Chapter 15
Route Window C13
Pudding Mill Lane portal
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Introduction

15.1 Crossrail’s twin bored tunnels will pass between the A11, Bow Road in the west and the Waterworks River in the east, before emerging from the ground near Pudding Mill Lane. Other elements of the scheme in this route window include a replacement Docklands Light Railway (DLR) station and some realignment of existing railway. North of Bow Road, the alignment runs roughly parallel with the DLR corridor towards Pudding Mill Lane station. From Pudding Mill Station the alignment shares the existing surface railway corridor to the east. There are substantial enabling works including sewer diversions.

15.2 Permanent works will consist of:
- Pudding Mill Lane Portal, ramp and cut and cover box;
- a new Pudding Mill Lane Docklands Light Railway station and alignment;
- realignment of the westbound (up line) electric track of the Great Eastern Main Line (GEML);
- twin bored running tunnels; and
- permanent closure of Pudding Mill Lane to road traffic and the opening up of Marshgate Lane to road traffic.

15.3 There will be three worksites in this route window:

- **Pudding Mill Lane worksite – Tunnel Portal and City Mill River**
- **Tunnel Portal**
  This will accommodate the main tunnel worksite and be situated immediately southeast of the GEML embankment. The worksite encompasses the Pudding Mill Lane DLR station, the northern section of the Heron Industrial Estate, Barbers Road and parts of Cooks Road, Pudding Mill Lane and Marshgate Lane.

- **City Mill River**
  This section of the worksite will be situated at and adjacent to the crossing of the City Mill River. A new bridge over City Mill River will carry the realigned DLR. City Mill River section of the worksite is required for this bridge strengthening for DLR / Great Eastern mainline and construction of the new DLR bridge over City Mill River.

- **Bow Midland Yard worksite**
  This will be located on the northeast of the Pudding Mill Lane worksite. This worksite will be used mainly for excavated material stockpiling and removal.

- **Bow Midland Yard West worksite**
  This will be located to the northwest of the Pudding Mill Lane worksite, to the west of the River Lea. This worksite will be used for delivery and storage of concrete tunnel lining segments.

15.4 The portal is located in land between the River Lea and Pudding Mill Lane, adjacent to the southern side of the GEML. The tunnel in this section climbs steeply to reach the level of the GEML and remains a covered section above ground up to the Marshgate Lane bridge. The vertical alignment also bisects Pudding Mill Lane and results in the permanent closure of the highway.

15.5 The Pudding Mill Lane Portal worksite is the main tunnel worksite and encompasses the River Lea. It includes a TBM launch shaft and the first section of cut and cover box. Works also require the demolition and acquisition of some industrial units on the Heron Industrial Estate and Bridgewater Road.

15.6 The Bow Midland Yard worksite (including waste transfer station) is needed for stockpiling material excavated from the tunnels and removing it by rail, and to a lesser extent for receiving and storing deliveries of tunnel segments and other materials.

15.7 The Bow Midland Yard West worksite facilitates an additional stockpile area for tunnel segments. Lorries will shuttle between the two sites to facilitate the movement of tunnel segments.

15.8 There are also three major utility diversions programmed in this Route Window see paragraph 15.27.

15.9 The maps provided at the end of this chapter present the main features of the route window and the assessed construction lorry routes.

Baseline conditions

15.10 The Pudding Mill Lane area of east London is situated in The London Borough of Newham to the west of Stratford, east of the River Lea and north of the A118 High Street. West of the River Lea, the London Borough of Tower Hamlets is the local authority.

15.11 Between Bow Road and the River Lea, Crossrail lies within the London Borough of Tower Hamlets. To the east of the River Lea, Crossrail lies within the London Borough of Newham. This route window covers a highly built-up residential area in its western part, while the
remainder consists of industrial areas, extensive railway lands and the north-south corridors of a number of rivers including the River Lea, the City Mill River, the Waterworks River and the Bow Back River. The Docklands Light Railway and Great Eastern Main Line (GEML) run east-west through the route window. The A12 Blackwall Tunnel Approach Road is to the west with the A11 Bow Road to the south.

15.12 Land use in the Pudding Mill Lane area is mainly industrial (light and heavy) and hence a high proportion of local traffic is made up of LGV and HGV type vehicles.

