore's natural therapy centre and a veterinary surgery on Balgore's Lane, Dothan House and Evelyn Sharp House sheltered accommodation. There is a post office to the south on Station Road. Open Space is provided by Squirrel's Heath Park, and Ardleigh Green Sports ground and bowling green.

7.11.2 There are no community policies that directly affect this area.

Main Works

7.11.3 GEML island platforms 3 and 4 will be extended west by 22m to 205m to accommodate 10 car Crossrail trains. New Platform furniture and lighting will be provided, and minor station refurbishment works will be carried out. Gidea Park Station Worksite will be located within the station car park with access from Crossways.

7.11.4 The existing Gidea Park sidings will be extended north and three new track will be added to stable Crossrail trains. In total, seven sidings will be provided for Crossrail trains, each 240m in length.

7.11.5 The Gidea Park Sidings Worksite will be located at the site of the existing sidings to the east of Gidea Park Station. Access will be from Southend Arterial to the east. The access is a local residential road heavily parked by local residents.

Significant Residual Impacts

7.11.6 Table 7.1 (Chapter 10) summarises the assessment process for this route section. There will be no significant residual impacts.

Cumulative Impacts

7.11.7 Table 7.2 (Chapter 10) summarises the cumulative impact assessment.

7.11.8 There will be a cumulative impact in NE11 during construction caused by: noise and visual impacts on large numbers of local residents either side of the stabling sidings.

7.12 Harold Wood (Route Window NE12)

Baseline

7.12.1 The area is mainly residential with Thames Chase Community Forest to the East. A number of community resources have been identified to the north of the railway, which include Harold Wood Hospital, medical surgeries and a post office. Resources that have been identified to the south include a residential home for the elderly, several churches and the Harold Wood War Memorial Home.

7.12.2 The Thames Chase Community Forest to the east is designated 'Metropolitan Green Belt' by Havering UDP (Adopted March 1993).

Main Works

7.12.3 GEML platforms 3 and 4 will be extended east by 38m to 205m to accommodate 10 car Crossrail trains. In addition, new platform furniture and lighting will be fitted and minor station refurbishment works will be carried out. Harold Wood Station Worksite will be located in the station staff car park with access from Station Road.

Significant Residual Impacts

7.12.4 Table 7.1 (Chapter 10) summarises the assessment process for this route section. There will be no significant residual impacts.

Cumulative Impacts

7.12.5 Table 7.2 (Chapter 10) summarises the cumulative assessment. There will be no cumulative impacts.

7.13 LB Havering / Brentwood BC (Route Window NE13)

7.13.1 No Crossrail works will take place in this route window.

7.14 Brook Street (Route Window NE14)

7.14.1 No Crossrail works will take place in this route window.

7.15 Brentwood Station (Route Window NE15)

Baseline

7.15.1 The main shops and services are provided along King's Road to the north. The Essex Army Cadet Force and Sea Cadet Corps are located to the east of King's Street. The area to the south is mainly residential with a school, a church and a surgery.

7.15.2 The shops and services on King's Road to the north are designated 'Retail' (with various types of retail use) under the Brentwood UDP (Revised Deposit Draft 2003).

Main Works

7.15.3 GEML platforms 3 and 4 will be extended east by 21m to 205m to accommodate 10 car Crossrail trains. The Brentwood Station Worksite will be located within the station carpark with access from Alex Road.

Significant Residual Impacts

7.15.4 Table 7.1 (Chapter 10) summarises the assessment process for this route section. There will be no significant impacts.

Cumulative Impacts

7.15.5 Table 7.2 (Chapter 10) summarises the cumulative impact assessment. There will be no cumulative impact.

7.16 Thrift Wood (Route Window NE16)

7.16.1 No Crossrail works will take place in this route window.

7.17 Shenfield Station (Route Window NE17)

Baseline

7.17.1 The area around Shenfield Station is mainly residential with some retail uses along Hutton Road. Local community resources include a school, a post office, two surgeries and a banqueting suite.

7.17.2 The UDP highlights the shopping area along the south side of Hutton Road as 'shops/residential' and the north side of the road as 'shops/office'.

Main Works

7.17.3 Works include the provision of additional stabling, a new platform and alterations to the Southend and Colchester rail lines.

Stabling Sidings

7.17.4 Stabling Sidings: the two existing middle sidings at the east end of the station will be extended by 30m, and increased from two to three to accommodate Crossrail trains. New retaining walls and earthworks will be constructed to accommodate the revised layout. The Southend loop (connects platform five and the Southend Victoria route) and Colchester loop will be modified to accommodate the changes to the sidings. The Shenfield Sidings Worksite will be located on the station carpark and will be accessed from Hunter Avenue.

7.17.5 Shenfield Station: a new platform 210m long will be constructed on the north side of platform five to accommodate Crossrail trains. A number of new crossovers will be provided at the west end of the station to improve train operations. The southernmost section of the three stabling sidings will be amended to enable through running of trains. The Shenfield Station Worksite will be located to the rear of properties on Friar's Avenue and accessed through a private garage area.

Significant Temporary Residual Impacts

7.17.6 Table 7.1 (Chapter 10) summarises the assessment process for this route section.

7.17.7 There will be a significant negative temporary impact on Hunter Avenue and Crossways. HGV traffic will increase by more than 100% due to construction activity. As these streets have a low flow of HGVs, the construction traffic will cause a significant adverse impact on the amenity of the local community.

Significant Permanent Residual Impacts

7.17.8 There will also be 26 properties which may qualify for rehousing for a period of greater than three months. Due to the fact that these residents may be absent from the community for a relatively long period of time it is assumed the loss of these residents will be a permanent impact.

Cumulative Impacts

7.17.9 Table 7.2 (Chapter 10) summarises the cumulative assessment. There will be a cumulative impact on the local community caused by:

- the increase in HGV flows mentioned above;
- the loss of car parking;
- noise disruption to a large number of residents as well as to users of the library and surgery on Hutton Road and pupils and teachers at School Mount Avenue; and
- visual impacts on residents, users of the station car park and pedestrians on Hunter Avenue

7.17.10 This will also include the potential re-housing of the 35 dwellings outlined above, the effects of which will commence at the beginning of construction.

7.18 Pitsea Sidings (Route Window R1)

Baseline

7.18.1 The site is bounded to the north by open land. The elevated A13 highway passes between 15 and 130m to the north of the site on the far side of this open land. A supermarket and residential buildings are located on the southern edge of Basildon immediately north of the highway. The area to the south is open marshland and the Pitsea land fill.

Main Works

7.18.2 A railway siding will be constructed for the unloading of excavated material from rail to road, for final delivery to the landfill site at Pitsea.

Significant Residual Impacts

7.18.3 Table 7.1 (Chapter 10) outlines the impact assessment. There will be no significant residual impact.

Cumulative Impacts

7.18.4 Table 7.2 (Chapter 10) summarises the cumulative impact assessment. There will be no cumulative impact.

08

Baseline and Environmental Impacts: Blackwall Way to Abbey Wood



Baseline and Environmental Impacts: Blackwall Way to Abbey Wood

8.1 Introduction

8.1.1 This chapter describes the construction of the south eastern route section of the scheme from the Isle of Dogs station to the Crossrail terminus at Ebbsfleet, and the temporary and permanent environmental impacts.

8.1.2 Crossrail will operate in tunnel to the west of Victoria Dock Portal and will serve a reconstructed surface station at Custom House. The route will then follow the existing alignment currently used by Network Rail's North London Line (NLL) through a refurbished Connaught Tunnel to Silvertown. Crossrail will then descend a ramp to the North Woolwich portal where a new twin-bore tunnel will be constructed than will surface at Plumstead Portal, located between the existing Plumstead and Abbey Wood Stations. Abbey Wood Station will be reconstructed to allow twelve Crossrail trains per hour.

8.2 Blackwall Way and Limmo Peninsula Shafts (Route Window SE1)

Baseline

8.2.1 The Blackwall Way Shaft is located in a mixed warehouse/industrial area between Aspen Way and the River Thames. East India Dock and high-rise flats lie to the east with a carpark to the west. The land has approval for the construction of two housing developments (New Providence Wharf and Blackwall Yard). The Charrington Wharf development (which forms part of the New Providence Wharf development) is expected to provide 735 residential units, 42,600m² of office space, 560m² of retail space, a hotel, a health club and over 650m² of community use.

8.2.2 The Limmo Peninsula Shaft is located on vacant land (currently being used for the DLR construction works). It lies in a triangle bordered by the River Lee, the Lower Lee Crossing and the Jubilee Line/DLR tracks. Canning Town with mainly residential uses is located to the east of the DLR.

8.2.3 The East India Dock Basin is designated 'Metropolitan Open Land' by Tower Hamlets UDP (Adopted December 1998). The UDP also identifies a 'Strategic Riverside Walkway' along the Thames.

8.2.4 The Limmo Peninsula forms part of the Royal Dock, which is designated an 'Opportunity Area' under the London Plan. The Plan promotes a framework to guide to provision of new housing and enhance the quality of the local environment. It states that Crossrail will help sustain this by encouraging further housing and economic development. The Limmo Site is identified by the Newham UDP (Adopted June 2001) as Major Opportunity Site 7 (named Thames Wharf and Limmo). The UDP promotes an Urban Framework Plan for the area with the aim of producing a high quality mixed use environment, which includes employment, residential, and leisure uses. It also falls within a 'Priority Development Node', which targets a future high quality mixed development of business, leisure and residential use. It is bordered to the west by a proposed 'Recreational Footpath' and Proposed 'Cycle Network'.

Main Works

8.2.5 The Blackwall Way shaft will be used as an EIP. It will consist of a 9 m diameter shaft located immediately to the south of Blackwall Way and adjacent to the Reuters Building car park and Virginia Quay Development. On the surface, a single storey building will be integrated with a boundary wall on Blackwall Way. A small area of hard standing will also be provided for emergency services and maintenance vehicles.

8.2.6 The Blackwall Way Worksite is located on some open land off Blackwall Way adjacent to and including part of the Reuter's Building car park and the Virginia Quay development.

8.2.7 The Limmo Peninsula shaft will be used as an EIP, ventilation and evacuation facility, and a principle tunnelling site. It will consist of a 25 m diameter shaft located at the southern end of the Limmo Peninsula. The surface buildings will be included within a landscaped mound and an area of hard standing for maintenance vehicles and emergency services will be provided.

8.2.8 The Limmo Worksite will use most of the vacant land within the Lea Triangle. It will be accessed from the Lower Lea Crossing.

Significant Residual Impacts

8.2.9 Table 8.1 (Chapter 10) summarises the assessment process for this route section. There will be no significant residual impacts.

Cumulative Impacts

8.2.10 Table 8.2 (Chapter 10) summarises the cumulative impact assessment. There will be no cumulative impact.

8.3 Custom House Station (Route Window SE2)

Baseline

- 8.3.1 The site is located within the Royal Docks area which has been developed to provide the Excel Exhibition Centre, Custom House Hotel, other hotels, bars, restaurants and leisure uses. Canning Town is to the north with residential areas and a range of associated community resources including health centres, doctor's surgeries, community halls, churches, recreation grounds and schools. The main local shopping resources are provided along Freemasons Road.
- 8.3.2 The Royal Docks are designated as an 'Opportunity Area' in the London Plan. The Plan promotes a framework to guide to provision of new housing and enhance the quality of the environment. It states that Crossrail will help sustain further housing and economic development.
- 8.3.3 The Victoria Docks are designated as Major Opportunity Zone 8 in the adopted Newham UDP. The UDP designates the perimeter of the Docks as a proposed 'Cycle Network', proposed 'Recreational Footpath' and an existing 'Green Chain'. The park to the east is designated 'Green Space to be Protected'.

Main Works

- 8.3.4 The proposed works comprise the construction of the Victoria Dock portal, the reconstruction of Custom House Station, installation of OHLE and the construction of twin bore running tunnels.
- 8.3.5 The Victoria Dock portal will be located approximately 150 m east of Royal Victoria DLR station. It will be constructed on the current alignment of the North London Line (NLL). It is assumed that this will have ceased operation between North Woolwich portal and Stratford once the proposed DLR route to Stratford has been opened.
- 8.3.6 The eye of the tunnels will be located opposite 250 and 250A Victoria Dock Road, where a ramp will be contained within a cut and cover box to the portal (opposite 251A Victoria Dock Road). From this point, Crossrail will run in a retained cut to join existing track levels immediately to the west of Custom House Station.
- 8.3.7 A new station will be provided at Custom House to serve the Royal Docks area. The existing station will be demolished (although the DLR platform will be retained). Crossrail trains will use a new island platform on the north side of the station that will be 10 m wide at the west end and 5 m wide at the east end. Canopies will be constructed for the Crossrail and DLR platforms.
- 8.3.8 Access will be provided at the west end of the station from a high level ExCel Centre walkway. The walkway will extend from the ExCel Centre across Victoria Dock Road to the site of the former Barge Public House (on the north side of the station).
- 8.3.9 The Victoria Dock / Custom House Worksite will require a large area of land from Munday Road east to Connaught Bridge. This will include the western and eastern Excel Exhibition Centre carparks and large areas of railway land. Access will be from Victoria Dock Road.

Significant Temporary Residual Impacts

8.3.10 Table 8.1 (Chapter 10) summarises the assessment process for this route section. There will be a significant increase in HGV traffic on Seagull Lane. This will cause a significant temporary impact on the local community.

8.3.11 It is likely that 21 dwellings will qualify for temporary rehousing for less than three months. The loss of these residents to the local community will be a significant temporary impact.

Significant Permanent Residual Impacts

8.3.12 The works will require the demolition of the Barge Hotel formerly the Barge Public House which provides bed and breakfast accommodation for the homeless. This will be a permanent significant negative impact.

8.3.13 It is likely that 30 dwellings may qualify for rehousing of greater than three months. Due to the fact that these residents may be absent from the community for a relatively long period the loss of these residents is considered a permanent impact on the local community.

Cumulative Impacts

8.3.14 Table 8.2 (Chapter 10) summarises the cumulative impact assessment.

8.3.15 There will be a cumulative impact during construction caused by:

- the temporary rehousing of 21 dwellings;
- increases in HGV traffic;
- noise impacts on a hotel on Victoria Dock Road; and
- impacts on the visual amenity of surrounding residents and pedestrians.

8.3.16 This will also include the rehousing of 30 dwellings outlined above, the effects of which will commence at the beginning of the construction period.



Picture 24: The Barge Hotel

8.4 Connaught Tunnel (Route Window SE3)

Baseline

- 8.4.1 The Connaught Tunnel worksite is located at the junction of the Royal Albert Dock and the Royal Victoria Dock. The London City Airport is to the north-east and the East London University Campus is to the southwest. The Silvertown worksite is located to the south of the tracks. St Mark's Church is to the east with industry/warehousing to the south of the worksite. There is housing to the north of the tracks, which includes two local play areas and a social club.
- 8.4.2 The Docks form part of the London Plan 'Opportunity Area' and are designated MOZ8 by the UDP. This promotes the development and growth of the Docks area. The Docks are bordered by a 'Green Chain' and proposed 'Cycle Network' and recreational footpath.

Main Works

- 8.4.3 Permanent works will consist of the alteration and refurbishment of the Connaught Tunnel to accommodate OHLE. Crossrail will use the existing Network Rail track alignment.
- 8.4.4 The Connaught Tunnel Worksite will require the use of open land above the tunnel (gravelled and paved public area) and access from Connaught Road.
- 8.4.5 The alignment of the tracks through the existing Silvertown station will be unsuitable for use by Crossrail trains. The station will therefore be demolished. Passive provision will be made for a future Crossrail Station in the event of the development of adjacent properties.
- 8.4.6 There will also be a worksite at Silvertown accessed from Albert Road. Access will also be required through the Church Yard to get to the retaining wall.

Significant Residual Impacts

- 8.4.7 Table 8.1 (Chapter 10) summarises the assessment process for this route section. There will be no significant residual impacts.

Cumulative Impacts

- 8.4.8 Table 8.2 (Chapter 10) summarises the cumulative impact assessment. There will be no cumulative impact.

8.5 North Woolwich Portal and Thames Tunnel (Route Window SE4)

Baseline

- 8.5.1 The North Woolwich Portal worksite is located to the south of King George V Dock, and to the northwest of North Woolwich Station. Silvertown residential area is located to the north of the worksite. It is served by health centres on Albert Road and Manwood Street, a community centre on Kennard Street, a day centre and a police station. Green space is provided by Royal Victoria Gardens to the east.
- 8.5.2 The Warren Lane Shaft Worksite is located on open space (used as a skateboard park) on the Thames south bank. The permanent shaft will be on land that forms part of the redevelopment of the Arsenal Munitions Factory (see next route section). The area to the south of this is residential with shopping facilities provided along Powis Street and Hare Street. The area to the east is mainly light industry and storage. Services to the south include: a leisure centre on Woolwich High Street, the University of Greenwich, a fitness club and Hyed Community Hall.
- 8.5.3 The Docks area to the north forms part of Major Opportunity Area 11 (adopted Newham UDP). It is allocated for airport-related business and hotel use and identifies several potential residential sites and an associated need for associated community and supporting facilities.
- 8.5.4 Woolwich Town Centre is identified as an 'Area for Intensification' by the London Plan. It aims to help accommodate growth and promote development opportunities through higher density development to create additional homes and jobs. It is also noted as a major centre with important shopping and services with a borough wide catchment. The shopping facilities provided along Powis Street and Hare Street are designated 'Core' and 'Fringe' shopping areas by the UDP. The UDP designates 'Cycle Routes' and an 'Established River Walk' along the Thames. The green space at Warren Street is designated 'Community Open Space' by the Greenwich UDP (Second Deposit April 2004).

