High Speed Rail: Consultation on the route from the West Midlands to Manchester, Leeds and beyond

Sustainability Statement

Appendix E2 – Built Heritage

A report by Temple-ERM for HS2 Ltd

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1. INTRODUCTION

1.1.1. This report has been prepared to support the HS2 Phase Two proposed scheme for consultation Sustainability Statement (the Sustainability Statement, Volume 1), a report which describes the extent to which the Government's proposed scheme for HS2 Phase Two supports objectives for sustainable development. This document is a technical appendix which summarises the method for the Built Heritage appraisal, informing the Sustainability Statement main report. The Sustainability Statement places emphasis on the key impacts only. This technical report summarises all the conclusions relating to the Built Heritage appraisal.

2. METHODOLOGY

2.1. Scope of the Built Heritage appraisal

2.1.1. The Built Heritage appraisal focused on three categories of heritage asset. One of these, Listed Building status, is a national designation, which carries explicit legal status. Registered Parks and Gardens (RPGs) are also designated at national level, but there is no statutory protection. Conservation Areas are designated at local authority level and again carry no statutory protection. They are subject to policies within Local Development Frameworks. Both Conservation Areas and Registered Parks and Gardens are considered as of significance in relation to the determination of future developments.

2.1.2. Listed Buildings and RPGs are awarded Grades, either I, II* or II, according to their quality and importance.

2.1.3. Information on Listed Buildings and RPGs is available from English Heritage, as downloadable digital datasets, and through the National Heritage List for England, via a dedicated website. The relevant geospatial digital mapping data, in the form of 'shapefiles', were supplied for the project, divided according to Grade.

2.1.4. The Conservation Area boundaries were obtained from the relevant local authorities and digitised by the project team in order to provide GIS shapefiles.

2.1.5. Appendix B (AoS Method and Alternatives) provides an explanation of the methodology used for the AoS and the rationale behind it.

2.2. Methodology

2.2.1. The appraisal methodology differed slightly between lines of route and stations. In both cases the methodology assumed that a direct physical impact would be experienced by an asset if it was within a 50m buffer of the route or the station footprint.

2.2.2. Impacts on the setting of heritage assets arising from the construction of the railways lines, stations and depots were considered. These can be considered as direct impacts. Potential indirect impacts may also arise, for example caused by changes to road alignments, but these have not been considered at this stage.

2.2.3. An impact on the setting of a heritage asset was considered a possibility if the asset lay within 350m of the proposed route for Grade I and Grade II* Listed Buildings. Grade II Listed Buildings were considered at risk of an indirect impact if they lay within 350m of a

line of route, but for those close to a station the zone of potential impact was much narrower.

2.2.4. There was assumed to be a risk of an impact on the setting of a RPG if any part of it lay within 1km of the proposed route. For a Conservation Area this distance was 500m. Indirect impacts on the setting of a Conservation Area were only considered at this stage for stations and not for lines of route.

2.2.5. All the distances were measured from the outer edge of the 50m buffer or the geospatial digital mapping (shapefiles) of the extent of proposed earthworks as these were made available.

2.2.6. The different buffers reflected the size of the features concerned. RPGs are large areas and were thus provided a correspondingly large 1km buffer, since the character of these areas is appreciated and affected at a correspondingly large scale. Other features tend to be smaller and so were given a smaller buffer (350m). In practice, the area within which a development might influence the setting or character of an historic feature would vary for each feature depending on its size and the visibility across the surrounding landscape. But for the AoS and its strategic level remit, these buffers were adopted and were deemed appropriate given the large number of options that required appraisal. For the proposed scheme, the specialists adopted a more flexible approach and considered each site more according to its unique situation, although the defined buffers remained the initial area of consideration.

2.3. Use of sources

2.3.1. The key source of information for appraising the potential impacts on heritage assets was the GIS mapping. The proposed route was supplied as shapefiles, together with shapefiles of the 50m and 350m buffer zones. The 500m and 1km buffers for Conservation Areas and Registered Parks and Gardens were not supplied, but were generated in-house. Maps showing the routes and the assets for appraisal were supplied, together with plan and profile drawings. For stations some very early indications of design (in terms of general scale) were available, particularly useful for appraising heights and massing.

2.3.2. The shapefiles provided the basis for the appraisal, allowing features to be identified and their distances from route options recorded. Aerial imagery enabled further investigation. The route maps showing the heritage assets, which were produced for the appraisal process, are helpful in finding places and particularly for comparing routes. Plans and profile drawings were of limited use for built heritage appraisal – the scale is not appropriate and so were only used to look at the relationship between the route and a specific feature e.g. viaduct and bridges.

2.3.3. The National Heritage List for England provides more detail on Listed Buildings (particularly useful for un-named Grade II) and of RPGs. Other material, such as images on the internet, was also used to look at the significance of building clusters, find images where the aerial imagery does not get close enough, views from RPGs etc and to obtain more detail of historical rather than architectural significance. Personal knowledge,experience and professional judgment was used in order to determine the significance of impacts. The limited number of sites visits carried out at this stage were valuable for setting issues and cumulative impacts, particularly in hot spots for activity and around stations.

2.4. Evaluation criteria

2.4.1. A set of guiding principles were supplied to the project team to inform appraisal of major, moderate, minor and negligible significance for impacts, by classes of asset, not for

individual assets. The threshold for appraisal of indirect impacts on Grade II Listed Buildings as more than minor/negligible was the most difficult to apply. Where these features occur in clusters, within or outside Conservation Areas, the impact is greater than if they were distributed along a route option. The cluster may be associated with a heritage asset from a higher grade, for example a Grade II* house with Grade II ancillary features, or stand alone, such as a group of buildings by a particular named architect.

2.5. Assumptions

2.5.1. It was assumed that the datasets provided for this appraisal were up-to-date and complete. No omissions were identified, although some inaccuracies in locations emerged and were rectified where known.

2.6. Limitations

2.6.1. It was not always possible to make a complete appraisal of the impacts on a heritage assets using aerial imaging (Google Earth). The street view images were generated from using a drive by approach, which did not cover all roads, particularly minor roads, or lanes. Many of the viewpoints required were in open farmland. In addition, for site visits, the level of vegetation cover differed according to the time of year of the visit. Hedges obscured views from the roads and it was necessary to estimate the difference when trees were bare of leaves. Some heritage assets lie higher than the surrounding road network and the views would be different.

