

9 Traffic and Transport

9.1 Introduction

This Traffic and Transport section is based upon information submitted within the Transport Assessment (TA) as a part of the planning application for the proposed mixed use development at Digbeth, Birmingham. The TA is included as an Appendix to this document. This chapter of the report will provide an assessment of the likely increase in traffic on the network as a result of the proposed development and the potential impacts therein.

AECOM have undertaken the TA based on discussions and meetings with Birmingham City Council (BCC) and a scope subsequently agreed with BCC.

9.2 Legislation and Policy Context

9.2.1 National Policy

National Planning Policy Framework (March 2012)

In March 2012 National Planning Policy Framework (NPPF) was published to consolidate all policy statements, circulars and guidance documents into a single, simpler National Planning Policy Framework. The NPPF sets out a number of transport objectives designed to facilitate sustainable development and contribute to a wider sustainability by giving people a wider choice about how they travel.

The NPPF states all developments that generate significant amounts of movement should be supported by a Transport Assessment. Plans and decisions should take account of whether:

- The opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;
- Safe and suitable access to the site can be achieved for all people; and
- Improvements can be undertaken within the transport network that cost effectively limits the significant impacts of the development.

The guidance advises that, subject to the above considerations, development should not be prevented or refused on transport grounds unless the residual impacts of the development are severe.

The NPPF states that plans should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people. Therefore, developments should be located and designed where practical to:

- Support opportunities for sustainable transport modes depending on the nature and location of the site, in order to reduce the need for major transport infrastructure;
- Accommodate the efficient delivery of goods and supplies;
- Give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;
- Create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;
- Incorporate facilities for charging plug-in and other ultra-low emission vehicles; and
- Consider the needs of people with disabilities by all modes of transport.

To achieve the above, all developments which generate a significant amount of trips should provide a Travel Plan. Furthermore, the minimisation of journey lengths for employment, shopping, leisure, education and other activities should be informed by planning policies which balance land uses within an area.

Planning Practice Guidance (PPG) 'Travel Plans, Transport Assessments and Statements in Decision-Taking (March 2014)

The Planning Policy Guidance (PPG) was updated in March 2014 and builds on the policy framework set out by NPPG. The Planning Practice Guidance - Travel Plans, Transport Assessments and Statements in Decision-Taking provides a concise report on the use and importance of Transport Assessments / Statements and Travel Plans. With regard to whether to provide a Transport Assessment, Transport Statement or no assessment, the guidance states that local planning authorities, developers, relevant transport authorities, and neighbourhood planning organisations should agree what evaluation is needed in each instance.

The guidance states that Transport Assessments / Statements and Travel Plans can positively contribute to encouraging sustainable travel, lessening traffic generation and its detrimental impacts and reducing carbon emissions and climate impact. In doing so they can create accessible, connected, inclusive communities with improved road safety, health and quality of life.

The guidance states that Transport Assessments / Statements and Travel Plans should be proportionate to the size and scope of the proposed development, be tailored to particular local circumstances and be established at the earliest practicable possible stage of a development proposal.

9.2.2 Regional Policy

West Midlands Local Transport Plan (2011)

The West Midlands Local Transport Plan 2011 sets out the five objectives of the transport strategy and policies for the West Midlands Metropolitan Area to 2026 as follows:

The five Objectives provide a set of detailed goals the Local Transport Strategy is seeking to achieve. Each Objective is consistent with the Strategic Principles and has a series of subsidiary elements within it:

1. To underpin private sector led growth and economic regeneration in the West Midlands Metropolitan Area, including support for housing development and population growth, increased employment and low carbon technologies (KO1);
2. To contribute towards tackling climate change through achieving a reduction in the emission of greenhouse gas emissions and ensure the resilience of the transport system to any changes to the West Midlands Metropolitan Area's climate (KO2);
3. To improve the health, personal security and safety of people travelling in the West Midlands Metropolitan Area (KO3);
4. To tackle deprivation and worklessness, so enhancing equality of opportunity and social inclusion for all age groups, through improved access to services and other desired destinations within and adjacent to the West Midlands Metropolitan Area (KO4); and
5. To enhance the quality of life for people in the West Midlands Metropolitan Area and the quality of the local environment (KO5).

