



CLEVE HILL SOLAR PARK

ENVIRONMENTAL STATEMENT

VOLUME 1 - CHAPTERS

CHAPTER 14 - ACCESS AND TRAFFIC

November 2018
Revision A

Document Reference: 6.1.14
APFP Regulation: 5(2)(a)

www.clevehillsolar.com



CLEVE HILL
SOLAR PARK

14 ACCESS AND TRAFFIC

14.1 Introduction

1. This chapter of the ES assesses the potential transport related environmental effects associated with the construction, operation and decommissioning of the proposed Cleve Hill Solar Park (the Development).
2. An Outline Construction Traffic Management Plan (CTMP) has also been produced to support the application and is appended to this chapter in Technical Appendix A14.1. Within this CTMP, other documents including an Outline Travel Planning Statement, Outline Traffic Incident Management Plan and Outline Public Rights of Way (PRoW) Management Plan are also provided.
3. This chapter provides:
 - A summary of the Development proposals including the proposed method of transporting plant and equipment to and from site, and anticipated vehicles which will be utilised.
 - Scoping and consultation responses;
 - A summary of policy context which underpins the assessment;
 - Explanation of the assessment methodology and existing baseline conditions;
 - Any unknowns or uncertainties relating to access and traffic at the time of writing;
 - Potential effects of the construction, operational and decommissioning phases; and
 - Details of mitigation measures proposed to address any adverse effects.
4. This chapter is supported by the following figures provided in the ES Volume 2 (DCO Document Reference 6.2.14):
 - Figure 14.1 Construction Traffic Routeing;
 - Figure 14.2 Accident Data;
 - Figure 14.3 Public Rights of Way; and
 - Figure 14.4 Sensitive Receptors.
5. This chapter is also supported by the following Technical Appendices provided in Volume 4 (DCO Document Reference 6.4.14):
 - Technical Appendix A14.1: Outline Construction Traffic Management Plan.

14.1.1 Development Parameters Assessed

6. The Development is described in Chapter 5: Development Description. In summary, it includes the transportation and installation of photovoltaic (PV) modules, energy storage modules and accompanying electric cables, transformers, string inverters, and associated access, environmental and construction works.
7. The Rochdale Envelope parameters for the Development have been considered with respect to the potential effects considered in this Chapter, and worst-case values/scenarios for this are captured by the candidate design, as set out in Chapter 5: Development Description. This chapter reports the assessment of effects associated with the candidate design, therefore. Notably, the more northerly of the two access roads from Seasalter Road to the electrical compound has been assessed, and a battery pack solution has been assumed, both of which are part of the candidate design and are the worst case of the scenarios included in the Rochdale Envelope. Furthermore, a robust phasing strategy, whereby separate elements of the Solar Park (i.e. civils, solar array and energy storage) are all assessed as occurring at the same time.

14.1.2 Scoping Responses and Consultation

8. A Scoping Report was issued to the Planning Inspectorate in December 2017. The Inspectorate issued a Scoping Opinion on behalf of the Secretary of State in January 2018, having collated responses from consultees. A scoping meeting was undertaken with the Transportation and Highways Team at Kent County Council (KCC) on 20th April 2018 to agree the scope of assessment. Responses of relevance to the transport and highways assessment are summarised in Table 14.1a.

Table 14.1a: Scoping Consultation Summary

Consultee	Response	Action
Planning Inspectorate (Scoping)	Detailed assessment of operational effects - The Scoping Report explains that the volume of operational traffic generated by the Proposed Development would be minimal; occasional visits may be made to the site for maintenance checks. Considering the nature of the Proposed Development, the Inspectorate is content that significant effects are unlikely to occur and that a detailed assessment of operational effects can be scoped out of the ES. However, the ES should still provide details of the anticipated traffic movements for the operational phase.	This is discussed in section 14.4.
	Access route options - The Inspectorate notes that there are several potential routes to access the application site via the A299 Thanet Way. Paragraph 461 of the Scoping Report details the 'most likely' route. The Inspectorate recommends that the decision regarding the access route option is made prior to submission of the DCO application. This will allow for a robust assessment of likely significant effects and provide certainty to those likely to be affected. Any alternative access options which have been considered (including sea, rail and air) should be reported in the 'alternatives' section of the ES.	A single construction access route from the A299 to the site is proposed. This is discussed in section 14.1.3.
	Impacts - The ES should assess impacts that may result in likely significant effects on the safety, reliability and operation of the Strategic Road Network, particularly with regards to the M2 and A2 around Faversham. The assessment methodology and any necessary mitigation measures should be discussed and agreed with relevant consultees including Highways England.	Section 14.4.2 provides a detailed assessment of the impact of construction traffic on the future baseline traffic.
	Road Improvements - The ES should describe and assess the potential impacts (both positive and negative) associated with any improvements/changes to the access route which are either required to facilitate construction of the Proposed Development or required for restoration purposes on completion of the works. The scope of the required works should be discussed and agreed with the relevant local highways authority, clearly described in the ES and it should be clear how this would be delivered and secured.	Section 14.4.2 describes the predicted impacts on the surrounding highway network. A highway condition survey will be undertaken prior to construction. This, along with other mitigation measures are set out within the CTMP. KCC has been consulted to agree the scope of the ES.
	Abnormal Loads - The ES should confirm the anticipated number of abnormal loads and the types of vehicles required. Any mitigation measures required to facilitate the delivery of abnormal loads should be detailed in the ES and any resultant likely significant effects assessed.	Section 14.1.3.2 sets out the anticipated level of abnormal loads.

Consultee	Response	Action
	<p>Automatic traffic count surveys - The Inspectorate notes that initial automatic traffic count surveys were undertaken in May 2017. The Scoping Report does not confirm if/when additional traffic count surveys are to be undertaken.</p> <p>The ES should identify the locations where traffic count surveys have been undertaken, explain how these locations were selected and confirm precise details of when the counts were undertaken. The Inspectorate would expect these details to have been discussed and agreed with the relevant local authority planning authorities. To provide assurance that the assessment of likely significant effects is supported by a robust dataset, the ES should include a justification to support the extent of the survey effort, including why the traffic data collected is considered to represent the typical (neutral) flow conditions on the network.</p>	<p>These are discussed in section 14.3.4.</p> <p>Automatic Traffic Counts were undertaken in 2017 and 2018 to provide a baseline traffic flows along Sea Salter Road, Monks Hill, Head Hill Road, Whitstable Road, Staple Street and Staple Street Road. Traffic counts on the strategic highway network have been extracted from the DfT database, including the A299, M2 and A249.</p>
	<p>Impacts - In addition to impacts on pedestrians, the ES should consider any impacts to other non-motorised users (NMUs) (for example equestrians and cyclists). The assessment of impacts on NMUs should be supported by pedestrian and cyclist counts, at locations agreed with the relevant local planning authorities. Any proposals for monitoring the effects should be detailed in the ES.</p>	<p>Discussions with the KCC and the PROW officer have been undertaken.</p> <p>NMU surveys have been undertaken during the school term and summer holidays to assess level of activity. These account for PROW through and in the vicinity of the site. The location and results are set out in section 14.3.7 of this report.</p> <p>A separate PROW Management Plan is appended to the CTMP in Technical Appendix 14.1.</p>
	<p>Sensitive Receptors - The Scoping Report does not identify specific sensitive receptors for the purposes of the assessment but explains that these would be identified based on the route inspections. The Inspectorate considers that this should include relevant community facilities (for example, Graveney Primary School) and their catchment areas. The full list of sensitive receptors should be discussed and agreed with the relevant local planning and highway authorities.</p>	<p>Section 14.3.9 of this report identifies sensitive receptors in the vicinity of the site along the proposed construction traffic access route.</p>
	<p>CTMP - The Applicant should append a draft/outline CTMP to the ES and demonstrate how this document will be secured. The CTMP should set out any proposals for monitoring HGV movements e.g. to/from the application site.</p>	<p>An outline CTMP has been produced and forms Technical Appendix 14.1 of this chapter. This is proposed to be secured by requirement 12 of the draft DCO.</p>

