

## ◆ Acoustics and Vibration

### INTRODUCTION

1. Intermodal Logistics Park North Ltd. ('the Applicant') is promoting proposals for a new strategic rail freight interchange (SRFI) and associated development on land to the east of Newton-le-Willows, in the jurisdictions of St Helens, Wigan and Warrington Councils. An SRFI is a large multi-purpose freight interchange and distribution centre linked into both the rail and trunk road systems. SRFIs reduce the cost of moving freight by rail and encourage the transfer of freight from road to rail, thereby reducing carbon emissions and contributing to the UK's target to achieve net zero by 2050.
2. Under the Planning Act 2008, the proposals qualify as a Nationally Significant Infrastructure Project (NSIP). Accordingly, an application for a Development Consent Order (DCO) is to be made to the Planning Inspectorate (PINS), which will examine the DCO application on behalf of the Secretary of State (SoS) for Transport.
3. Before making a DCO application, an Environmental Impact Assessment (EIA) of the Proposed Development will be undertaken in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ('the EIA Regulations'). EIA is a process that provides the decision maker with sufficient information about the likely environmental effects of a project and is used to improve the environmental design of a development proposal. The first stage of this process was the submission of a request for a formal scoping opinion under Regulation 10 of the EIA Regulations.
4. The Applicant submitted an EIA Scoping Report to the Planning Inspectorate in October 2024. This outlined the work undertaken to date and sought advice from the Inspectorate on the likely significant effects of the Proposed Development and the topics that needed to be assessed as part of the Environmental Impact Assessment (EIA). A Scoping Opinion was received in December 2024 and this will be used to inform the EIA process for the Proposed Development. A summary of the main comments received and how the Applicant intends to address these are set out in the table below.

**Table 1 Scoping Opinion comments and responses**

<b>Inspectorate's Comments</b>	<b>Applicant's Response</b>
Vibration effects beyond 100m from construction activities are scoped out on the basis that there would not be any significant	The Applicant notes this comment.

<b>Inspectorate’s Comments</b>	<b>Applicant’s Response</b>
<p>effects beyond this distance. The Inspectorate agrees that this can be scoped out of the assessment.</p>	
<p>The Scoping Report seeks to scope out operational vibration from vehicles travelling along the highway network on the basis of that a smooth road surface is unlikely to be a source of significant vibration. Given this uncertainty at this stage of which roads in the local highway network are likely to be the main source of operational traffic and their condition, it is not agreed to scope this out at this stage.</p>	<p>The Applicant will provide details of which roads are predicted to carry operational traffic.</p> <p>The Applicant will provide an explanation of how the relevant roads from the surrounding road network would be maintained to prevent surface irregularities, which are the primary cause of vibration of this type, in the ES noise and vibration chapter (see Paragraph 8.104 and Table 8.10 of the Scoping Report).</p>
<p>Operational vibration from vehicles travelling along Parkside Link Road or new access roads are scoped out as this is a new road that would therefore be unlikely to generate vibration effects. The ES would also set out the measures that would be applied to ensure the surface was maintained to prevent irregularities.</p> <p>The Inspectorate agrees that provided evidence is supplied, this can be scoped out.</p>	<p>The Applicant notes this comment.</p>
<p>The ES should include an assessment of the proposed energy infrastructure, including operation of the battery storage and CHP plant, where these are included as part of the Proposed Development and where significant effects are likely to occur.</p>	<p>The Applicant will review the feasibility of undertaking predictions/assessment of noise from the types of plant listed as the EIA process progresses. However, it is considered unlikely that sufficient details will be available at the application stage to undertake a meaningful assessment.</p> <p>Therefore, the primary approach to addressing noise from these items will be as stated in the third bullet of Paragraph 8.112 of the Scoping Report, i.e., target</p>

Inspectorate’s Comments	Applicant’s Response
	noise levels will be defined based on the results of the baseline noise survey. The DCO will include a requirement for the assessment of such plant, once details are finalised, with reference to the target noise levels.

5. This topic paper outlines the approach to the assessment of the likely significant effects of the Proposed Development, with respect to noise and vibration. The main potential impacts that are anticipated to arise are:
  - construction and demolition noise and vibration from the DCO Site, as well as those which may be generated by any offsite highway works;
  - changes in road traffic noise on the surrounding road network during the construction and operational phases of the Proposed Development;
  - noise from operational activities at the Proposed Development (i.e., from HGV movements, loading/unloading and manoeuvres, freight trains being unloaded using reach stackers and/or gantry cranes); and
  - changes in railway noise and vibration from additional freight trains serving the Proposed Development, both on the national rail network and within the DCO Site itself.
  
6. In line with the EIA Regulations, the noise and vibration assessment must be compiled by appropriately qualified, experienced, and competent experts. The noise and vibration assessment will be undertaken by Vanguardia, who have extensive experience in undertaking EIA assessments for range of developments including residential, mixed use, commercial, industrial developments as well as entertainment venues. Our team has worked in both the public and private sector, and continues to provide technical advice to Working Groups, Government Departments and even to Parliament on matters relating to noise. They are recognised within the industry as having extensive experience in the field of acoustics.
  
7. Vanguardia’s lead acoustician for the Intermodal Logistics Park North Rail Freight Interchange (ILPN RFI) has 15 years’ experience of managing EIA projects, including experience on other consented SRFI NSIPs such as Northampton Gateway and East Midlands Gateway. Other members of the project team also have extensive experience on predicting and assessing the noise and vibration effects from High Speed 2.

**RELEVANT LAW, POLICY AND GUIDANCE**

8. The DCO application will be determined pursuant to the Planning Act 2008 and relevant

regulations, the National Networks National Policy Statement<sup>1</sup> (NPSNN, adopted 2024) and the National Planning Policy Framework (NPPF)<sup>2</sup>. Relevant local planning policy are material considerations.