2.6.2. The appraisal was limited to heritage assets lying within 350m of lines of route. There were a small number of key designated sites lying further away, but for which there was an important line of sight or distant view, which would be affected by the proposals and were therefore considered. For example, Bolsover Castle lies further away from the proposed line of route, but overlooks a wide expanse of open country, including views of other heritage assets which were appraised e.g. Hardwick Hall. This intervisibility was an important factor in its choice of location.

2.6.3. At this stage of the project a large number of potential route options were appraised in a strategic manner. The methodology employed was therefore appropriate for the AoS stage of work, but unable to consider locally listed buildings and parks.

2.6.4. Most of the Listed Buildings shapefiles consist of point data. In the majority of cases this is sufficient for the level of appraisal. However, a point does not provide a complete representation of features such as viaducts, bridges or kitchen gardens, where the actual extent may be considerably greater than the point, meaning the asset could be much closer to the proposed route. It is possible that in reality there could be a direct physical impact rather than an indirect impact.

2.6.5. A further complication arises where a heritage asset such as a bridge crosses the boundary between two different local authorities. The two ends of the feature may be listed separately, suggesting that more assets were impacted than was in fact the case.

2.6.6. A small number of errors were detected in the Listed Buildings dataset, where an incorrect grid reference had been entered. In one instance the shapefile and National Heritage List provided different information, and the correct building was not obvious from aerial imagery. This error had already been reported and resolved in consultation with the local authority. Another building was incorrectly located in both the shapefile and the National Heritage List. However, the address given in the description and the appearance of the two locations on aerial imagery made the error apparent. The number of errors is small, but the

possibility of any additional anomalies (outside of the control of this appraisal) needs to be considered.

3. FINDINGS

3.1. Western leg

3.1.1. The breakdown of features where **direct physical impacts** may be expected is as follows:

Conservation Areas (two instances)

3.1.2. Trent and Mersey Canal. The canal would be crossed in **two places** along its length, with the route running parallel to it for a stretch. The crossing points would be:

3.1.3. North west of Great Haywood (Trent and Mersey Canal) for c 100m. The crossing would lie between two canal basins, used for mooring leisure craft in open country. It would also be visible from Listed bridges.

3.1.4. Between Wilmslow and Middlewich (Trent and Mersey Canal). As well as crossing the canal, the route is parallel to the canal for c 300m. That stretch of canal is also very close to the River Dane. It is situated in open country.

3.1.5. The route is not far from the canal just north of this point also and a little further south it crosses the Shropshire Union Canal at Clive Green. This canal joins the Trent and Mersey at Middlewich.

3.1.6. Canal users move along the canal system and the cumulative impact of the route is likely to be considerable. Other canal features are Listed Buildings which feature in the list of those within the 350m buffer of the proposed route. While the individual impacts are generally **negligible**, they may contribute to the cumulative impact.

3.1.7. The significance of the setting of the Trent and Mersey Canal Conservation Area is **major** and it may be adversely affected by the proposed route because of crossings of and close approaches to the canal within open country and in areas with high leisure use.

3.1.8. Each crossing represents a **major** impact for setting and the cumulative impact would also be **major**.

Listed Buildings (four instances)

3.1.9. **Newchurch Old Refectory, Grade II**.This is in fact 'The Old Rectory'. Red brick house from 1812. It is fairly typical of its time and has no particular distinguishing features. The building stands alone away from any connection to a church or the village of Culceth (Newchurch is Culceth). It is surrounded by trees and there is no intervisibility with the surrounding area. The loss of this building would be a **moderate** impact.

3.1.10. **Buckhall, The Four Seasons Hotel, Grade II**. Mid 18th century brick farmhouse now used as offices for the hotel, currently the Manchester Airport Marriott Hotel. Several windows have 20th century replacement sashes. The building is surrounded by the modern hotel, to which it has been joined and its former setting no longer exists. The hotel is surrounded by modern housing development and lies alongside the M56. The loss of this building would be a **moderate** impact.

3.1.11. **Train Shed at Piccadilly Station, Grade II**. The building dates from 1881 and was formed from remodelling of the 1842 Store Street Station. Brick undercroft. Cast-iron columns supporting glazed roof. This is not in fact a demolition, but there would be a direct physical impact on the structure arising from internal alterations to the undercroft. These would be minor and not involving visible, key elements of the historic character. The original building has already undergone remodeling and the facade would be unaffected. There are also

setting impacts which are discussed below. The limited level of physical intervention at the Train Shed would render the level of impact **minor**.

3.1.12. London Warehouse, Grade II. This appears to lie just within the 50m buffer at Piccadilly Station. However, it is unlikely to be affected by the proposals and the impact would be **negligible**.

3.1.13. The breakdown of features where **setting impacts** may be expected is as follows:

Conservation Areas (four instances)

3.1.14. **Stevenson Square Conservation Area**, Manchester (c210m away from proposed Manchester Piccadilly station). The significance of its setting is its position in relation to the commercial area and the transport network, particularly the canals. And this may be adversely affected by changes in the buildings around the station. This area contains a network of streets containing former warehouses and industrial buildings, with a network of canal basins. The removal of the existing office block and replacement of the car park would alter views from the Conservation Area towards the station. From the lower parts of the Conservation Area close to the station the rear of the Train Shed is visible, but from higher ground views are dominated by the modern office development. Its loss would represent an improvement from that perspective. However, there would be changes to the views arising from the proposals and overall the impacts would be **minor**.

3.1.15. **Whitworth Street Conservation Area**, Manchester (c610m away from proposed Manchester Piccadilly station). The significance of its setting is in the surrounding commercial district close to the railway, and this may be adversely affected by the train crew in front of the station. This Conservation Area contains a high density of 19th-20th century commercial properties, particularly large office buildings. Views into and out of the area are limited. The new HS2 structures would lie on the opposite side of the existing station and would have a **negligible** impact. However, the train crew building would have a **moderate** impact, obscuring the views from the Conservation Area of the historic public facade of the Former Train Shed, the existing station.

