

TRANSPORT AND WORKS ACT 1992

TRANSPORT AND WORKS (INQUIRIES PROCEDURE) RULES 2004

PROPOSED MIDLAND METRO (BIRMINGHAM EASTSIDE EXTENSION) ORDER

Statement of Case of the Applicant

West Midlands Combined Authority

30 May 2017

WEST MIDLANDS COMBINED AUTHORITY
THE MIDLAND METRO (BIRMINGHAM EASTSIDE EXTENSION) ORDER

STATEMENT OF CASE

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WEST MIDLANDS COMBINED AUTHORITY

THE MIDLAND METRO (BIRMINGHAM EASTSIDE EXTENSION) ORDER

STATEMENT OF CASE

1. INTRODUCTION

- 1.1 On 4 October 2016, the West Midlands Combined Authority ('the WMCA') applied to the Secretary of State for Transport under sections 1 and 5 of the Transport and Works Act 1992 ('the 1992 Act') **[BEE/B1]** for the Midland Metro (Eastside Extension) Order ('the Order').
- 1.2 The Order **[BEE/A8/1, BEE/A8/2]**, if made, would confer the necessary powers on the WMCA to construct, operate and maintain an extension to the Midland Metro tramway in Birmingham City Centre from Bull Street over Albert Street and Moor Street Queensway, along New Canal Street and Meriden Street to Digbeth and High Street Deritend. The Order would confer powers on the WMCA to acquire compulsorily land and rights over land, to extinguish private rights, use land temporarily and carry out such other works as may be necessary or expedient in connection with the tramway.
- 1.3 Composite plans and sections **[BEE/A11]** showing the proposed works and the extent of land to be acquired or used for the purposes of the tramway were deposited with the application for the Order.
- 1.4 The application for the Order was made in accordance with the requirements of the Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006 ('the Applications Rules') **[BEE/B3]**. In accordance with these rules, the application was advertised in the *Birmingham Mail* on 4 October 2016 and 11 October 2016 and in the *London Gazette* on 4 October 2016.
- 1.5 The Transport and Works (Inquiries Procedure) Rules 2004 ('the Inquiries Rules') **[BEE/B4]** require applicants for an order under the 1992 Act to provide a Statement of Case. The purpose of the Statement of Case is to set out full particulars of the case that the WMCA proposes to put forward at the Inquiry, including an explanation of the WMCA's reasons for making the application for the Order.
- 1.6 This Statement of Case includes the following appendices:
- Appendix A contains a list of the documents to which the WMCA currently intends to refer to or to put in evidence at the Inquiry.
 - Appendix B is a notice required by Rule 7(2)(b) of the Inquiries Rules **[BEE/B4]** setting out the deposit locations where the documents set out in Appendix A will be available for public inspection.
- 1.7 In this Statement of Case, references to the documents that have been included in the list in Appendix A are identified in bold (for example **[BEE/A1]**).

2. THE APPLICANT

The Applicant - West Midlands Combined Authority – the WMCA

- 2.1 The West Midlands Combined Authority ('the WMCA') is a statutory body created by the West Midlands Combined Authority Order 2016 (S.I. 2016/653) **[BEE/B12]** made by the Secretary of State on 16 June 2016 under the Local Democracy, Economic Development and Construction Act 2009.
- 2.2 The West Midlands Combined Authority Order 2016 abolished the West Midlands Integrated Transport Authority and dissolved the West Midlands Passenger Transport Executive and transferred those organisations' functions, property, liabilities and rights to the WMCA.
- 2.3 The WMCA is therefore the body responsible for the purposes of co-ordination, promotion and, in some areas, the delivery of the wider public transport network for the West Midlands. The WMCA's transport role also includes the preparation and implementation of the West Midlands Local Transport Plan (WMLTP) **[BEE/E10]**.
- 2.4 Section 20 of the Transport and Works Act 1992 **[BEE/B1]** provides that a body which has power to promote Bills in Parliament may also promote or apply for or object to orders under sections 1 and 3 of that Act. Section 10(1)(xxix) of the Transport Act 1968 (as amended by the WMCA Order 2016) and section 239(4A) of the Local Government Act 1972 (as amended by Local Democracy, Economic Development and Construction Act 2009) empowers the WMCA to promote Bills in Parliament. The WMCA therefore has power to apply for an order under the 1992 Act. Approval of the submission of the application for the purposes of s. 239 of the Local Government Act 1972 was granted by the WMCA Board on 30th September 2016 **[BEE/F1]**. That approval was confirmed by the WMCA Board on 17th March 2017.
- 2.5 The WMCA comprises twelve local authorities (seven constituent and five non-constituent) and three Local Enterprise Partnerships ('LEPs') (Black Country, Coventry and Warwickshire, and Greater Birmingham and Solihull). There are seven appointed councillors, one from each of the constituent districts led by the West Midlands Mayor, Andy Street who was elected on 4 May 2017.
- 2.6 References in this document to the Midland Metro Alliance ('MMA') are to the alliance that represents the WMCA in its capacity as promoter and developer of the Midland Metro, which it owns and currently operates through a concession agreement. The MMA has been formed by the WMCA, the design consortium of Egis, Tony Gee and Pell Frischmann and contractor Colas Rail, (supported by their sub Alliance Partners Colas Ltd; Barhale; Thomas Vale; and Auctus Management Group). The MMA will implement a 10 year programme of Midland Metro tram system enhancement works in the West Midlands.

Transport for West Midlands

- 2.7 Transport for West Midlands (TfWM) is the executive body within the WMCA with responsibility for its transport functions.

Birmingham City Council

Role as Local Authority and Project Partner

- 2.8 Birmingham is one of the most connected cities in the UK. There are three main railway stations (New Street, Moor Street and Snow Hill), located in the city centre with direct services to cities across England, Scotland and Wales. Birmingham Airport, adjacent to the city boundary, operates routes worldwide. Birmingham has excellent links with the national motorway network **[BEE/E3]**. The local government administration area of Birmingham City Council ('BCC') consists of 40 geographical wards with a total of 120 councillors representing the local population. The 2011 census recorded the city's population at over one million and it has experienced significant population growth, expecting population growth of an additional 150,000 people by 2031 **[BEE/E3]**.

- 2.9 Birmingham covers an area of some 268km² and its diverse population makes up approximately two thirds of the 2.5 million people within the West Midlands region, with approximately 411,000 households **[BEE/E3]**. The city currently attracts 33 million visitors each year¹ for business and pleasure and has a workforce of over 484,000 **[BEE/E22/1]**. The city has a strong learning and education base with a total of 73,000 students from five universities and six major colleges **[BEE/E3]**.
- 2.10 BCC supports the proposed Order. In BCC's Birmingham Development Plan 2031 (BDP) **[BEE/E3]**, it is estimated that the centre of Birmingham will be key to the implementation of a number of transformational proposals, supported by the delivery of extensions to the Midland Metro tram network, including the BEE. Through regeneration, the city centre itself will grow by 800 hectares. Policy TP41 of BCC's BDP **[BEE/E3]** states that support will be given to extensions of the Midland Metro, and to the Eastside extension in particular, to facilitate improvement/enhancement in the public transport offer on key corridors and to facilitate access to development and employment.
- 2.11 BCC has worked and continues to work closely with the WMCA as a scheme partner in the development of the Birmingham Eastside Extension ('BEE') as demonstrated in the Report Detailing Consultation Undertaken **[BEE/A10]** which formed part of the TWAO application and as expressed in their letter of support. The WMCA is continuing to work with BCC in the development of the scheme through to its implementation.
- 2.12 The WMCA's work with BCC as part of the development of the BEE has included matters related to funding, strategic transport planning, traffic management, highway design, conservation areas, listed buildings, planning consents and major new developments.

Role as Planning Authority

- 2.13 BCC in its role as Planning Authority produces local planning policies to guide the development and use of land across the city. The current plan is the BDP **[BEE/E3]** which was adopted in January 2017 and supersedes the majority of policies contained within the Unitary Development Plan. It contains policies and proposals for supporting the ongoing regeneration and investment in the city centre. Improved connectivity is fundamental to this through improvements to all transport modes, including HS2 and the expansion of the Midland Metro Network (Policy TP41). This includes express support for the extension of the Midland Metro in the centre of Birmingham to connect with HS2 and the Eastside area, which is the subject of this TWAO application.
- 2.14 BCC is also in the early stages of preparing a supplementary planning document for Digbeth. This will provide a framework for growth and investment, including the provision of over 3000 new homes, commercial and retail floorspace with an emphasis on supporting digital media and creative industries. Consultation on the Draft Plan is due to take place in 2017 and the WMCA is working in partnership with BCC to ensure the benefits of improved public transport connectivity into Eastside are fully realised.
- 2.15 Whilst the Secretary of State will determine the Request for a Planning Direction **[BEE/A2]**, sought by the WMCA in connection with the Order application, BCC will be responsible for discharging the conditions which are attached to any Planning Direction given as part of the decision on the TWAO application. There has been extensive dialogue and consultation between the WMCA and BCC in their role as local planning authority and BCC has agreed the terms of the draft conditions that are included in the request for a Planning Direction that accompanied the Order application. These conditions will ensure the implementation of the necessary mitigation measures as identified in the Environmental Statement ('ES') **[BEE/A13/1-3]**, integration with the respective development sites and deliver high standards of design and public realm improvements.

¹ <http://visitbirmingham.com/media-centre/press-releases/birminghams-visitor-numbers-reach-new-high/>

Role as Highway Authority

- 2.16 In its role as the Highway Authority for all publicly adopted streets within its administrative boundary, BCC provides traffic management systems, the approval of alterations to existing highways and the adoption of new streets. These roles, and its duties in connection with road safety, mean that BCC as Highway Authority has a considerable part to play in the successful design, construction, operation and approval of the proposed tramway. BCC have previously approved on-street running of the Metro for the Birmingham City Centre Extension ('the BCCE') which is in operation between Snow Hill Rail Station and Stephenson Street, and for both the Centenary Square (CSQ) and Edgbaston (EDGE) extensions that are in the process of being developed and implemented.
- 2.17 BCC contributed to the WMLTP [BEE/E10] together with the former Integrated Transport Authority ('ITA') and the six other local authorities within the West Midlands Metropolitan Area. The BEE supports the approved targets set out in the WMLTP in terms of annual traffic growth limitation, increase of active travel, reduction of CO2 emissions from transport, and air quality improvements.
- 2.18 Various traffic management measures required in connection with the planned introduction of the BEE are being further developed in liaison and partnership with BCC as Highway Authority. The proposed measures will complement BCC initiatives and also benefit pedestrians, cyclists, bus users and road safety.
- 2.19 The WMLTP [BEE/E10] places significant emphasis on improving the public transport network, although proposals relating to active travel including the enhanced provision for cycling and walking are considerably weighted. The delivery of the BEE therefore will integrate these modes of transport.

Midland Metro

- 2.20 Midland Metro is an integral part of the transport system in the West Midlands. Line 1 opened in May 1999 and the Birmingham City Centre Extension ('BCCE') opened to New Street Station in May 2016. The BEE is one of a number of proposed extensions to the network which include the EDGE/CSQ extensions in Birmingham and Wolverhampton City Centre Extension ('WCCE') both of which received authorisation under the 1992 Act in 2016 and which are due to start construction in 2019. The Wednesbury to Brierley Hill Extension is also being progressed to implementation and the BEE itself forms the first phase of a further proposed extension that is being developed through East Birmingham towards Birmingham Airport.
- 2.21 The BEE will provide seamless accessibility to the HS2 Birmingham Curzon Street Station for passengers arriving at any of the three city centre stations, the coach station and also Metro users, and will also provide a cross-city link to HS2 from the north and west of the city centre for bus users.

High Speed Two (HS2)

- 2.22 The BEE has also been developed in close collaboration with High Speed Two Limited ('HS2 Ltd') due to the close proximity of the two schemes, as well as the wider impacts of the construction and operations of HS2, and the role of the BEE as a scheme to support connectivity to HS2. The WMCA and HS2 Ltd have held regular meetings on a number of different facets of both schemes and the parties are working together through regular design development workshops to deliver both schemes in tandem ensuring they complement each other.
- 2.23 The HS2 Bill received Royal Assent in February 2017 and the HS2 Ltd design process has now commenced. The WMCA will therefore continue to engage with HS2 to ensure integration of the BEE into the design of the HS2 Curzon Street Station and associated areas of public realm in the vicinity of the station.

3. THE APPLICATION

- 3.1 Part 1 of the Transport and Works Act 1992 provides the mechanism for the Secretary of State for Transport to authorise the construction, maintenance and operation of tramways and other guided transport systems. Orders made under the TWA may also authorise ancillary matters such as the compulsory acquisition and temporary use of land, the creation or extinguishment of rights over land and the charging of fares.

The Application Documents

- 3.2 The provisions of the draft Order **[BEE/A8]** are based on the Transport and Works (Model Clauses for Railways and Tramways) Order 2006 (S.I. 2006 No. 1954). Each article in the Order is explained in the Explanatory Memorandum accompanying the application **[BEE/A9]**.

- 3.3 The WMCA's application comprises the formal application and all those documents required by the Applications Rules to support it, namely:

(a) the draft Order **[BEE/A8/1]** (as submitted on 4 Oct 2016), **BEE/A8/2** (updated at 31 May 2017)]

(b) the Explanatory Memorandum **[BEE/A9]**

(c) Concise Statement of Aims **[BEE/A3]**

(d) Report Detailing Consultation Undertaken **[BEE/A10]**

(e) Environmental Statement (including scoping opinion and Non-Technical Summary) **[BEE/A13/1, BEE/A13/2 and BEE/A13/3]**

(f) Funding Statement **[BEE/A5]**

(g) Composite Works, Land Plans and Sections **[BEE/A11]**

(h) Book of Reference **[BEE/A12]**

(i) Declaration as to the status of the Applicant **[BEE/A6]**

(j) Estimate of cost of carrying out the proposed works **[BEE/A4]**

(k) Request for direction as to deemed Planning Permission and accompanying plans **[BEE/A2 and BEE/A11]**

(l) List of Other Consents Permissions Licences **[BEE/A7]**

(m) Traffic Regulation Order (TRO) Plans **[BEE/A11]**

(n) Crown Land Plan **[BEE/A11]**

Scope of the Order

- 3.4 The proposed Order **[BEE/A8/1, BEE/A8/2]** would authorise the WMCA to construct, maintain and operate an extension to the Midland Metro tramway system within the centre of Birmingham to support regeneration in the Eastside and Digbeth, provide improved interchange between Metro, bus and rail and therefore encourage modal shift and provide interchange and connectivity to HS2 Curzon Station.

- 3.5 As explained in more detail below the proposed Order would:

- authorise approximately 1.7 kilometres of Metro tramway from the junction of the BCCE on Bull Street to High Street Deritend in the vicinity of its junction with Heath Mill Lane;
- provide powers to acquire and use approximately 12 hectares of land;
- confer powers to affix overhead line equipment to buildings;
- construct a substation on Meriden Street;

- authorise the demolition of the buildings on Kings Parade and at the corner of Meriden Street and Digbeth;
- provide a bus facility adjacent to the proposed Curzon Street Promenade;
- realign Albert Street; and
- provide for various traffic management measures.

Planning permission for works authorised by the Order

- 3.6 The application includes a request for a direction that planning permission be deemed to be granted for the development proposed to be authorised by the Order pursuant to section 90(2A) of the Town and Country Planning Act 1990 **[BEE/B2]**.
- 3.7 Details of the elements of development for which it is requested that planning permission be deemed to be granted are set out in Schedule 1 to the request for a planning direction **[BEE/A2]**.
- 3.8 It is envisaged that the deemed planning permission will be subject to conditions. Proposed planning conditions are set out in Schedule 2 to the request for deemed planning permission **[BEE/A2]** in accordance with Rule 10 (6)(b) of the Application Rules. These include conditions reserving for subsequent approval of the local planning authority matters relating to design and external appearance, materials, landscaping, archaeology, construction, contamination, access, noise and ecological mitigation and treatment of land and buildings that have been identified for future redevelopment.
- 3.9 On 12 April 2017, in accordance with Rule 4 of the Transport and Works (Inquiries Procedure Rules) 2004 **[BEE/B4]**, the Secretary of State announced his intention to hold a public local Inquiry into the application ('the Inquiry').

4. NEED FOR THE BEE

- 4.1 The need for the BEE has been established by an examination of the deficiencies and opportunities of the existing transport offer in the city and of the solutions needed to remedy or take advantage of them [BEE/D23/1-5].
- 4.2 To support the sustainable growth of the West Midlands and its economy, a need has been identified to provide high quality public transport that is accessible to all and is an attractive alternative to travel by car.
- 4.3 The Eastside and Digbeth areas of Birmingham are undergoing transition. The recent and forthcoming developments in the area are creating a new thriving cultural and economic quarter of the city, with new spaces created for businesses, retail, residential and leisure uses. The Eastside area is also the location for the new HS2 Curzon Street station. This rail link will bring further economic and social benefits to Eastside, the city of Birmingham and the wider West Midlands conurbation.
- 4.4 The proposed development of Eastside and Digbeth will stimulate new travel demand for the area. The redevelopment and regeneration of the area will be further facilitated by enhanced transport connectivity.
- 4.5 The introduction of high speed rail link to Birmingham, with a central HS2 station at Curzon Street will also increase travel to and from the area, as well as further support the redevelopment and regeneration of the Eastside and Digbeth areas. The benefits that HS2 will bring to the West Midlands conurbation will be enhanced by improving the connectivity of the HS2 station to the area it serves.
- 4.6 To realise the full potential for future economic growth within these areas, high quality public transport services providing connections between Eastside, the planned Curzon Street Station, Birmingham City Centre, and the surrounding area are required. The current public transport network does not achieve this. Additionally, the current network does not provide a cross-city link to and from Digbeth to the significant population centres north of Birmingham and in the Black Country. BEE will help meet this need.