9.2.3 Local Policy

Birmingham Unitary Development Plan (2005)

The UDP in the introduction to the Transport Section (chapter 6) advises that:

“In the past, transportation policy has concentrated primarily on existing and predicted traffic and transport problems. It is now recognised that transport planning and investment has a

much wider role. It is a key factor in supporting and stimulating economic regeneration and urban renewal. Improvements in accessibility, the environment, safety and image are important areas of concern, in addition to the more traditional matters such as delays and speed. In order to maximise all the benefits that can arise from investment in transport, a more positive approach is now required.”

The policies in respect of parking in the City Centre are set out in paragraph 6.50. This in part states:

“The concentration of activity in the City Centre creates a significant demand for car parking. To accommodate the parking needed for all car journeys would require destroying the fabric and environment of the City Centre to such an extent that activity would be driven away. However, the City Council recognises that it needs”

“to ensure that adequate provision is made for trips that may go elsewhere if they cannot be made to the City Centre. The priority for publicly-provided parking will be, therefore, to provide for those whose trips are particularly responsive to parking availability, i.e. shoppers, business visitors and other short-stay visitors. The provision of long-stay parking facilities within the City Centre Core will be resisted”.

6.50B Within the Core, short-stay on-street parking provides a convenient choice for people who want or need to park close to particular destinations. A balance needs to be struck between the requirements of those who need to park close to particular destinations (e.g. people with mobility difficulties, or those who need to collect bulky purchases), and the need to create a safe, attractive City Centre environment where businesses can flourish.

6.50C The additional provision of private non-residential parking facilities will be determined through the development control process. Within the City Centre Core, only essential on-site parking will be allowed, to enhance and maintain the high quality environment of the area. Existing site owners will be encouraged to enhance the quality of their stock”.

The site is located in an edge of town centre location and is accessible by walking, cycling and public transport. The site is within easy walking distance of Birmingham City Centre and would encourage linked trips with the town centre reducing the need to travel.

The proposal therefore accords with Birmingham UDP guidance.

The Emerging Core Strategy

The emerging Core Strategy sets out the key approach to land use planning and also identifies the need to provide parking provision for people with disabilities and for cycles and powered two wheel vehicles.

Policy TP37 aims to promote sustainable transport modes by:

- Improved choice by developing and improving public transport, cycling and walking networks;
- The facilitation of modes of transport that reduce carbon emissions and improve air quality;
- Working with partners to support and promote sustainable modes and low emission travel choices; and
- Ensuring that land use planning decisions support and promote sustainable travel.

Policy TP38 provides specific aims for walking throughout Birmingham and includes:

- Ensuring new development incorporates high quality pedestrian routes which will promote walking as an attractive, convenient, safe and pleasant option for travel including to and from bus stops, train stations and Metro stops; and
- Ensuring good design of pedestrian routes/areas reflecting desire lines and providing adequate way finding facilities where appropriate whilst ensuring that the routes/areas are free from unnecessary clutter.

The Core Strategy aims to encourage cycling through Policy TP39 which aims to increase cycling participation through:

- Development of different route types *e.g.* improvements to major radial roads and other main roads including improved crossing facilities and creating new, quieter, parallel routes, using the roads with lower speed limits and traffic flows, linking residential areas, green spaces, local centres and transport interchanges in order to encourage short trips and offer an alternative to busy A and B roads.
- Further development and enhancement of an extensive off-road network of canal towpaths and green routes.
- Improving cycle security with upgraded parking and trip end facilities within the City Centre and local centres.
- Providing enabling support to take up cycling through training and travel behaviour initiatives.

The Core Strategy identifies a continuing need to improve public transport facilities including interchanges so provide attractive and viable alternatives to public transport. Policy TP40

outlines the Council's strategy of working with bus, rail and Metro operators to improve the existing services on offer and to implement expansions to services where there is a need.

Policy TP44 aims to ensure that accessibility levels are maintained and improved as new development comes forward with major developments required to provide:

- An appropriate level of public transport provision (in terms of frequency, journey time and ease) to main public transport interchanges at the most relevant times of the day;
- Associated public transport stops, with shelters and seating, within 80m of the main focal point for the location;
- Good cycle access with a commensurate number of convenient cycle stands, with cycle shelters where stays are likely to be of longer duration; and
- Good pedestrian access, with seating where relevant.