3.1.16. **Ancoats Conservation Area**, Manchester (c170m away from the proposed Manchester Piccadilly station). This area contains warehousing and industrial buildings and lies on the north side of the Ashton Canal. The topography and intervening buildings would render the impact **negligible**.

3.1.17. **George Street Conservation Area**, Manchester (c40m away from the proposed Manchester Piccadilly station). This area is part of the commercial centre of the city, retaining a significant number of important buildings. The topography and intervening buildings would render the impact **negligible**.

Registered Parks and Gardens (two instances)

Grade I

3.1.18. **Shugborough Hall** (c910m from line of route near Great Haywood). The significance of the setting of the park is in the views to and from features within it, and these may be adversely affected by the addition of the route in more distant prospects. The park is now owned by the National Trust and is open to the public. It was the home of the Earls of Lichfield who developed the park in the 18th and 19th centuries. The proposed route would lie to its north. The Rivers Sow and Trent and the Trent and Mersey Canal run between the park and the route, with an existing railway line on the east side of the River Trent. The topography and vegetation shield the park. The impact would be **negligible**, possibly **minor** in winter.

Grade II*

3.1.19. **Tatton Park** (c300m from line of route near Knutsford). The significance of its setting lies in views from the park, and these may be adversely affected by the site of the route, although this would only be visible from the rear of the park, far from the house and where the views are not key. The house and its surrounding parkland are now a public recreation facility. The house and its formal gardens lie towards the western side of the park, which is mainly open land. The proposed route would lie on the low land to the north of the park, which tapers in that direction as it rises above the plain. Although higher than the plain, that side of the park is heavily wooded. The impact would be **negligible**, at worst in winter perhaps **minor**.

Grade II

3.1.20. **Crewe Hall**. Crewe Hall, (c830m away from the line of route south-east of Crewe). The park, now a hotel and leisure facility, lies to the south-east of the town and is very flat, limiting views in and out of it. The A500 dual-carriageway and the village of Weston lies between the proposed route and the park, which is beyond a railway line. The impact would be **negligible**.

Listed Buildings (21 instances)

Grade I – None

Grade II*

3.1.21. **Lightshaw Hall**. This building lies within a former moated site, and the building contains some 16th-century timber structures including king posts in the roof. This would be incorporated into the proposed car park area for the Golborne depot. Although it would be retained, its curtilage buildings, and the associated farm buildings would not. Its setting and context would be radically altered. It is currently in a garden with associated outbuildings in open countryside. The impact would be **major**.

3.1.22. **Store Street Aqueduct** (100m away from proposed Manchester Piccadilly station). The significance of its setting is the surrounding canal network and commercial properties with the railway at the edge. It may be adversely affected by the intrusion of a new car park into the view of the proposed station. The aqueduct dates from 1794-99 and carries the Ashton Canal into the basins serving the industrial area. It is elevated and the new car park would alter the view towards the station. The impact on this structure would be **minor**.

3.1.23. **Police and Fire Station**, 19th century (90m away from proposed Manchester Piccadilly station). The significance of its setting is its position within the commercial centre adjoining Piccadilly Station and it may be adversely affected by the intrusion of a new building in front of the station facade. The building occupies a triangular block directly opposite the Former Goods Office facade. Views of this would be unchanged. However, views of the Train Shed facade from the corner of the plot would be affected by the Train Crew Building. The facade of the station is not clearly visible because of its orientation.The impact on this structure would be **minor**.

3.1.24. **Ellen Wilkinson High School** (290m away from proposed route). The former Nicholls Hospital charity school was built in 1867-80 by Thomas Worthington, in the Gothic style, complete with tower. It is now surrounded by recent commercial properties. The intervening buildings would make the impact **negligible**.

3.1.25. **Church of St Benedict** (270m away from proposed route). The church by Crowther was built in 1880 and incorporated a clergy house and Sunday School. No longer a church, the red brick Gothic building is surrounded by modern housing and industrial estates. The intervening buildings would make the impact **negligible**.

3.1.26. **City Police Courts** (270m away from proposed Manchester Piccadilly station). The 1868-71 building by Worthington occupies a corner plot. It is the Italian Gothic style with a gabled attic floor. Taller, recent office blocks surround it. The intervening buildings would make the impact **negligible**.

3.1.27. **Dale Warehouse** (240m away from proposed Manchester Piccadilly station). This former warehouse dates from 1806. It has a subterranean waterwheel from 1824. This is of much more significance than the sandstone building itself. The topography and intervening buildings would make the impact **negligible**.

3.1.28. The impact on these latter six buildings would be **negligible**. They are all within dense urban areas and shielded from the proposed route.

Grade II

3.1.29. **Train Shed at Piccadilly Station**. The significance of its setting lies in its position as the station serving the surrounding commercial area, with many surviving 19th-century buildings and this may be adversely affected by changes to the arrangements around the entrance to the station. The building dates from 1881 and was formed from remodelling of the 1842 Store Street Station. Its facade has cast-iron columns supporting a glazed roof. At present it forms the main station entrance and is fronted by an open area for taxis and passenger drop-off. The historic structure is clearly visible from the surrounding area. The erection of a new train crew building in front of this facade would represent a **major** impact to the setting of the structure, obscuring it from the surrounding area and approaching station users.

3.1.30. **Byrom Hall**, dated 1713 (90m away from the proposed route). The house stands within a large garden, mostly set to lawn with little vegetation. The area is flat, and the three storey building would face the proposed route, albeit in cutting, and would have views towards the depot, with little tree cover between. Ovenback Cottage, (c30m from the route near High Legh) 17th-century cruck cottage. The house is timber-framed and with a thatched roof. It lies immediately adjacent to the road with open fields on the opposite side. It appears to be associated with a cluster of farm buildings. The proposed route would pass through the fields very close to the building with little in the way of shielding.The impacts on these two features would be **moderate**.

3.1.31. **Former Goods Offices to Piccadilly Station**, c 1850-60. Ashlar facade. The facade has been maintained in front of the modern office development and is currently visible from the surrounding area, including the Whitworth Street Conservation Area. The erection of a new train crew building would have an impact on views of this facade. The impact on this feature would be **minor**.

3.1.32. **The Bridgewater Canal**, Case to Waterpoint on South Bank of Canal, 15 metres West of Agden Bridge, 19th century. The cast iron feature is painted with traditional canal motifs. The proposed route would pass close to it on embankment and be very obvious to those using the waterpoint. This is another canal related impact, as discussed earlier. The impact on this featureswould be **minor**.