Improving Public Transport

- 4.7 The existing poor connectivity between Eastside and the rest of the city centre, including the key strategic rail interchanges is a barrier to growth, as without improved transport, these areas will remain isolated and remote from the main core area and the opportunity for growth that will be generated by the coming of HS2 into the Eastside area of Birmingham City Centre will not be maximised.
- 4.8 To meet the challenges of supporting and facilitating economic and population growth, while minimising transports negative impacts on the environment WMCA's Strategic Transport Plan [BEE/14] sets out a vision and strategy for the development of the West Midlands transport system and identifies a need to improve national and regional transport links to boost the West Midlands' economy, links across the Metropolitan Area to provide better access to jobs, leisure and services and links within local communities to reduce the reliance for short distance trips.
- 4.9 The Strategic Transport Plan identifies the need to invest in infrastructure to achieve its objectives and in particular, the need for a high quality metropolitan public transport network. Midland Metro is recognised as a key aspect of an integrated rapid transit network. BEE will be an integral part of the Midland Metro network. BEE will improve public transport connectivity to an area of the city not currently well served by public transport, enhance interchange opportunities with bus and provide better links to Birmingham Coach Station.
- 4.10 Buses accessing the city centre from the south and south east side of the city will be provided with access to Metro enabling easier access to destinations (new and existing) along the Metro network including Wolverhampton, West Bromwich etc., as well as to the western edge of the city centre with the implementation of the Edgbaston Extension.

- 4.11 As well as extending the geographic scope of Midland Metro, BEE will also provide a platform for further expansion of the network to east Birmingham.

Regeneration

- 4.12 The Eastside and Digbeth areas are located within the Birmingham City Centre Enterprise Zone. Currently much of the land in the Eastside and Digbeth areas is under-utilised and supports relatively low value activities. The Eastside area is recognised as an Area of Transformation within the Big City Plan [**BEE/E22/1 and BEE/E22/2**] as part of wider initiatives to support the economic growth of Birmingham and the wider West Midlands conurbation.
- 4.13 Both Eastside and Digbeth are home to an established and continually growing creative sector and have quickly become a well-known hub for digital media, gaming and arts companies. The area is complemented by cultural diversity and a unique nightlife scene.
- 4.14 The Enterprise Zone will support the development of Eastside and Digbeth as set out in the Big City Plan through a range of incentives, including simplified planning, business support and infrastructure investment. GBSLEP's assessment is that the Zone as a whole has the potential to support 40,000 new jobs, add £2 billion a year to the local economy and make available 1.3 million square metres of floorspace across the 25 year lifetime of the Enterprise Zone. Eastside and Digbeth are expected to make up a significant contribution to this.
- 4.15 To support the regeneration of the Eastside and Digbeth areas of Birmingham there is a need to improve access to those areas and increase journey opportunities. This need is recognised in BCC's BDP [**BEE/E3**] and Birmingham Curzon HS2 Masterplan [**BEE/E19**].

HS2

- 4.16 HS2 will link Birmingham and London from 2026. Due to the reduced journey times it will offer and the additional capacity it will provide, HS2 will be the principal link between Birmingham and London. With the completion of later phases of HS2, services will also be provided to the North West and to Yorkshire. With its statement building, the Curzon Street HS2 station will be a principal gateway to the city.
- 4.17 It is neither practicable nor desirable to cater for journeys to and from the new HS2 station solely by private car and taxi/private hire. In terms of public transport trips, the HS2 Environmental Statement [**BEE/C2**] provides an indication of the number of people arriving and departing each day. This is an additional 13,000 people in the 2026 and an additional 28,000 in 2041.
- 4.18 This forecast extra demand needs to be accommodated.
- 4.19 BEE will provide a fixed link between the HS2 station at Curzon Street and Birmingham city centre, the largest centre and employment and commercial activity in the West Midlands. It will provide interchange with Curzon Street Station through the tramstops at Albert Street and New Canal Street, adjacent to the two planned entrances to the station.
- 4.20 With the extension of Midland Metro to Edgbaston via Centenary Square, currently expected to open in 2021, the area of the city centre directly linked to the HS2 station will expand. Access to the HS2 station will also be provided from destinations along the existing Line 1 route and with proposed extensions between Wednesbury to Brierley Hill, and to east Birmingham. For Birmingham and the wider West Midlands to maximise the benefits of HS2 the connections between the city's wider transport network and HS2 needs to be improved. This includes a need to improve connections to:
- other rail stations in the city centre which offer local, regional and nation connections;
 - the existing Metro network which provides regular tram services from Wolverhampton through West Bromwich to Birmingham Snow Hill Station and Birmingham New Street Station;

- the city's bus network (buses provided 275.1 million journeys in the West Midlands in 2014/15); and
 - Birmingham Coach Station in Digbeth which provides access to regional and national destinations (including national airport connections).
- 4.21 While there is some existing connectivity between these modes and stations/stops and the HS2 station at Curzon Street, BEE will enhance these links through the provision of a high quality rapid transit system. In particular, BEE will
- link the HS2 station at Curzon Street directly to Snow Hill and New Street stations; and
 - provide a link between HS2 and Birmingham Coach Station, as well as enhance the links between the Coach Station and Birmingham City Centre and the railway stations at Snow Hill and New Street, as well as bus services in the city centre.
- 4.22 The BEE will maximise the benefits of HS2 for Birmingham in line with the BDP (Policy TP41 **[BEE/E3]**) and the 'HS2 Get Ready' report **[BEE/E9]**, enabling passengers arriving to Birmingham City Centre by HS2 to directly access shops, offices and other cultural and leisure amenities in other parts of the city. It will maximise the regeneration and development potential of HS2 in the city centre in line with the Birmingham Curzon HS2 Masterplan **[BEE/E19]** and the HS2 Growth Strategy **[BEE/E16]** by ensuring connectivity to Curzon Station from across the West Midlands.
- 4.23 The BEE would support the WMLTP **[BEE/E10]** which outlines the importance of high quality interchanges in Long Term Theme 8, stating that, 'Interchanges between the rail and rapid transit and bus networks are an important part of city and town centre improvements'.

5. SCHEME AIMS

- 5.1 The BEE has been developed to address the needs identified. The objectives of the BEE are set out in the Concise Statement of Aims **[BEE/A3]** which accompanied the application. These objectives are described below.

Provide Access to International Gateways and HS2.

- 5.2 The BEE will connect HS2 Curzon Street station with the wider Birmingham City Centre area and the Black Country by linking to the expanding Midland Metro network as well as maximising interchange opportunities with the existing railway stations at New Street and Snow Hill. It will also provide for future Midland Metro connections to East Birmingham, linking to Birmingham Airport, Birmingham International and the HS2 Birmingham Interchange.

- 5.3 In addition it will provide wider access to international Gateways and HS2 by creating linkages to the local bus network, both through the bus interchange adjacent to HS2 and the Albert Street tramstop.

Provide Economic Benefits and Improve Business Efficiency and Interactions.

- 5.4 The BEE will provide economic benefits by helping to improve business efficiency in the Eastside, Digbeth and the City Centre Enterprise Zone and by helping to unlock Birmingham's growth potential by increasing jobs and deepening labour pools through providing better transport accessibility.

- 5.5 One of the key determinants of the level of economic activity that a particular area can sustain is the size of the effective labour force who can reach that area. Three separate reasons can be identified as to why a larger effective labour market will allow an area to sustain a higher level of economic activity:

- A volume effect: Very simply, if there are more people who can potentially work in a given area, and there are currently labour supply shortages, then the more job vacancies can be filled.
- A price effect: With more people within the labour market of a particular area that labour market will become more competitive, reducing costs beyond what they otherwise would be and boosting productivity.
- Efficient labour market matching: A larger labour market means that employers are more likely to find a person with an appropriate set of skills to fill a particular vacancy.

- 5.6 The BEE aims to improve the size of the effective labour market of the Eastside, Digbeth and the City Centre Enterprise Zone and thereby increase the economic output of the area through the enhanced connectivity to the wider West Midlands region, enhancing all these three factors.

Link Key Developments and Facilitate Growth.

- 5.7 BEE will link the city centre core and the wider region, facilitating the growth proposed in BCC's BDP **[BEE/E3]**, Big City Plan **[BEE/E22/1 and BEE/E22/2]** and Birmingham Curzon HS2 Masterplan **[BEE/E19]**. It will encourage interaction between Birmingham businesses and stimulate growth, providing new and improved public transport links for Eastside and Digbeth, enabling businesses to access important national and international markets, supporting growth within the City Centre Enterprise Zone and reinforcing the economic momentum of the area. It will reduce journey times between Eastside and central Birmingham and the Black Country and will provide opportunities for modal shift to Midland Metro from private cars helping to reduce congestion and bringing opportunities for improving walking and cycling.

- 5.8 The BEE, together with the CSQ and EDGE extensions, will create a cross-city tram route providing legible, frequent and high quality links between employers and other facilities and HS2.

Enhance Access to Labour and Skills.

- 5.9 The BEE will provide high quality public transport links with key population, education and employment centres in the city which includes Eastside, Digbeth and Deritend, and the wider region, including along the Line 1 corridor, in order to open up access to the jobs created in the City Centre Enterprise Zone as identified in the NPPF **[BEE/E1]** and BDP **[BEE/E3]**.

6. SCHEME DEVELOPMENT

Consultation

- 6.1 Public consultation and stakeholder engagement was undertaken as part of the scheme development. Two initial consultations were carried out in which alternative route options were presented to the public. As part of these exercises, questionnaire surveys were also undertaken.
- 6.2 The first public consultation in February 2014 presented two alternative route options between the junction of the extension with the BCCE at Bull Street to New Canal Street. Of the two options, the route Option Two via Dale End with a tramstop at Albert Street received more positive comments and over 90% of questionnaire respondents to the questionnaire supported the BEE in general.
- 6.3 In October 2014 consultation was undertaken on the second section of the route from New Canal Street to Adderley Street, once again presenting two alternative route options. Over 94% of the questionnaire respondents stated support for the scheme and 74% stated a preference for the route option along Digbeth / High Street Deritend.
- 6.4 Further details of both consultations are given in the Route Options Report which is appended to the Environmental Statement ('ES') **[BEE/A13/2]**.
- 6.5 Following the conclusion of the initial route options assessment and the preliminary design, the WMCA commenced preparation work for the TWAO application, including consultation with statutory consultees (those listed in Schedule 5 and Schedule 6 to the Applications Rules) as well as a number of non-statutory consultees and a further public consultation in May and June 2016. The WMCA was already in dialogue with a number of statutory consultees ahead of the TWAO application and this consultation process fed into the selection of the route alignment as detailed in the Report of Consultations Undertaken **[BEE/A10]** that was submitted as part of the TWAO application.
- 6.6 The WMCA continues to engage directly with statutory and other stakeholders and their agents as appropriate, as well as the public through the TWAO process and, if the Order is made, will continue to do so during the subsequent implementation of the BEE scheme.
- 6.7 The Report of Consultations Undertaken **[BEE/A10]** details the discussions that were undertaken with various stakeholders in relation to the design of the route within the TWAO as well as wider discussions about the scheme and engagement with specific landowners. These included discussions with the following:
 - 6.8 Hammerson (Martineau Galleries) in relation to issues including the tramstop on Albert Street, the BEE alignment and highway in the vicinity of their development;
 - 6.9 Hotel LaTour in relation to access to their property, the Metro alignment and the bus facility outside their property, including mitigation;
 - 6.10 Gooch Estates in relation to the proposed Metro tramstop and the Metro alignment along New Canal Street and Meriden Street; and
 - 6.11 Hartwell in relation to their land at the junction Meriden Street and Digbeth.
- 6.12 The design of the scheme has been undertaken in consultation with BCC as the local authority particularly with regard to traffic / highways and planning. Prior to the submission of the TWAO application, the local authority were appraised of the details of the application through a regular series of design development workshops and through copies of draft Order documentation for comment.
- 6.13 The design development process has also involved close co-operation with HS2 Ltd which is continuing especially as the details of HS2 become determined following the granting of Royal Assent to the HS2 Bill in February 2017.

Consideration of Alternatives

Alternative Modes

- 6.14 The BEE has been developed in the context of an expanding city centre tram network, with a number of short extensions (all of less than 2km) being proposed and funded since 2012. For the first of these, the BCCE extending 1.3km from Snow Hill to New Street station a thorough assessment of alternatives was undertaken.
- 6.15 The BCCE considered a number of technology options for Metro in the city centre in general, which are equally applicable to the further short extensions, CSQ, EDGE (to Five Ways) and BEE **[BEE/C4]**. These were:
- Light rail, with some tunnelled sections
 - Light rail, on-street throughout
 - Wire guided trolley bus
 - Additional bus services
- 6.16 Work by Centro and BCC concluded that for the BCCE underground running would be both prohibitively expensive, and that access difficulties to underground stations would be undesirable for users in terms of convenience and security. It would also be difficult to provide good interchange and integration with new city centre developments.
- 6.17 Conversely, on-street running was felt to offer a more environmentally attractive solution, stronger integration potential with land use developments, as well as being more accessible than an option with underground stops. On-street running was also considered to have greater potential for securing developer contributions and other funding sources, and would provide a visual symbol for a world class city. The success of BCCE bears this out.
- 6.18 The non-rail options considered encompassed a wire guided trolley bus option and additional bus services. The wire-guided trolleybus was identified as being the closest equivalent system to light rail. It combines the features of a conventional bus, but without the emissions resulting from diesel engines. In addition, the trolleybus would require overhead power lines in common with light rail, although these could be expected to be more intrusive for trolleybus operation.
- 6.19 A wire-guided trolleybus option (or any other non-LRT mode), while being the closest equivalent system to light rail, would require an interchange for passengers making an onward journey from the existing Midland Metro system. This would be a significant dis-benefit compared with an option offering a seamless onward journey, such as an extension to Midland Metro. Options involving conventional bus services would similarly involve an interchange in central Birmingham.
- 6.20 The conclusions reached for BCCE remain equally valid for the CSQ, EDGE and BEE extensions, in the latter case given its routing through central Birmingham and a mix of segregated and on-street running. Further strengthening the choice of the Metro solution since the BCCE case was developed are the wider network benefits that expansion of the network to the Eastside will now provide. Since the authorisation of the BCCE, the proposed Metro network now includes the extensions to Edgbaston and to Wolverhampton Railway Station and proposals are being developed to extend the Metro to UK Central Hub via Chelmsley Wood and Bordesley Green, and in the Black Country to Dudley and Merry Hill. The East Birmingham to Solihull ('EBS') proposal is strongly supported by the WMLTP **[BEE/E10]** and is referred to in GBSLEP's HS2 Connectivity Packages and in the BDP **[BEE/E3]**. The extension to Eastside would be the first phase of this proposed extension.
- 6.21 The WMCA produced its proposals for the West Midlands Connectivity Package in the paper "HS2 Unlocking the benefits" **[BEE/E15]** setting out their strategy for realising the benefits of High Speed 2 through improvements in regional and local transport links.

- 6.22 The BEE, together with the existing Metro network and proposed extensions linking to HS2, will begin to deliver a world class integrated transport network for Birmingham and the West Midlands. The BEE is part of the WMCA's ongoing programme for the expansion of the Midland Metro network. The first phase of the expansion involved the construction of the Birmingham City Centre Extension (BCCE), which extended Metro to New Street station.

Alternative Alignments

- 6.23 Alternative alignments and the history of the development of the scheme and its alignment are described within the Route Options Report which is appended to the ES [BEE/A13/2].
- 6.24 The alignment options for the BEE were considered in two sections resulting in two final options for each section which were then considered further in order to select the preferred alignment to be included in the TWAO application.
- 6.25 In considering alignment options, the WMCA has also worked with BCC and has taken account of BCC's vision and aspirations for the Dale End, Eastside and Digbeth areas of Birmingham.

Kings Parade

- 6.26 The BEE requires the demolition of the Kings Parade Building in Dale End. The Route Options Report [BEE/A13/2] gives an overview of the design and consultation process that resulted in the confirmation of the alignment as is proposed in the vicinity
- 6.27 Six initial options were assessed having regard to the following factors: environment, deliverability, safety, accessibility, integration, engineering, operations and sustainability. This resulted in further work being undertaken on the two most feasible options both of which required some property demolition. However, the route chosen as proposed in the Order was straighter and shorter and the alternative option which had a major disadvantage of being along a one-way bus route and was also subject to concerns about the Metro passing over the Snow Hill Rail Tunnel, the crown of which is very shallow in this location.
- 6.28 Following the selection of this route corridor an alternative alignment was considered which avoided the demolition of the Kings Parade Building and instead required the demolition of the adjacent building, currently occupied by BetFred, and buildings located on Albert Street / New Meeting Street. However, this alternative would have required a very tight curvature of the alignment around the Kings Parade Building and would adversely impact on the servicing of properties from New Meeting Street, including visibility issues for those service vehicles. In addition, the Kings Parade Buildings are part of the site of the Martineau Galleries Development and were proposed to be demolished within the original planning application.

Tramstops

- 6.29 As part of the development of the route, the location and number of tramstops was the subject of the design evolution process.
- 6.30 Considerations included how to achieve a high quality interchange for both interconnecting Metro services (for which a tramstop as close as possible to BCCE would be the best option) and with HS2 (for which a tramstop close to the station would be best), whilst still maintaining commercial journey speeds for the tramway and also considering the large level differences across the route. Initially a tramstop on lower Bull Street and one outside Hotel LaTour were considered; these were amalgamated into a single tramstop on Albert Street to serve both the city centre and the western entrance to the HS2 Curzon Street Station. (The eastern entrance to the HS2 Curzon Street Station is served by another tramstop on New Canal Street.) A further tramstop was introduced on Meriden Street, primarily to serve the major redevelopment in that area, with a terminus tramstop on High Street Deritend.
- 6.31 As stated above, initial options for the Albert Street tramstop located the tramstop to the east of Moor Street Queensway, in the area alongside the proposed HS2 Curzon Street Station. However, discussions with HS2 and BCC identified that a Metro tramstop was less than ideal due to the large level difference between the proposed concourse and the tramstop. The stop

would also not be visible to users exiting the front of the station which was not desirable to either BCC or HS2, and this location was also further away from the city centre core area. As such, the tramstop was moved to its current position on Albert Street on the west side of Moor Street Queensway, where it best balances demands and constraints, and also enhances the potential for a high quality redevelopment of the Martineau Galleries site.

- 6.32 The proposed tramstop located at New Canal was originally located along the line of New Canal Street, but was revised during discussions with HS2 and BCC to move it further away from the face of the proposed HS2 structure (including the locally listed Eagle and Tun Public House) in order to provide a footway around the tramstop platform and more space for pedestrian movements in the area.
- 6.33 During ongoing consultation with BCC, and following response to BCC's consultations on the HS2 Curzon Masterplan for Growth **[BEE/E19]**, the Council expressed a desire to have a tramstop along New Canal Street / Meriden Street to serve regeneration of Eastside and proposed developments in the vicinity, principally the Typhoo Wharf development. During both engineering and modelling work including BCC's requirement for adequate footway provision, different locations were considered to maximise the tramstop position and minimise any land and property acquisition, including a staggered platform arrangement with the northbound platform and the southbound platform either sides of the junction with Bordesley Street. As such, the tramstop was relocated north of the junction to minimise landtake and impacts on existing businesses.