Consultee	Response	Action
	<p>Assessment of cumulative effects - The relationship between any committed developments which have been incorporated into the traffic modelling and other developments incorporated into the cumulative assessment should be clearly explained in the ES.</p>	<p>This is explained further in section 14.4.5. A growth factor obtained from the TEMPro database has been applied to calculate the future 2022 baseline. This factor takes into account effect of any cumulative developments on the highway network.</p>
	<p>Impacts from transportation of waste - The Access and Traffic chapter of the ES should assess the impacts which may result in likely significant effects resulting from the transport of waste generated during construction and decommissioning of the Proposed Development. Any assumptions made (such as with regard to quantities of contaminated land) should be clearly set out and justified in the ES.</p>	<p>This is explained in section 14.4.1. Waste removal has been accounted for in the expected vehicle trip generation during construction.</p>
	<p>Impacts - The Inspectorate notes the link between the number of vehicle movements and emissions to air (including dust), particularly during construction and decommissioning of the Proposed Development. If any impacts are likely to result in significant effects, these should be assessed in the ES. The Applicant is referred to the Inspectorate's comments in Table 4.13 of this Opinion (Air Quality) in this regard.</p>	<p>The level of vehicular trip generation associated with construction and decommissioning is outlined in section 14.4.1. The environmental effect of the additional vehicular traffic has been considered in section 14.4.2.</p>
	<p>Study Area - Study area/s for the purposes of the assessment have not been defined in the Scoping Report. The study areas area/s utilised in the Access and Traffic aspect assessment (including the area covered by any traffic modelling) should be discussed and agreed with relevant consultees, clearly defined and justified in the ES.</p>	<p>The scope of assessment has been agreed with KCC.</p>
	<p>Impact from decommissioning - Section 12 of the Scoping Report does not contain reference to impacts from decommissioning the Proposed Development. In the absence of information to demonstrate that decommissioning of the Proposed Development would not lead to significant effects in terms of Access and Traffic, the Inspectorate considers that this matter should be assessed in the ES.</p>	<p>The anticipated level of vehicular trip generation associated with construction and decommissioning is outlined in section 14.4.1 and 14.4.4.</p>
KCC	<p>What are the origins of the materials?</p>	<p>The exact origin is not currently known however the main elements of the solar array (mounting structures, modules and other components) are expected to be shipped into either Dover, Ramsgate or Sheerness Port. The routeing is outlined in section 14.1.3.</p>

Consultee	Response	Action
	An abnormal loads assessment should be undertaken under a separate legal process.	A detailed AIL route assessment will be undertaken from the port of entry to the site. This will be added to the CTMP approved under the DCO consent, once complete.
	Are there any cumulative developments or other schemes that could affect the CHSP?	No.
	There are currently issues with the A299 / M2 / A2 – Brenley Corner junction during the peak. The A2 / A251 junction is also problematic. The relevance of these issues will depend on the point of origin of the construction materials and the anticipated increase in traffic at these locations.	The traffic routing and generation is discussed in sections 14.1.3 and 14.4.1. Condition surveys will be undertaken and this is discussed in more detail within the CTMP.
	KCC requests that a condition survey be undertaken pre construction and that this would likely be verified by KCC highways. Overrunning onto verges had been a specific issue for London Array and should be avoided. This should also be addressed in the condition survey.	A survey will be undertaken both before and after construction and the results will be inform the final CTMP.
	There were counters on the network so cycling data should be available. Some stables to the south of Graveney.	NMU surveys have been undertaken on links close to the site. This scope of this has been confirmed with the KCC PRoW officer.
	The proposed construction traffic route can be a rat run and particularly in summer when there is more traffic towards Whitstable on the A299. This should be taken account of in the assessment.	This is discussed in section 14.1.3. Surveys have been undertaken in the summer to compare the level of vehicular traffic.

9. Following the publication of the PEIR, further Section 42 consultation responses relating to access and traffic have been received from the following stakeholders:
- CPRE Kent;
 - Friends of Earth Swale;
 - Kent Wildlife Trust;
 - London Array;
 - Graveney and Goodnestone Parish Council;
 - Kent County Council;
 - Canterbury City Council;
 - Environmental Agency;
 - Swale Borough Council;
 - The Ramblers; and
 - Graveney Rural Environmental Action Team (GREAT).
10. The comments raised by each stakeholder which are relevant to the transport impact assessment have been collated in Table 14.1b.

Table 14.1b Section 42 Consultation Summary

Consultee	Response	Action
KCC	KCC notes that in Point 19, the report lists the possible ports that can be considered for freight by sea. Table 14.1 details the road distances from the site and lists the London Medway Port as Chatham. In Point 22, the location of the London Medway Port is later referred to as Sheerness. The applicant should ensure that the correct port is detailed in future submission documents.	Within this chapter and the outline CTMP the description of the London Medway Port has been updated.
	The applicant should be aware that in Point 36, the report refers to a non-existent crawler lane on the A299, 350m from the A299/Whitstable Road junction. There is a layby on the eastbound approach to the junction, located approximately 350m away, so it is assumed this may be the feature to which reference is being made. This change should also be reflected in the Draft Construction Traffic Management Plan.	Within this chapter and the outline CTMP the description of the A299 has been updated.
	In Point 37, the applicant should be aware that the left turn route from the A299 onto Whitstable Road will take vehicles in a westerly direction, rather than the easterly direction as described in the PEIR. This will be relevant for eastbound A229 vehicles, although it should be appreciated that westbound A229 vehicles, that may have originated their journeys from Ramsgate, will turn left onto Staple Street in an easterly direction, before turning right onto Staple Street Road to cross over the A229. This will be the case unless they stay on the A229 and use the M2/A2/Homestall Lane/Brenley Lane roundabout to approach the Whitstable Road junction from the west instead. This change should also be reflected in the Draft Construction Traffic Management Plan.	Within this chapter and the outline CTMP the description of the A299 has been updated.
	KCC acknowledges that the applicant has considered a transport-related effect on the impact of the condition of the highway, due to the additional HGV traffic using the local highway network. This is likely to deteriorate the structural integrity of the highway, accelerate wear and tear, whilst also causing overrunning of the carriageway edges and adjacent verges where road widths are narrow. The condition surveys referred to will be required to identify where construction traffic has caused damage and the applicant will be expected to detail how they will rectify the damages.	As detailed within the outline CTMP. It is proposed that a detailed highway condition survey be undertaken both before and after construction. The scope of the survey will be agreed with KCC to ensure that any damage to the highway surface or verges as a result of the proposed construction traffic will be rectified.
	Method for assessing significance	Acknowledged.
	KCC considers the methodology set out in the associated sections 14.3.1.1 to 14.3.16 and subsequent sections 14.3.2 and 14.3.3 to be acceptable.	
	KCC considers the methodology set out in the associated sections 14.3.1.1 to 14.3.16 and subsequent sections 14.3.2 and 14.3.3 to be acceptable.	Acknowledged.

Consultee	Response	Action
	<p>Traffic Flows</p> <p>It is noted that Point 114 lists the roads that have had initial traffic surveys undertaken. KCC will require further surveys to inform the assessment of Staple Street, Staple Street Road and Whitstable Road, if the data cannot be extrapolated from the existing surveys.</p> <p>KCC agrees that the application of TEMPRO growth factors to the survey data, in order to set the 2018 baseline, is appropriate and can be taken through to consider the future traffic flows at the predicted year of construction, as noted in Point 151.</p>	<p>Further surveys have been undertaken on the roads identified and discussed within this chapter.</p> <p>Acknowledged.</p>
	<p>PIA</p> <p>As detailed in Point 118, the full data obtained from KCC will be used for analysis purposes, so that the specific circumstances of the accidents can be understood. An opinion can then be formed on whether the delivery of the development proposals are likely to influence the probability or severity of similar accidents occurring.</p>	<p>PIA data has been obtained from KCC for the last 3 years and is presented in section 14.3.6 of this chapter.</p> <p>Road accident data has been obtained from KCC and assessed within this chapter.</p> <p>No significant residual environmental effects from construction traffic are predicted</p>
	<p>Construction Effects</p> <p>KCC has noted that the current predictions of traffic movements are likely to change as further details are obtained. A simple “first principles” breakdown of how the figures are derived should be provided by the applicant to demonstrate the validity of the predicted vehicle numbers.</p> <p>Whilst an estimation of the HGV and LGV movements has been provided, it would be appropriate to consider the likely vehicle movements associated with the transportation of site personnel during the construction period, within the final EIA. It is noted that it is referenced in Point 169 through the CTMP in respect to staff routing, minibuses and an associated Travel Plan.</p>	<p>A breakdown of how the predicted construction traffic generation has been derived is included within this chapter.</p> <p>An allowance has been made in the predicted traffic generation for site personnel movements.</p> <p>This is discussed within this chapter.</p>