Main Works

- 8.5.5 The proposed works comprise the construction of: the North Woolwich portal, the twin bore Thames Tunnel, Warren Lane shaft, and the installation of OHLE equipment.
- 8.5.6 North Woolwich Portal: Crossrail will use the existing rail corridor located between Albert Road and Factory Road (currently used by the North London Line). Crossrail will descend into an open cut ramp to the portal to the east of the junction of Tate Road and Albert Road. The tunnel portal will be located between the junctions of Winifred Road and Fernhill Street with Albert Road. The tunnel eye will be located near the junction of Henley Road and Factory Road. A chamber will be constructed at the tunnel eye to receive the TBMs that will be used to construct the main Thames Tunnel from Plumstead. The works will be constructed from the North Woolwich Worksite. Sewer works will be constructed from the North Woolwich Sewer Diversion Worksite.
- 8.5.7 Warren Lane Shaft: the shaft will be located on the corner of Warren Lane and Beresford Street and will contain EIP and ventilation facilities. It will be 13.5 m in diameter. A building (10 m tall by 18 m in diameter) will be constructed on the surface to house emergency intervention and ventilation equipment. The worksite will take place on a portion of the Royal Arsenal Gardens, accessed from Warren Lane. It is currently used as a skateboard park. This will be required temporarily during the works.

08

Significant Residual Impacts

8.5.8 Table 8.1 (Chapter 10) summarises the assessment process for this route section.

8.5.9 The landtake of the skateboard park for approximately 4 years will be a significant temporary negative impact as there are no alternatives nearby.

8.5.10 There will be a significant increase in HGV numbers on Warren Lane. This will cause a temporary significant adverse impact on the local community.

Cumulative Impacts

8.5.11 Table 8.2 (Chapter 10) summarises the cumulative impact assessment.

8.5.12 There will be a cumulative impact on the local community around North Woolwich during the construction period. This will be caused by the visual amenity impacts on residents; and noise impacts on residents, St John's Church, St Mark's Church and the church community centre.



Picture 25: Royal Arsenal Gardens, skateboarding area

8.6 Arsenal Way Shaft (Route Window SE5)

Baseline

8.6.1 The site of the now disused Royal Arsenal munitions factory lies to the north of the proposed shaft. It has partially been redeveloped. A masterplan is currently with the local authority seeking approval for the redevelopment of the remainder of the site. The application comprises 711 residential units, up to 42,000m² of office use, 32,000m² D1, 13,000m² D2 and 6482m² B8.

8.6.2 Woolwich Town Centre is located to the south. This area to the south is residential and is served by community centres, a day nursery, a doctor's surgery, the Seventh Day Adventist Church, Thameside Adult Education Institute and Greenwich Community College Shopping.

8.6.3 Woolwich Town Centre is designated 'Core Shopping' along Powis Street and 'Fringe Shopping' along New Road, Greens End and Thomas Street by Greenwich UDP. The UDP designates Peakes Park on Greens End as 'Community Open Space'.

Main Works

8.6.4 The proposed works comprise the construction of the twin bore Thames Tunnel and Arsenal Way shaft.

8.6.5 Having passed beneath the River Thames, the twin bore tunnel will follow an alignment along the southern edge of the Royal Arsenal site towards the North Kent Line at Plumstead.

8.6.6 The Arsenal Way shaft will be located to the north of Plumstead Road (A206). The Arsenal Way shaft and worksite will be located at the eastern end of Woolwich Barracks car park. Access will be from Arsenal Way and egress onto Cornwallis Road.

Significant Residual Impacts

8.6.7 Table 8.1 (Chapter 10) summarises the assessment process for this route section. There will be no significant residual impacts.

Cumulative Impacts

8.6.8 Table 8.2 (Chapter 10) summarises the cumulative impact assessment. There will be no cumulative impact.

8.7 Plumstead Portal (Route Window SE6)

Baseline

8.7.1 The area to the north is mainly storage/warehousing and industry. To the south is Plumstead residential neighbourhood. The main shopping area is located along Plumstead High Street. There are a number of community resources, which include the Greenwich Hindu centre, Salvation Army hall, Under 5s Club and Plumstead Radical Centre. St Patrick's Catholic School and Conway Primary School. Planning permission has been granted for a site to the north of the station and east of Western Way to demolish existing buildings and redevelop to provide a purpose built 600 place Young Offenders Institute.

8.7.2 The area to the north of St Patrick's is designated 'Community Open Space' by the UDP and Plumstead High Street is 'Core and Fringe Shopping'.

Main Works

8.7.3 The proposed works comprise the construction of the twin bore Thames Tunnel, Plumstead Portal, White Hart Road Bridge, track realignment of the existing railway corridor, and the installation of OHLE equipment.

8.7.4 The Thames Tunnel will follow the existing alignment of the North Kent Line to the surface at Plumstead Goods Yard (east of Plumstead High Street). The tunnel eye will be located towards the south west corner of the goods yard.

8.7.5 A cut and cover box (approximately 100m) will be constructed from the tunnel eye to the portal. The portal will be located approximately 150 m to the west of White Hart Road. The tracks will rise to existing track level (opposite 139 Marmadon Road) in open cut.

8.7.6 A 21 m by 30 m chamber will be constructed at the tunnel eye, which will house the emergency escape and EIP facilities. The facilities will be housed in an approximate 20m by 25m size structure at the surface.

8.7.7 A new bridge will be constructed to the north of the existing structure to carry White Hart Road over Crossrail. The North Kent Line will continue to use the existing bridge.

8.7.8 The Plumstead Worksite West will be located on open land between Nathan Way and the Southern Outfall Sewer. It will be accessed from Nathan Way. Plumstead Worksite will occupy Plumstead Goods Yard and the adjacent timber yard to the east. The worksite will be accessed from the new highway currently being constructed to Thamesmead.

8.7.9 The works will require the demolition of the disused substation on White Hart Road, the timber yard on Reidhaven Road, buildings in Plumstead Goods Yard and garages to the west of Bostall Manor Way footbridge. Utilities work will be carried out from White Hart Road Cables Worksite.

Significant Residual Impacts

8.7.10 Table 8.1 (Chapter 10) summarises the assessment process for this route section.

8.7.11 The closure of White Hart Road to pedestrians for up to a year will result in a substantial diversion particularly for the users of the Asian Community Centre. This will be a significant temporary impact.

Cumulative Impacts

8.7.12 Table 8.2 (Chapter 10) summarises the cumulative impact assessment. There will be no cumulative impact.

8.8 Manor Wharf (Route Window SE6A)

Baseline

8.8.1 The area is primarily industrial, with the Belvedere Industrial Estate located to the southeast. The area to the west of the Belvedere Substation (on Norman Road) is designated Metropolitan Open Land and a Nature Conservation Site in the London Borough of Bexley UDP (April 2004).

Main Works

8.8.2 Manor Wharf (on the site of the former Belvedere power station) will be refurbished. The wharf will be used as a barge loading facility to transfer excavated material onto barges for disposal at Landfill in Rainham, Essex. The excavated material will comprise excavated material, removed from Plumstead portal and the intervention shafts at Arsenal Way and Warren Lane.

Significant Residual Impacts

8.8.3 Table 8.1 (Chapter 10) summarises the impact assessment.

8.8.4 The works will require the closure of the public footpath along the Thames for approximately a week. This will be a significant negative impact.

Cumulative Impact

8.8.5 Table 8.2 (Chapter 10) summarises the cumulative impact assessment. There will be no cumulative impact.

8.9 Church Manorway Bridge (Route Window SE7)

Baseline

8.9.1 The works are in a residential area. Shops are provided along Mcleod Road. Abbey Wood Secondary School, Eynsham Drive Sports Centre and St Thomas Beckett Catholic Primary School are located to the north of the alignment, with allotments and a sports ground to the south.

8.9.2 The allotments and a sports ground to the south are designated 'Community Open Space' and the shops on McLeod Road a 'Neighbourhood Parade' in the Greenwich UDP.

Main Works

8.9.3 The proposed works comprise:

- track realignment;
- the provision of two additional tracks within the existing railway corridor;
- the construction of new footbridges at Church Manorway and Bostall Manorway;
- the strengthening of Eynsham Drive Bridge;
- a 2 m high noise barrier on both sides of the railway; and
- installation of OHLE equipment.

8.9.4 The main construction site will be located on open land between the tracks and sports grounds west of Church Manorway (Church Manorway North Worksite). Church Manorway Worksite South is located on railway land to the south of the tracks (both worksites are accessed from Church Manor Way). Eynsham Drive Worksites north and south use open land adjacent to the railway. The northern site will be accessed from Mottisford Road. Bostall Manorway Bridge works also require highway and railway land to the north and the derelict council garages to south of the tracks.

Significant Residual Impacts

8.9.5 Table 8.1 (Chapter 10) summarises the assessment process for this route section.

8.9.6 Church Manorway footbridge will be closed for a week. This will significantly affect pedestrian access including access to nearby schools. This will be a significant negative temporary impact on the local community.

Cumulative Impacts

8.9.7 Table 8.2 (Chapter 10) summarises the cumulative impact assessment. There will be a cumulative temporary impact on the local community caused by the closure of the footbridge, noise and visual impacts on local residents.

8.10 Abbey Wood Station (Route Window SE8)

Baseline

- 8.10.1 The area is mainly residential with several green spaces. There is a small industrial estate to the north of the station and a single commercial building belonging to British Telecom overlooking the southern side of the station. Boxgrove School and a doctor's surgery are located to the north of the tracks (on Felixstowe Road), and Parkway Primary School is to the east. The following resources are to the south: a family and resources centre on Abbey Grove, St Bennet's Church, St Michael's Church, a post office and several community halls. The main open space is provided by Abbey Wood to the south-east. The main shopping facilities are provided on Manor Way.
- 8.10.2 The shops on Manor Way are designated a 'Neighbourhood Parade' by the Greenwich UDP and the Playing Fields to the rear of Abbeywood Road are designated as 'Community Open Space'.

Main Works

- 8.10.3 The proposed works within the route window comprise the reconstruction of Abbey Wood Station, track realignment, the provision of two additional tracks within the existing railway corridor, and the installation of OHLE equipment.
- 8.10.4 The station will be rebuilt to accommodate terminating Crossrail services, and will include the partial rebuilding of Harrow Manor Way Bridge to accommodate the new platforms. The existing platforms will be extended to the east and west, and will become islands with new tracks constructed to the north and south.
- 8.10.5 The existing station building will be demolished and replaced by a new station building and concourse constructed on a raft structure built above the tracks. It will be accessed at street level from Harrow Manorway Bridge, approximately 5 m above platform level. A pair of escalators, a lift and a set of stairs will link the concourse to each platform and Gayton Road to the south of the station. A lift and a set of stairs will be provided to Felixstowe Road on the north side.
- 8.10.6 The North Kent Line will be reconstructed to accommodate the two new Crossrail tracks in the centre and the rebuilt station at Abbey Wood. The Dartford and London bound tracks will be moved to the north and south respectively. To the east of Abbey Wood station, Crossrail trains will reverse and head back to Central London. Further east at a point 200 m to the east of Parkway Primary School, the line will revert to the current double track alignment.
- 8.10.7 The works will be constructed from three sites. Harrow Manorway Worksite North will be located on local authority carparking to the north of the station. It will be accessed from Rushdene. Abbey Wood Station Worksite South will be located on railway carparking to the south of the station and will be accessed from Wilton Road. Fendyke Road Worksite will be situated to the East of the existing railway line off Fendyke Road.

Significant Residual Impacts

8.10.8 Table 8.1 (Chapter 10) summarises the impact assessment. It is likely that 34 dwellings may qualify for rehousing for more than three months. Due to the fact that these residents may be absent from the community for a relatively long period, the loss of these residents is considered a permanent impact on the local community.

Cumulative Impacts

8.10.9 Table 8.2 (Chapter 10) summarises the cumulative impact assessment.

8.10.10 There will be a cumulative impact on the local community caused by:

- noise impacts on residents and a church;
- visual impacts around the worksite;
- disruption to bus services;
- loss of carparking spaces; and
- disruption to train services.

8.10.11 This will include the potential rehousing of 34 dwellings outlined above, the effects of which will commence at the beginning of the construction period.

09

Impact on Accessibility



Impact on Accessibility

9.1 Introduction

9.1.1 National policy objectives (e.g., OPDM Social Exclusion Unit Making the Connections: Final Report on Transport and Social Exclusion 2003) promote social inclusion through transport planning. They seek to improve accessibility for socially excluded areas and individuals to those opportunities that are likely to have the most impact on life chances, including employment, education, health and retail facilities.

9.1.2 The socio economic assessment has assessed the impact of Crossrail on employment and the potential take up of jobs by those resident in deprived areas and currently unemployed or economically inactive.

9.1.3 The community impact assessment is concerned with the impact of Crossrail on accessibility changes to community services and facilities that would contribute to social inclusion objectives.

9.1.4 Based on the DfT's draft "Guidance on Accessibility Planning in Local Transport Plans" the following core criteria against which to monitor changes in accessibility and the impact on social inclusion were adapted for the purposes of this assessment:

- % of 18-24 year olds within 30 and 60 minutes of a further education establishment by public transport;
- % of a) households b) households without access to a car within 30 and 60 minutes of a hospital by public transport;
- % of a) households; b) households without access to a car within 15 and 30 minutes of a major centre by public transport

9.1.5 TfL's transport model CAPITAL was used to model accessibility changes with and without Crossrail. Data from the 2001 census were used to capture the demographic and socio-economic characteristics of the population within these isochrones. This analysis was applied to changes in accessibility to universities, hospitals and major centres along the route.

9.2 Access to Education

Baseline

9.2.1 Table 9.1 below summarises universities that are located within walking distance of Crossrail stations, and the functions based at those sites.

TABLE 9.1: Universities served by Crossrail

Universities	Function	Location	Nearest crossrail Station
University College London	Various undergraduate and postgraduate courses, including engineering, clinical/medical science, and neurology. Various research centres including human genetics, neuroscience and transport.	Bloomsbury	Tottenham Court Road
Queen Mary College, University of London	Queen Mary's School of Medicine and Dentistry. Hall of residence, lecture theatres and several research departments of the School.	Charterhouse Square, Farringdon	Farringdon
Queen Mary College, University of London	Queen Mary's School of Medicine and Dentistry. Teaching campus. Extensive medical and dental library	Next to the Royal London Hospital, Whitechapel	Whitechapel
Queen Mary College, University of London	Queen Mary's School of Medicine and Dentistry. Teaching campus.	Within St Bartholomew's Hospital.	Farringdon
London Metropolitan University	Various undergraduate and postgraduate courses, including accountancy, economics, humanities, social science, art/media and	Moorgate & Aldgate East	Liverpool Street/ Whitechapel
City University	Postgraduate and undergraduate courses in radiography. Postgraduate and undergraduate courses in nursing & midwifery	Department of Radiography (Charterhouse Square), St Bartholomew's School of Nursing & Midwifery, St Bartholomew's West Smithfield.	Farringdon
City University	Links to Queen Mary College as above.	St Bartholomew's School of Nursing & Midwifery, Royal London Hospital	Whitechapel
Thames Valley University	Various undergraduate and postgraduate courses, including music & media, law, business, nursing and tourism	Ealing	Ealing Broadway
Thames Valley University	Various undergraduate and postgraduate courses, including nursing, business management, music & media, and computing.	Slough	Slough
Guildhall School of Music & Drama	Undergraduate and postgraduate courses in music and drama programmes.	Barbican	Farringdon
University of Westminster	Various undergraduate and postgraduate courses, including biosciences, computer science, health, social science and law.	Cavendish and Regent Campuses, Regent Street and New Cavendish Street	Bond Street

Impact

9.2.2 Table 9.2 shows that the introduction of Crossrail increases the number of young people who live within 30 and 60 minutes of the educational establishments (see Table 9.1).

9.2.3 Overall there will be a 10% increase in the number of 18 to 24 year olds living within 30 minutes of these universities and a 6% increase in the living within 60 minutes of the universities. Given the increasing number of students who live with their parents while at university this improved accessibility will assist them accessing higher education facilities.

TABLE 9.2: percentage increase in the number of 18-24 years old living within 30 and 60 minutes of universities served by crossrail.

	Number of 18-24 year olds within 60 min of University	Number of 18-24 year olds within 60 min of University
University	% change on Base	% change on Base
Queen Mary St Barts	18%	8%
Queen Mary St Barts City University Farringdon	18%	8%
Queen Mary	17%	8%
Thames Valley University Slough	17%	-16%
Royal London City University Whitechapel	10%	5%
Metropolitan University	9%	4%
Guildhall Barbican	8%	5%
Thames Valley University Ealing	5%	19%
Westminster University	2%	4%
University College London	0%	3%

9.2.4 The reduced catchment for the Thames Valley University Slough campus, is due to the replacement of some limited or non-stop Great Western services to Paddington with all stopping Crossrail services.

9.3 Access to Health Facilities

Baseline

9.3.1 Table 9.3 outlines the regional hospitals on the Crossrail route and the main services they provide.

TABLE 9.3: regional hospitals served by crossrail stations

Regional Hospital	Function	Location	Nearest crossrail Station
Royal London Hospital	<p>Together the RLH and St Bartholomew's provide:</p> <ul style="list-style-type: none"> •District general hospital (DGH) for Tower Hamlets and the City, providing secondary level services to our local population. •Tertiary centre for north east London, providing complex specialist services for the sector and beyond, notably Essex. •Provider of innovative and leading-edge clinical services to London and the UK. <p>RLH departments include the Helicopter Emergency Centre. Coronary Care Unit Dental Hospital, neurology, and orthopaedics.</p> <p>Proposals for new hospital include London's leading trauma and emergency care centre, Europe's largest renal service and the capital's second biggest paediatric service, provided within a dedicated Women and Children's Unit.</p>	Whitechapel	Whitechapel
St Bartholomew's Hospital	<p>As above.</p> <p>St Bartholomew's departments include a breast cancer unit, cardiology, ear nose & throat, and endocrinology.</p> <p>Planning permission to redevelop the hospital, to include a Cancer and Cardiac Centre of Excellence.</p>	Farringdon	Farringdon
Ealing Hospital	A district general hospital providing acute services for patients in the West London area.	Ealing	Hanwell
Goodmayes Hospital	Mental health.	Goodmayes	Goodmayes
Old Church Hospital	<p>Serving Barking, Havering and Redbridge, departments include A&E, dermatology, ENT, neurology, and paediatrics.</p> <p>The Cancer Centre at Barts and The London together with Oldchurch Hospital form the East London Regional Cancer Centre.</p>	Romford	Romford
Harold Wood Hospital	Serving Barking, Havering and Redbridge, departments include dermatology, ENT, neurology, and paediatrics. May be closing as part of plans to expand Oldchurch hospital.	Harold Wood	Harold Wood
St Mary's Hospital	<p>St Mary's provides a wide range of specialist and acute services to people including bone marrow transplant, cancer treatment, cardiology, neurology, orthopaedics, renal and transplant unit, and HIV.</p> <p>Proposals for a Paddington Health Campus (PHC) will create a world class clinical, research and teaching centre for northwest London. It will bring together on one site the teaching hospital, St Mary's NHS Trust, with the Royal Brompton & Harefield NHS Trust and the medical faculty of Imperial College London including the National Heart and Lung Institute.</p>	Paddington	Paddington

Impact

9.3.2 The introduction of Crossrail increases the number of households within 30 and 60 minutes of the health establishments by an average of 9% and 7% respectively. Increases to individual hospitals are shown in Table 9.4. This improved accessibility benefits patients, their friends and relatives as well as potential employees.