15.13 Three watercourses traverse the local area: The River Lea, City Mill River and the Waterworks River.

15.14 The Pudding Mill Lane area is served with public transport through the Pudding Mill Lane DLR station and bus routes on the A118 High Street.

15.15 Moderate pedestrian flows occur in both the a.m. and p.m. peaks on Pudding Mill Lane and Marshgate Lane (south), generally associated with access to the DLR station. Pedestrian volumes are fairly low at other times and elsewhere locally.

15.16 There are parking restrictions throughout the local area, mainly single yellow line waiting restrictions (0800 to 1830 hours, Monday to Saturday) with ‘at any time’ waiting restrictions at junctions and pinch points. The majority of local businesses have their own private car parking facilities and some run shuttle buses between their premises and the DLR station.

15.17 The Pudding Mill Lane DLR over bridge has a vehicular height restriction of 13 ft 3 in (4.04 m). Warning signs advising of the risk of large vehicles grounding is sited on the entry to Cooks Road at the A118 High Street.

15.18 A pedestrian and cyclist route known as ‘The Greenway’ has been established off-road, over the Northern Outfall Sewer, at the eastern edge of the site, and forms part of the strategic London Cycle Network. The A118 High Street also forms part of the cycle network.

Potential changes in baseline conditions

15.19 Development proposals in the Pudding Mill Lane area form an integral part in supporting the London 2012 Olympics bid. Implementation of works to construct venues, accommodation and associated upgrades to local infrastructure will be required if the bid is successful. Peak construction activity is likely to occur around 2010.

15.20 The Stratford City Development has now received planning consent from Newham Council. The development surrounds the Stratford Channel Tunnel Rail Link international station, which will open in 2007. It is proposed to begin construction of Stratford City in 2006, with the town centre completed by 2009 and the following development phases completed by 2020. This will create a new business district for London acting as a gateway to Europe.

15.21 The Stratford City and Olympics developments are scheduled to closely integrate, indeed it is intended that some of the residential accommodation constructed for Stratford City will be utilised by athletes.

15.22 The proposals described in paragraphs 15.19 to 15.21 above would affect this route window if they proceed. They do not form part of the baseline for Crossrail (see Volume 8a) and the implications of them being brought forward are addressed in Chapter 12 and in paragraphs 15.120 to 15.133 below.

The permanent works

Pudding Mill Lane portal, ramp and cut-and-cover box

15.23 The site is located between Marshgate Lane in the east and the River Lea in the West. From the track level of the GEML, a ramp will descend to a portal and cut and cover box, which starts immediately to the west of the existing DLR station. The ramp continues to the tunnel eye, which is located immediately to the east of the River Lea, from where the bored running tunnels commence.

Changes to the DLR

15.24 The DLR will be realigned between the bridge over the River Lea and City Mill River to accommodate the Crossrail running lines and the ramp into the tunnel. The existing Pudding Mill Lane station will be demolished and a replacement will be constructed on the bridge over Pudding Mill Lane itself. The new station will have side platforms and will be longer than the existing station to allow the future use of three car trains on the DLR.

Changes to the GEML

15.25 The line currently used by westbound One Great Eastern ‘Metro’ services will be realigned to the south between City Mill River and the bridge over the River Lea. It will cross the Crossrail lines by means of a bridge.

Running tunnels

15.26 Two 6 m diameter running tunnels will be constructed at a depth of approximately 17 m (eastbound) and 19 m (westbound) below the Blackwall Tunnel approach road.

Utilities diversions

15.27 There are three major utility diversions programmed in this route window:

- Diversion of Hackney to Abbey Mills and Wick Lane Sewers (See also Route Window C13a for Abbey Mills Section).
- Diversion of Electricity Cables at River Lea Towpath.
- Diversion of overhead Electricity Cables and New Pylon.

Worksite assessment (group 1)

Pudding Mill Lane worksite – Tunnel Portal

15.28 The worksite (and subsequent tunnel portal) would result in the permanent closure of Pudding Mill Lane to facilitate relocation of the DLR bridge, and construction of the portal and associated works. The footways along Pudding Mill Lane will also be closed. North-south traffic through
the area will be redirected to Marshgate Lane and on the north side of the viaduct and back to Pudding Mill Lane via a new connecting road. Marshgate Lane is currently closed to vehicular traffic and pedestrians but will be reopened throughout the construction period. The resultant diversions will not be significant.