Consultee	Response	Action
	<p>Mitigation:</p> <p>The general mitigation detailed in this section of the PEIR and Point 169 are suitable measures that KCC would expect to see to accommodate the traffic generated during the 7 construction period. Whilst it is accepted that the operational traffic generated during the life of the Solar Park will be minimal and does not require any mitigation, it is considered that mitigation measures may be required during the decommissioning period. KCC welcomes the commitment given in Point 173 to continue detailed mitigation discussions to ensure the effects of the development are minimised.</p> <p>KCC welcomes the commitment given in Point 173 to continue detailed mitigation discussions to ensure the effects of the development are minimised.</p>	<p>Noted, mitigation measures will also be implemented during the decommissioning of the park. Mitigation measures will be similar to those outlined during the construction phase. Section 14.4.4 of this chapter discusses the decommissioning of the solar park.</p> <p>The volume of traffic expected to be generated once the site is operational and during decommissioning is discussed within this chapter.</p> <p>No significant residual environmental effects from additional road traffic are predicted.</p> <p>Acknowledged</p>
	<p>Volume IIA Figure 14.1 Construction Traffic Routeing:</p> <p>When further details are known, KCC requests that the plan shows the A249 route from the M2 to the London Medway Port at Sheerness, if materials are to be transported from the Port to the proposed site.</p>	<p>The plans accompanying this chapter have been updated to reflect the route from the M2 to the London Medway Port at Sheerness.</p>
	<p>6.0 Access Route and Point Signing</p> <p>KCC accepts the measures proposed through the suggested approval process.</p>	<p>Acknowledged.</p>
	<p>7.0 Mitigation Measures</p> <p>KCC agrees that the general measures identified are considered workable in respect of the timing and routeing of vehicle movements with the booking system, to spread these over the whole day and allowing monitoring. However, KCC recommends that the measures should include contingency plans to cater for a holding area, in the event of HGV traffic nearing the site outside of the permitted timings.</p>	<p>Consideration has been given to contingency planning within the outline CTMP.</p>

Consultee	Response	Action
	<p>7.12 Highway Condition Surveys</p> <p>KCC requests that a highway condition survey should take place before the commencement of the development. Further, the description of another survey to be undertaken after commencement needs clarifying. The intention would also be for a final highway condition survey to be carried out at the end of the construction period and an agreement for any damage identified at that time to be repaired accordingly. Currently, the CTMP does not identify what actions will be expected from the outcome of comparing the highway condition surveys.</p> <p>KCC requests there should be scope within the CTMP to identify issues associated with damage occurring on or adjacent to the highway during the construction period, as a result of the development traffic. The applicant should detail how they will facilitate repairs where necessary. The detail will need to be available outside of the Traffic Management Group timetable and structure outlined in Section 8.2.</p>	<p>It is proposed that a detailed highway condition survey be undertaken both before and after construction. The scope of the survey will be agreed with KCC to ensure that any damage to the highway surface or verges as a result of the proposed construction traffic will be rectified. Further information with regards to the process of comparing the highway condition surveys before and after construction has been included within the outline CTMP.</p> <p>Further information with regards to remedial highway works during construction has been included within the outline CTMP.</p>
	<p>Section 8.3 Monitoring and Review and Section 8.4 Compliance</p> <p>Within the CTMP, KCC requests that the applicant identifies how certain mitigation measures will be monitored and, ensuring compliance with the speed restrictions to be imposed along the identified vehicular route.</p>	<p>The outline CTMP has been updated to identify how certain mitigation measures will be monitored. This includes the monitoring of vehicle speeds along the identified access routes.</p>
	<p>Impacts on the PRoW Network</p> <p>KCC recommends that the applicant takes account of KCC's statutory duty to protect and improve Public Rights of Way (PRoW) in the County. KCC is committed to working in partnership with the applicant to achieve the aims contained within the Countryside and Coastal Access Improvement Plan (CCAIP). Specifically, these relate to quality of life, supporting the rural economy, tackling disadvantage and safety issues and providing sustainable transport choices.</p> <p>To this end, it is appreciated that the applicant has acknowledged the existence of the PRoW network and considered the potential impacts of the Solar Park, during both the construction and operational phases of the development. KCC is pleased to note that the proposed site layout has incorporated the existing PRoW along their definitive alignments, which should avoid the need for any path diversions or extinguishments.</p>	<p>The applicant acknowledges KCC's statutory duty with regards to its Countryside and Coastal Access Improvement Plan (CCAIP) and welcomes the opportunity to work together to meet its aims. Reference to this is made within this chapter.</p> <p>Acknowledged.</p>

Consultee	Response	Action
	<p>Construction Phase</p> <p>With regards to the construction phase of this project, the applicant has stated that a PRow Management Plan will be produced, setting out how PRow will be managed. This is referred to in technical appendix A14.1 (Outline Construction Traffic Management Plan).</p> <p>It is anticipated that temporary path closures will be required during this period, to enable the construction work to proceed safely. The applicant is reminded that a Temporary Traffic Regulation Order (TTRO) will be required to temporarily close a PRow. It should be noted by the applicant that the KCC PRow and Access Service requires a minimum of six weeks to process this request.</p> <p>KCC requests that any path closures are kept to a minimum to reduce disruption for path users. Alternative access routes/temporary diversions should also be provided where possible, in order to avoid fragmentation of the PRow network.</p>	<p>A PRow Management Plan has been produced and appended to the CTMP.</p> <p>KCC's comments are noted, and it is not currently anticipated that closures will be necessary, however, within the draft DCO the Developer has included at Schedule 4 a list of public rights of way which it seeks the power to temporarily stop up that will give it the power to temporarily close the PRows if necessary.</p> <p>Any PRow closures will be kept to a minimum during the construction of the solar park. If any temporary PRow closures are required alternative access routes or diversions will be provided where possible. This detail is described within the PRow Management Plan appended to the outline CTMP.</p>

Consultee	Response	Action
	<p>Operational Phase</p> <p>With regard to the operational phase of the site, the applicant has completed a 'Glint and Glare' study (technical appendix A17.1) to assess the impacts of the Solar Park. However, KCC notes that PRow users have not been included in this assessment. The study has only assessed the potential impacts of the photovoltaic (PV) development upon surrounding roads and dwellings. Considering the proximity of Public Footpaths ZR484 and ZR485 to the solar panels, KCC requests that the 'Glint and Glare' study is extended to assess the impact on PRow users. This is especially for users of the Saxon Shore Way, who would be walking along an elevated sea wall overlooking the site.</p> <p>In addition, KCC highlights that Public Footpath ZR485 currently passes through expansive arable fields and would be significantly affected by the Solar Park. Although this footpath would be accommodated within a green corridor, the character of the route would be substantially transformed by the presence of solar panels and fencing enclosures. Due to the changing nature of the route, there is a risk that the path would become obstructed by overgrown vegetation without regular maintenance.</p> <p>KCC therefore requests that the applicant clarifies what the intention is for the future surface of this route. If the path is to be left unsurfaced, the applicant should contribute towards a future vegetation clearance programme, to ensure that it remains open and accessible for the public to use.</p> <p>The applicant should be aware that no furniture, fence, barrier or other structure may be erected on or across PRow without the express consent of the Highway Authority. Furthermore, there must be no disturbance of the surface of the PRow, or obstruction of its use, either during or following any approved development without the express consent of the Highway Authority. KCC therefore requests that the applicant provides details of the proposed surface appearance of all PRow located within the development site, following the completion of the construction work.</p>	<p>A 'Glint and Glare' study taking account of PRow users has been undertaken and is detailed within Chapter 17 of the ES.</p> <p>Regular maintenance will be undertaken to keep PRow within the site visible and not to obstruct or endanger users.</p> <p>It is proposed that that Public Footpath ZR485 remains unsurfaced, apart from the point where it is bisected by the solar access track. Regular maintenance will be undertaken to keep the route visible and not to obstruct or endanger users.</p> <p>No furniture, fence, barrier or other structure will be erected on or across a PRow without consultation and agreement with KCC.</p>

