



ENVIRONMENTAL STATEMENT: 6.1 CHAPTER 18: LANDSIDE TRANSPORT

DECARBONISATION

Cory Decarbonisation Project

PINS Reference: EN010128

March 2024

Revision A

TABLE OF CONTENTS

18. LANDSIDE TRANSPORT	1
18.1. Introduction	1
18.2. Policy and Guidance	1
18.3. Consultation and Engagement.....	5
18.4. Assessment Methodology and Significance Criteria	19
18.5. Study Area	33
18.6. Baseline Conditions and Future Baseline	34
18.7. Embedded Design, Mitigation and Enhancement Measures.....	43
18.8. Assessment of Likely Impacts and Effects	44
18.9. Additional Design, Mitigation and Enhancement Measures	52
18.10. Monitoring	52
18.11. Residual Effects	52
18.12. Limitations and Assumptions.....	55
18.13. References.....	56

TABLE

Table 18-1: Landside Transport Summary of Key Policy and Guidance	1
Table 18-2: Consultation and Engagement Summary Table in relation to Landside Transport	6
Table 18-3: Summary of the Statutory Consultation Comments in relation to Landside Transport	8
Table 18-4: Traffic Survey Count Locations.....	20
Table 18-5: Method Used to Travel to Work by Distance Travelled to Work for Bexley 003 MSOA (2021 Census ¹⁸).....	24
Table 18-6: Staff Vehicle Distribution.....	25
Table 18-7: Worst case Peak Daily Construction Traffic Attraction (Two-way)	25
Table 18-8: Anticipated Regular Material and Staff Requirements – Two-Way Traffic Flows	27
Table 18-9: Worst Case Peak Daily Operational Traffic Attraction (Two-way)	28
Table 18-10: Fear and Intimidation Degree of Hazard	30
Table 18-11: Levels of Fear and Intimidation Total Hazard Score	30
Table 18-12: Fear and Intimidation Magnitude of Impact	31
Table 18-13: Accidents and Road Safety: Magnitude of Effect.....	32
Table 18-14: Summary of Observed Traffic Flows	35
Table 18-15: Personal Injury Accident Data: Summary By Year.....	37

Table 18-16: Personal Injury Accident Data: Cluster Sites (>10 PIAs)	37
Table 18-17: Bus Timetable Information.....	38
Table 18-18: Train Services.....	39
Table 18-19: TEMPro Growth Factors.....	42
Table 18-20: Summary of Proposed Future Year Traffic Flows	42
Table 18-21: Summary of Future Baseline Flows and Anticipated Construction Phase and Operation Phase Flow Impact.....	44
Table 18-22: Driver Delay: Construction	47
Table 18-23: Driver Delay: Operation.....	50
Table 18-24: Landside Transport – Summary of Residual Effects.....	53

18. LANDSIDE TRANSPORT

18.1. INTRODUCTION

- 18.1.1. This chapter reports the assessment of the likely significant effects of the Proposed Scheme on landside transport during construction and operation and describes:
- relevant policy and guidance;
 - consultation undertaken to date;
 - the methodology for assessment;
 - potential effects of the construction phase; and
 - potential effects of the operation phase.
- 18.1.2. This chapter has been underpinned by the analysis presented within the Transport Assessment that has been prepared separately for the Proposed Scheme. For further information see **Appendix 18-1: Transport Assessment (Volume 3)**.

18.2. POLICY AND GUIDANCE

- 18.2.1. The policy and guidance relevant to the assessment of landside transport for the Proposed Scheme is detailed in **Table 18-1**.
- 18.2.2. Landside transport is not governed by legislation in the way that other technical topics are; consequently, legislation is not included in **Table 18-1**.

Table 18-1: Landside Transport Summary of Key Policy and Guidance

Policy, Legislation or Guidance	Description
Policy	
Overarching National Policy Statement For Energy EN-1 2024¹	<p>This Overarching National Policy Statement for Energy (EN-1) is part of a suite of NPS designated by the Secretary of State of DESNZ in January 2024.</p> <p>Under Section 5.14 ‘Traffic and Transport’ the NPS highlights that where possible, development should be located in areas already accessible by active travel and public transport. This section also suggests that all stages of the project should support and encourage a modal shift of freight from road to more environmentally sustainable alternatives, such as rail, cargo bike, maritime and inland waterways. The NPS also sets out a need for a Construction Travel Management Plan (CTMP), Travel Plan and a Transport Assessment (Appendix 18-1: Transport Assessment (Volume 3)).</p>
Decarbonising Transport: A Better,	Confirms that decarbonisation will deliver better, faster, cleaner and more efficient transport for everyone. The

Policy, Legislation or Guidance	Description
Greener Britain 2021²	document sets out a series of commitments to decarbonise the transport system before 2050, including reforming future local transport funding for local and regional level organisations to design and deliver local place improvements, delivering a zero-emission freight and logistics sector and maximising the benefits of sustainable low carbon fuels.
National Planning Policy Framework (NPPF) 2023³	The NPPF sets out the Government’s planning policies for England and how these should be applied. Section 9: Promoting Sustainable Transport, states that <i>“transport issues should be considered from the earliest stages of plan-making and development proposals, so that the potential impacts of development on transport networks can be addressed”</i> .
The Bexley Local Plan 2023⁴	The Local Plan, adopted on 26 April 2023, positively plans for sustainable development across the Borough. It is essential to the delivery of the Council’s other key plans and strategies, including the Bexley Plan, the Growth Strategy and the Connected Communities Strategy. Relevant landside transport policies include: <ul style="list-style-type: none"> ● SP10: Bexley’s Transport Network; ● DP19: The River Thames and the Thames Policy Area; ● DP22: Sustainable Transport; and ● DP24: Impact of new development on the transport network.
The London Plan 2021⁵	The Spatial Development Strategy for Greater London sets out a framework for how London will develop over the next 20-25 years and the Mayor’s vision for Good Growth. Chapter 10 covers transport and outlines a series of policies relevant to the Proposed Scheme, including: <ul style="list-style-type: none"> ● T1: Strategic Approach to Transport; ● T4: Assessing and Mitigating Transport Impacts; and ● T7: Deliveries, Servicing and Construction.
London Environment Strategy 2018⁶	The London Environment Strategy seeks to ensure that London will become a <i>“zero carbon city by 2050”</i> by setting out policies and proposals in seven policy areas to address environmental challenges. Transport forms one of the strategy’s pillars, with road transport identified as one of the

Policy, Legislation or Guidance	Description
	<p>main pollutants in London. To meet the Mayor’s ambition target of a zero-emission transport network by 2050 (Objective 6.3) the strategy aims to phase out the use of diesel vehicles alongside a mode shift to sustainable forms of transport (Policy 4.2.1 and Policy 4.3.2).</p> <ul style="list-style-type: none"> • Policy 4.2.1 Reduce emissions from London’s road transport network by phasing out fossil fuelled vehicles, prioritising action on diesel, and enabling Londoners to switch to more sustainable forms of transport; and • Policy 4.3.2 The Mayor will encourage the take up of ultra low and zero emission technologies to make sure London’s entire transport system is zero emission by 2050 to further reduce levels of pollution and achieve WHO air quality guidelines.
<p>Mayor’s Transport Strategy 2018⁷</p>	<p>This sets out the Mayor’s policies and proposals to reshape transport in London over the next two decades. A supplementary proposal was added in November 2022 to address the challenges of toxic air pollution, the climate emergency and traffic congestion.</p>
<p>Kent Local Transport Plan (LTP) 4: Delivering Growth without Gridlock 2016-2031⁸</p>	<p>This Plan brings together Kent County Council’s (KCC) transport policies, looking at local developments and issues as well as those relevant at countywide and of national significance. LTP4 aims to deliver safe and effective transport ensuring that all Kent’s communities and businesses benefit, the environment is enhanced, and economic growth is supported. This ambition will be realised through overarching policies that are targeted at delivering specific outcomes: economic growth and minimised congestion; affordable and accessible door-to-door journeys; safer travel; enhanced environment; and better health and wellbeing. LTP4 is relevant to the Proposed Scheme as vehicles travelling to/from the Site are likely to use part of the highway network maintained by KCC as the LHA.</p>
<p>Kent Emerging Local Transport Plan 5: Turning the Curve Towards Net Zero 2023⁹</p>	<p>KCC is in the process of preparing LTP 5 which, once adopted will replace LTP4. The ambition of the emerging LTP5 is <i>“to improve the health, wellbeing, and economic prosperity of lives in Kent by delivering a safe, reliable, efficient, and affordable transport network across the county and as an international gateway.”</i></p>

Policy, Legislation or Guidance	Description
Dartford Development Policies Plan 2017¹⁰	This Plan sets out the main planning policies that DBC will use to assess planning applications, supporting its adopted Core Strategy (2011). Policy DP3 Transport Impacts of Development' states that "development will only be permitted where it is appropriately located and makes suitable provision to minimise and manage the arising transport impacts". This Plan is relevant to the Proposed Scheme as vehicles travelling to/from the Site are likely to use part of the highway network maintained by KCC as the LHA with DBC operating as the LPA.
Dartford Local Plan to 2037 Pre-Submission (Publication) 2021¹¹	Sets the long term Borough development strategy and would replace all policies from the existing Core Strategy 2011 and Development Policies Plan 2017, once adopted. Policies relevant to the Proposed Scheme, include: <ul style="list-style-type: none"> ● M16: Travel Management; and ● M17: Active Travel, Access and Parking.
Guidance	
National Planning Practice Guidance 2021¹²	Explains the processes and tools that can be used through the planning system in England. Guidance on Travel Plans, Transport Assessments and Statements, is provided within the NPPG collection. The guidance recognises that TAs can positively contribute towards encouraging sustainable travel; lessening traffic impacts; improving road safety and reducing the need to increase existing road capacity or provide new roads.
Guidelines for the Environmental Assessment of Traffic and Movement 2023¹³	Provides good practice advice built up over the past three decades on the assessment of traffic and movement. Its scope is to provide the basis for systematic, consistent and comprehensive coverage for the assessment of traffic and movement impacts for a wide range of development projects as part of an environmental assessment/statement. The Guidelines are intended to complement professional judgement.
London Borough of Bexley: Installation of Temporary Traffic Count Equipment 2023¹⁴	Guidance note outlines the process in obtaining permission from LBB to undertake and install traffic survey and monitoring equipment. Outlines relevant conditions of installations, restrictions and positioning to ensure safety of

Policy, Legislation or Guidance	Description
	operators and general public for the duration of the survey period.

18.3. CONSULTATION AND ENGAGEMENT

- 18.3.1. **Table 18-2** provides a summary of the consultation and engagement undertaken in support of the preparation of this assessment.
- 18.3.2. **Table 18-3** provides a summary of comments provided as part of the statutory consultation process and an appropriate response.
- 18.3.3. **Appendix 4-2: Scoping Opinion Responses (Volume 3)** provides a summary of the Planning Inspectorate and consultee comments on the EIA Scoping Opinion¹⁵ and the Applicant's responses.

Table 18-2: Consultation and Engagement Summary Table in relation to Landside Transport

Date and Method of Consultation	Consultee	Summary of Key Topics Discussed and Key Outcomes
22 nd May 2023, Email	London Borough of Bexley (LBB)	Scope: Proposed traffic survey scope and construction/operation traffic routing, which outlined: <ul style="list-style-type: none"> ● Proposed survey types and locations; ● Proposed construction traffic routing between proposed site and strategic road network (SRN); and ● Proposed survey timings (mid- 2023). Response/Outcomes (7 th June 2023): <ul style="list-style-type: none"> ● Additional survey locations suggested, which have been added to the survey scope; and ● Highlighted local guidance note, Installation of Temporary Traffic Count Equipment.
	Royal Borough of Greenwich (RBG)	Scope: As per the scope for LBB above. Response/Outcomes (31 st May 2023): <ul style="list-style-type: none"> ● Noted that the survey scope included the main vehicle routes affecting the Borough. No additional comments.
	Dartford Borough Council (DBC)	Scope: As per the scope for LBB above. Response/Outcomes (26 th May 2023): <ul style="list-style-type: none"> ● Noted position as secondary tier authority with KCC acting as primary LHA; and ● Noted sensitivities surrounding the A2026 Burnham Road due to its residential nature and proximity of Dartford town centre which is readily impacted upon by traffic diverting from the SRN.
	Kent County Council (KCC)	Scope: As per the scope for LBB above. Response/Outcomes (25 th May 2023): <ul style="list-style-type: none"> ● Noted area of Dartford is heavily congested around access to SRN; and

Date and Method of Consultation	Consultee	Summary of Key Topics Discussed and Key Outcomes
		<ul style="list-style-type: none"> Noted that Riverside 2 did not require modelling of the A2026 Burnham Road junction, nor the A282 J1a or 1b as the level of predicted traffic generation did not warrant it. If the level of traffic is anticipated to be similar to the previous application, then this assumption is likely to remain and therefore no traffic surveys would be required at these junctions. However, evidence should be provided at the appropriate time to demonstrate this.
	Transport for London (TfL) – Spatial Planning	<p>Scope: As per the scope for LBB above.</p> <p>Response/Outcomes:</p> <ul style="list-style-type: none"> No response received at the time of writing (correspondence sent to both the Officer that responded directly to the Riverside 2 statutory consultation and also to the TfL Spatial Planning inbox).
20th October 2023, Email (with attached Memo)	LBB	<p>Scope: Update on the Proposed Scheme following submission of PEIR¹⁶, whilst also detailing (through a supporting memo) the proposed Transport Assessment (presented in Appendix 18-1: Transport Assessment (Volume 3))/EIA methodology.</p> <p>Response/Outcomes:</p> <ul style="list-style-type: none"> No response received at the time of writing.
	RBG	<p>Scope: As per the scope for LBB above.</p> <p>Response/Outcomes:</p> <ul style="list-style-type: none"> No response received at the time of writing.
	DBC	<p>Scope: As per the scope for LBB above.</p> <p>Response/Outcomes:</p> <ul style="list-style-type: none"> No response received at the time of writing.
	KCC	<p>Scope: As per the scope for LBB above.</p> <p>Response/Outcomes (20th November 2023):</p>

Date and Method of Consultation	Consultee	Summary of Key Topics Discussed and Key Outcomes
		<ul style="list-style-type: none"> Noted that the Transport Assessment (presented as Appendix 18-1: Transport Assessment (Volume 3)) should review the Kent Emerging Local Transport Plan 5: Turning the Curve Towards Net Zero 2023⁹ dated June 2023. Recommended the review of traffic assignment given the passage of time since Riverside 2 assessment and the changes in travel patterns which have occurred in the interim. Noted that traffic data from the surveys should be provided to confirm that the proposed assessment of traffic impact does not need to be extended further.
	TfL – Spatial Planning	<p>Scope: As per the scope for LBB above.</p> <p>Response/Outcomes:</p> <ul style="list-style-type: none"> No response received at the time of writing.