There is no material difference in accessibility for those with or without a car.

TABLE 9.4: percentage increase in the number of households living within 30 and 60 minutes of regional hospitals served by crossrail

	Number of households within 30 min	Number of households without a car within 30 min	Number of households within 60 min	Number of households without a car within 60 min
Regional Hospital	% change on Base	% change on Base	% change on Base	% change on Base
Queen Mary St Barts	21%	19%	8%	6%
Oldchurch Romford	8%	11%	1%	0%
Harold Wood	10%	10%	4%	6%
Goodmayes	9%	9%	10%	12%
Royal London	11%	9%	5%	3%
Paddington	1%	2%	5%	4%
Ealing	0%	0%	12%	17%

9.4 Major Centres

Baseline

9.4.1 There are a number of metropolitan and regional centres (as defined by the London Plan) served by Crossrail. These include Romford, Ilford, Ealing, Southall, and Stratford. Outside London major centres served by Crossrail include Slough, Brentwood and Maidenhead.

Impact

9.4.2 Crossrail gives an 11% increase in the number of households without access to a car within the 30 minutes of the centres listed. This will significantly improve access to key shops, services, and entertainment facilities for this population. The improvements occur on each branch of the system, with the largest improvements in accessibility accruing to Southall and Slough. The reduced catchment for Maidenhead is due to the replacement of some limited or non-stop Great Western services to Paddington with all stopping Crossrail services.

TABLE 9.5: percentage increase in the number of households living within 30 minutes of major centres

	Number of households within 30 min	Number of households without a car within 30 min
Major Centre	% change on Base	% change on Base
Southall	28%	30%
Slough	34%	25%
Romford	9%	11%
Ilford	8%	11%
Stratford	7%	6%
Ealing	2%	0%
Brentwood	0%	0%
Maidenhead	-4%	-16%

9.4.3 In summary, Crossrail will significantly improve accessibility to key educational establishments, hospitals and major centres along its route, and will therefore make a significant contribution to the achievement of social inclusion objectives. These benefits accrue to establishments located in central London and in the outer areas.

10

Summary of Principal Findings



Table 5.1 Assessment of Significant Community Impacts for the West (Maidenhead to Westbourne Park)

Route window	Name of use	Address	Primary use	Temp impact	Permanent impact	Level of use	Catchment	Availability of alternative facility	Within reasonable distance	Conflict with policy	Residual significant impact
W1: Ladbroke Grove				No impact	No impact						
W2: Canal Way Junction				No impact	No impact						
W3: Old Oak Common Depot				No impact	No impact						
W4: Acton Main Line Station & Acton Yard	Allotment gardens	south of Alwyn Gardens, London			total landtake for up to five years	Small		Yes	No		Significant negative impact
	Open space of West Acton Primary School	south of Noel Road, London W3			Grossed area partial landtake approx 30% for up to five years	Small		n/a	n/a	Ealing UDP (Adopted October 2004), Policy 3.4: "The loss of Public or Community Open Space [...] will not be permitted unless the development is directly related to the open space use of the land [...]"	Significant negative impact
	Sports Ground	Lowfield road, London			sports pitches total landtake for up to five years	Small		Yes	Yes (playing fields + North Acton playing fields)		Significant negative impact
		Noel Road, Lynton Road, Churchhill Gardens	Traffic	More than 100% increase in HGV traffic							Significant negative impact
W5: Ealing Broadway Station	Bette Davis Ltd	1-9 The Broadway, London W5	Retail		Permanent acquisition	Daily		Yes	Yes (the Broadway & Ealing shopping centre)		Not significant
	Budgens Stores	1-9 The Broadway, London W5	Retail		Permanent acquisition	Daily		Yes	Yes (the Broadway & Ealing shopping centre)		Not significant
	Cards Galore	1-9 The Broadway, London W5	Retail		Permanent acquisition	Daily		Yes	Yes (the Broadway & Ealing shopping centre)		Not significant
	Clarks Ltd	1-9 The Broadway, London W5	Retail		Permanent acquisition	Daily		Yes	Yes (the Broadway & Ealing shopping centre)	LB of Ealing UDP (Adopted October 2004) - Policy 7.3 "In all designated frontage any loss of shopping floorspace (A1), which serves the interests of shoppers, visitors and residents, will not normally be permitted"	Not significant

Holland & Barratt Retail Ltd	1-9 The Broadway, London W5	Retail	Permanent acquisition	Daily	Small	Yes	Yes (the Broadway & Ealing shopping centre)	Not significant
Starbucks Coffee	1-9 The Broadway, London W5	Café, Restaurants	Permanent acquisition	Daily	Small	Yes	Yes (the Broadway & Ealing shopping centre)	Not significant
Sketchley Ltd	1-9 The Broadway, London W5	Dry cleaners	Permanent acquisition	Daily	Small	Yes	Yes (the Broadway & Ealing shopping centre)	Not significant
Ealing Broadway new station	The Broadway, London	Transport	2 new kiosks					Not significant
Haven Green	Haven Green, Ealing Broadway, London W5	Open space	Partial landtake of approx 20% of green to use as a work site for approx. 2 yrs 3 mths	Daily & seasonal	Small	Yes	Yes (rest of the park)	Ealing UDP (Adopted October 2004), Policy 3.4: "The loss of Public or Community Open Space [...] will not be permitted unless the development is directly related to the open space use of the land [...]"
W6: West Ealing Station	Manor Road, Drayton Green Road, Drayton Road	Traffic	More than 100% increase in HGV traffic					Significant negative impact
W7: Hanwell Station	Churchfield Gardens Worksite	Open space	small area of open space from Churchfield Gardens for construction for approx 1 yr 2 mths		Small	Yes	Yes (remainder of Churchfield recreation grounds)	Ealing UDP (Adopted October 2004), Policy 3.4: "The loss of Public or Community Open Space [...] will not be permitted unless the development is directly related to the open space use of the land [...]"
Dwellings Dwelling	2 Campbell Road Fern Bank, Golden Manor	Housing Housing	5 re-housed for 2 mths 1 re-housed for 2 mths					Not significant
W8: Southall Station	Merrick Road, London	Access	minor alterations to bridge supports only no closure	Medium	Small	Yes	Yes (South Road bridge)	Not significant
W9: Southall West Sidings			No impact	No impact				
W10: Hayes and Harlington Station	Station Road bridge	Station Road, Hayes, London	Construction of new span to north side of bridge temporary bridge provided some week-end closures to pedestrians possible					Not significant
Platterplus	107 Station Approach 109 Station Approach 111 Station Approach	retail retail retail	Permanent acquisition Permanent acquisition Permanent acquisition	Medium	Medium	yes	yes	Not significant Not significant Not significant
B Stern Complete Dental Care Insurance A Fleishman	115 Station Approach 115 Station Approach 115 Station Approach	Dental surgery Dental surgery Dental surgery	Permanent acquisition Permanent acquisition Permanent acquisition	Daily Daily Daily	Small Small Small	Yes	Yes (Coldharbour Lane & the High Street)	Significant negative impact of closing 3 dental surgeries out of

W14 Iver Station	Thorney Lane footbridge	Thorney Lane, Iver, London	Pedestrian access Short weekend with short wend and onight closures - pedestrians will be diverted to road bridge	340 pedestrians and 133 cyclists over a 12 hour period					Not significant
	Thorney Hill Golf Course	Thorney Mill, Iver	Sport & recreation Small landtake for utilities work	Small landtake for new masts		Yes	Yes (golf course still operational)		Not significant
	Open land	East of the access road to Thorney, Iver	Open land open land and trees used as work site for the new bridge for 9 months (small proportion of total area of open space)	Low	Small	Yes	Yes		Not significant
	Open land	North of the tracks at Iver station	open land and trees used as work site for 9 months (very small proportion of total area of open space)	Low	Small	Yes	Yes		Not significant
	Iver	East of Iver station	Realignment of Thorney Lane South & new junction with cement works access road which would benefit local residents						Significant beneficial impact
W15 Dog Kennel Footbridge	Dog Kennel Bridge	Richings Park, Iver	Pedestrian and occasional horse access this bridge is a permissive footpath but connects two footpaths	Bridge removed and no replacement	Small	Yes	No		Significant negative impact
	Richings Park	Richings Park, Iver	Open land open land used for construction and utilities works for 7 months (very small proportion of the open space area)		Medium	Yes	Yes (rest of the park)		Not significant
	Chequers Bridge	Market Lane, Iver	Road bridge Construction of an extra span requiring some wend and onight closures						Not significant

Open land

North of the tracks, near Chequer's Bridge

Open land

open land, shrubs and trees
landtake used as work site for
7-8 months (small proportion
of the total area of open
space)

Medium

Yes

Yes (rest of the park)

South Buckinghamshire District Local Plan, Adopted 1999, Not significant
Policy GB1 "Within the Green Belt, planning permission will
not be granted for development other than for the change
of use of existing building or land [...]"

W16 Langley Station

No Impact

No Impact

W17 Middlegreen Road, St Mary's Road & Langley Trenches Bridges	Trenches bridge	Alderbury Road, Langley	Pedestrian & cycle 3 week closure for bridge works (part of the National Cycle Network Route 61)	664 pedestrians and 77 cyclists over 12 hour period	Medium	Yes	St Mary's Road Bridge	Significant negative impact
Springgate Field		St Mary's Road, Langley	park green space	15-20% of the park used as a work site for 8 months	Small	Yes	Yes (rest of the play area + Middle Green + playing fields on Langley Road)	Not significant
Bloom Park		Nurseys Lane, Langley	Open space used for the annual canal festival in September	approx 20% of the park used as a worksite for 4 months	Small	Yes	Yes (rest of the play area + Middle Green)	Not significant provided the festival is not affected
St Mary's Road bridge		St Mary's Road, Langley	road bridge	New bridge operational before the existing one is closed for works so no impact				
Middlegreen Bridge		Middlegreen Road, Langley	road bridge	5 weeks closure for bridge reconstruction. 0.8km diversion for pedestrians and cyclists over St Mary's Road Bridge		Yes	No	Significant negative impact
Uxbridge Road bridge		Uxbridge road, Langley	road bridge	Minor works. No impact				
Dwellings		Maryside, St Mary's Road, London	Housing	Permanent acquisition of garages				Not significant
W18 Slough Station	Slough Taxi Federation	railway terrace	Taxi	Potential disruption to taxi operation				Not significant
The Lemon Tree Limited		Railway terrace	Café, restaurant	Permanent acquisition	Small	Yes	Yes	Not significant

Wexham Road bridge	Wexham Road, Slough	road bridge	Temporary bridge will be provided for around 12months. It will be opened before the old bridge is demolished. So no impact.	No impact	1047 pedestrians and 173 cyclists over a 12 hour period	Not significant
William Street Bridge			Parapet works and track lowering, no impact	No impact		
W19 Stoke Poges Lane Bridge	Stoke Poges Lane footbridge		Closure for 1 month for parapet works and track lowering, pedestrians and cyclists diverted over road bridge	No impact		Not significant
Farnham Road bridge			No impact	No impact		
Soil Hill Pleasure Grounds		Open space	Small landtake for the work site approx 3 months		Small	Not significant
W20 Dover Road & Leigh Road Bridges	Dover Road, Slough	road bridge	Parapet works and track lowering	No impact		Not significant
Leigh Road bridge	Leigh Road, Slough	road bridge	Pedestrian access closed 5 months with 1.35km diversion over Dover Road Bridge		252 pedestrians and 101 cyclists over 12 hour period	Significant negative impact
W21 Burnham Station			No impact	No impact		
W22 Lent Rise			No impact	No impact		
W23 Taplow Station			No impact	No impact		
W24 Maidenhead Railway Bridge			No impact	No impact		
W25 Maidenhead Station	Body Image	Personal Services	Access, car park, buildings, works and land		Daily	Not significant
Café Tee	Station Approach	Cafés, Restaurants	Access, car park, buildings, works and land	Yes	Small	Not significant
Cullen-Burns Associates Ltd	Station Approach	Retail	Access, car park, buildings, works and land	Yes	Small	Not significant
Station Kiosk	Station Approach	Retail	Access, car park, buildings, works and land	Yes	Small	Not significant

Not significant

demolish garden wall to flats south of the road

Extension of the pedestrian subway should not prevent access during works so no impact

Housing

Transport

Shopperhangers Road, Maidenhead

King Street, Maidenhead

Dwellings

Station

Route window	Name of use / receptors	Address	Primary use	DIRECT IMPACTS			NOISE		CONSTRUCTION TRAFFIC	OPERATIONAL TRAFFIC		VISUAL		CUMULATIVE IMPACTS
				Significant residual construction impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact		Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	
W6: West Ealing Station		College Court	Car Parking						Significant adverse impact (loss of parking)					
	Train passengers	Ealing Broadway station	Transport						Significant adverse impact (termination of trains at Ealing Broadway)	Significant beneficial impact (shorter journey times)				
	Residents	1-34 Greenlaw Court, London	Housing								Significant negative impact			
	Residents	20-24 Haven Green, London	Housing								Significant negative impact			
	Residents	1-22 College Court, Hamilton Road	Housing								Significant negative impact			
	Residents	Manor Road, Drayton Green Road, Drayton Road	Road traffic	Significant negative impact (HGV traffic)										NO
W7: Hamwell Station	Train passengers	West Ealing station	Transport			No impact	No impact	No impact		Significant beneficial impact (shorter journey times)				
	Dwellings	11-26 Manor Road, London	Housing											
	Dwellings	1-3 Argyle Road, London	Housing											
	5 dwellings	2 Campbell Road	Housing	No impact	No impact			Significant negative impact (re housing)						NO
	1 dwelling	Fern Bank, Golden Manor	Housing					Significant negative impact (re housing)						
	Train passengers	Hamwell station	Transport							Significant beneficial impact (shorter journey times)				
W8: Southall Station	Dwellings	2-8, 22, 24, 35 Campbell Road	Housing											
	Dwellings	1, 2, 3-5 Golden Manor	Housing											
	Dwellings	Fern Bank, Golden Manor	Housing											
	16 dwellings													
	30 dwellings	11, 14, 23 Milan Road	Housing											
	8 dwellings	The Limes	Housing											
W8: Southall Station	Train passengers	5 Hortus Road	Housing											
	Train passengers	Southall station	Transport	No impact	No impact					Significant beneficial impact (shorter journey times)				NO

Route window	Name of use / receptors	Address	Primary use	DIRECT IMPACTS			NOISE		CONSTRUCTION TRAFFIC	OPERATIONAL TRAFFIC		VISUAL		CUMULATIVE IMPACTS
				Significant residual construction impact	Significant residual permanent impact	Significant residual permanent impact	Significant residual temporary impact	residual permanent impact		Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	
W9: Southall West Sidings	Residents	Approximately 50 dwellings on Park Avenue(West), Avenue Road and Milan Road, London	Housing	No impact	No impact					No impact	No impact	Significant negative impact		
	Residents	Approximately 10 dwellings on The Crescent	Housing									Significant negative impact		
	Residents	Approximately 20 dwellings in Marlins Court and Maypole Court, London	Housing									Significant negative impact		
W10: Hayes and Harlington Station	3 dental surgeries & 1 dental technician	115 & 117 Station Approach, London	Health	Significant negative impact	Significant negative impact					No impact	No impact	No impact	No impact	NO
	Car users	Hayes & Harlington station					No impact	No impact		Significant adverse impact (loss of 120 spaces)				
	Train passengers	Hayes & Harlington station	Transport								Significant beneficial impact (shorter journey times)			
	Residents	Approximately 10 dwellings, Brunel House, London	Housing									Significant negative impact		
W11: Stockley Flyover Track Realignment	Allotments	south of the railtracks		Significant negative impact	Significant negative impact		No impact	No impact	No impact	No impact	No impact			NO
	Residents	Approx. 20 dwellings	Housing									Significant negative impact (assuming mitigation proposed by experts is accepted. It would reduce impacts from 80 dwellings to 20)		
W12: Kingston Lane & Old Stockley Road Bridges	4 dwellings 2 dwellings 13 dwellings 42 dwellings	125 Mulberry Crescent 28 Emdon Close Knowles Close same as 13020 29,37 Raffle Close	Housing Housing Housing Housing	No impact	No impact			Significant negative impact Significant negative impact Significant negative impact Significant negative impact		No impact	No impact			NO