7. POLICY CONTEXT

- 7.1 A review of relevant transportation and economic development policies has been undertaken in the ES [BEE/A13/1-3] and as part of the Strategic Case of the scheme's Business Case [BEE/D23/1-5]. The BEE is supported by and complies with the key transportation, planning and economic development policies at all levels. The transportation policies and guidance outlined in this chapter are provided by the European Commission at the European level, the Department for Transport at a national level, the nine local authorities that make up the Greater Birmingham and Solihull Local Enterprise Partnership and the WMCA at a regional level and Birmingham City Council at a local level.
- 7.2 The national agenda for transport is focused upon the twin objectives of supporting economic development and reducing carbon emissions. Associated with these is improving social inclusion through the provision of wider social and economic benefits. The national planning policy context has been shaped in recent years through the National Planning Policy Framework (NPPF) 2012 [BEE/E1], and National Planning Practice Guidance 2014 [BEE/E2/2-4]. These and further planning and policy guidance documents relevant to BEE are discussed below.

Transport Policies

European Transport Policies

- 7.3 The European Commission Transport White Paper 2011: Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system (March 2011) [BEE/E13] sets out a vision for the future of the EU transport system and defines a policy agenda for the coming decade. The White Paper recognises that transport is fundamental in economic and social terms. In the urban context, the White Paper encourages a mixed strategy approach involving land use planning, pricing schemes, efficient public transport services and infrastructure for non-motorised modes (as provided by the BEE) and charging/refuelling of clean vehicles to reduce congestion and emissions. The expansion of the Midland Metro network is part of a wider strategy for improving connectivity across the West Midlands and one of the key objectives of the BEE is to maximise the transport benefits that arise from HS2 in Birmingham City Centre. In particular, the BEE will bring about connectivity and interchange between high speed services, heavy rail services and the light rail network. In doing so it achieves the aspirations of the White Paper by aligning a non motorised efficient mode of transport to the wider regeneration objectives set out in the various land use and development plan documents at a local level.

National Transport Policies

Transport White Paper

- 7.4 The Transport White Paper, *Creating Growth, Cutting Carbon: Making Sustainable Local Transport Happen* [BEE/E10] was published in January 2011. It seeks to create growth in the economy whilst also tackling climate change by cutting carbon emissions, thus contributing towards the achievement of these two key Central Government objectives. As such, the White Paper includes the vision for 'a safer transport system that is an engine for economic growth, but one that is also greener and safer and improves quality of life in our communities'.
- 7.5 Midland Metro delivers high quality and capacity public transport connectivity, helping modal shift from private vehicles, reducing carbon emissions, producing no pollutants at the point of use and enables people to improve their health and wellbeing through increased walking to conveniently located tramstops. A key part of the BEE will be to ensure safe and frequent services as part of the light rail network expansion and a number of measures will be implemented to deliver these objectives through the detailed design process.

West Midlands Transport Policies

West Midlands Strategic Transport Plan: Movement for Growth, West Midlands Combined Authority, June 2016

- 7.6 The Strategic Transport Plan **[BEE/E14]** sets out a vision and strategy for the development of the West Midlands transport system. It outlines five key challenges that the West Midlands faces:
- Support economic and population growth by linking ‘jobs and people’ and ‘products and markets’;
 - Meet the challenges of capacity and congestion greater demand for movement brings;
 - Reduce the environmental impacts from transport;
 - Improve people’s health through the encouragement of more active lifestyles; and
 - Raise the standard of living by improving access to leisure and essential services.
- Tackling these challenges lead to three key aims of the Strategy:
- Improving national and regional links to boost the West Midlands’ economy;
 - Improving links across the Metropolitan Area to provide better access to jobs, leisure and services; and
 - Improving links within local communities to reduce the reliance for short distance trips.
- 7.7 The Strategy stresses the importance of investment in both infrastructure, technology and behaviour change for achieving its objectives at both the national, metropolitan and local level. The Strategy is to develop a high quality metropolitan public transport network, allowing residents and workers to travel across the conurbation in a space efficient, environmentally friendly way. Midland Metro is recognised as a key aspect of an integrated rapid transit network, and future expansion is outlined as part of a long-term metropolitan rail and rapid transit network. Future expansion along the City Centre – East Birmingham – Birmingham International/NEC axis is supported as part of the region’s long term transport vision. BEE is an integral part of this extension to the network.
- Towards a World Class Integrated Transport Network: Supporting Growth and Regeneration in the West Midlands, April 2013*
- 7.8 The WMCA has produced a long term vision document for public transport ‘Towards a World Class Integrated Transport Network’, **[BEE/E11]** which updates the previous ‘Integrated Public Transport Prospectus’ **[BEE/E18]**. This document was updated in 2013 to include a wider narrative on the critical roles of highways, freight, cycling, walking and land use planning to enable promotion of a truly integrated transport system, with an increased emphasis on transport infrastructure boosting economic activity.
- 7.9 The aim of the prospectus is, “a prosperous, healthy, inclusive and sustainable West Midlands, served by a world class transport network. Such a network will be customer focused, offer excellent local connectivity and easy access across the West Midlands, so that people can reach jobs, skills and the range of services and leisure opportunities they demand for a high quality of life.”
- 7.10 With the extended economic geography of the West Midlands travel to work area, there needs to be a more extensive, high capacity, fast, rail and rapid transit network serving the centres and major employment zones together with the main growth centres and regeneration areas. This needs to be complemented by an effective and efficient high capacity local bus network. BEE contributes to this by providing greater rapid transit penetration between modes in

Birmingham City Centre improving connections and integration between Metro, bus and rail networks.

West Midlands Local Transport Plan (2011-2026): Making the Connections, 2011(WMLTP)

- 7.11 The West Midlands Strategic Transport Plan **[BEE/E14]** replaces the WMLTP **[BEE/E10]** as the strategic transport planning document for the West Midlands Metropolitan Area. However, to show consistency with the policy background against which the BEE was developed it is still of value to consider supporting points made in the WMLTP.
- 7.12 WMLTP **[BEE/E10]** focuses on providing sustainable travel and transport choices with improved connectivity within and between centres. When adopted it became the statutory transport plan for the West Midlands. The enabling role of the transport network is identified as supporting economic growth and regeneration in the West Midlands, and is consistent with national policy. The identified role that transport can play includes improving accessibility and connectivity, and supporting a better quality of life, as captured in the five objectives below:
- Underpinning private sector-led economic growth and regeneration.
 - Tackling climate change.
 - Improving public health and safety.
 - Tackling deprivation and worklessness.
 - Enhancing well-being and quality of life.
- 7.13 These objectives form the foundation of the WMLTP policies, which are designed as a route to achieving these objectives. The key policies are summarised below:
- Enable regeneration and thriving centres, corridors and gateways.
 - Encourage modal transfer and create sustainable travel patterns.
 - Use the rail and rapid transit network as the ‘backbone for development’.
 - Improve local accessibility and connectivity.
 - Integrate transport effectively and reliably.
 - Improve the environment and reduce carbon emissions.
- 7.14 In addition to these region-wide objectives and policies, the WMLTP also identifies the main challenges at a sub-regional level. With specific reference to Birmingham and Urban Solihull, and the Eastside Extension, the following key challenges are identified:
- Maximising the benefits of HS2.
 - Improving the accessibility and connectivity of the re-developed New Street station.
 - Need for Midland Metro extensions to serve high volume corridors.
 - Need to promote more sustainable transport modes.

Planning Policies

National Planning Policies

NPPF

- 7.15 The National Planning Policy Framework (NPPF) **[BEE/E1]**, sets out what sustainable development means in practice for the planning system in England and provides the basis for planning decisions. The Framework states that economic, social and environmental gains

should be sought jointly and simultaneously through the planning system. The BEE Scheme achieves the principles of sustainable development by:

- promoting an environmentally friendly form of transport that is aimed at minimising the use of the private car, reducing congestion and maximising usage of non car modes;
- promoting social inclusion through the provision of safe, affordable and highly accessible public transport facilities; and
- supporting the local economy through construction related employment and providing improved access and connectivity to support regeneration of the city centre.

7.16 The NPPF identifies a series of core planning principles which include, actively managing patterns of growth to make the fullest possible use of public transport, walking and cycling, and focussing development in locations which are or can be made sustainable.

7.17 Section 4 of the NPPF seeks to promote sustainable transport and seeks to widen transport choice. Paragraph 29 makes clear that the transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel, recognising that opportunities to maximise sustainable transport solutions will vary between urban and rural areas.

7.18 The BEE Scheme does this by providing improved connectivity between a variety of modes of transport including high speed rail, rail, light rail and bus services.

Local Planning Policies

The Birmingham Development Plan (2031)

7.19 The BDP **[BEE/E3]** sets out the statutory framework to guide decisions on development and regeneration in Birmingham up to 2031. It sets out how and where new homes, jobs, services and infrastructure will be delivered and the type of places and environments that will be created. The BDP covers the whole administrative area of the city.

7.20 Policy TP41 supports the BEE as it relates to Midland Metro and bus rapid transit. It states that the development and extension of Metro/bus rapid transit to facilitate improvement / enhancement in the public transport offer on key corridors and to facilitate access to development and employment will be supported. In particular it supports:

- an extension of the Midland Metro network to Eastside via the HS2 Curzon Street Station, the BEE; and
- bus rapid transit routes from Birmingham City Centre along the Walsall Road and Hagley Road.

7.21 Policy PG2 of the BDP **[BEE/E3]** confirms that Birmingham will be promoted as an international city supporting development, investment and other initiatives that raise the profile of the Birmingham City Centre and strengthen its position nationally and internationally.

7.22 Policy GA1.1 states that Birmingham City Centre will continue to be promoted as the focus for retail, office, residential and leisure activity. Policy GA1.2 relates to growth and areas of wider change. The policy outlines that the ongoing regeneration of Eastside (of which the BEE is located within) will enable the City Centre Core to expand eastwards and will require well designed mixed use developments including office, technology, residential, learning and leisure. It outlines that any proposals for a HS2 station will need to be integrated into the area creating a world class arrival experience with enhanced connectivity to surrounding areas including Digbeth and the City Centre Core. The BEE will perform a key role in ensuring that this enhanced connectivity is delivered.

7.23 Policy GA1.3 confirms that new development must support and strengthen the distinctive character of the areas surrounding the City Centre Core raising its overall quality, offer and accessibility. Birmingham City Centre is considered to be formed by seven Quarters with the

Core at its heart. The policy outlines that within each quarter varying degrees of change are proposed that relate to the overarching objectives of delivering ambitious growth whilst supporting the distinctive characteristics, communities and environmental assets of each area. The BEE is located within the following quarters:

- The City Centre Core - providing an exceptional visitor and retail experience with a diverse range of uses set within a high quality environment;
- Digbeth - Creating a thriving creative and cultural hub with a high quality, exciting and easily accessible environment; and
- Eastside – Maximising its role as an area for learning and technology realising its extensive development opportunities and the integration of any proposals for HS2 station.

7.24 Policy GA1.4 relates to connectivity and states that measures to improve accessibility to and within the city centre will be supported, including the integration of public transport. The BEE will be an example of this.

7.25 Plan 5 within the BDP provides the City Centre Spatial Strategy which identifies a Metro extension from Bull Street / Corporation Street to the HS2 terminus in Eastside which is in line with the BEE **[BEE/E3]**.

7.26 The BDP also captures the sites within the City Centre Enterprise Zone and other major development sites which will be brought forward for development within the plan period. The sites which will be impacted by the Scheme are as follows:

- City Centre Enterprise Zone Sites: Major Sites
 - 6 – Southern Gateway
- City Centre Enterprise Zones Sites: Digbeth
 - 12 – Typhoo Wharf
 - 15 – Custard Factory Extension
 - 16 – Smithfield Court
 - 17 – Connaught Square
- City Centre Enterprise Zone Sites: Eastside
 - 22 – Curzon Park
 - 23 – City Park Gate
- Other Major Development Sites:
 - 28 – Martineau Galleries

7.27 Policy TP38 provides support for the development of a sustainable, high quality, integrated transport system, where the most sustainable mode choices also offer the most convenient means of travel. It states that the delivery of a sustainable transport network will require, amongst other things:

- 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;
- reduction in the negative impact of road traffic, for example, congestion and road accidents;

- working with partners to support and promote sustainable modes and low emission travel choices;
 - ensuring that land use planning decisions support and promote sustainable travel; and
 - building maintaining and managing the transport network in a way that reduces CO2, addresses air quality problems and minimises transport's impact on the environment.
- 7.28 The BEE achieves the objectives of Policy TP38 by reducing the need for use of the private car, encouraging the use of public transport and promoting a route alignment that seeks to maximise the development of land identified within the BDP **[BEE/E3]**.

7.29 The BDP **[BEE/E3]** contains further policies to protect and improve environmental quality. The ES **[BEE/A13/1-3]** provides further information on those planning policies (relating to traffic and transport, noise and vibration, air quality, greenhouse gases, historic environment, townscape and visual amenity, water resources and land drainage, soils, geology and contaminated land, and socio-economics) that are relevant to the BEE.

Birmingham Curzon HS2 Masterplan – Masterplan for Growth (BCC 2015)

7.30 The Birmingham Curzon HS2 Masterplan **[BEE/E19]** identifies opportunities and sets out the approach to future development, building upon the work of BCC's Eastside Masterplan and the Birmingham Big City Plan. It serves as its vision and framework for the future development of the HS2 city centre terminus and the wider regeneration of Eastside, Digbeth and the eastern fringe of the city centre core.

7.31 The Masterplan area covers 141ha and is bound to the east by the Ring Road (A4540 Dartmouth and Watery Lane Middleway) and to the south by the B4100 (the road known as Digbeth), High Street Deritend and High Street Bordesley. The Aston University campus adjoins the northern boundary on Jennens Road, with High Street and Corporation Street forming the western boundary with the City Centre Core.

7.32 The Masterplan **[BEE/E19]** outlines how HS2 will accelerate the growth potential of Birmingham City Centre with Birmingham HS2 Curzon Station at the heart of the expansion into the Eastside and Digbeth areas. HS2 will provide a number of benefits to the city centre and in order that the potential to be maximised and the associated growth delivered, the Masterplan identifies '5 Big Moves' needed as part of the delivery of the station to create wider economic impact.

7.33 One of the '5 Big Moves' identified is an extension to the Midland Metro, with an integrated tramstop to be provided at New Canal Street which will provide HS2 travellers with fast and efficient connections to the wider city centre, with additional tramstops transforming connections and boosting the regeneration potential of Digbeth.

7.34 The Masterplan **[BEE/E19]** proposes the integration of Birmingham HS2 Curzon Street Station with Metro and Sprint bus services with an interchange tramstop on New Canal Street. The design of the station and viaduct structure should ensure that there is sufficient platform width for Metro and Sprint bus passengers. It is proposed in the Masterplan to close New Canal Street from Curzon Street to Fazeley Street to general vehicular traffic allowing some taxi access but principally becoming a route for Metro and Sprint bus services only.

7.35 Section 4 of the Masterplan **[BEE/E19]** relates to connectivity, within which an extension of Metro is supported between the city centre and Adderley Street via New Canal Street and High Street Deritend. The route to Bull Street will improve public transport connections across the city centre and will provide a connection to the proposed HS2 station. The Masterplan outlines that the proposed extension will include a bus interchange located close to the proposed HS2 station. An essential requirement for Metro and HS2 is the full integration of a tramstop on New Canal Street to provide fast connections for passengers.

7.36 The Masterplan **[BEE/E19]** notes that a key principle will be to provide safe, attractive, direct and convenient routes to the proposed tramstops. Plan to take the Metro into East Birmingham

and North Solihull will transform access for these communities to HS2 stations at Curzon Street and the interchange station at Birmingham Airport.

Big City Plan – City Centre Masterplan (2011)

- 7.37 The Big City Plan **[BEE/E22/1 and BEE/E22/2]** aims to deliver transformational change in Birmingham City Centre. It sets out further proposals to expand the City Core to accommodate greater levels of economic and cultural activity, whilst supporting and strengthening the distinctive character of the surrounding areas, improving connections and raising their overall quality. The Big City Plan identifies both Eastside and Digbeth as key areas for regeneration activity with HS2 providing an opportunity to unlock development opportunities and link the area into the city centre.

Digbeth, Deritend and Bordesley High Streets (Digbeth/Deritend) Conservation Character Appraisal and Supplementary Planning Policies (2009)

- 7.38 Digbeth, Deritend and Bordesley High Streets (Digbeth/Deritend) Conservation Area contains important remnants of Birmingham's medieval townscape, dating from the 12th to 15th Centuries. It is also significant as an inner city industrial quarter with a good range of industrial and commercial buildings dating from the 19th to 20th Centuries and provides a major focus for regeneration.
- 7.39 The purpose of the supplementary planning policies document is to preserve or enhance the character or appearance of Digbeth, Deritend and Bordesley High Streets (Digbeth/Deritend) Conservation Area. In order to maintain and reinforce this special character the policies are intended to guide and manage the significant level of change anticipated for the area through the promotion of good new design which responds sensitively to historic context. New development will be encouraged to complement the established character of the area while reflecting its own time and function.
- 7.40 The BEE seeks to minimise harm to local heritage assets and the detailed design process will ensure a sensitive approach to the transport infrastructure, including consideration of the setting of listed buildings.

Warwick Bar Conservation Area Character Appraisal and Supplementary Planning Policies (2008)

- 7.41 Warwick Bar Conservation Area has a special architectural and historic character of local and regional significance. The canalside quarter, with its surviving industrial heritage, makes a unique contribution to the quality and interest of Birmingham's wider city centre area and offers a number of opportunities for regeneration.
- 7.42 The purpose of the supplementary planning policies document is to preserve or enhance the character or appearance of Warwick Bar Conservation Area. In order to maintain and reinforce the special character the policies are intended to guide and manage the significant level of change anticipated for the area through the promotion of good new design which responds sensitively to historic context. New development will be encouraged to complement the established character of the area while reflecting its own time and function.
- 7.43 The ES has assessed the BEE in relation to the character of the Warwick Bar Conservation Area **[BEE/A13/1-3]** and as well as any mitigation proposed, the BEE will also run catenary free within the area which will also reduce any potential visual intrusion.

