

West Midlands Interchange

Local Impact Report

Prepared by

Staffordshire County Council



4th April 2019

West Midlands Interchange Local Impact Report

1. Purpose of the Report

- 1.1 This report is prepared by Staffordshire County Council and provides an evaluation of the local impacts of the West Midlands Interchange Development Consent Order for the construction, operation and maintenance of a Strategic Rail Freight Interchange and associated warehouses at Four Ashes. The report has been prepared in accordance with the Planning Inspectorate Advice Note on Local Impact Reports and the published guidance of the Planning Officers Society.

2. Site Description and surroundings

- 2.1 The site is located within the district of South Staffordshire in the County of Staffordshire. It sits immediately to the west of the M6 junction 12 in an area known locally as Four Ashes.
- 2.2 The existing uses on site are predominantly agriculture and quarrying. There is also a large wooded area, Calf Heath Wood.
- 2.3 The proposed site is adjacent existing employment areas comprising in the main Berricote Four Ashes, SI Group and the industrial Estates off Station Drive.
- 2.4 The villages of Calf Heath and Coven lie to the East and South West of the site respectively.
- 2.4 A detailed description of the site and its surroundings is set out in the application documents and the landscape section below considers the landscape character in more detail.

3. Details of the Proposal

- 3.1 The scheme put forward by Four Ashes Limited for a development consent order is primarily for a rail freight terminal and associated warehousing, along with ancillary works necessary to facilitate the delivery of the development. The precise details are set out in the application documents and the numbered works within the Development Consent Order.

4. Relevant County Planning History and Proposals Under Consideration

- 4.1 The following planning applications related to minerals are considered to be relevant material considerations;
- 4.2 SS.54/95 dated 28/11/1996 for extraction of aggregates for the construction industry and restoration to agriculture by inert waste infilling [subject to legal agreement dated 30 October 1996].

- 4.3 SS.54/95 V1 dated 04/08/2000 for variation of Conditions 3 & 41 of planning permission SS.54/95 to extend the time within which materials may be extracted and the site restored by the importation of waste.
- 4.4 SS.07/19/681 MW dated 21/08/2009 for extension to sand extraction and restoration of the land to agriculture using inert materials together with processing plant, landscaping and associated works [subject to legal agreement dated 26 February 2009].
- 4.5 SS.12/08/681 MW dated 25/03/2015 for variation of condition 2 (G) and 19 of planning permission SS.07/19/681 MW to amend the approved area layout to enable a small quantity of mineral products to be imported and stored on the site for sales purposes ancillary to the permitted operation [subject to legal agreement dated 12 March 2015].

5. Relevant County Planning Policy

- 5.1 Minerals Local Plan for Staffordshire (2015 -2030)
- Policy 1: Provision for Sand and Gravel
 - Policy 3: Safeguarding Minerals of Local and National Importance and Important Infrastructure
 - Policy 6: Restoration of Mineral Sites
- 5.2 The Staffordshire and Stoke-on-Trent Joint Waste Local Plan (2010 -2026)
- Policy 1: Waste as a resource
 - Policy 4: Sustainable design and protection and improvement of environmental quality

Assessment of prospective impact of the project

6. Highways and Transportation

- 6.1 The local highways implications of the proposed scheme will be significant in relation to the direct and indirect effects of development traffic in the local area. Whilst it is accepted that a large proportion of the Heavy Goods Vehicles (HGV) traffic associated with the site would have already been on the motorway network the presence of the WMI site brings significant volumes of HGVs and other traffic to the immediate area surrounding the site that otherwise would not have been there.
- 6.2 It is proposed that WMI will have three roundabout vehicle accesses to the highway network surrounding the site, onto each of the following roads;
- A449(Trunk Road),
 - A5(Trunk Road),
 - Vicarage Road.
- 6.3 The A449 south of the A5 to the M54 is trunk road as is the A5 / A449 roundabout junction (Gailey island) and the A5 from Gailey to the M6. Staffordshire County Council is the local highway authority for Vicarage Road. However, the A449 north

of the A5 and the A5 west of the A449 is under the control of Staffordshire County Council.

- 6.4 The proposal will generate additional vehicle movements; both HGVs and staff vehicles, on the highway surrounding the site which would have a negative impact.
- 6.5 The vehicular traffic from the site could be categorised into HGV's and non-HGV's, predominantly cars. Through discussions with Four Ashes Limited HGV movements to and from the site will be via prescribed routes mainly the quickest route to and from the trunk road system. There are also measures to be put in place to avoid HGV journeys on local highways, in particular the A449 through Penkridge which will be a banned through route for WMI HGV's, with any HGV's travelling along the A449 will face a financial penalty if the M6 is open.
- 6.6 However, as the A449 is the designated diversion route when the M6 is closed the restriction will need to be lifted during such closures. In event of a closure of the M6 there will be more traffic on local roads, in particular the A449 through Penkridge than is currently experienced during such periods, which will be a negative impact. The HGV management plan seeks to provide contingency measures during such periods to hold WMI HGV's on-site until the closure is lifted, which will lessen the impact.
- 6.7 Parts of the surrounding network are already busy and experience queuing at peak times of the day. There is potential for this to lead to vehicles using other County controlled local roads to complete their journey, which would be a negative impact. Work has been undertaken within the Transport Assessment (TA) to consider journey times from surrounding areas and demonstrates that the 'main' routes would still have comparable journey times and in many cases shorter journey times than utilising lower order roads. If granted consent further work will be undertaken to monitor other local routes to ascertain if there is any diversion of vehicles from the strategic highway and where appropriate measures taken to discourage this practise. The provision of the link road earlier than proposed would also help to lessen potential issues.
- 6.8 FAL have submitted information which will include a site wide travel plan to promote sustainable methods of travel to and from the site and alleviate the WMI traffic impact further; although no reductions have been made in the predicted traffic to provide a robust traffic report. All the proposed highway works will include facilities for public service vehicles (PSV's), pedestrians and cyclists. The location of the site means the opportunities for walking and cycling from surrounding residential areas to the WMI site will be limited. However, the site will be accessible by public transport, with FAL contributing to the public bus services past the site to ensure it remains a viable option. FAL will also secure dedicated transport for staff from surrounding areas e.g. works buses.
- 6.9 WMI is predicted to attract over 6,000 HGV trips a day once fully operational. With this number of HGV vehicles coming to the area the concern for the local highway authority is an increase in the number of HGV's parking overnight on County maintained highways, which would be a negative impact. Staffordshire County Council have experience of these HGV parking issues around distribution estates