Consultee	Response	Action
	<p>New PRoW & Access Provision</p> <p>With reference to Figure 13.1 (Recreational Receptor and Study Areas), the applicant has proposed two permissive access routes across the site. KCC supports the creation of these new routes as they would provide valuable links to the existing PRoW network. Consideration will need to be given to the future status of these paths.</p> <p>KCC strongly advises that the applicant enters into a permissive path agreement with the County Council for the 'western' link (between NGR TR 03101 63799 and NGR TR 02750 64508). Whilst the applicant could dedicate permissive access on their own, it is recommended that a formal licence is agreed, as this would clearly define conditions and areas of responsibility. The benefits of this approach are that the County Council would have details of the permission registered and would be able to promote responsible use of the route by the public. Furthermore, the landowner would be afforded greater protection against claims for new PRoW across their land made under the Wildlife and Countryside Act 1981.</p> <p>With regards to the 'eastern' link (between NGR TR 04265 64829 and NGR TR 05008 63325), KCC requests that this route is dedicated as a Public Footpath through a Creation Agreement with the County Council (Highway Act 1980 s25). This would allow the route to be shown on recreational ordnance survey maps and provide a valuable PRoW link through the site, connecting Footpath ZR484 to the wider network. The dedication as a PRoW would also secure the long-term sustainability and protection of this route, creating a positive legacy for the Solar Park.</p> <p>In addition to these paths, KCC requests that a third new access route is created along the eastern edge of the site, connecting Public Footpaths CW55 and CW90. Located within the eastern boundary of the site, this walking route would provide a valuable off-road alternative to the Faversham Road. KCC requests that this new route is dedicated as a Public Footpath through a Creation Agreement with the County Council (Highway Act 1980 s25), as it would be a valuable public amenity and address safety concerns along the Faversham Road</p>	<p>Only one permissive route is proposed within the east of the Development site. This is shown in Figure 13.1 of the Socio-economics, Tourism, Recreation and Land-use chapter (Chapter 13). It is intended that this route remains a permissive path.</p> <p>The permissive path being referred to in the second paragraph of KCC's comment is no longer proposed.</p> <p>On the third paragraph, it is intended that the route which is proposed remains a permissive path which, subject to the specific terms of the licence, will be agreed formally with KCC.</p> <p>This is because CHSP only has control of the land for a set duration, (identified in the terms of the lease agreement), and the use beyond that time reverts to the landowner.</p> <p>This has been discussed with the landowner of the route and we understand they are amenable to progressing with the adoption of this route, however whilst CHSPL is happy to support the landowner in their application for this, the adoption of this route is not included in the DCO application.</p>
Kent Police	<p>We note that several Public Rights of Way (PROW) cross the site. It is important that both sides of any PROW or access track that members of the public have legitimate access to, are secured with 2m fencing. Any CCTV cameras should not directly cover any PROWs.</p>	<p>It is proposed that all public access areas are secured with 2 m high fencing. No CCTV will directly cover any PRoW.</p>

Consultee	Response	Action
Canterbury City Council	<p>The Construction Environmental Management Plan (CEMP) at Technical Appendix A 10.2 does not appear to refer to construction working times and deliveries. This has been included in Chapter 12, where a 12 hour working day (07:00 - 19:00) is proposed on weekdays, however a 10 hour day (08:00 - 18:00) would be preferred - these hours are the most commonly used hours in the UK with regards to noisy work from construction projects and have been applied to projects like the Channel Tunnel Rail Link and HS2.</p>	<p>Core working hours are set out in Chapter 5 (Development Description) of the ES while the timing of construction vehicle movements is discussed within Chapter 14 (Access and Traffic).</p> <p>Core working hours are proposed to be between 07.00 until 19.00, Monday to Friday and 07.00 until 13.00 on a Saturday (unless in exceptional circumstances where need arises to protect plant, personnel or the environment). In addition to this, a start-up and close down period for up to an hour before and after the core working hours is proposed. This does not include the operation of plant or machinery likely to cause a disturbance.</p> <p>All construction traffic movements will be within the core working hours.</p> <p>It is proposed that CHSP will not accept HGV deliveries to site or let HGVs leave the site between the hours of 08.30 to 09.30 and 15.00 to 16.00 to avoid Graveney Primary School start/finish times.</p>
CPRE Kent	<p>We contend that a two-year construction period with some 75 HGV movements a day can not be tolerated in this rural location. We are aware that the Grade I-listed All Saints Church in Graveney suffered damage from the vibration of passing HGVs during the construction of the Cleve Hill converter which supports the London Array. We strenuously object to activities that would exacerbate the deterioration of an important heritage asset.</p>	<p>The amount of construction traffic predicted to be generated by the Development has reduced from that identified in the Preliminary Environmental Information Report (PEIR). Predicted traffic volumes are discussed within Chapter 14.</p> <p>The potential for vibration from construction vehicles is discussed within Chapter 12 of the ES (Noise and Vibration).</p> <p>Neither Chapter 12 nor 14 identify any significant residual environmental impacts associated with construction traffic from the Development.</p> <p>In addition, an outline CTMP has been produced to support the DCO application which sets out a number of mitigation measures.</p>

Consultee	Response	Action
Graveney and Goodnestone Parish Council	<p>12. Access and traffic We are very concerned that CHSP's preferred traffic access route to the proposed development site uses narrow rural roads in Head Hill Road and Seasalter Road. This is a particular concern during the construction phase of the development which will last up to two years overall.</p>	<p>This chapter identifies no significant residual environmental impacts from construction traffic.</p> <p>Furthermore, a number of pieces of mitigation are proposed in relation to construction traffic movements and these are detailed within the supporting outline CTMP.</p>
	<p>The preferred route will pass through the centre of the villages of both Graveney and Goodnestone, which include a primary school, church, holiday park, a number of residential properties and access to several public rights of way. A local bus service between Faversham and Whitstable covers the same route. Over much of their length, these routes do not have footways. Currently, they are used by very little HGV traffic. All three of our designated conservation areas are along this route.</p>	<p>It is considered that the most suitable construction traffic access route from the strategic road network to the Development site has been selected. This is discussed within this chapter and no residual significant environmental effects from construction traffic are predicted.</p> <p>Furthermore, a number of pieces of mitigation are proposed in relation to construction traffic movements and these are detailed within the accompanying outline CTMP.</p>
	<p>We question whether this makes a suitable route for heavy lorry traffic, even for a limited construction period and taking into account the proposed traffic mitigation measures, given the residual problems of noise, vibration, severance, delay and intimidation caused by heavy traffic.</p>	<p>This chapter discusses the suitability of the proposed construction traffic route while Chapter 12 (Noise and Vibration) discusses the potential for construction traffic vibration.</p> <p>It is proposed that a detailed highway condition survey be undertaken prior to construction. Any significant defects identified that are likely to exacerbate the potential for vibration from vehicles will be repaired prior to construction starting. In addition, vehicle speeds are expected to be low, particularly through sensitive areas.</p>

Consultee	Response	Action
	<p>We note the PEIR indicates an up to 10 to 12-fold increase in heavy lorry traffic over current levels during the peak construction period. Will CHSP make any financial contribution to the repair and maintenance of public roads which do not normally carry such heavy traffic? For example, a financial bond might be provided, which could be drawn upon if any consequent damage to road surfaces is evident.</p>	<p>The amount of construction traffic predicted to be generated by the Development has reduced from that identified in the Preliminary Environmental Information Report (PEIR). Predicted traffic volumes are discussed within this chapter.</p> <p>It is proposed that a detailed highway condition survey be undertaken both before and after construction of the Development. If the condition of the road surface or verges has deteriorated as a result of the proposed construction traffic, CHSP will undertake remedial works to ensure the condition of the highway is as it was prior to construction. The methodology and assessment of the highway condition surveys will be agreed and undertaken in consultation with KCC Highways.</p>
	<p>The review of local planning policies (PEIR pp 14-16 to 14-19) does not include Swale Local Plan policy DM26 on Rural Lanes. This is an important omission as the local access roads to the CHSP are covered by this policy.</p>	<p>Policy DM26 has been included and considered within the planning policy review section of this chapter.</p>
	<p>We would like to know how any agreed traffic management plans will be enforced? To whom would local people refer any problems? The local police would be hard pressed to fulfil this role.</p>	<p>An outline CTMP has been produced which details the proposed communication procedures, proposed monitoring of construction traffic and enforcement.</p>
	<p>A Construction Traffic Management Plan has been produced which details the proposed communication procedures, proposed monitoring of construction traffic and enforcement.</p>	<p>The volume of traffic expected to be generated once the site is operational is discussed within this chapter.</p>
<p>GREAT Graveney</p>	<p>CHSP's preferred traffic access route to the proposed development site would be to use narrow rural roads in Head Hill Road and Seasalter Road. This would be particularly intrusive during the construction phase of the development which will last up to two years overall.</p>	<p>This chapter identifies no significant residual environmental effects resulting from the proposed construction traffic.</p>