Table 18-3: Summary of the Statutory Consultation Comments in relation to Landside Transport

Statutory Consultee	Response
<p>London Borough of Bexley</p> <p><i>“The applicant has specified a Construction Workforce Travel Plan (CWTP) and Workforce Travel plan will be produced. A draft copy of both documents should be shared with the Highway Authority for review. In addition to this, a draft copy of the TA and Construction Management plan should also be shared with the Highway Authority”.</i></p>	<p>A Framework Construction Traffic Management Plan (Framework CTMP) (Document Reference 7.7) has been prepared, including the measures that will develop into a Construction Workforce Travel Plan (CWTP) to mitigate construction effects. A full CTMP(s) will be developed once Contractor(s) have been appointed. When operational, the Proposed Scheme will be incorporated within an update to the existing Workforce Travel Plan (WTP) for Riverside 1 and once operational Riverside 2. These documents, and the Transport Assessment have been based on the</p>

Statutory Consultee	Response
	positions agreed with LBB on the recent DCO application for Riverside 2.
National Highways	
<p><i>“I suggest a discussion to better understand the plans for construction phasing and timings, and the potential for further assessment of the impacts on the SRN, would be beneficial to yourselves and to National Highways. I would also like to talk about possible measures that could be committed to prior to start of works to reduce the construction impacts, i.e. managing delivery and shift timings during construction”.</i></p>	<p>A Framework CTMP (Document Reference 7.7) has been prepared which sets out potential measures (including delivery schedules, designated routes and site signage) to mitigate construction effects. A full CTMP(s) will be developed post-determination in substantial accordance with the Framework CTMP (Document Reference 7.7), pursuant to a requirement in the Draft DCO (Document Reference 3.1).</p>
<p><i>For now, we don’t have information on project timings to understand when, in the programme, the jetty works would be done and how much of the construction materials would then come to site via the river rather than by road. It has not been practical for myself, or my team to attend the open consultation sessions but I’d like to have an early opportunity to meet with your Team to gain a better understanding of potential SRN impacts”.</i></p>	<p>Table 2-3 and Table 2-4 of Chapter 2: Site and Proposed Scheme Description (Volume 1) indicate the preliminary construction programme for the Proposed Scheme.</p> <p>As explained in Section 2.4 of Chapter 2: Site and Proposed Scheme Description (Volume 1) for the landside elements of the Proposed Scheme construction transport will primarily be road-based. It is not practicable to use Middleton Jetty for the delivery of construction plant and materials for the landside elements of the Proposed Scheme without compromising the effectiveness of the operations at Riverside 1 and Riverside 2 (once operational). Construction transport for the Proposed Jetty (i.e. steel piles, precast concrete units and marine equipment such as fenders) is anticipated to be primarily via the River Thames. The Proposed Jetty would not</p>

Statutory Consultee	Response
	<p>have the required capacity to accommodate the construction of the Proposed Scheme. In addition, its lightweight structure is less suited for bringing in construction materials. To utilise landside transport for the construction of the Proposed Scheme will not result in significant effects on the local road network, as set out in this chapter. In order to assess a worst case scenario, it has been assumed that all construction transport will be road-based.</p>
<p>Transport for London</p>	
<p><i>“It is disappointing that construction of landside facilities will not be supplied from the river, consideration of which is required by London Plan Policy T7. We believe that a development with a riverside frontage and its own industrial pier, already used for transporting building materials (export of bottom ash), should be ideally placed for import of at least some construction materials. If not better addressed in the submission, this is something we would hope to explore at the examination”.</i></p>	<p>As explained in Section 2.4 of Chapter 2: Site and Proposed Scheme Description (Volume 1) for the landside elements of the Proposed Scheme construction transport will primarily be road-based. It is not practicable to use Middleton Jetty for the delivery of construction plant and materials for the landside elements of the Proposed Scheme without compromising the effectiveness of the operations at Riverside 1 and Riverside 2 (once operational). Construction transport for the Proposed Jetty (i.e. steel piles, precast concrete units and marine equipment such as fenders) is anticipated to be primarily via the River Thames. The Proposed Jetty would not have the required capacity to accommodate the construction of the Proposed Scheme. In addition, its lightweight structure is less suited for bringing in construction materials. To utilise landside transport for the construction of the Proposed Scheme will not result in significant effects on the local road network, as set out in this chapter. In order</p>

Statutory Consultee	Response
	to assess a worst case scenario it has been assumed that all construction transport will be road-based.
<p><i>“For road traffic, we await the results of the modelling which will be reported in the application. We would expect strong mitigation measures, including an undertaking to not schedule arrivals or departures which would involve travel on roads during the network peak periods, and to maximise opportunities for consolidation and back-loading”.</i></p>	<p>The modelling has been completed and is reported in detail within Appendix 18-1: Transport Assessment (Volume 3). A Framework CTMP (Document Reference 7.7) has been prepared to present appropriate mitigation measures (including scheduling deliveries) that can be implemented to mitigate construction effects. A full CTMP(s) will be developed post-determination in accordance with the Framework CTMP (Document Reference 7.7), pursuant to a requirement in the Draft DCO (Document Reference 3.1).</p>
<p><i>“Use of the Census journey-to-work data is not necessarily relevant here, particularly as it exemplifies a “predict-and-provide” approach rather than the now-established industry practice of “decide-and-provide”. In this respect, we would expect application of London Plan principles around commuter car parking (Policy T6 and T6.2, making appropriate adjustments for industrial sites as is clear in the policy and supporting text) and targets for sustainable travel set out in Policy T1. We would welcome detailed discussion over the assessment of impacts on existing bus services and the potential for enhancements to public services to support workforce travel. The Construction Workforce Travel Plan must contain strong measures to discourage single-occupancy private vehicles and to encourage more sustainable and active travel modes”.</i></p>	<p>The methodology used to distribute and assign the construction workforce trips replicates that which was used within the Riverside 2 Transport Assessment¹⁹ which was developed with input and approval from the local highways authorities. The London Plan principles have been adopted (where applicable and appropriate) throughout the design of the Proposed Scheme – see Chapter 2: Site and Proposed Scheme Description (Volume 1). An assessment of the effects on the existing bus services has been undertaken within Appendix 18-1: Transport Assessment (Volume 3) and enhancements are not considered necessary. A Framework CTMP (Document Reference 7.7) has been prepared which sets out potential measures (including a CWTP) to mitigate construction effects. A full CTMP(s) will be developed post-determination in accordance with the Framework CTMP (Document Reference 7.7),</p>

Statutory Consultee	Response
	pursuant to a requirement in the Draft DCO (Document Reference 3.1) .
<p><i>“While we acknowledge that the operational transport impacts are relatively modest, we are naturally concerned about the cumulative impact alongside existing and other new development in the area. Again, we would seek application of London Plan principles to issues such as provision of commuter parking places (Policies T6 and T6.2) and provision of measures to support active and sustainable travel (particularly Policies T2 and T5), and expect strong and effective measures within the workforce travel plan and other relevant mitigation (Policy T4)”.</i></p>	<p>The assessment of the Proposed Scheme has taken into consideration cumulative effects – background traffic growth associated with allocated sites within Local Plans using growth factors obtained from the Trip End Model Presentation Program (TEMPro) v7.2 – adjusted to the National Transport Model (NTM) dataset AF15 – and traffic flows associated with the key committed development, that is Riverside 2. The London Plan principles have been adopted (where applicable and appropriate) throughout the design of the Proposed Scheme – see Chapter 2: Site and Proposed Scheme Description (Volume 1). The Proposed Scheme will be incorporated within an update to the existing WTP for Riverside 1 and once operational Riverside 2. A WTP represents a long term travel management strategy, detailing specific measures, designed to encourage staff and visitors to travel by more sustainable and active transport options.</p>
<p><i>“We reserve the right to raise other issues on consideration of documents supporting the DCO application when it is submitted. By way of example, this may include scrutiny of any temporary closures or diversions of strategic PROWs, although we would expect the relevant Local Authority (in this case the London Borough of Bexley) to lead on addressing the detail of such issues”.</i></p>	No response required.

Statutory Consultee	Response
<p data-bbox="125 300 524 336">Dartford Borough Council</p> <p data-bbox="125 376 1093 624"><i>“The Borough Council would wish to raise concerns on the proposal. Dartford Borough Council (DBC) has considered the submitted documents and the PEIR. DBC are supportive of the scheme but have significant concerns with regard to the traffic and air quality impacts and how these are proposed to be assessed and mitigated as set out in the PEIR.</i></p> <p data-bbox="125 647 1093 1110"><i>The scheme will generate significant levels of traffic during construction with the scheme also having a long construction phase. The submitted details suggest that a majority of the construction traffic, in particular HGV's will travel to/from the A282/M25 using Bronze Age Way and Thames Road (within Bexley) and Bob Dunn Way within Dartford. This route already suffers from significant traffic levels and regular congestion. The known traffic 'hot spots' being Craymill Bridge, the western end of Bob Dunn Way and the eastern end of Bib Dunn Way and junction 1a of the M25/A282. The Environmental Impact Assessment (EIA) and Transport Assessment should fully assess the impacts of construction traffic on this route”.</i></p>	<p data-bbox="1133 376 2101 667">The number of trips anticipated to be attracted by the construction of the Proposed Scheme has been estimated based upon an assessment of similar sized schemes and taking into consideration localised factors (for example, HGV loading areas within the Temporary Construction Compounds and typical HGV loading/unloading times). As such, the estimates are considerably lower than that which was presented within the PEIR¹⁶.</p> <p data-bbox="1133 691 2101 938">This chapter and Appendix 18-1: Transport Assessment (Volume 3) provide a robust assessment of the effects of construction traffic on the surrounding transport networks. The highway links within the Study Area that have been assessed include, but are not limited to, A2016 Bronze Age Way, A206 Thames Road and A206 Bob Dunn Way.</p> <p data-bbox="1133 962 2101 1252">A Framework CTMP (Document Reference 7.7) has been prepared which sets out potential measures (including delivery schedules, designated routes and Site signage) to mitigate construction effects. A full CTMP(s) will be developed post-determination in substational accordance with the Framework CTMP (Document Reference 7.7), pursuant to a requirement in the Draft DCO (Document Reference 3.1).</p>

Statutory Consultee	Response
Kent County Council	
<p><i>“Kent County Council, in its capacity of the local highway authority for the administrative area of Dartford Borough Council, was not consulted on the Preliminary Environmental Information Report (PEIR) which was submitted to the Planning Inspectorate on 16th October 2023. (They were however consulted by DBC). KCC Highways did provide comments to the applicant regarding the scope of the traffic surveys, which were subsequently undertaken in June and July 2023.”</i></p>	<p>No response required.</p>
<p><i>“The part of the local road network within Dartford that would be impacted by the proposals is heavily congested. This is the route along the A206 towards M25 Junction 1A and B, via the Cray Mill Bridge pinch point. Will the proposed jetty be delivered during the early phases of the construction period, so that it may be used to transport construction materials for the remainder of the scheme, thereby minimising the impact on the local road network?”</i></p> <p><i>With regards to the scope of the Transport Assessment set out in a Memo from WSP dated 20th October 2023, I would make the following comments:</i></p> <ul style="list-style-type: none"> <i>• Chapter 3 should also review the Kent County Council 'Emerging Local Transport Plan' dated June 2023;</i> <i>• It is noted that further details on the trip attraction and assignment are provided in the PEIR, including on the census</i> 	<p>Table 2-3 and Table 2-4 of Chapter 2: Site and Proposed Scheme Description (Volume 1) indicate the preliminary construction programme for the Proposed Scheme. As explained in Section 2.4 of Chapter 2: Site and Proposed Scheme Description (Volume 1) for the landside elements of the Proposed Scheme construction transport will primarily be road-based. It is not practicable to use Middleton Jetty for the delivery of construction plant and materials for the landside elements of the Proposed Scheme without compromising the effectiveness of the operations at Riverside 1 and Riverside 2 (once operational). Construction transport for the Proposed Jetty (i.e. steel piles, precast concrete units and marine equipment such as fenders) is anticipated to be primarily via the River Thames. The Proposed Jetty would not have the required capacity to accommodate the construction of the Proposed Scheme. In addition, its lightweight structure is less suited for bringing in</p>