across the County, which leads to hazardous parking, littering and increased incidents of anti-social behaviour that require intervention from the local highway authority and local Borough/District council.

6.10 Staffordshire County Council is preparing a Freight Strategy that is intended to minimise and manage the impact of freight in Staffordshire and maximise the economic benefits. In addition, The Staffordshire Freight and Communities Forum was established in response to a recommendation of the Prosperous Staffordshire Select Committee in May 2016. This forum brings together key stakeholders such as local community representatives, Staffordshire County Council, the Police and Fire Service, Highways England and the Freight Haulage Association to address the impact of heavy commercial vehicles on Staffordshire's roads. The forum aims to develop an understanding of County wide distribution issues and constructive solutions to identified problems. This will often require reconciling the access requirements of goods and services with local, environmental and social concerns, whilst retaining a resilient network. The forum is led by Staffordshire County Council supported and resourced by key stakeholders. There is an emphasis on encouraging road freight to use the Motorway and Trunk Road network as far as possible. The forum will also allow stakeholders to discuss issues such as reducing noise impacts, managing construction traffic for major projects or agreeing appropriate diversionary and access routes. The forum meets every four months or more frequently if necessary to address urgent matters. It is envisaged that one priority issue will be fully investigated each financial year with a view to delivering appropriate mitigation measures.

6.11 Through the Strategy and Forum a number of key recurring themes persist in Staffordshire, including:

- Overnight parking in laybys, business/industrial parks and country lanes or other inappropriate areas;
- Anti-social behaviour;
- Increasing demand and lack of current capacity for formal lorry parking - The DfT National Survey of Lorry Parking 2017 considered the capacity and demand for overnight lorry parking across England. The study focussed on the Strategic Road Network (SRN) and sites within 5km of the SRN. The study found an excess of approximately 3,500 vehicles unable to park on-site overnight. The West Midlands region¹ was found to have a critically high utilisation of existing overnight lorry parking spaces illustrating a severe lack of available capacity. Off-site parking is predominantly centred around the M6 and A5. The study surmised that in practice the West Midlands region would require an increase in available lorry parking spaces of 21% to cater for demand.

6.12 This HGV parking concern has been raised with FAL and their consultants throughout most of the consultation period. It is acknowledged that the WMI development for the site is proposing to operate a vehicle booking system that

¹ The West Midlands region comprises:

the shire counties of Staffordshire, Warwickshire and Worcestershire,

the unitary counties of Herefordshire and Shropshire,

the metropolitan boroughs of Birmingham (6), Coventry (7), Dudley (8), Sandwell (9), Solihull (10), Walsall (11) and Wolverhampton (12), and

the city of Stoke-on-Trent (13) and the borough of Telford and Wrekin (14);

allows logistic companies to plan their journey accordingly and that the design of the units will allow 30 minutes early arrival spaces. The main concern is that HGV drivers may choose, or be required, to take their longer 8 or 9-hour statutory break in the vicinity of the WMI site i.e. before arriving or departing from WMI. Indiscriminate parking of HGVs around WMI is something we are keen to avoid as it will help prevent the issues raised above. FAL have proposed a parking standard to incorporate 'Extended Stay' HGV parking at each plot, which are an essential element of the proposal. These will need to be secured appropriately and covered by HGV Management Plans to ensure individual occupiers cannot re-assign their use.

- 6.13 In addition to identifying issues with HGV parking the Strategy and Forum has established that the key issues associated with HGV routing to be:
- Emergency diversion routes can cause issues in local communities as HGVs leave the trunk road network and use local roads;
 - Routing agreements are often not considered to be enforced;
 - Out of date or poor quality SAT NAV systems on HGVs or non-HGV SAT NAV systems can lead to inappropriate route use;
 - Localised route signing is sometimes of poor quality;
 - Increasingly large HGVs serving small rural areas and using narrow lanes can lead to safety, congestion, environmental issues and damage;
 - HGVs are often perceived as causing congestion issues in rural and urban areas where the local network is not engineered to accommodate such large vehicles and the environments are more sensitive;
 - We have a number of Air Quality Management Areas (AQMAs) in the county where emissions from HGV traffic are significant and reduce air quality.

6.14 Given the size of this project, the implementation of the proposal will generate a significant amount of traffic associated with the demolition and construction onto the highway network over a predicted 15-year construction period. This is a negative impact.