- 7.44 Therefore it can be demonstrated that the BEE is supported by and is consistent with the national and local strategic planning, transport and regeneration policies for Birmingham, as set out in the NPPF **[BEE/E1]**, BDP **[BEE/E3]** and WMLTP **[BEE/E10]**.

Colmore Row and Environs Conservation Area Character Appraisal and Supplementary Planning Policies (2006)

- 7.45 The Colmore Row and Environs Conservation Area covers an area of 21.7 hectares in Birmingham City Centre and is contained within the Ladywood Ward. Much of Birmingham's

Central Business District is contained with Colmore Row and Environs Conservation Area. The significance of Colmore Row and Environs Conservation Area lies in the quality and diversity of its architecture, particularly that of the nineteenth and twentieth centuries. It contains a number of buildings of exceptional interest and national importance including St Phillips Church (Birmingham Cathedral), the Town Hall.

- 7.46 The purpose of the Supplementary Planning document (SPD) is to guide the preservation and enhancement the character or appearance of Colmore Row and Environs Conservation Area. In order to maintain and reinforce the special character, the SPD seeks to guide and manage change through the promotion of good new design which responds sensitively to historic context. New development will be encouraged to complement the established character of the area while reflecting its own time and function.
- 7.47 Whilst the BEE does not pass through the Colmore Row and Environs Conservation Area the alignment run adjacent to its boundary. Therefore, the BEE has been considered in the ES **[BEE/A13/1-3]** in relation to potential impacts on the setting of the Conservation Area. The ES confirms the BEE will not result in substantial harm to the setting of Conservation Area due to it being integrated into the streetscene and the implementation of measures for delivering high standards of design.

8. THE BEE SCHEME – DESIGN, CONSTRUCTION AND OPERATION

Permanent Works

8.1 The permanent works proposed as part of the BEE comprise the following elements:

Tramway

- 8.2 The BEE is a 1.7km extension of the existing Metro network from the BCCE at the junction of Corporation Street and Bull Street to a terminus on High Street Deritend in the vicinity of the junction with Heath Mill Lane. The entire alignment is on street, with approximately 51% sharing road space with other vehicular traffic and approximately 49% segregated running.
- 8.3 From the junction with BCCE on Bull Street, the BEE will run on street along this highway in a southeast direction sharing space with other vehicular traffic; southbound along Bull Street it is proposed as tram and cycles only, and northbound tram, bus and cycles only. The route then crosses Dale End with a tramstop on the realigned Albert Street to serve the HS2 station, Moor Street Station and the Dale End area of the city centre. From here it continues over Moor Street Queensway running along Eastside Park and a proposed pedestrianised area as part of the HS2 scheme, then for a short distance alongside Park Street with a tramstop at the north end of New Canal Street under the HS2 station. This tramstop will provide interchange with the secondary (eastern) HS2 Curzon Street Station access and will also serve Millennium Point, the Education Quarter and other existing destinations.
- 8.4 The BEE route then runs on street along New Canal Street with a tramstop on the northern side of the junction with Bordesley Street to provide a connection to the Typhoo Wharf development and other proposed developments as well as existing businesses. From here, the tram continues on-street along Meriden Street sharing space with other traffic to turn east at the junction with Digbeth to run in a segregated formation in the middle of the highway. At the junction of Rea Street and Floodgate Street there would be a terminus tramstop to serve Birmingham Coach Station, South and City College Birmingham, the Custard Factory and other existing destinations.
- 8.5 From the terminus tramstop there will be a 0.2km length of track to the junction of Heath Mill Lane to provide a turnback facility. The proposed Order limits extend to the junction of Clyde Street in order to provide some highway alterations to facilitate the BEE.
- 8.6 The track alignment and associated infrastructure for BEE has been developed to accord with current Midland Metro system design parameters and technical requirements, Office of Road and Rail Regulation Tramway Technical Guidance Notes **[BEE/C1]**, UKTram Guidance² and best practice from other street running tramways. The geometric design parameters utilised in the development of the track alignment for BEE have been established to ensure passenger ride quality, promote vehicle stability and reduce vehicle and infrastructure maintenance requirements.
- 8.7 Consideration has been made in the design and location of tram tracks to minimise the potential for noise and vibration impacts particularly in the vicinity of designated noise sensitive receptors (as specified in the ES **[BEE/A13/1-3]**).
- 8.8 It is envisaged that the rails will be embedded and wrapped in an elastomer material to minimise stray electrical current leakage and reduce noise and vibration levels. In addition, a stray current collection mat would be built into the concrete track-bed of all embedded and street-running sections.
- 8.9 It is currently proposed that two types of trackform will be utilised along the route. It is envisaged that the majority of the route will be constructed using pre-formed tied-block sleepers, founded upon a formation layer and cast into the reinforced concrete road

² www.uktram.co.uk/resources/guidance-documents/

construction. The rails would be clamped onto the precast sleeper blocks and encased in the highway surfacing. Where the tracks pass over large voids or bridge structures, the trackform would be an in-situ reinforced concrete trackslab. A two-stage trackslab would be formed, with the rails laid in troughs formed within the second stage concrete.

- 8.10 Where the tracks pass over large voids or bridge structures for example, it is envisaged that the trackform will be an in-situ reinforced structural concrete trackslab. A two-stage trackslab would be formed, with the rails laid in troughs formed within the second stage concrete. This type of track form would also be used through and in the vicinity of rail switches and crossings.
- 8.11 Trams progress along the highway and through highway signal controlled junctions in the same manner as other road vehicles. Tram will be provided with an agreed level of priority with BCC, provided via a ground loop detection and on-board transponder system.
- 8.12 There will also be some earthworks required in the laying of the tracks and other associated infrastructure such as track drainage (to control and contain surface water run-off) and alterations to existing highway drainage.
- 8.13 Accommodation works, for example works required to boundary walls, gates or frontages to accommodate the tram alignment will also be required within the design of the BEE.

Substation and Overhead Line Equipment (OLE)

- 8.14 Midland Metro is an electrically-powered tramway conforming to European Standards in terms of traction voltage and design criteria. The system operates on direct current (dc) at a nominal voltage of 750 V, fed via traction substations.
- 8.15 The electricity supply for the BEE will be taken from a proposed new substation located on the land at the corner of Meriden Street and Coventry Street as shown on Sheet 2 of the Works and Land Plans **[BEE/A11]**.
- 8.16 A number of sites were initially assessed and considered to be feasible for the location of the substation. These possible site were assessed for suitability against a number of criteria including; impact on heritage assets, ecology, land use and current planning applications. Discussion was also undertaken with BCC as part of this assessment, and a Flood Risk Assessment was also undertaken given the area is located in Flood Zones 2 and 3 (1 in 1000 year and 1 in 100 year storms respectively).
- 8.17 The site proposed to accommodate the substation has been identified as the preferred location due to a number of factors. It has a low impact on proposed development sites and only a minor negative impact on heritage assets. It is also the preferred option of BCC from a planning and regeneration perspective and, although it falls within the flood zone, it currently falls just outside of the flood area. The land is currently in use as a pay and display car park. Options for locating the substation underneath the railway viaduct arches are being considered to minimise the impact on the land owners
- 8.18 It is envisaged that OLE will extend along approximately 33% of the BEE to facilitate the operation of the tram. Due to industry advances in on-board tram battery power technology, it is proposed that approximately 67% of the BEE route will be 'catenary free' not requiring the use of affixing OLE to buildings or the use of poles. The section requiring OLE extends from the junction with BCCE at Bull Street to the tramstop at Albert Street, and a short length from the terminus tramstop on High Street Deritend going south east along the turn back facility; the remainder of the BEE will be catenary free. This will reduce the visual impact of the BEEs detailed in the ES **[BEE/A13/1-3]**.
- 8.19 Where OLE is required along the route of the BEE, approximately 28 OLE poles (final number depending on detailed design) will be installed along the route, including the associated foundations to support the poles.
- 8.20 Where practicable, where OLE is required, they will be combined with lighting columns to minimise street clutter, maximise footway width and reduce construction requirements.

- 8.21 Where possible, the contact wires will be suspended from cross-street span-wires using simple fixings attached to buildings. This will minimise visual intrusion through minimising the need for poles and foundations. Approximately 14 permanent OLE building cable fixings (final number subject to detailed design) will be required for the BEE.
- 8.22 OLE building fixings are generally spaced at 20m – 30m on straight alignments and closer together on curves. Where suitable buildings are not available for fixings, poles will be used similar to those existing along the Metro network, and will be combined with lighting or closed circuit television (CCTV) poles where possible.
- 8.23 The principle of attaching OLE to buildings in preference to poles has already been established through their use along the BCCE and Line 1. Discussions with stakeholders including BCC, and others, are ongoing. Both visual and intrusive surveys will be undertaken to ensure the suitability of the structure and design of the connection detail.
- 8.24 As part of the catenary-free operation of the Metro, trams will recharge their batteries via lengths of OLE, including at the terminus tramstop in High Street Deritend.

Tramstops and associated infrastructure

- 8.25 Four tramstops are proposed in the following locations:

Albert Street

- 8.26 The proposed tramstop located at Albert Street is to one of two to serve HS2. The Albert Street tramstop is close to the proposed western Moor Street entrance of the HS2 Curzon Street Station, as well as the development at Martineau Galleries, Hotel La Tour, High Street and Dale End, and will provide interchange with bus services and Moor Street Rail Station.

New Canal Street

- 8.27 The proposed tramstop located at New Canal Street is to serve the New Canal Street entrance of the HS2 Curzon Street Station as well as Millennium Point, Thinktank, University buildings Eastside City Park and the Eastside area. This tramstop is located between the two sections of the proposed HS2 Curzon Street Station building, and will be oversailed by the HS2 platform level above.

Meriden Street

- 8.28 The proposed tramstop at Meriden Street is to serve existing premises in the vicinity as well as proposed developments within the HS2 Curzon Street Masterplan **[BEE/E19]** such as the Typhoo Wharf development. The tramstop at Meriden Street requires the permanent acquisition of land belonging to the Gooch Estate in order to provide for adequate pavement widths as specified by BCC.

High Street Deritend

- 8.29 The tramstop proposed at High Street Deritend / Digbeth High Street is located between the Coach Station and the Custard Factory to serve these and other existing businesses along High Street Deritend, including Birmingham South and City College.

- 8.30 A turnback facility extends beyond this tramstop up to the junction with Heath Mill Lane to allow the tram vehicles to recharge batteries and turn around for the return journey towards the City Centre.

- 8.31 BEE tramstops will be designed to complement those on the existing Metro network to avoid visual confusion as well as having cognisance to their environment in terms of the size and length of platforms for example as well as the finishes and appearance [see Urban Design Strategy **BEE/A13/2**]. The tramstop platforms are 300mm high and being designed to provide access and egress for all.

- 8.32 High quality materials and finishes will be employed ensuring integration with the surrounding areas (including developments where sufficient detail is available in the stage of the

development) and BEE Urban Design Strategy **[BEE/13/2]** alongside other BCC development, highways and regeneration aspirations. The detailed design of the tramstops will be a reserved matter for approval by BCC under conditions 2, 3 and 4 to be attached to the deemed planning permission **[BEE/A2]**.

- 8.33 Each tramstop will be designed to include either canopies or shelters with seating, passenger information and help points, lighting and CCTV. All of the tramstops will consist of two side platforms, separately serving the north and southbound directions, with the exception of the tramstop at Albert Street which will consist of a central platform.

Highway Alterations

- 8.34 The scheme includes highway alterations including highway realignment where required and reinstatement / repaving of highway footpaths and dedicated cycle facilities. It also includes modifications to highway signalling, the final designs of which will be agreed with BCC as part of the deemed planning permission **[BEE/A2]**. A one-way dedicated bus interchange will be provided to serve new stops adjacent to the HS2 Curzon Street Station.
- 8.35 The horizontal alignment of the carriageway and associated footways has been developed to facilitate the safe on-street operation of BEE as well as the needs of all other road users including heavy goods vehicles and passenger service vehicles, cyclists and pedestrians. Consultation has been undertaken with BCC as the local highway authority for any additional requirements and will continue as the BEE is taken forwards.
- 8.36 The installation of infrastructure enabling the operation of BEE will require the reconstruction of not just the immediate carriageway and footway but other areas local to the scheme resulting from associated accommodation and utility diversion works.
- 8.37 The design of the carriageway and pavements will be to current BCC design standards, taking into account aesthetics, vehicle class and volume, and any specific maintenance requirements with respect to the trackform and tram operations.
- 8.38 As trams are progressed through junctions in the same manner as other road vehicles with an agreed level of priority, the construction and operation of the BEE may require the introduction of and modification to some highway junctions along the route. The ability to undertake these modifications is included within the Order. All modifications will require the approval of BCC, and will incorporate pedestrian and cycle facilities as appropriate.

Street Lighting

- 8.39 The most appropriate class of lighting for the various sections of route will be considered including user type and safety, as well as other local factors such as the existence of public transport facilities. Both new and existing lighting will need to ensure that lighting levels are maintained on the road surface throughout. This may necessitate amendments to luminaires outside of the immediate area affected by the tram. Lighting will require the approval of BCC through the planning conditions set out in the request for planning permission **[BEE/A2]**.
- 8.40 The principal assumptions and approach to the design of the lighting include but are not limited to:
- where practicable, street lighting will be combined with OLE poles and that BCC and their nominated lighting contractor will accept the principle and methodologies;
 - lighting levels will need to be improved and increased to take into account the risk to road users and pedestrians through the use of combined running; and
 - minimise light pollution, light trespass and sky glow.

Urban Realm and Landscape

- 8.41 Landscaping works and improvements to urban realm will be carried out as part of the scheme.

- 8.42 The general approach to urban realm is the creation of a high quality public realm creating visual continuity and promoting a distinct identity. This has typically involved the replacement of existing surface materials, the removal and replacement of street furniture and sensitive integration of the tram infrastructure. This is explained in the draft Urban Design Strategy located within the ES technical appendices **[BEE/A13/3]**.
- 8.43 Design details have not yet been developed for the different sections of the route. However, in general, it is anticipated that a similar approach to the BCCE and Line 1 will be taken in the detailed design. The townscape value to the city centre will benefit from the BEE with investment in new paving and street furniture. The WMCA is continuing to liaise closely with BCC as local authority in the development of the detail, and also HS2 in the vicinity of the footprint of that scheme. The WMCA will also consult with developers in the vicinity as appropriate to their location and the development / phase of their design. The proposed deemed planning conditions require BCC's approval for design, external appearance, and materials used for the scheme.
- 8.44 Through design of surfacing and integration of street furniture, the proposals will also seek to reduce risk between vehicular traffic and pedestrians.
- 8.45 There are opportunities to enhance the existing streetscape along the route of BEE, as well as creating and integrating new areas of sociable and usable space for pedestrians including outside Hotel LaTour and the potential for grass track. There will inevitably be compromise in some aspects of the design and use of materials, particularly in close proximity to the operational tramway. These areas of opportunity are identified within the ES **[BEE/A13/1-3]** and will be captured through the planning conditions attached to the Deemed Consent **[BEE/A2]**.
- 8.46 Particular attention has been paid to the landscape and urban realm proposals adjacent to Hotel LaTour. Three semi-mature trees (London plane) will be removed from the footway in Moor Street Queensway and of these, one will be replaced at the end of construction. Eight young trees (London plane) will be removed from outside Hotel LaTour, but in their place, eight new semi-mature trees will be planted in a line, 1-2m closer to the hotel. The 5m wide border between the tram tracks and the bus stand will be planted with a line of semi-mature trees, a 2m high hedge and shrub and perennial planting.

Bus Facilities

- 8.47 The BEE alignment requires the removal of three bus stops on Moor Street Queensway, one which will be re-provided at a different location along the Queensway, the other two are reprovided in the realigned section of Albert Street near the proposed HS2 Curzon Street Station. In addition, two existing eastbound bus stops along the north section of Albert Street near Dale End are affected in that they will remain on the realigned Albert Street, one in an eastbound direction, the other for westbound bus services.

Drainage (Attenuation) Tank

- 8.48 It has been identified that there is a potential need to provide an additional drainage tank to attenuate the flow into the existing drainage system in the vicinity of Eastside City Park. This location is included within the land identified for permanent acquisition.

Tram Signalling, Communication and Electrical Equipment

- 8.49 The BEE includes the installation of tram signalling, communication and electrical equipment as well as the installation of parallel feeders (cables and ducting that will run parallel to both the Digbeth terminus bound line and the Birmingham City Centre bound line) and also cabinets to contain communication equipment and system, envisaged to be located within highway land.

Construction

- 8.50 An indicative Construction Strategy Report **[BEE/A13/2]** has been produced to demonstrate the key construction processes and also buildability of the BEE. The Principal Contractor will

further develop this strategy to identify the detailed strategy of construction. The document describes possible phasing of the works which addresses the principal considerations and objectives which include but are not limited to those listed below:

- Minimise adverse environmental effects;
- Minimise the disruption to local residents, public transport, commercial properties, businesses, etc;
- Minimise land-take from proposed developments;
- Minimise disruption to the highway network;
- Minimise utility diversion costs;
- Maintain access to public transport services along the route;
- Maintain access for emergency vehicles at all times;
- Minimise the disruption to pedestrians and cyclists;
- Maximise flexibility for the main Contractor to minimise timescale and cost; and
- At TWAO stage, demonstrate that the works are capable of being delivered safely and in a timely manner.

8.51 The indicative Construction Strategy Report has identified work sites which are all within the proposed order limits through the consideration of the following requirements and in consultation with the BCC as Highway Authority. These include but are not limited to:

- Possible traffic management requirements and likely availability of suitable diversion routes within each construction section;
- The uniformity of work type and method of construction to maximise the Contractor's opportunities to utilise plant and resources efficiently;
- Road space requirements;
- The ease with which the adjacent sections can commence without conflict;
- The degree of complexity;
- The availability of potential construction compound sites; and
- Possible testing and commissioning requirements.

8.52 The indicative Construction Strategy forms the framework upon which the indicative draft Construction Programme **[BEE/A13/2]** has been developed.