### National Policy

9. For nationally significant road, rail and strategic rail freight infrastructure projects (as defined in the Planning Act 2008), the NPSNN sets out the relevant policy objectives against which the scheme is evaluated.
10. The noise and vibration section of the NPSNN (paragraphs 5.227 to 5.242) identifies the factors that will determine the likely noise and vibration impact, the requirements of the noise assessment, relevant prediction methodologies, mitigation of identified effects and decision-making criteria. It advises at paragraph 5.238 that *‘Applicants should consider opportunities to address noise issues associated with Important Areas as identified through the noise action planning process’*.
11. In terms of decision making, paragraph 5.239 of the NPSNN states that due regard should be given to:
  - the Noise Policy Statement for England (NPSE)<sup>3</sup>;
  - the NPPF; and,
  - the Government’s associated National Planning Practice Guidance on Noise (NPPG(N))<sup>4</sup>.
12. Paragraph 5.241 of the document indicates that development consent should not be granted unless the development meets the following aims, within the context of government policy on sustainable development:

*‘avoid<sup>5</sup> significant adverse impacts on health and quality of life from noise as a result of the new development;*

*mitigate and minimise other adverse impacts on health and quality of life from noise from the new development; and*

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<sup>1</sup> National Policy Statement for National Networks, Department for Transport (2024)

<sup>2</sup> Ministry of Housing, Communities & Local Government (2024) National Planning Policy Framework

<sup>3</sup> Noise Policy Statement for England, Defra (2010)

<sup>4</sup> Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities and Local.

<sup>5</sup> “Avoid” here does not mean a significant adverse effect cannot ever exist. Instead, it means make every effort so that significant adverse impacts do not occur. The hierarchy set out in the NPPG(N) confirms this to be the case. The reason is that the NPSE covers all sources and for historical legal reasons, there are certain circumstances (e.g., statutory nuisance legislation) where a significant adverse impact is lawfully allowed to occur.

*contribute to improvements to health and quality of life through the effective management and control of noise, where possible.'*

13. Regarding the definition of significant adverse effects, as referenced in the NPSNN, the NPPG(N) indicates that increasing noise exposure causes the significant observed adverse effect level (SOAEL) threshold to be crossed, above which there are two levels of adverse effect:
- A significant adverse effect – in line with policy, every effort should be made to avoid these effects through mitigation, but there are some circumstances in which they can occur. Decisions must take account of the economic and social benefit of the activity causing or being affected by the noise; and
  - An unacceptable adverse effect – the impacts on health and quality of life are such that these effects should be prevented from occurring, regardless of the benefits of the activity causing the noise.

### Local Policy

14. The draft Order limits are located within St Helens Borough Council, Wigan Council and Warrington Borough Council administrative areas.
15. The applicable local policy documents and the policies of potential relevance to the noise and vibration assessment are set out below. In addition to identifying the applicable policy, a short summary of the parts of the policy which are relevant to noise and/or vibration has been included for context.

### St Helens Borough Council

#### *St Helens Borough Local Plan up to 2037*

16. The relevant Statutory Development Plan is the St Helens Borough Local Plan up to 2037 (adopted in July 2022). The policies of relevance to noise and vibration from the Proposed Development are:
- Policy LPA06: Transport and Travel – seeks to minimise noise impacts from transport sources and requires a Transport Assessment or Transport Plan to be produced for any non-residential development which generates significant transport movements.
  - Policy LPA09: Parkside East – applies to an area within the St Helens administrative area allocated for use as an SRFI as well as B2 (general industrial) and B8 (storage and distribution) uses. The policy states that the development should be designed to minimise impacts on residential amenity. Part of the Proposed Development occupies this allocated area.
  - Policy LPA10: Parkside West – applies to the Parkside West development and its allocation for B2 and B8 uses. In relation to noise the policy indicates the development should include suitable measures to control the impact of traffic or uses within the site, on residential amenity and noise.

- Policy LPD01: Ensuring Quality Development – states that noise and vibration from new development should be mitigated and minimised to acceptable levels.

**Wigan Council**

**Wigan Local Plan Core Strategy 2013**

17. The Wigan Local Plan Core Strategy 2013 has been partially superseded by the Greater Manchester Places for Everyone Plan; however, saved Policy CP17 Environmental Protection still remains relevant to the Proposed Development. This policy ensures that new development is planned and designed so that it does not have an unacceptable adverse impact on amenity and quality of life.

**Wigan Unitary Development Plan 2006**

18. The Wigan Unitary Development Plan 2006 has also been partially superseded by the Greater Manchester Places for Everyone Plan; however, saved policy EV1B Pollution is considered relevant to the noise and vibration assessment. This policy indicates that development which would result in unacceptable levels of noise will not be permitted.

**Greater Manchester Places for Everyone, 2024**

19. The Greater Manchester Places for Everyone 2024 is a joint development plan of nine of the ten Greater Manchester districts (Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford and Wigan). The relevant policies in respect of noise and vibration are:
  - Policy JP-C5: Streets for All – seeks to mitigate the impacts of noise pollution from road transport.
  - Policy JP-C8: Transport Requirements of New Development – requires new development to be located and designed to encourage sustainable transport use to reduce the negative effects of car dependency. It also requires that Construction Management Plans are used to mitigate construction logistics and environmental impacts including noise.

**Warrington Borough Council**

**Warrington Local Plan, 2023**

20. The relevant Statutory Development Plan is the Warrington Local Plan covering the period of 2021/22 to 2038/39 (adopted in December 2023). The policies of relevance to noise and vibration from the Proposed Development are:
  - Policy ENV8 - Environmental and Amenity Protection – part of this policy indicates that significant noise effects that cannot be mitigated will not be permitted.
21. In addition to the local policy listed above, any applicable Supplementary Planning Guidance or Documents produced by the Local Authorities will be taken into consideration where

relevant to the Proposed Development and its potential noise and vibration effects.

### Legislation

22. The most relevant legislation in the context of the noise and vibration assessment is listed below:
- Noise Insulation Regulations, 1975 (as amended 1988);
  - Noise Insulation (Railways and Other Guided Transport Systems) Regulations, 1996.