6.15 FAL have submitted information on the demolition and construction traffic associated with the proposal. The size of the site means it is likely a sizeable number of construction related vehicles will be traffic entering and leaving the site. Although this is a negative impact this could be monitored via the 'Demolition and Construction Traffic Management Plan (DCTMP)' and actions taken in line with the recommendations, once agreed, the effect of this level of traffic could be managed so not to cause a severe impact. Specific elements of this plan are a must e.g. no construction vehicles through Penkrige via the A449 unless their journey begins or ends in that location. The proposal to restrict deliveries outside of peak times will also reduce the impact on the local highway network but the DCTMP will require monitoring and implementing vigorously by the FAL and their contractors.

7. Ecology

7.1 The construction of the West Midlands Interchange will have an impact on the biodiversity of the area. There are no designated biodiversity sites which will be directly impacted by the proposed scheme. Several veteran trees (considered

irreplaceable habitat) will be lost, while the setting of others will be changed. Other features present which will be affected include grassland, arable land, woodland, mature trees and hedges.

Description

- 7.2 The area comprises farmland, with a block of woodland (Calf Heath Wood) in the centre. Fields to the west of the railway are mainly arable, while those to the east are mainly pasture, with some arable. The majority of field boundaries are marked by hedges and there are also mature and veteran trees. The Staffordshire and Worcester Canal borders and crosses the site for around 3km. There is an active quarry to the northeast.
- 7.3 Designated sites adjoining or very close to the development boundary include Calf Heath and Gailey Reservoirs (Local Wildlife Sites) which are mainly of importance for birds, a section of the Canal to the south (Biodiversity Alert Site) listed for marginal vegetation and adjoining small woodland. The Geological Site of Special Scientific Interest Four Ashes Pit lies to the southeast.
- 7.4 Species of note recorded from the site or immediately adjacent include otter (Canal) lapwing (arable fields) native black poplar, bats, badger and great crested newt.
- 7.5 Ecological surveys have noted that the following habitats are present and will be affected:

Habitat	Effect of development
Semi-improved grassland	16.15ha lost of a total 20.43ha
Hedges	8.8 km lost of a total 23km
Woodland	15.6ha lost of total 25.5ha
Individual trees	129 trees lost of total 300
Tree groups	56 groups lost of total 141
Ponds	6 lost of total 17

- 7.6 The above summary does not include the larger areas of arable land, poor grassland and quarry that will be affected, which, while less important, still provide habitats for a range of species.
- 7.7 The major group of species found on site is bats. Ten of the county's 12 species were recorded from the site, including feeding and commuting activity and 6 on-site roosts. Direct impacts on roosts and on feeding activity are expected. Other roosts were found close to the site boundary; activity of bats feeding from these is also likely to be disrupted.
- 7.8 Otters are mainly confined to the canal corridor, although they are thought to use the wider landscape including the site. No otter holts were found during the survey. Badgers were found, and details have been submitted in a confidential report.
- 7.9 Amphibians found within the site and will be affected include a small population of great crested newt, plus smooth newt, common frog and reasonable numbers of common toad. Of these, great crested newt and common toad are considered to be important at site level. No reptiles were recorded on site.
- 7.10 Breeding and wintering species of farmland are the most prominent group of birds, with other species associated with woodland and hedges. Several building-

- nesting species were also recorded including swallow and house sparrow. Important populations of birds were also noted for the reservoirs to the northeast.
- 7.11 Invertebrate species recorded included species of woodland and related habitats and species of grassland and open ground. Species recorded were from Calf Heath Wood (133 species), quarry (90 species), the wider Calf Heath landscape (172 species) and 179 species were recorded in the Land south of Vicarage Road.

Mitigation

- 7.12 Since 2016, Staffordshire County Council Ecologists have been actively involved in ensuring that adequate species and habitat surveys are carried out on the site. It is important to ensure that good survey data is obtained to correctly assess impacts and work out what mitigation is necessary. Existing data from Staffordshire Ecological Record (the Local Environmental Records Centre) was used by SCC and by WMI consultants to inform this process. Habitats and species were also considered for a 1km zone of influence outside the site boundary.
- 7.13 The following species / groups of species have been covered by detailed surveys on site (and in nearby habitats where appropriate): birds, invertebrates, white-clawed crayfish, reptiles and amphibians, bats, otter, water vole, badgers, native black poplar, invasive species
- 7.14 The following mitigation measures have been identified:
- Bat flight paths – to be provided by means of dark corridors, green infrastructure and bat ‘hopovers’ at road crossing points
 - Bat roosts – subject to Natural England licence, with associated mitigation work.
 - Habitat loss – farmland birds – 12 ha to be provided off-site nearby
 - Habitat loss – grassland – to be provided in 2 parks, giving a total of 17.42ha
 - Habitat loss – hedges – where possible hedges are to be retained in situ, translocated and new ones (10.7km) created
 - Species protection during construction – to be dealt with through reasonable avoidance measures in Framework Ecological Mitigation and Management Plan (FEMPP) (except where additional measure for licences are required)
 - Species protection post-construction to include mammal road crossings and tunnels, amphibian friendly kerbs etc. Canal to be retained as a dark corridor (otters).

