
NORTH LONDON WASTE AUTHORITY
NORTH LONDON HEAT AND POWER
PROJECT

ENVIRONMENTAL STATEMENT:
VOLUME 2 APPENDICES 10.1 AND 10.2

AD06 .02

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ENVIRONMENTAL STATEMENT:
VOLUME 2 APPENDIX 10.1
TRANSPORT ASSESSMENT
METHODOLOGY

AD06 .02

North London Waste Authority
**North London Heat and Power
Project**

Environmental Statement
Volume 2 Appendix 10.1
Transport Assessment
Methodology

AD06.02

The Planning Act 2008 The Infrastructure Planning
(Applications: Prescribed Forms and Procedure)
Regulations 2009 Regulation 5 (2)(a)

Issue

October 2015

Arup

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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north london waste authority

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1 Transport Assessment Methodology

1.1 Introduction

- 1.1.1 This appendix sets out the methodology for assessing the likely significant effects of the Project on transport.
- 1.1.2 The assessment presented in Vol 2 Section 10 of the Environmental Statement (ES) draws on the data presented in, and the conclusions of, the Transport Assessment (TA) which is appended at Vol 2 Appendix 10.2 of the ES.
- 1.1.3 The transport-related environmental effects considered in this assessment have been broadly categorised as follows:
- a. effects on road users in terms of delay due to route changes or changes in traffic flow conditions on routes ('road users' would include cars, motorcycles, cycles, buses, taxis and commercial vehicles) and/or road safety;
 - b. effects on public transport users due to changes in demand or provision;
 - c. effects on pedestrians due to new or diverted routes or changes in pedestrian volumes, including a consideration of delay, amenity, severance and road safety;
 - d. effects on cyclists due to changes to the local cycle network or to cyclist volumes, including a consideration of delay, amenity, severance and road safety; and
 - e. effects on equestrians due to changes to local equestrian routes, including a consideration of delay, amenity, severance and road safety;
- 1.1.4 This section sets out the methodology used to determine the effects of the Project on each of these receptor groups in transport terms. The assessment has not included effects on parking or users of the River Lee Navigation because all parking would be on the Edmonton EcoPark site and there would be no additional trips on the river during construction or operation of the Project. Effects are assessed for the various stages associated with the Project:
- a. construction (Stages 1-3 of the Project);
 - b. operation (Stages 1-4 of the Project);
 - c. decommissioning; and
 - d. effect of the Project in combination with other developments close to the Application Site (i.e. cumulative effects).
- 1.1.5 This appendix is divided into the following parts:
- a. engagement – describing a summary of comments included in the Scoping Opinion and received on the Preliminary Environmental Information Report (PEIR) and through further stakeholder engagement and how these comments have been addressed;

- b. legislation and guidance – detailing requirements of the relevant National Policy Statements (NPS), how these have been addressed and additional guidance relevant to the assessment;
- c. methodology for establishing baseline conditions; and
- d. methodology for the assessment of construction, operation decommissioning and cumulative effects.

1.2 Engagement

- 1.2.1 The Scoping Report recommended that transport be scoped out from the Environmental Impact Assessment (EIA). The Scoping Opinion did not however agree that the provision of the TA alone would fulfil the information required to assess the significant effects of transport and traffic on the environment. Based on the Scoping Opinion, transport has been scoped into the EIA to assess the transport effects on environmental receptors.
- 1.2.2 Stakeholder engagement on transport has been undertaken with Transport for London (TfL) and the Greater London Authority (GLA), the London Borough of (LB) Enfield, the Highways Agency (HA), the Canal and River Trust (CRT), Sustrans and Network Rail.
- 1.2.3 Key issues raised included the scope and methodology of the TA, ensuring the ‘busiest case scenario’ was assessed and the level of detail of the analysis of trip generation calculation, the need to explore the potential to make use of water transport, and the need for Road Safety Audits (RSAs) to assess the safety of proposed access arrangements. These issues have been addressed in the methodology by ensuring that the scope and depth of the TA (and hence the subsequent assessment of the effects identified in it which feeds through to the EIA) is appropriate.
- 1.2.4 TfL and LB Enfield also requested that specific plans be developed to minimise any adverse transport impacts of the Project. A Delivery and Servicing Plan framework and Travel Plans for the different stages of the Project have therefore been developed and are submitted as part of the DCO application for the Project. These plans will contribute to minimising the transport impact of the Project and are referenced where relevant in the assessments outlined within the TA and ES. In addition a Construction Logistics Plan will be prepared prior to commencement of construction as specified in the Code of Construction Practice (CoCP) (Vol 1 Appendix 3.1 of the ES).
- 1.2.5 Vol 2 Appendix 10.1 Table 1 below sets out all transport-specific comments related to the EIA received and a response to each of those comments, showing how the comment is addressed in the ES. Several of the comments are in relation to the TA which has been submitted as part of the application for development consent for the Project (and contained in Vol 2 Appendix 10.2 of the ES). These effects are then referenced in the ES for the purpose of assessing their effect on the identified receptors. It is therefore felt that it is relevant to include the comments here even though they do not focus specifically on the EIA.

Vol 2 Appendix 10.1 Table 1: Transport engagement – comments and responses

Organisation and date	Comment	Response
TfL (September 2014)	<p><i>“a. TfL’s Transport Assessment best practice advice should be followed.</i></p> <p><i>b. An updated TA scope to be submitted to TfL for review.</i></p> <p><i>c. TfL supports the principal of the development as helping to meet London needs and future growth.</i></p> <p><i>d. TfL supports the proposed access strategy for the site; TfL would need to know that access can work safely in the future and take account of non-motorised modes.</i></p> <p><i>e. Scenario testing proposed is acceptable to TfL – this may need further work in a revised scope, sensitivity testing only if necessary.</i></p> <p><i>f. Car and cycle parking needs to be related to London Plan standards, operational needs and overall management including during construction.</i></p> <p><i>g. Impact on TfL and Borough’s areas of responsibility should be assessed. Mitigation agreed with each authority.</i></p> <p><i>h. TfL would seek to review information and identify gaps. TfL aim to seek appropriate mitigation so we can support the granting of the DCO [Development Consent Order].</i></p> <p><i>i. TfL needs to understand how the proposals translate into transport impacts – we will verify where we can and rely on the expertise of the NLWA [North London Waste Authority].</i></p> <p><i>j. Walking, cycling and public transport access may change in relation to other proposals in this area. TfL would seek options to improve access to site and encourage mode shift where practicable.</i></p> <p><i>k. We expect DSP [Delivery and Servicing Plan] to be prepared for this site though we understand that the NLWA can influence logistics from collection authorities and only directly control a proportion of movements to site. .</i></p> <p><i>l. Water freight study is welcome and this may require a workshop with TfL, Canal and Rivers Trust, NLWA and relevant consultants before the recommendations are finalised.</i></p> <p><i>m. The opportunity to reduce this site’s operational impact is shared with the seven collection authorities as well as through Travel Plan and DSP.</i></p> <p><i>n. TfL is most concerned about construction impact. This should be assessed in the TA and mitigation proposed including CLP [Construction Logistics Plan] and other measures.</i></p> <p><i>o. Programme information is useful for TfL, particularly where there is likely need for approval from TfL during the planning process and postplanning.”</i></p>	<p>TfL’s comments are noted and are addressed in the TA.</p> <p>An updated TA Scoping Report was issued to TfL on 30 September 2014 and a follow-up meeting was held on 6 March 2015.</p>

Organisation and date	Comment	Response
Scoping response: Secretary of State (November 2014)	<p>Traffic and Transport: <i>“this topic is proposed to be scoped out on the basis that relevant information will be within the separate Transport Assessment which will accompany the DCO application. The Secretary of State does not agree that the provision of the Transport Assessment alone will necessarily fulfil the information required to assess the significant effects of transport and traffic on the environment. Therefore, the assessment of impacts from traffic and transport should be presented in the ES. The assessment should also include consideration of inter-relationships between potential transport impacts and other environmental aspects (e.g. air quality, noise/vibration).”</i> (para 3.11 bullet v)</p>	<p>The TA is a technical document that considers the aspects required by statutory authorities such as TfL and LB Enfield, primarily impacts to networks and not necessarily ‘EIA’ receptors.</p> <p>A streamlined Transport chapter within the ES has therefore also been prepared. This does not repeat information from the TA but signposts to the relevant sections of the appended TA while providing a specific assessment of transport effects on environmental receptors.</p> <p>The effects of transport on air quality and noise and vibration are considered in Vol 2 Sections 2 and 8 of the ES respectively.</p>
	<p>Traffic and Transport: <i>“3.54 The Secretary of State welcomes the applicant’s commitment to agree the scope of the Transport Assessment (TA) with local authority highways officers and Transport for London (TfL). The Highways Agency (HA) do not object to the Project (see Appendix 2 of the Opinion for a copy of their response), however the Secretary of State encourages the applicant and the HA to also discuss and agree the scope of the assessment and the information which should be included in the ES.”</i> (Paragraph 3.54)</p>	<p>TfL is responsible for the TfL Road Network roads in the vicinity of the Application Site. LB Enfield is responsible for the remainder of the road network in the vicinity of the Application Site. The HA has been consulted and has confirmed that it has no comments on the Project.</p>
	<p>Traffic and Transport: <i>“The Secretary of State notes the potential for both the existing and proposed waste management facilities to be operational at the same time (during the proposed ‘phased move’). The ES should describe and assess the potential worst case transport impacts that could occur during such a scenario. This should also consider the potential for more workers to be travelling to and from the site during this time.”</i> (Paragraph 3.55)</p>	<p>The following trip generation scenarios are included in the TA (and therefore forms the basis of the EIA TA):</p> <p>a. Development stages with the existing facilities in operation (Stages 1b, 1c and 1d). The proposed Resource Recovery Facility (RRF) has been included in the appropriate stages (Stages 1c and 1d);</p> <p>b. Transition period in which the Energy Recovery Facility (ERF) and RRF are completed</p>