3.1.33. **Hey House**, early 18th century house, extended in the 19th century. The house, near Madeley, has former farm buildings behind it, between it and the existing railway. It faces south, across a garden and then a large open field. The proposed route would be on embankment and would run across this field, with Hey House facing it directly. There is a low hedge at the end of the garden, but no more cover. The impact on this feature would be **minor**.

3.1.34. The following buildings are located at The Bent and Moss Brow, north-east of Lymm

- Church of St Werburgh. 1883-5 sandstone church.

- Post Office House. Now a house.
- The School. The school is now a house.
- Church House. Parish rooms and caretakers house, next door to the church.

3.1.35. The significance of these buildings and others close to them is their contribution to a planned settlement, built for Mr Egerton-Warburton. And this may be adversely affected by severance as the route passes between them. All of the above are C19 buildings at Warburton by Douglas, and more than 240m away from the proposed route. The proposed route would pass through the group. With the proposed route being in cutting, the impacts will be **negligible** or **minor** at most.

3.1.36. **Woodhouse Farmhouse**, possibly 17th century red brick and tile (70m away from the route near Mavesyn Ridware). The proposed route would be on embankment and visible from the upper floors. The impact would be **minor**.

3.1.37. **Moreton House**, late 18th century (50m away from the route near Great Haywood). Although the proposed route would be in cutting it is very close to the house. The impact would be **minor**.

3.1.38. **Hollow Wood Farmhouse**, c1790, (90m away from the route near Junction 19 on the M6). Modern farm buildings would lie between the structure and the proposed route, but it would be noticeable. The impact would be **minor**.

3.1.39. **Winterbottom Farmhouse**, late 17th century (140m away from the route near Junction 9 on the M6). Although the farm would be sheltered by a large farm building, the proposed route would be noticeable. The impact would be **minor**.

Other Grade II Structures

3.1.40. For all other Grade II Listed Buildings (a total of 43 buildings) the impact would be **negligible**. The buildings would be screened by other buildings, the level of vegetation and topographic features. The buildings, listed in order from south to north along the proposed Manchester route, are:

- Pipe Ridware Hall; Garden Walls and Gate Piers at Pipe Ridware Hall; Dovecote Remains at Pipe Ridware Hall and Attached Wall to the North; Wheelwright Cottage and Attached Workshop; Bentley Hall Farmhouse;
- Hamley House; Gatepiers and Attached Garden Wall Immediately South West of Hamley Hall; Trent and Mersey Canal Bridge Number 75 at SJ 9948 2341; The Pavilion in Ingestre Park; Church of St Leonard;
- Swynnerton Heath Farmhouse; Snape Hall Farmhouse; Chorlton Mill; Milepost at NGR SJ 7687 4413; Basford Bridge Cottage;
- Park House; Park Farmhouse; Middlewich Branch Canal Hughes Bridge at SJ 683 653; Stanthorne Hall; Stanthorne Lodge;
- Milepost; Bank Farmhouse; Brook House Farm House; Park Farmhouse; Shippon and Former Barn 15 metres North West of (No 65) Park Farmhouse;
- Legh Cottage; Building Approximately 10 metres west of Villa Farmhouse; Church of St Helen; War Memorial; Timber Framed Farm Building, South Side of Warburton Park Farmhouse;

- Milestone; Brookhouse Farmhouse; Wigshaw House; Forecourt Walls, Gate Piers and Gates to Ellen Wilkinson High School; Benjamin Nicholls Memorial Beside Entrance path to Ellen Wilkinson School;
- John Nicholls Memorial in Grounds of Ellen Wilkinson High School; 2 and 4 Palfrey Place; Mere Covert Cottage; Millington Hall; Outbuilding Approximately 100 metres East of Ryecroft Farmhouse;
- Sycamore Cottage; Hough Green Farmhouse; Yewtree House; Rose Cottage; Davenport Green Hall; Barn;
- Davenport Green Farmhouse; Lower House Farmhouse; Chapel House.

3.1.41. A small number of features appear twice in the analysis of route sections, because of overlapping of route sections. In most cases they appear twice.

- Lightshaw Hall; Ellen Wilkinson High School, two Listed Buildings Grade II*.
- Byrom Hall; Milepost at NGR SJ 7687 4413; Hollow Wood Farmhouse; Legh Cottage; Winterbottom Farm; The Bridgewater Canal, Case to Waterpoint; Mere Covert Cottage; Outbuilding Old Stables at Newland Hall; Farm Buildings to Former Newland Hall; Norbriggs House; Brookside Farmhouse; Outbuilding approximately 100 metres east of Ryecroft Farm. Twelve Listed Buildings Grade II.
- Tatton Park, Registered Park and Garden Grade II*.
- Trent and Mersey Canal Conservation Area – two separate locations.

3.1.42. In addition a small number of features are affected three times:

- Church of St Werburgh; Post Office; School. Four Listed Buildings Grade II.

3.1.43. It would appear that Park Farmhouse also appears twice, but in fact there are two farms with this name, in different locations. Similarly Brook House Farmhouse and Brookhouse Farmhouse are different buildings.

3.1.44. Some clusters of features occur, where the impacts might be greater than for dispersed features. These include the area around Pipe Ridware Hall, around Ellen Wilkinson High School in Manchester and at Mossbrow, Warburton, but the impacts are only **minor/negligible** even for the cluster.

3.1.45. The Trent and Mersey Canal and associated features are impacted in six instances, although these are distributed along its length. However, the impacts on the setting are **major** for parts of the Conservation Area.

3.1.46. The number of Listed Buildings varies considerably through the local authority areas along the route as follows:

- Staffordshire 18
- Cheshire East 13
- Cheshire West & Chester 9
- Warrington 7
- Wigan 2
- Trafford 10
- Manchester 15

3.1.47. The figure for Piccadilly, Manchester does not include the Grade II Listed Buildings in the centre near to the new station.