Effects on European Sites

- 7.15 Effects on nearby European designated sites have been considered and are not expected to be significant (see submitted No Significant Effects Report)

8. Landscape

Landscape Character

- 8.1 According to Planning for Landscape Change - <https://www.staffordshire.gov.uk/environment/eLand/planners-developers/landscape/NaturalEnvironmentLandscapeCharacterTypes.aspx> the Staffordshire Landscape Character Assessment (2000), the site straddles the Landscape Character Types (LCTs) Settled Heathlands in Cannock Chase and Cank Wood, east of the Staffordshire and Worcestershire Canal, and Ancient Clay Farmlands in the Staffordshire Plain, west of the Canal.
- 8.2 *Planning for Landscape Change* describes the key features of Settled Heathlands as a landscape of mixed arable and pastoral farming on a flat to gently rolling landform, where the fabric is breaking down due to pressure from adjacent urban areas. Hedges define a mainly regular field pattern, with oak and birch hedgerow trees which coalesce in flatter areas to limit views. Broadleaved woodlands and wooded stream valleys also feature. Locally straight roads are typical. Under visual character Planning For Landscape Change notes that where the fabric of the landscape is breaking down closer to urban areas, deterioration of the medium scale field pattern is leading to large scale open areas with gappy hedges.
- 8.3 These characteristics are reflected on the site through the rectilinear pattern of farmland and woodland plantation (Calf Heath Wood). The site is bounded and traversed by straight roads, reflecting the later planned enclosure of heath. Hedges are mainly low, clipped with occasional small hedgerow trees.
- 8.4 Part of the site to the east of Calf Heath Wood is an operational Quarry which has removed some of the landscape structure. Planning Permission for the Quarry includes mitigation measures to reduce visual impact during operation. The approved Restoration Plan is to restore to agriculture, reinstating a similar hedgerow pattern with hedgerow trees along with other enhancements for nature conservation including woodland and pond creation.
- 8.5 Visibility across the landscape is very much controlled by abundance or paucity of hedgerow trees, so that where there is poor tree cover and medium to large scale fields there are open views into the site. As a result views from the highway network and nearby properties often extend across the site. Areas of greater tree cover, such as alongside the Canal, or Calf Heath Wood form strong visual barriers and limit views.
- 8.6 To the west and south west of Calf Heath Wood are established industrial estates. Generally, the character of these estates is of 'low rise' industrial units with some 2-storey brick built office blocks of a similar height. The LVI notes that the influence of Four Ashes industrial estate is fairly localised, the exceptions being the Veolia ERF building, which is more widely visible though incorporates a green roof to reduce visual impact, and the chimney stacks of the SI Chemical Works.
- 8.7 The character type Ancient Clay Farmlands is described as a landscape of mixed arable and pastoral farming, with mature hedgerow oaks and strong hedgerow

patterns particularly in areas of pastoral farming, though there has been local loss of hedgerows. The varying tree and hedgerow density gives different scales and the gently rolling landform and allows long distance views that show up landcover elements. Well treed stream and canal corridors also feature.

- 8.8 The western part of the site, west of the Canal lies in the fringes of this LCT, and the landform here is generally flat, rather than confirming strictly to the description. The hedge along the site boundary with the A449 is low clipped, but with more hedgerow trees of greater stature. From close quarters there are open views of the western part of the site, truncated by vegetation alongside the Canal, which forms a strong visual buffer.
- 8.9 As stated in the documents *Planning for Landscape Change* derived landscape policy objectives of Active Landscape Conservation and Landscape Maintenance for the character types east and west of the canal respectively. This indicated landscapes where characteristic features were strongly represented and in good condition at the time of assessment. Volume 1 Introduction and Users Guide recommended:
- 8.10 *“In areas for which the objective is Landscape Maintenance substantial emphasis should be placed on ensuring that the development blends unobtrusively into the landscape and does not lead to the loss of features characteristic of it. Where the objective is Active Landscape Conservation the same requirements apply, but in addition any development should make a positive contribution, e.g. through the restoration or management of characteristic features such as buildings, parkland or woodland.”*

Landscape Designations

- 8.11 Cannock Chase Area of Outstanding Natural Beauty (AONB) lies approximately 3km to the east of the Site at its nearest point. The Application acknowledges the potential for development to effect views into and out of the AONB and influence the setting of the AONB. Cannock Chase AONB is preparing a Management Plan for 2019 – 2024. This process will be strengthening policy for protecting and enhancing the setting of the AONB.

Landscape and Visual Impacts

- 8.12 The development would be a significant intrusion into the flat rural landscape of this part of Staffordshire. The overall scale of the development, and the height and bulk of individual buildings would be significantly larger than existing industrial development in the vicinity, with the majority of building heights typically between 20m – 30m, and gantry heights of 30m. Lower elevations and the majority of operational areas would be screened by perimeter screen bunds; views of middle elevations term would be filtered by planting in the medium to long term; however, upper elevations of buildings and the overhead railhead gantry would be permanently visible for a wide range of receptors and have a lasting negative impact on the landscape and visual amenity. The efficacy of filtering would depend upon the season.