### Other relevant guidance

23. In addition, the assessment will take into consideration a number of British Standards and other guidance documents. These include:
- Association of Noise Consultants (ANC) Guidelines: Guidelines: Measurement & Assessment of Groundborne Noise & Vibration (ANC Guidelines), 2020;
  - Calculation of Road Traffic Noise (CRTN), 1988;
  - Calculation of Railway Noise (CRN), 1995;
  - Design Manual for Roads and Bridges (DMRB), LA111 Noise and Vibration May 2020 Revision 2;
  - Defra Additional Railway Noise Source Terms for 'Calculation of Railway Noise 1995';
  - BS 4142:2014+A1:2019 Method for rating and assessing industrial and commercial sound;
  - BS 5228:2009+A1:2014 (Parts 1 and 2) Code of Practice for Noise and Vibration Control on Construction and Open Sites;
  - BS 8233:2014 Guidance on sound insulation and noise reduction for buildings;
  - BS 6472-1:2008 Guide to evaluation of human exposure to vibration in buildings. Vibration sources other than blasting;
  - ISO 9613-2:2024 Acoustics – Attenuation of sound during propagation outdoors Part 2: Engineering method for the prediction of sound pressure levels outdoors;
  - World Health Organisation, Guidelines for Community Noise (1999); and
  - IEMA Guidelines for Environmental Noise Impact Assessment (2014).

## SITE DESCRIPTION

### Site location

24. The DCO Site is located on the eastern extent of Newton-le-Willows in a flat, agricultural landscape. The DCO Site is located within the local authority areas of St Helens Borough Council, within the Liverpool City Region Combined Authority; Wigan Council, within the Greater Manchester Combined Authority; and Warrington Borough Council.
25. The DCO Site is split broadly in two sections:
  - the Main Site – land to the east of the M6 motorway, to the south of the Chat Moss Line and to the west of Winwick Lane incorporating the triangular parcel of land located to the west of Parkside Road and to the north of the Chat Moss Line;
  - the Western Rail Chord – land to the west of the M6 motorway, which bisects the DCO Site in a northwest southeast orientation, and to the east of the West Coast Mainline.
26. The majority of the land contained within the Main Site is bound to the north by the Chat Moss Line (Liverpool-Manchester railway line), to the west by the M6 motorway and to the southeast by Winwick Lane (A579). The Main Site south of the Chat Moss Line is approximately 198 hectares in size. The Highfield Moss Site of Special Scientific Interest (SSSI) is also adjacent to the north of the DCO Site, which is described in more detail below. A number of other uses exist at the Main Site currently, including:
  - Kenyon Hall Airfield, which is a small airfield used by the Lancashire Aero Club for recreational flying of small propeller planes;
  - Warrington Model Flying Club, which is a model club for radio controlled model aircraft; and
  - Highfield Farm, which is comprised of two agricultural/residential buildings set within a curtilage surrounded by agricultural fields.
27. The majority of the Main Site is comprised of agricultural fields used for arable crops, with some small patches of woodland in the east. There are also a number of residential properties, farmsteads and a commercial yard within the Main Site. Parkside Road (A573) runs through the DCO Site to the south before passing over the M6 where it provides access to Parkside Link Road West.
28. The triangular parcel of land located to the north of the Chat Moss Line and to the east of Parkside Road also forms part of the Main Site.
29. The Western Rail Chord of the DCO Site is approximately 12 hectares in size and is bordered to the west by the West Coast Mainline railway, to the north by the Chat Moss Line and to the east by the Parkside West Development. The Western Rail Chord is comprised of safeguarded land for the rail-turn head to enable trains to be serviced to and from the North and the East.



30. The Western Rail Chord is comprised of scrub land and areas of woodland which are set within the context of an area of redevelopment with commercial uses proposed, which is known as Parkside West, and is currently being promoted through the Town and Country Planning Act process.