Statutory Consultee	Response
<p><i>data used to derive the mode split. The approach is acceptable in principle. However, it is recommended that the assignment of traffic is reviewed, given the passage of time since Riverside 2 was assessed and the changes in travel patterns which have occurred in the interim; and</i></p> <ul style="list-style-type: none"> <i>Traffic data from the June / July 2023 surveys should be provided to confirm that the proposed assessment of traffic impact does not need to be extended further”.</i> 	<p>construction materials. To utilise landside transport for the construction of the Proposed Scheme will not result in significant effects on the local road network, as set out in this chapter. In order to assess a worst case scenario it has been assumed that all construction transport will be road-based.</p> <p>This chapter and Appendix 18-1: Transport Assessment (Volume 3) provide a robust assessment of the effects of construction traffic on the surrounding transport networks, based on traffic data collected in June 2023. The highway links within the Study Area that have been assessed include, but are not limited to, A2016 Bronze Age Way, A206 Thames Road and A206 Bob Dunn Way. Section 18.2 of this chapter and Section 3 of Appendix 18-1: Transport Assessment (Volume 3) also present a summary of the relevant policies to this assessment, including the Kent Emerging Local Transport Plan 5: Turning the Curve Towards Net Zero 2023⁹. The methodology used to distribute and assign the construction workforce trips for this assessment replicates that which was used within the Riverside 2 Transport Assessment¹⁹ which was developed with input and approval from the local highways authorities. Despite the changes brought about by the COVID-19 pandemic, such as increased remote working, this is unlikely to have affected the trip distribution and assignment of the construction industry given the nature of the anticipated works. The traffic data is appended to Appendix 18-1: Transport Assessment (Volume 3).</p>

Statutory Consultee	Response
	<p>A Framework CTMP (Document Reference 7.7) has been prepared which sets out potential measures (including delivery schedules, designated routes and site signage) to mitigate construction effects. A full CTMP(s) will be developed post-determination in substational accordance with the Framework CTMP (Document Reference 7.7), pursuant to a requirement in the Draft DCO (Document Reference 3.1).</p>
<p>Royal Mail</p>	
<p><i>“Every day, in exercising its statutory duties Royal Mail vehicles use all of the roads that may potentially be affected by the proposed Cory Decarbonisation Project construction works.</i></p> <p><i>Any periods of road disruption / closure, night or day, on or to the roads immediately connected to the Cory Decarbonisation Project or the surrounding highway network will have the potential to impact operations and may consequently disrupt Royal Mail’s ability to meet its Universal Obligation service delivery targets.</i></p> <p><i>Royal Mail does not wish to stop or delay the Cory Decarbonisation Project from occurring. However, Royal Mail does wish to ensure the protection of its future ability to provide an efficient mail sorting and delivering service to the public from and to the above identified operational facilities in</i></p>	<p>This chapter and Appendix 18-1: Transport Assessment (Volume 3) provide a robust assessment of the effects of the construction and operation phases of the Proposed Scheme on the surrounding transport networks. No significant effects are anticipated as a result of the Proposed Scheme to the local highway network.</p>

Statutory Consultee	Response
<p><i>accordance with its statutory obligations”.</i></p>	
<p>Tilfen Land Ltd and the Peabody Trust</p>	
<p><i>“Peabody would also wish for Cory to consider further measures to improve public access to the River Thames, as part of their overall proposals. As a general principle, Peabody is supportive of the proposals advanced by Cory to improve local area connectivity by enhancing public rights of way. As noted, this forms a critical component of the Thamesmead Plan. Peabody looks forward to reviewing Cory’s detailed proposals and will continue to engage with Cory on these issues”.</i></p>	<p>The Design Approach Document (Document Reference 5.6) and the Outline LaBARDS (Document Reference 7.9) provide information on the mitigation measures and enhancements which are to be undertaken to improve the amenity of PRoW within the Site Boundary and offsite.</p>
<p>Natural England</p>	
<p><i>“We advise you to follow the mitigation hierarchy (avoid, mitigate, compensate) and firstly consider what existing environmental features on and around the site can be retained or enhanced or what new features could be incorporated into the development proposal. Where onsite measures are not possible, you should consider off site measures. Opportunities for enhancement might include:</i></p> <ul style="list-style-type: none"> <i>• Providing a new footpath through the new development to link into existing rights of way.</i> <p><i>You could also consider how the proposed development can contribute to the wider environment and help implement elements of</i></p>	<p>The Design Approach Document (Document Reference 5.6) and the Outline LaBARDS (Document Reference 7.9) provide information on the mitigation measures and enhancements which are to be undertaken to improve the amenity of PRoW within the Site Boundary. These measures include, but are not limited to:</p> <ul style="list-style-type: none"> • positioning buildings in a linear arrangement on a north-south direction to help utilise the screening provided by the buildings themselves in public views towards the south or north; and • creation of landscape buffer along the boundaries of the Site to minimise the effects on visual amenity. In particular a landscape buffer along the western Site boundary is proposed to minimise

Statutory Consultee	Response
<p><i>any Landscape, Green Infrastructure or Biodiversity Strategy in place in your area. For example:</i></p> <ul style="list-style-type: none"> <i>Links to existing greenspace and/or opportunities to enhance and improve access;</i> <p><i>Identifying any improvements to the existing public right of way network or using the opportunity of new development to extend the network to create missing links”.</i></p>	<p>the effects on visual amenity of users of the MOland local PRoW, and to respond positively to local policy.</p>

18.4. ASSESSMENT METHODOLOGY AND SIGNIFICANCE CRITERIA

18.4.1. The landside transport assessment of the Proposed Scheme has been undertaken in line with the policy and guidance described in **Section 18.2** of this chapter.

POTENTIAL SIGNIFICANT EFFECTS

18.4.2. As identified in the EIA Scoping Report¹⁷, the following effects are considered to be significant and have been considered further in this assessment:

- Construction Phase:
 - pedestrian/cyclist severance;
 - pedestrian/cyclist delay;
 - pedestrian/cyclist amenity;
 - fear and intimidation;
 - public transport network
 - driver delay; and
 - accidents and safety.
- Operation Phase:
 - pedestrian/cyclist severance;
 - pedestrian/cyclist delay;
 - pedestrian/cyclist amenity;
 - fear and intimidation;
 - public transport network; and
 - hazardous loads.

MATTERS SCOPED OUT

18.4.3. The following effects are considered unlikely to be significant and therefore have not been considered further in this assessment:

- Operation Phase: Driver delay – the Carbon Capture Facility will attract 50 two-way daily vehicular movements (worst case), which is below the threshold for assessment set out in the IEMA Guidance¹³.

BASELINE DATA COLLECTION

18.4.4. Both desk-based baseline data collection and traffic surveys have been undertaken.

Desk-based

18.4.5. The key sources of information used to determine the baseline landside transport conditions are:

- Census Journey To Work Data¹⁸;
- Riverside Energy Park Environmental Statement: Transport Assessment¹⁹; and
- Personal Injury Accident (PIA) data from KCC²⁰ and TfL²¹.

Traffic Surveys

- 18.4.6. Following consultation with the local highways authorities, noted in **Table 18-4**, an initial survey area and scope was agreed and conducted which is described below:
- Automatic Traffic Counts (ATC):
 - 19 locations – 24-hour vehicle volumes (classified) and speeds over 14-days between Friday 16th June and Thursday 29th June 2023.
 - Manual Classified Count (MCC):
 - 6 locations – 24 hour classified junction turning counts on Thursday 22nd June and Saturday 24th June 2023.
- 18.4.7. The locations are described in **Table 18-4** and are shown on **Figure 18-2: Traffic Survey Locations (Volume 2)**.

Table 18-4: Traffic Survey Count Locations

Reference	Location Description
ATC 1	Norman Road – northern end, next to the entrance to Riverside 1
ATC 2	Norman Road – southern end, immediately north of A2016
ATC 3	A2016 Eastern Way
ATC 4	Yarnton Way
ATC 5	A2016 Picardy Manorway (west of Norman Road)
ATC 6	A2016 Picardy Manorway (east of Norman Road)
ATC 7	B253 Picardy Manorway
ATC 8	A2016 Bronze Age Way
ATC 9	Norman Road – central, north of access to Isis Reach
ATC 10	A206 Northend Road
ATC 11	A2000 Perry Street
ATC 12	A206 Thames Road (between Howbury Lane and Crayford Way)
ATC 13	A206 Thames Road (between Crayford Way and Burnham Road)
ATC 14	A2026 Burnham Road
ATC 15	A206 Bob Dunn Way (between Burnham Road and Central Road)
ATC 16	A206 Bob Dunn Way (between Marsh Street North and A282 J1a)
ATC 17	A220 Bexley Road (Eastern End)
ATC 18	A2041 North of Yarnton Way
ATC 19	A2041 South of Yarnton Way

Reference	Location Description
MCC 1	A2016 Picardy Manorway/Clydesdale Way/Yarnton Way/A2016 Eastern Way
MCC 2	A2016 Picardy Manorway/Norman Road.
MCC 3	A2016 Picardy Manorway/Anderson Way/A2016 Bronze Age Way/B253 Picardy Manorway.
MCC 4	A2016 Bronze Age Way/A206 Queens Road/A206 Bexley Road/Bexley Road/Walnut Tree Road.
MCC 5	A206 Queens Road/James Watt Way.
MCC 6	A206 South Road/Boundary Road/A206 Northend Road/Larner Road.

18.4.8. During the survey period, it was noted the following locations encountered some disruptions to the recorded data:

- ATC 1 and ATC 9 (Norman Road): These were severed by street sweepers relating to nearby construction activities. Reinstallation attempts were made but the equipment was continually damaged and as such were unable to be replaced. Data collected at ATC 2 (Norman Road) has been considered sufficient to provide a comprehensive understanding of the traffic flows along Norman Road.
- ATC 13 (A206 Thames Road): Damaged part way through the recording period. The equipment was reinstalled and the recorded data spans Sunday 11th June to Wednesday 14th June; Thursday 22nd June to Saturday 24th June; and Saturday 1st July to Saturday 8th July 2023. Whilst this dataset is temporally offset to the other survey sites, the assessment undertaken is still considered robust as representative traffic data has been collected.

ASSESSMENT METHODOLOGY

18.4.9. The baseline information (outlined in **Section 18.4**) provides an understanding of the existing transport conditions and flow of traffic. This transport dataset has been used comprehensively within **Appendix 18-1: Transport Assessment (Volume 3)** and has subsequently been used to assess the impact of the Proposed Scheme, during both the construction and operation phases, on the transport networks surrounding the Site. This includes capacity assessments of six key junctions within the Study Area (where MCC data has been collected) where significant increases in vehicle movements are anticipated.

- 18.4.10. As set out in **Chapter 2: Site and Proposed Scheme Description (Volume 1)**, two options for the construction programme of the Proposed Scheme are being considered: Option 1 and Option 2. The estimated construction period is approximately 60 months (five years) for Option 1 and approximately 42 months (three and a half years) for Option 2. In order to provide a proportionate and robust assessment, only Option 2 has been considered for landside transport as this presents the worst case scenario for this topic. This is because there would be greater construction traffic due to the consolidated construction programme and so will require delivery of a higher number of components/plant in a shorter amount of time. This also assumes that in that Option, two plants are being brought forward.
- 18.4.11. As set out in **Chapter 2: Site and Proposed Scheme Description (Volume 1)**, two options for the design of the Carbon Capture Facility are being considered. One option is for individual lines to be connected to the exhaust stacks for Riverside 1 and Riverside 2, with two individual Stack(s) for the Carbon Capture Facility. A second option is for the two lines from Riverside 1 and Riverside 2 to be combined into a single Stack at the Carbon Capture Facility. The two individual lines and two individual Stack(s) in the assessment is representative of the worst case scenario for this topic for single plant design or two plant design for landside transport, as the choice between one or two Stacks does not change the landside transport impacts of the Proposed Scheme.
- 18.4.12. As set out in **Chapter 2: Site and Proposed Scheme Description (Volume 1)**, the choice between demolition or retention of the Belvedere Power Station Jetty (disused) (with modifications) is being considered. For the purposes of this assessment, the demolition of the Belvedere Power Station Jetty (disused) has been assumed as this is considered to present the worst case scenario for landside transport. This is because increased construction traffic would be required should the Belvedere Power Station Jetty (disused) be demolished. If the Belvedere Power Station Jetty (disused) is to be retained (with modifications) there would be a slight improvement in the assessment of impacts and effects reported within this chapter, given the quantity of construction activities and associated vehicle movements would reduce.
- 18.4.13. The assessment of landside transport effects has been undertaken for two future years to provide a robust assessment of the effects associated with the Proposed Scheme:
- A peak construction year (maximum construction activities) of 2028, which coincides with the expected peak construction activities within Option 2, as described in **Chapter 2: Site and Proposed Scheme Description (Volume 1)**. The peak construction traffic anticipated to be attracted to the Site (outlined further below), has been added to the 2028 peak construction year baseline.
 - An operation year of 2030. The typical operational traffic anticipated to be attracted to the Site (outlined further below), has been added to the 2030 operation year baseline.
- 18.4.14. Following engagement with the relevant local highways and planning authorities and in undertaking the cumulative effects assessment (the approach to which is detailed

in **Chapter 21: Cumulative Effects (Volume 1)**), the assessment year baselines (without development) have been prepared by applying growth factors to the traffic flows collected, obtained from the Trip End Model Presentation Program (TEMPro) v7.2 – adjusted to the National Transport Model (NTM) dataset AF15²².