3.2. Eastern leg

3.2.1. The breakdown of features where **direct physical impacts** may be expected is as follows:

Conservation Areas (six affected)

3.2.2. Impact on **Leeds Canal Wharf Conservation Area**. The construction of the new walkway over the River Aire would significantly restrict views of the river from the south and affect river users. The character of that part of the Conservation Area would be changed - at present, although new buildings have been constructed, the idea of warehouses etc lining the river and canal has been retained. This represents the only **major** impact along the proposed Leeds route.

3.2.3. **Stainsby Conservation Area**. Crossed for 380m. This Conservation Area consists of the village and its surrounding enclosed fields. Close to its eastern edge is close to the M1 motorway. Although the proposed route would run through open fields on the east side, it would be in cutting for much of the distance with the rest in embankment. The land slopes down to the east, but the village does not face in that direction. The impact would be **moderate**.

3.2.4. **Eckington & Renishaw Park**. Crossed for 820m. The proposed route would affect the eastern edge of the Conservation Area, currently mainly a golf course. The golf course is within Renishaw Hall Park, along the edge of which there is an existing railway line. The core of Eckington village lies in the north-west of the Conservation Area. The viaduct would have a moderate impact as the Conservation Area is already divided by a railway line and the eastern side is heavily wooded. The proposed route would lie between the existing railway line and the route of another former line on the edge of the Conservation Area. The impact would be **moderate**.

3.2.5. **Thrumpton**. The proposed route would cross the western end of the Conservation Area, where it is open land with a band of trees running close to the northern edge. The village would be c 1km away. For most of this distance the proposed route would be in tunnel, emerging into cutting and then embankment leading to viaduct on which it crosses the River Trent. Visibility from the village would be limited and there is already a railway line crossing the Trent Valley nearby. The impact would be **moderate**.

3.2.6. **Strelley**. Crossed for 130m. The Conservation Area lies between the M1 and the A6002. It comprises open fields and Strelley Hall with its associated buildings, around which there are many trees, which provide shielding. This section of the proposed route would be in cutting across open fields fairly close to the motorway. It would pass under most of the Conservation Area in a cut and cover tunnel. The impact would be **minor**.

3.2.7. **Long Eaton Town Centre**. The Construction Boundary for Toton Station extends into the Conservation Area for 110m and would have a potential impact on an area of modern car parking. The operational boundary lies 120m from the edge of the Conservation Area and is within 500m of it for 770m. The modern development between the bulk of Conservation Area and the railway would shield it from the development. The proposed route follows an existing railway line along the eastern edge of the Conservation Area for a short distance. There are some older, commercial properties in that area, but these are already next to the level crossing over the existing railway line. The impact would be **minor**.

Listed Buildings (five instances)

3.2.8. **Ruins of Heath Old Church**, Grade II. 12th century but remodelled. Sandstone rubble with sandstone quoins. The porch is 19th century. There is no roof and incomplete walls, standing to a maximum height of 1.5m. The few remains of this building stand in an isolated location, within its churchyard. Used as a mortuary chapel from the mid 19th century after demolition of most of the medieval church. The asset is surrounded by trees so is not a landscape feature. The modern road network makes access difficult. It lies between the

A617 dual-carriageway and the M1. Damage to the churchyard is likely to be a significant archaeological issue to be addressed as part of the EIA.

3.2.9. Loss of the ruins in isolation would be a moderate impact. Taking the churchyard and graves within the church into consideration, it is possibly a **major** impact.

3.2.10. **Meer Bridge, Grade II**, near Measham. Mid 19th century skew bridge from a former railway line. The bridge now just leads from the road into a field and has no context. The proposed route is on viaduct and it is possible that the bridge might be preserved. It should be possible to retain the features, with the proposed route on viaduct. The setting impacts would be **minor.** If the feature is demolished the impact would be **moderate**.

3.2.11. **Aberford road Milepost**: Milepost at SE421344, Grade II. Mid 19th century stone with cast-iron plates. The milestone is on the A642, and is already close to a motorway junction, with the M1. The proposed route passes under the road in a cut and cover tunnel and it is likely that the milestone could be stored and replaced. The road has been much improved and the milestone is not immediately adjacent to the carriageway. It should be possible to retain the features, with the proposed route on viaduct. The setting impacts would be **minor.** If the feature is demolished the impact would be **moderate**.

3.2.12. **Swillington Bridge**, Grade II. Late 18th or early 19th century bridge over the Aire and Calder Navigation. The proposed route would be crossing the Navigation on a viaduct and it is possible that the bridge could be avoided. It is made of magnesian limestone blocks, with rebuilt parapets. The area already has a complex of waterways and an existing railway line. The proposed route would represent a further layer of complexity. It should be possible to retain the features, with the proposed route on viaduct. The setting impacts would be **minor**. If the feature is demolished the impact would be **moderate**.

3.2.13. **Freestanding chimney at Bleachcroft Farm**, Grade II, near Cudworth. This structure represents the only significant remains of the Midland Bleach Works industrial site. Dressed and ashlar sandstone, dating from 1854. It would lie 10m from the 50m buffer extent. The area is degraded and has been affected by the recent construction of a by-pass. It is currently used as a parking area for caravans. The setting has been virtually destroyed and the structure has no redevelopment potential. The impact would be **moderate**.

3.2.14. The breakdown of features where **setting impacts** may be expected is as follows:

Conservation Areas (nine affected) – stations and depots only

3.2.15. **Erewash: Sandiacre Cloudside**, (c20m from the proposed route). The significance of its setting lies in the surrounding open land, which maintains its individual character on the edge of an urban area, and may be adversely affected by additional rail capacity. The 50m buffer extends to within 20m of the Conservation Area, along the road bordering it. There would be negligible direct impacts, but implications for setting. The Conservation Area includes the settlement core and the surrounding open fields south of the M1. The existing railway line lies close to the eastern edge, on the opposite side of the canal, both outside its boundary. The key historic buildings would be shielded by more recent development. There would be **minor** impacts for the open eastern side. The setting impacts on the conservation area would be **negligible**.

3.2.16. **Church Street Stapleford** (c440m away from the proposed route). Intervening development would shield the Conservation Area. The Conservation Area is a small area of older buildings surrounded by later urban development. The setting impacts on the conservation area would be **negligible**.

3.2.17. **Long Eaton Lace Factories** (c100m away from the proposed route). This Conservation

Area, with 19th-century terraces and industrial premises, lies on the opposite side of Long Eaton Town Centre from the proposed route. The setting impacts on the conservation area would be **negligible**.