8.53 For the BEE, the extent that underground utilities run within the swept path of the tracks means that there will be a need for many of these services to be diverted into or within the footway. It is currently anticipated that diversion of utilities will take place in advance of the main BEE construction works in order to minimise the construction time for the BEE as a whole

8.54 The Construction Strategy **[BEE/A13/2]** details five suggested construction phases in an ordered sequence commencing at the tie in with the BCCE at Bull Street:

- One – Bull Street tie-in to Moor Street Queensway;
- Two - Moor Street Queensway;
- Three – Moor Street Queensway to New Canal Street;
- Four – New canal Street and Meriden Street; and
- Five – High Street Deritend.

8.55 Typical construction activities are set out in more detail in the Construction Strategy and include the following:

- Site clearance and demolition where required;
- Excavation;
- Sub-base concrete slab;
- Reinforcement mesh;
- Track installation;
- Track drainage, ducting, bonding;
- Second layer of concrete slab;
- New kerbs;
- Highway reconstruction and kerbs;
- OLE foundations and pole erection and catenary (where required); and
- Platform construction

Demolition

8.56 The BEE requires the demolition of the Kings Parade Building on Dale End as well as the partial demolition of the building at the corner of Meriden Street and High Street Deritend. The details of the demolition of these buildings is contained within the draft Construction Strategy [BEE/A13/2] and it is likely that a specialist demolition sub-contractor will be engaged to develop these details further and to carry out these works.

Operation

8.57 Tram frequency on the BEE will be a peak six minute service along the route, with alternate trams heading to Edgbaston and Wolverhampton. The capacity of the Corporation Street / Bull Street junction will operate satisfactorily for the future year tram and bus operations. The operational hours of the BEE are assumed to be:

- Monday to Wednesday inclusive from 06:00 to 01:00; and
- Thursday to Sunday inclusive from 06.00 to 03.00.

8.58 There will be no regular maintenance trams operating on the BEE. The only tram that will operate outside of the operational hours will be the occasional 'ice-breaker' tram which will run prior to the first tram service during potentially icy conditions to prevent a build-up of ice on the overhead line.

8.59 In Digbeth B4100 and High Street Deritend, the introduction of tram operation requires the reduction of traffic lanes in each direction from 3 to 2 through the removal of the existing bus lanes. The Traffic modelling demonstrates that the road operates satisfactorily in future years with these changes.

8.60 On the operation of the BEE, the cycle time of the junction of Heath Mill Lane and Liverpool Street will be increased to 90 seconds, and an indicative arrow on Great Barr Street for the right turn movements introduced.

8.61 The BEE will directly interface with the proposed HS2 terminal at Curzon Street, and through current infrastructure, will link the HS2 terminal with New Street Station and Snow Hill Station. This will offer a high quality and reliable public transport alternative to the car, and improved connectivity between stations and transport modes will significantly improve the public transport network.

8.62 The location of the tramstop in relation to the Birmingham Coach Station will allow inbound coach passengers to easily reach the city centre, Wolverhampton and West Bromwich among

other tramstops on the Midland Metro network. Outbound passengers in the City will also be better connected, allowing for a more efficient public transport route to the coach station. The Bus Interchange will also provide capacity for coaches to serve the demand for the HS2 terminal station.

- 8.63 The BEE will in most cases enhance the existing cycling and pedestrian infrastructure, whilst providing a step change in public transport provision within Birmingham City Centre and the Eastside area. The scheme will allow journeys into, out of and within Birmingham City Centre to be undertaken in a more sustainable manner, incorporating walking and cycling into the wider public transport network. Future proposals, such as the designation of Moor Street Queensway as bus, cycle and taxi only as set out in the Curzon HS2 Masterplan [BEE/E19] will further improve cyclist and pedestrian safety.
- 8.64 Existing parking bays will be retained or relocated where possible as part of the BEE. Current parking facilities at New Meeting Street and Albert Street will be affected but any displaced parking bays will be relocated where necessary to alternative locations.
- 8.65 All existing taxi rank provision will be maintained, except for the removal of the rank on High Street Deritend (which has no formal recognition by BCC).
- 8.66 The operation of the BEE will not affect the routing of taxis within Birmingham City Centre.
- 8.67 The implementation of the proposed BEE scheme will alter some existing access routes, the availability of on-street loading/unloading, and refuse collection access.
- 8.68 Where service areas are impacted upon by the future tram network, solutions have been identified and incorporated into the tram alignment design.
- 8.69 When the BEE is operational existing priority and emergency routes that are directly impacted by BEE will be maintained.

Tram Vehicles

- 8.70 The WMCA procured a new fleet of CAF Urbos 3 tram vehicles that came into service from September 2014. The trams are 2.65m wide and will have a capacity of approximately 200 passengers. The vehicles provide level access from platforms to provide for mobility impaired passengers and are fully Disability Discrimination Act (DDA) compliant.
- 8.71 It is proposed that an additional seven vehicles are required to service the BEE to achieve the projected operational frequency. A "third-generation" tram fleet will be procured to serve the BEE, the Wednesbury to Brierley Hill Extension and EBS schemes. This procurement is planned as part of the overall Metro Programme, with tram supply options within an overall contract being timed to supply tested and commissioned trams in time to undertake testing and commissioning of this extension.

9. ENVIRONMENTAL IMPACTS AND MITIGATION

Introduction

- 9.1 The ES submitted with the application **[BEE/A13/1-3]** assesses the likely environmental effects that may result from the BEE, considers the significance of these effects, and where necessary proposes appropriate mitigation measures to address any potentially significant effects.

The Construction of the BEE

- 9.2 The following likely impacts related to the construction of the BEE are identified in the ES:

Climate Resilience

- 9.3 The Climate Change Risk Assessment (CCRA) **[BEE/A13/2]** identified that there are likely effects associated with extreme weather events, such as heavy rainfall and strong winds, which may impact construction activities and exacerbate any contamination issues. However, adherence to the Construction Environmental Management Plan which should take into account current climatic risks and procedures needed in the event of a significant event, would result in construction activities having a high level of climate resilience.

Traffic and Transport

- 9.4 Likely effects associated with construction traffic will be mitigated by following good working practices as set out in the Code of Construction Practice ('CoCP'), and the Construction Traffic Management Plan. A full assessment of the temporary effects associated with the construction phase is located in Appendix L1 of **the [BEE/A13/2]**. The conclusions show that there are no likely significant adverse or beneficial temporary effects on any receptors within the study area during the construction of the BEE.

Noise and Vibration

- 9.5 Whilst there are likely to be potentially significant noise and likely vibration effects associated with construction activities and construction traffic, these will be mitigated via good practice guidance and the measures set out in the CoCP along with a Construction Noise and Vibration Management Plan. Whilst effects will remain, their extent and magnitude will be reduced by these mitigation measures. Although there is the potential for temporary disturbance due to vibration levels due to construction activity, vibration levels are predicted to be significantly lower than the threshold at which building damage could occur.

Air Quality

- 9.6 The main effects that may arise during construction are dust generating activities. A qualitative assessment of construction dust effects has been undertaken and, following implementation of the measures set out in the CoCP, the assessment concludes that there will be no significant effects associated with construction dust.

Greenhouse Gases

- 9.7 Construction activities will lead to emissions of greenhouse gases (GHG), however the CoCP will include various measures that will minimise the emissions from construction plant and construction traffic. Whilst it is only an indirect source of emissions, the use of materials is predicted to be the largest contributor to construction impacts. Some of the proposed measures in the CoCP will take into account possible reuse of materials which has the potential to further reduce emissions, and further consideration to the use of sustainable materials will be undertaken during subsequent design phases.

Townscape and Visual

- 9.8 The conclusions of the Townscape and Visual Impact Assessment (TVIA) are that during construction of the BEE there will be temporary moderate adverse significant effects on the City Core townscape character area (TCA) and Digbeth TCA. However, these impacts will affect a relatively small proportion of the overall TCA. The sensitivity of the Eastside TCA will be

temporarily reduced due to the construction activities associated with the HS2 Curzon Street Station development, consequently the BEE will result in a temporary minor adverse non-significant effect. In terms of visual effects, it is predicted that the BEE will result in temporary adverse significant effects on a number of visual receptors that are in close proximity to the works.

Historic Environment

- 9.9 Construction activities will not have a significant effect on any conservation areas, listed buildings or locally listed buildings. 33 Listed Buildings as well as 51 locally listed buildings (undesignated heritage assets) have been identified within the 250m study area and are considered in the ES **[BEE/A13/1-3]**. No physical works have been identified for any of the listed buildings, therefore the ES has considered the effects on the setting of the listed buildings and conservation areas. Any adverse effects will be mitigated by a variety of design measures, including the use of catenary free technology and high standards of design of the transport infrastructure and the creation of new areas of public realm.
- 9.10 The assessment within the ES **[BEE/A13/1-3]** has concluded that the BEE will have a major adverse significant effect during construction upon buried archaeology especially within the Park Street Gardens area and the St John's Chapel site on High Street Deritend. In particular, the construction of the BEE may impact upon the top of grave cuts and coffins and it is not possible to apply mitigation measures to preserve the burials. The principle of disturbance to buried archaeology at this site has been approved by Parliament as part of the authorisation of the HS2 scheme which also affects this site. It is expected that works to the Park Street Gardens will be undertaken by HS2 in advance of the BEE works and therefore that appropriate mitigation will be delivered by HS2 in advance of the BEE works. However, to ensure this effect is mitigated in circumstances where the HS2 works do not take place before BEE works, the draft Order for the BEE includes a power for the WMCA to move (subject to the procedures set out in article 26) the buried remains to avoid any impacts upon them.

Soils, Geology and Contaminated Land

- 9.11 Potential effects identified during the construction of the BEE will be mitigated by undertaking ground investigation surveys and subsequent risk assessment, along with the implementation of measures set out in the CoCP and other appropriate construction and environment plans. On this basis there will be no significant temporary or permanent effects relating to contamination during construction.

Water Resources and Land Drainage

- 9.12 The Flood Risk Assessment **[BEE/A13/2]** has identified that the majority of the BEE is located within Flood Zone 1. However, the last section of the route along High Street Deritend is located within Flood Zones 2 and 3. Likely construction effects associated with siltation, spillages and surface water runoff are not significant, subject to the design of embedded mitigation measures and implementation of the requirements of the CoCP. This will include temporary site drainage to prevent overflow of site surface water runoff to watercourses and highways. Flood risk during construction will be monitored and managed by the Contractor.

Ecology and Biodiversity

- 9.13 Overall, the area of the route of the BEE has a very low ecological value, and therefore the construction of the scheme is not likely to have a significant negative effect on any ecological receptor. However, measures such as keeping noise to a minimum by turning plant and machinery off when not in use will assist in minimising ecological disturbance.

Socio Economics

- 9.14 During construction of the BEE, the potential socio-economic effects include temporary employment through construction; a short-term increase in economic activity from construction; land take and building demolitions; and temporary disruption to local businesses. The majority of these effects are not assessed to be significant, apart from the temporary land take required

for the Adderley Street construction compound and the loss of car parking on New Canal Street. Both of these result in a moderate adverse effect. The loss of employment land at Kings Parade is also identified as a significant major adverse effect.

Electromagnetic Fields

- 9.15 Electromagnetic fields and EMC issues on the BEE will be mitigated through compliance with the requirements of the EMC directive, following best practice and utilising certified equipment as required by the planning conditions set out in the request for deemed planning permission **[BEE/A2]**.
- 9.16 During construction the EMC impact of mobile radio systems for communication is considered to be minimal. EMC issues for heavy construction and plant equipment are addressed under the Machinery Directive (2006/42/EC), and EMC risks are low when this machinery is installed and used correctly, as would be expected by a competent contractor. Gas welding is recommended on site, with arc welding being undertaken off site. Therefore there are not considered to be any significant EMC effects during the construction phase of the BEE.

Mitigation of construction impacts

- 9.17 As noted above, construction impacts will be mitigated by the implementation of the measures set out in the CoCP. A draft Code of Construction Practice (CoCP) has been submitted with the application which contains measures to mitigate the impacts of construction **[BEE/A13/2]**.
- 9.18 The draft CoCP defines the minimum standards of construction practice acceptable to the WMCA and BCC, and therefore what is required of the Principal Contractor. During construction of the BEE, the environmental management process would be guided by a number of strategies including those required by the CoCP, which include a Construction Environmental Management Plan, a Construction Noise and Vibration Management Plan, and a Construction Traffic Management Plan.
- 9.19 One of the proposed planning conditions **[BEE/A2]** requires that a CoCP must be submitted for BCC's approval before works commence. The CoCP submitted for approval must be in substantial accordance with the draft CoCP submitted with the application.

The Operation of the BEE

- 9.20 The likely environmental impacts related to the operation of the BEE are considered in the ES **[BEE/A13/1-3]**:

Climate Resilience

- 9.21 The Climate Change Risk Assessment (CCRA) **[BEE/A13/2]** concludes that, whilst likely effects associated with extreme weather events such as heavy rainfall and strong winds may impact the tram alignment or tram vehicles, the majority of BEE components have a medium or high level of climate resilience. Therefore no additional climate change adaptation measures are required above those already incorporated into the scheme design. Active use of operational management, such as rail closures and notifications to users and staff will provide a high degree of climate resilience.

Traffic and Transport

- 9.22 A full assessment of the traffic and transport effects associated with the operational phase located in Appendix L1 of the ES **[BEE/A13/2]**. Highway capacity has been assessed and mitigation measures are proposed to alleviate traffic impacts from displaced traffic due to the operation of the BEE. However, some receptors located at online junctions are likely to experience significant adverse effects associated with driver delay during operation of the BEE. Pedestrians in the study area will experience significant beneficial effects as a result of changes in their experience of severance, fear and intimidation during the operation of the BEE as well as the associated reduction in traffic along the route.

Noise and Vibration

- 9.23 The noise assessment concluded that there are no likely significant impacts in the operational phase due to tram noise. Therefore the tram and its infrastructure are unlikely to lead to significant adverse effects. There are indirect impacts in the wider area due to changes in traffic patterns as a result of the BEE, which do lead to adverse and significant adverse effects. However these indirect effects are also the result of other proposed developments including HS2 that are included in the traffic model. No adverse or significant adverse effects due to operational vibration are reported.

Air Quality

- 9.24 The operational air quality effects of the BEE have been evaluated in Chapter 11 of the ES **[BEE/A13/2]**. In summary the BEE is predicted to improve or have no impact on NO₂ concentrations at the majority of modelled receptors. Where there are some areas which are predicted to experience increases in NO₂ concentrations, these changes are not considered to be significant. No significant changes in dust concentrations are predicted.

Greenhouse Gases (GHG)

- 9.25 Whilst the BEE will lead to an increase in emissions of GHG due to its energy use for powering the scheme, the changes in emissions associated are predicted to be very small in the context of existing emissions from the transport network in Birmingham. Mode shift to Midland Metro results in a small reduction in vehicular GHG emissions. Overall, the net changes are not considered to be significant.

Townscape and Visual

- 9.26 In the operation phase of the BEE, the introduction of a high quality and consistent approach to paving and street furniture and a reduction in street clutter will enhance townscape character and therefore result in permanent minor beneficial effects on the City Core and Digbeth TCAs. However the loss of trees, introduction of trams and increased bus provision in the Eastside TCA will result in a permanent minor adverse effect on the Eastside TCA. These effects are not significant. In terms of effects on visual receptors the majority of receptors will have minor beneficial or negligible effects.

Historic Environment

- 9.27 As presented in the **ES [BEE/A13/2]**, the permanent major adverse effects as a result of the construction phase of the BEE will remain throughout the operation of the BEE. However there are no significant other adverse or beneficial effects from the operation of the BEE within the study area. Although not significant, there are various operational effects which are likely to be beneficial to the character of the conservation areas such as improved pedestrian connections, reduced vehicle dominance and reduction in streetscape clutter.

Soils, Geology and Contaminated Land

- 9.28 Assessment of land quality during operation of the BEE was scoped out of the **ES [BEE/A13/1-3]** as operational activities are above ground. If any ground contamination is appropriately remediated, then it is unlikely there would be any effect on land quality in the operational phase.

Water Resources and Land Drainage

- 9.29 The Flood Risk Assessment ('FRA') has identified that the majority of the BEE is located within Flood Zone 1, however the last section of the route along High Street Deritend is located within Flood Zones 2 and 3. To mitigate the potential risks of flooding to the operation of the BEE within Flood Zones 2 and 3, all tram facilities within high risk flood zone areas will be designed with appropriate flood resilience measures. Operation of the BEE will be suspended within Flood Zones 2 and 3 prior to and during flood events. A flood sensor will be used to alert the

tram operator before/during flood events for evacuating tram users to safe areas. Tram drivers will be trained to handle flood events and to operate the trams under a safe condition.

- 9.30 In terms of surface water runoff, the BEE will result in an increase in impermeable area and therefore an increase in surface water runoff. However, a storage tank will be provided to store additional flows and outflows will be discharged at a controlled rate to public sewers. Therefore, taking into account the provision of appropriate mitigation measures, the BEE will not increase flood risk to the surrounding area and can itself operate safely, though part of the route will be suspended during an extreme flood event.

Ecology and Biodiversity

- 9.31 Overall the route of the BEE has a very low ecological value, and therefore the scheme it is not likely to have a significant effect on any ecological receptor during operation. During operation, new landscape planning has the potential to increase biodiversity within the site, but not to the point that it is significant.

Socio Economics

- 9.32 During operation of the BEE, potential socio-economic effects include long term employment for operation and maintenance of the BEE; increased economic development activity for Birmingham; support for wider economic development; and improved access to employment, leisure and housing. The permanent operation impacts fall into two broad categories: economic development and regeneration; and improved accessibility to socio-economic resources for local residents. Overall the significant socio-economic effects of the BEE are major beneficial effects, including support for economic development/regeneration of Digbeth and Eastside, overall job creation and economic growth in Birmingham, and improved accessibility through reduced journey times.

- 9.33 The BEE scheme has a number of benefits. These include:

- provision of a direct, high quality link to the Eastside area;
- improved connectivity with national transport hubs such as HS2 Curzon Street Station, New Street Station, Snow Hill Station and Birmingham Coach Station;
- serving the associated Eastside Digbeth developments;
- provision of high quality public transport to the Birmingham City Centre Enterprise Zone;
- improved connectivity between Eastside and the City Core, the Jewellery Quarter and the Black Country ;
- providing convenient access to business, tourist, social opportunities;
- improved integration between different modes - Metro, bus, coach and rail modes of transport providing new and improved journeys for the travelling public;
- encouraging modal shift from private to public transport;
- HS2 connectivity providing access to the Curzon Street Station and facilitating access to HS2 in the future via Line 1;
- rail station accessibility in improving connections with Metro services through delivering a tramstop at the rail station; and
- a direct connection between Birmingham Coach Station and HS2 and city centre rail stations and to all areas along the existing Line 1 route.