- 18.4.15. The NTM incorporates key committed developments based on approved Local Plans. Following engagement with the relevant local highways and planning authorities and in undertaking the cumulative effects assessment, Riverside 2 is the only additional committed development included within the Landside Transport assessment.
- 18.4.16. Agreement on the years of assessment, the TEMPro growth factors to be applied and the traffic flows of committed developments to be included (where relevant) was sought from the relevant local highways authorities through the engagement undertaken in October 2023 (see **Table 18-2**).
- 18.4.17. The assessment presented within this chapter considers potential impacts from the construction and operation of the Proposed Scheme alongside Riverside 1 and Riverside 2.

CONSTRUCTION PHASE ASSESSMENT METHODOLOGY

- 18.4.18. The construction phase assessment has been undertaken in line with the IEMA Guidelines¹³. The assessment evaluates the landside transport conditions during a peak construction year of 2028.
- 18.4.19. The construction phase assessment includes:
 - estimated construction traffic volumes (HGV and light vehicles) including movements associated with materials and waste;
 - anticipated vehicle routing during construction; and
 - journey to work data (obtained from the latest available Census data).
- 18.4.20. As explained in **Section 2.4 of Chapter 2: Site and Proposed Scheme Description (Volume 1)** for the landside elements of the Proposed Scheme construction transport will primarily be road-based. It is not practicable to use Middleton Jetty for the delivery of construction plant and materials for the landside elements of the Proposed Scheme without compromising the effectiveness of the operations at Riverside 1 and Riverside 2 (once operational). Construction transport for the Proposed Jetty (i.e. steel piles, precast concrete units and marine equipment such as fenders) is anticipated to be primarily via the River Thames. The Proposed Jetty would not have the required capacity to accommodate the construction of the Proposed Scheme. In addition, its lightweight structure is less suited for bringing in construction materials. To utilise landside transport for the construction of the Proposed Scheme will not result in significant effects on the local road network, as set out in this chapter. In order to assess a worst case scenario it has been assumed that all construction transport will be road-based.

Construction Phase Traffic

HGVS

- 18.4.21. For the landside elements, transport of construction plant and materials will only be road-based. It is assumed that all Abnormal Indivisible Loads (AIL) would also be delivered by road; however, the number of these movements are likely to be minimal and will be agreed on a case-by-case basis with the relevant local highway authorities so have not been considered further.
- 18.4.22. It is projected that at the construction peak there will be 25 HGV deliveries (50 two-way movements) per day. This is based upon an assessment of similar sized schemes and taking into consideration localised factors (for example, HGV loading areas within the Temporary Construction Compounds) and is considered a robust estimation of the anticipated peak construction movements.
- 18.4.23. The origin of construction related materials (HGV) is currently unknown, however, the Transport Assessment for the adjacent Riverside 2¹⁹ (at the time of writing, construction works for Riverside 2 are being undertaken) assumed construction traffic routing from the north/west via the A2016 Eastern Way (25%), and the southeast (towards the M25) via the A2016 Bronze Age Way and A206 (75%). Yarnton Way has a 3.0t weight restriction so would not be suitable for any HGVs.
- 18.4.24. The Riverside 2 Transport Assessment¹⁹ was developed with input and approval from the local highways authorities; the same assumptions have been applied for the Proposed Scheme. Agreement on these assumptions was sought from the relevant local highways authorities through the engagement undertaken in October 2023 (see **Table 18-2**).

Staff

- 18.4.25. It is projected that at the construction peak there will be up to 1,000 workers onsite per day. The latest available Census Journey To Work data¹⁸ for the Bexley 003 Middle Layer Super Output Area (MSOA) has been obtained to inform the anticipated mode split of construction staff and is summarised in **Table 18-5**.

Table 18-5: Method Used to Travel to Work by Distance Travelled to Work for Bexley 003 MSA (2021 Census¹⁸)

Mode	Mode Share (%)	Mode	Mode Share (%)
Underground, metro, light rail, tram	5	Public transport	37
Train	17		
Bus, minibus or coach	15		
Taxi	1	Private vehicle	48
Motorcycle, scooter or moped	1		
Driving a car or van	43		

Mode	Mode Share (%)	Mode	Mode Share (%)
Passenger in a car or van	4		
Bicycle	2	Active travel	13
On foot	11		
Other method of travel to work	1	Other	1
Note: Due to rounding, some totals may not tally.			

- 18.4.26. As shown in **Table 18-5**, 48% of existing workers within Bexley 003 MSOA travel to work by private vehicle. Therefore, for the peak construction workforce of up to 1,000 people, it is anticipated that 480 staff would travel by private vehicle, resulting in 960 two-way trips across the daily period (assuming one arrival and one departure trip by each worker).
- 18.4.27. It is assumed that construction staff travel habits and hence vehicle trip distribution would be similar to that of Riverside 1 and Riverside 2. Consequently, staff vehicle trip distribution has been assumed based upon the information contained within the Riverside 2 Transport Assessment¹⁹, as shown in **Table 18-6**.

Table 18-6: Staff Vehicle Distribution

Link	Staff Vehicle Trip Distribution (%)
Yarnton Way	10
B253 Picardy Manorway	37
A2016 Bronze Age Way	47
A2016 Eastern Way	6

Construction Total

- 18.4.28. The resulting worst case peak daily construction traffic attraction (two-way) is shown in **Table 18-7**. This assumes all construction materials and staff arriving by private transport will be arriving by the surrounding road network. These figures form the basis of the Assessment of Likely Significant Effects presented in **Section 18.8** of this chapter.

Table 18-7: Worst case Peak Daily Construction Traffic Attraction (Two-way)

Dataset	Link	Daily Traffic Movements
ATC 1	Norman Road	N/A ^a
ATC 2	Norman Road	1,010
ATC 3	A2016 Eastern Way	70

Dataset	Link	Daily Traffic Movements
ATC 4	Yarnton Way	48
ATC 5	A2016 Picardy Manorway	1,010
ATC 6	A2016 Picardy Manorway	1,010
ATC 7	B253 Picardy Manorway	355
ATC 8	A2016 Bronze Age Way	489
ATC 9	Norman Road	N/A ^a
ATC 10	A206 Northend Road	489
ATC 11	A2000 Perry Street	0
ATC 12	A206 Thames Road	489
ATC 13	A206 Thames Road	489
ATC 14	A2026 Burnham Road	0
ATC 15	A206 Bob Dunn Way	489
ATC 16	A206 Bob Dunn Way	489
ATC 17	A220 Bexley Road	0
ATC 18	A2041	0
ATC 19	A2041	0
Note:		
^a Indicates location where disruptions were experienced.		

18.4.29. A percentage impact assessment has been carried out against the future baseline traffic flow data to inform the assessment, using the aforementioned assumptions. Junction capacity assessments has been undertaken for the peak hours within **Appendix 18-1: Transport Assessment (Volume 3)** at the junctions where MCC surveys were undertaken for the ‘peak construction year’ and the modelling results has been used to inform this Environmental Statement (ES).

OPERATION PHASE ASSESSMENT METHODOLOGY

18.4.30. The operation phase assessment has been undertaken in line with the IEMA Guidelines¹³. The operation phase assessment evaluates the landside transport conditions for the year 2030.

18.4.31. The operation phase assessment includes:

- estimated operational traffic volumes (HGV and light vehicles);
- anticipated vehicle routing during operation; and
- journey to work data (obtained from the latest available Census data¹⁸).

Operation Phase Traffic

HGV

- 18.4.32. The deliveries shown in **Table 18-8** are expected to be required for the regular operation of the Proposed Scheme. As a robust worst case scenario, it is assumed that all material requirements would be arriving on a hypothetical single day. In regular operation, material deliveries can be scheduled to reduce any impacts on the local road network. The origin of operation related materials (HGV) is currently unknown and has been assumed to be 25% from the north/west (A2016 Eastern Way) and 75% from the southeast (A2016 Bronze Age Way/A206), as per the Riverside 2 Transport Assessment¹⁹.

Table 18-8: Anticipated Regular Material and Staff Requirements – Two-Way Traffic Flows

Material and Staff	Notes	Reasonable Worst case Scenario Traffic Movements (Two-way)
Amine-based solvent	2-4 HGV, every 3 weeks	8
Amine Solvent Waste	2-4 HGV, every 3 weeks	8
Caustic Soda	1 HGV, every 3 weeks	2
Anti-foam	1 HGV, every 3 months	2
Sulphuric Acid, Sodium Hypochlorite, Sodium Bisulphite, Antiscalent	1 HGV, every 3 weeks	2
Diesel	1 HGV (tanker), every 6 months	2
Total		24

Staff

- 18.4.33. It is expected that 27 full-time equivalent staff will be involved in the operation of the Proposed Scheme. The mode share and distribution assumptions applied to the construction staff (outlined in **Table 18-5** and **Table 18-6**) has also been applied to the operational staff movements. Therefore, assuming that 48% (13) will use a private vehicle to get to work, a total of 26 two-way movements are anticipated across the daily period (assuming one arrival and one departure trip by each staff member).

Operation Phase Total

- 18.4.34. The resulting worst case daily operational traffic attraction (two-way) for the Proposed Scheme is shown in **Table 18-9**. This assumes all operational materials and staff arriving by private transport will be arriving by the surrounding road network. These figures form the basis of the Assessment of Likely Significant Effects presented in **Section 18.8** of this chapter.

Table 18-9: Worst Case Peak Daily Operational Traffic Attraction (Two-way)

Dataset	Link	Daily Traffic Movements
ATC 1	Norman Road	N/A ^a
ATC 2	Norman Road	50
ATC 3	A2016 Eastern Way	8
ATC 4	Yarnton Way	3
ATC 5	A2016 Picardy Manorway	50
ATC 6	A2016 Picardy Manorway	50
ATC 7	B253 Picardy Manorway	10
ATC 8	A2016 Bronze Age Way	30
ATC 9	Norman Road	N/A ^a
ATC 10	A206 Northend Road	30
ATC 11	A2000 Perry Street	0
ATC 12	A206 Thames Road	30
ATC 13	A206 Thames Road	30
ATC 14	A2026 Burnham Road	0
ATC 15	A206 Bob Dunn Way	30
ATC 16	A206 Bob Dunn Way	30
ATC 17	A220 Bexley Road	0
ATC 18	A2041	0
ATC 19	A2041	0
Note: ^a Indicates location where disruptions were experienced.		

18.4.35. A percentage impact assessment has been carried out against the future baseline traffic flow data to inform the assessment, using the aforementioned assumptions. Junction capacity assessments have been undertaken for the peak hours within the **Appendix 18-1: Transport Assessment (Volume 3)** at the junctions where MCC surveys were undertaken for the ‘operation year’ and the modelling results have been used to inform this Environmental Statement (ES).

SIGNIFICANCE CRITERIA

18.4.36. The methodology for assessing the significance of an effect has been based upon the environmental sensitivity (or value/importance) of a receptor and the magnitude of change from baseline conditions.

18.4.37. The approach to determining the sensitivity of receptors, magnitude of impacts and the significance of effects considered for the impacts, as required by the IEMA Guidelines¹³, is described below.

Pedestrian and Cyclist Severance

18.4.38. Professional judgement has been applied to determine receptor sensitivity. The IEMA Guidelines¹³ notes that previously the Department for Transport (DfT) had set out a range of indicators for determining the magnitude of impact on pedestrian and cyclist severance. Changes in traffic flow of <30% were regarded as producing 'slight' impact, between 30 - 60% as 'moderate' impact and >90% as 'substantial' impact. These thresholds no longer appear in the guidance but have not been superseded. Consequently, together with specific local conditions (such as the provision of crossing facilities and traffic signal settings) they have been used to determine the magnitude of impact on pedestrian and cyclist severance. The IEMA Guidelines¹³ state that caution should be taken in this approach as a low baseline may influence severity, and practitioners are advised to consider local factors.

18.4.39. Together, the sensitivity of the receptors and magnitude of the impact has been used to determine the significance of effect, following the approach described at **Chapter 4: EIA Methodology (Volume 1)**.

Pedestrian and Cyclist Delay

18.4.40. There is no formal or published guidance for the assessment of pedestrian and cyclist delay. However, the IEMA Guidelines¹³ indicate that there are useful reference resources to assist the competent traffic and movement expert's judgement in determining the significance of pedestrian and cyclist delay. For the purpose of this assessment, changes in traffic flows of 30%, 60% and 90% have been considered to represent a low, medium and high magnitude impact on pedestrian and cyclist delay, respectively. The receptor sensitivity has been determined using professional judgement.

18.4.41. Together, the sensitivity of the receptors and magnitude of the impact has been used to determine the significance of effect, following the approach described at **Chapter 4: EIA Methodology (Volume 1)**.

Pedestrian and Cyclist Amenity

18.4.42. Professional judgement has been applied to determine receptor sensitivity. The updated IEMA Guidelines¹³ suggest a tentative threshold for judging the magnitude of changes in pedestrian and cycling amenity would be where the traffic flow is halved or doubled. In the absence of other criteria, this threshold has been used in the assessment for the Proposed Scheme. The magnitude would be considered as 'high' where traffic flow has doubled and 'low' where traffic flow has halved.

18.4.43. Together, the sensitivity of the receptors and magnitude of the impact has been used to determine the significance of effect, following the approach described at **Chapter 4: EIA Methodology (Volume 1)**.