15.29 The construction of the Pudding Mill Lane tunnel portal will take about four years and three months to complete. This includes the period which will be required for the tunnel works and modifications to the DLR and GEML.

15.30 The westernmost worksite activities will result in restrictions on the River Lea. It is envisaged that through a strictly controlled construction methodology, a navigable waterway can be maintained at all times, hence significant impacts for marine vessels and other waterway users throughout the construction period can be avoided.

15.31 The River Lea towpath will be restricted or closed for pedestrian use at various times throughout the construction phase however it has a low level of use and hence a significant impact is not predicted. Appropriate advance diversionary warning signs for pedestrians who may wish to use towpath will be required.

15.32 The Pudding Mill Lane worksite would also result in the temporary closure of a section of Barbers Road (between Cooks Road and Pudding Mill Lane) for the duration of the construction period. The resultant diversions do not exceed 250 m and hence will not be significant.

15.33 To allow for construction of the new Crossrail alignment, the DLR will be realigned and the existing DLR station at Pudding Mill Lane will be demolished and rebuilt on the southern side of the viaduct. It is intended that the DLR will remain open for use and that one or other of the stations will be functional (aside from occasional weekend closures). The resultant diversions for pedestrians will hence not be significant.

Pudding Mill Lane worksite – City Mill River

15.34 A new bridge will be constructed over the City Mill River to carry the realigned DLR, and this will require the partial impounding of the river and is likely to result in impacts for waterway users throughout the construction period. Where Crossrail crosses the City Mill River, strengthening works on the existing DLR/GEML bridge will result in a permanent narrowing and a height restriction over the river. This section of watercourse is already constrained by existing bridge infrastructure to the north and is currently not as readily navigable as the adjacent River Lea, hence the impacts of the works are not considered to be significant.

15.35 The towpath below the bridge will be restricted or closed for pedestrian use at various times throughout the construction phase however it has a low level of use and hence a significant impact is not predicted. Appropriate advance diversionary warning signs for pedestrians who may wish to use towpath will be required.

15.36 Road access to the City Mill River worksite for bridge and embankment construction will be from a new site access road on the eastern side of the river to the west end of Bridgewater Road.

15.37 The worksite arrangement and associated lorry access and entry points are not predicted to cause any significant adverse impact on local road users, pedestrians or cyclists.

15.38 It is expected that due to the size of the worksite at least two separate lorry routes will be required, one to access the main tunnel portal area and one to access the City Mill River area.

15.39 Lorry access to the two sites will be taken from either A12 (or A11) via the Bow Flyover roundabout (or Flyover) and the A118 High Street.

15.40 Access to both worksites will be from the A118 High Street eastbound carriageway. Access to the Pudding Mill Lane worksite will be either from Barbers Road via Pudding Mill Lane and Marshgate Lane to the main tunnelling area (west access) or from Bridgewater Road via Warton Road to the City Mill River Bridge area.

15.41 Access to the tunnel portal area will also be required from the train loading area at the Bow Midland Yard Site; for excavated material this will be handled by conveyor and for tunnel segments these will be transported by road. Lorries will shuttle between the two sites and new link sections of highway will be required to facilitate this movement.

15.42 Consultation meetings have been held with Transport for London, The London Borough of Newham and London Buses to discuss the proposed lorry routes in this Route Window; all parties concurred that the proposed routes and the estimated utilisation thereof is acceptable.

15.43 It is envisaged that vehicle egress from both sites would be via the same route network as utilised for access.

15.44 Bus routes 25, 118, D8 and S2 currently serve the A118 High Street. No significant impacts upon bus users or operators are expected.
It is probable that the Stratford City development, and to a lesser extent the Olympics will generate lorry traffic that will share road space with Crossrail lorries on the Bow Flyover roundabout and the A118 High Street. Further liaison will be required as the separate projects develop. They do not form part of the baseline for Crossrail (see Volume 8a) and the implications of them being brought forward are addressed in Chapter 12 and in paragraphs 15.120 to 15.133 below.

The construction lorry movements which will be carried by the local roads in the vicinity of the worksites are as shown in Table 15.1. Cumulative peak movements are shown on figure 15.2.