Consultee	Response	Action
	<p>The preferred route would pass through the centre of the villages of both Graveney and Goodnestone, which include a primary school, a school for pupils with specific learning difficulties, the church, a holiday park, a number of residential properties and access to several public rights of way. A local bus service between Faversham and Whitstable covers the same route. Over much of their length, these routes do not have footways. Currently, they are used by very few HGV lorries. All three designated conservation areas are along this route.</p>	<p>It is considered that the most suitable construction traffic access route from the strategic road network to the Development site has been selected. This is assessed within this chapter and no significant residual environmental impacts are predicted.</p> <p>Furthermore, a number of pieces of mitigation are proposed in relation to construction traffic movements and this are detailed within the accompanying outline CTMP. This includes proposals to avoid HGV traffic movements during school start and finish times. These measures will be secured within a final CTMP to be approved under the requirements of the DCO.</p>
	<p>In Chapter 13 – Socioeconomics, Tourism, Recreation and Land Use, page 13-13 mentions that “Faversham is located to the southwest of the Development and the port of Sheerness is located within 20 miles of the Development.” In Chapter 14 Access and Traffic, page 14-3 has a table that refers to “London Medway Port (Chatham)” and states it as being 45km away which is 28 miles.</p>	<p>The Port of Sheerness is approximately 28 miles to the Development site via the M2.</p>
	<p>CHSP’s preferred traffic access route to the proposed development site would be to use narrow rural roads in Head Hill Road and Seasalter Road. This would be particularly intrusive during the construction phase of the development which will last up to two years overall.</p>	<p>This chapter identifies no significant residual environmental effects resulting from the proposed construction traffic.</p>
	<p>How has the suitability of the roads been assessed? What was the outcome?</p>	<p>It is considered that the most suitable construction traffic access route from the strategic road network to the Development site has been selected. This chapter identifies no significant residual environmental effects from construction traffic.</p> <p>Furthermore, a number of pieces of mitigation are proposed in relation to construction traffic movements and these are detailed within the accompanying outline CTMP.</p>
	<p>How was the use of vehicular transport assessed? What was the outcome?</p>	<p>This chapter details the methodology used to assess the environmental effects of road traffic. It follows guidelines set out by the Institute of Environmental Assessment ‘Guidelines for Environmental Assessment of Road Traffic’ (1993) and the Design Manual for Roads and Bridges.</p>

Consultee	Response	Action
	<p>Can you provide specific details about the road users should the development go ahead: cars, HGV, Light GV, farm vehicles, cyclists, motorbikes and walkers?</p>	<p>Details on the existing road users and the volumes/type of construction traffic are discussed within this chapter.</p> <p>Furthermore, mitigation and management measures are set out within the supporting outline CTMP.</p>
	<p>Can you provide specific details about the timings of the road use of the above vehicles should the development go ahead?</p>	<p>Core working hours are set out in Chapter 5 (Development Description) of the ES while the timing of construction vehicle movements is discussed within this chapter.</p> <p>Core working hours are proposed to be between 07.00 until 19.00, Monday to Friday and 07.00 until 13.00 on a Saturday (unless in exceptional circumstances where need arises to protect plant, personnel or the environment). In addition to this, a start-up and close down period for up to an hour before and after the core working hours is proposed. This does not include operation of plant or machinery likely to cause a disturbance.</p> <p>All construction traffic movements will be within the core working hours.</p> <p>It is proposed that CHSP will not accept HGV deliveries to site or let HGVs leave the site between the hours of 08.30 to 09.30 and 15.00 to 16.00 to avoid Graveney Primary School start/finish times.</p>
	<p>How would the safety of walkers and cyclists be addressed?</p>	<p>Highways safety is assessed and discussed within this chapter. No significant residual environmental effects from construction traffic are predicted.</p> <p>Furthermore, mitigation and management measures are set out within the supporting outline CTMP.</p>
	<p>How would the safety of school children be addressed?</p>	<p>Highways safety is discussed within this chapter. No significant environmental effects from construction traffic are predicted.</p> <p>It is proposed that construction HGV movements are controlled during school start/finish times. This along with further management and mitigation is set out within the accompanying outline CTMP.</p>

Consultee	Response	Action
	What is the reason for not including the Swale Local Plan policy DM26 on Rural Lanes?	<p>Policy DM26 has been considered within Chapter 5 of the ES (Access and Traffic).</p> <p>It is considered that the proposals will not significantly harm the character of the roads along the proposed access route.</p> <p>Any potential environmental impacts resulting from construction traffic will be temporary. Once operation the proposed site is expected to generate minimal traffic and will result in a reduction of large agricultural vehicles using Head Hill Road and Seasalter Road.</p>
	What are the reasons for identifying Head Hill and Seasalter Roads as suitable for use by heavy goods lorries, the number of which would lead to a 1000% increase during peak times.	<p>It is considered that the most suitable construction traffic access route from the strategic road network to the Development site has been selected. This chapter identifies no significant residual environmental effects from construction traffic.</p> <p>Furthermore, a number of pieces of mitigation are proposed in relation to construction traffic movements and these are detailed within the accompanying outline CTMP.</p>
	How would CHSP developers' transport arrangements reflect the mobility needs of villagers?	<p>Baseline highway conditions are discussed within this chapter.</p> <p>No significant residual environmental effects from construction traffic are predicted.</p> <p>Furthermore, a number of pieces of mitigation are proposed in relation to construction traffic movements and these are detailed within the accompanying CTMP.</p>
	What was the outcome of the impact assessment of the amount and length of construction traffic on the local economy?	Chapter 14 of the ES (Access and Traffic) identifies that no significant environmental impacts from construction traffic are predicted.
	Who would enforce agreed traffic management plans?	An outline CTMP has been produced and will be submitted as part of the DCO application. This details proposed communication procedures, proposed monitoring of construction traffic and enforcement for inclusion in a final CTMP.
	How has the impact on human health and well-being been assessed, based on the amount and length of construction time traffic required for construction of the development, and what was the outcome?	A Human Health assessment, which considers proposed construction traffic, has been undertaken and is detailed within Chapter 17 of the ES.

Consultee	Response	Action
	<p>How was the impact of noise, dirt, dust and vibration on residential properties and the church assessed? What was the outcome?</p>	<p>The potential for noise and vibration from construction traffic is discussed within Chapter 12 (Noise and Vibration) while dirt and dust is discussed in Chapter 14 (Access and Traffic).</p> <p>Both Chapter 12 and 14 identify that no significant residual environmental impacts from construction traffic are predicted.</p> <p>Furthermore, construction traffic mitigation measures are proposed in the accompanying outline CTMP and Construction Environmental Management Plan (CEMP).</p>
	<p>What is your waste management plan, and what affect will disposal have on the traffic plan?</p>	<p>Traffic generation from waste has been included within the assessments of construction traffic set out in this chapter.</p> <p>No significant residual environmental impacts from construction traffic are predicted.</p>
	<p>Are the developers clear about the differences between the port at Chatham and the port at Sheerness?</p>	<p>The differences between the port at Sheerness and Chatham are noted within this chapter.</p>
<p>Highways England</p>	<p>Thank you for your letter dated 31 May 2018, inviting Highways England to comment on the above consultation and indicating that a response was required by 13 July 2018.</p> <p>Highways England has been appointed by the Secretary of State for Transport as strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the strategic road network (SRN). The SRN is a critical national asset and, as such, Highways England works to ensure that it operates and is managed in the public interest, both in respect of current activities and needs, as well as in providing effective stewardship of its long-term operation and integrity. We will therefore be concerned with proposals that have the potential to impact the safe and efficient operation of the SRN, in this case, particularly the M2 and A2.</p>	<p>This chapter assesses any potential road traffic related environmental effects associated with the construction of the proposed solar park on the SRN. It is concluded that there would be no significant residual environmental effects resulting from the proposed construction traffic.</p>

