

Wednesbury to Brierley Hill Extension

**Evidence Given on Behalf of the Applicant: WMCA
Civil Engineering
Summary Proof of Evidence
Ian Collins**



1.0 Qualifications and Experience

1.0.1 I am Ian Collins, a Chartered Fellow of the Institution of Civil Engineers. I am employed by Colas Rail and am working on secondment for the Midland Metro Alliance (MMA) as the Wednesbury to Brierley Hill Extension (WBHE) Project Director where I provide leadership and direction for the project.

1.1 Scope of Evidence

1.1.1 My evidence covers the civil engineering aspects of the scheme and layout of the elements of the project.

1.2 Route Description

1.2.1 The WBHE will connect with the existing Line 1 between Wolverhampton and Birmingham at Wednesbury, adjacent to the existing tram depot. From Wednesbury the extension will run along the disused South Staffordshire railway line traversing and linking Great Bridge, Dudley Port railway station and Tipton before leaving the former rail corridor to climb Castle Hill on street linking with Dudley Town Centre and bus station. From Dudley bus station the route will continue to climb along King Street before entering Flood Street and leaving the town centre along a segregated strip of land alongside Duncan Edwards Way heading towards Cinder Bank. At Cinder Bank the extension will join the disused Oxford Worcester Wolverhampton railway line travelling as far as the Waterfront area before leaving the railway line to integrate with The Waterfront and Merry Hill Shopping Centre and then on to the terminus in Brierley Hill.

1.2.2 The total length of the extension is 11Km of which approximately 7Km will run along disused railway lines. The route will traverse through Sandwell (SMBC) and Dudley (DMBC) Metropolitan Borough's. 35 bridge structures will be repaired, demolished, rebuilt or created. Up to 17 new tram stops will be constructed. In addition numerous developments are actively being planned in coordination with the metro extension in Dudley town centre which is planning for a renaissance with metro acting as the catalyst. The extension will also penetrate a new Business and Innovation Enterprise Zone known as DY5 in the Waterfront and Merry Hill areas.

1.3 Design and Construction

1.3.1 MMA was formed to design and construct a programme of Midland Metro enhancements including WBHE.

1.3.2 The track alignment and associated infrastructure for WBHE has been developed in accordance with; current Midland Metro system design parameters and technical requirements, Network Rail standards, UK Tram's Tramway Principles and Guidance and best practice from other tramways.

1.3.3 Trams will typically run along two tracks along the length of the route. The extension is being designed so as not to preclude future conversion to a shared tram and train, should a separate business case and funding be established. Network Rail has no current proposals to bring this forward.

1.3.4 The scheme is at outline design stage progressing towards detailed design. MMA is in the process of preparing construction plans and schedules. The following issues are amongst those being considered:

- a. Former railway corridor sections of the route will now be designed and constructed for 2 tracks with passive provision for future conversion to allow joint tram and train running along the corridor. Originally 3 tracks were planned.
- b. Bridge refurbishments and constructions, mainly along the former railway corridor, have been reassessed given a) above, and in light of further ground and structural investigations undertaken by MMA. In the current scheme there is opportunity to retain and modify existing structures as additional corridor width is no longer required.
- c. Locations of three tram stops in Dudley Town Centre are being reviewed with DMBC and stakeholders against Dudley Town Centre planned developments.
- d. Dudley Town Centre. Numerous new developments are planned to happen at or around the same time as WBHE, including the Bus Station Interchange and Portersfield. DMBC will coordinate all developments including WBHE in Dudley Town Centre. This may

impact the phasing and timing of WBHE design and construction activities, necessary to suit the final coordination plan for Dudley Town Centre.

- e. Former earth and retaining wall embankments planned at Canal Street and adjacent to The Embankment, Brierley Hill, have been reassessed in light of further ground and structural investigations undertaken by MMA and viaduct solutions are now planned.
- f. The planned introduction and procurement of innovative battery operated trams may make it possible for certain sections of the route to be wire free.

1.3.5 The deemed planning conditions, that were granted with the 2005 Order, [WBHE/B7] at condition 7 state “Development shall not begin until Part 1 of the Code of Construction Practice has been submitted to and approved in writing by the local planning authority. Before any stage of the works begins, Part 2 of the Code of Construction Practice with respect to that stage shall be submitted to and approved in writing by the local planning authority. The development shall be carried out in accordance with Part 1 of the Code of Construction Practice, together with the relevant provisions of Part 2 of that Code.”