Fear and Intimidation

- 18.4.44. Professional judgement has been applied to determine receptor sensitivity. In the absence of commonly agreed thresholds for judging the significance of likely fear and intimidation effects, IEMA Guidelines¹³ recommend the thresholds outlined in **Table 18-10** are used.
- 18.4.45. Considerations key to assessing the impact on fear and intimidation include: volume of traffic; percentage of HGVs; and the proximity of pedestrians to traffic. In addition, the speed of traffic, the number of turning movements, the proximity of schools and the level of vulnerable groups have been considered. These factors are quantified and graded based on the assigned Total Hazard Score.
- 18.4.46. For example, if the Proposed Scheme results in:
- an increased average traffic flow of 3,500 over 18 hours;
 - an increase of total heavy vehicle flow by 200; and
 - an increase in average vehicle speed of 10mph.
- 18.4.47. The total degree of hazard score would be 10 (10 + 0 + 0); thereby the level of fear and intimidation is considered 'small' as defined in **Table 18-11**.
- 18.4.48. This result is then used to assess the magnitude of change as per **Table 18-12**.

Table 18-10: Fear and Intimidation Degree of Hazard

Average Traffic Flow Over 18 hour day – All Vehicles/Hour 2-way (a)	Total 18 hour Total Heavy Vehicle Flow (b)	Average Vehicle Speed (c)	Degree of Hazard Score
+1,800	+3,000	->40	30
1,200-1,800	2,000-3,000	30-40	20
600-1,200	1,000-2,000	20-30	10
<600	<1,000	<20	0

Table 18-11: Levels of Fear and Intimidation Total Hazard Score

Level of Fear and Intimidation	Total Hazard Score (a) + (b) + (c)
Extreme	71+
Great	41-70
Moderate	21-40
Small	0-20

Table 18-12: Fear and Intimidation Magnitude of Impact

Magnitude of Impact	Change in Step/Traffic Flows (AADT) from Baseline Conditions
High	Two step changes in level.
Medium	One step change in level, but with <ul style="list-style-type: none"> ● >400 vehicle increase in average 18hr two-way all vehicle flow; and/or ● >500 HGV increase in total 18hr HGV flow.
Low	One step change in level, with <ul style="list-style-type: none"> ● <400 vehicle increase in average 18hr two-way all vehicle flow; and/or ● <500 HGV increase in total 18hr HGV flow.
Negligible	No change in step changes.

18.4.49. Together, the sensitivity of the receptors and magnitude of the impact has been used to determine the significance of effect, as described at **Chapter 4: EIA Methodology (Volume 1)**.

Public Transport Network

18.4.50. There is no formal or published guidance for the assessment of effects on the public transport network. Accordingly, professional judgement has been applied to determine the sensitivity of the receptor and the magnitude of impact on the public transport network. For the purpose of this assessment, the following factors have been taken into consideration:

- changes in bus and rail capacity;
- enhancements to existing routes/services;
- new routes/services; and
- changes to the connectivity/waiting facilities of public transport interchanges.

18.4.51. Together the sensitivity of the receptors and magnitude of the impact has been used to determine the significance of effect, following the approach described at **Chapter 4: EIA Methodology (Volume 1)**.

Driver Delay

18.4.52. To determine the traffic and transport impact of the Proposed Scheme on driver delay during the peak hours, junctions on the highway network have been modelled using appropriate junction assessment software (LinSig, ARCADY) with and without the Proposed Scheme for the ‘peak construction year’ and the ‘operation year’.

18.4.53. The models provide an assessment of the Ratio of Flow to Capacity (RFC), or Degree of Saturation (DoS) (in the case of signalised junctions), the expected level of queuing and average delay per vehicle at each junction approach during peak highway time periods. The magnitude of impact on driver delay will be based on the percentage

change in average driver delay per vehicle. The percentage thresholds for low, medium and high magnitude impact will be based on the IEMA Guidelines¹³ thresholds of 30%, 60% and 90% respectively. The receptor sensitivity will be determined using professional judgement.

Accidents and Safety

- 18.4.54. The assessment of accident risk and highway safety has been based upon specific local circumstances and any identified accident clusters. For example, should a particular link or junction be found to demonstrate a large volume of accidents, the addition of substantial traffic volumes generally would be expected to have an adverse impact on highway safety, due to further increased opportunities for conflict.
- 18.4.55. The IEMA Guidelines¹³ state that “*professional judgement will be needed to assess the implications of local circumstances, or factors, which may elevate or lessen risks of accidents, e.g., junction conflicts*”.
- 18.4.56. The criteria used to determine the magnitude of impact to be applied to accidents and road safety is described by **Table 18-13** below. The criteria are in accordance with the IEMA Guidelines¹³.

Table 18-13: Accidents and Road Safety: Magnitude of Effect

Magnitude	Definition
Large	Expected change in accident risk of 15+% at the location of existing accident cluster.
Moderate	Expected change in accident risk of 10%-14% at the location of existing accident cluster.
Small	Expected change in accident risk of 5%-9% at the location of existing accident cluster.
Negligible	Expected change in accident risk of less than 5% at the location of existing accident cluster.

- 18.4.57. Detailed traffic accident data has been obtained from the local highways authorities. Detailed Personal Injury Accident data, descriptions and locations has been analysed as part of the **Appendix 18-1: Transport Assessment (Volume 3)** and has been used to inform the assessment on accidents and road safety.

Hazardous Loads

- 18.4.58. The assessment of hazardous loads has been based upon the nature of hazardous loads being transported and the number of movements anticipated to illustrate the potential and likely effect of a catastrophic event.

- 18.4.59. Hazardous loads are assessed on the basis set out within the IEMA Major Accidents and Disasters Guidance (2020)²³, when it is determined to be a low likelihood/high consequence event. Events assessed to be low consequence (i.e. leaks and spills at construction sites) are not in the scope of major accidents and/or disaster assessments as they do not meet the definition, and hence have been assessed under other criteria.
- 18.4.60. During construction diesel will be required for generators, mobile plant and equipment; and during operation chemicals and proprietary amine-based solvent will be required for the Carbon Capture Facility. These materials are readily transported on the highways network in accordance with standard measures, such as secondary containment and the use of registered carriers. Nonetheless, a transport-related hazard assessment has been included within this chapter covering the operational materials (chemicals and proprietary amine-based solvent) for the Carbon Capture Facility.
- 18.4.61. The assessment of AIL has not been considered further, as the number of these movements are likely to be minimal and will be agreed on a case-by-case basis with the relevant local highway authorities.

18.5. STUDY AREA

- 18.5.1. The Study Area for landside transport has been developed following pre-application discussions held with the local highways authorities. The Study Area includes the key links from the Site to the surrounding local and strategic road network that will be subject to daily traffic flow changes resulting from the construction or operation of the Proposed Scheme. The key links include:
- Norman Road;
 - A2016 Eastern Way;
 - Yarnton Way;
 - A2041 Harrow Manorway;
 - A2016 Picard Manorway;
 - B253 Picardy Manorway;
 - A2016 Bronze Age Way;
 - A206 Queens Road;
 - A206 Northend Road;
 - A2000 Perry Street;
 - A206 Thames Road; and
 - A206 Bob Dunn Way.
- 18.5.2. The Study Area is shown in **Figure 18-1: Landside Transport Study Area (Volume 2)**.

SENSITIVE RECEPTORS

- 18.5.3. The following sensitive receptors have been identified for the Proposed Scheme:

- non-motorised users (pedestrians and cyclists) of the surrounding highway network, PRow and non-designated public routes; and
- motorised users of the surrounding highway network, including vehicle drivers, public transport users and vulnerable groups.

18.5.4. Construction and operation phase vehicles associated with the Proposed Scheme are likely to utilise the surrounding dual carriageways to access the Proposed Scheme (A2016 Eastern Way, Yarnton Way, A2016 Picardy Manorway /Bronze Age Way and the A206). These highways are not fronted by residential properties and as such residents are not considered to be a sensitive receptor with regards to landside transport.

18.6. BASELINE CONDITIONS AND FUTURE BASELINE

BASELINE

Access and Location

- 18.6.1. Riverside 1, including Middleton Jetty, Riverside 2 (under construction), the foreshore of the River Thames and Belvedere Power Station Jetty (disused) are situated within the northern extent of the Site. To the south of Riverside 1 lies the Crossness LNR, Munster Joinery, and former industrial land. The southern perimeter of the Site borders the A2016 Eastern Way. The main access route to the Site is Norman Road, located off the A2016 Picardy Manorway.
- 18.6.2. Further information and details on the facilities within and surrounding the Site, including destinations and PRow are described in **Chapter 2: Site and Proposed Scheme Description (Volume 1)**.

Highway Network

- 18.6.3. Norman Road is approximately 650m in length; providing vehicular access to Riverside 1 and other business premises. Norman Road is aligned north-south between the Site Boundary and the A2016 Picardy Manorway. It is subject to a 30mph speed limit and has streetlights on the eastern side. The junction of Norman Road and the A2016 Picardy Manorway is a left-in left-out traffic signal-controlled junction.
- 18.6.4. Norman Road has a footway along its eastern side. A three-stage toucan crossing of Norman Road and the A2016 Picardy Manorway provides connection with the southern footway of the A2016 Picardy Manorway, including the eastbound bus stop.
- 18.6.5. Norman Road has a mixture of advisory cycle lanes and shared use paths providing a cycle route to the cycle path on the north side of the A2016 Picardy Manorway and the three-stage toucan crossing of Norman Road and the A2016 Picardy Manorway. There are various elements of cycle infrastructure providing a route to Belvedere Rail Station.
- 18.6.6. Due to the construction of Riverside 2, conditions on Norman Road are temporarily different, with reduced speed limits and pedestrian crossing facilities.

- 18.6.7. The A2016 Picardy Manorway is a dual carriageway aligned east-west with a 50mph speed limit. It connects with Clydesdale Way/Yarnton Way/the A2016 Eastern Way 100m to the southwest and with Anderson Way/the A2016 Bronze Age Way/B253 Picardy Manorway approximately 330m to the southeast; both in the form of large, priority roundabouts.
- 18.6.8. The A2016 Eastern Way forms part of the SRN and connects to the A206 South Circular (via the A2016 Western Way) approximately 1.7km to the east of the Woolwich Ferry and 5.8km to the east of the A102 Blackwall Tunnel. Both of these roads form part of the TfL Road Network (TLRN). To the east, the A2016 Bronze Age Way passes through Erith, continuing through Dartford (as the A206) connecting to the A282 at the Dartford Crossing.
- 18.6.9. London's Ultra Low Emission Zone (ULEZ) was expanded in August 2023, to include the area surrounding the Site. The ULEZ requires non-compliant vehicles to pay a charge (24 hours a day, every day of the year, excluding Christmas Day)²⁴.
- 18.6.10. London Lorry Control Scheme restrictions are also in place on the A2016 Eastern Way to the west of the A2016 Picardy Manorway. These require that vehicles over 18t are only permitted to use the road at the following times:
- Weekdays 07:00-21:00; and
 - Saturdays 07:00-13:00.
- 18.6.11. Therefore, all vehicles over 18t accessing the Proposed Scheme outside of these times must route from the east, via the A206 at Slade Green, in accordance with these restrictions.
- 18.6.12. A summary of the observed traffic flows recorded (averaged weekday 06:00-24:00 two-way flows) at the ATC traffic survey locations is summarised in **Table 18-14** below:

Table 18-14: Summary of Observed Traffic Flows²⁵

Ref	Junction Description	Observed Traffic Flows
ATC 1	Norman Road – northern end	N/A ^a
ATC 2	Norman Road – southern end, immediately north of A2016	2,388
ATC 3	A2016 Eastern Way	21,747
ATC 4	Yarnton Way	10,422
ATC 5	A2016 Picardy Manorway (west of Norman Road)	30,268
ATC 6	A2016 Picardy Manorway (east of Norman Road)	29,761
ATC 7	B253 Picardy Manorway	11,521

Ref	Junction Description	Observed Traffic Flows
ATC 8	A2016 Bronze Age Way	24,385
ATC 9	Norman Road – central, north of access to Isis Reach (Asda Belvedere Distribution Centre access)	N/A ^a
ATC 10	A206 Northend Road	31,429
ATC 11	A2000 Perry Street	16,285
ATC 12	A206 Thames Road (between Howbury Lane and Crayford Way)	28,987
ATC 13	A206 Thames Road (between Crayford Way and Burnham Road)	39,630 ^a
ATC 14	A2026 Burnham Road	18,371
ATC 15	A206 Bob Dunn Way (between Burnham Road and Central Road)	26,419
ATC 16	A206 Bob Dunn Way (between Marsh Street North and A282 J1a)	27,025
ATC 17	A220 Bexley Road (Eastern End)	9,643
ATC 18	A2041 North of Yarnton Way (capturing vehicles in both directions)	22,290
ATC 19	A2041 South of Yarnton Way (capturing vehicles in both directions)	19,515
Note:		
^a Indicates location where disruptions were experienced to survey count, as described in Section 18.4 .		

18.6.13. **Table 18-14** demonstrates that the majority of the Study Area experiences two-way traffic volumes in excess of 20,000 vehicles per day, with most surveyed locations being typical, urban, dual carriageway connecting the surrounding area with the SRN.

Personal Injury Accidents

18.6.14. Personal Injury Accident (PIA) data for the Study Area has been obtained from TfL and KCC as the local highways authorities for the most recent period available (between January 2018 to the end of June 2023 for TfL and between January 2018 to the end of July 2023 for Kent). **Table 18-15** and **Table 18-16** summarise the PIA statistics across the Study Area.