Consultee	Response	Action
	<p>Construction Phase</p> <p>We understand that volume and routeing of HGVs is not available at this stage. We will be particularly interested in this information, and therefore should continue to be consulted as the PEIR is revised and the full EIA developed.</p> <p>As part of the full Environment Impact Assessment, the effect of traffic flows on the SRN must be considered, in addition to junctions on the Local Road Network (LRN).</p> <p>We require confirmation on how the impact of the proposals on the SRN will be assessed, in particular the M2 Junction 7. This should include consideration of how restrictions outlined for HGV traffic on the LRN may impact on HGV arrival / departure profiles, and thus Peak Period use of the SRN.</p> <p>A separate assessment will need to be undertaken to identify suitable routes to transport AILs to Site. Highways England will need to be in agreement of this. We recommended contact with the HE Abnormal Load Team abnormal.loads@highwaysengland.co.uk to discuss your/our requirements.</p>	<p>Further information on traffic routeing and predicted construction vehicle volumes is provided within this chapter</p> <p>The effect of construction traffic flows on the SRN has been considered within this chapter. No significant residual environmental effects from construction traffic are predicted.</p> <p>The effect of construction traffic flows on the SRN has been considered within this chapter. No significant residual environmental effects from construction traffic are predicted.</p> <p>A separate assessment to identify suitable routes for AILs to access the site will be undertaken and shared with HE.</p>
	<p>Operational Phase</p> <p>Minimal traffic is expected in relation to the Operation and Decommissioning Phases. Whilst we are in agreement that it is unlikely that the trips generated during these phases would have a severe impact on the SRN, we will require confirmation of the likely volume of trips associated with this phases to confirm this.</p> <p>I trust that the above is of assistance. Should you have any queries regarding this response, please do not hesitate to contact us.</p> <p>We look forward to continued consultation on the details of the PEIR, EIA and any future documents, as the currently outstanding information becomes available.</p>	<p>The volume of traffic expected to be generated once the site is operational and during decommissioning is discussed within this chapter.</p>
<p>Ramblers</p>	<p>The Ramblers works to help everyone enjoy the pleasures and benefits of walking and to enhance and protect the places where people walk. We are committed to encouraging and supporting walking, protecting and expanding public rights of way and access land and protecting the beauty of the countryside and other areas.</p>	<p>Acknowledged</p>
	<p>We have been working with Natural England since 2010 to provide the best possible route for the England Coast Path around Kent that will be accessible and enjoyable to walk.</p>	<p>Acknowledged</p>

Consultee	Response	Action
	<p>England Coast Path</p> <p>Despite the fact that Natural England published their proposals in June 2017, you have failed to acknowledge in your report that the new "England Coast Path" will follow the line of the "Saxon Shore Way" along the northern and western perimeter. Natural England expects to receive approval from the Secretary of State to their proposals for this stretch of the coast later this year. It should be open well before construction of the solar park is proposed and will form part of the longest and most prestigious and iconic National Trail in England. It will encourage many more people to walk and enjoy the coast and its countryside.</p>	<p>Chapter 13 (including Recreation) and this chapter have been updated to make reference to the "England Coast Path" which will follow the route of the Saxon Shore Way along the northern and western perimeter of the site.</p>
	<p>Impact on Coast Path</p> <p>Kent has some of the longest stretches of reclaimed marshland along the entire English coast. What makes this particular section almost unique is that the Coast Path will be along the top of the sea defence providing great views over the mudflats and across the Swale and Faversham Creek to seaward and across the marshes to the Downs to landward. Other similar sections of the Coast Path are likely to be below the sea defence on the landward side with no view of the sea.</p> <p>It is easily accessible from Faversham and Seasalter. It is already popular with walkers and birdwatchers.</p>	<p>Acknowledged</p> <p>Acknowledged</p>
<p>Swale Borough Council</p>	<p>As you are aware the wide and well surfaced access road to the London Array substation extends all the way from the Seasalter Road and passes right around the southern perimeter of the substation, eventually reaching the farmyard at Cleve Hill Farm immediately next to where you propose the solar farm substation compound. This road is little used but offers excellent access options right up to the main focus of traffic on your site. Despite this, you appear to propose a substantial length of new or upgraded roadway leaving the London Array road east of the substation to approach your substation to the north of the London Array site and the ditch that fronts it. This is largely be on land otherwise unaffected by the solar panels themselves and intended to mitigate the ecological impacts of the development. The northern edge of the wider London Array substation site was deliberately designed to be without hard fences or intrusive infrastructure to allow the marshland character to be maintained. This upgrading of an existing informal trackway will disrupt this achievement. The new work seems unnecessary and incompatible with the conservation of visual amenity and maximum ecological enhancement of this area. I would like to see a thorough exploration of the maximum use being made of the full length of the London Array access road before contemplating the new works you indicate.</p>	<p>Development proposals have been updated to include the option to provide an alternative access road to the south of the London Array Substation. This is discussed in detail within Chapter 5, Development Description, of the ES.</p>

Consultee	Response	Action
Swale Friends of the Earth	We would urge you to adopt a sustainable transport plan to minimise lorry and road traffic movements during construction and operation, for safety and air quality reasons.	<p>This chapter assesses the potential for road traffic related environmental effects associated with the construction of the proposed solar park. It is concluded that there would be no significant residual environmental effects resulting from the proposed construction traffic. Similarly, an assessment into the potential effects of construction traffic on air quality has been undertaken within the ES, (Chapter 16), and no significant residual effects are predicted.</p> <p>Furthermore, construction traffic mitigation measures are proposed in the accompanying Construction Traffic Management Plan and Construction Environmental Management Plan.</p>
The Faversham Society	This is a very large site that would not only be covered with new solar installations but would also require substantial works to provide the roads, new ditches and the electrical plant - including a substantial compound for battery storage. The Faversham Society is concerned that the roads to the site, in particular, Head Hill Road and Seasalter Road are not suitable for the weight and frequency of traffic required to transport such a high volume of materials and equipment to the site. We are unclear about future responsibilities for road maintenance, repair and general restitution.	<p>This chapter predicts no significant residual environmental impacts from construction traffic.</p> <p>Furthermore, a number of pieces of mitigation are proposed in relation to construction traffic movements and these are detailed within the supporting outline CTMP.</p> <p>It is proposed that a detailed highway condition survey be undertaken both before and after construction. The scope of the survey will be agreed with KCC to ensure that any damage to the highway surface or verges as a result of the proposed construction traffic will be rectified. Further information with regards highway condition surveys has been included within the Construction Traffic Management Plan.</p>
	The developers have provided no information about the level of traffic to be expected nor any modelling on the effect that this will have not only on roads leading to and from the site but those in the wider area such as the M2, the A2 and the Thanet Way. Society members know that it only takes a little extra traffic or a small accident to reduce the entire local road network to a standstill.	<p>Predicted traffic generation from the Development and vehicle routing is assessed in this chapter. The environmental effects of the construction traffic have been assessed in the context of both local roads and the strategic road network and no significant residual environmental impacts are predicted.</p> <p>In addition, an outline CTMP has been produced to support the DCO application which sets out a number of mitigation measures.</p>

Consultee	Response	Action
	<p>The Construction Traffic Management Plan (CTMP) only addresses the first phase of the project, the construction phase, and does not cover the operation of the site or its decommissioning. The construction phase is expected to last 18-24 months but given the exclusion of the bird breeding season and problems with winter work as well, is likely to take up parts of three years or more. The CTMP states that the stakeholders to be consulted on road traffic movements are Highways England, Kent County Council, Swale Borough Council, Graveney Primary School, Graveney Parish Council and Graveney Residents Environmental Action Team.</p>	<p>This chapter discusses construction, operational and decommissioning phases of the project and concludes no significant residual environmental impacts from construction traffic are predicted.</p> <p>An Outline Decommissioning and Restoration Plan has been produced to accompany the ES and it is expected a Decommissioning Traffic Management Plan will be produced and agreed with the relevant highways authorities prior to this stage of work commencing.</p> <p>Construction of the development is expected to be completed within a 24 month programme.</p> <p>If the energy storage facility were to not be constructed, or constructed at a later date, the final installation of batteries would take up to six months to complete outside of the main 24 month construction window. If this were to occur, peak vehicle volumes would be significantly reduced.</p>
	<p>The route to be used from the M2 is the A299 to the Whitstable Road junction then via Head Hill Road to Seasalter Road through Graveney including over the narrow bridge over the railway line close to Graveney Primary School. Construction work in phase 1 includes bringing in all new materials and equipment, creation of a main construction compound, creation of the spine road which will have to be constructed first to reach the furthest extent of the site, other tracks and culverts over the ditches, marking out the locations of the infrastructure, construction of the solar array including piling for the module mountings, trenching and installation, construction of a flood protection bund and site protection for the sub-station and development of the sub-station.</p>	<p>Statement - no response required.</p>