Table 15.1  Route 1 – Pudding Mill Lane worksite local lorry movements

<table>
<thead>
<tr>
<th>Road link (Figures given for two-way flows unless stated)</th>
<th>Periods of peak construction traffic on the road link</th>
<th>Periods of non-peak construction traffic on the road link</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Duration (weeks)</td>
<td>Additional HGV movements per day</td>
</tr>
<tr>
<td>A118 High Street (Bow Interchange to Marshgate Lane)</td>
<td>14</td>
<td>90</td>
</tr>
<tr>
<td>Marshgate Lane (A118 High Street to Pudding Mill Lane), Pudding Mill Lane (Marshgate Lane to Barbers Road)</td>
<td>14</td>
<td>80</td>
</tr>
<tr>
<td>A118 High Street (Marshgate Lane to Warton Road), Warton Road (A118 High Street to Bridgewater Road), Bridgewater Road</td>
<td>14</td>
<td>10</td>
</tr>
</tbody>
</table>

The daily flow of lorries generated by the worksites will not cause a significant impact.

Lorry holding area assessment

It is expected that adequate lorry holding capacity is available on site.

Bow Midland Yard worksite

The Bow Midland Yard worksite occupies the industrial area north of GEML east of the River Lea (see figure 15.3).

The worksite will be used for the storage of excavated material from the tunnel portal, its transfer to rail as well as the storage of tunnel lining segments and other materials. Excavated material will be transferred from the Pudding Mill Portal worksite to the Bow Midland Yard train loading area by conveyor.

The Bow Midland Yard worksite will also be used for receiving and storing deliveries of tunnel segments and other materials. Lorries will shuttle between the two sites and new link sections of highway will be required to facilitate the movement of non excavated material.

The worksite arrangement and associated lorry access and entry points are not predicted to cause any significant adverse impact on local road users, pedestrians or cyclists.

The Bow Midland Yard worksite will be used for the storage of excavated material from the tunnel portal, its transfer to rail as well as the storage of tunnel lining segments and other materials. Other vehicles can access Bow Midland Yard from the new access road via Marshgate Lane, and the A118 High Street eastbound carriageway.

The daily flow of lorries generated by the worksite will not cause a significant effect impact (see table 15.1).

Lorry holding area assessment

It is expected that adequate lorry holding capacity will be available on site.
Figure 15.3 Bow Midland Yard

Worksite assessment (group 3)

Bow Midland Yard West worksite

15.56 The Bow Midland Yard West worksite is situated north of the GEML, west of the River Lea, east of the A12 Blackwall Tunnel Approach and south of Wick Lane.

15.57 Due to site constraints within the main Bow Midland Yard worksite it will also be necessary for tunnel segments to be stored at the Bow Midland Yard West worksite for subsequent transfer by road to the Pudding Mill Lane tunnel portal area.

15.58 The worksite arrangement and associated lorry access and entry points are not predicted to cause any significant adverse impact on local road users, pedestrians or cyclists.

Lorry route assessment (group 3)

15.59 Lorry access and egress will be taken from/to the A12 via Wick Lane and Dye House Lane (or similar local access point).

15.60 Lorries will enter the Pudding Mill Lane tunnel portal worksite from either the main worksite entrance from Marshgate Lane / Barbers Road or Cooks Road. Around 30 lorry movements per day will be generated during the peak period, spanning approximately three months.

15.61 Warning signage advising of the risk of large vehicles grounding is sited on the entry to Cooks Road at the A118 High Street. Therefore the use of vehicles with low wheel bases are not recommended, standard rigid vehicles should not encounter any problems.

15.62 The daily flow of lorries generated by the worksite will not cause a significant impact.

Lorry holding area assessment

15.63 It is expected that adequate lorry holding capacity is available on site.

Worksite assessment (utilities – 1)

River Lea towpath electricity cables diversion

15.64 The electricity cable that lies beneath the towpath on the east bank of the River Lea will require a new support bridge to prevent damage from the construction of the Crossrail tunnels. The bridge will not be visible on the surface.

15.65 The diversion of high voltage electricity cables along the towpath on the eastern side of the River Lea will necessitate the closure of the towpath to the general public throughout the duration of the works.