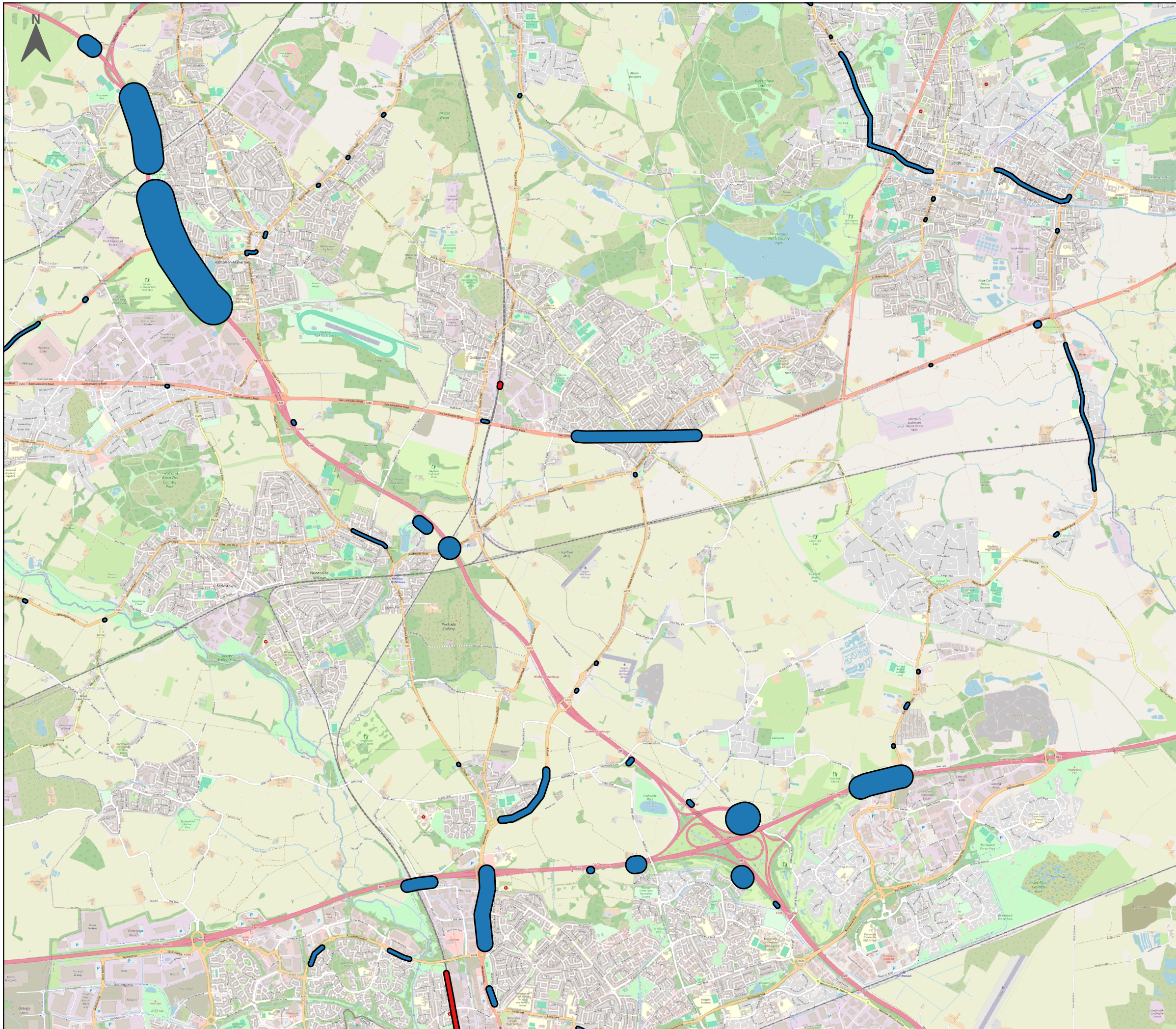
### Baseline environment

31. The existing noise environment in the area and at the nearby sensitive receptors is affected by:
- road traffic noise from the M6, M62, A49, A572, the A580, Newton Road, Parkside Road, Kenyon Lane and Winwick Lane;
  - railway noise from the West Coast Mainline and the Chat Moss Line; and
  - there will also be contributions from the use of the Kenyon Hall Airfield and the Warrington Model Flying Club for recreational purposes.
32. In addition, there are several noise Important Areas (IAs) in the vicinity of the Proposed Development (Figure 1). These areas are identified through national strategic noise mapping and indicate hotspot locations where the highest 1% of noise levels from road and railway sources can be found. They are intended to provide a framework for future investigation, relating to how the noise levels could be reduced. The NPSNN states that '*Applicants should consider opportunities to address noise issues associated with IAs*'; such opportunities will be considered as the Proposed Development progresses.
33. The existing sources of vibration are primarily trains travelling on the two railway lines: the Chat Moss Line which runs east to west and the West Coast Mainline which runs north to south.
34. The future baseline noise and vibration environment is likely to continue to be governed by the dominant sources of noise and vibration (i.e., road traffic and railway noise). The assessment of noise and vibration effects will consider the future road and rail forecasts as far as practicable, including the contribution from committed developments. Furthermore, some receptors will also be affected by noise from the Parkside West development.
35. Noise and vibration surveys have been undertaken to determine the existing baseline environment in the areas immediately surrounding the DCO Site. The surveys were conducted at locations considered to represent the closest noise sensitive receptors. It is not practicable to undertake baseline monitoring at every receptor; therefore, monitoring locations were selected to represent a cluster of receptors with a similar level of exposure.
36. The monitoring positions for the noise and vibration surveys are shown in Figure 2 and 3. Positions denoted with:
- 'LT' indicate unattended noise survey locations (long-term) where monitoring was undertaken over a period of at least one week (including a weekend);
  - 'ST' indicate short-term attended survey locations which will be correlated with the

long-term positions; and

- 'V' indicate locations where short-term attended vibration measurements were undertaken.

37. The surveys commenced on 9th September 2024 and ended on 8th October 2024 and were conducted following the principles set out in BS 7445-2:1991, BS 4142:2014+A1:2019 and BS 6472-1:2008.

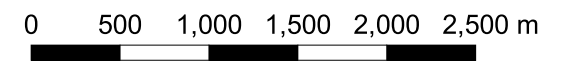


# INTERMODAL LOGISTICS PARK (ILP) NORTH

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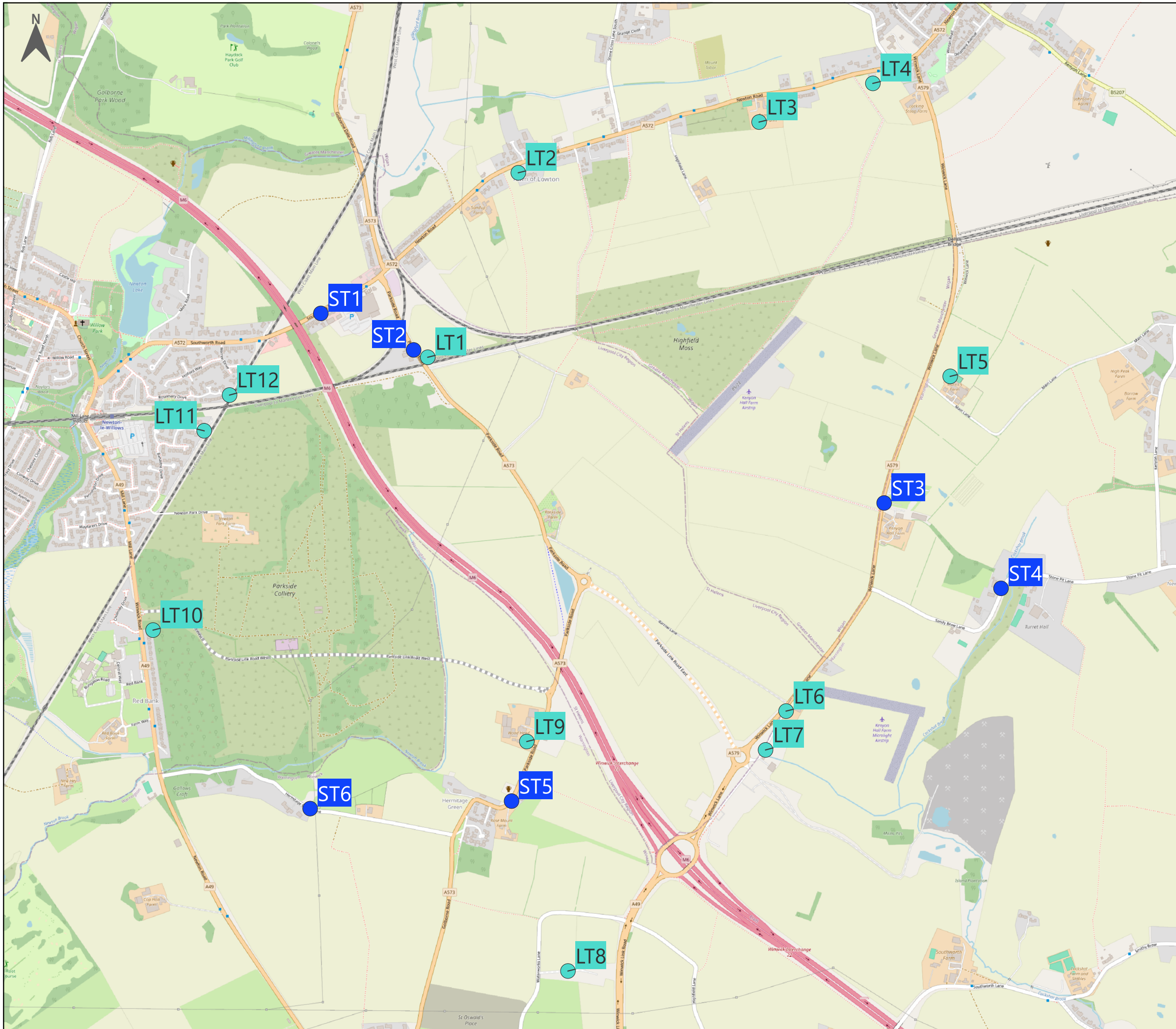
## Key:

- Noise Important Areas (ROAD)
- Noise Important Areas (RAIL)



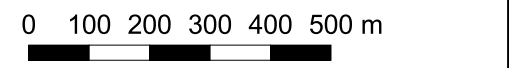
**FIGURE 1:  
Noise Action Planning Important Areas**

APFP Regulation:	N/A
Document Ref:	N/A
Drawing Number:	0061210-0003
Drawing Status:	INFORMAL CONSULTATION
Revision:	R02
Drawn by:	EL
Approved by:	AT



## INTERMODAL LOGISTICS PARK (ILP) NORTH

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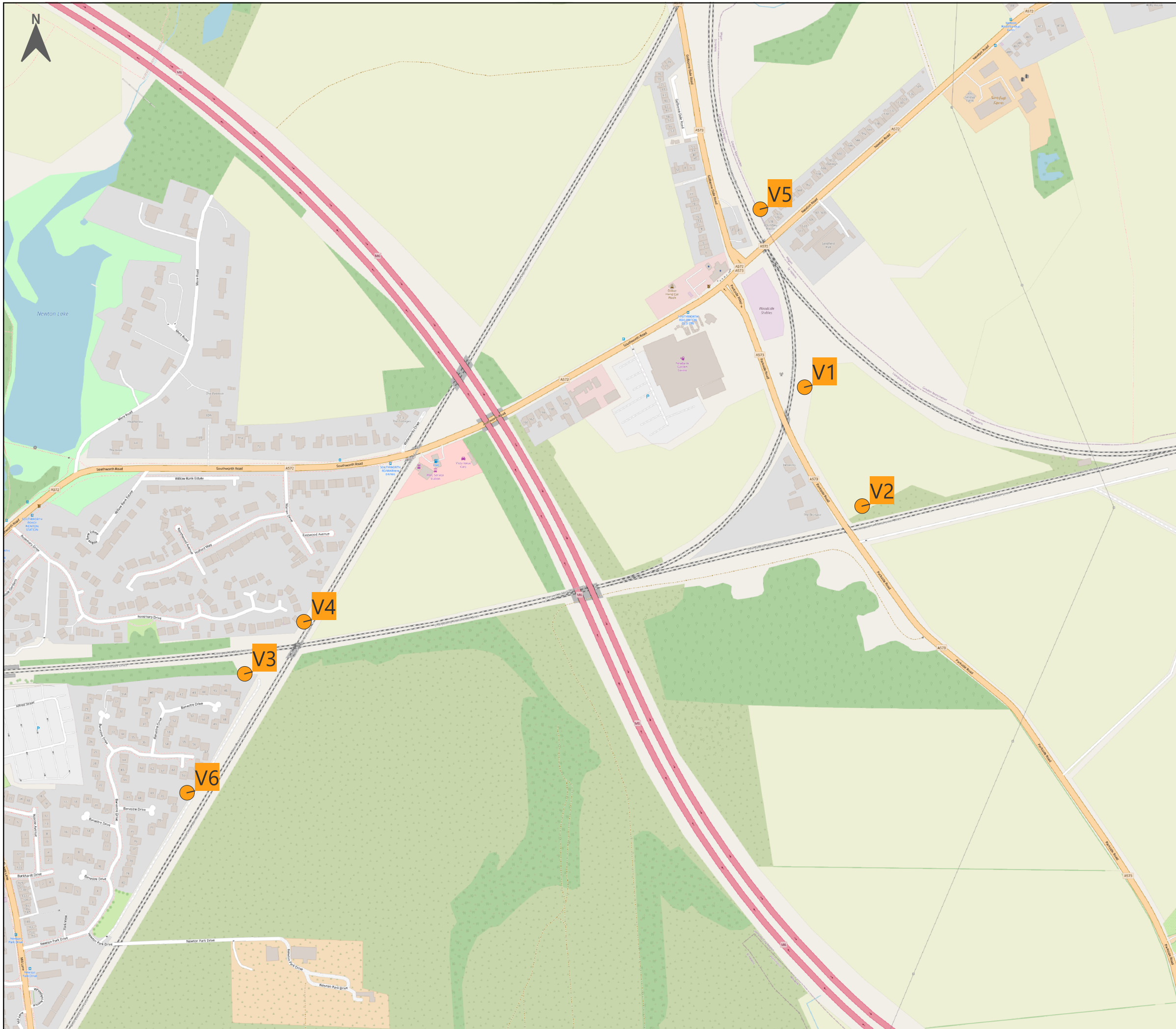