Organisation and date	Comment	Response
		<p>and are part-operational alongside the Energy from Waste (EfW) facility (Stage 2);</p> <p>c. Completed ERF when the existing EfW facility is decommissioned and demolished (Stage 3); and</p> <p>d. Completed ERF and RRF (Stage 4).</p> <p>The TA includes construction worker trips generated during each stage of construction. Stage 2 represents the worst-case scenario in transport terms when both facilities are temporarily operational at the same time.</p>
	<p>Traffic and Transport: <i>“The impacts resulting from the delivery of construction materials and the removal of waste from the site (including that which results from decommissioning of the existing facility) should be assessed. This should include consideration of the likely modes of transport and the vehicle routes. Where certain routes are proposed to minimise/avoid adverse effects, the ES should explain how the use of these would be achieved.”</i> (Paragraph 3.56)</p>	<p>The TA includes trips associated with the delivery of construction materials and removal of waste from the Application Site (including during the decommissioning of the existing facility).</p> <p>Details of access routes are set out in Vol 1 Section 3 of the ES and in the TA (AD05.11). Restrictions required with regard to access routes (e.g. time restrictions) are set out in the CoCP (Vol 1 Appendix 3.1 of the ES).</p>
	<p>Traffic and Transport: <i>“The geographical origin of the proposed fuel (waste) has not been identified in the Scoping Report. The ES should identify any assumptions which have been made regarding the sourcing of the fuel, in particular its origin and how transporting the fuel to site has been assessed. The ES should also identify the anticipated quantity of by products, bottom ash and flue gas treatment residues that would be generated as a result of the Project and the anticipated number of associated vehicle movements, including vehicle types. If the vehicle depot and servicing facility is to be relocated off-site, then the ES should also assess the transport implications of this”</i> (Paragraph 3.57)</p>	<p>Summary details of the origin of fuel and disposal of residual waste (by-products) are contained within Vol 1 Section 3 of the ES and the TA. Full details of trips associated with fuel movement and waste disposal are provided in Section 5 of the TA.</p> <p>The vehicle depot is located within the Application Site boundary.</p>
	<p>Traffic and Transport: <i>“The Secretary of State notes that the Project is in the vicinity of existing railway lines, roads and water bodies. The applicant is therefore encouraged to consult with Network Rail,</i></p>	<p>The TA considers the impact of employees on rail capacity. However the use of rail or water for</p>

Organisation and date	Comment	Response
	<i>the Canal and River Trust and other relevant bodies regarding any potential impacts on these assets and their users, for example in terms of disruption. The methodology for any assessment required should be agreed, together with the design and likely effectiveness of measures proposed to mitigate any significant adverse effects identified.” (Paragraph 3.58)</i>	construction or operation purposes is not considered therefore it is considered that there would be no disruption to these modes. A meeting was held with the CRT on 6 March 2015. No specific concerns on transport were raised.
	Traffic and Transport: <i>“The ES should clarify whether any Public Rights of Way (PRoW) including bridleways and byways would be affected by the Project. Any impacts on ProW and the wider network of routes should be assessed.” (Paragraph 3.59)</i>	A streamlined TA has been undertaken to consider the effects on users of these ProW (e.g. Lee Park Way which is used by cyclists) with cross references provided to the relevant parts of the TA.
	Traffic and Transport: <i>“The potential impacts (during demolition/construction and operation) on the use of the wharf that is leased by the Edmonton Sea Cadets should be assessed. This issue is also raised in the consultation response from the CRT (see Appendix 2).” (Paragraph 3.60)</i>	A report into the feasibility of transporting waste and material by water is included in Appendix I of the TA (AD05.11). The wharf would not be used for waterborne transport of construction materials or operational waste so there would be no impacts. The effects of the Project on the Edmonton Sea Cadets are considered in Vol 2 Section 9 (Socio-economics) of the ES.
	Traffic and Transport: <i>“Mitigation measures should be considered within the ES, such as a travel plan and sourcing materials so as to minimise transport.” (Paragraph 3.61).</i>	Travel Plans have been prepared and appended to the TA for both construction and operational stages. The plans contain measures for all transport modes e.g. car sharing and a shuttle bus for employees.
	Traffic and Transport: <i>“The relationship with other potential impacts of the Project (e.g. recreation, noise/vibration and air quality) should be considered; and cross reference should be made to the relevant chapters of the ES.” (Paragraph 3.62)</i>	The effects of transport on air quality and noise and vibration are considered in Vol 2 Sections 2 and 8 of the ES respectively. Additionally Vol 2 Section 12 of the ES contains an assessment of interactive effects.

Organisation and date	Comment	Response
Scoping response: CRT (November 2014)	<p><i>"[...] the Canal & River Trust considers that the following information should be provided as part of the environmental statement:</i></p> <p><i>Feasibility/viability study for the transport of waste and materials using the blue ribbon network during the demolition/construction phase and the operational phase following completion;</i></p> <p><i>Information about how the proposal will affect the use of the wharf that is leased by the Edmonton Sea Cadets during both the construction period and following completion". (Appendix 2)</i></p>	<p>A report into the feasibility of transporting waste and material by water is included in Appendix I of the TA (AD05.11).</p> <p>The wharf would not be used for waterborne transport of construction materials or operational waste so there would be no impacts.</p> <p>The Project has been discussed with the CRT at a meeting on 6 March 2015.</p> <p>No specific concerns were raised with respect to transport.</p>
GLA (January 2015)	<p>Water transport: Transport by river should be considered in line with policy 7.26 of the London Plan and Mayor's Transport Strategy for demolition/construction and operational stage (especially delivery of waste to the site).</p> <p>Transport assessment: Transport for London (TfL) provided comments on the scope of the transport assessment in September 2014. TfL's summary comments were:</p> <ol style="list-style-type: none"> TfL Transport Assessment best practice advice should be followed. An updated TA scope to be submitted to TfL for review. TfL supports the principal of the development as helping to meet London needs and future growth. TfL supports the proposed access strategy for the site; TfL would need to know that access can work safely in the future and take account of non-motorised modes. Scenario testing proposed is acceptable to TfL – this may need further work in a revised scope, sensitivity testing only if necessary. Car and cycle parking needs to be related to London Plan standards, operational needs and overall management including during construction. Impact on TfL and Borough's areas of responsibility should be assessed. Mitigation agreed with each authority. TfL would seek to review information and identify gaps. TfL aim to seek appropriate mitigation so we can support the granting of the DCO. TfL needs to understand how the proposals translate into transport impacts – we will verify 	<p>A study into the feasibility of the use of water transport is provided in the TA and summarised Vol 2 Section 10 (Transport) of the ES.</p> <p>The comments received have been addressed throughout the TA and Vol 2 Section 10 (Transport) of the ES.</p> <p>Responses to particular requests have been addressed as follows:</p> <ol style="list-style-type: none"> TfL TA best practice advice has been followed in the preparation of the assessment. An updated TA scope was submitted to TfL in September 2014. The safety of the access and its effect on non-motorised modes is assessed in the TA (AD05.11)/ES (AD06.02). The elements mentioned have been taken into account in the proposed level of parking provision. The impact on TfL and Borough's areas of responsibility is assessed. It is not anticipated that any mitigation would be required but if so it would

Organisation and date	Comment	Response
	<p>where we can and rely on the expertise of the NLWA.</p> <p>j. Walking, cycling and public transport access may change in relation to other proposals in this area. TfL would seek options to improve access to site and encourage mode shift where practicable.</p> <p>k. TfL expect Delivery and Service Plan to be prepared for this site though we understand that the NLWA can influence logistics from collection authorities and only directly control a proportion of movements to site.</p> <p>l. Water freight study is welcome and this may require a workshop with TfL, CRT, the Applicant and relevant consultants before the recommendations are finalised.</p>	<p>be agreed with the relevant authority.</p> <p>i. The TA outlines the transport impact of the Project.</p> <p>j. Any changes to walking, cycling and public transport access can be taken advantage of through the travel plan process.</p> <p>k. A Delivery and Servicing Plan is expected to be agreed with LB Enfield.</p> <p>l. The Water freight study has been completed and is included in the TA (Appendix I of Vol 2 Appendix 10.2 of the ES).</p>
HA (January 2015)	No comments at this time	No response required.
London Borough of Enfield (January 2015)	<p>TA</p> <p>The Local Planning Authority (LPA) understands that works to prepare the TA are underway and at this stage we would reserve our position in the matter of the potential transport implications of the scheme until such time as a TA can be scrutinised. Please note that the Edmonton EcoPark SPD [Supplementary Planning Document] includes minimum requirements for the TA and the submission must take account of this.</p>	The TA has been prepared with consideration for the Edmonton EcoPark SPD.
	<p>Trip Generation</p> <p>There is a need to ensure the existing baseline employee trips are done before the site begins to close as opposed to 'estimating' what it should be based on the site size. Use the real figures whilst the site is fully operational.</p>	Existing baseline employee trips have not been used in the preparation of the TA and the employee mode share has been derived based on Trip Rate Information Computer System (TRICS) and from first principles. The Applicant will seek to obtain data prior to the commencement of construction so that it can be used to inform the Travel Plan targets of the full Travel Plans.
	<p>Effect of Proposed Development</p> <p>There is a need to ensure the impact on the peak hours of the local network is covered and as a minimum the junctions of Fore Street St/A406, Cook's Ferry Roundabout, Great Cambridge/A406, and Montagu Street/Conduit Way are covered (as per SPD). The impact from the construction should</p>	The TA includes an assessment of the likely additional trips at the junctions of Fore Street St/A406, Cook's Ferry Roundabout, Great Cambridge/A406, and