Electromagnetic Fields

- 9.34 Electromagnetic fields and EMC issues on the BEE will be mitigated through compliance with the requirements of the EMC directive, following best practice and utilising certified equipment as required by the planning conditions set out in the request for deemed planning permission.

9.35 The BEE traction system has been designed and will be constructed applying good EMC engineering practice and should conform to the limits of BS EN 50121-2, minimising the risk of EMI to equipment in adjacent buildings. Magnetic interference risks are reduced to levels that are not significant through separation, low current and reduced current loop areas. The tram track will be well earthed will minimise the risk of DC stray current. Furthermore, sections of the BEE route will operate with battery powered trams which will further reduce the risk of EMI to equipment in adjacent buildings. Therefore, there are not considered to be any significant EMC effects during the operation phase of the BEE.

10. FUNDING

- 10.1 The Funding Statement **[BEE/A5]** sets out the funding details for the BEE. It is estimated to cost £120.8 million in 2016 prices, which includes a contingency for risks and blight (a breakdown of cost can be found in the Estimate of Cost **[BEE/A4]**). The outturn cost, which adds forecast inflation to this figure, is estimated to be £137.2 million, and represents the amount that will need to be funded. This assumes construction of the BEE is completed by September 2022.
- 10.2 The funding of the BEE is proposed from Greater Birmingham and Solihull Local Enterprise Partnership (GBSLEP) Local Growth Funding and Central Government Grant³.

GBSLEP Funding

- 10.3 On 7 July 2014, the GBSLEP Growth Deal announcement from the Government⁴ placed great importance on maximising the benefits of HS2 noting that HS2 is a game-changing opportunity for the Greater Birmingham and Solihull area. To ensure that the GBSLEP can maximise the local economic benefits before and after the arrival of HS2, the Deal:
- *“Set out a new way of working between GBSLEP and Government, with strong commitments on both sides, to ensure that the area is able to exploit the potential of HS2 and maximise the benefits in terms of investment, jobs and skills; and*
 - *Provided a package of investment in a range of HS2-related schemes that will significantly enhance connectivity to the Birmingham Curzon station and support extended provision of construction skills, noting that the overall package - including four schemes prioritised by the GBSLTB to be funded from the pre-allocation of the Local Growth Fund - would enable Greater Birmingham and Solihull to start getting ready now for the arrival of HS2, and support improved access to jobs and economic growth in the period up to its arrival in 2026.”*

Government Funding

- 10.4 The Government has committed to:
- “£5.5m for development and preparatory works for BEE (funded from GBSLEP), and
 - Provisional allocation of £35m from 2016/17 to help deliver the first phase extension from Stephenson Street to Curzon Street Eastside (Funded by the Department for Transport as part of its nationally managed large local major schemes portfolio).”
- 10.5 As part of the West Midlands Combined Authority devolution package on 17 November 2015⁵, full funding for the BEE was announced by the Chancellor of the Exchequer.
- 10.6 On 27 June 2016 the Department for Communities and Local Government confirmed, further to the West Midlands Combined Authority devolution agreement **[BEE/D21]**, a maximum capped additional funding contribution of up to £96.7 million towards the total scheme cost will be made available through the Department of Transport **[BEE/D22]**.

Blight Expenditure

- 10.7 Blight expenditure is not anticipated to arise as a consequence of this application. However, any such costs will be met from the contingency provisions identified in the Estimate of Cost.

³ <https://www.gov.uk/government/collections/local-growth-deals>

⁴ <https://www.gov.uk/government/collections/local-growth-deals>

⁵ <https://www.gov.uk/government/publications/west-midlands-devolution-deal>

11. PROCUREMENT

- 11.1 Midland Metro Line 1 was procured as a concession on a Design, Build, Maintain and Operate basis. The contract reflected a Private Finance Initiative format though the majority of the finance was provided by the WMCA. Maintenance and operational costs have been borne by the concessionaire who also retains all fares and advertising revenues.
- 11.2 The 23 year concession was awarded to Altram LRT Ltd. in August 1995 and the system opened to the public in May 1999. In 2005 West Midlands Travel Ltd. acquired 100% control of Altram. West Midlands Travel Ltd. is part of the National Express group. On 17 March 2017 the WMCA announced that instead of re-procuring the concession, it is to take direct control of Metro services as part of a new subsidiary company 'Midland Metro Ltd', which will be wholly owned by the WMCA.
- 11.3 The detailed design and construction of the BEE is to be undertaken as part of the ten year commission to the MMA. The MMA will undertake the detailed design for the infrastructure contract, focused on work to clarify urban realm design, to mitigate major risks, to obtain all necessary planning consents relating to streetscape issues and to discharge conditions precedent for the scheme.
- 11.4 Long-term maintenance is currently undertaken as part of the operator's maintenance. From October 2018, this will form part of the in house day to day running of the tramway by Midland Metro Ltd.

12. VALUE FOR MONEY

- 12.1 The draft Business Case [BEE/D23/1-5] has considered the Value for Money of the BEE. The draft Business Case has been developed with regard to the Treasury's Green Book guidance [BEE/D4] and the Department for Transport's Transport Business Case Guidance [BEE/D17].
- 12.2 Consideration of the Value for Money (VfM) is integral to the scheme's Economic Case, which is one of five cases that make up the overall Business Case. Due regard has been given to the Department for Transport's Value for Money Assessment Guidance [BEE/D18]. An approach in line with the Department for Transport's transport appraisal guidance (WebTAG) has been taken [BEE/D5-D16]. As well as representing 'best practice', this approach allows for consistency and comparability with other investment projects.
- 12.3 The BEE scheme has a number of benefits and impacts. These include:
- Reduced journey times for public transport users;
 - Improved access to Eastside, Digbeth and the Curzon Street HS2 station;
 - Reductions on highway decongestion as a result of modal shift;
 - Increases in highway congestion due to re-routeing and the priority given to Metro
 - Reliability benefits;
 - A reduction in private bus operator revenue;
 - An increase in Metro patronage and revenues.
- 12.4 The economic appraisal of the BEE considers the benefits and impacts of the scheme, along with its costs. This socio-economic cost benefit appraisal contributes to the assessment of the scheme's value for money (VfM).
- 12.5 The passenger transport impacts of the proposals are considered relative to a 'Do Minimum' position which comprises the current road network and public transport system along with other committed changes.

Passenger Transport Impacts

- 12.6 When compared with the Do-Minimum scenario, BEE will provide enhanced public transport access to the HS2 Curzon Street Station and the Eastside area of the city. It will allow for quicker, more convenient access from areas served directly by Metro network and via interchange to Metro by areas served by rail from New Street and Snow Hill stations and to areas served by bus. Passengers who use BEE will do so because they enjoy an economic benefit.
- 12.7 Some of the passengers using BEE would have previously used private bus services. This has the effect of reducing private bus operator revenue and in appraisal terms this is an economic disbenefit.
- 12.8 Modelling and economic appraisal of BEE has found that it would deliver net passenger transport benefits.

Highway Impacts

- 12.9 The introduction of the BEE and its operations will require alterations to the existing highway. The allocation of priority to Metro vehicles at junctions and the changes required to the highway network to allow scheme implementation will result in changes to traffic flows and routeings. This has the effect of increasing the distance travelled by private vehicles and increasing their overall journey time.
- 12.10 This effect is offset by mode shift from private transport to public transport, which is forecast to reduce traffic volumes and, as a consequence, reduces congestion. This has the effect of reducing the distance travelled by private vehicles and reducing their overall journey time.

12.11 The impact of BEE is to result in a small net increase in congestion in the years immediately after scheme opening. After the opening of HS2, the further development of the Eastside area and the implementation of further committed changes to the local road network, there is a net reduction in congestion compared with the Do Minimum scenario. This is because the extra volume of traffic generated by the HS2 station and Eastside developments and the additional modal shift to public transport that BEE will induce.

Benefit Cost Ratio (BCR)

12.12 Integral to the assessment of a scheme's Value for Money is the calculation of a Benefit Cost Ratio (BCR) in accordance with the Department for Transport's transport appraisal guidance. Benefits and costs are assessed over a sixty year period reflecting Treasury guidance and are discounted to present values.

12.13 The monetised benefits of the scheme include passenger transport and highway impacts, as well as monetised externalities and indirect tax impacts. The costs of the scheme include capital costs, operating costs, and public sector revenue effects. Material to BEE is that for the purposes of appraisal any revenue surplus generated by the scheme is offset against its whole life cost.

12.14 The Department for Transport Benefit Cost Ratio (BCR) is the ratio of the Present Value of Benefits (PVB) to the Present Value of Costs (PVC). Transport modelling and appraisal shows that the results for BEE are as follows:

- PVB £97.3m (PV (2010);
- PVC £20.4m (PV (2101); and
- BCR 4.8:1.

Impacts

12.15 There are additional impacts of BEE that are not taken into account in the calculation of the DfT BCR but are important when it comes to assessing the overall Value for Money case for the scheme.

12.16 BEE is anticipated to support and facilitate the further redevelopment and regeneration of the Eastside and Digbeth areas of the city, which as well as supporting economic growth and increased employment is expected to lead to an enhanced urban environment and streetscape. It is integral to the overall strategy to maximise the benefits of HS2 by providing onward connectivity from its Curzon Street station to Birmingham City Centre and directly and via further interchange, to the wider West Midlands. These benefits are not captured directly by the BCR, but are considered significant.

12.17 BEE will also have some negative impacts not included in the BCR. These include property and land take and localised impacts on the urban realm. There will be some very localised noise impacts. Overall, these negative impacts are considered to be small.

Value for Money Conclusion

12.18 The DfT BCR for BEE is very high. In addition, there are further non monetised benefits of the scheme which are considered to outweigh its non-monetised disbenefits. As a consequence the scheme has a very high VfM case.

13. COMPULSORY ACQUISITION

- 13.1 There is both a strong policy need for the scheme and a strong economic case when the scheme is assessed in accordance with government guidance. This is demonstrated by the draft Business Case for the BEE [BEE/D23/1-5] which has followed this Government's Five Case model and demonstrates the clear benefits which the scheme will deliver.

Land Requirements for the Scheme

- 13.2 The land requirements for the BEE are minimal, based on engineering details available at the time of the TWAO submission. The proposed Order includes approximately 126,641m² of land required both on a temporarily and permanent basis; most of the scheme is within highway land.
- 13.3 The Composite Works and Land Plans [BEE/A11] show the extent of the land to be acquired and used for the purposes of the Order. The area covered by the Order limits measures approximately 126,641 m² with 21,245 m² of this land required temporarily, 78,519 m² land required permanently and 26,877 m² which is land subject to rights to attach OLE building cable fixings.
- 13.4 The land requirements of the scheme include 8,726m² of land that constitutes Crown Land which comprises the Ministry of Justice holding a lease of the building located at 33 Bull Street. This building has been included within the proposed Order to seek powers to affix overhead equipment to the building. The WMCA has consulted with the Ministry of Justice, who have confirmed that they have no objection to the TWAO and are happy for the WMCA to deal with them through their landlord (Pavilion Property Trustees Limited and Pavilion Property Limited).
- 13.5 There are a number of plots of land within the proposed Order that are also within the limits of the HS2 Act. Of these plots, the WMCA has come to an agreement with HS2 Ltd that, where HS2 Ltd is required to acquire land ahead of WMCA, HS2 Ltd will provide the necessary rights for WMCA to construct, maintain and operate the BEE scheme.

Open Space

- 13.6 8,726m² of land within the proposed Order limits is classified as open space. This land is within BCC's ownership and also within the limits of the land that may be acquired under the HS2 Act. In developing the route for the BEE the WMCA concluded that it had no alternative but to traverse this open space land in order for the route to connect to both entrances of the proposed HS2 Curzon Street Station and achieve the associated benefits.
- 13.7 The WMCA is currently in the process of entering into an agreement with BCC in respect of this land which will provide for WMCA to be granted the necessary rights over the open space land to construct operate and maintain the BEE. Therefore, it is anticipated that compulsory acquisition of such rights will become unnecessary and it is anticipated that these plots will be removed from the scope of the Order before the Inquiry.

Affected Properties

- 13.8 The Land Use and Land Take Chapter of the ES [BEE/A13/1-3] provides an assessment of the location and extent of land to be permanently used and acquired as a result of the operation of the BEE. The ES references the relevant land plans and parcels of land that will be directly affected and are required to enable construction, operation and maintenance of the BEE. A number of these are linked to wider proposals for redevelopment and therefore the BEE has been purposefully designed to minimise impact on this land so as to maximise its future development potential.
- 13.9 A majority of the BEE is on highway land, therefore, the amount of third party land required for the scheme is minimised and only includes that which is necessary for the construction, operation and maintenance of the scheme, including land for a substation and proposed compound sites to be used on a temporary basis during construction. The required land which falls outside of the alignment of the BEE tramway includes (but is not limited to):

- Additional highway land within the Land to be Acquired or Used to provide for tie in highway works at road junctions;
 - Land included specifically in order to attach building fixings;
 - A strip of land within the 'Land to be Used Temporarily' from Moor Street Queensway to New Canal Street in order to facilitate the construction of the BEE;
 - Three construction compounds within the 'Land to be Used Temporarily'; and
 - Land at Kings Parade to facilitate the demolition of the building.
- 13.10 The extent of land that is required on a temporary basis was informed by the Construction Strategy **[BEE/A13/2]** and discussions with stakeholders in terms of extent and also timing especially when the land falls within proposed development sites.
- 13.11 The proposed Order also includes powers for permanent rights for the installation of approximately 14 permanent OLE building cable fixings (final number subject to detailed design). Building fixings are proposed in order to minimise visual intrusion and street clutter by minimising the need for poles and foundations.
- 13.12 Where land is being acquired on a permanent basis for the realignment or widening of streets, this land will become highway land on the completion of the works.
- 13.13 Prior to the submission of the Order, in accordance with the DCLG October 2015 guidance on Compulsory Purchase Process and the Crichel Down Rules **[BEE/E24]**, the WMCA commenced negotiations with a number of landowners whose land may be required for the implementation of the BEE. The purpose of this dialogue was not only to open dialogue on the land that may be required but also to negotiate the extent and commence the process of agreement for acquisition. Some of these stakeholders have submitted objections to the scheme and the negotiations are continuing. Negotiations are also ongoing with other freeholders whose land is required but who have not submitted objections to the application.
- 13.14 In terms of the land acquisition in and around Kings Parade Building, partial-demolition and the demolition of the adjacent building was considered as an alternative to full demolition, but these options were not considered feasible.
- 13.15 In terms of the extent land acquisition around the Kings Parade Buildings, this includes the existing alignment of Albert Street as well as the land required for the realigning of Albert Street. This then releases the existing highway land to be encompassed within the residual land for the development. The land within the Order also includes sufficient space to provide a turning in order to retain vehicular (including deliver access) to the NCP car park. In the absence of any details for the proposed Martineau Galleries Development, following the construction of the scheme, further land will become available that could be used as part of the development, the extent of which could depend on the final development implemented.
- 13.16 Where land is required, the WMCA attempted to commence dialogue at an early stage, as detailed in the Report on Consultations Undertaken **[BEE/A10]** for example, with Hartwell, Gooch, Horton Estates. Dialogue is continuing with all parties as despite best intentions of the parties, it has not been possible to acquire land or rights purely by agreement and as such the acquisition of all land required for the BEE has been included within the proposed Order.
- 13.17 Of the objections raised, nine were in relation to the acquisition / use of property under compulsory purchase and temporary possession powers.

Compensation

- 13.18 Compensation, where due, will be paid in accordance with the Statutory Compensation Code. If a settlement cannot be agreed the matter can be referred to the Lands Chamber of the Upper Tribunal for determination on application by either party. However, entitlement to or the amount of payment of compensation is not a matter that will be dealt with at the Public Inquiry into the proposed Order.

European Convention on Human Rights

- 13.19 The powers over land and rights sought in the draft TWA Order are necessary for the construction, operation and maintenance of the BEE and have been limited as far as possible to ensure that they are proportionate to the requirements of the scheme.
- 13.20 The approach to be taken when considering compulsory acquisition of land and rights is conveniently summarised in paragraph 13 of the Department for Communities and Local Government's (DCLG) October 2015 Guidance on Compulsory Purchase Process and the Crichel Down Rules [BEE/E24], which states that a compulsory purchase powers should only be given where there is "a compelling case in the public interest". The Guidance makes it clear that an acquiring authority should be sure that the purposes for which it is making a compulsory purchase order sufficiently justify interfering with the human rights of those with an interest in the land affected. In making this assessment, the person seeking to acquire the land should have regard, in particular, to the provisions of Article 1 of the First Protocol and Article 6 of the Convention and, in the case of a dwelling, Article 8 of the Convention. These are summarised and considered below.
- 13.21 Article 1 of the First Protocol states that: *"...Every natural or legal person is entitled to peaceful enjoyment of his possessions" and "no one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by the law and by the general principles of international law..."*
- 13.22 Whilst occupiers and owners of land will be deprived of their property if the TWA Order is made, this will be done in accordance with the law. The TWA Order is being pursued in the public interest as required by Article 1 of the First Protocol. The public benefits associated with the scheme are set out earlier in this Statement. The WMCA considers that the TWA Order will strike a fair balance between the public interest in the implementation of the Scheme and those private rights which will be affected by the TWA Order.
- 13.23 Article 6 of the Convention provides that: *"In determining his civil rights and obligations...everyone is entitled to a fair and public hearing within a reasonable time by an independent and impartial tribunal established by law."*
- 13.24 The scheme has been extensively publicised and consultation has taken place with communities and parties that will be affected by the TWA Order. All those affected by the TWA Order have been notified, and have been afforded the right to make representations and/or objections to the Secretary of State for Transport, and to be heard at a public inquiry. The WMCA considers that the statutory processes and associated right for those affected to pursue remedies in the High Court where relevant, are compliant with Article 6.
- 13.25 The WMCA considers that such interferences as may occur in pursuance of the Order are in accordance with the law, pursue a legitimate aim, namely the provision of a high quality integrated public transport system and which advances the objectives set out in this statement, and are proportionate having regard to the benefits to the public interest that the Scheme will secure. . It is also proportionate having regard to the alternative means of securing the objectives.
- 13.26 Those directly affected by the Order will also be entitled to compensation proportionate to any losses that they may incur as a result of the acquisition. Compensation will be payable in accordance with the compensation code, assessed on the basis of the market value of the property interest acquired, disturbance, statutory loss payment and, if appropriate, home loss payments. The reasonable surveying and legal fees incurred by those affected will also be paid by the WMCA. The compensation code has been held to be compliant with Articles 8 and Article 1 of the First Protocol.
- 13.27 The European Court of Human Rights has recognised in the context of Article 1 of the First Protocol that "regard must be had to the fair balance that has to be struck between the competing interests of the individual and the community as a whole". Both public and private

interests are to be taken into account in the exercise of an acquiring authority's powers and duties. Similarly, any interference with Article 8 rights must be "necessary in a democratic society" i.e. proportionate.