- Key:**
- Long Term Monitoring Locations
  - Short Term Monitoring Locations



**FIGURE 2:  
INITIAL SURVEY PLAN - NOISE**

APFP Regulation:	N/A
Document Ref:	N/A
Drawing Number:	0061210-0001
Drawing Status:	INFORMAL CONSULTATION
Revision:	R03
Drawn by:	EL
Approved by:	AT

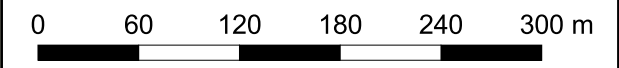


## INTERMODAL LOGISTICS PARK (ILP) NORTH


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### Key:

 Vibration Monitoring Locations



**FIGURE 3:  
INITIAL SURVEY PLAN - VIBRATION**

APFP Regulation:	N/A
Document Ref:	N/A
Drawing Number:	0061210-0002
Drawing Status:	INFORMAL CONSULTATION
Revision:	R03
Drawn by:	EL
Approved by:	AT

## DEVELOPMENT DESCRIPTION

38. The Proposed Development is a Strategic Rail Freight Interchange (SRFI) and associated development comprising:
- provision of a rail terminal serving up to 16 trains per day, including ancillary development such as container storage, cranes for the loading and unloading of shipping containers, Heavy Goods Vehicle (HGV) parking, rail control building and staff facilities;
  - a rail turn-back facility within the Western Rail Chord;
  - up to c.767,000 square metres (m<sup>2</sup>) (gross internal area) of warehousing and ancillary buildings with a total footprint of c.590,000m<sup>2</sup> and up to c.177,050m<sup>2</sup> of mezzanine floorspace, subject to ongoing design and market assessment, comprising a mixture of units with the potential to be rail-connected, rail served and additional units;
  - new road infrastructure and works to existing road infrastructure;
  - provision of overnight lorry parking for users of the SRFI;
  - new energy centre and electricity substations, including central battery storage and potential provision of central Combined Heat and Power (CHP) units to augment the grid supply in the case of demand exceeding instantaneous firm and variable supplies;
  - provision of photovoltaics and battery storage on site;
  - strategic landscaping and open space, including alterations to public rights of way and the creation of new ecological enhancement areas;
  - demolition of existing on-site structures (including existing residential dwellings / farmsteads and commercial premises);
  - potential relocation of the Huskisson Memorial; and
  - earthworks to regrade the DCO Site to provide appropriate access, connections to the railway, development plots and landscape zones.

## OUR APPROACH TO THE ASSESSMENT

### Introduction

39. As identified in the introduction of this Topic Paper, the Proposed Development is anticipated to generate noise and vibration during the construction and operational phases of the development from several different sources, e.g., construction noise and vibration, road traffic noise, railway noise and vibration, and from operational activities at the SRFI.
40. The noise levels from each source will be predicted using 3D noise modelling software which

considers the topography of the DCO Site and the surrounding area, the surrounding highway network and the locations of the receptors. The model will use the relevant prediction methodology and guidance for each type of source.

41. Vibration effects will not be modelled but will be calculated using the relevant prediction methodologies and guidance for construction and operational effects.
42. The assumptions made for each element of the predictions and subsequent assessment will be clearly documented in the supporting technical appendices to the Preliminary Environmental Information Report (PEIR), an early assessment of potential significant effects produced as part of pre-application consultation, and the ES Chapter.

### Receptors

43. The assessment of noise and vibration effects is generally receptor led. It is not practicable to undertake an assessment at every individual receptor and therefore as is standard practice, a sample of receptors will be selected for the assessment. A sample of representative receptors are selected based on them being representative of other receptors in the same area and reflecting the worst case (i.e., those which are most exposed to noise from the development). As the effects of noise and vibration typically reduce with distance from the source, this provides a robust basis for the assessment.
44. The main sensitive receptors likely to be affected by the Proposed Development are those residential properties or natural (ecological) features close to the DCO Site, as well as receptors close to the roads along which the development traffic will travel or that are in proximity to any proposed highway works.
45. The specific receptor locations and the sources of noise which will be assessed at each receptor will be identified in due course as the modelling progresses enabling identification of the worst affected receptors. The impacts at other receptors located at a greater distance from the DCO Site or any highway works will be lower than at the receptors considered in the assessment.
46. It is anticipated that the nearest sensitive receptors to the DCO Site are residential dwellings located along:
  - Southworth Road/Newton Road (A572) north of the DCO Site;
  - Winwick Lane (A579) east of the DCO Site;
  - Parkside Road (A573), both those located north of the Chat Moss Line on the east of the M6 and those to the west of the M6 as the road travels towards Hermitage Green;
  - Mill Lane/Winwick Road (A49) – due to potential effects from traffic and the Western Rail Chord;
  - Banastre Drive and Rosemary Drive – due to potential effects from railway noise and vibration; and

- Hermitage Green Lane – due to potential noise effects from the Western Rail Chord and link road.
47. This list is not exhaustive – specific receptor locations will be identified as the assessment progresses and agreed with St Helens Borough Council, Wigan Council and Warrington Borough Council.
48. Ecological receptors at the Highfield Moss SSSI will be considered. It is understood the site is designated primarily for the habitat and flora that are present. At the time of writing, the ecologist for the Proposed Development has not identified any species which are particularly sensitive to noise. Suitable information will be provided to the ecologist for the Proposed Development to inform their assessment of the potential effects on ecological receptors.
49. The Huskisson Memorial, which is Grade II listed, is not considered as a sensitive receptor for noise as there is no current public access.