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	also be looked at in terms of an estimated profile of trip numbers over time and included in the TA. The actual detail of how trips/deliveries/parking etc will be managed should be put in the Construction Logistics Plan.	Montagu Street/Conduit Way. A daily profile of trips is provided for each Project development stage taking account of construction and operational traffic. Detail of how trips/deliveries/parking etc. would be managed is set out in the CoCP (Vol 1 Appendix 3.1 of the ES).
Sustrans (March 2015)	No concerns at this time but suggest that Sustrans <i>Handbook for cycle-friendly design</i> ¹ and TfL's <i>London Cycle Design Standards</i> ² are used to inform the design.	The Sustrans and TfL guidance have both been considered in the design of cycle facilities associated with the Project.
Network Rail	No comments received to date.	No response required.
Phase Two Consultation response: TfL (June 2015)	<p>General TfL requirements related to the Application Site:</p> <p><i>“The NLWA should confirm that to build and operate this facility that TfL procedures and processes will be complied with where appropriate. TfL can provide details of our process on request. TfL could consider entering a Memorandum of Understanding to clarify these processes and procedures in relation to this project if requested.</i></p> <p><i>TfL Transport Assessment best practice advice should be followed.</i></p> <p><i>TfL supports the proposed access strategy for the site; TfL would need to know that each access can work safely taking account of non-motorised modes. This requires Road Safety Audits and compliance with appropriate design standards.</i></p> <p><i>Car and cycle parking should be in accord with London Plan standards, operational needs and overall management including during construction. For the latter, we should seek to ensure that provision strikes the right balance between encouraging sustainable travel and minimising overspill impact during construction.</i></p> <p><i>Walking, cycling and public transport access may change in relation to other proposals in this area. TfL would seek options to improve access to site and</i></p>	<p>This requirement has been noted and considered further and the commitment to build and operate the Project in accordance with the relevant TfL procedures and processes has been included in the TA.</p> <p>The TA has been prepared in accordance with the TfL's TA best practice guidance (see Paragraphs 10.3.8 and 10.3.9).</p> <p>RSAs have been undertaken and the results are included in Appendix D of the TA.</p> <p>Proposed car and cycle parking provision has been determined based on the requirements of the Project and with consideration for the location of the Application Site. The TA provides details on the justification for the provision of parking.</p> <p>Access by walking, cycling and public transport will be reviewed as part of the</p>

¹ Sustrans (2014) Sustrans Design Manual: Handbook for cycle-friendly design

² Transport for London (2014) London Cycle Design Standards

Organisation and date	Comment	Response
	<p><i>encourage mode shift where practicable for the operational and construction phases.</i></p> <p><i>We expect a Delivery and Servicing Plan to be prepared for this site. This would need to be up dated over time and in relation to phasing. We understand that the NLWA ability to influence collection authorities is limited though we expect the NLWA would take reasonable endeavours to influence collection authorities accessing the site alongside other vehicle movements to minimise environmental and transport impact.</i></p> <p><i>Water freight study is welcome however, we suggest it is not appropriate to rule out the use of water freight at this stage and would like to confirm if any other streams of materials could be included in study and consideration of comments in Appendix A, we also question if the infrastructure investment has wider benefits or potential funding sources. We require explanation of the study to colleagues and other stakeholders and may require the feasibility study to be revisited in the future post approval.</i></p> <p><i>TfL is concerned about construction impact. This should be assessed in the TA and mitigation proposed including CLP and other measures. TfL has provided comments within Appendix A and in Appendix C.”</i></p> <p>TfL comments on Interim Transport Report (May 2015):</p> <p><i>“3. In i.vi.ii, Phase 1d represents the peak construction phase. 1,176 net additional trips. This is a significant impact that needs mitigating through the CLP.</i></p> <p><i>Phase 4 (i.vi.iii), refers to a net increase in 175 vehicle trips with employee trips are falling. This is best addressed through the DSP and Travel Plan.</i></p> <p><i>5. TfL supports the use of water freight to reduce vehicles on the highway. As the project may not be implemented until 2020s, it seems too an early a stage to rule out or stop planning for transfer of freight by water (i.viii.ii).</i></p>	<p>Travel Plan process. A mechanism to monitor this has been included in the Travel Plans which are provided in Appendix J (construction) and Appendix K (operational) of the TA (AD05.11). If access in the local area changes during the build or operation of the facility, Travel Plan targets and measures will be adjusted accordingly.</p> <p>A framework Delivery and Servicing Plan is included in Section 9 of the TA (AD05.11). This includes a mechanism/requirement for the DSP to be updated periodically.</p> <p>Further discussions have been undertaken with TfL, including a site visit to the Edmonton EcoPark. The Applicant will continue to engage with TfL in order to arrive at an agreed position with respect to water transport.</p> <p>Construction impact has been considered further in the TA in accordance with comments within Appendices A and C.</p> <p>The CLP will include mitigation measures to address this.</p> <p>This is addressed through the framework DSP and Travel Plan.</p> <p>Further discussions have been undertaken with TfL, including a site visit to the Edmonton EcoPark. The Applicant will continue to engage with TfL in order to arrive at an agreed position</p>

Organisation and date	Comment	Response
	<p>6. We note it could reduce vehicle movements by 30 to 48 vehicles per day.</p> <p>7. We note that cost per tonne of moving material by water is lower than road on a like by like basis; however there are capital and logistical costs that reverse this position and show water freight would be more expensive. TfL comments are as follows:</p> <p>a) The TA should clarify are we comparing these different modes of transport on a fair basis?</p> <p>b) What is the value of the benefit of water transport over road transport? (environmental, road congestion, and road accident reduction)</p> <p>c) TfL and local authorities maintain the road network whilst the PBA report assumes considerable investment in the lock infrastructure.</p> <p>d) Can we assume investment in these locks in the next few years?</p> <p>e) What is the basis for the commercial costs assumed in the PBA report?</p> <p>f) Does the combined water/road proposal represent a potential approach?</p>	<p>with respect to water transport.</p> <p>Noted.</p> <p>The Water Transport Study in Appendix I of the TA compares options on a fair basis. The methodology used is set out in the Study.</p> <p>A full cost benefit analysis is included in the water transport report in Appendix I of the TA (AD05.11).</p> <p>Costs of all equipment and operations for water and road are based on first principles e.g. purchase cost of equipment, fuel, insurance, wages, number of units, assumed work hours etc. Cost of cranes, heavy plant, on-site lorries barges and tug were obtained from indicative quotes and for Thames haulage tug operation costs. Road transport costs are based on Road Haulage Association vehicle operating cost tables.</p> <p>Infrastructure costs are based on Peter Brett Associates hydro engineers assessment cross referenced with CRT engineers.</p> <p>Long term cost considers capital and operating costs, and valued as post tax cash flow for a year-on-year predicted cost to a maximum of 25 years, with inflation assumed to be 2.5 per cent. The final cost is expressed in today's terms using Net Present Cost of 8 per cent (NPV 8 per cent).</p> <p>The Water Transport Study considers a combined water/road option.</p>

Organisation and date	Comment	Response
	<p><i>TfL suggests that it is too early to rule out water freight in 2015 for a project that may not be operational until 2025.”</i></p> <p>TfL comments on the Preliminary Environmental Information Report Volume 2:</p> <p><i>a) Paragraph 9.1.3 cyclists should be included in the road network more general as well a specific cycle network</i></p> <p><i>b) Need to consider impact on accessibility to public transport for wheelchair users, where push chairs are needed and where people have mobility impairments.</i></p> <p><i>c) The development could impact on the River Lee Navigation – this is more an opportunity cost against policy that promotes the Blue Ribbon Network.</i></p> <p><i>d) Potential overspill car parking if on site provision is inadequate or not appropriately managed.</i></p> <p><i>e) TfL note that background environmental conditions could deter walking and cycling.</i></p> <p><i>f) Healthy lifestyles for workers on site during operations and construction through promotion of sustainable travel.</i></p> <p><i>g) Potential exclusion of certain people from jobs created on site due to lack of access to alternative transport.</i></p> <p><i>h) Paragraph 9.2 TfL agrees that engagement with TfL has been positive and indicates that our transport concerns can be mitigated.</i></p> <p><i>i) Paragraph 9.3 TfL broadly concurs for methodology proposed</i></p> <p><i>j) Vol 2 Table 9.1 for public transport users where there are limited alternative travel choices – suggest a high sensitivity to delay or disruption. Also, alighting and boarding bus users are pedestrians locally.</i></p> <p><i>k) Paragraph 9.7.37 TfL cannot confirm if the impact on bus services is negligible. As there may need to be changes to local services to i) support sustainable</i></p>	<p>Noted.</p> <p>Cyclists have been added to the list of road users in paragraph 10.1.3.</p> <p>These users have been considered within the assessment of effects on public transport users and further detail has been added to Vol 2 Appendix 10.1 Table 4 to reflect this.</p> <p>Further discussions have been undertaken with TfL, including as part of a site visit to the Edmonton EcoPark. The Applicant will continue to engage with TfL in order to arrive at an agreed position with respect to water transport.</p> <p>This has been addressed by considering the potential effect of overspill parking on road users.</p> <p>This point is accepted. However, the Project includes measures to actively promote these modes in the Travel Plans.</p> <p>Sustainable travel is promoted through the Travel Plans.</p> <p>This point has been addressed in Vol 2 Appendix 10.1 Table 4 of the ES.</p> <p>Noted.</p> <p>Noted.</p> <p>The sensitivity of this receptor has been changed to ‘high’ and the explanatory text has been amended to reflect this.</p> <p>An additional paragraph on the likely effect on public transport users if changes</p>

Organisation and date	Comment	Response
	<i>travel; ii) minimise disruption to existing bus services and iii) enable all workers and visitors access to site.</i>	to local services were instigated has been added at Paragraphs 10.7.16, 10.7.39 and 10.7.55 in Vol 2 Section 10 of the ES.
Phase Two Consultation response: LB Enfield (June 2015)	<p>Comments on the Preliminary Environmental Information Report (Transport) [focused on the TA]:</p> <p><i>“The prediction on the volume of trips has been made based on the payload of the vehicles and the daily volumes of waste predicted to arrive to the Ecopark, the number of visitors to the RFF site, and the staff trips. This was also agreed with LBE and TfL and is considered the most robust way of predicting the future trip generation. The methodology was also agreed at the planning brief stage of the Ecopark development, although the TA does not specifically reference this.</i></p> <p><i>The changes between the existing and the proposed can in part be explained by information provided by the applicant which confirms that more waste will be transported as ‘bulked waste’; 42% of waste will arrive bulked, which will arrive on vehicles with a payload of 22 tonnes. Whilst this approach was agreed originally in the TA scoping discussions, there isn’t a detailed explanation included in the TA to confirm the same methodology has been followed in reaching the figures shown in table 5.5 of the TA.</i></p> <p><i>Overall these predicted figures do follow the original brief and methodology agreed between Arup and LBE. As mentioned above though, it is noted that the TA does not specifically breakdown the different trip numbers provide a summary in the TA. This makes it difficult to see exactly which trips are increasing and which are decreasing. T&T therefore request a revision to the TA to provide a clearer explanation to accompany Table 5.5.</i></p> <p><i>The traffic generation predictions follow the agreed methodology as agreed in the planning brief, but the TA does not provide a detailed enough on analysis on Table 5.5 to explain the reduction in certain trips. Additional work to the TA is needed for this section; it is noted that the data to justify the table is included in the appendix, but it needs to be summarised in the main body of the TA to confirm it follows the same methodology as agreed in the TA scoping document.</i></p> <p><i>As a result of applying the increase in the trip numbers then it is shown that only the Advent Way link would experience an increase above 10% in the AM peak and inter peak, and this would only be in phase 1d of the overall development. Would only be temporary. The AM increase is 19.4% and the inter peak is 14%. Whilst the increase is only temporary due to the construction period (phase 1d is the intense construction period) LBE would still expect a</i></p>	<p>A reference to the agreement on this methodology at the planning brief stage has been added to Section 5.3 of the TA (AD05.11).</p> <p>Further explanation to this effect has been added to the trip generation section (Section 5.3) of the TA (AD05.11).</p> <p>The TA (AD05.11) has been revised (in Section 5.3) to provide more explanation of which trips are increasing and which are decreasing.</p> <p>Further analysis of Table 5.5 has been added to the TA (AD05.11).</p> <p>A Framework Construction Travel Plan (Appendix J of the TA (AD05.11)) has been produced and is submitted as part of the DCO application.</p>