Route window	Name of use / receptors	Address	Primary use	DIRECT IMPACTS			NOISE		CONSTRUCTION TRAFFIC	OPERATIONAL TRAFFIC	VISUAL		CUMULATIVE IMPACTS
				Significant residual construction impact	Significant residual permanent impact	Significant residual permanent impact	Significant residual temporary impact	residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	
W13 West Drayton Station	Residents	Approx. 85 dwellings on Ruffe Close / Lantern Way, Warwick Road, Holly Close, Emden Close and Mulberry Crescent	Housing								Significant negative impact		
	Pedestrians	Grand Union Canal from West Drayton station to Horton Bridge	Access		Potential significant beneficial impact (new footpath)								YES
	21 dwellings	63-81 Warwick Road	Housing				Significant negative impact						
	7 dwellings	72-75 Knowles Close	Housing				Significant negative impact						
	4 dwellings	76-81 Knowles Close	Housing				Significant negative impact						
	22 dwellings	1-18 High Street	Housing				Significant negative impact						
	28 dwellings	65-74 Tavistock Road	Housing				Significant negative impact						
	Train passengers	West Drayton station	Transport							Significant beneficial impact (shorter journey times)			
	Residents	Approx. 85 dwellings on Walside Gardens, Humber Close, Knowles Close and Warwick Road	Housing								Significant negative impact		
	Residents	Approx. 25 dwellings on Warwick Road	Housing									Significant negative impact	
W14 Iwer Station	Iwer residents	South of Iwer station - new road access	Transport		Significant beneficial impact		No impact	No impact	No impact	Significant beneficial impact (shorter journey times)			NO
	Train passengers	Iwer station	Transport				No impact	No impact					
	Residents	Between 40-50 dwellings on Balhurst Walk, Buckfield Court, Wellesley Avenue and Wellesley Court	Housing								Significant negative impact		
	Residents	Approx. 25 dwellings on Thorney Lane	Housing								Significant negative impact		
	Pedestrians & road users	Thorney Lane	Access								Significant negative impact		
W15 Dog Kennel Footbridge	Pedestrians	Dog Kennel Footbridge	Access	Significant negative impact (bridge removed)	Significant negative impact (bridge removed)								DOG KENNEL BRIDGE: NO
	2 properties	Farnstead / Kennels				Significant negative impact			No impact	No impact			CHECKERS

Route window	Name of use / receptors	Address	Primary use	DIRECT IMPACTS		NOISE		CONSTRUCTION TRAFFIC	OPERATIONAL TRAFFIC	VISUAL		CUMULATIVE IMPACTS
				Significant residual construction impact	Significant residual permanent impact	Significant residual temporary impact	residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	
W16 Langley	Residents	Around 60-70 dwellings in Maplin Park and Southwold Spur	Housing	No impact	No impact	No impact	No impact	No impact		Significant negative impact		
	Residents	11 mobile homes at Mansion Caravan Park	Housing							Significant negative impact		
	Residents	Chequers Bridge Cottages	Housing							Significant negative impact		
	Pedestrians	Market Lane	Access							Significant negative impact		
	Pedestrians	footpath north and south of Dog Kennel Bridge	Access							Significant negative impact		
W17 Middlegreen Road, St Marys Road & Trenches Bridges	Train passengers	Langley station	Transport	No impact	No impact	No impact	No impact	No impact	Significant beneficial impact (shorter journey times)	No impact	No impact	NO
	Pedestrians	Trenches Bridge, Aldbury Road, Langley	Access	Significant negative impact								
	Pedestrians	Middlegreen Road Bridge	Access	Significant negative impact			No impact	No impact	No impact			
	Residents	5 dwellings on Cherry Avenue	Housing							Significant negative impact		
	Residents	1 dwelling on Middlegreen Road	Housing							Significant negative impact		
W18 Slough Station				No impact	No impact							NO
	16 dwellings	16 to 24 Stanley Cottages	Housing			Significant negative impact						
	26 dwellings	31-41, 61 Grays Place	Housing			Significant negative impact						
	47 dwellings	1 to 6 Noble Court	Housing			Significant negative impact						
	13 dwellings	8,14,26 Richmond Crescent	Housing			Significant negative impact						
	9 dwellings	19 Colonial Road	Housing			Significant negative impact						
	Slough station & Offices	Slough station carpark and office car park	Car parking					Significant adverse impact (loss of 125 spaces - approx 50% of total)				
	Train passengers	Slough station	Transport						Significant beneficial impact (shorter journey times)			
	Residents	10 dwellings in Richmond Crescent	Housing							Significant negative impact		

Route window	Name of use / receptors	Address	Primary use	DIRECT IMPACTS			NOISE			CONSTRUCTION TRAFFIC		OPERATIONAL TRAFFIC		VISUAL		CUMULATIVE IMPACTS
				Significant residual construction impact	Significant residual permanent impact	Significant residual permanent impact	Significant residual temporary impact	residual permanent impact	Significant residual temporary impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	
W19 Stoke Pages Lane Bridge	Offices	office car park - south worksite	Car parking	No impact	No impact	No impact	No impact	No impact	No impact	No impact	Significant adverse impact (loss of 40 spaces)	No impact	No impact	No impact	No impact	NO
W20 Dover Road Leigh Road Bridge & Leigh Road Bridges	Transport	Leigh Road	Transport	Significant negative impact (closure of pedestrian access)			No impact	No impact	No impact	Significant adverse impact (loss of parking)	Significant beneficial impact (replacement of narrow bridge with 2 lanes & footway)	No impact	No impact	No impact	No impact	NO
	Car parking	southern worksite	Car parking				No impact	No impact	No impact							
W21 Burnham Station	Train passengers	Burnham station	Transport	No impact	No impact	No impact	No impact	No impact	No impact	Significant beneficial impact (shorter journey times)		No impact	No impact	No impact	No impact	NO
Residents	Approx. 25 properties in Sandringham Court, London		Housing													
W22 Lent Rise				No impact	No impact	No impact	No impact	No impact	No impact	No impact		No impact	No impact	No impact	No impact	NO
W23 Taplow Station	Train passengers	Taplow Station		No impact	No impact	No impact	No impact	No impact	No impact	No impact	Significant beneficial impact (shorter journey times)	No impact	No impact	No impact	No impact	NO
W24 Maidenhead Railway Bridge				No impact	No impact	No impact	No impact	No impact	No impact	No impact		No impact	No impact	No impact	No impact	NO
W25 Maidenhead Station				No impact	No impact	No impact	No impact	No impact	No impact							NO

Route window	Name of use / receptors	Address	Primary use	DIRECT IMPACTS		NOISE		CONSTRUCTION TRAFFIC	OPERATIONAL TRAFFIC		VISUAL		CUMULATIVE IMPACTS
				Significant residual construction impact	Significant residual permanent impact	Significant residual temporary impact	residual permanent impact		Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	
	Maldenhead station	Station Approach, Maldenhead						Significant adverse impact (loss of car parking)	Significant adverse impact (loss of car parking)	Significant adverse impact (loss of car parking)			
	Residents	Approx. 25 properties in Courtlands House, Maldenhead	Housing								Significant negative impact		
	Residents	Approx. 5 dwellings in Ludlow House, Maldenhead	Housing								Significant negative impact		

Table 6.1 - Assessment of Community Impacts in the Central Route Section (Royal Oak Portal to Pudding Mill Lane)

Route window	Name of use	Address	Primary use	Temp impact	Permanent impact	Level of use	Catchment	Availability of alternative facility	Within reasonable distance	Interview/ key issues	Conflict with policy	Residual impacts
C1, Royal Oak Portal	Westbourne Green	Bourne Terrace	unkmpt grass area under Westway	loss of grassed area for approx 4 years		Low (not part of main recreational area)	Small	Yes	Yes (main park)			Not significant
					Small loss of grass but remaining area will be landscaped post construction	Low (not part of main recreational area)	Small	Yes	Yes (main park)		Emerging UDP - Policy 13a (D) "Public open space [...] will be protected from development that would detract from their mainly green and open character"	Not significant
C2, Paddington Station	Public access to Paddington station	Departure Road	Pedestrian access	Closure of entrance via Eastbourne Terrace for approx 5 years		High	Large	Yes	Yes (alternative entrance)			Not significant
	Fotosprint	191 Praed Street	Retail		Permanent acquisition & demolition	Daily	Small	Yes	Yes			Not significant
	Lellu Accessories	195 Praed Street	Retail		Permanent acquisition & demolition	Daily	Small	Yes	Yes			Not significant
	Reload Internet	197 Praed Street	Internet café		Permanent acquisition & floorspace retained	Daily	Small	Yes	Yes			Not significant
	Mercury Change International	199 Praed St	Bureau de change		Permanent acquisition & floorspace retained	Daily	Small	Yes	Yes			Not significant
	Desai Newsagent	19 Spring Street	Retail		Relocation	Daily	Small	Yes	Yes			Not significant
	Tutto Fresco	20 Spring Street	Café, restaurant		Relocation	Daily	Small	Yes	Yes			Not significant
	Lolita Ltd	21 Spring Street	Retail		Relocation	Daily	Small	Yes	Yes			Not significant
	Sandro Sandwich Bar	22 Spring Street	Retail		Relocation	Daily	Small	Yes	Yes			Not significant
	Paddington station	WH Smith	Retail		Permanent acquisition	High	Small	Yes	Yes			Not significant
	Paddington station	Other shops	Retail	Service access to shops reprovided therefore no impact								
C3, Hyde Park and Park Lane shafts	Hyde Park Riding Stables North ride	63 Bathurst Mews, 25B	Horse-riding school	Diversion of the north ride for 4 years		7am-5pm daily, all year round	Large (from local residents to overseas and domestic visitors)	n/a	n/a	See Appendix 1		Significant negative impact.
	Hyde Park Riding Stables Training ring	Immediately east of the construction site	Horse-riding school	Noise from construction activity for 4 years		*	*	No	No			Significant negative impact. There will be a significant impact on the use of the training ring due to construction works.

Hyde Park Riding Stables: Clarendon Gate, Bayswater Road, London

Access to the park

The Stables will have to come in to the park via Clarendon Gate for 4 years

See Appendix 1

Not significant provided that measures are taking to make the crossing of Bayswater Road safe for riders and horses.

Hyde Park	Hyde Park, London	Perimeter open space, road, horse ride and footpaths	loss of grassed area for construction use for 4 years, grass reinstated post construction	Low	Large	Yes (whole park)	n/a	No, given the size of the park the small loss of open space is not deemed significant
-			Diversion of footpaths south of the North ride	High	Large	Yes	Yes	Emerging UDP, Policy Env 13a (D) (see above) + Policy Env 13a (B) "Planning permission will not be granted for development on or under Metropolitan Open Land unless the development is essential or ancillary to maintaining or enhancing that land as valuable open space"
-			Small loss of open space for the vent shaft	Low	Large	Yes (whole park)	n/a	Not significant

North Carriage Drive

North Carriage Drive

Transport

More than 100% increase in HGV traffic for 5 mths

Significant negative impact

Park Lane

Park Lane, London

Central

No impact

No impact

Not significant

C-4, Bond Street Davies Street worksite	University of Arts & London Fashion College	65 Davies Street, London W1K 5DA	Teaching facilities for the London Fashion College and headquarters for the University of the Arts	Permanent acquisition	Daily until 10pm and Saturdays.	Large (national and No 25% international students)	No	see Appendix 1	UDP, Policy Soc 3 - The London College of Fashion is noted as a "further education institution of local, national and international importance which can contribute to Westminster's role as a world and capital city"	Significant negative impact
Dwellings	25 - 47 Cavendish Flats (S)	Housing	10 re-housed for 11 mths							Significant negative impact
Dwellings	23 St Anselm's Place (N)	Housing	2 re-housed for 11 mths							
Dwellings	25 St Anselm's Place (N)	Housing	2 re-housed for 11 mths							
Dwellings	27 St Anselm's Place (N)	Housing	1 re-housed for 11 mths							
Dwellings	29 - 55 Hanover Flats, Gilbert Street	Housing	9 re-housed for 11 mths							
Dwellings	48 - 60 Weighhouse Street	Housing	4 re-housed for 11 mths							Significant negative impact

- a gallery is also in the building and it is open to the public and exhibits artists' work, not only students

Dwellings	1 - 5 Weighhouse Street (E)	Housing	3 re-housed for 11 mths
Weighhouse Street	Weighhouse Street, London	Access	Pedestrian access is maintained during the works so no impact
Residents	Davies Street, St Anselm's Place, Brook Street	Transport	More than 100% increase in HGV traffic for 5 mths
Residents	Weighhouse Street, Duke Street, Davies Street	Transport	More than 100% increase in HGV traffic for 5 mths
Hanover Square <u>worksite</u>	Tenterden Street, London	Open space	Loss of around 25% of open space & the level of construction activity is likely to be very disruptive for the users of the space for approx 4 years
			Pedestrian access to Hanover Square from Tenterden Street & Brooke Street is maintained so no impact
			UDP, Policy Des 12 (B), 10.93 - "The City council will resist any development of land forming part of the Royal Parks or public and private square" (also see Policy Env 13a (B))

C5, Tottenham Court Road Station

Tottenham Court Road worksite	Astoria	157 Charing Cross Road, London W1G 9BR	Nightclub & concert venue	Permanent acquisition	Daily, 10pm-4am	Large	Yes	Yes	see Appendix 1
					Can hold 2,000-3,000 people. Core place for London's gay community. One of the largest venues in the UK.				Significant negative community impact from closing of 3 clubs
	The MeanFiddler	165 Charing Cross Road, London W1G 9BR	Nightclub & concert venue	Permanent acquisition	Daily	Large	Yes	Yes	
	Rouge	148 Charing Cross Road, London	Nightclub	Permanent acquisition	700 capacity - Daily use	Large	Yes	Yes	
	William Hill Office	143 Charing Cross Rd 147-149 Charing Cross Road	Bookmaker Retail	Permanent acquisition Permanent acquisition	Daily Daily	Medium Medium	Yes Yes	Yes Yes	
	Mr Toppers	148 Charing Cross Road, London	Hairdresser	Permanent acquisition	Daily	Small	Yes	Yes	Not significant
	Benjys	155 Charing Cross Road, London WC2H 0EE	Café, restaurant	Permanent acquisition	Daily	Small	Yes	Yes	Not significant

Chopstick Noodle Bar	157 Charing Cross Road, London WC2 9BR	Café, restaurant	Permanent acquisition	Daily	Small	Yes	Yes	Not significant
Euromoney Exchange	157-165 Charing Cross Road, London WC2	Bureau de change	Permanent acquisition	Daily	Medium	Yes	Yes	Not significant
Harmony	167 Charing Cross Road, London WC2	Lingerie	Permanent acquisition	Daily	Medium	Yes	Yes	Not significant
SAKS	1-1a Oxford Street	Retail	Permanent acquisition	Daily	Small	Yes	Yes	Not significant
The Link	7 Oxford Street, London W1D 2DF	Retail	Permanent acquisition	Daily	Medium	Yes	Yes	Not significant
Clarks	9-15 Oxford Street, London W1D 2DQ	Retail	Permanent acquisition	Daily	Medium	Yes	Yes	Not significant
Riccardo's Snack Bar	9-15 Oxford Street, London W1D 2DQ	Café, restaurant	Permanent acquisition	Daily	Small	Yes	Yes	Not significant
Cambio Bureau de change	9-15 Oxford Street, London W1D 2DQ	Bureau de change	Permanent acquisition	Daily	Medium	Yes	Yes	Not significant
Gulfronics	91 Oxford Street, London W1D 2HA	Retail in electronic goods	Permanent acquisition	Daily	Medium	Yes	Yes	Not significant
Eurochange	93 Oxford Street	Bureau de change	Permanent acquisition	Daily	Medium	Yes	Yes	Not significant
Ann Summers	95 Oxford Street, London W1D 2Raj	Retail - Lingerie	Permanent acquisition	Daily	Medium	Yes	Yes	Not significant
Café Nero	101 Oxford Street, London W1D 2LY	Café, restaurant	Permanent acquisition	Daily	Small	Yes	Yes	Not significant
Waterstones	1-6 Falconberg Court, London	Retail	Permanent acquisition	Daily	Medium	Yes	Yes	Not significant
Tottenham Public House	6 Oxford Street	Commercial / residential	Re-housed temporarily	Daily	Small	Yes	Yes	Not significant
Ghetto Nightclub	5-6 Falconberg Court, London	Nightclub	Permanent acquisition	Daily	Medium	Yes	Yes	Not significant
Centre Point Snooker Club	Centre Point, New Oxford Street, London WC1A 1DD	Leisure	Permanent acquisition	Daily, 24 hrs a day	Medium	Yes	No	Significant negative impact
West End Hostel	Diadem Court, London	Accommodation for the homeless	Re-housed for 11 months	Daily	Medium/high	Yes	Yes	Significant negative impact
Soho Square	Soho Square, London	Open space	4 grout shafts installed but pedestrian access and the use of the square is maintained.					Not significant
Pedestrian circulation	St Giles Circus, London		There will be considerable difficulties regarding the management of pedestrian circulation during the works with pavement narrowing, diversions etc					Significant negative impact (not reported as already covered by traffic assessment)

Significant beneficial impact (not reported as already covered by traffic assessment)

Closure of the north west entrance to the underground, widening of station forecourt at Charing Cross, pedestrianisation of Andrew Bords Street and improvement of entrance at CentrePoint.