15.66 These works will be scheduled to take place in advance of main portal works and will take six months to complete.

15.67 No impact upon the utilisation of the waterway itself is expected. The towpath has a low level of use and hence a significant impact is not predicted. However appropriate advance diversionary warning signs for pedestrians who may wish to use towpath will be required.

15.68 The worksite arrangement and associated lorry access and entry points are not predicted to cause any significant adverse impact on local road users, pedestrians or cyclists.
Lorry route assessment

15.69 Occasional access to the site will be required by lorries carrying cables and ducting in and out of the worksite. Lorry access to the worksite will be taken from either A12 (or A11) via the Bow Flyover roundabout (or Flyover) and the A118 High Street then via Cooks Road and the tunnel portal worksite.

15.70 It is envisaged that vehicle egress from both sites would be via the same route network as utilised for access.

15.71 Warning signage advising of the risk of large vehicles grounding is sited on the entry to Cooks Road at the A118 High Street. Therefore the use of vehicles with low wheel bases are not recommended, standard rigid vehicles should not encounter any problems.

15.72 During the peak period of approximately three months, eight lorry movements will be generated on Cooks Road. The daily flow of lorries generated by the worksite will not cause a significant impact.

Lorry holding area assessment

15.73 It is expected that adequate lorry holding capacity is available on site.

Worksite assessment (utilities – 2)

Overhead electricity cables diversion and new pylon

15.74 Existing overhead electricity cables traverse the Pudding Mill Lane area; these cables are carried by pylons. One of the existing pylons will conflict with the relocated DLR station and hence it will be necessary to relocate one pylon and restraining the electricity cables between adjacent existing pylons.

15.75 It is envisaged that these works will be scheduled to take place in advance of main portal works during the Summer and will take six months to complete.

15.76 It should be noted that if Olympic proposals are successful then it is essential that all overhead electricity cables / pylons are removed from site and reinstated below ground.

15.77 The worksite arrangement and associated lorry access and entry points are not predicted to cause any significant adverse impact on local road users, pedestrians or cyclists.

Lorry route assessment

15.78 Only occasional access to the site will be required by lorry. Lorry access to the worksite will be from either A12 (or A11) via the Bow Flyover roundabout (or Flyover) and the A118 High Street then onto local roads from Warton Road and Bridgewater Road to the City Mill River Bridge area.

15.79 It is envisaged that vehicle egress from both sites would be via the same route network as utilised for access.

15.80 The daily flow of lorries generated by the worksite will not cause a significant impact.

Lorry holding area assessment

15.81 It is expected that adequate lorry holding capacity is available on site.

Worksite assessment (utilities – 3)

Abbey Mills and Wick Lane Sewer Diversion worksites

15.82 The Crossrail alignment of the running tunnels at Pudding Mill Lane will require diversion of the Hackney to Abbey Mills and Wick Lane sewers. Between the Great Eastern Main Line at Wick Lane and the Abbey Mills Pumping Station, the sewers will be diverted northeastwards to run beneath the junction of Marshgate Lane and Pudding Mill Lane before passing beneath Claypole Road.

15.83 The diversion of the sewer through the Pudding Mill Lane Portal Worksite, between Wick Lane and Abbey Mills will require 1.3km total length of tunnelling, four shafts (including one in Route Window C13a) and construction of a new pumping station (at Abbey Mills see Route Window C13a). Associative works are required on the existing sewers; a new headwall is required to stop-up the Wick Lane Sewer at an existing manhole situated on the southbound carriageway of the A12 Blackwall Tunnel approach and a new head manhole is to be constructed adjacent to the northbound carriageway of the A12 at the rear of 31–69 Baldock Street.

Marshgate Lane worksite

15.84 The worksite will house a TBM reception shaft and permanent access to the sewer. The worksite will be located on a site at the southernmost junction of Marshgate Lane and Pudding Mill Lane, access and egress will be taken from the southern arm of Marshgate Lane.

15.85 These works will take about four months to complete.

15.86 The worksite arrangement and associated lorry access and entry points are not predicted to cause any significant adverse impact on local road users, pedestrians or cyclists.

Lorry route assessment

15.87 Access to the worksite will be from the A118 High Street eastbound carriageway then Marshgate Lane. Egress will be via the same route.