- 13.28 In pursuing the TWA Order, the WMCA has carefully considered the balance to be struck between the effect of acquisition or other interference with property rights on individual rights and the wider public interest in securing the objectives. Interference with Convention rights is considered by the WMCA to be justified in order to secure the Scheme objectives.
- 13.29 Consideration has been given to whether the legitimate aim of achieving the Scheme objectives can be achieved by means which are less interfering of individuals' Convention rights. Alternative approaches have been considered as set out in chapter 6 of this statement. It is clear that the Scheme best meets the objectives and is not impeded by delivery constraints.
- 13.30 The WMCA considers that there is a compelling case in the public interest for these powers and rights to be granted as part of the proposed TWA Order. The WMCA believes that transport, economic and social improvements which can be achieved by the BEE scheme justify the interference with the human rights of affected parties.

Case for the BEE

- 13.31 The Strategic Case section of the draft Business Case **[BEE/23/3]** covers the local policy context, including the plans and policies of BCC and the GBSLEP and demonstrates that the scheme is entirely in line with national, regional and local policies.
- 13.32 The Economic Case **[BEE/23/5]** section sets out the Value for Money (VfM) of the scheme in accordance with government guidance and shows that the scheme represents high VfM with a very high draft BCR of 5.3.1. The net present value over the appraisal period is £79 million.
- 13.33 The Financial Case **[BEE/23/2]** section for the scheme confirms the expected outturn costs and the funding sources from which they will be met.
- 13.34 The Management Case **[BEE/23/4]** shows that the scheme is managed by a strong project team organisation with a mixture of in-house project managers and technical and operational light rail experts together with a strong team of supporting specialists and advisers covering all aspects of development, delivery and implementation.
- 13.35 The Commercial Case **[BEE/23/1]** demonstrates the WMCA's recent experience in procurement of Midland Metro extensions with the BCCE and Fleet Replacement Programme which included procurement of a 1.3km extension to Midland Metro, a Depot extension and a replacement tram fleet. Lessons learnt from those contracts have been fed through into the current phase.
- 13.36 Therefore, the Business Case is a strong one and demonstrates the need for the scheme, showing that the benefits of the scheme greatly outweigh its monetary costs and other disbenefits and as a consequence public sector funding of the scheme is warranted.
- 13.37 There is therefore considered to be a compelling case in the public interest for the compulsory acquisition of lands and rights over lands as set out within the proposed Order. The justification is based upon the BEE supporting the delivery of a 'first class transport network providing rapid convenient and sustainable links between the strategic centres, existing and new communities and employment sites' and delivering the scheme benefits as outlined above.

14. RESPONSE TO OBJECTIONS

- 14.1 The statutory period for the making of objections and representations relating to the application ended on 15th November 2016. A total of 12 objections to the WMCA's application were received, of which all are statutory. Two representations were received along with four letters of support.
- 14.2 One of the objections (OBJ/01 Hammer and Anvil Public House) and one of the representations (REP/01 Environment Agency) have been formally withdrawn.
- 14.3 The WMCA is in negotiations with all remaining objectors with a view to reaching agreements on the matters which would enable the remaining objections to be withdrawn.

Letters of Objection and Representation

- 14.4 In Table 14.1 below provides a summary explanation of the grounds for each objection and representation and the WMCA's response.

Table 14.1

Objection		Grounds of Objection	The WMCA's Position (as of 30 May 2017)
OBJ/01	The Hammer and Anvil Public House	Concern that the scheme will disrupt and affect the business particularly the implication of compulsory acquisition powers on the property.	The objection has been withdrawn following explanation of the proposals.
OBJ/02	National Grid Gas (NGG)	Require appropriate protection in relation to any impacts of the scheme on a low or medium (below bar 2) gas pipes and associated equipment identified in vicinity.	The WMCA and NGG have agreed revisions to the wording of the utility protective provisions in Schedule 9 to the draft Order. The revisions are included in the revised version of the draft order (revision 1).
OBJ/03	MD Phoenix Cars	Severe impact on business as the owners needs constant access from the street to move vehicles in and out of workshop and has cars and supplies delivered regularly to the premises.	<p>The WMCA has been advised by BCC that the objector's current use of the highway may constitute an obstruction of the highway.</p> <p>Alternative arrangements for legitimate loading have been suggested to the objector.</p> <p>The operation of the BEE will not prevent access to the property, alternative arrangements will be proposed during the construction period, during which WMCA will aim to minimise impacts. These arrangements will enable the business to continue operating.</p>
		Concerns about relocating the business.	The operation of the BEE will not require the relocation of the business as it will not prevent access to the property and alternative arrangements will be agreed with the objector during construction.
OBJ/04	National Express Bus	Impact of Metro operations on traffic flows in (lower) Bull St	In order to address the objector's concerns, further modelling work has been undertaken which confirms that (lower) Bull Street operates satisfactorily with the BEE in operation.

	Impact of Metro crossing Moor St Queensway including pedestrians and HS2	Moor Street Queensway is the subject of a committed development by BCC to reduce traffic by removing through traffic apart from buses. The Midland Metro will cross Moor Street Queensway via a signal controlled junction, designed to make appropriate safe provision for pedestrians, including the predicted flows arising from HS2. Trams drive on line of sight, and their drivers are trained and very experienced in driving through busy city centre environments. This will therefore be a safe environment for pedestrians.
	Impact of Metro operations on Digbeth especially regarding removal of bus lanes	<p>The traffic modelling undertaken for the scheme accords with DfT guidance and confirms that High Street Deritend will operate satisfactorily with the BEE scheme.</p> <p>In order to attempt to allay the objector's concerns, further modelling work has been undertaken which confirms the original findings and demonstrates traffic moves more efficiently without bus lanes.</p>
	Impact on traffic flows around Digbeth / Rea St junction including pedestrians.	<p>The traffic modelling undertaken for the scheme accords with DfT guidance and confirms that the Rea Street junction will operate satisfactorily with the BEE scheme.</p> <p>In order to attempt to allay the objector's concerns, further modelling work has been undertaken which confirms the original findings.</p>
	It is premature to approve Order until traffic modelling is complete and Digbeth study is approved so can understand traffic flows and deal with impacts	The traffic modelling undertaken for the scheme accords with DfT guidance and confirms that traffic will operate satisfactorily with the BEE scheme.

			<p>In order to attempt to allay the objector's concerns, further modelling work has been undertaken which confirms these original findings.</p> <p>A separate and independent urban realm study for Digbeth is underway, commissioned by BCC. NX Bus have been party to the development of the brief and are fully engaged in the detail of the work underway within the development of proposals, should any emerge from the study. The study is taking full account of the BEE proposals.</p> <p>Any proposals would need to be promoted by BCC as a separate project, separately funded and justified through Cabinet approvals, etc. There is no certainty that any feasible proposals will emerge from the study, or that these will be taken forward by BCC, and so it is unreasonable to delay the making of the Order for the fully funded BEE scheme.</p>
		Object to removing of bus lanes without better understanding of impact on traffic flows etc.	<p>The traffic modelling undertaken for the scheme accords with DfT guidance and confirms that High Street Deritend will operate satisfactorily with the BEE scheme.</p> <p>In order to attempt to allay the objector's concerns, further modelling work has been undertaken which confirms the original findings and demonstrates traffic moves more efficiently without bus lanes.</p>
OBJ/05	McDonalds Real Estate, McDonalds Restaurants Ltd and Dean Chapman	Inadequate justification for acquiring and demolishing the property.	The acquisition and demolition of the property is required for the scheme and is justified in the public interest. The WMCA has demonstrated that all other route options are more detrimental to existing businesses or do not meet the need or provide benefits to the same degree. Due to the nature of the building's construction the demolition of the whole block is required.

		<p>Scheme is predicated on construction of HS2 and as Royal Assent has not been given to the HS2 Bill the BEE application is premature.</p>	<p>The HS2 Bill received Royal Assent on 23 February 2017.</p>
		<p>Scheme cost will exceed initial estimate and no provision for additional funding to cover shortfall so not convinced scheme capable of delivery - evidence of additional funding needed</p>	<p>Costs and funding were considered by the WMCA when approval was sought to apply for the Order at the Board meeting on 30 September 2016 [BEE/F1]. This took into account the potential need to fund increases over the current estimated costs via provision for “Optimism Bias” and identified options for this to be funded should it occur.</p>
		<p>Insufficient time and opportunity to relocate and safeguard business and limited discussions re requirement for the business and no details on relocation - limited sites. Need formal commitment to purchase in advance of order being determined.</p>	<p>The WMCA considers there is sufficient time between funding being confirmed by Government and the requirements for demolition to begin to meet the construction delivery programme to enable relocation to take place.</p> <p>WMCA is in the process of negotiating an agreement with the objector to give the maximum time and information on relocation given the level of commitment that it can enter into ahead of the Order being determined and Government funding being confirmed.</p>
OBJ/06	<p>Martineau Galleries No 1 Ltd, Martineau Galleries No 2 Ltd</p>	<p>Extent of permanent acquisition</p>	<p>The extent of the land included within the Order is the minimum necessary to allow for the safe demolition of the Kings Parade buildings, the realignment of Albert Street and also highway works to maintain access to existing businesses with the construction and operation of the BEE.</p> <p>The land has been included within the Order on a</p>

			<p>permanent basis to optimise flexibility in the overall design of the tramstop and the access to businesses given that there is no detail of timescales or the form of any revised masterplan for the proposed redevelopment in the vicinity of the BEE.</p>
		Overhead catenary fixing	<p>The WMCA does not foresee that attachment of building fixings to the existing NCP building will be necessary. However WMCA will endeavour to seek, through the planning process associated with any redevelopment, the ability to attach building fixings to any new buildings to minimise visual impact and street clutter that overhead line poles may bring..</p>
OBJ/07	Quintain City Park Gate Ltd	Insufficient information provided to gain understanding of land included in order	<p>WMCA has provided the objector with sufficient information to understand the rationale for the land requirements.</p> <p>The land included within the Order is required for the BEE route, and for replacement (BEE and HS2) bus stops to provide for high quality, convenient interchange with HS2 for Metro, Sprint and bus services. The WMCA has considered reasonable alternatives and considered that the alignment of the BEE in this location cannot be located anywhere else than between the proposed HS2 station and Hotel LaTour.</p>
		Insufficient consultation	<p>WMCA contacted the objector as part of the TWAO consultation process and no response was received from the objector or concerns raised.</p>
		HS2 Bill has not received Royal Assent and undermines one of scheme aims.	<p>The HS2 Bill received Royal Assent on 23 February 2017.</p>

		No supporting evidence regarding alternative sites or consideration of other methods	The ES, the Options Report and the Business Case [BEE/A13/2 and BEE/D23/1-5] demonstrate the work that has been undertaken in the development of the alignment and consideration of other modes and alignments. They conclude that no alternative mode or route would provide the benefits delivered by the BEE.
		The property is proposed to be acquired or used under the HS2 Bill proposals.	The HS2 Bill received Royal Assent on 23 February 2017. The WMCA is liaising with HS2 to co-ordinate the design and implementation of their respective schemes.
		Keen to work with HS2 and BCC to maximise regeneration	WMCA notes the objector is keen to work with HS2 and BCC to maximise regeneration and is open to co-operate in such discussions
		Reservations on co-ordination of HS2 and BEE construction schedules.	The WMCA and HS2 are continuing to work together to progress the schemes together to co-ordinate construction of both schemes and minimise disruption.
		Insufficient attempts to negotiate reasonably	The WMCA met with the objector at their request. The objector did not respond to the consultations on the BEE.
OBJ/08	Instant Cash Loans Ltd (The Money Shop)	Inadequate justification for acquiring and demolishing the property	<p>The need for the scheme and the acquisition of the land is demonstrably in the public interest, as set out in this Statement of Case.</p> <p>The extent of the land included within the Order is the minimum necessary to allow for the safe demolition of the Kings Parade buildings, the realignment of Albert Street and also highway works to maintain access to existing businesses with the construction and operation of the BEE.</p> <p>The land has been included within the Order on a permanent basis to optimise flexibility in the overall</p>

			design of the tramstop and the access to businesses given that there is no detail of timescales or the form of any revised masterplan for the proposed redevelopment in the vicinity of the BEE.
		Scheme is predicated on the construction of HS2. As the HS2 Bill has not been given Royal Assent the applications for the BEE Order is premature	The HS2 Bill received Royal Assent on 23 February 2017.
		Scheme cost will exceed initial estimate and no provision for additional funding to cover shortfall so not convinced scheme capable of delivery - evidence of additional funding needed	Costs and funding were considered by WMCA when approval was sought to apply for the Order at the Board meeting on 30 September 2016 [BEE/F1]. This took into account the potential need to fund increases over the current estimated costs via provision for "Optimism Bias" and identified options for this to be funded should it occur.
		Insufficient time and opportunity to relocate and safeguard business and limited discussions regarding requirement for the business and no details on relocation - limited sites. Need formal commitment to purchase in advance of order being determined.	<p>The WMCA considers there is sufficient time between funding being confirmed by Government and the requirements for demolition to begin to meet the construction delivery programme to enable relocation to take place.</p> <p>WMCA is in the process of negotiating an agreement with the objector to give the maximum time and information on relocation given the level of commitment that it can enter into ahead of the Order being determined and Government funding being confirmed.</p>
OBJ/09	Network Rail Infrastructure Ltd	Precise implications for safe efficient operation of the railway have not been adequately described or assessed.	<p>The proposed substation sits beneath the railway arch and neither this, nor the BEE as a whole, will adversely impact the safety or operation of the railway.</p> <p>The draft order contains protective provisions for the benefit of Network Rail which require Network Rail approval of any works which could affect the operation of</p>

		the railway.
	No sufficient explanation or justification for extent of compulsory acquisition.	The land taken as part of the scheme enables the construction of a substation and means of access. The Network Rail protective provisions included in the draft Order provide that compulsory acquisition powers could only be exercised over railway property with the prior consent of Network Rail.
	Failure to demonstrate order would not prejudice the safe operation of the railway etc and in absence of this NR contents no compelling case in public interest.	<p>The proposed location of the substation sits beneath the railway arch and does not impact the safety or operation of the railway. The placing of the substation beneath the railway minuses the impact on adjacent land, there is a compelling need for the scheme as set out in this Statement of Case and the acquisition of the land included in the Order is in the public interest.</p> <p>The draft order contains protective provisions for the benefit of Network Rail which require Network Rail approval of any works which could affect the operation of the railway.</p>
	NR requires: 1) detailed information on precise nature of all works proposed and especially confirmation whether works affect fabric of structures 2) justification of extent of CPO powers sought 3) agreement that acquisition of operational land is on terms agreed with NR for its protection and CPO will not be exercised in relation to such land 4) sufficient protections for NR statutory undertaking are put in place for carrying out works in vicinity of operational railway.	<p>During the meetings ahead of the Order being submitted [BEE/A10]the WMCA undertook to work with Network Rail in the investigation of placing a substation under their railway viaduct in order to minimise land take from the adjacent site.</p> <p>The draft order contains protective provisions for the benefit of Network Rail which require Network Rail approval of any works which could affect the operation of the railway.</p>

OBJ/10	Done Brothers (Cash Betting) Limited trading as Betfred	Object to acquisition of land and construction immediately adjacent to property	The land included within the Order adjacent to the property is included to enable the construction of the BEE. That which is required permanently and for the operation of the BEE is to allow for highway and pavement widths to be to minimum standards as required by BCC.
		Potential for substantial adverse impact on ability of the objector to operate its business	During construction and operation of the BEE, access will be maintained to the property at all times. In the event that servicing access will be disrupted during construction, the objector would be notified in advance and the WMCA would work with the objector to minimise effects (for example by undertaking the works outside of normal trading hours) and provide alternative arrangements for access (such as for service deliveries) where practicable.
		Require undertaking that measures put in place and implemented that access to and from property maintained at all times during works and operation; and interference by noise dust vibration etc avoided or kept at minimum	This has been offered by the WMCA in accordance with the CoCP and the objector is in the process of signing a legal agreement.
		Apparatus would be affixed to the property.	After further investigation and surveys, the WMCA will not be considering attaching building fixings to the building.
OBJ/11	The Gooch Family	Insufficient information to gain understanding of why the land is included in Order	<p>WMCA has provided the objector with sufficient information to understand the rationale for the land requirements, as set out in this Statement of Case.</p> <p>During the meetings ahead of the Order being submitted the WMCA undertook to work with the objector (and BCC) to maximise the benefits of the BEE for the</p>

		developer including the placing of an additional tramstop adjacent to its proposed development [BEE/A10] .
	Insufficient consultation to provide justification	The WMCA undertook dialogue with the objector ahead of the application being submitted in an attempt to come to an agreement ahead of the application being submitted [BEE/A10] .
	Not supporting evidence to demonstrate benefits of using the land compared to other sites or alternative methods	During the meetings ahead of the Order being submitted the WMCA undertook to work with the objector (and BCC) to maximise the benefits of the BEE for the developer including the placing of an additional tramstop adjacent to its proposed development [BEE/A10] . This dialogue has continued through the statutory process relating to the Order.
	Detrimental impact on future regeneration of Typhoo Wharf and land on corner Bordesley Street and New Canal Street which is important in position on a key route and tram should not compromise this	During the meetings ahead of the Order being submitted the WMCA undertook to work with the objector (and BCC) to maximise the benefits of the BEE for the developer including the placing of a tramstop an additional tramstop adjacent to its proposed development [BEE/A10] . WMCA considers that the BEE will significantly enhance the potential for future regeneration of the objector's landholdings, as set out in this Statement of Case
	No sufficient attempts to negotiate reasonably in advance of obtaining compulsory purchase powers	The WMCA undertook dialogue with the objector ahead of the application being submitted in an attempt to come to an agreement ahead of the application being submitted [BEE/A10] .