Dean Street worksite	Pedestrians	Sutton Row, London	Access	Severance of pedestrian access for 5 years	850 pedestrians between 7-10am	Yes	Yes	Not significant
Dean Street worksite	Push	93 Dean Street & 9 Diadem Court, London	Bar (grd + base)			Yes		Not significant
	Flying Records	94 Dean Street, London W1D 3TA	Retail	Permanent acquisition	Daily	Yes		Not significant
	Red Vag Ltd	95 Dean Street	Café, restaurant	Permanent acquisition	Daily	Yes		Not significant
	The Bath House (pub)	96 Dean Street, London W1D 3TD	Pub	Permanent acquisition	Daily	Yes		Not significant
	Couch Public House	97-99 Dean Street	Pub	Permanent acquisition	Daily	Yes		Not significant
	Bella Napoli	101 Dean Street, London W1V 5RA	Café, restaurant	Permanent acquisition	Daily	Yes		Not significant
	Donell (shoes)	102 Dean Street, London W1D 3TO	Retail	Permanent acquisition	Daily	Yes		Not significant
	Tai Buffet	3-4 Great Chapel Street, London	Café, restaurant	Permanent acquisition	Daily	Yes		Not significant
	4 dwellings	3-4 Diadem Court	Housing	Permanent acquisition				Not significant
	5 dwellings	9 Diadem Court & 93 Dean Street, London	Housing	Permanent acquisition				Not significant
Dean Street worksite	1 dwelling	The Bath House, 96 Dean Street, London	Housing	Permanent acquisition				Not significant
	Pedestrians	Fareham Street, London	Access	Severance of pedestrian access for 5 years	371 pedestrians between 7-10am	Yes		Not significant
	Pedestrians	Fareham Street and Dean Street	Access	Closed during utilities work but pedestrian access maintained so no impact				Not significant
	Pedestrians	Great Chapel Street	Access	No access to Great Chapel Street from Sheraton Street or Carlisle Street				Not significant
	NHS Medical Centre	Great Chapel Street	Health	Access is maintained during works so no impact				Not significant
								Not significant
								Not significant
								Not significant
								Not significant
								Not significant

Significant negative impact

<u>Fisher Street shaft</u>	The Ivy House	8-10 Southampton Row, London WC1B 4AE	Pub		Permanent acquisition	Daily	Medium (mainly local workers & students)	Yes	Yes	Not significant
Dwellings		8-10 Southampton Row, London WC1B 4AE	Housing		Permanent acquisition of 9 flats					Significant negative impact
Central St Martins College of Art and Design		Caillon Street, London WC1	Teaching and Student Union offices		Permanent acquisition	Day and evening	Large	No	see Appendix 1	Significant negative impact
Residents		Fisher Street, Southampton Row, Procter Street	Transport	More than 100% increase in HGV traffic for 3.5 months						Significant negative impact
Residents		Caillon Street, Fisher Street, Procter Street	Transport	More than 100% increase in HGV traffic for 3.5 months						Significant negative impact

<u>C6, Farringdon station</u>										
<u>Western Ticket Hall</u>	Farringdon Flowers	2a-12 Farringdon Road, London	Retail		Permanent acquisition	Mon-Fri 7.30am-7.30pm	Medium	Yes	Yes (Storm Flowers, Baldwin Gardens)	Not significant
Best Café		2b Farringdon Road, EC1M 3HP	Café, restaurant		Permanent acquisition	Daily	Small	Yes	Yes	Not significant
Benly's		2a-12 Farringdon Road, London	Café, restaurant		Permanent acquisition	Daily	Small	Yes	Yes	Not significant
Whitecross Dental Care Ltd		6 Farringdon Road, EC1M 3HP	Dental surgery		Permanent acquisition	Mon-Fri 9.00am-5.30pm	Medium	Yes	Yes (GM Porter, 07 Dental Practice, Barbican Dental Care)	Not significant
Kentucky Fried Chicken		2a-12 Farringdon Road, London	Café, restaurant		Permanent acquisition	Daily	Small	Yes	Yes	Not significant
William Hill		2a-12 Farringdon Road, London	Bookmaker		Permanent acquisition	Daily	Medium	Yes (Ladbroke's, 7 Goswell Road, EC1M / William Hill, St John's Street)	Yes	Not significant
Starbucks		2a-12 Farringdon Road, London	Café, restaurant		Permanent acquisition	Daily	Small	Yes	Yes	Not significant
McColl's		2a-12 Farringdon Road, London	Café, restaurant		Permanent acquisition	Daily	Small	Yes	Yes	Not significant
Raj Tandoori		2a-12 Farringdon Road, London	Café, restaurant		Permanent acquisition	Mon-Fri, 12.3pm & 6-11pm / Sat, 6-9pm	Small	Yes	Yes	Not significant
McDonald's		2a-12 Farringdon Road, London	Café, restaurant		Permanent acquisition	Daily	Small	Yes	Yes	Not significant

Westsmithfield garden	Cowcross Street	Cowcross Street, London EC1M	Road	Pedestrianisation of the street	Daily	Small	Yes	Yes (Charterhouse Square)	Not significant
	Small city square with benches and trees The level of construction activity and traffic is likely to be very disruptive for the users of the space for approx 4 years								
	Smithfield Tandoori	4 Lindsey Street, EC1A 9HP	Café, restaurant	Permanent acquisition	Mon-Fri	Small			Not significant
	Lindsey Hotel	4 Lindsey Street, EC1A 9HP	Hotel	Permanent acquisition	Daily, around 40 rooms	Medium / High	Yes	No (there are other hotels but much more expensive)	Significant negative impact
	Café Gulsman	33-35 Charterhouse Square	Café, restaurant	Permanent acquisition	Daily	Small	Yes	Yes	Not significant
Charterhouse Bar	Bar Bombay	36-37 Charterhouse Square	Café, restaurant	Permanent acquisition	Daily	Small	Yes	Yes	Not significant
	Charterhouse Bar	38 Charterhouse Square	Bar	Permanent acquisition	Daily	Small	Yes	Yes	Not significant
	1 dwelling	3 Hayne Street, London	Housing	Permanent acquisition					Not significant
<hr/>									
C7, Liverpool Street station									
Western Ticket Hall	Benjys	12 Moorfields London EC2 Y9AA	Café, restaurant	Permanent acquisition	Daily	Small	Yes	Yes	Not significant
	Birley Sandwiches	14 Moorfields London EC2 Y9AA	Café, restaurant	Permanent acquisition	Daily	Small	Yes	Yes	Not significant
	Bodis Plc	17 Moorfields London EC2 Y9AG	Retail	Permanent acquisition	Daily	Small	Yes	Yes	Not significant
	Davy's of London (Wine Merchants)	91-93 Moorgate London EC2 M6SJ	Retail	Permanent acquisition	Daily	Small	Yes	No	Not significant
	The Bishop of Norwich	91-93 Moorgate London EC2 M6SJ	Pub	Permanent acquisition	Daily	Small	Yes	Yes	Not significant
	Oddbins Limited	95 Moorgate London EC2 M6SL	Retail	Permanent acquisition	Daily	Small	Yes	No	Not significant
	Snappy Snaps	105 Moorgate, EC2M 6SL	Retail	Permanent acquisition	Daily	Small	Yes	Yes	Not significant
	Pedestrians	Moorfields & Fore Street	Access	Closure for construction and utilities work	7,656 pedestrians between 7-10am	Small	Yes	Yes	Not significant
	City of London Bowling Club	Finsbury Circus, London EC2M 7AB	Bowling club and club rooms	Loss of bowling green & storage space for approx 4 years and 8 months	50 members + high daily use by non-members open from 4pm on week days and all day at the weekend from 1st week in April to last week in September	Medium (mainly the City and East London)	Yes	No	See Appendix 1
Finsbury Circus worksite	UDP, Policy Rec 4 - "To resist the loss and encourage the provision of recreational and sport facilities" UDP, Policy Rec 5 - "To encourage the inclusion of recreational facilities in developments"								Significant negative impact (but on-going discussions are seeking to mitigate this)

especially where such facilities are to be open to the public[...]"										Impact
Finsbury Circus	Open from 4pm on week days and all day at the week-ends / from 1st week in April to last week in September	Daily and all year round	Small (mainly local residents)	Yes	No	As well as being the largest open space in the City, Finsbury Circus provides an array of facilities: drinking fountain, bandstand with outdoor concerts every summer, a Pavilion with a bar and restaurant, the gardener's Portacabin. See Appendix 1	UDP: Policy Rec 1 - "To resist the loss of existing open space unless, where relocation is appropriate, adequate provision for replacement is made"	Significant negative impact		
						Educational trips to the park are planned to start next year.		Not significant		
								Significant negative impact		
								Significant negative impact		
Pavilion Wine Bar		Daily	Medium	Yes	Yes	Forms part of the pavilion		Not significant		
								Significant negative impact		
								Significant negative impact		
								Significant negative impact		
Residents								Significant negative impact		
								Significant negative impact		
								Significant negative impact		
								Significant negative impact		
Residents								Significant negative impact		
								Significant negative impact		
								Significant negative impact		
								Significant negative impact		
Tiffinbles								Significant negative impact		
								Significant negative impact		
								Significant negative impact		
								Significant negative impact		
Lord Aberconway Public House								Significant negative impact		
								Significant negative impact		
								Significant negative impact		
								Significant negative impact		
Liverpool Street station								Significant negative impact		
								Significant negative impact		
								Significant negative impact		
								Significant negative impact		
Pedestrians								Significant negative impact		
								Significant negative impact		
								Significant negative impact		
								Significant negative impact		

C8, Whitechapel Station

Hanbury Street work Residents								Significant negative impact	
Residents								Significant negative impact	

Residents	Spital Street, Woodseer Street, Transport Buxton Street	More than 100% increase in HGV traffic over 11 mths					Significant negative impact
Residents	Buxton Street, Spital Street, Vallance Road	More than 100% increase in HGV traffic over 11 mths					Significant negative impact
Dwellings	51, 61, 65 Princelet Street	18 re-housed over 3 mths					Significant negative impact
Dwellings	66 Hanbury Street	2 re-housed over 3 mths					Not significant
Pedley Street works/ Grassed area	Fakruddin Street / Vallance Road	Landtake		Yes	Yes		
Dwellings	Weaver House	8 re-housed for 5 mths					Significant negative impact
Dwellings	Weaver House	8 re-housed for 8 mths					
Dwellings	Fakruddin Street	1 re-housed for 13 mths					Not significant
Sainsbury	Cambridge Heath Road, London E1 5SD	Loss of around 50% of the 300 car parking spaces for approx. 4 yrs 6 mths	Mon-Sat 8am-10pm, Sun 11am-5pm	Yes	Yes (Safeway & Iceland)		
Car park	333-335 Whitechapel Road	Loss of 20 car parking spaces for approx. 4 yrs 6 mths	Daily	No	No		Not significant
Sports centre	Dunward Street	Car park for users & staff of the sport & storage facility for approx. 4 yrs 6 mths	Mon-Fri 7am-9pm, Sat-Sun 8am-6pm	Yes	Yes		Not significant
Swanley School	Brady Street, London E1 5DJ	The loss of 33 car parking spaces, reprieved before the works start	High	Medium (catchment of the school)	n/a	see Appendix 1	
		Loss of open amphitheatre and garden area, 750sqm i.e. 34% of total	Medium	n/a	n/a		Significant negative impact
		Loss of playground space, 1,100 sqm i.e. 17% of total	High	n/a	n/a		

	Demolition of caretaker's house. Assuming the school opts for re-provision, the new accommodation will be in place before the old one is demolished so no impact.							Not significant	
•		Depending on scheme chosen, there will either be no permanent loss of playground space or a net gain of around 1,900sqm							Not significant
	Spielfields City Farm	Weaver Street, London	Recreation & education	Noise levels may be disruptive but will not affected the function of the farm	Tuesday-Sunday, 10.30am - 5pm	Small / medium	Yes	No	Not significant
	Residents	Dunward Street, Brady Street, Vallance Road	Transport	More than 100% increase in HGV traffic over 3 months					Significant negative impact
	Residents	Brady Street, Whitechapel Road, Dunward Street	Transport	More than 100% increase in HGV traffic over 7 months					Significant negative impact
	Residents	Brady Street, Dunward Street, Merceron Street	Transport	More than 100% increase in HGV traffic over 7 months					Significant negative impact
Dwellings	57-71, 75 Dunward Street	Housing	10 re-housed for 1 mth						Significant negative impact
Dwellings	1 - 4 Kempton Court, London	Housing	1 re-housed for 2 mths						

Alternative scenarios for Whitechapel station would have the same community impacts

C0a. Mile End conveyor corridor	Mile End Park	Grove Road, London	Green space	Loss of open space for about 26 months	High	Small / medium	Yes	Yes	<p>Mile End Park is designated as Metropolitan Open Land which means it's a "strategically important open space" and that it receives the same presumption against development as green belt land (cf. UDP).</p> <p>Park to Limehouse, only a section of it is accessible to local residents. The work site represents a considerable chunk of that portion of the park.</p>	Significant negative impact. The whole park is large but as it's a very long and narrow park extending from Victoria Park to Limehouse, only a section of it is accessible to local residents. The work site represents a considerable chunk of that portion of the park.
	Entrance to the park	Grove Road, London	Entrance to the park	Closure	Low	Small / medium	Yes	Yes		Not significant
	Footpath	Mile End Park, London	Footpath	Severance	Low / medium	Small / medium	Yes	Yes		Not significant
C9. Stepney Green Shaft	Stepney Green	Redmans Road, London E1	Green space and astro turf	Loss of the astro turf sports ground for approx 4 years 4 months	Daily	Small	No	No	<p>UDP: Env 26 - "Development on land designated as Publicly Accessible Open Space will only be permitted if the development is ancillary to a use already taking place on the PAOS, and there is a demonstrable need for development that cannot reasonably be satisfied elsewhere".</p>	Significant negative impact
	*	*	Footpaths adjacent to sports pitch	Severance for approx. 4 yrs 4 mths		Small	Yes	Yes		Not significant
				Loss of some open space for the vent shafts	Daily	Small	Yes	Yes (rest of the park)		Not significant
	Garden Street	Stepney Green	Access	Severance for approx. 4 yrs 4 mths			Yes	No		Significant negative impact
	*	*	*	Permanent severance			Yes	Yes		Not significant
	Stepping Stones Farm	Stepney High Street, London E1 3DG	City farm	Loss of grazing area at Worcester House	High	Medium	No	No	<p>Noise may be disruptive but will not affect the function of the farm</p>	Significant (it changes the function of the farm to small animals only)
C10. Lower Street Shaft	1 dwelling	Regents Canal	Residential	Re-housed for 15 months						Not significant
C11. Isle of Dogs station	St Peter's barge	West India Dock, Isle of Dogs	Place of worship	Relocation because of closure of North Dock	Daily	Low	Yes	No	Part of St Helen's Church, only Christian place of worship on the Isle of Dogs.	Significant negative impact

[illegible]

River Lea bankside path		Heron Industrial Estate, E15	Footpath	Severance for approx. 4 yrs 3 mths for construction and utilities work	<100 pedestrians per day	Yes	No	Significant negative impact
C13A, Abbey Mills	Green space	Claypole Road, E3	Very small public space	Around 50% of the area will be used as a worksite for utilities work for about 5 months.	Small	Yes	Yes (Abbey Lane)	Not significant

Table 6.2 - Assessment of Cumulative Impacts

Route window	Name of use / receptors	Address	Primary use	DIRECT IMPACTS		NOISE		CONSTRUCTION TRAFFIC		OPERATIONAL TRAFFIC		VISUAL		CUMULATIVE IMPACTS
				Significant residual construction impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	
C1: Royal Oak Portal	4 dwellings	229 Gloucester Terrace	Housing	No impact	No impact	Significant negative impact		Significant negative impact						NO
	Road users	Harrow Road / Great Western Road junction	Transport							No impact				
	Dwellings Dwellings Dwellings Dwellings	Alfred Road Westbourne Park Villas Brunel Housing Estate Gloucester Terrace / Osselt Terrace	Housing Housing Housing Housing								Significant negative impact Significant negative impact Significant negative impact Significant negative impact			
C2: Paddington Station	1 dwelling	1 Craven Road, London	Housing	No impact	No impact									YES
	2 dwellings	3 Craven Road, London	Housing			Significant negative impact								
	1 dwelling	7 Craven Road, London	Housing			Significant negative impact								
	2 dwellings / public house	27 - 34 Spring Street, London	Commercial / Housing			Significant negative impact								
	4 dwellings	13 Spring Street, London	Housing			Significant negative impact								
	6 dwellings	18 Spring Street, London	Housing			Significant negative impact								
	4 dwellings	The Queens Railway Tavern, 16 Chisworth Street (SE)	Commercial / housing			Significant negative impact								
		Sussex Court Pub, 27-34 Spring Street	Commercial / Health			Significant negative impact								
	Patients, doctors, visitors	St Mary's Hospital				Significant negative impact								
	Occupants	Hilton Hotel	Commercial /			Significant negative impact								
	Rail users	Paddington station, Eastbourne Terrace, London	Transport					Significant negative impact (delays to train services)						
		Departure Road entrance to Paddington station	Transport					Significant negative impact (diversion of pedestrian access into the station to Praed Street)						
	Pedestrians							Significant negative impact (loss of the car park)						
	Public car park	Platform 1A	Public car park							Significant negative impact (increased delays)				
	Road users	Eastbourne Terrace, Departures Road & Westbourne Terrace	Transport							Significant beneficial impact (shorter journey times & better interchanges)				
	Paddington station	Eastbourne Terrace, London	Transport											
	Pedestrians Pedestrians Occupants	South Wharf Eastbourne Terrace, London Hilton Hotel / Praed Street	Access Access Commercial									Significant negative impact Significant negative impact Significant negative impact	Significant negative impact (until replacement building is constructed)	
	Residential dwellings Residential dwellings Pedestrians	1-5 Craven Road, London 18 Spring Street, London Praed Street / Craven Street	Housing Housing Access									Significant negative impact Significant negative impact Significant negative impact	Significant negative impact	
	Hyde Park and Park Lane Shells	Hyde Park, north side & training ring	Recreation			Significant negative impact								NO