15.88 The daily flow of lorries generated by the worksite will not cause a significant impact.

Lorry holding area assessment

15.89 It is expected that adequate lorry holding capacity is available on site.

Wick Lane worksite

15.90 The worksite will house a new TBM reception shaft and facilitate connections to existing sewers. The worksite will be located on a site at the southernmost section of Wick Lane immediately south of (including the area under) the rail bridge and north of Wrexham Road (within The London Borough of Tower Hamlets).

15.91 These works will be scheduled to take up to 15 months to complete.
15.92 The worksite placement will restrict vehicular access to light industrial premises on the west side of Wick Lane immediately south of the railway bridge.

15.93 It is envisaged that existing pedestrian and cyclist routes adjacent to the worksite will be maintained.

15.94 The worksite arrangement and associated lorry access and entry points are not predicted to cause any significant adverse impact on local road users, pedestrians or cyclists.

**Lorry route assessment**

15.95 Lorry access and egress will be taken from/to the A12 directly from Wick Lane.

15.96 The worksite will operate for six months in total, with about four lorry movements off-peak. During the peak period, spanning approximately one month, around eight lorry movements per day will be generated. The daily flow of lorries generated by the worksite will not cause a significant impact.

**Lorry holding area assessment**

15.97 It is expected that adequate lorry holding capacity is available on site.

**Baldock Street worksite**

15.98 The worksite will facilitate the construction of a new head manhole over an existing sewer. The worksite will be situated in a soft landscaped area to the rear of flats (31–69) on Baldock Street (within The London Borough of Tower Hamlets).

15.99 The site can be accessed and exited through newly created crossovers located on A12 northbound on-slip (from the Bow Fly-over interchange).

15.100 These works will take about four months to complete.

15.101 The worksite arrangement and associated lorry access and entry points are not predicted to cause any significant adverse impact on local road users, pedestrians or cyclists.

**Lorry route assessment**

15.102 Lorry access and egress will be taken from/to the A12 northbound on-slip (from the Bow Flyover interchange).

15.103 The worksite will operate for six months in total, with about four lorry movements off-peak. During the peak period, spanning approximately one month, around eight lorry movements per day will be generated. The daily flow of lorries generated by the worksite will not cause a significant impact.

**Lorry holding area assessment**

15.104 It is expected that adequate lorry holding capacity is available on site.

**A12 worksite**

15.105 This worksite is to facilitate the construction of a new head wall on an existing sewer accessed via a manhole situated on the A12 southbound carriageway adjacent to the commencement of the Bow Flyover off-slip.

15.106 To facilitate the worksite it will be necessary to close one lane of the A12 off-slip (Bow Flyover southbound approach) and at least one lane (potentially the entire southbound carriageway) of the A12 southbound for up to 1 month (see figure 15.5). This will cause delay to vehicular traffic on the A12 and, having regard to the nature and volume of traffic on the A12 is considered to result in an impact of particular importance.

![Figure 15.5 A12 slip road on northbound approach to Bow Flyover interchange](image)

**Lorry route assessment**

15.107 Lorries can directly access the construction worksite from the A12 southbound carriageway.

15.108 The daily flow of lorries generated by the worksite will not cause a significant impact.

**Lorry holding area assessment**

15.109 It is expected that an area for lorry holding could be set-up immediately to the south of the worksite on the A12 southbound off-slip.
Mitigation and temporary impacts

15.110 The significant temporary impacts and mitigation measures are indicated in Table 15.2.
15.111 During the construction phase, the location of a worksite on the Blackwall Tunnel Northern Approach required for the diversion of the Hackney to Abbey Mills and Wick Lane sewers will cause traffic congestion and delays. This will be a significant impact of particular importance.
15.112 No appropriate mitigation has been agreed. There is potential to reallocate sections of northbound carriageway for southbound users in contra-flow. Works could also be undertaken during summer months when traffic flows are lighter. These actions would not however fully mitigate the impact. The resulting congestion and delays would remain a significant impact of particular importance.