The proposed development is supportive of the policies and strategies stated above.

The Big City Plan and Vision for Movement

The Big City Plan and Vision for Movement provide a high level strategy to deliver a new approach to movement in the city centre to create a well-connected, efficient and walkable city. In achieving this, the focus will be upon:

- Improving the overall quality of the transport environment.
- Enhancing the efficiency with which the transport network operates.
- Encouraging people to move around on foot, bike and by public transport.
- Making efficient and effective use of the highway network and associated infrastructure.

The proposed development is supportive of the aims stated above.

Birmingham Connected

Birmingham Connected aims to reinforce transport's role in continuing to create a successful, vibrant, healthy and green city.

Birmingham Connected's five core objectives are:

- **Efficient Birmingham** – Birmingham Connected will facilitate the city’s growth agenda in the most efficient and sustainable way possible, strengthening its economy and boosting jobs.
- **Equitable Birmingham** – Birmingham Connected will facilitate a more equitable transport system; linking communities together and improving access to jobs and services.
- **Sustainable Birmingham** – Birmingham Connected will specifically reduce the impacts of air and noise pollution, greenhouse gas emissions and energy consumption.
- **Healthy Birmingham** – Birmingham Connected will contribute to a general raising of health standards across the city through the promotion of walking and cycling and the reduction of air pollution.
- **Attractive Birmingham** – Birmingham Connected will contribute to enhancing the attractiveness and quality of the urban environment in local centres, key transport corridors and the city centre.

The accessibility of the proposed development is supportive of the aims stated above in terms of encouraging more sustainable methods of travel.

Car Parking Guidelines Supplementary Planning Document (SPD)

The purpose of this document is to set out the car parking standards which the City Council will apply when considering planning applications for new development.

The standards set out were derived from those set out in Planning Policy Guidance Note 13 Transport (PPG13) which has now been withdrawn.

The SPD reflects the objectives of the City’s Sustainable Communities Plan. In particular it aims to help ensure that:

- The access needs of new developments are properly provided for.
- A balance is struck between the needs of different road users.
- The impact of new development on congestion is minimised.
- Birmingham continues to be an attractive place for new investment and development.

In addition to proposing standards for car parking provision in new developments, this document also sets out proposed standards for parking for people with disabilities and for cycle and motorcycle parking.

The car parking standards set out in the SPD are defined as *maxima*. However the standards proposed for cycle and motorcycle provision are minimal.

9.3 Assessment Methodology and Significance Criteria

The Department for Transport's Guidance on Transport Assessment (March 2007) sets out the purpose, principles and methodology for undertaking a Transport Assessment. This guidance has recently been archived but still provides a robust guide on the format and requirements of transport impact analysis of new developments. AECOM have prepared the Transport Assessment to support this application in accordance with DfT guidance. The purpose of a Transport Assessment is as follows:

"A TA is a comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be taken to deal with the anticipated transport impacts of the scheme and to improve accessibility and safety for all modes of travel, particularly for alternatives to the car such as walking, cycling and public transport."

The Transport Assessment accompanying this application has addressed all of the relevant considerations which are outlined in the DfT guidance including NPPF and PPG. A review of the key considerations for the proposed development is provided in the impact section.

9.4 Baseline Conditions

9.4.1 Existing Road Network

The site is located south-east of Birmingham city centre in the Digbeth area. It is located to the west of Allison Street. The site boundaries are made up of Allison Street to the east, the B4100 Digbeth to the south, Park Street to the west and Well Lane to the north.

The site is immediately west of Allison Street which connects Bordesley Street in the north to the B4100 Digbeth in the south. One hundred metres north of site Allison Street passes under the railway bridge before connecting to Bordesley Street.

Bordesley Street runs in an east-west direction connecting Park Street in the west to Barn Street/Little Ann Street/Milk Street in the east. It is intersected by Meriden Street/New Canal Street.

Meriden Street connects Curzon Street in the north to the B4100 Digbeth in the south.