- 8.13 The proposal to locate taller warehouses towards the centre of the site and smaller scale development closer to residential development and the Canal should assist in reducing landscape and visual impacts.
- 8.14 The proposals seek to break up the visual proportions of larger building elevations through use of mottled elevations and co-ordinated colour pallets as indicated on the Illustrative Landscape Sections and Photomontages. The design principles are based on the theory that when viewed from low level at close quarters, paler treatments on the upper elevations of buildings will tend to reduce their visual impact, and it would be beneficial for buildings to have a darker pallet of colours to reduce visual impact from more distant elevated viewpoints. The principles appear sound, however further detail is sought to understand how impacts on multiple receptors at different elevations might be addressed. There may also be elevations where there is a difference in preferred solutions, resulting in a visual conflict at the junction between differing treatments that could be counter effective.
- 8.15 The proposed mitigation bunding, at heights of 4 – 8 metres, would screen lower elevations of the development and areas of operational activity such as service yards and parking. The bunds would be visually intrusive at least in the short term due to the otherwise flat local landform and generally low hedges that allow views across the landscape. The Application provides details of Finished Floor Levels (FFL) and bund heights relative to FFL. However, to fully understand the scale of development (including aspects such as building height, height of screen bunds), and asses effects on the landscape and receptors outside the site, clarity is needed as to how proposed levels relate to levels at the site boundary and surrounding landscape.
- 8.16 Avenue Cottages and White Cottages, off Watling Street are sensitive receptors where the position, proximity and height of the bund combined with the proposed planting would detrimentally affect properties. The bund, which is proposed to be 8 metre high, would be domineering over these properties and at maturity planting on the bund could itself detrimentally affect visual amenity and light levels.
- 8.17 Proposed bunding directly to the east of the Canal would obstruct views of the lower elevations of the development and tunnel views along the canal, changing the experience of Canal and towpath users.
- 8.18 On the Illustrative Landscape Cross Sections planting is shown as semi-mature (Year 15 or after). In the short to medium term planting would deliver little enhancement in addition to that achieved by the bunds. In the longer term the size and scale of the screen bunds will remain incongruous, albeit ultimately softened with planting.
- 8.19 The impact of lighting on the landscape has not been fully assessed in the documents. The submitted Lighting Strategy and Lighting Impact Assessment (LSLIA) (Appendix 12.8) describes that the potential lighting impacts have been assessed based on the following embedded mitigation having been implemented: *the Lighting Strategy (section 5); the Green Infrastructure Plan (mounding and planting); the principles given in the illustrative Landscape and Green Infrastructure Strategy (planting)*. It would have been appropriate to assess lighting from the

same receptor locations as assessed in the LVIA and following the same methodology for assessment i.e. at Year 0 and Year 15. Selecting only 7 locations in the assessment excludes key locations in the area of Vicarage Road / Straight Mile, where roads are currently unlit. It also fails to consider effects when planting has not matured. It is considered that the assessment in the LVIA, which at section 12.465 states '*The resultant night time effects will vary for the surrounding visual receptors yet are likely to be predominantly **Negligible to Moderate Adverse upon completion***' is not grounded in sufficiently detailed information to offer a reliable conclusion on this point.

- 8.20 At the time of implementation planting would not contribute to visual screening raising, the Description in Table 9 could be inaccurate. For example, in relation to lighting to service yards (18m high columns), and lorry parks and car parks (15m columns), as screen bund vary between 3 and 8 metres high, lighting could be expected to be visible above screen bunds and so more visible than stated in the assessment, increasing the Significance of Impact experienced by receptors, at least in the short to medium term. A reduction to the height of lighting columns in areas visible outside the site boundary could reduce visual impact.
- 8.21 A 'Minor Adverse' Significance of Impact for Shoal Hill Common in the AONB, is questioned. During winter months there would potentially be users on site around dusk. The Description in Table 9 states:
'The uppermost parts of many units will be seen in the middle distance of the extensive views obtainable from the exposed parts of this location. Some lighting units may also be observable. Existing vegetation and new landscaping will prevent the most significant parts of lit development from being seen, however. Taking into account the context, where many significant sources of light can be seen in the middle distance right out to the horizon, the impact of light presence (4) will be slight. There will be at most a slight increase in local sky glow (5) in views in the direction of the Proposed Development under misty or hazy conditions.'
This fails to recognise that Shoal Hill is an elevated location and this, combined with the location of screen bunds on the site is such that there will be minimal screening benefit from perimeter mounding; new planting would offer little or no enhancement to mitigation for potentially 10 – 15 years; the proposed development would occupy a substantial sector of the view, in the middle distance.
- 8.22 Figure 2 illustrates and describes the night time landscape viewed from Shoal Hill. It demonstrates that the landscape to the right of Veolia is currently mainly un-lit but would be lit as a result of the proposals, though the actual predicted horizontal spread of light is not clarified.

9. Public Rights of Way

- 9.1 The West Midlands Interchange proposal will directly impact on Public Footpath No. 29 Penkrige. In addition, there is an application submitted under section 53 of the Wildlife and Countryside Act 1981 to add a Byway Open to All Traffic to the Definitive Map of Public Rights of Way (reference LH626G) from the A449 opposite Crateford Lane to Gravelly Way Bridge. The development will have a significant

negative impact on the appeal of walking in this area, particularly on users of the canal towpath which provides attractive links to the wider path network.

- 9.2 In order to accommodate the development the DCO proposes to permanently close Public Footpath No 29 Penkridge and it is disappointing that this cannot be accommodated through landscaped areas as originally proposed. This footpath is not part of any locally or nationally promoted route, nor does it run through an area with any special landscape features e.g. National Park, SAC, etc. The route is likely to be one of local importance because it provides an attractive off-road link across fields and over the railway bridge between the A449 and Croft Lane and is probably used by local people as part of a circular route to link the A449 pavement, Gravelly Way and the Staffordshire and Worcestershire Canal.
- 9.3 The majority of the proposed site is not currently accessible to the public and a series of permissive paths and cycle routes will be created to mitigate against the loss of Public Footpath No 29 Penkridge. Some of these routes will also run through the two new community parks and provide links to the canal towpath. It is likely that none of these routes will be formally created as public rights of way i.e. added to the Definitive Map and Statement. In view of this it is difficult to comment on the long-term value of such routes because they will not be safeguarded through legal provision and, by their permissive nature, could potentially be closed or amended by the landowner at any time. There will, however, be some recreational benefits to the local community through the proposed parks and associated permissive path network if maintained.
- 9.4 There are also planned improvements to the towpath alongside the Staffordshire and Worcester Canal “to enhance accessibility and improve access to and the experience of the canal and wider community”. The construction and operation of the proposed WMI is likely to significantly impact on the appeal of walking or cycling in this area. Currently the canal towpath allows users to pass through a predominantly rural landscape which will become much more industrial if these plans are approved. In view of this it is hard to see how the experience of users will be enhanced by improvements to the towpath.
- 9.5 None of the application documents recognise the application submitted under Section 53 of the Wildlife and Countryside Act 1981 to add a Byway Open to All Traffic (BOAT) to the Definitive Map of Public Rights of Way (legal reference LH626G). This application is to add a route running from the A449 opposite Cratford Lane to Gravelly Way Bridge and is based upon historical evidence. The application can be viewed on the County Council’s Register of Modification Order Applications at:
<https://www.staffordshire.gov.uk/environment/eLand/RightsofWay/Legal/application/register/ApplicationRegister.aspx>
- 9.6 According to the applicant the Deposited Railway Plan and Book of Reference of the Grand Junction Railway 1832, held at the Stafford Record Office, shows the route as a “Bye Lane from Stafford Road to Gravelly Way Bridge” and the owner or reputed owner is the Surveyor of Highways. This hasn’t been verified and no investigation has been carried out on this application. There is also an outstanding section 36 Highways Act ancient highway application for this route. The application