### Study Area

50. As discussed above, the noise and vibration assessment will generally follow a receptor led approach, focusing on the most affected receptors. The specific receptor locations will be identified as the assessment progresses; at this stage it is not possible to identify which receptors would be most affected by the Proposed Development.
51. However, regarding the study area, there are some distance related criteria for certain impacts and effects which will be taken into account. These are discussed below.
- Construction vibration – DMRB indicates a study area of 100 m from the closest construction activity with the potential to generate vibration is normally sufficient;
  - Operational vibration from additional movements on mainline rail network – as for construction vibration, the study area will be limited to receptors within 100 m of the rail line. The longitudinal extent of the study area will be up the point where the freight trains servicing the Proposed Development join the West Coast Mainline, and a similar length along the Chat Moss line;
  - Construction noise from highway works – DMRB indicates a study area of 300 m from the closest construction activity is normally sufficient;
  - Operational noise from highway works – DMRB indicates this should be considered within 600 m of new road links or links physically changed or bypassed by the Proposed Development and within 50 m of other road links with the potential to experience a change in the basic noise level (BNL) of more than 1.0 dB(A) as a result of the Proposed Development. This study area also covers the requirements of the Noise Insulation Regulations 1975; and
  - Operational noise from additional movements on mainline rail network – the Noise Insulation (Railways and Other Guided Transport Systems) Regulations 1996 indicate a



distance of 300 m from the nearest running rail. As for operational vibration, the longitudinal extent of the study area along the line will be up the point where the freight trains servicing the Proposed Development join the West Coast Mainline, and a similar length along the Chat Moss line.

### Approach to the Assessment

52. In general, the approach to the assessment used for each type of noise or vibration source is different in terms of how the potential noise or vibration impact is predicted and how the effects are assessed. Consequently, the significance of noise and vibration effects is not determined by a matrix which only considers the sensitivity of the receptor and the magnitude of change/impact. The approach adopted and the rationale behind it is explained below.
53. The implementation of government policy on noise primarily requires the determination of whether the impact is likely to cause a significant adverse effect or an adverse effect. The corresponding thresholds for these are defined as:
- Significant Observed Adverse Effect Level (SOAEL), and the
  - Lowest Observed Adverse Effect Level (LOAEL).
54. Whilst the term ‘level’ is used, the definition of these thresholds can take account of not only the noise level, but the number of times it occurs, when it occurs and the sensitivity of the receptor experiencing the noise impact. Consequently, as stated in the Noise Policy Statement for England (NPSE) in relation to the SOAEL:
- ‘It is not possible to have a single objective noise-based measure that defines SOAEL that is applicable to all sources of noise in all situations. Consequently, the SOAEL is likely to be different for different noise sources, for different receptors and at different times.’*
55. Therefore, the thresholds for LOAEL and SOAEL for each noise and vibration source are set by the assessor, based on prevailing evidence regarding the impact of that source on the relevant receptors. They might reflect what has been used elsewhere, but should not be used simply because they have been used elsewhere – a tailored approach is required. The relevant LOAEL and SOAEL criteria for each noise and vibration source will be set out within the PEIR and ES Chapter. These will typically be set for residential receptors as they generally have the highest sensitivity of all receptors being assessed. Where a receptor is of lower sensitivity, this would usually warrant higher threshold values for the LOAEL and SOAEL.
56. Across the NPSNN, NPSE and NPPF national policy documents, the requirements relating to mitigation are the same:
- effects above SOAEL (i.e., significant adverse effects) are to be avoided, in the context of government policy on sustainable development; and
  - effects above LOAEL but below SOAEL (i.e., adverse effects) are to be mitigated and reduced to a minimum, in the context of government policy on sustainable development.

57. The NPSE explains that while all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life, that does not mean that such adverse effects cannot occur.
58. The approach to the prediction and subsequent assessment of impacts and significance of effects for each element of the assessment will be detailed in the PEIR and ES Chapter.

### Consultation to date

#### *St Helens Borough Council*

59. A meeting was held between Vanguardia and St Helens Borough Council's (SHBC) Scientific Officer for Noise and their Team Leader on the 6th August 2024. During the meeting, a brief introduction to the Proposed Development and overview of the DCO process was given. An outline of the anticipated scope of the noise and vibration assessment was also discussed. This was then followed by a discussion of the approach that would be undertaken for the baseline noise and vibration surveys.
60. Following this meeting, the indicative baseline survey locations and an overview of the measurement methodology was sent by email to the officers. A response was received from the Scientific Officer for Noise on 21st August 2024 indicating that they had reviewed the documents and were in agreement with the survey proposals and that they represented all relevant receptors.
61. A further meeting was held with SHBC on 28<sup>th</sup> November 2024 to discuss the minor amendments to the baseline survey proposals which occurred when on site, how the baseline data was being processed and the overall approach to the assessment as set out in the Scoping Report.
62. The minor amendments to the baseline survey methodology included:
  - at location LT5, the meter suffered a power failure after 8 days and therefore was redeployed between 24<sup>th</sup> September and 8<sup>th</sup> October 2024 predominantly to capture baseline conditions under a broadly easterly wind direction.
  - at location LT8, the meter was tampered with and moved and consequently lost power after 1 day. On reviewing the location and the potential risk of redeployment and further damage, the view was taken that other nearby monitoring locations and the short-term measurements would be sufficiently representative of this location.
  - originally it was intended that all vibration measurements would be attended short term measurements. However, equipment was installed at each location for a minimum period of 15 hours. Attended observations of train passbys were recorded at the start of the measurements and verified against real time trains logs of passbys.
63. During the 28<sup>th</sup> November 2024 meeting, it was confirmed that the Scoping Report had been reviewed by SHBC and was in line with what would be expected for this type of development. There were no points which required further discussion at this time.

**Wigan Council and Warrington Borough Council**

64. A meeting was held on 27<sup>th</sup> November 2024 with officers from Wigan Council and Warrington Borough Council to discuss the DCO Process, the Proposed Development and wider context, the baseline surveys and the proposed approach to the assessment (as set out in the Scoping Report).
65. Both Authorities were content with the baseline surveys that had been conducted, the anticipated effects of the development and the approach to the assessment set out in the Scoping Report. One area that was flagged by Warrington, is that there is not yet information relating to where the various components of the Proposed Development would be which may affect the potential impacts from noise and vibration. This was discussed and it was explained that the design of the scheme is still evolving, however once further information was available and parameters fixed, this information would be shared along with how we were using those parameters to undertake a robust assessment of the potential impacts and effects. From Warrington's perspective one of the key points of concern was vehicles travelling along the roads to access the site which are in close proximity to existing noise sensitive receptors.
66. Both Councils have submitted their responses to the Scoping Report and were generally satisfied with the proposed approach to the assessment.

