

Network Rail

**170248 Headbolt Lane New
Station GRIP 4**

Health Impact Summary

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This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

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1 Introduction

This document comprises the Health Impact Summary which has been prepared on behalf of Network Rail ('the Applicant') to support a detailed planning application for the development of Headbolt Lane station, car park and associated railway line works ('the proposed Scheme').

1.1 The Site

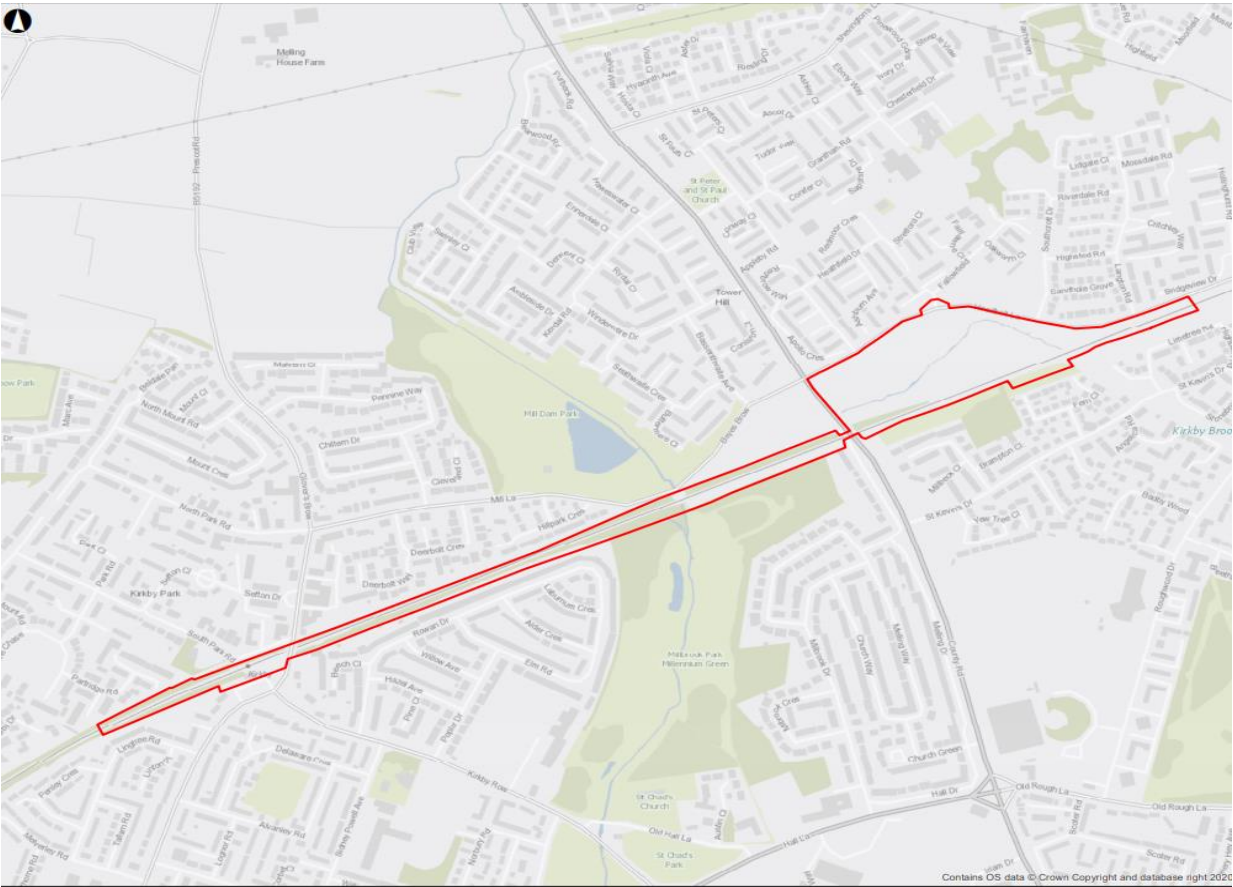
The extent of the proposed Scheme site is approximately 10 hectares (ha) and is shown in Figure 1. The site is divided into the two following areas:

- the station and car park (an area of 5.9 ha); and
- the railway corridor (an area of 4.1 ha).

The proposed station and car park is located in an area of undulating, amenity grassland and is also an area of Urban Greenspace/ Education Land, called Mercers Dell, as allocated by Knowsley Council's Local Plan. A Public Right of Way (PRoW) is located within the north-eastern corner of the area running southwards from Headbolt Lane, via a non-designated footpath, before heading south-east along the banks of Kirby Brook. The non-designated footpath bisects Mercers Dell connecting Headbolt Lane in the north east to the A506 County Road in the south-west. A series of existing bridges along the non-designated footpath provide crossings over Kirkby Brook. The amenity grassland is frequently used by dog walkers.