Organisation and date	Comment	Response
	<p><i>travel plan to help militate against construction phase traffic.</i></p> <p><i>The impact on the junctions shows that some will be operating over capacity and that the assessment includes growth factors to take into account background growth over the next 13 years. Therefore the junctions are expected to approach capacity regardless of the development taking place; if traffic does not grow as expected then the majority of the junctions and links will operate in capacity. Further analysis or summary would be welcomed on the junction operations before the TEMPRO factors were applied i.e. pre 2024.</i></p> <p><i>The TA does account for construction traffic in the assessment of each phase however the actual CMP will need to go into more detail about how access and service arrangements will be provided (potentially from the north of the site) as well as how sustainable measures e.g. shuttle bus will be provided.”</i></p>	<p>Further information on the junction operations without the application of the TEMPRO factors has been added to Section 6 of the TA (AD05.11).</p> <p>The Construction Logistics Plan (CLP) would include more detail on access and service arrangements and the proposed provision of sustainable measures.</p>
Phase Two Consultation response: Highways England (July 2015)	No comments on the proposal offered.	No response required.
Phase Two Consultation response: Lee Valley Regional Park Authority (June 2015)	<p><i>“Concern over the capacity of the internal road network serving the RRF/RRC which requires access from Lee Park Way. Assurances are required that this is sufficient to withstand peak demand without leading to parking and ‘backing up’ on the access road to the south. This has to be avoided to ensure that the character of Lee Park Way is not unduly disturbed by the proposed use.</i></p> <p><i>Care must be taken to ensure measures to make the road suitable for use by the Heat and Power project do not change its character to the extent that it becomes or is considered part of the industrial site – the addition of gate houses, weight bridges and lighting for example will be a deterrent to Park visitors especially of [sic] the route is not clearly signed.</i></p>	<p>The design and layout of the Application Site has been tested to ensure that queuing back onto Lee Park Way would not occur. The anticipated peak hour flow of 53 vehicles is expected on a weekend day which equates to just less than one vehicle per minute. While a surge of arrivals could occur, well in excess of 20 vehicles can be accommodated between the entrance to the RRC and the Application Site access from Lee Park Way meaning that blocking back on to Lee Park Way would be very unlikely to occur.</p> <p>Facilities for both pedestrians and cyclists would be provided along Lee Park Way between Advent Way and the Application Site entrance so that visitors by these modes would not be deterred. Visitor access</p>

Organisation and date	Comment	Response
	<p><i>This project is staged over a long period of time and for the Authority it is important that the future use and layout of the Lee Park Way is safeguarded in relation to leisure uses, enhancement of the SMINC, and its function as a wildlife corridor. Page 17 of the Design Statement provides an indication that the weigh bridges and the security gate are located outside Park. But this could change especially if Lea Park Way is used to access future development on the land to be freed up once the existing waste plant is demolished. It would be helpful if further detail could be provided on this matter. “</i></p>	<p>and access to the RRC would only be provided during specific times. All gate houses and weigh bridges would be located within the boundary of the existing Edmonton EcoPark site and would be clear of Lee Park Way. Clear signage for both visitors to Application Site and the Park would be provided.</p> <p>Any future development on the land on which the existing EfW facility is located would be subject to a separate planning application and would need to demonstrate that the access and other arrangements would be satisfactory both in transport and environmental terms.</p>
<p>Phase Two Consultation response: CRT (June 2015)</p>	<p><i>“The Trust supports the use of the Navigation for the movement of waste, freight and other materials. Given the amount of development that is occurring on site consideration should be given to establishing a wharf facility at the water’s edge to allow for the transfer of waste etc to and from the site. The provision of a wharf would also allow and encourage other developments in the surrounding area to move waste to the site.</i></p> <p><i>The Trust notes that the movement of waste by water has not currently been considered viable. Although this may currently be the case, it is possible that it would be viable in the future. Therefore investment in a wharf facility at the site will futureproof the development for the transport of waste by water.</i></p> <p><i>It should be noted that Policy 7.26 of the London Plan seeks to increase the use of the Blue Ribbon Network to transport freight and it is also encouraged by the National Planning Policy Framework. The Trust strongly urges that further consideration is given to the provision of facilities to allow the movement of waste by water.</i></p> <p><i>The Trust would like to see the following matters incorporated into the design of the scheme:</i></p> <ul style="list-style-type: none"> • <i>Provision for enhanced step free pedestrian and cycle access from the canal bridge to the towpath in both north and south directions. This should recognise the importance of the towpath for access to employment in this area and that the towpath may be designate</i> 	<p>A full study into the feasibility of transporting waste by water has been undertaken and is provided in Appendix I of the TA.</p> <p>In addition, the wharf area is the site of the proposed EcoPark House which would serve as the site reception, location for some administration staff, accommodate the Edmonton Sea Cadets and serve as a visitor and education centre for visiting groups such as schools.</p> <p>A route from Lee Park Way to the towpath is already available. There is not sufficient space to provide a convenient step-free route from the bridge to the</p>

Organisation and date	Comment	Response
	<p><i>a future 'Quietway' under the Mayor's cycling vision;</i></p> <ul style="list-style-type: none"> • <i>Enhanced site management to control windblown litter arising from the intensification of waste vehicles crossing the canal bridge;</i> <p><i>Provision of legible London signage at the towpath entrance to integrate with existing wayfinding along the Navigation."</i></p>	<p>towpath given the level differences involved.</p> <p>Waste vehicles would not be crossing the canal bridge on Lee Park Way; these would continue to access the Application Site from the southern access on Advent Way.</p> <p>Consideration will be given to the provision of Legible London signage as part of the Section 106 Agreement.</p>
<p>Phase Two Consultation response: GLA (June 2015)</p>	<p><i>"TfL has provided advice to the NLWA on the scope of a Transport Assessment for this proposal on 9 September 2014, which can be summarised as follows:</i></p> <ul style="list-style-type: none"> • <i>Construction programme and impact on operation of the Transport for London Road Network (TLRN) A406 North Circular Road needs to be assessed.</i> • <i>Vehicle access to the site during operation / construction – TfL to review specific proposals from a road safety and traffic impact viewpoint.</i> • <i>Identity area of interest for the TA based on initial traffic assessment.</i> • <i>Car parking including electric vehicle charging in accordance with London Plan requirements.</i> • <i>Cycle parking and facilities for cyclists (showers, lockers) also in line with London Plan standards.</i> • <i>Opportunities to improve local cycle / pedestrian routes to site to encourage these modes of travel.</i> • <i>Measures to encourage use of water for freight.</i> • <i>Design and servicing plan.</i> • <i>Measures to reduce traffic impact on wider highway network.</i> • <i>Construction logistic plan will be needed.</i> • <i>Travel plan for operation and construction stages.</i> • <i>Section 106 agreement or other agreement for any necessary offsite mitigate measures.</i> <p><i>TfL will be able to provide definitive advice on the impact of the proposals once the transport assessment is completed to its satisfaction. There is also a note on the feasibility of water transport. Currently NLWA is suggesting that water freight will</i></p>	<p>The TA has been prepared in accordance with TfL's advice and TfL has confirmed this in its own Phase Two Consultation response.</p> <p>Further discussions have been undertaken with TfL, including a site visit to the Edmonton EcoPark. The Applicant will continue to</p>

Organisation and date	Comment	Response
	<p><i>not be feasible. TfL would need to review the technical basis of this advice. TfL notes over a 25 year project lift-cycle that the environmental benefits of water use would be significant and in the environmental appraisal capital costs need to differentiate from operations costs. TfL remain supportive of water transport as a matter of policy and potential measures in context of this site and wider north London role, and aspirations to regenerate the Upper Lee Valley.</i></p> <p><i>TfL has operation interests in the site. TfL would need to assess if any consent granted under the Development Consent Order, impacts on TfL freehold land interest, it's easement and whether these constitute a breach of restrictions that protect TfL interests. TfL restrictive covenants allow for hard standing access or car parking but no other development or construction is allowed. TfL will provide comments in respect of its interest in land under a separate document.</i></p> <p><i>The applicant should provide information on the construction period, along with the likely increase in road traffic during and after construction when the plant begins to operate. A further comparison of the current facility's traffic movements against those proposed should be demonstrated. To reduce the impact on the road network, the applicant is advised to further explore options of waterborne transportation of water material. Reference to water transport is also made earlier in this report.</i></p> <p><i>To conclude, TfL has reviewed the interim transport report and it follows the scoped TfL previously advised. However, TfL will provide a fuller technical review directly to the NLWA. Once that work is complete, it will be able to advice on the transport implications of the proposals, including its requirements ti safeguard TfL interests, TfL view on their approach to water transport, access arrangement, travel arrangements and construction impacts. Overall, the interim transport report is not the final TA but includes a lot of detail, which needs to be considered by TfL colleagues collectively to provide a comprehensive response to this consultation."</i></p>	<p>engage with TfL in order to arrive at an agreed position with respect to water transport.</p> <p>No specific comments regarding TfL's land interests have been received to date.</p> <p>Section 4 of the TA provides information on the duration of construction while Section 5 provides details of the trip generation for each development stage of the Project. This include comparisons with the movements to and from the existing Edmonton EcoPark.</p> <p>TfL has provided a separate Phase Two Consultation response. The comments have been incorporated into the TA and ES, where appropriate.</p>

1.3 Legislation and guidance

- 1.3.1 The assessment takes into account relevant national and international legislation and guidance.
- 1.3.2 There are two NPSs of direct relevance to the Project. These are:
- a. EN-1 – Overarching NPS for Energy
 - b. EN-3 – NPS for Renewable Energy Infrastructure

1.3.3 Vol 2 Appendix 10.1 Table 2 details the requirements from EN-1 which are relevant to transport. How this requirement has been addressed and where further details on how the requirement has been addressed is also described.