The B4100 Digbeth is a dual carriageway which becomes High Street Deritend to the east of the development site, then High Street Bordesley before forking into Coventry Road and Camp Hill.

Coventry Road connects with the five-armed roundabout junction of B4128 Coventry Road/ A45 Small Heath Highway/ A4540 Bordesley Middleway/A4540 Watery Lane. The Camp Hill fork joins the four-armed roundabout of A34 Stratford Road/A4540 Highgate Middleway/B4100 Camp Hill/A4540 Bordesley Middleway.

To the west of the B4100 Digbeth is a gyratory system where Digbeth, Upper Dean Street, Moat Lane and Park Street connect. Park Street is the western site boundary, becoming Moor Street to the north.

9.4.2 Accessibility

The site is centrally located within Birmingham city centre with the surrounding area comprising of well-established networks of footways providing access to a wide range of local community, education, health, retail and employment facilities.

Pedestrian access to key facilities, including retail areas, employment, health, educational facilities and local transport links are of a good standard. There are wide, well maintained and well lit footways present along both side of Park Street and Digbeth High Street. These help facilitate continuous pedestrian links between the site and facilities located throughout the city centre.

The pedestrian footways along Digbeth High Street, adjacent to the development, are to be widened as part of the Phase 1 development and will provide a more attractive route for pedestrians and those utilising the bus passenger waiting facilities.

Pedestrian crossings are provided to the west and south of the site at the signalled junctions of Digbeth High Street and Moat Lane. Further pedestrian crossings are provided to the north of the site at the junction of Park Street and Moor Street. Tactile paving and dropped kerbs are provided on Allison Street, at the junction with Digbeth High Street.

These crossings provide access from the development to the Bullring Shopping Centre and markets and the wider city centre.

Cycling is considered an important mode of sustainable travel and is generally considered suitable for distances up to 3 miles (4.8km) for regular journeys in urban areas, and 5 miles (8km) for commuting journeys (source: LTN 2/08, Cycle Infrastructure Design).

The site benefits from proximity to a number of bus lanes, on road signed cycle routes and unsigned advisory on road routes.

The bus lanes provided on Park Street, Moor Street, Moor Street Queensway and Digbeth High Street provide cyclists with facilities segregated from the private vehicle driver.

All of the signalled junctions in the vicinity of the site are accompanied by advance cycle stop lines to assist cyclists.

Signed on road cycle routes are provided to the west of the site along Upper Dean Street and Pershore Street and to the south along Rea Street.

Unsigned on road advisory cycle routes are located in the vicinity of the site including Meriden Street to the east, Bradford Street to the south and Pershore Street and Dudley Street to the west.

The proposed development site lies in close proximity to excellent existing public transport routes. The nearest bus stops to the site are located on Digbeth High Street, adjacent to the site.

The Digbeth High Street southern bus stop benefits from a shelter, travel information and Real Time travel information. The bus services provide connections to the wider Birmingham region including Small Heath, Yardley, Solihull, Chelmsley Wood, the NEC, Birmingham International Airport, Coventry, Sheldon, Tile Cross, Highgate, Kings Heath, Redditch, Wythall, Hamstead, Great Barr, Longbridge, Cotteridge, West Bromwich, Smethwick, Wolverhampton, Bearwood, Dudley, Perry Beeches and Witton.

The bus stops located on Digbeth High Street provide outbound services, with inbound services dropping passengers off at the stops located on Moat Lane. These stops are a short walk from the development via the pedestrian crossings provided.

The Digbeth High Street southern bus stop is served by approximately 25 buses per hour (one-way) during a typical weekday daytime hour, 22 buses an hour (one-way) on a Saturday and 14 buses an hour (one-way) on a Sunday. The northern bus stop is served by 16 buses per hour during a typical weekday. The northern and southern bus stops provide a combined total of 41 bus services during a typical weekday hour.

There are a further six bus stops located on Upper Dean Street, to the west of the site, adjacent to the Bull Ring Markets. The bus stops are located less than 200m from the site and are served by six bus services which provide 28 services during the morning peak, 69 services during the daytime period, including Saturday and Sunday, and 18 services during the evening.