Route window	DIRECT IMPACTS										VISUAL		CUMULATIVE IMPACTS
	Name of use / receptors	Address	Primary use	Significant residual construction impact	Significant residual permanent impact	Significant residual temporary impact	NOISE	CONSTRUCTION TRAFFIC	OPERATIONAL TRAFFIC	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	
	Road users	Hyde Park, North Carriage Drive	Road traffic	Significant negative impact (HGV traffic)									
	14 dwellings		Housing				Significant negative impact						
	Users	6, 9, 12, 15, 17 Hyde Park Gardens, London					Significant negative impact						
		Hyde Park Stables training ring & north ride	Sport										
	Road users	West Carriage Drive, Hyde Park, London	Transport					Significant negative impact (reduction of road width generating congestion)					
	Users of the northern and eastern part of Hyde Park	Hyde Park, London	Open land					No impact					
	Residential dwelling	Victoria Gate Lodge, Hyde Park, London	Housing									Significant negative impact	
	Residential dwellings	117-127 and 128-138 Park Lane, London	Housing									Significant negative impact	
	Pedestrians	Park Lane & Marble Arch	Access									Significant negative impact	
	Occupants	Grosvenor Hotel	Commercial / residential									Significant negative impact	
	Users	Bank, 84 Park Lane	Commercial									Significant negative impact	
C4, Bond Street Station													
	University of the Arts Residents	65 Davies Street, London	Education	Significant negative impact	Significant negative impact								DAVIES STREET: YES HANOVER SQUARE: YES
	Residents	Davies Street, St Anselm's Place, Brook Street	Road traffic	Significant negative impact (HGV traffic)									
	Residents	Weighhouse Street, Duke Street, Davies Street	Road traffic	Significant negative impact (HGV traffic)									
	10 dwellings		Housing					Significant negative impact (re-housing)					
	5 dwellings	25 - 47 Cwearndish Flats, London	Housing										
		23, 25, 27 St Anselm's Place, London											
	9 dwellings	29 - 35 Hanover Flats, Gilbert Street, London	Housing										
	4 dwellings	48 - 60 Weighhouse Street, London	Housing	Significant negative impact (re-housing)	Significant negative impact (re-housing)								
	3 dwellings	1 - 5 Weighhouse Street, London	Housing										
	1 dwelling	5 Princes Street, London	Housing										
	Ukrainian Cathedral	Weighhouse Street	Place of worship				Significant negative impact						
	Regent Hall Church	Salvation Army Hall	Place of worship				Significant negative impact						
	Users of Hanover Square	Tenberden Street	Open space				Significant negative impact						
	Car users	Hanover Square	Car parking spaces					Significant negative impact for 2 yrs 8 mths, (loss of kerbside parking space)					
	Bus users	Davies Street	Transport									Significant negative impact (closure of Davies Street and bus diversions)	
	Bond Street station	Hanover Square, London	Transport									Shorter journey times & better interchange at the new Crossrail station	

Route window	Name of use / receptors	Address	Primary use	DIRECT IMPACTS		NOISE		CONSTRUCTION TRAFFIC		OPERATIONAL TRAFFIC		VISUAL		CUMULATIVE IMPACTS
				Significant residual construction impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	
C5: Tottenham Court Road Station	Residents	Cavendish Flats at 25-27 Gilbert Street (southern side)	Housing									Significant negative impact	Significant negative impact	FOR YES FISHER STREET: YES
	Residents	23-28 St Anselm's Place, London	Housing									Significant negative impact	Significant negative impact	
	Residents	48-60 Weyhouse Street	Housing									Significant negative impact	Significant negative impact	
	Residents	1-5 Weyhouse Street	Housing									Significant negative impact	Significant negative impact	
	Residents	27-55 Gilbert Street	Housing									Significant negative impact	Significant negative impact	
	Residents	25-28 South Molton Lane	Housing									Significant negative impact	Significant negative impact	
	Residents	52-58, 61 Davies Street	Housing									Significant negative impact	Significant negative impact	
	Pedestrians	Around Davies Street worksite	Access									Significant negative impact	Significant negative impact	
	Pedestrians	St Georges Street	Access									Significant negative impact	Significant negative impact	
	Pedestrians	Davies Mews	Access									Significant negative impact	Significant negative impact	
	Pedestrians	Hanover Square and Tenterden Street	Access									Significant negative impact	Significant negative impact	
	Users of Hanover Square	Hanover Square	Open space									Significant negative impact	Significant negative impact	
	Residents	properties overlooking Hanover Square	Housing									Significant negative impact	Significant negative impact	
	Residents	1-7 Davies Mews	Housing									Significant negative impact	Significant negative impact	
	Residents	7-9 South Molton Lane	Housing									Significant negative impact	Significant negative impact	
	Pedestrians	Haunch of Venison Yard and Davies Mews	Access									Significant negative impact	Significant negative impact	
	Occupants	Running Horse Pub	Commercial									Significant negative impact	Significant negative impact	
	Astoria	Charing Cross Road, London	Nightclub	Significant negative impact	Significant negative impact									
	Mean Fiddler	Charing Cross Road, London	Nightclub	Significant negative impact	Significant negative impact									
	Rouge	Charing Cross Road, London	Nightclub	Significant negative impact	Significant negative impact									
	CentrePoint Snooker Club	CentrePoint, New Oxford Street, London	Recreation	Significant negative impact	Significant negative impact									
	West End Hostel	Diadem Court	Homeless accommodation	Significant negative impact (may be on e-housing)	Significant negative impact (e-housing)									
	10 dwellings	3-4 Diadem Court, 93 Dean Street, 96 Dean Street	Housing	Significant negative impact	Significant negative impact									
	9 dwellings	Southern Row, London	Housing	Significant negative impact	Significant negative impact									
	Central St Martins College of Arts and Design	Galton Street, London	Education	Significant negative impact	Significant negative impact									
	Residents	Fisher Street, London	Road traffic	Significant negative impact (HGV traffic)	Significant negative impact (HGV traffic)									
	Residents	Galton Street, London	Road traffic	Significant negative impact (HGV traffic)	Significant negative impact (HGV traffic)									
	Pedestrians	St Giles Circus / Andrew Bords Street	Access	Significant negative impact	Significant beneficial impact									
	Tottenham Public House	6 Oxford Street	Commercial / residential											
	1 dwelling	52 Andrew Bords Street	Housing											
	Users of St Patrick's Church	Soho Square	Religion											
	Students, teachers, visitors	University of Westminster, Fisher Street	Education											
	Students, teachers, visitors	Central St Martins College, Fisher Street	Education											
	Medical centre	Diadem Court	Health											
	Road users & pedestrians	Sutton Row & Falconberg Court	Transport										Significant negative impact (closure)	

Route window	DIRECT IMPACTS				NOISE		CONSTRUCTION TRAFFIC		OPERATIONAL TRAFFIC		VISUAL	
	Name of use / receptors	Address	Primary use	Significant residual construction impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	CUMULATIVE IMPACTS
	Pedestrians	Oxford Street	Access					Significant negative impact (pavement narrowing for utilities work)				
	Bus users	Oxford Street	Transport					Significant negative impact (loss of stops)				
	Road users & bus users	St Giles Circus	Transport					Significant negative impact (narrowing of lanes & new traffic arrangements)				
	Road users, pedestrians & cyclists	Fareham Street	Transport					Significant negative impact (closure)				
	Road users	Charing Cross Road	Transport					Significant negative impact (narrowing)				
	Road users	Soho Square	Transport					Significant negative impact (loss of street parking)				
	Road users & bus users	Andrew Boole Street	Transport					Significant negative impact (closure of street & traffic diversion)				
	Bus users / underground users	TCR	Transport					Significant negative impact (disruption to interchanges for bus and underground users)				
	Pedestrians	New Oxford Street	Transport					Significant negative impact (loss of southern footway)				
	Road users	New Oxford Street	Transport					Significant negative impact (narrowing)				
	Tottenham Court Road station	Centrepoint Plaza	Transport					Significant beneficial impact - New entrances, better interchanges, improved amenity for pedestrians at CentrePoint Plaza, shorter journey times.				
	Road users	St Giles Circus	Traffic					Significant negative impact (delays at the junction of TCR, New Oxford Street, Charing Cross Road & Oxford Street)				
	Residents	buildings overlooking western worksite i.e. on Darnley Court, Great Chapel Street, Oxford Street, Dean Street	Housing					Significant negative impact			Significant beneficial impact	
	Pedestrians	Oxford Street	Access					Significant negative impact			Significant beneficial impact	
	Pedestrians	Great Chapel Street	Access					Significant negative impact			Significant beneficial impact	
	Pedestrians	Dean Street	Access					Significant negative impact			Significant beneficial impact	
	Pedestrians	Diadem Court	Access					Significant negative impact			Significant beneficial impact	
	Pedestrians	Charing Cross Road	Access					Significant negative impact			Significant beneficial impact	
	Pedestrians	Tottenham Court Road	Access					Significant negative impact			Significant beneficial impact	
	Pedestrians	St Giles High Street	Access					Significant negative impact			Significant beneficial impact	
	Residents and workers	127-133, 128-146 Charing Cross Road, London	Commercial & residential					Significant negative impact			Significant beneficial impact	
	Workers and visitors	Centre Point (lower floors), Tottenham Court Road, London	Leisure					Significant negative impact			Significant beneficial impact	
	Users of Dominion Theatre waiting a 249 Tottenham Court Road, London		Culture					Significant negative impact			Significant beneficial impact	

DIRECT IMPACTS										
Route window	Name of use / receptors	Address	Primary use	DIRECT IMPACTS		NOISE	CONSTRUCTION TRAFFIC	OPERATIONAL TRAFFIC	VISUAL	CUMULATIVE IMPACTS
				Significant residual construction impact	Significant residual permanent impact					
Co. Farringdon Station	Pedestrians	vicinity of the works for eastern ticket hall	Access						Significant negative impact	
	Residents	171 Windour Street	Housing						Significant negative impact	
	Residents	1-2 Wedgwood Mews	Housing						Significant negative impact	
	Residents	1 Greek Street	Housing						Significant negative impact	
	Pedestrians	Procter Street	Access						Significant negative impact	
	Pedestrians	Sheraton Street	Access						Significant negative impact	
	Pedestrians	Colton Street, London	Access						Significant negative impact	Significant beneficial impact
	Pedestrians	Fisher Street	Access						Significant negative impact	Significant beneficial impact
	Users & pedestrians	Soho Square	Open space						Significant negative impact	
	University of Westminster	Fisher Street	Education						Significant negative impact	
	St Martin's College of Art and Design	Colton Street, London	Education						Significant negative impact	Significant beneficial impact
	Linsey Street Hotel	Linsey Street, London	Low cost hotel		Significant negative impact					EASTERN TICKET HALL: YES
	Pedestrians	Cowcross Street, London	Access		Significant beneficial impact					WESTERN TICKET HALL: NO
	2 dwellings	34-35 Cowcross Street	Housing			Significant negative impact				
	2 dwellings	105 Charterhouse Street	Housing			Significant negative impact				
	2 dwellings	121-123 Charterhouse Street	Housing			Significant negative impact				
	1 dwelling	Florin Ct	Housing			Significant negative impact				
	12 dwellings	41 Charterhouse Square	Housing			Significant negative impact				
	Pupils & teachers	Charterhouse School	Education			Significant negative impact				
	Patients & doctors	Surgery, 62-66 Long Lane	Health			Significant negative impact				
Car parks	Farringdon area	underground car parks				Significant negative impact (loss of car parking space)				
Road users, pedestrians	Aldergate Street, London	Transport				Significant negative impact (worksite impacts on pedestrians and traffic delays)				
Road users	Aldergate Street / Beech Lane, London	Transport				Significant negative impact (traffic delays due to utilities work)				
Farringdon station	Cowcross Street	Transport				Significant beneficial impact (shorter journey times + better interchanges)				
Residents	Gastle Pub, 34-35 Cowcross Street	Commercial / residential							Significant beneficial impact	
Pedestrians	Cowcross Street	Access							Significant negative impact	
Pedestrians	Farringdon Road	Access							Significant negative impact	
Residents	above Ye Olde Red Cow pub	Housing							Significant negative impact	
Residents	Florin Court, 6-9 & 10-11 Charterhouse Square	Housing							Significant negative impact	
Residents	above Fox and Knot pub	Housing							Significant negative impact	
Pedestrians	Linsey Street	Access							Significant negative impact	
Pedestrians	Fox and Knot Street	Access							Significant negative impact	
Pedestrians	Charterhouse Square & Charterhouse Street	Access							Significant negative impact	
Pedestrians	Hayne Street	Access							Significant negative impact	
Users	Gardens in Charterhouse Square	Open space							Significant negative impact	
Residents	Seddon House & Thomas More House, Barbican	Housing							Significant negative impact	
Pedestrians	Beech Street	Access							Significant negative impact	

Route window	Name of use / receptors	Address	Primary use	DIRECT IMPACTS			NOISE		CONSTRUCTION TRAFFIC		OPERATIONAL TRAFFIC		VISUAL		CUMULATIVE IMPACTS
				Significant residual construction impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	
	Residents	Brady Street, Whitechapel Road, Dunward Street	Road traffic	Significant negative impact (HGV traffic)											
	Residents	Brady Street, Dunward Street, Marsson Street	Road traffic	Significant negative impact (HGV traffic)											
	18 dwellings 2 dwellings	51, 61, 65 Princoled Street 66 Hanbury Street	Housing	Significant negative impact (re-housing)	Significant negative impact (re-housing)										
	1 dwelling 10 dwellings	1-4 Kempton Court 57, 71, 75 Dunward Street	Housing	Significant negative impact (re-housing)											
	16 dwellings 1 dwelling	Weaver House Fakrudin Street	Housing	Significant negative impact (re-housing)	Significant negative impact (re-housing)										
	2 dwellings 4 dwellings 3 dwellings 10 dwellings 3 dwellings 1 dwellings 7 dwellings	48 Princoled Street 41 Princoled Street 65 Princoled Street Boden House, Hanbury Street 105 Hanbury Street 111a Hanbury Street 1-15 Volasky House	Housing				Significant negative impact Significant negative impact Significant negative impact Significant negative impact Significant negative impact Significant negative impact Significant negative impact								
	Swanley School Young People Centre Alton Health Centre	Brady Street 2-12 Cambridge Heath Road 333 Whitechapel Road	Education				Significant negative impact								
	Sainsbury's	Whitechapel Road, London	Retail				Significant negative impact (loss of car parking)								
	Residents	331-335 Whitechapel Road	Housing				Significant negative impact (loss of car parking)								
	Road users	Brady Street, London	Transport				Significant negative impact (traffic congestion)								
	Road users	Dunward Street, London	Transport				Significant negative impact (traffic congestion)								
	Whitechapel Station	Whitechapel Road	Transport					Significant beneficial impact (shorter journey time)							
	Residents	50 to 62 (even) Princoled Street, London	Housing						Significant negative impact				Significant negative impact		
	Residents	1 to 15 Boden House, Hanbury Street,	Housing						Significant negative impact				Significant negative impact		
	Residents	1 to 15 Volasky House, Daglyn Street,	Housing						Significant negative impact				Significant negative impact		
	Residents	Flats on eastern side of 5-10 Dunward Street, London	Housing						Significant negative impact				Significant negative impact		
	Users	1-12 Cambridge Heath Road, London							Significant negative impact				Significant negative impact		
	Residents	1-4 and 4 Dunward Street, London							Significant negative impact				Significant negative impact		
	Residents	1-7 Gentry Road, London							Significant negative impact				Significant negative impact		
	Residents	Housing on eastern side of Traham Close,							Significant negative impact				Significant negative impact		
	Pedestrians	Hanbury Street, London	Access						Significant negative impact				Significant negative impact		
	Pedestrians	Princoled Street, London	Access						Significant negative impact				Significant negative impact		
	Pedestrians	Spelman Street, London	Access						Significant negative impact				Significant negative impact		
	Pedestrians	Spital Street	Access						Significant negative impact				Significant negative impact		
	Pedestrians	Dunward Street, London	Access						Significant negative impact				Significant negative impact		
	Residents	properties on Hanbury Street between Greatbow Street and Hanbury Street	Housing						Significant negative impact				Significant negative impact		
	Residents	Greatbow House & along Greatbow Street between Old Montague Street and Hanbury Street	Housing						Significant negative impact				Significant negative impact		
	Residents	McClashon House & in properties on Spital Street between Woodsear Street and Buxton Street	Housing						Significant negative impact				Significant negative impact		
	Residents	Buxton Street between Spital Street and Brick Lane	Housing						Significant negative impact				Significant negative impact		

DIRECT IMPACTS																					
NOISE				CONSTRUCTION TRAFFIC		OPERATIONAL TRAFFIC		VISUAL		CUMULATIVE IMPACTS											
Route window	Name of user / receptors	Address	Primary use	Significant residual construction impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact
C1a: Mile End Conveyor Corridor	Residents	New housing development overlooking Castleman Street, Canary Road and Trobryn Road	Housing																		
	Residents	235-263, 243 Whitechapel Road east of Vallance Gardens	Housing																		
	Staff and pupils at Swanlea School	Brady Street, London	Education																		
	Pedestrians	Whitthrop Street	Access																		
	Pedestrians	Court Street & Court Street footbridge	Access																		
	Users	Whitechapel Station	Transport																		
	Residents	1-8 Devonshire Court, Bancroft Road, London	Housing																		
	Residents	West-facing flats at Northesk House, Scott Street, London	Housing																		
	Residents	12-17 Suma Close, London	Housing																		
	Visitors	Avery Centre Library	Education																		
	Visitors	337 Whitechapel Road	Commercial																		
Residents	21-32 Falkrudin Street, London	Housing																			
Residents	1-16 Weaver House, Peckley Street, London	Housing																			
C1a: Mile End Conveyor Corridor	Users of Mile End Park	Mile End Park	Open space & recreation	Significant negative impact																YES	
C1b: Mile End Conveyer Corridor	29 dwellings	Brancaster House	Housing																		
	16 dwellings	Longer Road	Housing																		
	Residents	University Accommodation	Housing																		
	Patients, visitors & doctors	London hospital at Mile End	Housing																		
	Residents	Flats adjacent to the Regent's Canal and south of Mile End Sand Silos	Housing																		
	Residents	1-17 Haverfield Road, London	Housing																		
	Residents	101 and 105 Grove Road, London	Housing																		
	Residents	Newport House and Vissall House, Grove Road (opposite the eastern edge of Mile End Park), London	Housing																		
	Users of the park & outdoor area of climbing centre	Mile End Park	Open space																		
	Residents	Grove Road, Condon Road & University Accommodation south of the site	Housing																		
	C1b: Mile End Conveyer Corridor	Users of Mile End Park	Mile End Park	Open space	Significant negative impact																YES
C1c: Mile End Conveyer Corridor	Signet Green Ashford Shells	Signet Green, London	Open space, sport	Significant negative impact																	
	Pedestrians	Gordon Street, London	Access	Significant negative impact																	
	Slipping Stones Farm	Slippery High Street, London	City farm	Significant negative impact																	
	1 dwelling	The Banglow, Slippery Green Way	Housing																		
	10 dwellings	Community Housing	Housing																		
	2 dwellings	67-68 Slippery Green Way	Housing																		
C1d: Mile End Conveyer Corridor	Pedestrians	Gordon Street	Access																		
	Residents	Temple Court (the former Joseph Stern Hall East London Synagogue), London	Housing																		
C1e: Mile End Conveyer Corridor	Residents	Temple Court (the former Joseph Stern Hall East London Synagogue), London	Housing																		
	Residents	Temple Court (the former Joseph Stern Hall East London Synagogue), London	Housing																		