Vol 2 Appendix 10.1 Table 2: Transport NPS EN-1 requirements

Requirements of NPS EN-1	How the requirement is addressed	Location of where to find further detail
Paragraph 5.13.2 – <i>“If the project is likely to have significant transport implications, the applicant’s ES should include a transport assessment, using the NATA/WebTAG methodology stipulated in Department for Transport guidance, or any successor to such methodology. Applicants should consult the Highways Agency and Highways Authorities as appropriate on the assessment and mitigation.”</i>	A TA has been produced with reference to the Department for Communities & Local Government National Planning Practice Guidance on travel plans, transport assessments and statements in decision-taking ³ (which has superseded the Department for Transport guidance). The HA were consulted but had no comments on the Project which does not affect the strategic road network.	The TA is provided in Vol 2 Appendix 10.2 of the ES.
Paragraph 5.13.4 – <i>“Where appropriate, the applicant should prepare a travel plan including demand management measures to mitigate transport impacts. The applicant should also provide details of proposed measures to improve access by public transport, walking and cycling, to reduce the need for parking associated with the proposal and to mitigate transport impacts.”</i>	Two Travel Plans are being produced to support the application for development consent for the Project: one for the construction stages and one for the final operational stage (Stage 4).	The Framework Travel Plans are provided in Appendix J (Construction) and Appendix K (Operation) of the TA which is provided in Vol 2 Appendix 10.2 of the ES.
Paragraph 5.13.5 – <i>“If additional transport infrastructure is proposed, applicants should discuss with network providers the possibility of co-funding by Government for any third-party benefits. Guidance has been issued in England which explains the circumstances where this may be possible, although the Government cannot guarantee in advance that funding will be available for any given uncommitted scheme at any specified time.”</i>	No additional infrastructure is required other than the provision of two new access points from Lee Park Way, Deephams Farm Road and widening of the existing southern access on Advent Way.	Design and Access Statement (AD05.07) and TA (Vol 2 Appendix 10.2 of the ES).
Paragraph 5.13.6 – <i>“A new energy NSIP [Nationally Significant Infrastructure Project] may give rise to substantial impacts on the surrounding infrastructure”. The applicant should have “sought to mitigate these impacts, including during the construction phase of the development. Where the proposed</i>	The Project is not anticipated to give rise to any significant effects.	The TA is provided in Vol 2 Appendix 10.2 of the ES.

³ Department for Communities & Local Government (2015) Planning Practice Guidance: Travel plans, transport assessments and statements in decision-taking

Requirements of NPS EN-1	How the requirement is addressed	Location of where to find further detail
<p><i>mitigation measures are insufficient to reduce the impact on the transport infrastructure to acceptable levels, requirements to mitigate adverse impacts on the transport networks arising from the development” should be considered. “Applicants may also be willing to enter into planning obligations for funding infrastructure and otherwise mitigating adverse impacts.”</i></p>		
<p>Paragraph 5.13.8 – <i>“Where mitigation is needed, possible demand management measures must be considered and if feasible and operationally reasonable, required, before considering requirements for the provision of new inland transport infrastructure to deal with remaining transport impacts.”</i></p>	<p>Mitigation measures, such as the provision of cycle parking, are implicit within the design. The Travel Plans for the Project include measures such as the provision of shuttle services to encourage travel by public transport during construction. The potential to operate a shuttle bus for the operation of the scheme is reviewed as part of the Operational Travel Plan. Walking and cycling will also be encouraged. No new transport infrastructure is proposed.</p>	<p>The Framework Travel Plans are provided in Appendix J (Construction) and Appendix K (Operation) of the TA which is provided in Vol 2 Appendix 10.2 of the ES.</p>
<p>Paragraph 5.13.9 – <i>“The IPC [Infrastructure Planning Commission] should have regard to the cost-effectiveness of demand management measurements compared to new transport infrastructure, as well as the aim to secure more sustainable patterns of transport development when considering mitigation measures.”</i></p>	<p>The Travel Plans for the Project will include measures such as the provision of shuttle services to encourage travel by public transport. Walking and cycling will also be encouraged. No new transport infrastructure is proposed.</p>	<p>The Framework Travel Plans are provided in Appendix J (Construction) and Appendix K (Operation) of the TA which is provided in Vol 2 Appendix 10.2 of the ES.</p>
<p>Paragraph 5.13.10 – <i>“Water-borne or rail transport is preferred over road transport at all stages of the project, where cost-effective.”</i></p>	<p>Water-borne transport utilising the River Lee Navigation has been assessed. The conclusions of the assessment were that the costs of providing water transport outweighs the benefits (including the environmental benefits).</p>	<p>A detailed study of the use of water-borne transport is provided in Appendix I of the TA which is provided in Vol 2 Appendix 10.2 of the ES.</p>
<p>Paragraph 5.13.11 of this NPS notes that <i>“the IPC may attach requirements to a consent where there is likely to be substantial HGV [Heavy Goods Vehicles] traffic.”</i></p>	<p>The composition of traffic is not expected to vary significantly from that of the existing site and there would not be a significant increase in HGV movements during construction.</p>	<p>The TA is provided in Vol 2 Appendix 10.2.</p>
<p><i>“control numbers of HGV movements to and from the site in a specified period during its construction and possibly on the routing of such movements;</i></p>	<p>HGV movements would be controlled through the implementation of the CoCP (Vol 1 Appendix 3.1 of the ES) during construction and the Delivery and Servicing Plan during operation.</p>	<p>Details are provided in the CoCP (Vol 1 Appendix 3.1 of the ES) and in the TA, which is provided in Vol 2 Appendix 10.2.</p>

Requirements of NPS EN-1	How the requirement is addressed	Location of where to find further detail
<i>“make sufficient provision for HGV parking, whether on the site or at dedicated facilities elsewhere, to avoid ‘overspill’ parking on public roads, prolonged queuing on approach roads and uncontrolled on-street HGV parking in normal operating conditions;</i>	Sufficient parking is provided on-site for operational vehicles. Parking would be provided on the Temporary Laydown Area for construction vehicles.	Details are provided in the CoCP (Vol 1 Appendix 3.1 of the ES) and in the TA (Vol 2 Appendix 10.2 of the ES).
<i>“ensure satisfactory arrangements for reasonably foreseeable abnormal disruption, in consultation with network providers and the responsible police force.”</i>	Arrangements for reasonably foreseeable normal loads are detailed in the CoCP and will be agreed with TfL and LB Enfield.	Details are provided in the CoCP (Vol 1 Appendix 3.1 of the ES).
Paragraph 5.13.12 – <i>“If an applicant suggests that the costs of meeting any obligations or requirements would make the proposal economically unviable this should not in itself justify the relaxation by the IPC of any obligations or requirements needed to secure the mitigation.”</i>	The Applicant is committed to ensuring that all reasonable obligations are met.	N/A

1.3.4 Vol 2 Appendix 10.1 Table 3 details the requirements from EN-3 which are relevant to transport. How this requirement has been addressed and where further details on how the requirement has been addressed is also described.

Vol 2 Appendix 10.1 Table 3: Transport NPS EN-3 requirements

Requirements of NPS EN-3	How the requirement is addressed	Location of where to find further detail
Paragraph 2.5.25 of this NPS makes reference to requirements in EN-1 Section 5.13. These references and additional requirements are detailed below.		
<i>“Government policy encourages multi-modal transport and the IPC should expect materials (fuel and residues) to be transported by water or rail routes where possible.”</i>	Water-borne transport utilising the River Lee Navigation has been assessed. The conclusions of the research were that the costs of providing water transport outweighs the benefits (including the environmental benefits).	A detailed study of the use of water-borne transport is provided in Appendix I of the TA which is provided in Vol 2 Appendix 10.2 of the ES.
<i>“Applicants should locate new biomass or waste combustion generating stations in the vicinity of existing transport routes wherever possible. Although there may in some instances be environmental advantages to rail or water transport, whether such methods are viable is likely to be determined by the economics of the scheme.”</i>	The Project is on the site of an operational EfW facility and can make use of existing transport routes. It is located close to the A406 which is a route of strategic importance in north London.	Refer to Section 3 of the TA (Vol 2 Appendix 10.2 of the ES) and Vol 2 Section 10 (Transport) of the ES.

Requirements of NPS EN-3	How the requirement is addressed	Location of where to find further detail
Paragraph 2.5.25 of this NPS makes reference to requirements in EN-1 Section 5.13. These references and additional requirements are detailed below.		
<i>“Road transport may be required to connect the site to the rail network, waterway or port. Therefore, any application should incorporate suitable access leading off from the main highway network. If the existing access is inadequate and the applicant has proposed new infrastructure, the IPC will need to be satisfied that the impacts of the new infrastructure are acceptable as set out in Section 5.13 of EN-1.”</i>	Two new accesses are proposed to ensure access to the Project is adequate and would ensure the continued operation of the Edmonton EcoPark in the most efficient manner. The existing southern access on Advent Way would also be widened.	Refer to Section 4 of the TA (Vol 2 Appendix 10.2 of the ES) and Vol 2 Section 10 (Transport) of the ES.

- 1.3.5 In addition, a review of potential transport environmental effect assessment methods has been undertaken to ensure the most appropriate methods were used in the assessment.

Department for Communities & Local Government – Planning Practice Guidance: Travel plans, transport assessments and statements in decision-taking³

- 1.3.6 The Department for Communities & Local Government Planning Practice Guidance, a web-based resource, replaces the Department for Transport Guidance on TAs (2007) which was withdrawn in 2014. The guidance sets out the methodological approach for completing a TA. The transport impacts identified in the TA are then assessed in the environmental assessment (reported in the ES) for their effect on the identified receptors. The TA has been written in accordance with this guidance.
- 1.3.7 Since the guidance does not cover environmental effect assessment, further specific environmental effect assessment guidance is required to develop the methodology for the main environmental effect assessment stage.