Consultee	Response	Action
	<p>Phase 2, a further 3-6 months includes the creation of the energy storage facility including the installation of cabling, importing components, transformers and battery pads. It is stated that at the peak period for construction, there will be up to 75 heavy goods vehicles per day and 48 light goods vehicles. All of the equipment and building materials have to come through Graveney village, and the road from Head Hill to the site is no more than 5 metres wide. The traffic serving the site would operate between 0700-1900 Monday to Friday and 0700-1300 on Saturdays with no traffic on Sundays or public holidays. No lorries would run for half an hour either side of school opening or closing times. There is no table that sets out levels of vehicles over time during any day or over the construction period except this maximum figure. Details of procedures to receive deliveries and to inform contracting lorry firms of procedures are set out, and there will be a complaints procedure. There will also be a transport co-ordination officer and a traffic management group. This traffic includes abnormal indivisible loads of a type which need to travel with a police escort.</p>	<p>The amount of construction traffic predicted to be generated by the Development has reduced from that identified in the Preliminary Environmental Information Report (PEIR). Predicted traffic volumes and timings are discussed within this chapter.</p>
	<p>A table sets out that at Head Hill and Seasalter Road, existing levels of HGV traffic are in the range 0.5% to 0.9% of vehicles using the road. This is expected to rise to between 5.4% and 8.6%, the latter figure at Seasalter Road near the entrance to the site. This means that instead of less than one in a hundred vehicles using the road is a heavy goods vehicle or one in two hundred at Head Hill, up to one in twelve vehicles will be a heavy goods vehicle. These will be going past a school, houses fronting onto the road and a grade I listed church, quiet junctions from minor roads and a small housing estate and a caravan park and over a narrow, angled railway bridge. There are no parts of the road suitable for passing places for lorries and it is likely that on any trip along the road a motorist or walker would meet a lorry. This will make the character of the road feel very different for users in cars or the occasional bus and for residents and will be more dangerous since there are no pavements at all except in short stretches in the central part of Graveney village and the road at present generally has the appearance of a quiet country lane.</p>	<p>A description of the predicted increases in road traffic during construction of the Development along Head Hill Road and Seasalter Road are discussed within this chapter.</p> <p>This chapter also assesses the environmental impacts of construction traffic on sensitive receptors and no significant residual environmental effects are predicted. This includes effects associated with fear and intimidation, and highway safety.</p> <p>Furthermore, a number of pieces of mitigation are proposed in relation to construction traffic movements and these are detailed within the supporting outline CTMP.</p>

Consultee	Response	Action
	<p>The Faversham Society is concerned that the roads to the site, in particular Head Hill Road and Seasalter Road are not suitable for the amount and frequency of traffic and the transport of such a high volume of materials and equipment to the site. This is much more extensive in its volume than the works that created the existing Cleve Hill sub-station because of the very large site that will be covered with new installations and the works needed to provide the roads, new ditches and the electrical plant including a substantial compound for battery storage. There is no other route to the site from the major route network, and the roads are enclosed by farmland and houses and runs over a narrow bridge and past a listed church with a walled enclosure so cannot be widened. This traffic is expected to occur over a period taking in parts of three years or more, and afterwards, there will be a small increase in traffic serving the site when in use but this has not been quantified.</p>	<p>This chapter predicts no significant residual environmental impacts from construction traffic.</p> <p>Furthermore, a number of pieces of mitigation are proposed in relation to construction traffic movements and these are detailed within the supporting Construction Traffic Management Plan.</p>

11. In addition to the above, meetings have taken place with Highways Officers and PRow Officers at KCC to discuss local transport and highways conditions, and the scope of assessment.

14.1.3 Construction Logistics

12. In the early stages of Development, the Applicant considered alternative options to transport freight to the site, in order to minimise the impact of construction traffic on the local road network. Movement of freight by marine access, a new rail freight hub, a new haul road bypassing existing local roads and air freight were all considered. However, these were discounted due to the significant cost implications, environmental impact (all of which would be over and above that of road) and the increased risk to the delivery of the site (including short tidal impacts, weather delays etc.).
13. Many of the options also required the creation of new infrastructure which would result in high levels of construction traffic before construction of the scheme had commenced.
14. It was also demonstrated through construction of the Cleve Hill Substation between 2009 and 2011, that the construction traffic route is capable of accommodating the type and numbers of construction vehicles necessary to undertake this type of development.
15. All of the alternative options were therefore readily discounted relative to the most commonly used option of road transport.
16. It is anticipated that equipment and plant will be transported to site via sea and road from the port of landing to the site. Therefore, information about both, in tandem with vehicle routing strategies and abnormal loads are discussed in this section.

Freight by Sea

17. Freight travelling via sea will also utilise roads to access the site. This is seen as the most feasible option for transporting goods and materials to site. Much of the electrical equipment for the Development will likely be manufactured in Asia and therefore will arrive in the UK by boat.
18. It is anticipated that freight travelling by sea will utilise either Dover, Ramsgate or Sheerness ports. These ports have experience in handling some of the world's largest vessels from abroad and handle cargo between normal and abnormally large, including energy infrastructure.

19. All three ports are located within 50 km of the site, and can be accessed via the strategic highway network. The port of Ramsgate is located to the east and is accessed via the A299 Thanet Way. The port of Sheerness is located to the northwest, accessed via the A299, M2 and A249 whilst the port of Dover, located to the southeast is accessed via the A2.

Freight by Road

20. The closest strategic road network to the site is the M2, accessed from Junction 7 approximately 1 km south of the Whitstable Road/A299 Thanet Way junction.
21. The M2 continues westwards merging to become the A2 towards Central London and the M25. At Junction 7 of the M2 the A2 also provides a connection south towards Dover.
22. At Junction 5 of the M2, the A249 provides links north to the Port of Sheerness and south to the M20 north of Maidstone.
23. While not managed by Highways England (HE), the A299 Thanet Way is also considered to be of strategic importance as a key distributor road across northern Kent and provides direct connections to the Port of Ramsgate.
24. The local road network consists of Whitstable Road, Staple Street, Staple Street Road, Head Hill Road and Seasalter Road. These roads are described in further detail in section 14.3.3, Baseline Conditions.

Construction Vehicle Routeing Strategy

25. To provide safe and responsible construction vehicle access to the site, construction traffic routes have been derived and agreed with KCC.
26. The origin of plant, machinery and materials is not known at this stage, however, contractors will be required to use one of three primary routes to access the site. These include the A299 (if approaching from the east), the M2 (if approaching from the west) and the A2 (if approaching from the south).
27. These will be followed by both LGVs and HGVs during the construction phase of the Development.
28. All routes converge on the A299 before reaching the Development. From the A299 vehicles will be required to use Staple Street, Staple Street Road, Whitstable Road, Head Hill Road and Seasalter Road to access the site. The proposed vehicle routes are illustrated by Figure 14.1.
29. Staple Street Road / Whitstable Road forms a cross roads with Head Hill Road. which connects with Seasalter Road further north. Head Hill Road and Seasalter Road follow a north / south alignment and measure between 4.5 m and 7.5 m in width.
30. Along the route, the existing railway bridge, located in Graveney is owned by Network Rail. There is no existing weight restriction on the bridge and (subject to standard road vehicle regulations) and it is currently used by large vehicles, especially during certain times of the year.
31. From Seasalter Road, construction vehicles will access the site via a private road which provides access to the existing London Array Substation and is approximately 6 m wide. A bellmouth junction with good visibility in both directions measuring circa 26 m wide is provided at the access road/Seasalter Road junction. All construction traffic will utilise this existing junction.
32. Construction vehicles will travel along the internal access road to the existing Cleve Hill Substation before utilising new access tracks to enter and exit the Development site.
33. Figure 14.1 illustrates the routes identified to and from the Development site.

14.1.3.1 Vehicle Classification

34. A number of vehicle types will be used during the construction phase of the Development. Table 14.2 details each vehicle which are expected to be used. Heavy Goods Vehicles (HGVs) are classed as vehicles exceeding 7.5 tonnes.

Table 14.2 Typical Construction Vehicle Classification

Light (LGVs)	Heavy (HGVs)
Car	40 tonne truck
Van (under 7.5t)	Low Loader
4x4 pick-up	Flat Bed
4x4 transit	Truck (over 7.5t)
Mini-buses	Crane
4 x 4 vehicle	Excavator
	Winch Tractor
	Tractor and Trailer
	Waste Collection

35. The vehicles listed above have been identified based on similar projects by scale and type.
36. HGV and LGV movements will typically comprise those associated with the delivery of building materials and plant/equipment.