Route window	Name of use / receptors	Address	Primary use	DIRECT IMPACTS			NOISE		CONSTRUCTION TRAFFIC		OPERATIONAL TRAFFIC		VISUAL		CUMULATIVE IMPACTS
				Significant residual construction impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual temporary impact	Significant residual permanent impact (re-housing)	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	
C12 Mile End and Eleanor Street Shells	Residents	23-72 Boardwalk Place, east of Trafalgar Way, Isle of Dogs, London	Housing										Significant negative impact	Significant negative impact	
	Residents	332-417 Boardwalk Place, east of Trafalgar Way, Isle of Dogs, London	Housing										Significant negative impact	Significant negative impact	
	Passengers Residents	DLR at West India Quay station Port East Apartments	Transport Housing										Significant negative impact Significant negative impact	Significant negative impact Significant negative impact	
	Dwellings	Calverton Park, Eleanor Street	Housing	Significant negative impact	Significant negative impact										
	Users	Mile End Park - football pitch	Sports	Significant negative impact				Significant negative impact (re-housing)							
	1 dwelling	156-182 Wagner Street	Housing						No impact	No impact					
	Residents	156-182 Wagner Street (West of Mile End site), London	Housing												
	Recreational users of Mile End Park and its sports facilities.	Mile End Park	Recreation & open space										Significant negative impact	Significant negative impact	
	Residents	New development on Campbell Road	Housing										Significant negative impact	Significant negative impact	
	Pedestrians	Eleanor Street	Access										Significant negative impact	Significant negative impact	
C13 Pudding Mill Pond	Pedestrians	City Mills River footpath	Access	Significant negative impact											NO
	Pedestrians	River Lea footpath	Access	Significant negative impact			No impact	No impact							
	Road users	A12 Blackwall Tunnel Northern Approach	Transport						Significant negative impact (closure of one southbound slip road and inside lane of main carriageway)						
	Residents	2-34 Brynmay Close, London	Housing										Significant negative impact	Significant negative impact	
	Residents	1-25 Baldock Street, London	Housing										Significant negative impact	Significant negative impact	
	Residents	27-69 Baldock Street, London	Housing										Significant negative impact	Significant negative impact	
	Residents	Wrenham Road	Housing										Significant negative impact	Significant negative impact	
	Residents	Other Close	Housing										Significant negative impact	Significant negative impact	
	Residents	western side of Northern Approach Road	Housing										Significant negative impact	Significant negative impact	
	Residents	417 Old Ford Road	Housing										Significant negative impact	Significant negative impact	
C13a, Abbey Mills	Residents	Arboda House	Housing										Significant negative impact	Significant negative impact	
	Residents	417 Wick Lane	Housing										Significant negative impact	Significant negative impact	
C13a, Abbey Mills	Pedestrians	Footpaths through the area, including towpaths along River Lea, Bow Back River the Green Way	Access												
				No impact	No impact		No impact		No impact						NO

Table 7.1 Assessment of Significant Community Impacts for the North East (Stratford to Shenfield)

Route window	Name of use	Address	Primary use	Temp impact	Permanent impact	Level of use	Catchment	Availability of alternative facility	Within reasonable distance	Conflict with policy	Residual significant impact
NE1: Stratford Station				No impact	No impact						
NE2: Forest Gate Station				No impact	No impact						
NE3: Manor Park Station				No impact	No impact						
NE4: Ilford Station	Ilford station	Cranbrook Road, London	Transport	Public access to station moved from existing ticket hall to temporary ticket hall near York Mews during construction (16 weeks)							Not significant
	Tops Tobacconists	27 Cranbrook Road, Ilford	Retail		Permanent acquisition						Not significant
	Karl Fashion Accessories	29 Cranbrook Road, Ilford	Retail		Permanent acquisition						Not significant
	Dwelling	York place, London	Housing		Permanent acquisition of the garage						Not significant
	Dwellings	21 - 33 (odd) York Road	Housing		6 re-housed for 7 mths						Significant negative impact
	Dwellings	33a York Mews	Housing		4 re-housed for 7 mths						
	Dwellings	45a York Mews	Housing		2 re-housed for 7 mths						
	Dwellings	45a York Mews	Housing		2 re-housed for 9 mths						
	Dwellings	51b York Mews	Housing		4 re-housed for 9 mths						
NE5: Seven Kings Station	Canon Palmer School	Aldborough Road, Seven Kings IG3 8EU	High school	Loss of some grassed area for a few weeks		Daily	Medium / high	Yes	Yes (rest of the playground space)		Not significant
	"			Access through the school to the construction site access to school will be maintained at all times.		Daily					Not significant

NE6: Goodmayes Station

No impact

No impact

NE7: Chadwell Heath Station

No impact

No impact

NE8: Romford Depot (West)	West Ham FC training grounds	Saville Road, Romford	Relocation of gymnasium + all-weather sports pitch (re-inslayment or compensation after construction)	High		Yes	No	Significant negative impact (although subject to on-going discussions with the club which could mitigate this impact)
Westland Playing Fields	Sports & recreation	loss of 8 sport pitches and training grid for approx 3 years for construction and utilities work	Daily (by schools and the local community)	Small/medium	Yes	Yes (Crowlands sports ground + Ford sports ground + other pitches)	Yes (Crowlands sports ground + Ford sports ground + other pitches)	Significant negative impact
Westlands Rough	Access	Severance for several months, possibly a year	Small loss of open space (for dive-under)	Medium	Yes	Yes (rest of park)	Yes (rest of park)	No significant impact
Pedestrians	Access	Severance for several months, possibly a year	Small loss of open space (for dive-under)	Medium	Yes	Yes (rest of park)	Yes (rest of park)	Significant negative impact

UDP Policy LAR5 - "The council will seek the retention of existing parks, playing fields and open spaces in both public and private ownerships"

NE9: Romford Station & Depot (East)	Jutsum Lane recreational area	Jutsum Lane, Romford	Recreation & open space	Small loss of open space for utilities work for around 12 months	Small	Yes (rest of the park)	Yes (rest of the park)	Not significant
Footpath 122	Footpath	Justum Recreation Grounds	Footpath	Severance during the utilities work i.e around 12 months	Small	Yes	Yes (if an alternative path is provided)	Not significant
Footpath 123	Pedestrian and cycle path	South of the tracks, from Nursery Walk, Romford	Pedestrian and cycle path	Closure + diversion of pedestrian flow along existing roads	Small	Yes (diversion)	Yes	Not significant
Jutsum Lane Bridge	Transport	Jutsum Lane, Romford	Transport	new bridge built off line so short closures whilst installed				Not significant

Nursery Walk	Nursery Walk, Romford	Pedestrian and cycle path linking north & south of the railtracks	Pedestrian access maintained so no impact	349 pedestrians over 12 hours	Small	Yes	Yes	Not significant
St Francis Hospice Shops	110 South Street, Romford	Charity shop		Daily	Small	Yes	Yes	Not significant
	112-116 South Street, Romford	Retail		Daily	Small	Yes	Yes	Not significant
Dwellings	95 South Street	Housing		2 re-housed for 20 mths				Not significant
Dwellings	139 South Street	Housing		1 re-housed for 12 mths				
NE10: Gidea Park Station	97 Crossways - Rear	Housing	1 re-housed for 2 mths					Not significant
Dwellings	Fengrol Crossways - Rear	Housing	2 re-housed for 2 mths					
Dwellings	2, 4 Station Square	Housing	2 re-housed for 2 mths					
Dwellings	13 Station Road	Housing	1 re-housed for 2 mths					
NE11: Gidea Park Stabling Sidings			No impact	No impact				
NE12: Harold Wood Station			No impact	No impact				
NE13: LB Havering/ Brentwood			No impact	No impact				
NE14: Brook Street			No impact	No impact				
NE15: Brentwood Station			No impact	No impact				
NE16: Thrit Wood			No impact	No impact				
NE17: Shenfield Station	Residents	Transport	Hunter Avenue, Crossways, Alexander Lane	More than 100% increase in HGV traffic for over 2 years				Significant negative impact

Residents	Crossways: Hunter Avenue, Hutton Road	Transport	More than 100% increase in HGV traffic for over 2 years	Significant negative impact
Dwellings	75 Hunter Avenue	Housing	3 re-housed for 2 mths	Not significant
Dwellings	101 Hunter Avenue	Housing	4 re-housed for 2 mths	
Dwellings	Burnside	Housing	2 re-housed for 2 mths	
Dwellings	81 Hunter Avenue	Housing	4 re-housed for 4 mths	Significant negative impact
Dwellings	87 Hunter Avenue	Housing	4 re-housed for 4 mths	
Dwellings	95 Hunter Avenue	Housing	4 re-housed for 4 mths	
Dwellings	Washbrook	Housing	2 re-housed for 4 mths	
Dwellings	Hill Croft	Housing	2 re-housed for 4 mths	
Dwellings	8, 12 Alexander Lane	Housing	4 re-housed for 7 mths	
Dwellings	14, 16, 18, 20, 22, 24 Herington Grove	Housing	6 re-housed for 3 mths	

R1, Plisea

Public footpath

north of the tracks

Access

Diversion along the worksite so no impact.

Route window	Name of user / receptors	Address	Primary use	DIRECT IMPACTS			NOISE		CONSTRUCTION TRAFFIC		OPERATIONAL TRAFFIC		VISUAL		CUMULATIVE IMPACTS
				Significant residual construction impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	
NE5: Seven Kings Station	Carmel College		Education				Significant negative impact								
	Patients and doctors	9-17 Cranbrook Road	Health				Significant negative impact								
	Patients and doctors	Surgery, 27 York Road	Health				Significant negative impact								
	Users	Surgery, 55 York Road	Sport				Significant negative impact								
	Users	Golf Course	Leisure				Significant negative impact								
	Pedestrians	Allotments													
		Station	Transport												
	Trains passengers	Ilford station	Transport						Significant negative impact (diversion for pedestrians)		Significant beneficial impact - shorter journey time				
	Residents	1-23 York Road	Housing												
	Residents	York Mews	Housing												
NE6: Goodmayes Station	Residents	York Place	Housing												
	Shoppers	Exchange Court Shopping Centre & Cranbrook Road	Retail												
	Staff and pupils at Canon Palmer Catholic School	Cameron Road, Seven Kings, Ilford	Education	No impact	No impact		Significant negative impact								NO
	Train passengers	Seven Kings station	Transport								Significant beneficial impacts - shorter journey times				
	Residents	adjacent flats	car park	No impact	No impact	No impact	No impact		adverse impacts (loss of parking from adjacent flats)						NO
	Train users	Goodmayes station	Transport												
	Residents	Approx. 50 dwellings at 157-195, 197-219, 269-307 Express Drive	Housing								Significant beneficial impact - shorter journey time			Significant negative impact	
NE7: Chadwell Heath Station	5 dwellings	42 Overton Drive	Housing	No impact	No impact		Significant negative impact								NO

Route window	Name of user / receptors	Address	Primary use	DIRECT IMPACTS			NOISE		CONSTRUCTION TRAFFIC		OPERATIONAL TRAFFIC		VISUAL		CUMULATIVE IMPACTS
				Significant residual construction impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	
	9 dwellings	459, 460, 462, 472-474 Upper Brentwood Road	Housing				Significant negative impact		No impact						
	12 dwellings	11-34 Coopers Court	Housing				Significant negative impact								
	31 dwellings	1-58, 59-90 Tallis Court East	Housing				Significant negative impact								
	26 dwellings	2a, 14, 26, 38, 50 Cambridge Avenue	Housing				Significant negative impact								
	49 dwellings	59a, 62, 74, 75, 88, 100, 110, 120, 126-132, 134-138 Amery Gardens	Housing				Significant negative impact		No impact						
	3 dwellings	Interwood House	Housing				Significant negative impact								
	12 dwellings	64, 95 Starford Avenue	Housing				Significant negative impact								
	2 dwellings	32 Ashlyn Grove	Housing				Significant negative impact								
	2 dwellings	16 Ardleigh Close	Housing				Significant negative impact								
	Pedestrians Residents	Upper Brentwood Road 2a-50 Cambridge Avenue and Evelyn Sharp House, London	Access Housing						No impact				Significant negative impact Significant negative impact		
NE12:Harold Wood Station	Residents	460-482 Upper Brentwood Road	Housing										Significant negative impact		
	Residents	144-148 Southend Arterial Road	Housing										Significant negative impact		
	Residents	Tallis Court and Coopers Court, Kidman Close	Housing										Significant negative impact		
	Residents	The Railway Factory, Elvel Avenue	Housing										Significant negative impact		
				No impact	No impact										NO
	6 dwellings	29 Fitzilian Avenue - Rear	Housing				Significant negative impact								
	3 dwellings	28 Fitzilian Avenue	Housing				Significant negative impact								
	Traffic	Station car park	Transport						Significant negative impact (loss of car parking)						
	Tran passengers	Harold Wood station	Transport						Significant beneficial impact (shorter journey times)				No impact		
NE13:LB Havering/Brentwood				No impact	No impact		No impact	No impact	No impact				No impact		NO
NE14:Brook Street				No impact	No impact		No impact	No impact	No impact				No impact		NO
NE15: Brentwood Station				No impact	No impact		No impact	No impact	No impact				No impact		NO

Route window	Name of user / receptors	Address	Primary use	DIRECT IMPACTS			NOISE		CONSTRUCTION TRAFFIC		OPERATIONAL TRAFFIC		VISUAL		CUMULATIVE IMPACTS
				Significant residual construction impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	
R1, Plisea	Users of the library	Hilton Road	Education				Significant negative impact								
	Pupils & teachers	School Mount Avenue	Education				Significant negative impact								
	Patients & doctors	Surgery	Health				Significant negative impact								
	Traffic	Long stay car park on Hunters Avenue	Transport						Significant negative impact (loss of car parking)						
	Traffic	Short stay car park on Friar's Avenue	Transport						Significant negative impact (loss of car parking)						
	Train passengers	Sherfield station	Transport							Significant beneficial impact (shorter journey times)					
	Residents	1a-25 Friar's Avenue	Housing												
	Residents	71-105 Hulton Road	Housing												
	Residents	14-44 (even), 69, 41-43 Hunter Avenue, Sherfield	Housing												
	Users of the station car park	Sherfield station	Transport												
	Pedestrians	Hunter Avenue	Access												
R1, Plisea	Residents	4 dwellings	Housing	No impact	No impact		Significant negative impact								NO
	Workers and visitors	Horse Sanctuary, Plisea Hall Lane					Significant negative impact								
	Users	Plisea Hall and associated play area	Recreation				Significant negative impact								
	Pedestrians	footpath to north of the site	Access											Significant negative impact	

Table 8.1 Assessment of Significant Community Impacts for the South East (Isle of Dogs to Abbey Wood)

SE4: North Woolwich Portal, Thames Tunnel	Public footbridge	West of Silverdown station	Access	Potential short closure but aiming at maintaining access						Not significant
	Tate & Lyle footbridge	Factory Road, London	Access		Demolition	Low	Small	Yes	Yes	Not significant
	North Woolwich Railway Museum	North Woolwich station, Pier Road, London	Culture	The museum will not be affected						
	Royal Arsenal Gardens	Warren Lane, Greenwich, London	Open space	Landtake of the skateboard area to be used as a work site for approx. 4 years	No impact as the skateboard area would be re-instated	Medium / high	Small	No	No (St Mary's Gardens don't have a playground)	Significant negative impact
	Footbridge	Fennhill Street, North Woolwich, London	Access	Pedestrian access maintained during the works	Bridge replaced by footpath					Not significant
		Warren Lane / Woolwich High Road traffic Street		More than 100% increase in HGV traffic over 11 months						Significant negative impact
SE5: Arsenal Way Shaft				No impact	No impact					
SE6: Plumstead Portal	White Hart Road	White Hart Road	Access	Closure of road meaning severance of pedestrian access and diversion >0.5km for up to 1 yr						Significant negative impact
SE6A: Manor Wharf	public footpath	Along the Thames	Access	likely closure of footpath for approx a week						Significant negative impact
SE7: Church Manonway Bridge	Church Manonway Bridge	Church Manonway, London	Footbridge	1 week closure	New footbridge with MIP access	Daily (serves Abbey Wood School and the sports ground)	Small	Yes	No	Significant negative impact
	Eynsham Drive Bridge	Eynsham Drive Bridge	Road bridge	No impact	No impact					
	Bosill Manonway Bridge	Bosill Manonway, London	Pedestrian access	No closure	New footbridge with MIP access	50 pedestrians between 7-10am	Small	Yes	No	Not significant
	Open land	Church Manonway, London	Open space	Loss of small area of trees and shrubs	Loss of small area		Medium	Yes	Yes (Plumstead Gardens + rest of the private open space areas defined as Community Open Space [...]) will be safeguarded from built development".	Not significant

Open space	South of the tracks, Bracondale Road, London	Community Open space	Loss of some open space	Small	Yes	Yes	Not significant
Car park	South of the tracks, Bracondale Road, London	Car park	Part of the car park used for utilities work for around 2 months. The car park will remain open however.				Not significant
Dwelling	53 Bracondale Road, London	Housing	Small part of rear garden needed for utilities work				Not significant