OBJ/12	Hotel LaTour	Concerns of disturbance during and after implementation of the scheme	The WMCA has taken the objector's concerns raised in the considerable pre-submission consultation into account in the design of the scheme. The scheme includes maintaining the existing access to the front of the property (which would have been removed by HS2), switching the BEE alignment closer to the hotel with the bus stops relocated as far away as possible, with landscaping and screening of the bus stops from the hotel. The WMCA will demonstrate that there will not be significant noise impact at the hotel as a result of the BEE. Construction impacts will be mitigated as set out in the ES [BEE/A13/1-3]
		Insufficient information provided to gain understanding of land included in Order	<p>WMCA has provided the objector with sufficient information to understand the rationale for the land requirements.</p> <p>The land included within the Order is required for the BEE route, and for replacement (BEE and HS2) bus stops to provide for high quality, convenient interchange with HS2 for Metro, Sprint and bus services. The WMCA has considered reasonable alternatives and considered that the alignment of the BEE in this location cannot be located anywhere else than between the proposed HS2 station and Hotel LaTour.</p>
		Impact on access and car parking	During construction and operation of the BEE, access will be maintained to the property at all times. The WMCA has worked to ensure the existing access arrangements to the front of the hotel are maintained as part of the design of the BEE. In the event that access will be disrupted during construction, the objector would be notified in advance and the WMCA would work with the objector to minimise effects and alternative arrangements made if practicable.

			<p>In operation it is envisaged that a tram will pass the hotel in each direction every six minutes; this will not be detrimental to access to the hotel from the car parking at Bullring/Selfridges.</p> <p>We understand from BCC that the land that the hotel enjoys as a car park does not have planning permission for this use.</p>
		Lack of consideration and engagement.	<p>The WMCA undertook a number of meetings with the objector ahead of the application being submitted in an attempt to come to understand and address their concerns ahead of the application being submitted [BEE/A10]. The scheme includes maintaining the existing access to the front of the property, switching the BEE alignment closer to the hotel with the bus stops as far away from the hotel as possible and landscaping and screening of the bus stops from the hotel.</p>
REP01	Environment Agency	<p>1) Flood risk mitigation measures to be included 2) Flood warning system to be included / improved 3) Environmental permit may be required 4) Controlled waters protection may be required and request planning condition 5) Development to be carried out in accordance with CLAIRE definition of waste and thus any waste come under waste management legislation.</p>	<p>The representation has been withdrawn as the Environment Agency's concerns have been satisfactorily addressed.</p>
REP/02	Chiltern Railways	<p>Concern powers applied for in the Order could interfere with their ability to provide franchised passenger services over the railway.</p>	<p>The powers applied for relate to the proposal to locate a substation under the railway bridge and will not affect the ability of the objector to provide franchised passenger services over the railway.</p> <p>The protective provisions for railway interests in Schedule 9 to the draft Order provide that the approval of Network Rail needs to be obtained for any works which could affect railway property.</p>

		<p>Seek assurances regarding proposed use of the Order powers in relations to Plots 67, 68 and 69.</p>	<p>The WMCA is seeking to provide the assurances being sought. The powers applied for relate to the proposal to locate a substation under the railway bridge and will not affect the ability of the objector to provide franchised passenger services over the railway. Electromagnetic fields and EMC issues on the BEE will be mitigated through compliance with the requirements of the EMC directive, following best practice and utilising certified equipment as required by the planning conditions set out in the request for deemed planning permission [BEE/A2].</p>
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Letters of Support

14.5 Letters of support were received from the following:

- **The Irish Centre (SUPP/01)**
- **Friends of Eastside Park (SUPP/02)**
- **Woodman Pub (SUPP/03)**
- **Birmingham City Council (SUPP/04)**

Conclusion

14.6 As can be seen from Table 14.1, the WMCA is continuing to address all of the points of objection / representation, and is confident that where issues remain, these should be capable of being resolved.

15. CONCLUSION

- 15.1 This Statement of Case for the Midland Metro (Birmingham Eastside Extension) Order sets out how the WMCA has complied with the TWAO procedures in the submission of this Order. It also identifies the objectives and aims of the BEE.
- 15.2 The need for the BEE has been demonstrated in the need for regeneration and development of both the Eastside and Digbeth areas of Birmingham. This need has been recognised within the Curzon Street Masterplan, the Birmingham Development Plan and WMCA's Movement for Growth. The scheme meets a need for regeneration in Digbeth and the wider Birmingham city centre which has been heightened by HS2 and the once-in-a-generation opportunity this national major project brings to maximise the regeneration of these areas. The BEE will link Digbeth and Eastside to the rest of the city centre, Birmingham and the wider West Midlands.
- 15.3 The objectives of the BEE are to support BCC's programme of regeneration and investment in Birmingham City Centre by increasing journey opportunities to both existing and future destinations in the Eastside and Digbeth areas as set out in the BDP **[BEE/E3]**, Big City Plan **[BEE/E22/1, BEE/E22/2]** and Birmingham Curzon HS2 Masterplan **[BEE/E19]**. The scheme meets these objectives.
- 15.4 The need for the BEE is strengthened by the current lack of transport integration within the centre of Birmingham, both between existing modes and also with the future HS2 services. The BEE will provide connections to HS2 from all heavy rail stations within the city centre, from Birmingham Coach Station and with the rest of the expanding Metro network, linking the Black Country and with future connections the west side of the city centre.
- 15.5 The BEE is part of a package of schemes proposed to maximise the benefits of HS2 and also to meet the aims of the Greater Birmingham and Solihull Local Enterprise Partnership (GBSLEP) relating to transport and regeneration as set out in the WMCA paper 'Unlocking the Benefits' **[BEE/E15]**.
- 15.6 The BEE will also meet the need to increase the use of public transport by providing a rapid efficient alternative to the motor car as well as expanding the transport offer by providing a cleaner alternative to the motor car.
- 15.7 The BEE fits with relevant European, national, regional and local transport and planning and economic development policies. The scheme is fully aligned with and supported by the GBSLEP HS2 Growth Strategy **[BEE/E19]**. It is identified as a key transport priority in the WMLTP **[BEE/E10]** and the BDP **[BEE/E3]** and the Birmingham Curzon HS2 Masterplan **[BEE/E19]**.
- 15.8 The benefits of the scheme outweigh any detriment as demonstrated in the ES **[BEE/A13/1-3]** given the identified mitigation measures proposed with the design, urban design strategy and CoCP.
- 15.9 The route of the BEE has been developed with the consideration of a number of options for the alignment as a whole and in more detail in certain locations and the alignment proposed is that which best fits the need of the BEE and also maximises the benefits as demonstrated in the Business Case **[BEE/D23/1-5]**. This demonstrates that the value for money of the BEE is very high with the net present value over the appraisal period of £76.9 million and a Benefit to Cost ratio of 4.8:1 demonstrating the economic case.
- 15.10 The impact of the BEE will be positive, reflecting the benefits of providing direct access to and from the HS2 Curzon Street station. Any minor loss of amenity is significantly outweighed by the positive benefits arising from the BEE in improving the connectivity of the metropolitan area to the national and international transport network.
- 15.11 On the basis of the case made in this document, the WMCA considers that the making of the Order for the BEE is in the public interest in meeting the needs for large-scale regeneration and growth and bringing the benefits and maximising the opportunities brought by HS2.

16. LIST OF DOCUMENTS AND DEPOSIT LOCATIONS

- 16.1 Appendix A of this Statement of Case sets out a list of the documents which the WMCA presently intends to refer to or put in evidence at the public inquiry. The WMCA reserves the right to refer to further documents if and insofar as they may become relevant or necessary.
- 16.2 Appendix B is a notice required by Rule 7(2)(b) of the Transport and Works (Inquiries Procedure Rules) 2004 [**BEE/B4**] setting out the deposit locations where the documents set out in Appendix A will be available for public inspection.

APPENDICES

Appendix A – LIST OF DOCUMENTS

Appendix B – DEPOSIT DOCUMENT LOCATION

APPENDIX A – LIST OF DOCUMENTS

The following is a list of the documents which the WMCA presently intends to refer to or put in evidence at the public inquiry. The WMCA reserves the right to refer to further documents if and insofar as they may become relevant or necessary.

List of Documents	
BEE/A - Formal Application Documents (all 04/10/16 unless stated otherwise)	
BEE/A1	Application Letter
BEE/A2	Planning Direction Application
BEE/A3	Concise Statement of Aims
BEE/A4	Estimate of Costs
BEE/A5	Funding Statement
BEE/A6	Declaration as to status of Applicant
BEE/A7	List of Consents Permissions and Licences
BEE/A8/1	Draft Order
BEE/A8/2	Updated Draft Order Revision 1 31/05/17 (clean and tracked versions)
BEE/A9	Explanatory Memorandum
BEE/A10	Report Detailing Consultation Undertaken
BEE/A11	Order Plans (Plans and Sections, Planning Direction, Traffic Regulation Order and Crown Land)
BEE/A12	Book of Reference
BEE/A13/1	Environmental Statement Volume 1 (Main Report)
BEE/A13/2	Environmental Statement Volume 2 Technical Appendices
BEE/A13/3	Environmental Statement Volume 3 (Non-Technical Summary)
BEE/B - Legal Documents	
BEE/B1	Transport and Works Act 1992
BEE/B2	Section 90(2A), Town and Country Planning Act 1990
BEE/B3	Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006
BEE/B4	Transport and Works (Inquiries Procedure) Rules 2004
BEE/B5	Midland Metro Act 1989
BEE/B6	Midland Metro (Penalty Fares) Act 1991
BEE/B7	Midland Metro Act 1992
BEE/B8	Midland Metro (No.2) Act 1992
BEE/B9	Midland Metro Act 1993
BEE/B10	Midland Metro (No.2) Act 1993
BEE/B11	Transport and Works (Model Clauses for Railways and Tramways) Order 2006
BEE/B12	The West Midlands Combined Authority Order 2016
BEE/B13	Noise Insulation (Railways and Other Guided Systems) Regulations 1996 (as amended)
BEE/B14	Midland Metro (Wolverhampton City Centre Extension) Order 2016
BEE/C - Scheme Development Documents	
BEE/C1	Guidance on Tramways Railways Safety Publication Part 2, Office of Rail Regulation (Nov 2006)
BEE/C2	HS2 Phase One Environmental Statement Extract Volume 5 Technical

	Appendices Part 9: West Midlands Assessment Traffic and Transport High Speed Two (HS2) Limited (Nov 2013)
BEE/C3	Code of Practice For Working On or Near Metro, Centro (November 2015)
BEE/C4	Midland Metro – City Centre Extension & Fleet Replacement Option Development, (October 2009)
BEE/D - Economic and Business Case Documents	
BEE/D1	'Making our Mark' West Midlands Combined Authority Strategic Economic Plan (2016)
BEE/D2	A Greater Birmingham for a Greater Britain, Strategic Economic Plan 2016-2030, Greater Birmingham & Solihull Local Enterprise Partnership, (2016)
BEE/D3	Green Book Appraisal and Evaluation in Central Government, HM Treasury (2003 – as updated in 2011)
BEE/D4	Public Sector Business Cases Using the Five Case Model, Green Book Supplementary Guidance on Delivering Public Value from Spending Proposals, HM Treasury (2013)
BEE/D5	WebTAG Unit; Transport Appraisal Process, DfT (Jan 2014)
BEE/D6	WebTAG Unit: Proportionate Update Process, DfT (Jan 2014)
BEE/D7	WebTAG Adopted Unit A1.1 Cost Benefit Analysis, DfT (Nov 2014)
BEE/D8	WebTAG Adopted Unit A1.2 Scheme Costs, DfT (Nov 2014)
BEE/D9	WebTAG Adopted Unit A1.3 User and Provider Impacts, DfT (Mar 2017)
BEE/D10	WebTAG Adopted Unit A2.1 Wider Impacts, DfT (Jan 2014)
BEE/D11	WebTAG Adopted Unit A2.2 Regeneration Impacts, DfT (Jan 2014)
BEE/D12	WebTAG Adopted Unit A4.2 Distributional Impact Appraisal, DfT (Dec 2015)
BEE/D13	WebTAG Consultation Draft Unit A2.1 Wider Economic Impact Appraisal, DfT (Sept 2016)
BEE/D14	WebTAG Consultation Draft Unit A2.2 Induced Investment Impacts, DfT (Sept 2016)
BEE/D15	WebTAG Consultation Draft Unit A2.3 Appraisal of Employment Effects, DfT (Sept 2016)
BEE/D16	WebTAG Consultation Draft Unit A2.4 Appraisal of Productivity Impacts DfT (Sept 2016)
BEE/D17	Transport Business Case Guidance, DfT (Jan 2013)
BEE/D18	VfM Advice Note for Local Transport Decision Makers, DfT (Dec 2013)
BEE/D19	Monitoring and Evaluation Framework for LA Major Schemes, DfT (Sept 2012)
BEE/D20	Best Practice Guidance for Planning the Fuller Evaluations of Local Authority Major Schemes, DfT (2013)
BEE/D21	West Midlands Combined Authority Devolution Agreement, HM Treasury and West Midlands Combined Authority, 2015
BEE/D22	Department for Communities and Local Government Letter confirming funding for BEE 27 (June 2016)
BEE/D23/1	Birmingham Eastside Extension Draft Business Case, Commercial Case, WMCA (May 2017)
BEE/D23/2	Birmingham Eastside Extension Draft Business Case, Financial Case, WMCA (May 2017)
BEE/D23/3	Birmingham Eastside Extension Draft Business Case, Strategic Case, WMCA (May 2017)
BEE/D23/4	Birmingham Eastside Extension Draft Business Case, Management Case, WMCA (May 2017)

BEE/D23/5	Birmingham Eastside Extension Draft Business Case, Economic Case, WMCA (May 2017)
BEE/E - Policy Documents	
BEE/E1	National Planning Policy Framework, Department for Communities and Local Government (March 2012)
BEE/E2/1	Extract from National Planning Policy Guidance: Ensuring the Vitality of Town Centres, Department for Communities and Local Government (March 2014)
BEE/E2/2	Extract from National Planning Policy Guidance: Noise, Department for Communities and Local Government (March 2014)
BEE/E2/3	Extract from National Planning Policy Guidance: Travel Plans, Transport Assessments and Statements in Decision-taking, Department for Communities and Local Government (March 2014)
BEE/E2/4	Extract from National Planning Policy Guidance: Use of Planning Conditions, Department for Communities and Local Government (March 2014)
BEE/E3	Birmingham Plan 2031: Birmingham Development Plan (Part of Birmingham's' Local Plan), Planning for Sustainable Growth (adopted January 2017)
BEE/E4	Bordesley Park Area Action Plan, Pre-Submission Report, Birmingham City Council, (February 2017)
BEE/E5	Birmingham Mobility Action Plan, White Paper 'Birmingham Connected', Birmingham City Council, (November 2014)
BEE/E6	Creating Growth, Cutting Carbon: Making Sustainable Local Transport Happen, White Paper, Department for Transport, (January 2011)
BEE/E7	Door to Door: A strategy for Improving Sustainable Transport Integration, DfT, (March 2013)
BEE/E8	Building our Industrial Strategy Green Paper, (January 2017)
BEE/E9	'High Speed 2: Get Ready' HS2 Growth Taskforce, DfT (March 2014)
BEE/E10	West Midlands Local Transport Plan (2011-2026): Making the Connections (2011)
BEE/E11	'Towards a World Class Integrated Transport Network' Vision Document, Centro (2013)
BEE/E12	White Paper 'Creating Growth, Cutting Carbon': Making Local Sustainable Transport Happen, Department for Transport January 2011
BEE/E13	Roadmap to a Single European Transport Area-Towards a competitive and resource efficient transport system European Commission Transport White Paper (March 2011)
BEE/E14	West Midlands Strategic Transport Plan: Movement for Growth, West Midlands Combined Authority, (June 2016)
BEE/E15	HS2 - Unlocking the benefits: West Midlands Connectivity Package, Transport for West Midlands, (2013)
BEE/E16	The Midlands HS2 Growth Strategy: Accelerating the UK's engine of growth, Greater Birmingham & Solihull Local Enterprise Partnership, (July 2015)
BEE/E17	Midlands Connect Strategy: powering the Midlands Engine, Midlands Connect, March 2017
BEE/E18	Centro Integrated Public Transport Prospectus, Centro (Jan 2010)
BEE/E19	Curzon Street HS2 Masterplan for Growth, Birmingham City Council (July 2015)

BEE/E20	Curzon Street Investment Plan Birmingham City Council (June 2016)
BEE/E21	HS2 Unlocking the Benefits West Midlands Connectivity Programme, Centro (2013)
BEE/E22/1	Big City Plan City Masterplan (Part 1), Birmingham City Council (2011)
BEE/E22/2	Big City Plan BCC City Masterplan (Part 2), Birmingham City Council (2011)
BEE/E23	TfWM Transport Plan 2017-2018, WMCA (May 2017)
BEE/E24	Guidance on Compulsory Purchase Process and The Crichel Down Rules for the disposal of surplus land acquired by, or under the threat of, compulsion Department for Communities and Local Government, (October 2015)
BEE/E25	Guide to Transport and Works Act procedures, DfT (2006)
BEE/F - TWA / Inquiry Documents	
BEE/F1	WMCA Board Report, WMCA (30 September 2016)
BEE/F2	Statement of Case, WMCA (31 May 2017)

APPENDIX B – DEPOSIT DOCUMENT LOCATION

As required by Rule 7(2)(b) of the Transport and Works (Inquiries Procedure) Rules 2004 the deposit locations where the documents set out in Appendix A will be available for public inspection as set out below.

The documents can also be downloaded free of charge from the WMCA's website <https://www.metroalliance.co.uk/eastside-extension>.

Copies of documents can also be obtained from the WMCA, subject to payment of a reasonable charge. Requests for copies of documents should be made to the TWA Support Officer, West Midlands Passenger Transport Executive at the WMCA House, 16 Summer Lane, Birmingham, B19 3SD telephone no. 0121 214 7214.

Place	Times
The Library of Birmingham , Centenary Square Broad Street Birmingham B1 2ND	Monday and Tuesday 11am – 7pm, Wednesday to Saturday 11am to 5pm Sundays: closed