**LIKELY MAIN EFFECTS OF THE PROPOSALS**

67. At the time of writing, no predictions or assessment work has been undertaken regarding the potential effects arising from the construction or operational phases of the Proposed Development. This is predominantly because the scheme design is still evolving, and insufficient information is available to make a quantitative assessment. An indication of the likely main effects of the proposals is provided below based on experience of similar types of developments.

**Construction Phase**

68. The Proposed Development is anticipated to potentially give rise to the following effects during the construction phase of the project:
- demolition and construction noise associated with the Proposed Development affecting receptors surrounding the DCO Site. This would comprise all works within the draft Order Limits, including: warehousing, the rail turnback track, additional track and the RFI terminal itself;
  - construction noise from highway works/highways mitigation works on the local road network affecting receptors in the area surrounding those works; and
  - construction traffic noise generated from vehicles travelling to and from the DCO Site affecting receptors on the surrounding road network.
69. Demolition and construction vibration associated with the DCO Site or any highway works will

be considered where vibration generating activities will occur within 100 m of sensitive receptors. At greater distances from the sensitive receptors, vibration generating activities would not be expected to give rise to any adverse or significant adverse effects and therefore they would not require further consideration and would be scoped out of the assessment.

### Operational Phase

70. During the operational phase, the Proposed Development is anticipated to potentially give rise to the following effects:
- changes in road traffic flows and resulting noise levels on the highway network around the DCO Site;
  - noise from HGVs serving the Proposed Development travelling on the internal roads within the DCO Site;
  - noise and vibration from additional freight trains serving the Proposed Development on the West Coast Mainline and the Chat Moss Line;
  - noise and vibration from freight trains serving the Rail Terminal travelling within the DCO Site, potentially including noise from wheel squeal on tight radii bends;
  - noise from loading and unloading activities associated with the Rail Terminal, which may involve use of gantry cranes and reach stackers to move freight containers;
  - noise from HGVs and other operational activities at the DCO Site, such as manoeuvring, loading and unloading at the proposed warehouses and Rail Terminal; and
  - mechanical services plant noise associated with the warehousing at the DCO Site.
71. It is not anticipated that the Proposed Development would give rise to any significant vibration effects from HGVs using new access roads or the Parkside Link Road, as these would be newly surfaced, smooth and free of irregularities which could otherwise induce vibration. Operational vibration from new roads is scoped out in DMRB as a maintained road surface will be free of irregularities and therefore it will not have the potential to give rise to significant adverse effects. Therefore, operational vibration from vehicles travelling on the Parkside Link Road and new access roads is proposed to be scoped out of the assessment. Details will be provided on how these roads would be maintained.
72. Regarding road traffic on the surrounding road network giving rise to ground borne vibration, it is generally rare that this would result in perceptible levels of vibration inside dwellings or other sensitive receptors. The main cause of this type of vibration is vehicles passing over irregularities in the road surface rather than as a direct result of any change in traffic volume on the surrounding highway network. As such, it is proposed that specific assessment of this can be scoped out of the assessment, on the basis that details of which roads are predicted to carry operational traffic are provided, as well as an explanation of how the relevant elements of the surrounding road network will be maintained to prevent irregularities and

potential vibration issues arising.

### PROPOSED APPROACH TO MITIGATION

73. For the noise and vibration assessment, mitigation will be required for any significant effects to avoid them as far as practicable. In addition, for effects which are not significant but are adverse, i.e., they lie between the LOAEL and the SOAEL, reasonable steps should be taken to mitigate and minimise such effects, in the context of government policy on sustainable development (as set out in the NPSNN and NPSE).

#### Construction Phase

74. Any construction impacts will be temporary and will be managed using Best Practicable Means (BPM). There will also be a framework Construction Environmental Management Plan (CEMP) which will set out the measures that will be undertaken to monitor, mitigate and manage construction noise and vibration (among other potential effects) and a Construction Traffic Management Plan (CTMP).

#### Operational Phase

75. At the time of writing, specific mitigation measures have not been identified; however, opportunities to incorporate embedded mitigation will be explored as the proposals evolve. The type of embedded mitigation measures that will be considered include following good acoustic design principles, where practicable, this could include:
- Acoustic bunding;
  - Acoustic barriers;
  - Layout and orientation of buildings within the DCO Site; and
  - Alignment of site roads.
76. Additional mitigation measures will be considered where required and will include the use of on-plot mitigation such as barriers and enclosures, and where there are no other viable solutions, there is a potential that sound insulation packages may be offered to receptors.

### NEXT STEPS

77. At present, the data collected from the baseline noise and vibration surveys is being processed to identify the prevailing levels of noise and vibration exposures at each monitoring location. We will continue to engage with the relevant Local Authority Officers regarding the conclusions of the surveys and whether there are any concerns with the data set which needs to be addressed.
78. Further work is programmed to advise on the ongoing design and mitigation of the development proposals to maximise the use of inherent mitigation to minimise the potential noise and vibration impacts of the scheme.

79. Once sufficient information is available, predictions will be undertaken of the noise and vibration arising from the various sources which require consideration. This will include the creation of a 3D noise model, initial development of which will commence in the first quarter of 2025. The resulting impacts will be assessed to determine the significance of the effects. Mitigation measures will be targeted to avoid significant adverse effects as well as to mitigate and minimise adverse effects in the context of government policy on sustainable development.
80. This topic paper forms part of the material available for the informal consultation that is taking place between 27 January 2025 and 21 March 2025. Should you wish to comment on this paper or any other matters related to the Proposed Development you can respond to the informal consultation via:
- ILP North website – [www.tritaxbigbox.co.uk/our-spaces/intermodal-logistics-park-north](http://www.tritaxbigbox.co.uk/our-spaces/intermodal-logistics-park-north)
  - Email [ilpnorth@consultationonline.co.uk](mailto:ilpnorth@consultationonline.co.uk)
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