is currently ranked at number 95 on the list of applications and so it is likely to be some time before the matter is determined. The applicant is advised to contact the County Council's Legal Services team for further information about this application.

10. The Historic Environment

- 10.1 The construction of the West Midlands Interchange will have an impact on the historic environment of the area. There are no designated heritage assets which will be directly impacted by the proposed scheme although the setting of a number of these will be affected, including a section of the Staffordshire and Worcestershire Canal Conservation Area, which runs through the site but is not within any of the constituent parcels. There are also a range of undesignated heritage assets which will be impacted directly or indirectly by the proposed scheme. These can be sub-divided into three main areas - below ground archaeological remains; the historic landscape; and the historic built environment. A final section outlining the mitigation methodology is included in the Historic Environment element of this Local Impact Report.

Below Ground Archaeological Remains

- 10.2 There is a clear archaeological interest within the site, with the potential for buried archaeological remains relating to the prehistoric, Romano-British, Anglo-Saxon, medieval, post-medieval periods and the 19th century. The majority of these remains would be fragile and would be substantively impacted during the construction of the current scheme.
- 10.3 Cropmarks within the site, which have been identified from aerial photographs, indicate the presence of a Neolithic ring ditch and linear feature and a possible Bronze Age ring ditch, whilst a geophysical survey undertaken as part of the pre-DCO application investigations have highlighted the potential presence of pit and ditch-like features and a possible ring ditch. A LiDAR survey identified a number of previously unknown potentially archaeological features distributed widely across the site, many of which are likely to be the slightly above ground remains of medieval and post medieval agricultural activity. Further cropmarks within the wider landscape also indicate human activity in the area during the Iron Age, whilst a LiDAR survey, which formed part of the recent HLF-funded Chase Through Time Project (centred on the Cannock Chase AONB and its hinterland), has revealed further evidence for prehistoric and later activity in the wider landscape
- 10.4 The wider landscape also contains evidence for significant occupation during the Romano-British period and includes four Scheduled Monuments (approx. 750m to the northwest of the site) which would have occupied a strategic location and a nodal point in the Roman road system with roads leaving from Watling Street, which runs along the northern boundary of the West Midlands Interchange site along the current route of the A5, towards the Roman forts/settlements at Chester, Wroxeter, Greensforge, and perhaps Metchley in Birmingham. Three of the Scheduled Monuments are the buried remains of camps or forts constructed by the Roman military, whilst the remains of the Roman settlement of Pennocrucium (located at present day Water Eaton), which continued to function as an estate centre during the post-Roman and early medieval periods. In addition to the above

forts, settlements, and roads, a number of finds dating to the Romano-British period have been found in the area, including a silver Roman denarius (minted 82 BC), which was found in the proposal site.

- 10.5 There are a number of settlements in the wider landscape which can trace their origins to the Anglo Saxon period, these include Rodbaston, Water Eaton, and Gailey (within the proposal site), which is recorded in the Domesday Book (1086) as having one villager. It has also been suggested that Watling Street continued to function as a principal highway during this period and is likely to have been an important landscape feature at this time. Further evidence of activity in the area during the Anglo-Saxon period is in the form of finds including a copper alloy strap end and stirrup strap mount with an animal's head which were discovered within the proposal site. Two possible medieval moats have also been identified in the wider landscape which retained its rural character long into the post medieval period, when the construction of a number of mills and the laying out of Somerford Park, around Somerford Hall in the mid-18th century, were the key additions/alterations to the area until the construction of the Staffordshire and Worcestershire Canal in 1772.
- 10.6 Designed by the pre-eminent engineer James Brindley as part of his wider plan to link the cities of Hull, Bristol and Liverpool with waterways, the Staffordshire and Worcestershire Canal, which runs through part of the proposal site (although not located within any of the constituent parcels), is now a designated Conservation Area and retains a lot of its associated infrastructure such as locks and the Grade II listed Round House, a lock keeper's cottage, Gailey Wharf complete with restored 18th century crane, the Grade II listed Wharf Cottage, and an aqueduct and bridge, in the vicinity of the site.
- 10.7 Despite the introduction of the canal (and its Hatherton branch arm constructed in 1860), and the construction of the Grand Junction railway in 1833, which runs through the site (although not located within any of the constituent parcels), and Gailey Station, the area remained broadly rural throughout the 19th century, a fact attested to by the presence of several farmsteads in the wider area including the locally listed Heath Farm, which is located within the proposal site.
- 10.8 In summation, as can be seen from above, there will be impacts to buried archaeological remains within the West Midlands Interchange site, both to known sites recorded on the Staffordshire Historic Environment Record/ identified as part of pre-DCO application survey, or to previously unrecorded remains identified during the construction process. It should also be recognised that, given the presence of superficial deposits of Devensian Glaciofluvial sands and gravel within the site and its proximity to the River Penk, and deposits of alluvium associated with this, there remains the potential for previously unknown and significant evidence of early human activity to be encountered during the scheme.