The site benefits from being in close proximity to two major railway stations with Birmingham Moor Street located approximately 300m north of the site and Birmingham New Street approximately 700m west of the site.

Birmingham Moor Street offers regular services to the following destinations:

- Kidderminster
- Shirley
- Dorridge
- Great Malvern
- London Marylebone
- Birmingham Snow Hill
- Stourbridge Junction
- Stratford upon Avon
- Worcester Foregate Street
- Worcester Shrub Hill

The three main train stations located within Birmingham city centre provide local, regional and national services direct to much of the United Kingdom and are all within a comfortable walking distance of the proposed development.

9.4.3 Permitted Use of the Site

AECOM have calculated the trips which could be generated by the permitted use of the site based on the 2009 Transport Assessment which supported the planning application (2009/00295/PA) for the whole of the original site. The original trip rates were calculated using the TRICS and TRAVL databases and has been previously agreed by BCC.

The permitted trip generation for the site is summarised in *Table 9.1*.

Table 9.1: 2009 Phases 1, 2 & 3 Permitted Development Trip Generation

Mode of Travel	AM Trips (2-way)	IP Trips (2-way)	PM Trips (2-way)
Car Driver	28	24	37

Mode of Travel	AM Trips (2-way)	IP Trips (2-way)	PM Trips (2-way)
Car Passenger	7	15	22
Public Transport	1607	898	1210
Taxi	10	23	11
Motorcycle	2	2	1
Bicycle	23	22	23
On Foot	248	317	242
Total	1925	1301	1546

Phase 1 of the overall Beorma development is currently under construction and the land uses of this phase were assessed by the 2009 Transport Assessment with the following permitted trip generation shown in *Table 9.2*.

Table 9.2: 2009 Phase 1 Permitted Development Trip Generation

Mode of Travel	AM Trips (2-way)	IP Trips (2-way)	PM Trips (2-way)
Car Driver	2	1	2
Car Passenger	1	1	1
Public Transport	454	344	377
Taxi	1	2	1
Motorcycle	0	0	0
Bicycle	2	2	2
On Foot	24	25	23
Total	484	375	406

The 2009 permitted trips for Phases 2 and 3 are shown in *Table 9.3*.

Table 9.3: 2009 Phases 2 and 3 Permitted Development Trip Generation

Mode of Travel	AM Trips (2-way)	IP Trips (2-way)	PM Trips (2-way)
Car Driver	26	23	35
Car Passenger	6	14	21
Public Transport	1153	554	833

Mode of Travel	AM Trips (2-way)	IP Trips (2-way)	PM Trips (2-way)
Taxi	9	21	10
Motorcycle	2	2	1
Bicycle	21	20	21
On Foot	224	292	219
Total	1441	926	1140

9.5 Assessment of Project Impacts

An analysis of the traffic and transport effects that could be associated with both the construction phase and overall development proposals is presented below.

9.5.1 Construction Phase

The construction traffic for the proposed development is likely to be divided into three parts, as follows:

- Site Clearance;
- Preparatory Works; and
- Construction Period

It is considered that the preparatory works would take approximately 6-8 weeks and the construction work would be dependent on the phasing of the works. The HGV movements associated with the construction phase will give rise to a temporary moderately negative impact.

The phasing programme would ensure that the type and level of traffic movement would be sequenced to avoid causing intensive and prolonged periods of vehicular activity.

Site Clearance for Construction Traffic

It is considered that the construction traffic would use the access off Allison Street and Well Lane. Construction vehicles would not be permitted to park or load/unload from Park Street or Digbeth.

Impact on Road Network

The impact on the road network is likely to be limited to Allison Street, Digbeth High Street and the primary road network. The traffic flows undertaken for the 2009 Transport Assessment give an average daily HGV flow on Digbeth High Street of 1879 vehicles, which is the equivalent of 11.8% of the total flow. The relatively high baseline of HGV traffic will ensure that construction traffic generated by the proposed development will not provide a material impact on the highway network.

9.5.2 Operational Phase

The proposed development total person trips have been calculated based on the 2009 agreed trip rates and an updated TRICS assessment for the residential uses. This methodology was agreed with BCC Highways during scoping discussions. The full details are included within the TA produced by AECOM. The results are summarised in *Table 9.4*.