Mitigation and permanent impacts

15.113 There are no significant permanent impacts in this route window.
15.114 The portal structure will provide emergency intervention and evacuation points and ventilation.
15.115 The closure of Pudding Mill Lane, north of Barbers Road will have minimal impact on traffic. North/south traffic through the area will be redirected to Marshgate Lane and on the north side of the viaduct and back to Pudding Mill Lane via a new connecting road. Marshgate Lane is currently closed to traffic north of the railway bridge and this would need to be reinstated. Pudding Mill Lane experiences low traffic flow. It lies in an industrial area and thus carries a high proportion of heavy goods vehicles.
15.116 The new Pudding Mill Lane DLR Station will be located on the southern side of the extended GMER embankment. The impact on pedestrian and cyclists would be non-significant as the proposals would add less than 250 m to the journey length. Therefore, operational impacts at Pudding Mill Lane would not be significant.
15.117 Strengthening works for Crossrail will result in permanent narrowing and a headroom restriction on the City Mill River. It is however already constrained by an existing bridge to the north and so the works are not considered to cause a significant impact.

2012 Olympics scenario

Worksite assessment (2012)

15.118 Development proposals in the Pudding Mill Lane area form an integral part in supporting the London 2012 Olympics bid. Implementation of works to construct venues, accommodation and associated upgrades to local infrastructure will be required if the bid is successful. Peak construction activity is likely to occur circa. 2010.
15.119 If the London 2012 Olympic proposals are successful it is probable that the main worksite operations will be concentrated within a site to the west of the River Lea, known as Bow Midland Yard West. Tunnelling works will therefore require completion by summer 2012 when the site would be fully occupied by the Olympics.

Lorry route assessment (2012)

15.120 Warning signage advising of the risk of large vehicles grounding is sited on the entry to Cooks Road at the A118 High Street.
15.121 The worksite is to be located on west side of the River Lea, east of the A12 Blackwall Tunnel Northern Approach, and all materials on and off site will be moved by road transport.
15.122 No impact upon the utilisation of the waterway itself is expected. The towpath will be closed to the general public throughout the construction period, however, it has a low level of use and hence a significant impact is not predicted. Appropriate advance diversionary warning signage for pedestrians who may wish to use the towpath will be required.
15.123 No significant traffic and transport impacts have been identified as a result of the alternative proposed worksite should the London 2012 Olympics bid be successful.

2012 Olympics scenario – Mitigation and temporary impacts

15.124 For removal of excavated material lorry access and egress will be taken from/to the A12 via Wick Lane and Dye House Lane (or similar local access point).
15.125 It is expected that a maximum of 262 lorry movements per day will be generated, associated with the removal of excavated material.
15.126 As a result of the lorry traffic generated by worksite, relating to the removal of excavated materials, the assessment has highlighted possible delays for vehicle occupants and buses on Wick Lane. This possibility was brought about by an increase in lorries when compared with the low volume of lorries currently using the road.
15.127 For movement of tunnel segments onto site, lorry access and egress will be taken from the A118 High Street eastbound slip road from the Bow Flyover roundabout via Cooks Road.
15.128 It is expected that a maximum of 30 lorry movements per day will be generated associated with the supply of tunnel segments to site.
15.129 Warning signage advising of the risk of large vehicles grounding is sited on the entry to Cooks Road at the A118 High Street. Therefore the use of vehicles with low wheel bases are not recommended, standard rigid vehicles should not encounter any problems.

15.130 In this scenario, the increase in lorries over the existing flows during the construction phase has the potential to exacerbate the existing peak-hour congestion at the Wick Lane junctions with the A12. This will be a significant temporary impact.
15.131 Localised traffic management may assist / regulate lorry access and egress between the worksite and Wick Lane. The precise measures if required will be determined in consultation with the local authority and other stakeholders. These actions may not however fully mitigate and congestion and delay would remain a significant impact.
<table>
<thead>
<tr>
<th>Works and potential impact</th>
<th>Significance</th>
<th>Committed mitigation</th>
<th>Residual impact Description</th>
<th>Significance</th>
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<tr>
<td>Worksite impacts</td>
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<td></td>
</tr>
<tr>
<td>CT1d</td>
<td>Significant of Particular Importance</td>
<td>None</td>
<td>Will cause traffic congestion at certain times, particularly AM and PM weekday peaks.</td>
<td>Significant of particular importance</td>
</tr>
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</table>

As a result of the proposed lane closures, to accommodate the A12 sewer worksite, on the A12 southbound carriageway and southbound off-slip to the Bow Flyover probable delays and loss of amenity for vehicle occupants on the A12 southbound for up to 1 month are predicted.