Transport for London (TfL) – Transport Assessment Guidance⁴

- 1.3.8 The TfL TA Guidance provides guidance on assessing all transport effects of a development. It provides an overall approach for establishing baseline conditions and potential effects in general TA terms. The TA has been written in accordance with this guidance.
- 1.3.9 Since the guidance does not cover environmental effect assessment, further specific environmental effect assessment guidance is required to develop the methodology for the main environmental effect assessment stage.

⁴ Transport for London (2015) Transport Assessment Guidance

Department for Transport – TAG Unit A3: Environmental Impact Appraisal⁵

- 1.3.10 The Department for Transport guidance for environmental effect appraisal recommends using the HA Design Manual for Roads and Bridges (DMRB) guidance to undertake the environmental effect assessment itself.

Highways Agency – Design Manual for Roads and Bridges⁶

- 1.3.11 The DMRB guidance is specifically for the assessment of transport schemes rather than developments generally. However, aspects of its recommended methodological approach are relevant to the assessment of non-transport schemes which have transport impacts and can be used for this purpose too. The methodological approach outlined in this document therefore uses elements of the DMRB guidance.

Institute of Environmental Assessment [now the Institute of Environmental Management and Assessment, IEMA] – Guidelines for the Environmental Assessment of Road Traffic⁷

- 1.3.12 The IEMA guidance provides a methodology and approach which is appropriate for conducting a transport environmental effect assessment of a development. The approach can be complemented with use of the DMRB guidance in the development of transport environmental effect assessment methodology where appropriate.

Guidance used for transport environmental assessment

- 1.3.13 Both the DMRB and the IEMA guidance documents were written over twenty years ago and so there is a risk that parts of the guidance are now outdated. However, since there is no more recent guidance available, the approach taken for the assessment has been to use the DMRB and IEMA guidance as a base approach and modify it where appropriate and based on professional judgement, to account for transport conditions specific to the Project and for the area within which the Project is located. The TfL guidance has been used for assessing what the transport effects of the Project are (as reported in the TA (Vol 2 Appendix 10.2 of the ES)).

1.4 Baseline conditions

Current baseline

- 1.4.1 Existing transport conditions have been identified by means of desktop research and online data sources, analysis using Geographic Information Systems, site visits and surveys. These are described in the following sections.

⁵ Department for Transport (2014) TAG UNIT A3: Environmental Effect Appraisal

⁶ Highways Agency (1993) Design Manual for Roads and Bridges (DMRB): Volume 11 Section 3 Parts 3, 8 9 and 12 ('Disruption Due to Construction', 'Pedestrians, Cyclists, Equestrians and Community Effects', 'Vehicle Travellers' and 'Impact of Road Schemes on Policies and Plans')

⁷ Institute of Environmental Assessment (1993) Guidelines for the Environmental Assessment of Road Traffic

All modes

- 1.4.2 A number of site visits were undertaken in 2012, 2013 and 2014 to verify the current local transport infrastructure.

Road users

- 1.4.3 The local highway network within the vicinity of the Application Site has been considered in order to understand the current traffic flows in the vicinity of the Application Site. This includes but is not limited to A406 North Circular Road, Advent Way, Eley Road, A1055 Meridian Way, Ardra Road and A1009 Hall Lane. These are shown in Vol 2 Figure 10.1 of the ES.
- 1.4.4 Traffic surveys were undertaken in May 2013 and October 2014. Details of the baseline conditions on the local highway network and the traffic surveys that were undertaken are provided in Section 4 of the TA (Vol 2 Appendix 10.2 of the ES).

Public transport users

- 1.4.5 A desktop based Public Transport Accessibility Level (PTAL) assessment of the Application Site has been undertaken. The PTAL has been calculated using TfL's approved PTAL methodology⁸. This assumes a walking speed of 4.8km/h. It considers rail stations within a 12 minute walk (960m) and bus stops within an eight minute walk (640m) as accessible.
- 1.4.6 The numbers of existing bus, London Underground and rail services were calculated using March 2015 timetable information.

Pedestrians

- 1.4.7 The existing pedestrian network has been identified through desktop studies and site visits. The purpose of this review was to identify the existence, qualities, legibility and convenience of the existing pedestrian infrastructure. The review was based on professional judgement and details can be found in Section 3 of the TA (Vol 2 Appendix 10.2 of the ES).

Cyclists

- 1.4.8 In addition to a site visit, a desktop study was used to identify the existing local cycling infrastructure. The purpose of this review was to identify the existence, quantities, coherence and convenience of the existing cycling infrastructure. The review was based on professional judgement and details can be found in Section 3 of the TA (Vol 2 Appendix 10.2 of the ES).
- 1.4.9 There is no standard measure for assessing the distance from a development to cycling facilities. When assessing bus services, all services within 640m of the Application Site boundary are considered within accessible walking distance; this was therefore considered to be an appropriate catchment area for cycling facilities as well. All cycle parking and cycle routes within 640m are included within the baseline.

⁸ PTAL is a detailed measure of the accessibility of a defined point to the public transport network, taking into account walk access time and service availability. TfL's summary document on PTAL measurement can be accessed at: <http://data.london.gov.uk/dataset/public-transport-accessibility-levels/resource/86bbffe1-8af1-49ba-ac9b-b3eacaf68137/proxy>

Equestrians

- 1.4.10 In addition to a site visit, a desktop study was used to identify the existing local equestrian network. The purpose of this review was to identify the existence and quality of local equestrian routes. The review was based on professional judgement and details can be found in Section 3 of the TA (Vol 2 Appendix 10.2 of the ES).
- 1.4.11 There is no standard measure for determining the area which should be considered when assessing local equestrian routes. As was the case with the assessment of the local cycle network, a 640m catchment area from the Application Site boundary was deemed to be appropriate for the assessment of equestrian routes.

Receptor identification and sensitivity

- 1.4.12 The significance of any effect is dependent upon both the sensitivity of the receptor affected and the magnitude of the effect. The criteria for determining receptor sensitivity varies by receptor. Vol 2 Appendix 10.1 Table 4 sets out the receptor sensitivity methodologies for the identified receptors based on baseline conditions.

Vol 2 Appendix 10.1 Table 4: Methodology for determining receptor sensitivity

Receptor	Description	Methodology for identifying sensitivity level
Road users	Road users, including construction workers and operational employees, on the road network in the immediate vicinity of the Application Site (i.e. access points).	Analysis of survey data to determine existing traffic conditions in the vicinity of the Application Site. The receptor sensitivity is identified as very low, low, medium or high based on professional judgement.
Public transport users	Public transport users, including construction workers and operational employees, travelling on bus, rail or Underground services in the vicinity of the Application Site.	Desktop study to determine the availability of public transport services. The receptor sensitivity is identified as very low, low, medium or high based on professional judgement.
Pedestrians	Pedestrians, including construction workers, operational employees, wheelchair users, people with pushchairs and people with mobility impairments using footways and pedestrian infrastructure, including those leading to local public transport stops, in the vicinity of the Application Site.	Desktop study on the availability and location of pedestrian routes. The receptor sensitivity is identified as very low, low, medium or high based on professional judgement.
Cyclists	Cyclists, including construction workers and operational employees, using cycle routes in the vicinity of the Application Site affected by the proposals	Analysis of survey data to determine existing traffic conditions in the vicinity of the Application Site and a desktop study on the availability and location of cycle routes. The

Receptor	Description	Methodology for identifying sensitivity level
		receptor sensitivity is identified as very low, low, medium or high based on professional judgement.
Equestrians	Equestrians using the River Lee Navigation path/towpath.	Desktop study on the availability and location of equestrian routes. The receptor sensitivity is identified as very low, low, medium or high based on professional judgement.

Future baseline

1.4.13 The future baseline has been determined using the same sources of information as the current baseline. Information available on expected changes to the transport networks was also used for the development of the future baseline. Full details of the methodology used in the development of the future baseline are included in Section 6 of the TA contained in Vol 2 Appendix 10.2 of the ES.

1.4.14 In addition, information on developments in the area close to the Application Site that have extant planning permissions has been used to identify any additional future receptors for consideration in the baseline and assessment.

1.5 Construction and operational effects

1.5.1 Each of the Project development stages is considered in terms of both construction and operational traffic, i.e. it is a combined assessment with the total traffic within each stage considered. Also, when considering the construction and operational effects of the Project on environmental receptors, the same significance criteria are used.

Assessment of Project stages

- 1.5.2 A number of trip generation scenarios are assessed:
- a. Stage 1a – site preparation and enabling works;
 - b. Stage 1b – construction of RRF, EcoPark House and commence use of Temporary Laydown Area;
 - c. Stage 1c – operation of RRF, EcoPark House and demolition/clearance of northern area;
 - d. Stage 1d – construction of proposed ERF;
 - e. Stage 2: commissioning of ERF alongside operation of existing EfW facility, i.e. transition period;
 - f. Stage 3: operation of proposed ERF, RRF and EcoPark House, demolition of existing EfW facility; and

- g. Stage 4: operation of proposed ERF, RRF and EcoPark House, i.e. final operational situation; and
 - h. decommissioning of proposed ERF.
- 1.5.3 For the assessment of Stage 1, the assessment focuses on Stage 1d which is the 'busiest case scenario', generating the most trips (combined construction and operation trips) on the local transport network. For all other Stage 1 sub-stages, the effect of the Project on the local transport network would be lower than that of Stage 1d.

Assessment area

- 1.5.4 The assessment area for assessing impacts on road users (shown on Vol 2 Figure 10.2 of the ES) focuses on the highway network in the vicinity of the application site including the following junctions:
- a. A406 North Circular Road/Advent Way (Cooks Ferry Roundabout);
 - b. A406 North Circular Road/Montagu Road;
 - c. A1055 Meridian Way/Conduit Lane;
 - d. A406 North Circular Road/A1010 Fore Street; and
 - e. A406 North Circular Road/A10 Great Cambridge Road.
- 1.5.5 The above junctions/links have been included as they have been specifically referenced in the Edmonton EcoPark Planning Brief⁹. The assessment area has also been discussed with TfL and LB Enfield.
- 1.5.6 The assessment area for assessing impacts on public transport users focuses on the public transport services identified in Paragraphs 1.4.5-1.4.6.
- 1.5.7 The assessment area for assessing impacts on pedestrians, cyclists and equestrians focuses on the relevant local networks identified in Paragraphs 1.4.7-1.4.11.