1.3.6 Centro, predecessor organisation to WMCA, obtained the approval of SMBC and DMBC of Part 1 of the Code of Construction Practice (CoCP) [WBHE/C1, approvals WBHE/F28 and WBHE/F27] following the granting of the 2005 Order.

1.3.7 The CoCP Part 1 [WBHE/C1] sets down a series of measures to reduce the potential impacts of construction of WBHE on the environment. It defines minimum standards of construction practice acceptable to WMCA, SMBC and DMBC, required of a Concessionaire who is now the MMA.

1.3.8 MMA has begun consultations with SMBC and DMBC as required by the CoCP Part 1 [WBHE/C1] and will agree and obtain SMBC and DMBC written approval of CoCP Part 2 for planned works in any section before

work commences. Approval of CoCP Part 2 will ensure MMA's construction plans that could affect the environment, amenity and safety of local residents, businesses and the general public and the surroundings in the vicinity of the proposed works and associated worksites have been appropriately considered and mitigation provided for.

1.3.9 It is not envisaged that works will sever accesses to businesses and car parks. Works will be planned and executed in such a manner to maintain traffic flows, so far as reasonably practicable. Works will be planned and executed in consultation with the emergency services so construction works do not impact on emergency response times in the event of an incident. Access to frontagers will be maintained at all times. A dedicated MMA Engagement Team has already begun to communicate with land owners, residents, businesses and occupiers along the route to take into account their particular needs, so far as is reasonably practicable.

1.3.10 The Churchill and Merry Hill Shopping Centres will continue to function throughout the tramway construction works. Accesses to shopping centres and car parks will be maintained and pedestrians will be safely diverted around the works where necessary.

1.3.11 No significant adverse impacts arising from the exercise of powers in the proposed Order are expected.

1.4 Statutory Undertakers Equipment

1.4.1 All Statutory Undertakers have been contacted by West Midlands Combined Authority (WMCA), in consultation with MMA, to ascertain the extent and cost of utility works.

1.4.2 WBHE will undertake the majority of utility diversion and protection works in advance of WBHE infrastructure works, where reasonably practicable to do so. This has both a time and cost benefit for the project and significantly de-risks the scope since the act of undertaking the diversions or protections gives greater certainty of ground conditions and provides a 'clear site'. WMCA will co-ordinate and manage the utility companies programmes, in

consultation with MMA, and in conjunction with DMBC and SMBC pursuant to their statutory roles as highway authorities.

1.5 Operations

1.5.1 WBHE's tram frequency will be a peak six-minute service along the route, with alternate trams heading to Birmingham and Wolverhampton

1.5.2 Maximum tram speeds will be :

- 70 km/h on off-street (former railway) running sections.
- 48 km/h (30 mph) on segregated / integrated on-street running sections.

1.6 Secretary of State Matters

1.6.1 My civil engineering evidence has addressed matters 4a, 4c, 4d and 5d raised in the Statement of Matters.

1.7 Response to Objectors

1.7.1 In response to specific objections my civil engineering evidence addresses:

- Jewson Ltd, Saint Gobain and SGBD Property Holdings (OBJ/05)
- LCP Estates Limited* (OBJ/06)
- Jessops Europe Limited* (OBJ/07)
- Tata Steel UK Limited (OB/09)
- Intu and others* (OBJ/10)
- Waterstones Booksellers Limited (OBJ/11)
- National Grid Electricity Transmissions Plc* (OBJ/13)
- MFG – previously Malthurst Group/Jet (OBJ/15)
- McDonald's Restaurants Limited and Astrad Limited and AR Sirkhat (OBJ/20)
- Argos Limited (OBJ/21)
- TJX (trading as TK Maxx) (OBJ/22)

1.8 Conclusions

1.8.1 Only land that is considered necessary for the construction, operation and maintenance of WBHE has been included in the draft Order [WBHE/B2].

The amount of third party land required has been reviewed and reduced from that required for the 2005 Order. The land take will continue to be reviewed and, where reasonably practicable, reduced during the process of detailed design.

1.8.2 The project is progressing to be delivered and I urge the Inspector to recommend the powers applied for by WMCA.

2.0 Statement of Truth

2.1.1 The evidence I shall give is true, given in good faith and represents my professional opinion. I have carried out my assessment in accordance with the Code of Professional Conduct of the Institution of Civil Engineers.

Ian Collins

13 February 2019.