Historic Landscape Character

- 10.9 Prior to 1800 the historic landscape character of the site can broadly be defined as heathland which was largely enclosed as part of a planned enclosures in the 18th/19th century, with a small section to the northwest constituting an earlier

phase of irregular enclosure. This type of piecemeal enclosure is likely to represent the informal enclosure of medieval open field systems through agreement between individual landowners in an attempt to clarify landholdings. In addition, smaller areas of the proposal site are plantations established after 1800, pre-1880s settlements, artificial water bodies, or sites of industrial extraction.

- 10.10 The presence of a plantation on the site which was established after 1800 leads to the potential for earlier archaeological remains to survive in the form of earthworks- a recent assessment of the LiDAR data for this portion of woodland proved inconclusive due to the understorey and leaf litter masking the ground surface. Also, it is likely that some of the hedgerows forming the earlier irregular enclosure in the northwest of the site may mark a field system pre-dating the Enclosure Acts of the 19th century, however the lack of historical mapping for the area in this period means that it is not possible to definitively establish the extent of the pre-enclosure field system. The impact on the historic landscape should these be removed as part of the scheme is likely to be low or negligible even when these are assessed and considered with other aspects of the built environment, such as surviving farmsteads, and the canal.
- 10.11 In summation, the site and the surrounding landscape was historically primarily heathland on the margins of settlement with areas utilised for agricultural purposes following the irregular and planned enclosures prior to and during the 19th century, and from a historic landscape perspective is of limited significance. The proposed West Midlands Interchange would fundamentally alter the character of the site; however, this would not constitute an appreciable loss to the character of wider historic landscape.

Historic Built Environment

- 10.12 There are no designated historic buildings within the proposal site. However, two historic farmhouses are due to be demolished as part of the scheme. Of these, the locally listed (Grade B) Heath Farm, an early 19th century farmhouse, which forms part of a farmstead laid out around a regular courtyard, is located within the site on the south side of Vicarage Road. The other is Woodside Farm, an early 19th century farmhouse which is not recorded on the local list.
- 10.13 In addition to these, there are a number of designated and undesignated historic buildings/sites within the vicinity of the proposal site. Of these, the setting of the vast majority, including the four Roman Scheduled Monuments mentioned above, is unlikely to be affected by the proposed development. However, the setting of the Staffordshire and Worcestershire Canal Conservation Area and elements of the historic environment associated with the canal network in this area, such as the aforementioned Grade II listed Round House and Wharf Cottage will be changed by the proposed development, although the perceived effect of the development on these is likely to be minimal and would not represent a substantial worsening of their setting. However, it must be noted here that care must be taken in the design (general design, materials, scale) of the proposed new road bridge across the route of the canal at Berricote, which has the potential to significantly detract from the character of the Canal conservation area.

Mitigation Strategy

- 10.14 Liaison between Staffordshire County Council's Historic Environment Team, Historic England, West Midlands Interchange, and their appointed Historic Environment consultants have informed the work to date (the preparation of an Archaeological Desk-Based Assessment/ Cultural Heritage chapters of the Environmental Statement, a LiDAR Assessment, and a Geophysical Survey) and highlighted the need for an Outline Written Scheme of Investigation (OWSI) to be produced to support the DCO application. This OWSI outlines the mitigation techniques/interventions and methodologies which are likely to be employed in advance of and during construction. These are based on the zoning of the site in terms of archaeological risk established by the aforementioned assessments/surveys, and include additional geophysical survey, trial trench evaluation, and archaeological watching brief during site investigation works. It is important to note here that areas revealed as 'blank' by the geophysical survey should be tested as part of the evaluation trenching and that the potential for preservation in situ where significant (and potentially nationally important) archaeological remains are identified as being present must be considered as an option.
- 10.15 This OWSI also outlines the process of liaison between all interested parties, including the Staffordshire County Archaeologist, the Local Planning Authority, Historic England, and the relevant conservation officer.
- 10.16 This OWSI is outline in nature and should be complimented by more detailed WSI's, including pre-construction mitigation strategies which will seek to determine the presence and significance of any archaeological remains present and determine the level of any further mitigation, which could include preservation in situ and further pre-construction investigation where appropriate. These WSI will be produced to match the various phases of development as they are progressed and reflect the detailed designs (and impacts) associated with each phase. Detailed WSI's will also be required outlining a proposed programme of historic building recording of the built heritage assets that are due to be demolished as part of the proposals. All individual elements of work covered by the detailed WSI's will be undertaken by organisations following the Chartered Institute for Archaeologists (CIfA) Code of Conduct and all relevant CIfA standards and guidance, including the appropriate archiving of all material. The OWSI identifies the reporting strategy and will ensure that appropriate levels of dissemination occur commensurate to the significance of discoveries made during the scheme as advised in the National Planning Policy Framework.
- 10.17 In addition, a Historic Environment Statement of Common Ground has been prepared which details the above approach and the works required to satisfy the DCO.
- 10.18 The Staffordshire County Council Historic Environment Team have been consulted during the preliminary stages of the project and will continue to liaise with the appointed Historic Environment Consultants/Appointed Archaeological Contractors during the development and construction phases of the project and will also advise the Local Planning Authority on the provision of archaeological considerations in

the Demolition Construction Environment Management Plan (DCEMP) process. This will ensure that the necessary Historic Environment mitigation strategies are in place prior to the commencement of construction works. An outline DCEMP has been produced and provides a framework for management controls, inspection, monitoring, and documentation that will be put in place in respect of the archaeological resource.