Assessment method

- 1.5.8 Based on the approach recommended by the guideline documents discussed above, the process for the environmental effect assessment has been as follows:
- a. To identify the different groups or receptors that would be affected by the transport effects of the Project;
 - b. To develop a checklist of potential effects on the different groups/receptors;
 - c. To develop a significance framework, setting out the levels of significance of effects on different users/receptors;
 - d. To develop a baseline (to be used for comparison against the different development stages of the Project);

⁹ Enfield Council (2013) Edmonton EcoPark Planning Brief Supplementary Planning document, May 2013.

- e. To identify what the changes would be for the different stages of the Project; and
- f. To assess the changes and effects on receptors in terms of significance using the significance framework.

1.5.9 Vol 2 Appendix 10.1 Table 5 addresses steps one and two of this process.

Vol 2 Appendix 10.1 Table 5: Summary of potential transport environmental effects

Guidance	Potential transport effects	Affected parties/areas (receptors)
TfL	Effects on the road network (including loading)	Car clubs, car parking, coaches, dial-a-ride, electric vehicle charging points, freight, taxis and private hire, 'general' road users i.e. drivers
	Effects on cycle and pedestrian routes	Cycling [leisure and utility] and walking
	Effects on the public transport network	Buses, Rail and London Underground passengers and operators
HA – Effects of construction	Localised increase in noise*, vibration*, dust and dirt*, and a loss of amenity, longer journey times, impact on the natural environment*	Pedestrians, cyclists [leisure and utility], equestrians, the local community (including vulnerable groups which should be separately identified), the natural environment, [motor] vehicle users
HA – Pedestrians, cyclists, equestrians and community effects	Changes in journey lengths and patterns	Pedestrians, cyclists [leisure and utility], equestrians, the local community (including vulnerable groups which should be separately identified)
	Changes in route amenity	
	Adverse or beneficial changes in existing community severance, new severance or relief from severance	
HA – Vehicle travellers	View from the road	[Motor] Vehicle users
	Driver stress	
HA – Policies and Plans	Effect on transport policy objectives	Society as a whole
IEMA	Noise*	Local community
	Vibration*	Local community
	Visual effect*	Society as a whole
	Severance	Pedestrians and vehicle users
	Driver delay	[Motor] Vehicle users
	Pedestrian delay	Pedestrians
	Pedestrian amenity	Pedestrians
	Fear and intimidation	Vulnerable road users
	Accidents and safety	All road users
	Hazardous loads*	All parties
	Air pollution*	Local community, society as a whole

Guidance	Potential transport effects	Affected parties/areas (receptors)
	Dust and dirt*	Local community
	Ecological effect*	Sites of ecological/nature conservation value

Note: aspects marked with an asterisk '*' have been covered in different topic assessments within the ES.

- 1.5.10 The assessment covers all the potential transport effects outlined in Vol 2 Appendix 10.1 Table 5 except for those which were highlighted for assessment by a different discipline (i.e. assessment contained within other topic sections of the ES).
- 1.5.11 Assessments of effects in relation to the construction and operation of the Project have been undertaken. The assessments are based on trip generation and distribution analysis and on the physical changes proposed to the transport networks. Data presented in Sections 5 and 6 of the TA provides information regarding the anticipated number of vehicle trips, by type, that the construction and operation of the Project would generate respectively and the probable routes those vehicles would take. Trip generation for the construction of the Project is based on the expected vehicle requirements for materials deliveries and removal of materials and also includes trips by construction workers by all modes of transport. Trip generation for the operation of the Project is based on the expected number of trips by operational employees and visitors accessing the Project as well as the expected number of operational vehicle trips associated with the operation of the facility.
- 1.5.12 The expected mode split of construction workers and operational employees has been derived based on the location of the application site, the accessibility to public transport and the likely shift times/patterns (for operational employees).
- Road users**
- 1.5.13 For the operational assessment, the number of trips and the directional distribution has been derived based on the borough/location from which waste is arriving, the volume of municipal waste arriving at the application site from each borough/location, the location of any waste transfer stations from which waste is arriving and the destination of any waste outputs. The number of visitor trips to the application site has also been estimated and its impact on the highway network assessed.
- 1.5.14 The number of construction traffic trips and directional distribution has been derived in a similar manner for the construction stages, based on the anticipated origins and destinations of construction materials and construction waste.
- 1.5.15 A mode share has been calculated to determine the number of trips undertaken to the Edmonton EcoPark site by each mode of transport for construction workers during the construction stage and operational employees during the operational stage. These trips would be distributed to the local transport networks.

- 1.5.16 The forecasted volume of traffic for the construction and operation stages has been assessed against baseline traffic flows for the AM, PM and Saturday peak hours to quantify the increase in traffic as a result of construction or operation and the effect these additional trips would have on the network.
- 1.5.17 The effect on road users, which includes construction workers and operational employees, has been determined for the highway AM peak hours (07:00–08:00/08:00–09:00) and the highway PM peak hours (17:00–18:00/18:00–19:00) as well as the period during the day which the application site generates most traffic. This occurs between 11:00 and 12:00, as derived from the profile of traffic entering and leaving the existing site. In determining the effects during the AM and PM peak hours, the traffic generated by the application site has been considered so that the 'busiest case' scenario has been assessed.
- 1.5.18 Outside of the above hours, the traffic generated by the application site would be lower and would have a lower effect on the local highway network.
- 1.5.19 The effect on road users of overspill parking has been determined by considering the proposed parking provision, the likelihood of the occurrence of overspill parking and the reduction in road capacity should it occur.

Public transport users

- 1.5.20 The effects on public transport services as a result of construction workers during the construction of the Application Site and operational employees and visitors once the Application Site is in operation have been assessed by comparing the number of construction workers and employees anticipated to use public transport with the number of AM peak hour and PM peak hour services. For a robust assessment it has been assumed that all construction worker and employee trips would occur between 08:00 and 09:00 which is usually the busiest period on public transport. In reality construction workers may arrive earlier than 08:00 when the public transport networks are quieter and employees may have working hours that mean that they are not travelling at the busiest period.
- 1.5.21 Professional judgement has been used to determine the effect that additional passengers would have on public transport services based on a typical bus capacity of 87 passengers (double decker), a tube (Victoria line) capacity of 864 passengers per train and a capacity of approximately 600 passengers per train (Greater Anglia).
- 1.5.22 The effect of changes to traffic levels on the road network on bus services as road users have been covered under the highway network assessment. This includes construction workers and operational employees as public transport users.
- 1.5.23 Accessibility to public transport for wheelchair users, people with pushchairs and people with mobility impairments is considered as part of the pedestrian assessment.

Pedestrians

- 1.5.24 The effects on pedestrian networks in terms of delay to pedestrian, including construction workers and operational employees, and route options has been assessed by measuring the additional journey distance and assessing the physical changes to routes likely to occur as a result of proposed diversions during construction and permanent changes to routes during operation. Professional judgement based on knowledge of the local highway network has been used to determine the effect that additional pedestrians would have on the local pedestrian network. Given that the traffic flows in the vicinity of the Project are already high, the flow increases arising from the Project may not be noticed by pedestrians. In such instances, the flow increases would be deemed imperceptible.
- 1.5.25 Route amenity, severance, safety and fear and intimidation effects have been assessed with reference to expected traffic volumes (and composition) and baseline conditions on routes in the vicinity of the Application Site using professional judgement.
- 1.5.26 Access to the Application Site for wheelchair users, people with pushchairs and people with mobility impairments, including pedestrian access to public transport have also been assessed with reference to expected traffic volumes (and composition) and baseline conditions on routes in the vicinity of the Application Site using professional judgement.

Cyclists

- 1.5.27 The effects on cycling networks in terms of delay and route options has been assessed by measuring the additional journey distance and assessing the physical changes to routes likely to occur as a result of proposed diversions during construction and permanent changes to routes during operation. The assessments take into account any route changes which mean that cyclists are required to dismount from their cycle or manoeuvre around obstacles (such as gates, steps and so on), which are known to create inconvenience and discomfort and to reduce the overall accessibility of routes. Professional judgement based on knowledge of the local highway network was used to determine the effect that additional cyclists would have on the local cycle network.

Route amenity, severance, safety and fear and intimidation effects have been assessed with reference to expected traffic volumes (and composition) and baseline conditions on routes in the vicinity of the application site using professional judgement.

Equestrians

- 1.5.28 The effects on equestrian routes in terms of delay and route options has been assessed by measuring the additional journey distance and assessing the physical changes to routes likely to occur as a result of proposed diversions during construction and permanent changes to routes during operation.
- 1.5.29 Route amenity, severance, safety and fear and intimidation effects have been assessed with reference to expected traffic volumes (and

composition) and baseline conditions on routes in the vicinity of the application site using professional judgement.

Significance criteria

1.5.30 Vol 2 Appendix 10.1 Table 6 sets out the explanation of magnitude of effect for the different types of effects on different receptors. General definitions are not related to a particular stage of development but instead give a general summary of what would be expected at that level of magnitude in an assessment looking at any stage of the Project. Effect thresholds have been defined in relation to the Project specifically to reflect the area in which the Project is located and the existing transport conditions in the vicinity of the application site.

In the case of the assessment of the effect of the Project on road users, the assessment considers the overall effect on the users of all roads that are included in the assessment. This means that while a particular road may have a high magnitude effect (i.e. increase in traffic of over 40 per cent), the overall effect on road users could still be very low if all other roads within the assessment experience a very low magnitude effect (i.e. increase in traffic of less than 10 per cent).