3.2.18. **Sandiacre Canal Side** (c80m away from the proposed route). This area contains 19th-century former industrial premises. There is significant modern redevelopment to the east between the Conservation area and the proposed route. The setting impacts on the conservation area would be **negligible**.

3.2.19. **Sandiacre Lock** (c200m away from the proposed Toton station). This Conservation Area surrounds a lock, bridge and canal-side buildings where the canal and River Erewash run parallel. Beyond the east side of the Conservation Area there is a steep bank covered in vegetation. The topography means that the station would not be visible from the Conservation Area. The construction boundary element of the shapefile for the station includes the A52 where it crosses the railway and overlaps with the north edge of the Conservation Area. During construction a busy road may have some additional traffic. The setting impacts on the conservation area would be **negligible**.

3.2.20. **Holbeck** (200m away from the proposed Leeds station). The area is a mix of older industrial premises and modern redevelopment. Heights of intervening buildings mean that the Conservation Area would be shielded. The setting impacts on the conservation area would be **negligible**.

3.2.21. **Central Area Leeds City Centre** (180m away from the proposed Leeds station). The city centre of Leeds, which contains some fine 19th-century buildings, lies on the north side of the existing station, which is fronted by some important Listed Buildings. Heights of intervening buildings mean that the Conservation Area would be shielded. The setting impacts on the conservation area would be **negligible**.

3.2.22. **Barrow Hill** (300m away from the proposed Staveley depot). The depot would lie in an area of former quarry and works already served by railway lines which lie between it and Barrow Hill. Although there are views southwards in the direction of the depot from the historic core, the topography of the surrounding area means that the existing quarry area is not visible. The setting impacts on the conservation area would be **negligible**.

3.2.23. **Staveley** (340m away from the proposed Staveley depot). The depot would lie in an area of former quarry and works already served by railway lines, on the opposite side of the River Rother. The historic core of Staveley is surrounded by trees and lies on the opposite side of a rise from the proposed depot site.The setting impacts on the conservation area would be **negligible**.

Registered Parks and Gardens (eight affected)

Grade I

3.2.24. **Hardwick Hall**. The significance of its setting lies in the very open views across the valley, including views to other heritage assets, which may be adversely affected by additional transport infrastructure. The route section passes within 1km of the asset for 2.8km. The proposed route would lie close to the M1 motorway and much of it would lie in cutting. It would be visible from many parts of west side of the park, but the association with the motorway would reduce the potential impact. The west side of the park has a significant amount of woodland. It rises eastwards and the two halls, new and old (a scheduled monument), lie on the higher ground. There are open views to the east, but to the west the views are principally of the opposite side of the valley. This impact would be generally **minor**, but moderate from higher locations, particularly in winter.

3.2.25. The area is open and the setting aspects for Hardwick Hall, Sutton Scarsdale and Bolsover Castle, the other two outside the distance considered for this appraisal, is an issue which will need to be considered as a block.

Grade II*

3.2.26. **Renishaw Hall**, which is 90m away at its nearest point. The significance of its setting lies in the enclosed character of the park within the wider landscape and this may be adversely affected by additional transport infrastructure. The route section passes within 1km of the asset for 3.03km. The park surrounds the hall and a model farm, with fields to the south. To the north-east is a golf club. The proposed route would be on viaduct and in cutting, but given the wooded nature of that side of the park and the existing railway, along the east edge of the park, between the proposed route and the park the impact would be **minor**.

3.2.27. **Coleorton Hall**, which is 560m away at its nearest point. The park consists of the hall with its surrounding park and fields, extending to the village edge in the east. There is a small new development on the west side. The route section passes within 1km of the asset for 1.99km to the west. The park is very wooded on the west side towards the proposed route and rises towards the hall before sloping down eastwards, where the principal views lie. The hall is on the opposite side of the rise from the proposed route. The route would be in cutting. The impact on this park would be **negligible**.

3.2.28. **Staunton Harold Hall**, which is 500m away at its nearest point. The route section passes within 1km of the asset for 1.69km. This has parkland to the north east of the hall and the rest is fields. There is a tree-lined driveway extending south-east to the road. Only this narrow strip which extends from the south-east corner of the main park would be near to the proposed route and then on the opposite side of the A42. The impact on this park would be **negligible**.

3.2.29. **Annesley Hall**, which is 260m away at its closest point. The route section passes within 1km of the asset for 2.92km. The western side of the park is heavily wooded, with rides through the trees. There are open fields towards the north and Annesley Hall lies in that area, is situated close to the A608 and would be well away from the proposed route. The impact on this park would be **negligible**.

3.2.30. **Nostell Priory**. 655m away at its nearest point and would be within 1km of the depot option for 1.38km. The formal parkland around the house, which has its main views to the east, away from the proposed depot. The west side drops steeply and is heavily wooded. The existing railway is not visible from the house. The topography, existing quarrying and the level of tree cover mean that there would be little visibility or other impact. The impact on this park would be **negligible**.

Grade II

3.2.31. **Temple Newsam** (260m away from the proposed route). The historic house and park on the east side of Leeds are now maintained as a public park. In the west is a golf course and towards the east ponds and woodlands going up to the line of the M1. The proposed route would lie on the opposite side of the M1. The impact on this park would be **negligible**.

3.2.32. **Hunslet Cemetery** (270m away from the proposed route). This is a typical small urban cemetery in Leeds. On the north side, where the proposed route would pass, are terraced houses and then the M1. The proposed route would follow the existing railway and the cemetery would be shielded by development. The impact on this park would be **negligible**.

Listed Buildings

Grade I (two instances)

3.2.33. **Church of St Giles**, Sandiacre, founded in C11 (140m away from the proposed route). In the 14th century the church was a prebend of the Bishop of Lichfield. The significance of its setting lies in the surrounding village, which is bordered by open land, and may be adversely affected by additional railway infrastructure. It lies on the west side of the village, in a large churchyard. There is a modern farm to the west of it, and then open fields leading towards the canal. These buildings and intervening vegetation would shield the church from the proposed route which would be close to the existing railway line. It would only be visible from the tower. The impact would be **minor**.