Table 9.4: Proposed Development Trip Generation

Mode of Travel	AM Trips (2-way)	IP Trips (2-way)	PM Trips (2-way)
Car Driver	60	24	43
Car Passenger	80	24	50
Public Transport	1011	602	788
Taxi	12	12	8
Motorcycle	1	1	0
Bicycle	13	11	14
On Foot	175	194	177
Total	1352	868	1080

The permitted (Table 9.3) and proposed (Table 9.1) traffic generation has been compared in *Table 9.5*. The results demonstrate that the proposal would result in a slight increase in vehicle trips during the peak hours, with reductions noted in the number of overall person trips to and from the site.

Table 9.5: Proposed Development Net Trip Generation

Mode of Travel	AM Trips (2-way)	IP Trips (2-way)	PM Trips (2-way)
Car Driver	34	1	8
Car Passenger	73	10	29
Public Transport	-142	48	-45
Taxi	3	-9	-2
Motorcycle	-1	-1	0
Bicycle	-8	-9	-7
On Foot	-49	-98	-43
Total	-89	-59	-60

It can be seen that the proposed development will have minimal traffic impact on the local highway network and therefore, it has been agreed with BCC that no traffic mitigation measures are required.

9.6 Assessment of Cumulative Impacts

9.6.1 Construction Phase

It is possible that the construction of Phases 2 and 3 and other major developments in the vicinity of the development site will be undertaken simultaneously. Therefore the traffic disruption and other construction effects on pedestrians, the mobility impaired, and cyclists could increase correspondingly. A high level of co-ordination between project teams will therefore be required. Ongoing consultation with the Emergency Services is recommended. Should the Beorma development and other developments, including transport projects such as HS2 and further extension of the Metro, come forward in a similar timescale, liaison and coordination with the promoters of these schemes would also be required when the construction phase of the Phase 2 and 3 of Beorma is planned in detail, so that the cumulative effects can be minimised.

9.6.2 Operational Phase

Once Phases 2 and 3 are in operation there will be a minor increase of traffic flows on local roads as shown in Table 9.5(b). Due to the minimal impact anticipated from the proposed development, detailed capacity assessments of the highway network including committed development flows have not been undertaken, as agreed with BCC. The accessibility of the

site via sustainable modes will contribute to the low level of vehicular movements anticipated to be generated by the site. Therefore the proposal would not make a material contribution to the cumulative impact of future development.

9.7 Impact Mitigation and Residual Effects

9.7.1 Measures to Ensure Mitigation of Any Adverse Impact

Construction Phase

As part of the planning permission it is likely that the planning authority will install a condition requiring a Construction Environmental Management Plan is produced for the site. This plan would outline the commitment to minimise construction traffic and the disturbance that can be associated with such works by taking reasonable endeavours to manage construction traffic effectively. The plan is likely to include items such as:

Scheduling Construction Works

- No work for the implementation of the development would be permitted on Public Holidays or undertaken outside of the hours 07:00-19:00 Monday to Friday and 07:30-18:00 hours at weekends and Bank Holidays unless otherwise agreed with the local planning Authority.

Scheduling Deliveries

- Access to the site for HGVs over 7.5 tonnes would be limited to between 09:15-16:30 Monday to Friday.
- Access to the site for heavy plant over 7.5 tonnes would be limited to between 09:15-16:30 Monday to Friday.
- Access to the site for articulated vehicles over 7.5 tonnes (other than heavy plant) would be limited to 09:15-16:30 Monday to Friday.
- All other vehicles would be restricted to site opening hours.
- A clear signing strategy will be implemented to direct vehicles from Digbeth High Street onto Allison Street. Signage at the site entrance would include times when vehicle access into the site can be obtained.
- Although not desirable, if any vehicles attempt to access the site outside of the agreed hours, there would be little benefit in preventing the driver from accessing the site. In

such circumstances the vehicle will be allowed to leave the road network in order to prevent unnecessary congestion.

- Avoiding HGV's queuing into the site on Allison Street or on Allison Street accessing Digbeth High Street through the management of deliveries.