A detailed description of the proposed Scheme site is contained in ES Volume I, Chapter 2: Scheme Description.

Figure 1: Site location plan



1.2 The Proposed Scheme

The proposed station and car park comprises the following elements:

- a new station located on land at Headbolt Lane;
- a new 300 space car park and associated structures (signage, waiting shelters and car park lighting) and to service the new station;
- bulk supply point and substation to accommodate electrification of rail corridor upgrades and for the new station;
- new vehicular and pedestrian access including two footbridges over Kirkby Brook and a road bridge to access each section of the car park; and
- associated landscaping.

Works to the railway corridor comprises the following:

- railway line upgrade to a twin track and associated infrastructure to extend the Merseyrail electrification to the proposed station (including the extension of the existing third line electrification network and a new substation); and
- decommissioning works to the existing Kirkby Station.

Construction of the proposed Scheme is due to commence immediately following grant of planning permission and the proposed Scheme is anticipated to be fully operational in Q1 2023.

A detailed description of the proposed Scheme is contained in ES Volume I, Chapter 2: Scheme Description.

1.3 The Purpose and Structure of this Summary

In Knowsley Metropolitan Borough Council's (KMBC) Scoping Opinion it was agreed that population and health could be scoped out of the EIA, however, it was requested that a Health Impact Assessment be submitted with the planning application in pre-application comments provided by KMBC. After further consultation between Network Rail and KMBC it was agreed that a signposting document to where health is considered within the ES was acceptable.

This document comprises a signposting document to the sections of the Environmental Statement (ES Volume I: Main Report) that have considered health. It highlights the key environmental effects of the proposed Scheme which may have an impact on human health receptors in the area during both construction and operation phases.

Construction and operational impacts are defined as follows:

- construction impacts, temporary: temporary impacts that occur during the construction phase, such as construction traffic, noise and dust;

- construction impacts, permanent: permanent impacts that come about during the construction phase, such as the introduction of physical infrastructure; and
- operational impacts, permanent: impacts resulting from the operation of the proposed Scheme. It is considered that most operational impacts will be permanent.

Potential environmental impacts on human health during both the construction and operation phases of the proposed Scheme have been identified through the EIA process. These impacts are reported in the ES which has been submitted along with the planning application for the proposed Scheme. This document has been produced, upon request, to be read in conjunction with the ES and aims to summarise the environmental impacts on human health.

The summaries that follow look at potential human health impacts identified through the assessments undertaken in the ES Volume I: Main Report:

- Volume I, Chapter 4, Traffic and Transport;
- Volume I, Chapter 5; Air Quality;
- Volume I, Chapter 6, Noise and Vibration;
- Volume I, Chapter 8, Landscape and Visual Impact Assessment (LVIA); and
- Volume I, Chapter 10, Ground Conditions.

2 Health Impact Summary

2.1 Traffic and Transport

Chapter 4 of the ES outlines the potential impacts upon traffic and transport receptors as result of the proposed Scheme. Section 4.6.1 outlines the potential impacts and effects during construction. In relation to health there is the potential for very low adverse impacts upon pedestrian and cycle amenity due a reduction in ‘pleasantness’ of pedestrian and cycle routes; an increased perception of fear and intimidation due to a larger number of Heavy Goods Vehicles on the local road network; and increased likelihood of road accidents occurring during the construction period. The impacts are explained in more detail within Table 4.10 within the ES which states that none of the impacts lead to significant effects.

Section 4.6.2 outlines the potential impacts and effects during operation. A number of design features would reduce severance, as a result of the increased traffic flows, for station user and local residents particularly along Headbolt Lane which would help to mitigate local severance, such as access to Eastcroft Park Primary School. The impact upon such receptors would be very low adverse which would not be significant.

Increased volumes of traffic accessing the site via Headbolt Lane could adversely impact pedestrian and cycling amenity as well as driver delay, however, as previously stated, it is considered that the increase in traffic on Headbolt Lane due to the proposed Scheme is not significant.

Several improvements to the pedestrian network are proposed on Headbolt Lane and within the site as part of the new station, which cumulatively will reduce pedestrian delay. A local cycleway and cycle store are also proposed as outline in Section 4.6.2. It is considered that the proposed Scheme will have a beneficial impact on pedestrian delay on Headbolt Lane, which would have a moderate beneficial effect.

The increase in the volume of traffic, and particularly buses, travelling on Headbolt Lane as a result of the proposed Scheme could potentially increase fear and intimidation for pedestrians and cyclists. However, the proposed signalised crossing provision on all arms of the site access junction, along with the proposed uncontrolled crossing to the east of the site, will aid pedestrians on Headbolt Lane by providing safer and more frequent crossing points. Overall, there would be a minor adverse impact which would not be significant.