Vol 2 Appendix 10.1 Table 6: Explanation of magnitude of effects based on effect receptors

Receptor	Description of effect	Definition of effect
High magnitude effect		
<u>General definition:</u> permanent/irreversible change, over the whole Project area and beyond (i.e. strategic or regional scale) to key characteristics or features of receptor. Effects certain or likely to occur.		
<u>Receptor-specific definitions</u>		
Road users	Very significant increase in delay to road users or reduction in road capacity caused by increases in traffic volumes or overspill parking.	Increase in peak hour traffic flows of 40 per cent as a result of the Project; Increase of greater than ten percentage points in the junction degree of saturation (DoS) ¹⁰ or ratio of flow to capacity (RFC) ¹¹ , where the future baseline DoS or RFC is greater than 85 per cent or increases to above 85 per cent as a result of the Project; Qualitative assessment shows a very substantial negative effect on road safety; and/or Qualitative assessment shows a very substantial negative effect on road capacity due to overspill parking.
Public transport users	Very significant increase in the number of passengers on public transport resulting in a reduction	Increase of >25 per cent in the number of users on each public transport service when considered against the

¹⁰ Degree of saturation (DoS): the ratio of demand to capacity used as an indicator of signalised junction performance.

¹¹ Ratio of flow to capacity (RFC): ratio of flow to capacity used as an indicator of priority junction/roundabout performance.

Receptor	Description of effect	Definition of effect
	in capacity for other public transport users.	theoretical capacity of public transport services.
Pedestrians	Very significant reduction in route amenity or route options or significant increase in delay. Very significant increase in severance.	Very substantial loss of existing routes; Qualitative assessment shows a very significant reduction in route amenity or safety; and/or Permanent increase in journey length of 250m or more.
Cyclists	Very significant reduction in route amenity or route options or significant increase in delay. Very significant increase in severance.	Very substantial loss of existing routes; Qualitative assessment shows a very significant reduction in route amenity or safety; and/or Permanent increase in journey length of 500m or more.
Equestrians	Very significant reduction in route amenity or route options or significant increase in delay. Very significant increase in severance.	Very substantial loss of existing routes; Qualitative assessment shows a very significant reduction in route amenity or safety; and/or Permanent increase in journey length of 500m or more.
Medium magnitude effect		
<u>General definition:</u> temporary change, over the majority of the Project and potentially beyond, to key characteristics or features of the receptor; or Permanent change over a localised area. Effects certain or likely to occur.		
<u>Receptor-specific definitions</u>		
Road users	Significant increase in delay to road users or reduction in road capacity caused by increases in traffic volumes or overspill parking.	Increase in peak hour traffic flows of between 20 per cent and 40 per cent as a result of the Project or increase of between five and ten percentage points in the junction DoS or RFC, where the future baseline DoS or RFC is greater than 85 per cent or increases to above 85 per cent as a result of the Project; Qualitative assessment shows a substantial negative effect on road safety; and/or Qualitative assessment shows a substantial negative effect on road capacity due to overspill parking.
Public transport users	Significant increase in the number of passengers on public transport resulting in a reduction in capacity for other public transport users.	Increase of between 15 per cent and 25 per cent in the number of users on each public transport service when considered against the theoretical capacity of public transport services.
Pedestrians	Significant reduction in route amenity or route options or significant increase in delay. Significant increase in severance.	Substantial negative change to existing routes; Qualitative assessment shows a significant reduction in route amenity or safety; and/or

Receptor	Description of effect	Definition of effect
		Change in journey length by between 250m and 500m either permanently or for a period of four weeks or more (during construction).
Cyclists	Significant reduction in route amenity or route options or significant increase in delay. Significant increase in severance.	Substantial negative change to existing routes; Qualitative assessment shows a significant reduction in route amenity or safety; and/or Change in journey length by between 250m and 500m either permanently or for a period of four weeks or more (during construction).
Equestrians	Significant reduction in route amenity or route options or significant increase in delay. Significant increase in severance.	Substantial negative change to existing routes; Qualitative assessment shows a significant reduction in route amenity or safety; and/or Change in journey length by between 250m and 500m either permanently or for a period of four weeks or more (during construction).
Low magnitude effect		
<u>General definition:</u> noticeable, temporary (during the Project duration) change, over a limited/local area, to key characteristics or features of the receptor. Effects would possibly occur.		
<u>Receptor-specific definitions</u>		
Road users	Slight increase in delay to road users or reduction in road capacity caused by increases in traffic volumes or overspill parking.	Increase in peak hour traffic flows of between 10 per cent and 20 per cent as a result of the Project or increase of between two and five percentage points in the junction DoS or RFC, where the future baseline DoS or RFC is greater than 85 per cent or increases to above 85 per cent as a result of the Project; Qualitative assessment shows a slight negative effect on road safety; and/or Qualitative assessment shows a slight negative effect on road capacity due to overspill parking.
Public transport users	Slight increase in the number of passengers on public transport resulting in a reduction in capacity for other public transport users.	Increase of between 10 per cent and 15 per cent in the number of users on each public transport service when considered against the theoretical capacity of public transport services.
Pedestrians	Slight reduction in route amenity or route options or slight increase in delay. Slight increase in severance.	Slight negative change to existing routes; Qualitative assessment shows a slight negative effect on road safety; and/or

Receptor	Description of effect	Definition of effect
		Change in journey length by between 100m and 250m for a period of four weeks or more (during construction).
Cyclists	Slight reduction in route amenity or route options or slight increase in delay. Slight increase in severance.	Slight negative change to existing routes; Qualitative assessment shows a slight reduction in route amenity or safety; and/or Change in journey length by between 100m and 250m for a period of four weeks or more (during construction).
Equestrians	Slight reduction in route amenity or route options or slight increase in delay. Slight increase in severance.	Slight negative change to existing routes; Qualitative assessment shows a slight reduction in route amenity or safety; and/or Change in journey length by between 100m and 250m for a period of four weeks or more (during construction).
Very low magnitude effect		
<u>General definition:</u> noticeable, temporary (for part of the Project duration) change, or barely discernible change for any length of time, over a small area, to key characteristics or features of receptor. Effects unlikely or rare to occur.		
<u>Receptor-specific definitions</u>		
Road users	Very slight increase in delay to road users or reduction in road capacity caused by increases in traffic volumes or overspill parking.	Increase in peak hour traffic flows of less than 10 per cent as a result of the Project or increase of less than two percentage points in the junction DoS or RFC, where the future baseline DoS or RFC is greater than 85 per cent or increases to above 85 per cent as a result of the Project; Qualitative assessment shows a very slight negative effect on road safety; and/or Qualitative assessment shows a very slight negative effect on road capacity due to overspill parking.
Public transport users	Very slight increase in the number of passengers on public transport resulting in a reduction in capacity for other public transport users.	Increase of less than 10 per cent in the number of users on each public transport service when considered against the theoretical capacity of public transport services.
Pedestrians	Very slight reduction in route amenity or route options or increase in delay.	Very slight negative change to existing routes; Qualitative assessment shows a very slight reduction of route amenity or safety; and/or

Receptor	Description of effect	Definition of effect
		Change in journey length by less than 100m for a period of four weeks or more (during construction).
Cyclists	Very slight reduction in route amenity or route options or increase in delay.	Very slight negative change to existing routes; Qualitative assessment shows a very slight reduction route amenity or safety; and/or Change in journey length by less than 100m for a period of four weeks or more (during construction).
Equestrians	Slight reduction in route amenity or route options or slight increase in delay. Slight increase in severance.	Slight negative change to existing routes; Qualitative assessment shows a slight reduction in route amenity or safety; and/or Change in journey length by between 100m and 250m for a period of four weeks or more (during construction).

1.5.31 Combining the receptor sensitivity with magnitude of effect, the overall significance of effect can be assessed for each stage of the Project. Vol 2 Appendix 10.1 Table 7 sets out a matrix of significance levels.

Vol 2 Appendix 10.1 Table 7: Matrix to determine effect significance

Magnitude of effect	Sensitivity of receptor			
	High	Medium	Low	Very low
High	Major	Major to moderate	Moderate to minor	Negligible
Medium	Major to moderate	Moderate	Minor	Negligible
Low	Moderate to minor	Minor	Minor to negligible	Negligible
Very low	Negligible	Negligible	Negligible	Negligible

1.5.32 These effect categories can then be used to assess whether an effect is significant or not significant in EIA terms. Vol 2 Appendix 10.1 Table 8 sets out the definitions for effect levels and significance and identifies how these relate to the matrix of significance set out in Vol 2 Appendix 10.1 Table 7.

Vol 2 Appendix 10.1 Table 8: Definitions for effect levels and significance

Category	Effect level	Significance
Major effect	The importance of the receptor and the magnitude of effects are predicted to give rise to effects that are fundamental and may be material in the decision-making process.	Significant
Moderate effect	The importance of the receptor and the magnitude of effects are predicted to give rise to effects that are material but not fundamental and alone are not likely to be material in the decision-making process.	
Minor effect	The importance of the receptor and the magnitude of effects are predicted to give rise to effects that are detectable but	Not significant

Category	Effect level	Significance
	alone are not likely to be material in the decision-making process.	
Negligible effect	The effects arising from the specified magnitude of effect acting on the receptor are not predicted to be detectable or outside the norms of variations.	

1.5.33 Transport-related mitigation measures have been built into the Project for the construction and operation elements of the Project and so are reflected in the assessments for each development stage. These include measures such as improvements to the Lee Park Way, new accesses to the Application Site, and cycle parking and shuttle buses for the Application Site during the construction stage. Full details are provided in the TA (Vol 2 Appendix 10.2 of the ES).

1.6 Decommissioning effects

1.6.1 The effects of decommissioning would be comparable to and no worse than the effects assessed for Stage 3 of the Project. No additional assessment for decommissioning has been undertaken but the assessment draws on the Stage 3 assessment.

1.7 Cumulative effects

1.7.1 A separate assessment of the cumulative effects of the Project with other nearby developments (as set out in Vol 2 Section 10.11 of the ES) on all receptors during each Project stage has also been undertaken.

1.7.2 The methodologies for the cumulative assessment is the same as the assessment of the effects of the Project. The effect of cumulative developments has been determined by utilising trip generation figures from these developments' TAs or through trip generation estimates carried out for these developments specifically for this assessment. This approach to the cumulative effects assessment trip generation has been agreed with TfL.

1.7.3 The output of the cumulative assessment is used to determine whether the cumulative effects are of greater significance than those set out in the core assessment.

NORTH LONDON WASTE AUTHORITY
NORTH LONDON HEAT AND POWER
PROJECT

ENVIRONMENTAL STATEMENT:
VOLUME 2 APPENDIX 10.2
TRANSPORT ASSESSMENT

AD06 .02

REFER TO APPLICATION DOCUMENT AD05.11 TRANSPORT
ASSESSMENT



Series 06 Environmental
Statement

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