Phasing and Timetabling

- The Construction Managers will be encouraged to operate a 'just in time' delivery system so that materials are not brought on to the site until such time that they are genuinely required. This helps to prevent unnecessary travel to/from the site and therefore minimises congestion.
- Avoiding network peak times, as outlined in the delivery schedule above.

Other Mitigation

- Designated haulage routes are to be used and are likely to include Allison Street, Digbeth High Street and the primary road network.
- Wheel washing facilities will be implemented on site to minimise the transfer of mud and debris onto the road network.

It is considered that given the relatively small scale of this site, and the limited duration of the construction period, there would not be any significant environmental impact that would need to be addressed.

Operational Phase

The traffic impacts of the operational phase are considered to be low meaning mitigation will not be required. The following factors contribute to low level of vehicular impact.

Encouraging Environmental Sustainability

Reducing the need to travel, especially by car

The proposed mixed use development will encourage linked trips between the different uses on the site and improve integration with the local community, reducing the need to travel. The proposal will have a minimum operational car parking provision of approximately 30 spaces to encourage sustainable travel. The development will be supported by a Travel Plan.

Tackling the environmental impact of travel

The site is located in Birmingham city centre and is accessible by walking, cycling and frequent public transport services. Improvements would be made to the pedestrian environment to encourage walking trips and improve the linkages from the site to the city centre including the widening of existing footways on Digbeth High Street, directly adjacent to the site.

The accessibility of the location

The site is located in Birmingham city centre and is highly accessible by public transport. The site is considered to be a prime location for access by non-car borne modes.

Managing the Existing Network

Making best possible use of existing transport infrastructure

Lighting and surfacing improvements in the vicinity of the site would provide benefits in terms of security, aesthetic quality and journey ambience for pedestrians.

Managing access to the highway network

The proposed development has a minimal operational parking provision of approximately 30 spaces which would serve the residential and office elements of the proposed development. It is therefore considered that the proposal would have a minimal impact in terms of the level of traffic on the highway network compared to the extant permission of the site. Therefore no highway mitigation measures are required.

Mitigating Residual Impacts

Through demand management

Traffic generated by the site would be controlled by the availability and allocation of the proposed parking provision which would be for the residential and office elements of the development. The development will be supported by a Travel Plan which would seek to reduce car borne trips generated by the commercial and residential uses on the site.

Through provision of new or expanded road

The site is located in a mature urban environment with an established road network. The Transport Assessment and Travel Plan have principally sought to minimise the number of car trips generated by the site, therefore no expansion of the road network is required.

9.8 Summary

The site is located within Birmingham city centre and benefits from being in close proximity to retail, leisure and health facilities along with excellent public transport links including three major train stations within 700m and bus stops adjacent to the site. The site is also accessible by walking and cycling and is therefore considered that the site is ideally located to maximise sustainable accessibility.

The permitted use of the site, granted in the 2009 planning permission, comprises a mix of residential, commercial and retail uses.

It is proposed to redevelop the site to provide a mixed use scheme comprising of 223 residential dwellings, 4 live/work units, 1,415m² of retail and 23,422m² of office use.

The proposal would provide improvements in terms of pedestrian activity and connectivity of the site to the Bullring and the wider city centre by means of the following proposed works including:

- New pedestrian route from Allison Street to Park Street
- Wider footways on Digbeth High Street
- Pedestrianisation of Orwell Passage including resurfacing.

The TA has sought to demonstrate that the proposed development could produce a small increase in vehicle trips to and from the site during the peak periods above the existing permission for the site.

The proposal would therefore have a minor impact on traffic levels on the surrounding highway network. BCC, as the Highway Authority, are content that the traffic impact of the proposed development will be minimal, and therefore mitigation is not required.

Overall whilst the construction phase of the project will have a moderately negative impact, this is relatively short lived and the long term effect of the development on the local traffic situation will be minor.

Based upon the appraisal of transport impacts discussed above, the residual impacts associated with the **Construction Phase** are deemed to be of **MODERATE** significance and short-term and temporary in nature. The residual impacts associated with the **Operational Phase** are deemed to be of **LOW** significance and long-term or permanent in nature.