Table 18-15: Personal Injury Accident Data: Summary By Year

Year	Accident Severity (TfL Network/KCC Network)			Total
	Slight	Serious	Fatal	
2018	29/2	5/0	1/0	35/2
2019	42/4	13/0	1/0	56/4
2020	51/0	9/1	0/0	60/1
2021	51/5	8/3	0/0	59/8
2022	46/0	3/2	0/0	49/2
2023	14/3	1/2	0/0	15/4
Total	233/13	39/8	2/0	274/21

Table 18-16: Personal Injury Accident Data: Cluster Sites (>10 PIAs)

Description	Network	Severity			Total
		Slight	Serious	Fatal	
A2016/Walnut Tree Road/Bexley Road/ A206	TfL	25	2	0	27
A206/Wyatt Road/ A2000/Parkside Avenue	TfL	12	1	0	13
A2041/Yarnton Way/ Eynsham Drive	TfL	7	4	0	11
A206/A2026	KCC	11	0	0	11
A2016/Anderson Way/ B253	TfL	9	1	0	10
Total		64	8	0	72

- 18.6.15. Over the most recent available period (of circa five years), there has been a total of 295 PIAs within the Study Area (274 PIAs occurring on the TfL managed network and 21 PIAs occurring on the KCC managed network). The majority of PIAs (83%; 246 PIAs) were of slight severity – including two on Norman Road – with only 47 (16%) classified as being serious in nature, with the remaining two PIAs (1%) resulting in a fatality. The two fatal PIAs occurred over 2.3km from the Site on the A2016 Bronze Age Way and Thames Road and were not a result of highway layout or safety issues.
- 18.6.16. A detailed review of the PIA data, including location by severity plans, is provided within **Section 4** of the **Appendix 18-1: Transport Assessment (Volume 3)**.

Public Transport

Bus

- 18.6.17. The closest bus stops to the Site are those located on the A2016 Picardy Manorway. The eastbound bus stop is named ‘Picardy Manorway Eastern Way’ and is

characterised by a bus stop signpost with timetable information, a small bench and a bus lay-by which allows passengers to alight/disembark the bus without impacting upon the mainline flow of traffic. The westbound bus stop on the A2016 Picardy Manorway is named 'Eastern Way Norman Road' and is also characterised by a signpost with timetable information and a bus lay-by but does not have any seating.

- 18.6.18. Both bus stops are serviced by the 180, 401 and 601, all operated by TfL, which provide connectivity to Greenwich, Woolwich, Plumstead, Abbey Wood, Erith Thamesmead, Belvedere and Bexleyheath. **Table 18-17** provides a summary of the bus services (first service, last service, and typical frequency – correct as of 12 January 2024), with full timetable information provided in **Appendix C of Appendix 18-1: Transport Assessment (Volume 3)**. As the 601 service is a school bus service, this has been excluded from the analysis as it would not be available to future staff (construction or operation).

Table 18-17: Bus Timetable Information

Direction	Frequency	Day of the Week		
		Weekday	Saturday	Sunday
180 Towards North Greenwich Station (Westbound)	First Bus	04:30	04:30	06:15
	Daytime Frequency	Every 8-12 minutes	Every 8-12 minutes	Every 15 minutes
	Last Bus	23:46	23:46	23:46
180 Towards Erith Quarry/Fraser Road (Eastbound)	First Bus	05:06	05:06	07:25
	Daytime Frequency	Every 8-12 minutes	Every 8 to 11 minutes	Every 15 minutes
	Last Bus	01:01	01:01	01:01
401 Towards Thamesmead Town Centre (Northbound)	First Bus	06:08	06:08	07:30
	Daytime Frequency	Every 15 minutes	Every 15 minutes	Every 30 minutes
	Last Bus	00:25	00:25	00:25
401 Towards Bexleyheath Clock Tower (Southbound)	First Bus	05:40	05:40	06:58
	Daytime Frequency	Every 15 minutes	Every 15 minutes	Every 30 minutes
	Last Bus	23:55	23:55	23:55

Rail

18.6.19. The closest railways stations to the Site are Belvedere and Abbey Wood. **Table 18-18** presents the information associated with each Railway Station including train services to key destinations and their frequency. Full timetable information for both stations is provided in **Appendix C** of the **Appendix 18-1: Transport Assessment (Volume 3)**.

Table 18-18: Train Services

	Belvedere Railway Station	Abbey Wood Railway Station
Managed By	Southeastern	TfL
Fare Zone	5	4
Passenger Service Operators	Thameslink (National Rail) Southeastern (National Rail)	Elizabeth Line (TfL) Thameslink (National Rail) Southeastern (National Rail)
Service Information for Direct Trains Information provided as: Key Destination Approximate Journey Time Trains per Hour	<p>London Cannon Street 40 minute journey 4 trains per hour</p> <p>Dartford 11 minute journey 2 trains per hour</p> <p>Eltham 27 minute journey 2 per hour</p> <p>Gravesend 29 minute journey 2 per hour</p>	<p>London Cannon Street 35 minute journey 4 trains per hour</p> <p>Luton 1 hour and 33 minute journey 2 trains per hour</p> <p>Gravesend 31 minute journey 2 trains per hour</p> <p>Maidenhead 1 hour and 10 minute journey 4-5 trains per hour</p> <p>Reading 1 hour and 23 minute journey 2-3 trains per hour</p> <p>Heathrow Terminal 4 1 hour and 1 minute journey 4 trains per hour</p>

Active Travel Network

Pedestrian Infrastructure

Norman Road

18.6.20. Norman Road has a footway that extends along its eastern side from the A2016 Picardy Manorway/Norman Road signalised junction up to the Riverside 1/ Riverside 2 entrance. For the first 100m, the active travel infrastructure provides off-carriageway segregated (white lining) provision for both pedestrians and cyclists. After the spur junction – navigable by dropped kerbs with tactile paving and a central refuge island –

cyclists re-join the carriageway, and the footway restricts to 1.6m for circa 400m. Cyclists then re-join a shared footway/cycleway provision at the northern end of Norman Road. Lighting is provided along the length of Norman Road at regular intervals.

- 18.6.21. At the southern end of Norman Road, there is a signalised toucan crossing which provides onward active travel connectivity to the east (towards the eastbound bus stop on the A2016 Picardy Manorway), to the south (towards Belvedere Park, the westbound bus stop on the A2016 Picardy Manorway and Belvedere Railway Station via Norman Road/Yarnton Road) and to the east (facilitating access to the Crossness Nature Reserve via Footpath 2).
- 18.6.22. The toucan crossing provides dropped kerbs with tactile paving and central refuge islands to allow staged crossings of Norman Road and the A2016 Picardy Manorway. Both the triangular and staggered refuge islands provide metal railings which enhance pedestrian/cyclist safety.
- 18.6.23. Relevant site visit imagery is provided within **Section 4** of the **Appendix 18-1: Transport Assessment (Volume 3)**.

Surrounding Network

- 18.6.24. The surrounding network is typified by providing good, wide, lit footways adjacent to the major carriageways (A2016 Picardy Manorway, A2016 Eastern Way, Yarnton Way, B253 Picardy Manorway, A2016 Bronze Age Way, Anderson Way) which fosters an environment that is conducive to active travel. Suitable crossing facilities (signalised crossings across multi-lane carriageways and uncontrolled crossings of single carriageways) with dropped kerbs and tactile paving are provided at key locations and on desire lines to support movements to and from the local facilities and residential areas surrounding the Site.
- 18.6.25. Relevant site visit imagery is provided within **Section 4** of the **Appendix 18-1: Transport Assessment (Volume 3)**.

Public Rights of Way (PRoW)

- 18.6.26. Within close proximity of the Site are a series of PRoW which provide access into or around the Site. The footpaths vary in surface type, width and natural surveillance but are well sign-posted. In addition, the England Coast Path (FP3/NCN1) – Southeast section (a National Trail), which extends from Woolwich to Grain in Kent, is situated immediately north of the Site, following the southern edge of the River Thames.
- 18.6.27. Relevant site visit imagery and a plan of the aforementioned PRoW is provided within **Section 4** of **Appendix 18-1: Transport Assessment (Volume 3)**.

Walking Accessibility

- 18.6.28. **Walking from the Site** (based upon a typical walking speed of 4.8kph) the local bus stops situated on the A2016 Picardy Manorway and the local retail park (Belvedere Park), with local services such as Lidl and Starbucks, can be accessed on foot within 10 minutes. Belvedere Railway Station is situated within a 15 minute walk and a number of residential areas are situated within a 20-25 minute walk.

Cycling Infrastructure

Norman Road

- 18.6.29. On-carriageway cycle lanes (delineated by white lining) are present along both the eastern and western sides of Norman Road. The northbound on-road cycle lane starts approximately 100m north of the A2016 Picardy Manorway/Norman Road signalised junction and extends for approximately 400m. After this, cyclists are taken off carriageway and cross (uncontrolled priority with dropped kerbs) to the adjacent side of Norman Road to use the shared footway/cycleway connecting to Riverside 1 and Riverside 2, as well as FP4.
- 18.6.30. The provision is mirrored in the opposite direction, with shared footpath/cycleway for circa 100m (from the Riverside 1 and Riverside 2 facilities) before on-carriageway cycle lanes are provided for circa 400m. Cyclists are then directed off-carriageway (north of the Norman Road spur) to continue towards the A2016 Picardy Manorway/Norman Road signalised junction via the segregated (white lining) footway/cycleway facility.
- 18.6.31. Relevant site visit imagery is provided within **Section 4** of the **Appendix 18-1: Transport Assessment (Volume 3)**.

National Cycle Network

- 18.6.32. The England Coast Path (FP3/NCN1), situated immediately north of the Site, following the southern edge of the River Thames, also forms part of Route 1 of the National Cycle Network (NCN). This offers a traffic free cycle route providing connectivity to Thamesmead to the west and Erith to the east and other destinations further afield along the River Thames corridor.

Cycling Accessibility

- 18.6.33. A wide range of areas south of the River Thames can be accessed from the Site within a 25 minute cycle, including Long Reach, Old Bexley, East Wickam, Plumstead and Royal Arsenal West. Importantly, both Belvedere Station and Abbey Wood Station – both of which offer a number of regular services – can be accessed from the Site within a 10-15 minute cycle.

FUTURE BASELINE

- 18.6.34. The future baseline (without development) for landside transport has been developed using the DfT Trip End Model Presentation Program (TEMPro) growth factors. The TEMPro growth factors used are detailed below and were applied to the observed data captured in the June 2023 traffic surveys.
- 18.6.35. The TEMPro inputs for the respective scenarios discussed in **Section 18.4** are outlined below:
- TEMPro version 7.2;
 - Base Year: 2023;
 - Future Years: 2028 and 2030;
 - Time Period: Average Weekday; and

- All Modes and Origin/Destination.

18.6.36. The TEMPro growth factors used are shown in **Table 18-19** below:

Table 18-19: TEMPro Growth Factors

Ref	Average Weekday TEMPro Factor	
	2023-2028	2023-2030
ATC 2-8	1.034617	1.047505
ATC 10	1.035169	1.048307
ATC 11	1.036673	1.050262
ATC 12-13	1.041987	1.057632
ATC 14-15	1.054462	1.075837
ATC 16	1.057881	1.080523
ATC 17	1.040683	1.055877
ATC 18-19	1.045997	1.063448

18.6.37. The resultant baseline traffic flows are shown in **Table 18-20** below:

Table 18-20: Summary of Proposed Future Year Traffic Flows

Ref	Junction Description	Peak Construction Year (2028)	Operation Year (2030)
ATC 1	Norman Road – northern end	N/A	N/A
ATC 2	Norman Road – southern end, immediately north of A2016	2,471	2,502
ATC 3	A2016 Eastern Way	22,499	22,780
ATC 4	Yarnton Way	10,783	10,917
ATC 5	A2016 Picardy Manorway (west of Norman Road)	31,316	31,706
ATC 6	A2016 Picardy Manorway (east of Norman Road)	30,791	31,175
ATC 7	B253 Picardy Manorway	11,919	12,068
ATC 8	A2016 Bronze Age Way	25,229	25,543
ATC 9	Norman Road – central, north of access to Isis Reach (Asda Belvedere Distribution Centre access)	N/A	N/A
ATC 10	A206 Northend Road	32,534	32,947
ATC 11	A2000 Perry Street	16,882	17,104

Ref	Junction Description	Peak Construction Year (2028)	Operation Year (2030)
ATC 12	A206 Thames Road (between Howbury Lane and Crayford Way)	30,204	30,658
ATC 13	A206 Thames Road (between Crayford Way and Burnham Road)	41,294	41,914
ATC 14	A2026 Burnham Road	19,372	19,765
ATC 15	A206 Bob Dunn Way (between Burnham Road and Central Road)	27,858	28,422
ATC 16	A206 Bob Dunn Way (between Marsh Street North and A282 J1a)	28,589	29,201
ATC 17	A220 Bexley Road (Eastern End)	10,036	10,182
ATC 18	A2041 North of Yarnton Way (capturing vehicles in both directions)	23,316	23,705
ATC 19	A2041 South of Yarnton Way (capturing vehicles in both directions)	20,413	20,753

18.7. EMBEDDED DESIGN, MITIGATION AND ENHANCEMENT MEASURES

18.7.1. This section sets out the embedded design, mitigation and enhancement measures which are relevant to the landside transport assessment. The **Design Principles and Design Code (Document Reference 5.7)** are commitments which will govern the design of the Proposed Scheme during the detailed design stage. The **Design Principles and Design Code (Document Reference 5.7)** are considered to be embedded mitigation for the purposes of the assessment presented in this chapter.