Residential dwellings	71-125 Abbey Grove	Housing	Loss of small part of the back gardens	Not significant.
Road	Motistons Road, London	Road and pedestrian access	There may be some short severance period as the worksite is at this location. Pedestrian access can easily be diverted.	Not significant
Footpath	North of Eynsham Drive between Church Manonway and Eynsham Drive		access restricted but not severed so no impact	
SE8: Abbey Wood Station	Jamokie Centre	Day nursery	Loss of very small part of the back garden	Not significant
Dwelling	27 Florence Road, London	Housing	Permanent acquisition	Not significant
Dwellings	19 Abbey Terrace, London	Housing	Permanent acquisition	
Dwellings	42-56 and 200-210 Rushdene, London	Housing	Loss of very small part of the back gardens	Not significant. (Assuming the landtake drawings include the safety area - will be checked)
Dwellings	Priory Place, Abbey Wood, London	Housing	Loss of very small part of the back gardens	Not significant. (Assuming the landtake drawings include the safety area - will be checked)
Dwellings	53-59 Abbey Grove, London	Housing	Loss of very small part of the back gardens	Not significant. (Assuming the landtake drawings include the safety area - will be checked)
Dwellings	1-45 Abbey Grove, London	Housing	Landtake of land behind gardens	Not significant.
Dwellings	19 Abbey Terrace	Housing	Demolition	Not significant
Dwellings	Barratt development, Felkstone Road, London	Housing	Potential re-housing of a few dwellings	

Green Chain footbridge	Abbey Way (Alsike Road), London	Access	No impact	No impact	Significant negative impact
Dwellings	18 Abbey Terrace	Housing		1 re-housed for 5 mths	
Dwellings	28 Wilton Road	Housing		1 re-housed for 5 mths	
Dwellings	52 Hermitage Close Hermitage Close	Housing Housing		16 re-housed for 5 mths 16 re-housed for 72 mths	

Route / window	Name of user / receptors	Address	Primary use warehouse, offices, housing	DIRECT IMPACTS		NOISE		CONSTRUCTION TRAFFIC		OPERATIONAL TRAFFIC		VISUAL	
				Significant residual construction impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact
SE1, Connaught Tunnel	Residents, workers, visitors	Warehouse K, Custom House, London		No impact	No impact	No impact	No impact	No impact	No impact	No impact	No impact	Significant negative impact	
	Pedestrians	Excel Walkway between DLR Custom House station and Excel centre including on temporary / footbridge	Access									Significant negative impact	
	Pedestrians	Victoria Dock Road and adjoining streets	Access									Significant negative impact	
	Pedestrians	Seagull Lane / Sandstone Lane and adjoining roads and public areas	Access									Significant negative impact	
	Occupants	Proposed new hotel adjacent to north portal	Commercial / residential										
	Pedestrians	Victoria Dock Road	Access									Significant negative impact	Significant negative impact
	Pedestrians	Jake Russell Walk and nearby open spaces/paths	Access									Significant negative impact	Significant negative impact
	Pedestrians	footway/public open space under Connaught bridge	Recreation / access									Significant negative impact	Significant negative impact
	Pedestrians and travellers	Connaught Road and Albert Road and adjoining residential streets	Access									Significant negative impact	Significant negative impact
	Residents	Approx. 28 properties at 1-28 Royal Connaught Apartments, Connaught Road	Housing									Significant negative impact	Significant negative impact
SE4 North Woolwich Portal & Thames Tunnel	Residents	Approx. 9 properties at Lily Nicholls House, 1-9 Connaught Road, London	Housing									Significant negative impact	Significant negative impact
	Residents, workers and visitors	1-8 Albert Road (parade of shops/offices), London	Housing									Significant negative impact	Significant negative impact
	Residents, workers and visitors	Curly Tavern, Albert Road	Commercial / residential									Significant negative impact	Significant negative impact
	Pedestrians	Footbridge west of Silvertown Station	Access									Significant negative impact	Significant negative impact
	Users of bus stop	Prince Regent's DLR Bus stop	Transport									Significant negative impact	Significant negative impact
	Skateboarders	Royal Arsenal Gardens, skateboarding ramp	Recreation	Significant negative impact									NORTH WOOLWICH: YES
		Warren Lane / Woolwich High Street	Road traffic	Significant negative impact (HGV)									WARREN LANE: NO
	4 dwellings	2 Canal Road	Housing										
	Mark's Church		Place of worship										
	St John's Church Centre	Albert Road	Community										
SE18, Woolwich Tunnel	St John's Church	Albert Road	Place of worship										
	Pedestrians	Warren Lane, Woolwich	Access							No impact		Significant negative impact	

Route window	Name of user / receptors	Address	Primary use	DIRECT IMPACTS		NOISE		CONSTRUCTION TRAFFIC		OPERATIONAL TRAFFIC		VISUAL	
				Significant residual construction impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact	Significant residual temporary impact	Significant residual permanent impact
SE 5 Arsenal Way Shaft	Pedestrians and cyclists	Riverside path, Woolwich	Access	No impact	No impact	No impact	No impact					Significant negative impact	
	Pedestrians	Royal Arsenal Gardens, Woolwich	Access									Significant negative impact	
	Residents	Approx. 14 properties at 74-98 (evens) Sheldrake Close, London	Housing									Significant negative impact	
	Residents	1-2-20 (evens) Winfield Street	Housing									Significant negative impact	
	Residents, workers, visitors	Henley Arms Public House, Albert Road, London	Pub									Significant negative impact	
	Workers & visitors	St John's Community Centre, Albert Road, London	Community centre									Significant negative impact	
	Workers & visitors	St John's Church, Albert Road	Place of worship									Significant negative impact	
	Pedestrians	Albert Road and adjoining residential streets	Access									Significant negative impact	
	Park users	between Manorwood Street / Albert Road, London	Open space									Significant negative impact	
	Pedestrians	Factory Road and adjoining local roads	Access									Significant negative impact	
SE 6 Plumstead Portal	Visitors	Railway Museum	Culture									Significant negative impact	
	Road users	Royal Arsenal	Transport	No impact	No impact	No impact	No impact	Significant negative impact (loss of car parking spaces)					NO
	Pedestrians	Plumstead Road / Berdord Street	Access									Significant negative impact	
	Pedestrians	White Hart Road		Significant negative impact (closure + long diversion)	No impact	No impact	No impact	Significant negative impact (disruption to passenger services)					NO
	Passengers	Plumstead - Abbey Wood	transport					No impact					
	Residents	3-9 (odds) Plumstead High Street	Housing									Significant negative impact	
	Residents	11-15 Plumstead High Street	Housing									Significant negative impact	
	Residents	1-63 and 15-70 Gavin House, Plumstead High Street, Woolwich	Housing									Significant negative impact	
	Residents	1-12 Richard Neve House, Redhaven Road, Woolwich	Housing									Significant negative impact	
	Residents	51-123 (odd) Redhaven Road, Woolwich	Housing									Significant negative impact	
SE 6 Plumstead Portal	Residents	16-28 (even) Heverham Road, Woolwich	Housing									Significant negative impact	
	Residents	37-44 White Hart Road	Housing									Significant negative impact	
	Residents	45-50 White Hart Road	Housing									Significant negative impact	
	Residents	87-95, 107-115, 104, 127-133 Barth Road, Woolwich	Housing									Significant negative impact	
	Residents	49-153 (odds) Marmadon Road	Housing									Significant negative impact	
	Residents	155-171 (odds) Marmadon Road	Housing									Significant negative impact	
	Pedestrians	White Hart Road	Access									Significant negative impact	
	Pedestrians	Nathan Way	Access									Significant negative impact	
	Pedestrians	The Ridgeway, Woolwich	Access									Significant negative impact	
	Players and spectators	Church Manorway Sports Ground, Woolwich	Recreation & open space									Significant negative impact	

A1

Appendix 1: Community Issues





Appendix 1: Information on Selected Community Facilities

1. Hyde Park Riding School (Route Window C3)

Context

Three stables use Hyde Park daily and all year round as part of their operation. Two stables are located in Bathurst Mews and one stable in Holland Park. The Paddock on the edge of the construction site is used continuously. The stables are used by people from all backgrounds, both tourists and regular riders. They also offer free riding lessons to the pupils of some local state schools.

Issues

Closure of Victoria Gate during the Crossrail works would mean that the stables would have to enter the park at Clarendon Gate. There are about 300 horse movements (150 in, 150 out) through Victoria Gate per day and the school is concerned about the safety of crossing the road at this point as they feel the traffic is faster.

There is currently no horse crossing facility at Victoria Gate despite requests from the school over the past few years.

There are also concerns over safety of riders in the paddock, any sudden noises or movement of construction machinery and cranes is likely to frighten the horses.

2. London College of Fashion (Route Window C4)

Context

The building at 65 Davies Street is used by the headquarters of the University of the Arts and includes facilities for the London College of Fashion. The building contains teaching rooms, student services, and offices.

The London College of Fashion also has two large photographic studios and one digital studio equipped with a high resolution scanner, computer and printer, a gallery and a number of lecture rooms. The gallery is open to the public and shows work of former alumni as well as other artists. The college also runs evening classes and is open weekdays until 10pm and on Saturdays.

Issues

The University of Arts agreed to a short lease for 65 Davies Street in the awareness of Crossrail proposals. This means that as part of a consolidation programme of its various colleges, the University is already reviewing alternative locations.

3. Central St Martin's College of Art and Design (Route Window C5)

Context

The building at 2-6 Catton Street is a satellite of Central St Martins College of Arts and Design. There are 45 members of staff based in this building. The College has some teaching rooms. It also houses the Student Union.

Issues

The College agreed to a short lease for 2-6 Catton Street in the awareness of Crossrail proposals and are currently reviewing options for alternative locations.

4. The Astoria, Metro, Mean Fiddler music venues (Route Window C5)

Context

The Astoria (157 Charing Cross Rd), Metro and Mean Fiddler (165 Charing Cross Rd) music venues are owned and operated by the Mean Fiddler entertainment group.

Both venues are at the core of London's night and music culture and host a wide range of music performances. The Astoria also hosts dance club nights. The Astoria is used by the G-A-Y-E Club on Mondays, Thursdays, Fridays and Saturdays as a music and entertainment venue for London's gay and lesbian community.

Issues

No discussion has been held to date with the Mean Fiddler group.



5.Finsbury Circus Bowling Green (Route Window C7)

Context

Finsbury Circus is the largest public garden in the City. It has a National Standard Bowling Green, which is enjoyed by regular members of the City of London Bowling Club as well as local residents, tourists and office workers.

The Bowling Club is an established club and is a member of Middlesex Bowling Club Association. It has a clubhouse, which provides changing rooms, a bar and storage.

The Club has 50 members who come mainly from East and Northeast London. Some members work in the City / London and come after work. Members' age range from 12-18 years olds to the elderly. The green is used from approximately the first week in April to the last week in September, during which time it is opened from 4pm every weekday & all day at the weekend. It is also open to passers-by.

Issues

The green at Finsbury Square would be a viable alternative during the construction period as it is very closeby. It is located within a different local authority.

There are more remote greens at Bow, Chadwell, Poplar, Royal Parks and Victoria Park. There are concerns that if the club is closed for 5 years and people have to find another club, they might not come back at the end of the construction period.

There is also concern that club members will need some space to store the club's belongings during construction works.

6.Swanlea School (Route Window C8)

Context

Swanlea School is co-educational with 1050 pupils ranging in age from 11 to 16. The school building was built in 1993. In September 2002 the school became central London's first Business and Enterprise College with the aim of improving performance in design and technology, science and mathematics, and making effective use of ICT.

The main entrance to the school is from Brady Street. The entrance leads to an internal corridor that runs along the centre of the building to a set of exit doors at the other end. The school effectively uses this as a one-way system with regard to managing arriving and leaving pupils. In the morning pupils arrive via the secure entrance on Brady Street, and in the evening they leave via the west end of the building, and walk through gates leading onto Durward Street. There is a separate entrance for teaching staff on the north side of the school building. There is a dedicated service access to the school from Durward Street.

There is a staff car park with 33 spaces to the north of the school building. The school considers that there are currently insufficient parking spaces.

To the west of the service access route is a single storey structure containing storerooms and a substation and to the east is the caretaker's house.

Emergency access to the school is through the staff car park. There is also a gated emergency escape on the south side of the school to Durward Street.

The school has a playground area to the north of the school building, adjacent to the staff car park, which includes two basketball courts. There is a garden area to the south of the school building with an open amphitheatre.

Issues

The school will experience a prolonged period of disruption. There is concern that the noise arising from construction works and loss of recreational space may impact the students ability to study.

Management of construction works and shared access through staff car park will have to be carefully co-ordinated with the school.

There will be potential conflicts between the routes used by students to the school and the construction site entrances on Durwood Street and Brady Street.

Due to a reduction in external recreation space, students may have to be taken off-site for Physical Education.

The caretaker's house is in use and may have to be reinstated.

In terms of permanent reinstatement of the school grounds at the end of the construction period, the education authority prefer CLRL's proposed option to extend the school boundary to the west over the rail lines, in order to provide for additional space for recreational use and staff car parking spaces.



7. Stepping Stones Farm (Route Window C9)

Context

The farm keeps a range of animals including cows, pigs, rabbits, guinea pigs, chickens, and geese. The farm offers structured sessions with one of the farm teachers for school groups. There is a shop on site selling refreshments, home-produce, eggs, and gifts.

Recent improvements have been made to the farm including a new toilet block and clearing and fencing of wasteland to create new pastures and housing for animals.

Issues

It is likely that the farm could continue to operate on the remainder of the site during Crossrail construction works. However, temporary closure of part of the farm may also result in loss of animals, as it may not be possible to find alternative accommodation for them.

Supervision will need to be fully considered if partial relocation of the farm is proposed.

8. North Dock, Blackwall Basin and Poplar Basin – British Waterways (Route Window C11)

Context

There are eight boats moored at West India Quay including a chapel, an art gallery, and a couple of residential vessels.

Poplar Dock has 90 berths, mostly for recreational use. Blackwell Basin has 20 berths for larger vessels. These are all residential. Moorings on Poplar Dock and Blackwall Basin have annual licenses. Berths are well subscribed and there is a long waiting list of users. There are very few alternative moorings in Central London. Alternatives include South Dock (Rotherhithe), St Katherine's Dock, Shadwell Basin and Limehouse Basin.

The North Dock host events, for example music festivals. These could be moved to other dock locations.

Issues

The redevelopment of Wood Wharf may include the provision of a new canal that would re-route access to Poplar Dock and Blackwall Basin, circumventing the need for access via the North Dock. However, it is unlikely that this development will be completed by the time that Crossrail construction works commence. The development of Wood Wharf is anticipated to commence in 2007/08 and it is unlikely that the canal infrastructure would be completed before 2010.

Locking boats into the Poplar Dock and Blackwall Basin for a period of five years would raise concerns about water quality, amenity, and access for maintenance as all boats need to leave the dock for repairs.

Users could be offered an option to relocate during construction works upon renewal of licenses.

British Waterways is also concerned about the navigability of the North Dock post construction works, particularly around the shaft on the east side of the Dock.



9.Eleanor Street travellers' caravan park (Route Window C12)

Context

The travellers emphasise that the caravan site at Eleanor Street provides their community with a permanent residential site. The caravan site is not a temporary base for travellers, but a permanent site that has been there for 22 years. Many of the residents have been living on the site since it opened. The caravan site offers security to the travelling community.

There are very few caravans, which are towable, with many residents living in brick foundation chalet bungalows.

The travellers see themselves as part of the Tower Hamlets local community:

- children attend local schools, colleges and local clubs
- travellers are registered with local GPs
- good relationships have been built up between the travellers and the wider local community

Issues

The travellers are concerned that the ventilation shaft will cause problems for site residents and young families. They have asked for reasons why an alternative location for the shaft and worksite is not possible.

They will not consider a temporary relocation and do not want to be re-housed in permanent residential accommodation.

10. London Borough of Tower Hamlets – Proposed Football pitches at Mile End Park (Route Window C12)

Context

Proposals for seven mini soccer pitches, funded by the Millennium Commission, are part of a wider scheme to improve sports facilities in Mile End Park. The pitches are planned to be complete in January 2005. The primary users of the sports facilities will be aged between 7-11 years.

Issues

LB Tower Hamlets request that the reconstruction of the coach parking area and the affected football pitch be carried out prior to the construction of the Mile End Park shaft. Any closure of the facility, either temporary or permanent may result in compensation claims from external funding partners.

LB Tower Hamlets are concerned about the health and safety implications for users of the park and leisure facilities, both during construction and operation.

11. West Ham United Football Club (Route Window NE8)

Context

The training facilities are vital for training the West Ham United FC first team. Facilities also include medical facilities and training facilities for the Youth Academy, including an indoor 60x40 pitch.

Issues

The West Ham United FC are concerned about the temporary loss of the gymnasium, but consider that the Crossrail construction works could be a catalyst for changes which could benefit the Club in the long term:

The Club has aspirations to extend their training space into Westland's Playing Fields and, in return, to provide LB Havering with playing fields or artificial pitches for wider community use.

It is understood that St Edwards school could be interested in purchasing Westland's Rough from LB Barking & Dagenham in order to expand the school's facilities.

Existing access to the Club is via Saville Road. Permanent access to the Club through the Westland's Playing Fields, by utilising the proposed temporary access to the Crossrail construction worksite, would improve the residential amenity of Saville Road.



12. Westland's Playing Fields (Route Window NE8)

Context

The Westland's playing fields comprise 12 playing pitches comprising:

- 2 x full size football pitches
- 2 x 7-a-side football pitches
- 3 x rugby pitches
- 5 x junior pitches
- 2 x training grids

The pitches are used by the following groups:

- Ferns Junior FC
- Boys Brigade
- West Ham United FC
- Old Edwardians RFC
- Roneo Colts FC
- Country Park FC
- All Saints FC
- Havering Sixth Form College
- The Royal Liberty School
- Romford & Gidea Park RFC
- St Edwards CE Comprehensive School
- Crowlands Junior School
- The Mawney School
- The Manor Primary
- St Edwards CE Primary
- Edwin Lambert School

Issues

The loss of the playing fields for up to five years will have a significant impact on the provision of sports facilities in the Borough, as this is a facility shared by a number of community users not just St Edwards school.

The education authority are investing in the improvement of the existing facilities and have recently received lottery funding to develop new tennis courts and redevelop the pavilion. These improvements are planned for completion in the next year.

St Edwards School have aspirations to develop part of Westland's Rough for playing fields.

The layout of the playing pitches was re-arranged in August 2004 to meet Sport England standards.

Alternative sports facilities are already well used and unlikely to be able to accommodate the users of Westland's playing fields.

Temporary relocation of playing pitches during Crossrail construction would require a secure facility, within a reasonable distance of existing users.