- 10.19 In conclusion, the Historic Environment work completed to date, the iterative approach to developing the Historic Environment mitigation strategy, continuing liaison between West Midlands Interchange/their appointed historic environment consultants/contractors and the Staffordshire County Archaeologist, Historic England, and the provision of advice to the Local Planning Authority on the efficacy of the provision of archaeological considerations in the Demolition Construction Environment Management Plan (DCEMP) process, represent a satisfactory approach to securing appropriate levels of historic environment mitigation throughout the lifespan of this large scheme.

11. Flood Risk

- 11.1 The site is within Flood Zone 1, which is land assessed as having a less than 1 in 1,000 annual probability of river or sea flooding (<0.1%). The surface water flood map indicates potential flow routes associated with the natural drainage patterns of the site but does not suggest significant issues that could not be rationalised during development.
- 11.2 There are no relevant flooding hotspots within the site; however, our information about past flooding is based on data that the Flood Risk Management team holds. Where other authorities (such as Local Planning Authorities) have been made aware of issues, we cannot guarantee they have passed this information on to us.
- 11.3 A development of this scale has the potential to significantly increase the rate and volume of surface water runoff from the site, which could increase the flood risk downstream.
- 11.4 The plans will therefore need to include a sustainable drainage strategy to ensure that surface water discharge from the site is attenuated to greenfield runoff rates, and that adequate water quality treatment is provided to protect downstream watercourses from increased pollution.
- 11.5 Document 6.2 (Technical Appendix 16.3 – Site Wide Surface Water Drainage Strategy, Waldeck, July 2018) provides an overall drainage strategy for the scheme to demonstrate that there will be adequate controls on the rate, volume and quality of surface water runoff. It recommends that the detailed drainage design for each individual plot should be agreed for each phase as the DCO requirements are discharged by the LPA.
- 11.6 The Drainage Strategy proposes four outfalls for surface water, based on the natural catchments and existing drainage patterns of the site. The allowable

discharge rates at each outfall are set out in table 7-4, based upon the QBAR (which is the mean annual maximum flow rate) greenfield rate. All the required attenuation is to be provided above ground in the form of open water detention basins. A Sustainable Urban Drainage System (SuDS) management train approach has been taken where possible to provide the necessary water quality treatment for each catchment.

12. Minerals and Waste

- 12.1 The proposal would affect a mineral safeguarding area and a site allocation in the Minerals Local Plan as well as result in the cessation of the production of construction aggregates at Calf Heath Quarry which serves markets in central and southern Staffordshire as well as the West Midlands conurbation. This would impact adversely on planned provision for sand and gravel in Staffordshire and the proposal would constrain future potential use of remaining mineral resources within the site.
- 12.2 There will be additional demand placed on the local provision of construction aggregates and it is difficult to assess the impact on current permitted reserves. It is recommended that a materials audit is provided by the applicant whereby the estimated requirements for construction aggregates over the phased development of the site can be assessed.
- 12.3 The Secretary of State's scoping opinion required the Applicant to consider the impact of the proposals on permission SS.12/08/681 MW and the potential impact of the proposals on the end-use of finished mineral workings for waste backfilling. Revised proposals for a low-level restoration to mitigate the disturbance caused by mineral excavations have been submitted by the mineral operator to the Minerals Planning Authority (MPA). The MPA is considering these proposals as a variation to the requirements of the current mineral permission (reference for the application to vary restoration conditions is SS.19/01/681 MW).

13. Economy

- 13.1 WMI has the potential to generate over 8,000 jobs, primarily within the logistics sector although we remain open to other compatible uses, such as advanced manufacturing, if they were to come forward. The exact nature of the jobs on the site will clearly not be fully known for some time. This, combined with the sheer scale of the development, relatively low levels of unemployment outside of the conurbation and construction timescales means that there is a degree of uncertainty as to precisely where the workforce for the site will come from. This is to be expected with larger than local schemes.
- 13.2 However, we want to make sure that the job opportunities created by the development have the maximum possible benefit for local residents who will after all be those who feel the greatest impact of the scheme, positive and negative. In particular, given the types of jobs likely to primarily be created by end-users, there is a clear opportunity to support the harder-to-reach unemployed and economically inactive residents to gain employment. Ensuring the maximum possible levels of local employment will also have significant advantages in reducing commuting

distances to the site, placing less pressure on the transport network and helping to reduce the environmental impact of the development. As part of the Statement of Common Ground the County Council agree with FAL that these issues will be addressed through an Employment, Training and Skills Plan (ESTP) to maximise local employment opportunities during both construction and operation. This ESTP will function in combination with the Travel Plan and Sustainable Transport Strategy to help reduce commuting distances and increase propensity for sustaining bus services and effectiveness of car sharing schemes.

14 Summary

- 14.1 Paragraph 6 of the National Planning Policy Framework (NPPF) states that the purpose of the planning system is to achieve sustainable development. Paragraph 7 states that there are 3 dimensions to sustainable development: economic, social, and environmental.
- 14.2 The proposals would clearly have both short and long-term impacts on the local area. In environmental terms from the scheme's potential to affect ecological interests and by changing the character and appearance of the area.
- 13.3 However, the role that infrastructure plays in achieving sustainable development and the potential for broader regional and national economic and social benefits is acknowledged.