CONSTRUCTION PHASE

- **Framework CTMP (Document Reference 7.7)** – sets out potential measures to mitigate construction effects, including the development of a CWTP. A full CTMP(s) will be developed once Contractor(s) have been appointed. The full CTMP(s) will be produced in accordance with local highways authority guidance and Construction Logistics Planning (CLP) Guidance²⁶.
- The design ensures that routes used by walkers and cyclists, including PRoW, long distance walking routes and NCN routes will remain open, where practicable, and accessible to users during construction. For more information, refer to **Chapter 2: Site and Proposed Scheme Description (Volume 1)** and the **Outline CoCP (Document Reference 7.4)**.
- If required, traffic management can be implemented to effectively manage and control traffic flow where construction activities would likely impact the typical operation of a highway link. It is anticipated that the Contractor(s) would identify

the need for traffic management and plan appropriate strategies that would enable the safe movement of all road users. Traffic management will be agreed on a case-by-case basis with the relevant local highways authorities.

OPERATION PHASE

- Workforce Travel Plan (WTP) – the Proposed Scheme is not anticipated to attract a significant number of movements (by all modes) in the operation phase (see **Table 18-8**). The Proposed Scheme will be incorporated within an update to the existing WTP for Riverside 1 and once operational Riverside 2. A WTP represents a long term travel management strategy, detailing specific measures, designed to encourage staff and visitors to travel by more sustainable and active transport options.
- The LCO₂ from the Proposed Scheme is anticipated to be transported via the Proposed Jetty, and not via the surrounding road network as a fundamental part of the Proposed Scheme. In the event that the Proposed Jetty is out of order, or there is a problem with the export vessels/ provider, LCO₂ will remain within or be added to the temporary Above Ground Storage Tanks described in **Chapter 2: Site and Proposed Scheme Description (Volume 1)**, up to the volume capacity for those tanks. It is not expected that LCO₂ will be transported by road due to the limited availability and viability of suitable vehicles and so any other carbon emissions would not be captured once the storage is at capacity. These scenarios will be set out in the future Environmental Permit as issued by the Environment Agency.

18.8. ASSESSMENT OF LIKELY IMPACTS AND EFFECTS

- 18.8.1. This section details the assessment of impacts and effects for the Proposed Scheme during both the construction and operation phases, considering the embedded design, mitigation and enhancement measures detailed in **Section 18.7**.
- 18.8.2. To assess the potential likely significant effects on receptors, the current estimated construction and operation related traffic has been assigned to the network in accordance with the methodology previously outlined in **Section 18.4**. The construction traffic has been added to the 2028 peak construction year baseline and the operational traffic has been added to the 2030 operation year baseline. The percentage increase has then been calculated, as shown in **Table 18-21**.

Table 18-21: Summary of Future Baseline Flows and Anticipated Construction Phase and Operation Phase Flow Impact

Ref	Junction Description	Construction Traffic % increase	Operation Traffic % increase
ATC 1	Norman Road – northern end	N/A	N/A
ATC 2	Norman Road – southern end, immediately north of A2016	40.9%	2.0%

Ref	Junction Description	Construction Traffic % increase	Operation Traffic % increase
ATC 3	A2016 Eastern Way	0.3%	0.0%
ATC 4	Yarnton Way	0.4%	0.0%
ATC 5	A2016 Picardy Manorway (west of Norman Road)	3.2%	0.2%
ATC 6	A2016 Picardy Manorway (east of Norman Road)	3.3%	0.2%
ATC 7	B253 Picardy Manorway	3.0%	0.1%
ATC 8	A2016 Bronze Age Way	1.9%	0.1%
ATC 9	Norman Road (north of Picardy Manorway) – central	N/A	N/A
ATC 10	A206 Northend Road	1.5%	0.1%
ATC 11	A2000 Perry Street	0.0%	0.0%
ATC 12	A206 Thames Road (between Howbury Lane and Crayford Way)	1.6%	0.1%
ATC 13	A206 Thames Road (between Crayford Way and Burnham Road)	1.2%	0.1%
ATC 14	A2026 Burnham Road	0.0%	0.0%
ATC 15	A206 Bob Dunn Way (between Burnham Road and Central Road)	1.8%	0.1%
ATC 16	A206 Bob Dunn Way (between Marsh Street North and A282 J1a)	1.7%	0.1%
ATC 17	A220 Bexley Road (Eastern End)	0.0%	0.0%
ATC 18	A2041 North of Yarnton Way (capturing vehicles in both directions)	0.0%	0.0%
ATC 19	A2041 South of Yarnton Way (capturing vehicles in both directions)	0.0%	0.0%

CONSTRUCTION PHASE

Pedestrian and Cyclist Severance

- 18.8.3. The sensitivity of pedestrians and cyclists is determined by the relevant facilities in the surrounding area such as footways, crossing points and cycle facilities, and is deemed as high due to the surrounding network walking and cycling facilities adjacent to the Site and the proposed construction traffic route. The magnitude of change is

negligible (<4%) on all links, with the exception of Norman Road (41% traffic flow increase compared with the 2028 baseline flows).

18.8.4. Norman Road functions as an industrial access road and not a major pedestrian and cycling throughfare, and therefore is not considered to be the sole determining highway link in the assessment of the pedestrian and cyclist severance assessment. Norman Road also has pedestrian and cyclist infrastructure beside the carriageway, with appropriate crossing facilities along the key desire lines; therefore, there should be limited reasons for pedestrians/cyclists to cross Norman Road away from the existing signalised crossing locations.

18.8.5. Therefore, there is likely to be a direct, temporary, medium term, **Negligible (Not Significant)** effect on pedestrian and cyclist severance.

Pedestrian and Cyclist Delay

18.8.6. For the assessment of effects on pedestrian and cyclist delay, the sensitivity of pedestrians and cyclists is high. The magnitude of change is negligible (<4%) on all links, with the exception of Norman Road (41% traffic flow increase compared with the 2028 baseline flows).

18.8.7. Therefore, there is likely to be a direct, temporary, medium term, **Negligible (Not Significant)** effect on pedestrian and cyclist delay.

Pedestrian and Cyclist Amenity

18.8.8. For the assessment of effects on pedestrian and cyclist amenity, the sensitivity of pedestrians and cyclists is high. The magnitude of change is negligible (<4%) on all links, with the exception of Norman Road (41% traffic flow increase compared with the 2028 baseline flows).

18.8.9. Therefore, there is likely to be a direct, temporary, medium term, **Negligible (Not Significant)** effect on Norman Road pedestrian and cyclist amenity.

Fear and Intimidation

18.8.10. For the assessment of effects on fear and intimidation, the sensitivity of pedestrians and cyclists is high. The magnitude of change is negligible (no step change in level of fear and intimidation based upon a total hazard score of 10 – degree of hazard of 10 for average vehicle speed – for Norman Road).

18.8.11. Therefore, there is likely to be a direct, temporary, medium term, **Negligible (Not Significant)** effect on fear and intimidation.

Public Transport Network

18.8.12. For the assessment of effects on public transport networks, the sensitivity of receptors is low due to the available services and frequencies (as outlined in **Section 18.6**). The magnitude of change is low, with an anticipated peak construction 760 daily two-way staff trips anticipated to be undertaken by public transport (based on the journey to work data presented in **Table 18-5**).

18.8.13. Given the availability of bus and rail services within proximity of the Site, there is likely to be a direct, temporary, medium term, **Minor Adverse (Not Significant)** effect on public transport networks.

Driver Delay

18.8.14. To determine the traffic and transport impact of the Proposed Scheme on driver delay, junctions on the highway network have been modelled using appropriate junction assessment software with and without the Proposed Scheme for the ‘peak construction year’. The assessments have been undertaken for the observed AM peak hour (07:30-08:30) and PM peak hour (16:45-17:45) using the ARCADY module of Junctions 10 for the roundabouts and LinSig v3 for the signalised junctions. **Table 18-22** summarises the model outputs for each of the junctions and provides a percentage change in delay per vehicle. The full model outputs for all scenarios can be viewed in **Appendix F** of the **Appendix 18-1: Transport Assessment (Volume 3)**.

Table 18-22: Driver Delay: Construction

Arm	Description	2028 Base		2028 Base + Dev		Delay % Change	
		Delay		Delay		AM Peak Hour	PM Peak Hour
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour		
Junction 1: A2016/Clydesdale Way/Yarnton Way (s/Veh)							
1	A2016 Picardy Manorway	3.58	2.55	5.63	2.69	57%	5%
2	Clydesdale Way	9.59	6.16	19.53	6.57	104%	7%
3	Yarnton Way	2.37	1.94	3.03	1.97	28%	2%
4	A2016 Eastern Way	3.06	3.90	4.09	3.91	34%	0%
Junction 2: A2016/Norman Road (s/PCU)							
1	A2016 (Ahead)	7.50	8.90	6.20	34.60	-17%	289%
2	A2016 (Left Turn)	3.00	2.90	4.30	2.90	43%	0%
3	Norman Road	41.60	42.40	50.80	36.90	22%	-13%
Junction 3: A2016/Anderson Way/B253 (s/Veh)							
1	A2016 Picardy Manorway	4.24	5.18	4.27	14.77	1%	185%
2	Anderson Way	2.95	3.18	2.96	4.43	0%	39%
3	A2016 Bronze Age Way	3.71	2.85	4.60	3.30	24%	16%

Arm	Description	2028 Base		2028 Base + Dev		Delay % Change	
		Delay		Delay		AM Peak Hour	PM Peak Hour
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour		
4	B253 Picardy Manorway	4.82	2.89	8.39	3.01	74%	4%
Junction 4: A2016/Walnut Tree Road/Bexley Road/A206 (s/Veh)							
1	A2016 Bronze Age Way	4.73	6.05	4.73	9.40	0%	55%
2	Bexley Road	10.93	18.55	10.93	45.80	0%	147%
3	A206 Queens Road	6.36	5.05	9.79	5.07	54%	0%
4	A206 (West)	27.49	14.87	115.83	14.96	321%	1%
Junction 5: A206/James Watt Way (s/PCU)							
1	Queens Road (East)	58.50	57.50	75.50	53.60	29%	-7%
2	James Watt Way	44.30	40.60	51.10	48.10	15%	18%
3	Queens Road (West)	47.60	54.80	49.10	58.00	3%	6%
Junction 6: A206/Boundary Street/Dell View Road (s/Veh)							
1	A206 South Road	4.38	4.60	4.40	6.29	0%	37%
2	Boundary Street	11.79	13.14	11.88	22.27	1%	69%
3	A206 Northend Road	4.71	4.07	6.22	4.12	32%	1%
4	Dell View Road	5.64	4.53	7.13	4.54	26%	0%

- 18.8.15. The models indicate that the forecast delay (s/Veh) across all arms of all junctions is relatively small, and the impact of the Proposed Scheme on delay is fairly minimal (up to 88 seconds). Whilst it is noted that some percentage increases are significant, it can be shown that this is due to low baseline values. Delays are not forecast to exceed 2 minutes, which is an acceptable level, and the relative increase in delay will likely be imperceptible to most users.
- 18.8.16. Therefore, there is likely to be a direct, temporary, medium term, **Negligible (Not Significant)** effect on driver delay.

Accidents and Safety

- 18.8.17. Detailed traffic accident data has been obtained from the local highways authorities and has been used to inform the assessment on accidents and safety. Whilst there

are a few locations where there are >10 PIAs, the majority (88%; 64) were of slight severity. The magnitude of change is negligible (<4%) on all links, with the exception of Norman Road (41% traffic flow increase compared with the 2028 baseline flows). No accident cluster sites were identified on Norman Road and there are no other significant factors/local circumstances that are likely to elevate the risk of accidents.

- 18.8.18. Therefore, there is likely to be a direct, temporary, medium term, **Negligible (Not Significant)** effect on accidents and safety.

OPERATION PHASE

- 18.8.19. The likely significant effects for landside transport associated with the operation phase are set out below.

Pedestrian and Cyclist Severance

- 18.8.20. For the assessment of effects on pedestrian and cyclist severance, the sensitivity is high. The magnitude of change, as presented in **Table 18-21**, is negligible (<2%) on all links.
- 18.8.21. Therefore, there is likely to be a direct, permanent, long term, **Negligible (Not Significant)** effect on pedestrian and cyclist severance.

Pedestrian and Cyclist Delay

- 18.8.22. For the assessment of effects on pedestrian and cyclist delay, the sensitivity is high. The magnitude of change, as presented in **Table 18-21**, is negligible (<2%) on all links.
- 18.8.23. Therefore, there is likely to be a direct, permanent, long term, **Negligible (Not Significant)** effect on pedestrian and cyclist delay.

Pedestrian and Cyclist Amenity

- 18.8.24. For the assessment of effects on pedestrian and cyclist amenity, the sensitivity is high. The magnitude of change, as presented in **Table 18-21**, is negligible (<2%) on all links.
- 18.8.25. Therefore, there is likely to be a direct, permanent, long term, **Negligible (Not Significant)** effect on pedestrian and cyclist amenity.

Fear and Intimidation

- 18.8.26. For the assessment of effects on fear and intimidation, the sensitivity of pedestrians and cyclists is high. The magnitude of change is negligible (no step change in level of fear and intimidation based upon a total hazard score of 10 – degree of hazard of 10 for average vehicle speed – for Norman Road).
- 18.8.27. Therefore, there is likely to be a direct, permanent, long term, **Negligible (Not Significant)** effect on fear and intimidation.

Public Transport Network

- 18.8.28. For the assessment of effects on public transport networks, the sensitivity of receptors is low due to the available services and frequencies (as outlined in **Section 18.6**). The magnitude of change is negligible with 20 two-way staff trips anticipated to be undertaken by public transport (based on the journey to work data presented in **Table 18-5**).
- 18.8.29. Therefore, there is likely to be a direct, permanent, long term, **Negligible (Not Significant)** effect on public transport networks.