Further detail on operational impacts can be found within Section 4.6.2 of the ES.

2.2 Air Quality

Chapter 5 of the ES outlines the potential impacts upon air quality receptors as result of the proposed Scheme. Section 5.6.1 outlines the potential impacts and effects during construction. The main air quality receptors identified were the residential receptors within 20 m of the site boundary, of which there are between 10 and 100. Table 5.12 of the ES outlines that prior to mitigation there

would be a medium risk to human health from all construction related activities which could result in dust nuisance. However, through the implementation of the appropriate best practice mitigation measures as detailed in the outline CEMP (ES Volume III, Appendix 2A), there is likely to be a negligible effect from the dust-generating activities on site.

The air quality operational assessment within Section 5.6.2 of the ES states that there would be negligible changes to air quality (NO₂, PM₁₀ and PM_{2.5}) and therefore no risk to human health.

2.3 Noise and Vibration

Chapter 6 of the ES outlines the potential impacts upon sensitive noise and vibration receptors as a result of the proposed Scheme. Section 6.6.1 outlines the potential impacts and effects arising during the construction phase. Receptors considered for assessment are presented in in Volume II: Figures, Figure 6.1. Tables 6.14, 6.15 and 6.16 outline the predicted construction noise experienced by nearby sensitive receptors. These tables show that the only significant effects arising from construction noise are likely to occur during evening and weekends and night-time construction activities. These effects are only expected to be temporary in nature and will only last for the duration of construction works in those given times. Table 6.23 highlights that adherence to the CEMP and public liaison will be the primary focus of mitigation measures for effects arising from construction noise.

The noise and vibration operational assessment outlined in Sections 6.6.2 – 6.6.10 of the ES states that there would be no significant effects arising from the proposed Scheme experienced by nearby sensitive receptors and therefore no risk to human health.

2.4 Landscape and Visual

Chapter 8 of the ES outlines the potential impacts upon sensitive Landscape and Visual receptors as a result of the proposed Scheme. Section 8.7.1 outlines the potential impacts arising during the construction phase. In relation to health, construction activities will have a visual impact on sensitive visual receptors such as residential areas and footpath users.. The activity from construction machinery, movement and clustering of vehicles and workforce on site, as well as and changes to the landscape resulting from the changes to the landform to accommodate the car park and vegetation will substantially alter the appearance of the amenity greenspace and substantially change the ability for the local community to use the greenspace.

Section 8.7.1 also outlines the potential environmental impacts where visual amenity is concerned. Significant impacts are anticipated at sensitive visual receptors at residential properties and road users close to the proposed Scheme which may arise through the removal of vegetation, particularly trees, which will result in views of the construction of the proposed Scheme. This effect is considered significant but will be short term and temporary.

Section 8.7.2 outlines the potential impacts and effects during the operation phase of the proposed Scheme. The character of the Site will be transformed from an area of attractive and open, public amenity greenspace into a large area of car parking around the station and its associated infrastructure, this effect is considered significant and will be permanent during the whole lifecycle of the proposed Scheme as outlined in Table 8.4 of the ES. Operational visual effects are also assessed within Section 8.7.2 of the ES. Visual impacts arising from operation are similar to those experienced by human receptors during construction, the removal of vegetation means that the proposed Scheme will be visible to residential properties and road users close to the proposed Scheme. As a result, tree and shrub planting to screen components of the proposed Scheme is proposed to mitigate these significant effects, which, as can be seen in Table 8.4 would lead to these effects being non-significant at Year 15 of the proposed Scheme's lifecycle.

2.5 Ground Conditions

Chapter 10 of the ES outlines the potential impacts upon human receptors where Ground Conditions are concerned. Section 10.6.1 identifies the potential human health impacts during the construction phase of the proposed Scheme. Potential impacts to human health have been identified as exposure to contaminated dust and vapour experienced by construction workers through site excavation. There is also a potential risk to human health from ground gases especially in enclosed and confined spaces. However Section 10.6.1, current assessments contained in Table 10.10 and Appendix 10C all state that through the implementation of the measures outlined in the CEMP that any potential effect on human health during construction would be negligible.

Section 10.6.2 outlines the potential impacts upon human receptors during the operational phase of the proposed Scheme. The assessment has concluded that due no human contact with contamination pathways is expected and that there have been no significant ground gases recorded. Therefore, the effect during operation without mitigation is assessed to be negligible which is not considered significant.

2.6 Conclusion

The ES has considered the potential impacts resulting from the proposed Scheme in relation to traffic and transport, air quality, noise and vibration, landscape and visual amenity and ground conditions.

Potential impacts on health primarily arise during the construction phase of the proposed Scheme. These include nuisance impacts such as dust, construction noise and visual impacts. However, with the use of best practice construction methods, implemented through the CEMP, impacts to human health will be minimised as much as possible.

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