3.2.34. **Church of All Saints**, Strelley. 13th century (60m away from the proposed route). The significance of its setting is its position relative to the historic village and manor. The church lies near Strelley Hall, away from the existing village. It was rebuilt in the 13th century and restored in the 19th century. The proposed route passes through a tunnel at Strelley and there would be trees between the church and the point where the route emerged from tunnel. The impact would be **negligible**.

Grade II* (14 instances)

3.2.35. **River Lock and Retaining Walls to River Aire**, 1770-1776 (30m away from the proposed route and Leeds New Lane station). The lock was the site for the opening ceremony in 1777 of the Leeds to Holmbrige stretch of the canal. It has a rare surviving set of 'jack cloughs', a type of gate. The significance of the setting is the surviving commercial area and its supporting transport network and may be adversely affected by changes in views to the station. Despite the redevelopment work in the surrounding area, these features still retain much of their original character. The construction of the new platform over the River Aire to the east of this structure would affect the character of the area and views to and from the structure. This would be at least a **moderate** impact.

3.2.36. **Former Leeds and Liverpool Canal and Company Warehouse**, c1776 (50m away from the proposed route and Leeds New Lane station). This is a nice example or 18th century canal architecture, which was well treated by conversion in 1994-5. The significance of the setting is the surviving commercial area and its supporting transport network and may be adversely affected by changes in views to the station. Despite the redevelopment work in the surrounding area, these features still retain much of their original character. The construction of the new platform over the River Aire to the east of this structure would affect the character of the area and views to and from the structure. This would be at least a **moderate** impact.

3.2.37. **Pooley Hall** attached former chapel and Pooley Hall Farmhouse, which is 230m away. The significance of its setting would have originally arisen from its position away from a village within its own land. However, this setting has already been much reduced. The building is thought to date originally from 1509 with later alterations. There are now several other buildings and trees around it. It was probably a farm in the past, but is now in residential use with some buildings converted to light industrial units. The motorway is just visible from the road. The location is fairly isolated and the proposed route would be in cutting to the west, towards the motorway. The impact would be **minor**.

3.2.38. The impact for the following 11 listed buildings would be **negligible**.

- **Former Machine and Fitting Shops** for Fenton Murray and Wood Engineers, 1795-1802 (320m away from the proposed Leeds New Lane station);
- **Tower Works, Boiler House Chimney**, 1976 (290m away from the proposed Leeds New Lane station). The impact would be negligible;

- **99 Water Lane**, foundry workshop 1795-8 (290m away from the proposed Leeds New Lane station);
- **Former Foundry Building for Fenton Murray and Wood Engineers**, foundry c1795 (300m away from the proposed Leeds New Lane station);
- **Tower Works, the Giotto Tower dust extraction chimney** (320m away from the proposed Leeds New Lane station).

  [These buildings lie in an area of Leeds where the level of survival of industrial buildings is high, although redevelopment is taking place in the area].
- **Statue of the Black Prince**, equestrian statue erected 1903 (260m away from the proposed Leeds New Lane station).

  [In all cases the heights and positions of intervening buildings in a dense urban area would reduce impacts].
- **Swaithe House** (50m away from the proposed route near Worsborough). This farmhouse has a date WH/1680. It is designed for southerly views. There is a cluster of farm buildings and cottages around it, but it is not in a village. The building would be screened by other buildings and trees
- **The Hall, Long Eaton,** 1778 now offices (30m away from the proposed route). This 18th-century house has been converted for use as council offices. Some of its grounds survive, although they include some car parks.
- **Church of St Laurence and St James**, Long Eaton C12 (110m away from the proposed route). The medieval parish church is surrounded by later development from the 19th century onwards.The intervening modern development and building orientation would reduce impacts.
- **Church of St Patrick**, Nuthall, C13 restored 1838 (200m away from the proposed route). The church lies on the edge of the older part of the settlement. It is surrounded by much recent redevelopment.
- **Gothic Summerhouse at Number 9 The Yews**, 1759 by Thomas Wright (140m away from the proposed route). The summerhouse is what remains of the gardens of Nuthall Temple, which was demolished in 1926. It is surrounded by trees.

  [These lie on the opposite side of the M1 and would be screened by other buildings and vegetation also].

Grade II (11 instances)

3.2.39. **Victoria Bridge**, Leeds, Grade II, 1837-39 by George Leather jnr (within 50m of the proposed Leeds New Lane station). The construction of the concourse to the south east of the bridge will not affect its structure, but removal of the vegetation on that corner would have a **moderate** impact on its setting. Demolitions of the buildings on its west side and construction of a new walkway across the River Aire would also be moderately adverse. The current view on that side includes the arches carrying the existing railway over the river, suggesting the continuity of the waterway.

3.2.40. **Mill Farmhouse**, early C19 (150m away from the proposed route near Worthington) and **Old Mill**, early C19 (190m away from the proposed route near Worthington). Both of these buildings are in a very exposed location, isolated in enclosed fields to the north of the village.There is motorway to the west and quarries to the east, where the land rises. Although the proposed route would be in cutting, there would be **minor** impacts.

3.2.41. **Redhill Tunnel Portal**, C19 (150m away from the proposed route). There are matching tunnels portals for the existing lines. The entrance to the tunnel is set in a wooded hill and approached by bridges over the river. The open valley, providing a good view of the hill, the setting of the portal. The proposed route, on viaduct which would result in a **minor** setting impact.

3.2.42. **Canal Bridge** at SK 496 313, 1797 (110m away from the proposed route near Red hill) and **Cranfleet Lock**, 1797 (280m away from the proposed route near Thrumpton). These two canal features are in open country on the floodplain. There are existing railway lines on bridges. The proposed route, on viaduct which would result in a **minor** setting impact.

3.2.43. **Packhorse Bridge Redhill Lock, pound lock and packhorse bridge** late C18 - early C19 (290m away from the proposed route near East Midlands Parkway station). This Listed Building lies at a basin and marina on the Cranfleet Canal. It is not the most picturesque setting, overlooked by a power station, but has open land around it. The proposed route would be closer than the power station. The proposed route, on viaduct which would result in a **minor** setting impact.

3.2.44. **Canal Bridge on Erewash Canal** at SK 484 376, 1779 by John Varley. This lies just north of the approaches to Toton Station. The proposed route would be on viaduct across open countryside and the bridge will not be damaged, although it lies within the 50m buffer. The proposed route, on viaduct which would result in a **minor** setting impact.