Driver Delay

- 18.8.30. To determine the traffic and transport impact of the Proposed Scheme on driver delay, junctions on the highway network have been modelled using appropriate junction assessment software with and without the Proposed Scheme for the 'peak construction year'. The assessments have been undertaken for the observed AM peak hour (07:30-08:30) and PM peak hour (16:45-17:45) using the ARCADY module of Junctions 10 for the roundabouts and LinSig v3 for the signalised junctions. **Table 18-23** summarises the model outputs for each of the junctions and provides a percentage change in delay per vehicle. The full model outputs for all scenarios can be viewed in **Appendix F** of the **Appendix 18-1: Transport Assessment (Volume 3)**.

Table 18-23: Driver Delay: Operation

Arm	Description	2030 Base		2030 Base + Dev		Delay % Change	
		Delay		Delay		AM Peak Hour	PM Peak Hour
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour		
Junction 1: A2016/Clydesdale Way/Yarnton Way (s/Veh)							
1	A2016 Picardy Manorway	3.63	2.57	3.69	2.58	2%	0%
2	Clydesdale Way	9.82	6.22	10.03	6.23	2%	0%
3	Yarnton Way	2.39	1.96	2.41	1.96	1%	0%
4	A2016 Eastern Way	3.08	3.96	3.11	3.96	1%	0%
Junction 2: A2016/Norman Road (s/PCU)							
1	A2016 (Ahead)	7.60	9.00	7.60	9.60	0%	7%
2	A2016 (Left Turn)	3.00	2.90	3.10	2.90	3%	0%
3	Norman Road	41.70	42.60	42.20	41.60	1%	-2%
Junction 3: A2016/Anderson Way/B253 (s/Veh)							

Arm	Description	2030 Base		2030 Base + Dev		Delay % Change	
		Delay		Delay		AM Peak Hour	PM Peak Hour
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour		
1	A2016 Picardy Manorway	4.31	5.29	4.33	5.39	0%	2%
2	Anderson Way	2.97	3.22	2.98	3.24	0%	1%
3	A2016 Bronze Age Way	3.78	2.88	3.81	2.89	1%	0%
4	B253 Picardy Manorway	4.92	2.91	5.00	2.91	2%	0%
Junction 4: A2016/Walnut Tree Road/Bexley Road/A206 (s/Veh)							
1	A2016 Bronze Age Way	4.83	6.29	4.84	6.35	0%	1%
2	Bexley Road	11.37	20.07	11.42	20.42	0%	2%
3	A206 Queens Road	6.59	5.20	6.70	5.20	2%	0%
4	A206 (West)	30.90	15.87	32.27	15.87	4%	0%
Junction 5: A206/James Watt Way (s/PCU)							
1	Queens Road (East)	59.40	59.20	59.90	60.00	1%	1%
2	James Watt Way	44.50	40.90	44.50	40.90	0%	0%
3	Queens Road (West)	48.70	56.10	49.50	56.10	2%	0%
Junction 6: A206/Boundary Street/Dell View Road (s/Veh)							
1	A206 South Road	4.44	4.69	4.45	4.73	0%	1%
2	Boundary Street	12.10	13.61	12.16	13.76	0%	1%
3	A206 Northend Road	4.78	4.13	4.84	4.13	1%	0%
4	Dell View Road	5.73	4.58	5.78	4.58	1%	0%

18.8.31. The models indicate that the forecast delay across all arms of all junctions is relatively small, and the impact of the Proposed Scheme on delay will be imperceptible to most users.

18.8.32. Therefore, there is likely to be a direct, temporary, long term, **Negligible (Not Significant)** effect on driver delay.

Accidents and Safety

- 18.8.33. Detailed traffic accident data has been obtained from the local highways authorities and has been used to inform the assessment on accidents and safety. Whilst there are a few locations where there are >10 PIAs, the majority (88%; 64) were of slight severity. The magnitude of change is negligible (<2%) on all links, and there are no other significant factors/local circumstances that are likely to elevate the risk of accidents.
- 18.8.34. Therefore, there is likely to be a direct, permanent, long term, **Negligible (Not Significant)** effect on accidents and safety.

Hazardous Loads

- 18.8.35. The impact and assessment of hazardous loads is limited to the diesel for the back-up diesel generators and the delivery of chemicals and proprietary amine-based solvent for the Carbon Capture Facility. The magnitude of hazardous loads is low (22 two-way movements quarterly for servicing and maintenance – see **Table 18-8**).
- 18.8.36. Therefore, there is likely to be a direct, permanent, long term, **Negligible (Not Significant)** effect on highway users.

18.9. ADDITIONAL DESIGN, MITIGATION AND ENHANCEMENT MEASURES

- 18.9.1. No additional design, mitigation or enhancement measures are proposed for landside transport.

18.10. MONITORING

- 18.10.1. The **Framework CTMP (Document Reference 7.7)** outlines the typical monitoring requirements for landside transport impact during construction. A full CTMP(s) will be developed once Contractor(s) have been appointed and this will indicate the monitoring requirements.
- 18.10.2. The Proposed Scheme will be incorporated within an update to the existing WTP for Riverside 1 and once operational Riverside 2 and will be subject to the existing monitoring requirements.

18.11. RESIDUAL EFFECTS

- 18.11.1. **Table 18-24** below summarises the residual effects associated with the Proposed Scheme.

Table 18-24: Landside Transport – Summary of Residual Effects

Description of the Effect	Sensitive Receptor	Significance of Effect with Embedded Mitigation	Additional Design, Mitigation, Enhancement Measure	Residual Effect
Construction Phase				
Pedestrian and Cyclist Severance	PRoW (non-motorised user)	Negligible (Not Significant)	N/A	Negligible (Not Significant)
Pedestrian and Cyclist Delay	PRoW (non-motorised user)	Negligible (Not Significant)	N/A	Negligible (Not Significant)
Pedestrian and Cyclist Amenity	PRoW (non-motorised user)	Negligible (Not Significant)	N/A	Negligible (Not Significant)
Fear and Intimidation	PRoW (non-motorised user)	Negligible (Not Significant)	N/A	Negligible (Not Significant)
Public Transport Network	Public Transport Users	Minor Adverse (Not Significant)	N/A	Minor Adverse (Not Significant)
Driver Delay	Highway Links/Junctions (motorised users)	Negligible (Not Significant)	N/A	Negligible (Not Significant)
Accidents and Safety	Highway Links/Junctions (motorised users)	Negligible (Not Significant)	N/A	Negligible (Not Significant)
Operation Phase				
Pedestrian and Cyclist Severance	PRoW (non-motorised user)	Negligible (Not Significant)	N/A	Negligible (Not Significant)
Pedestrian and Cyclist Delay	PRoW (non-motorised user)	(Not Significant)	N/A	Negligible (Not Significant)


Description of the Effect	Sensitive Receptor	Significance of Effect with Embedded Mitigation	Additional Design, Mitigation, Enhancement Measure	Residual Effect
Pedestrian and Cyclist Amenity	PRoW (non-motorised user)	Negligible (Not Significant)	N/A	Negligible (Not Significant)
Fear and Intimidation	PRoW (non-motorised user)	Negligible (Not Significant)	N/A	Negligible (Not Significant)
Public Transport Network	Public Transport Users	Negligible (Not Significant)	N/A	Negligible (Not Significant)
Driver Delay	Highway Links/Junctions (motorised users)	Negligible (Not Significant)	N/A	Negligible (Not Significant)
Accidents and Safety	Highway Links/Junctions (motorised users)	Negligible (Not Significant)	N/A	Negligible (Not Significant)
Hazardous Loads	Highway Links/Junctions (motorised users)	Negligible (Not Significant)	N/A	Negligible (Not Significant)


18.12. LIMITATIONS AND ASSUMPTIONS

18.12.1. The following limitations and assumptions have been identified:

- This assessment has relied, in part, on data provided by third parties which are the most up-to-date data available at the time of writing.
- The assessment of transport conditions utilises traffic surveys carried out in 2023, which provide a snapshot of the traffic conditions within the local area.
- The traffic survey information obtained to-date include minor variability in conditions due to unplanned disruptions to the data collected as outlined in **Section 18.4**.
- It is assumed that the peak construction year would align with the peak construction activities.
- It is assumed that the majority (75%) of HGV construction traffic would access the Site via the A282/M25, A206, A2016 and Norman Road. HGV construction traffic routing will be secured through a full CTMP(s) (to be developed once a Principal Contractor has been appointed).

18.13. REFERENCES

- ¹ Department for Energy Security and Net Zero. (2024). 'Overarching National Policy Statement for Energy (EN-1)'. Available at: <https://www.gov.uk/government/collections/national-policy-statements-for-energy-infrastructure>
- ² Department for Transport. (2021). 'Decarbonising transport: a better, greener Britain'. Available at: <https://www.gov.uk/government/publications/transport-decarbonisation-plan>
- ³ Department for Levelling Up, Housing and Communities. (2023). 'National Planning Policy Framework'. Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2>
- ⁴ London Borough of Bexley. (2023). 'The Bexley Local Plan 2023'. Available at: <https://www.bexley.gov.uk/sites/default/files/2023-04/bexley-local-plan-adopted-26-april-2023.pdf>
- ⁵ Greater London Authority. (2021). 'The London Plan'. Available at: https://www.london.gov.uk/sites/default/files/the_london_plan_2021.pdf
- ⁶ Greater London Authority. (2018). 'London Environment Strategy'. Available at: https://www.london.gov.uk/sites/default/files/london_environment_strategy_0.pdf
- ⁷ Mayor of London. (2018). 'Mayor's Transport Strategy 2018'. Available at: <https://www.london.gov.uk/programmes-strategies/transport/our-vision-transport/mayors-transport-strategy-2018>
- ⁸ Kent County Council. (2016). 'Local Transport Plan 4: Delivering Growth without Gridlock 2016–203'. Available at: https://www.kent.gov.uk/_data/assets/pdf_file/0011/72668/Local-transport-plan-4.pdf
- ⁹ Kent County Council. (2023). 'Turning the Curve Towards Net Zero'. Available at: <https://letstalk.kent.gov.uk/23735/widgets/70451/documents/52605>
- ¹⁰ Dartford Borough Council (2017). 'Dartford Development Policies Plan'. Available at: <https://www.dartford.gov.uk/policy-1/key-plans-policies>
- ¹¹ Dartford Borough Council. (2021). 'Pre Submission Publication Dartford Local Plan'. Available at: <https://www.dartford.gov.uk/downloads/download/1304/pre-submission-publication-dartford-local-plan-february-2021>
- ¹² Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities and Local Government. (2021). 'National Planning Practice Guidance, Healthy and Safe Communities'. Available at: <https://www.gov.uk/guidance/health-and-wellbeing>
- ¹³ Institute of Environmental Management and Assessment (IEMA). (2023) 'Guidelines: Environmental Assessment of Traffic and Movement'. Available at:


t
- ¹⁴ London Borough of Bexley. (2023). 'Installation of Temporary Traffic Count Equipment'. Received from authoring organisation via email on 07/06/2023.
- ¹⁵ Planning Inspectorate. (2023). 'Environmental Impact Assessment Scoping Opinion: Cory Decarbonisation Project.' Available at: <https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/EN010128/EN010128-000026-EN010128%20-%20Scoping%20Opinion.pdf>

¹⁶ Cory Environmental Holdings Limited. (2023). 'Preliminary Environmental Information Report: Cory Decarbonisation Project'. Available at:

[REDACTED]

¹⁷ Cory Environmental Holdings Limited. (2023). 'Environment Impact Assessment Scoping Report: Cory Decarbonisation Project'. Available at:

<https://infrastructure.planninginspectorate.gov.uk/wp->

¹⁸ Office for National Statistics. (2021). 'RM077 - Method used to travel to work by distance travelled to work'. Available at:

[REDACTED]

¹⁹ Cory. (2018). 'Cory Riverside Energy: Riverside Energy Park: Transport Assessment'. Available at:

<https://infrastructure.planninginspectorate.gov.uk/wp->

[content/ipc/uploads/projects/EN010093/EN010093-000244-](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010093/EN010093-000244-)

[6.3%20ES%20Technical%20Appendices%20B.1%20Transport%20Assessment.pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010093/EN010093-000244-6.3%20ES%20Technical%20Appendices%20B.1%20Transport%20Assessment.pdf)

²⁰ Kent County Council. (2023). 'Personal Injury Accident Data'.

²¹ Transport For London. (2023). 'Personal Injury Accident Data'.

²² Department for Transport. (2021). 'Guidance Trip End Model Presentation Program (TEMPro)'. Available at: <https://www.gov.uk/government/publications/tempro-downloads>

²³ Institute of Environmental Management and Assessment (IEMA). (2020). 'Major Accidents and Disasters in EIA: A Primer'. Available at:

[REDACTED]

[REDACTED]

²⁴ London Councils. (2023). 'London Lorry Control'. Available at:

<https://www.londoncouncils.gov.uk/services/london-lorry-control>

²⁵ MHC Traffic Limited. (2023). 'Belvedere Traffic Surveys, June 2023'.

²⁶ Construction Logistics and Community Safety. (2021). 'Construction Logistics Planning (CLP) Guidance'. Available at: <https://content.tfl.gov.uk/clp-guidance-clocs.pdf>



DECARBONISATION

10 Dominion Street
Floor 5
Moorgate, London
EC2M 2EF
Contact Tel: 020 7417 5200
Email: enquiries@corygroup.co.uk
corygroup.co.uk