3.2.45. **Old Stables at site of former Newland Hall**, C18 (130m away from the proposed route near Normanton) and **Farm Buildings to former Newland Hall**, C1790m away from the proposed route near Normanton). The line would be on embankment across open fields, but these two features would be screened by trees. They are associated with a Scheduled Monument. The buildings are the remains of a farm which developed at the site of a former Preceptory of the Order of St John of the Hospital. The buildings lie on the edge of an area of open field, with some trees around them. There would be a **minor** impact on the following settings.

3.2.46. **St Thomas Church**, Newman Road, Wincobank, Sheffield (1876 by Flockton & Abbot). The proposed route lies c270m away and, although on viaduct, it would be difficult to see from the church and would not affect views of it. There is residential development around the area and the ground slopes downwards towards the east in the direction of the proposed route, which would lie on the opposite side of the existing railway line at end of the road past the church. The viaduct might be visible from the tower. It is possible that there might be a small increase in noise, but this is unlikely to be significant. The impact on the church would be **negligible/minor**.

Other Grade II Structures

3.2.47. For all other Grade II Listed Buildings (a total of 75 buildings) the impact would be **negligible**. The buildings would be screened by other buildings, the level of vegetation and topographic features. The list of buildings moving from south to north along the line of the proposed Leeds route is:

- Sycamore Cottage; Whateley Hall Farmhouse; Barn Approximately 15 metres North West of Whateley Hall Farmhouse; Holt Hall and Attached Walls; Moorash Farm;

- Packington Manor House; Packington Mill; Bridge by Packington Mill; The Old Rectory; Coach House and Stables at the Old Rectory;
- Park Farmhouse; Hall Farmhouse; Milestone at NGR 43703159 (outside No 96 which is not included); Bridge Opposite Manor House; Croft Cottage;
- Mill Croft; Outbuilding approximately 20 metres to South East of Brookside House; Brookside Farmhouse; Bramcote Hail: 14 Ashby Road Packington;
- J and H Lacey Warehouse; Halifax Building Society; 38 and 40 Market Place; Midland Bank; War Memorial to 6 metres South West of St Laurence's Church;
- Nottingham Canal Swansea Bridge; Strelley Hall; Stables at Strelley Hall and adjoining Dairy Cottage and Gate Lodge; Ice House 200 metres south east of Strelley Hall; Kitchen Garden Walls 250 metres North West of Strelley Hall forms part of Strelley Lodge;
- 1 Nottingham Road; 3 Nottingham Road; 7 Nottingham Road; The Cottage; The Old Rectory and Adjoining Rectory Grange;
- Home Farmhouse and Attached Gatehouse; Farm buildings to Rear of Home Farm; Gatepier from Former Nuthall Temple; 2 Headstones 1 metres South of Chancel at Church of St Patrick; Norbriggs House;
- Thundercliffe Grange; Fence Farmhouse; Boundary Walls and Gate Piers to Church of St Thomas; Mill Farmhouse; Road Bridge 175 metres South of Renishaw Park Golf Clubhouse;
- Renishaw Park Golf Clubhouse; The Gothick Archway; Railway Overbridge 250 South West of Birley Farm; Stainsby Mill; Milepost Approximately 100 metres to North of Driveway to Bell Ground House;
- Milepost Approximately 45 metres to South West of Junction with Kirby Lane; Guide Stoop at NGR SE 3837 0942; South Lodge to Swillington Park; Dovecote and Stables/Outbuilding approximately 20 metres north of Gamblethorpe Farmhouse; Ice House;
- Barrowby Hall with front steps and flanking screen walls and gate piers; Bridge Farmhouse; 1 3 and 11 Station Road; 31 Station Road; Church of St Peter;
- Hoyland Low Stand; Swaithe Hall Farmhouse Rosebower Cottage and Swaithe Hall; Cruck Barn at East side of Entrance to Swaithe Hall Farm; Stable block at west side of entrance to Swaithe Hall Farm; Milepost at SE432346;
- Swillington Bridge; Church of All Saints; Eshaldwell Brewery; Gateway and flanking piers to former Railway Foundry; Tower and Spire of Church of St Mary;
- Gate Piers to Boyne Engineering Works; Boyne Engineering Works Offices; Hunslet Engineering Company Offices; Barn forming north side of farmyard at Horncastle Farm; Garden Walls of Staveley Hall.

3.2.48. A small number of features appear twice in the analysis in section 3, because of overlapping route sections. In each case they appear twice.

- Renishaw Hall, Registered Park and Garden II*.
- Church of St Laurence and St John; The Hall, two Listed Buildings Grade II*.
- Old Stables at Newland Hall; Farm Buildings to Former Newland Hall; Norbriggs House; Brookside Farmhouse; Outbuildings at Brookside Farmhouse, five Listed Buildings Grade II.

3.2.49. It would appear that Swillington Bridge also appears twice, but in fact there are two sections of bridge with this name, both over the River Aire which is braided. The locations are slightly separate and it is the southern end which would be subject to a **minor** impact.

3.2.50. Some clusters of features occur where the impacts might be greater than for dispersed features. These include the area around Renishaw Park Golf Clubhouse, Strelley and Packington. However, the impacts for most clusters would be **negligible**. There are three instances where two or more Listed Buildings occur together and the impacts would be **minor**:

- Mill Farmhouse and The Old Mill (two Grade II Listed Buildings).
- Redhill North Tunnel Portal; Canal Bridge; Cranfleet Lock and Redhill Lock Packhorse Bridge (four Grade II Listed Buildings).
- Old Stables at Newland Hall and Farm Buildings to Former Newland Hall (two Grade II Listed Buildings).

3.2.51. The Redhill and Newland Hall clusters are also associated with Scheduled Monuments, increasing the significance of the impacts.

3.2.52. The number of Listed Buildings varies considerably through the local authority areas along the proposed route as follows:

- Warwickshire 8
- Leicestershire 17
- Nottinghamshire 18
- Derbyshire 22
- Sheffield 2
- Barnsley 10
- Rotherham 3
- Wakefield 3
- Leeds 25

3.2.53. The figure for Leeds does not include the Grade II Listed Buildings in the centre near to the new station.