14.1.3.2 Abnormal Loads

37. Abnormal loads are defined by the Department for Transport as weighing more than 44 tonnes (whilst KCC require notification for weight over 80 tonnes). Abnormal load movement is controlled by The Motor Vehicles (Authorisation and Special Types) General Order 2003 and subject to management and prior agreement with the Police, HE, and KCC.
38. It is anticipated that the 400 kV transformer will weigh in the region of approximately 130 tonnes and measure 2.5 m by 8.5 m. Therefore, the relevant authorities will need to be notified and an appropriate port chosen (these assumptions are based on information obtained from London Array). KCC also state that loads greater than 130 tonnes will require an escort on a number of motorways and A roads (including M2, A20, A2, A289 and A299)
39. The authorities required to be informed will include the police, highway authorities and the owner of Graveney Bridge (Network Rail) through an abnormal loads movement assessment, however, the abnormal loads are expected to be within the weight thresholds of those transported to the London Array substation. The final CTMP will detail the vehicle specification, proposed access arrangements and vehicular routeing including points of interest.
40. It is foreseen that abnormal load vehicles will be organised to travel during off-peak hours and will be escorted.

14.1.3.3 Timings

41. It is proposed that CHSP will not accept HGV deliveries to site or let HGVs leave the site between the hours of 08.30 to 09.30 and 15.00 to 16.00 to avoid Graveney Primary School start/finish times. Furthermore, it is anticipated that large vehicles will be released in pairs to reduce impact.

14.1.4 Policy Context

42. Policy for the Development must be considered from national to local level. The following documents have been considered in this assessment:
- National Policy Statement (NPS) for Energy (EN-1);
 - National Planning Policy Framework (NPPF);
 - Kent County Council Fourth Local Transport Plan Growth without Gridlock 2016 – 2031;
 - Canterbury District Local Plan (July 2017);
 - Swale Local Plan (2017); and
 - Kent and Medway Growth and Infrastructure Framework (2018).

43. Chapter 6 of the ES provides the Legislative and Planning Policy Context for the application, while those policies that are relevant to traffic and transport have been discussed further below.

14.1.4.1 National Policy Statement (NPS) for Energy (EN-1)

44. The NPS has a chapter in its 'Generic Impacts' on Traffic and transport, which focuses on the:

"transport of materials, goods and personnel to and from a development during all project phases can have a variety of impacts on the surrounding transport infrastructure and potentially on connecting transport networks".

45. The statement emphasises the importance for consideration and mitigation of transport effects. Explaining these are an essential part of wider policy objectives and sustainable development goals.

14.1.4.2 National Planning Policy Framework

46. The updated National Planning Policy Framework (NPPF) was adopted in July 2018. Section 9, Promoting Sustainable Transport, of the NPPF outlines the important role that considering development applications should ensure that:

- 'appropriate opportunities to promote sustainable transport can be – or have been – taken up, given the type of development and its location; and
- Safe and suitable access to the site can be achieved for all users.'

47. Paragraph 110 of the NPPF states applications for development should:

- 'Give priority to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services and appropriate facilities that encourage public transport use;
- Address the needs of people with disabilities and reduced mobility in relation to all modes of transport;
- Create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter and respond to local character and design standards;
- Allow for the efficient delivery of goods and access by service and emergency vehicles; and
- Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.'

48. The NPPF details the current national transport planning policy, highlighting the important role that transport policies have in helping sustainable development.

49. Paragraph 109 of the NPPF states that:

"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."

50. The Development is considered to have no 'severe' effects, and appropriate mitigation measures will be implemented to counteract effects relating to traffic and transport. Furthermore, once operational there will be negligible effect on the surrounding highway network as a result of the Development.
51. Kent County Council Fourth Local Transport Plan Growth without Gridlock 2016 - 2031
52. The Kent County Council Fourth Local Transport Plan Growth without Gridlock states that its purpose is to:
- "enable planned, sustainable growth and ensure the necessary infrastructure is in place, which will stimulate regeneration and encourage people and businesses to come to Kent. To be able to travel easily, safely and quickly to our destinations we need a transport network that can cater for current demand, enables economic growth, and supports a growing population"*.
53. This policy identifies the five outcome policies for transport as:
- 'Outcome 1: Economic growth and minimised congestion: Deliver resilient transport infrastructure and schemes that reduce congestion and improve journey time reliability to enable economic growth and appropriate development, meeting demand from a growing population.
 - Outcome 2: Affordable and accessible door-to-door journeys Policy: Promote affordable, accessible and connected transport to enable access for all to jobs, education, health and other services.
 - Outcome 3: Safer travel Policy: Provide a safer road, footway and cycleway network to reduce the likelihood of casualties, and encourage other transport providers to improve safety on their networks.
 - Outcome 4: Enhanced environment Policy: Deliver schemes to reduce the environmental footprint of transport, and enhance the historic and natural environment.
 - Outcome 5: Better health and wellbeing: Provide and promote active travel choices for all members of the community to encourage good health and wellbeing, and implement measures to improve local air quality."

14.1.4.3 Bearing Fruits 2031, The Swale Local Plan (July 2017)

54. The document sets out the vision and overall development strategy for the surrounding area and how it will be achieved for the period from 2014-2031. Local plans are part of the development plan for an area.
55. It identifies where development will take place and how the natural environment and built heritage of the borough will be protected and enhanced.
56. Policy CP2 relates to promoting sustainable transport, detailing that:
- "Actions by the public, private and voluntary sector will adopt an integrated approach to the provision of transport infrastructure. Development proposals will, as appropriate:*
- 1. Contribute to transport network improvements, where capacity is exceeded and or safety standards are unacceptably compromised, with particular emphasis on those identified in the Infrastructure Delivery Schedule;*
 - 2. Make best use of capacity in the network by working together with transport providers to improve the transport network in the most sustainable way, and*

extending it where necessary, as demonstrated by Transport Assessments and Travel Plans in support of development proposals;

3. Support the provision of major new transport infrastructure in accordance with national and local transport strategies;

4. Maintain and improve the highway network at key points to improve traffic flows and respond to the impact of new development and regeneration, as set out in the Local Transport Strategy;

5. Improve safety, through measures such as adequate parking, lighting and traffic management schemes;

6. Achieve alternative access to all services through promoting access to sustainable forms of transport particularly bus, cycling and rail transport and improving interchange between them from the earliest stages of development;

7. Provide integrated walking and cycling routes to link existing and new communities with local services and facilities, public transport and the Green Grid network; and

8. Facilitate greater use of waterways for commercial traffic, where this would not have an unacceptable adverse environmental impact, through working with the Port of Sheerness and other bodies."

57. Policy DM 26 Rural Lanes states:

"Planning permission will not be granted for development that would either physically, or as a result of traffic levels, significantly harm the character of rural lanes. For those rural lanes shown on the Proposals Map, development proposals should have particular regard to their landscape, amenity, biodiversity, and historic or archaeological importance."

14.1.4.4 Canterbury District Local Plan (July 2017)

58. The Canterbury District Local Plan sets out the vision for the area between 2011 and 2031 and was fully adopted in July 2017. The five key transport aims of the document are to improve travel choice, reduce traffic congestion, improve road safety, reduce travel demand and improve travel awareness. The following policies are deemed pertinent to the development proposals:

- Policy T1 – Transport Strategy: In considering the location of new development, or the relocation of existing activities, the Council will always take account of the following principles of the Transport Strategy
- Controlling the level and environmental impact of vehicular traffic including air quality;
- Policy T16 - Rural Lanes: Rural lanes which are of landscape amenity, nature conservation, historic or archaeological importance will be protected from changes and management practises which would damage their character, and where possible be enhanced.

14.1.4.5 Kent and Medway Growth and Infrastructure Framework (2018)

59. The Kent and Medway Growth and Infrastructure Framework states:

"The link between infrastructure and growth is well known. Robust infrastructure can enable development and ultimately raise land values; alternatively, a lack of infrastructure can fundamentally limit development and restrict land values".

60. The purpose of the document is to provide a strategic framework in the county, identifying and prioritising investment across a range of infrastructure, for planned growth up to 2031.

61. The framework helps plan sustainable development, minimising the effect on residents by insuring appropriate infrastructure and services are supported.

14.1.4.6 Countryside and Coastal Improvements Plan

62. The countryside and Coastal Improvements Plan sets out KCC's ambitions to improve accessibility for pedestrians, cyclists and equestrians to the Kent countryside. This includes a range of objectives and aims relating the following vision
- *To help the Kent economy to grow*
 - *To tackle disadvantage*
 - *To put the citizen in control*

14.2 Assessment Methodology

63. This assessment of likely effects of the Development in environmental terms follows the Institute of Environmental Assessment's (IEA) 'Guidelines for Environmental Assessment of Road Traffic' (1993) (the 'IEA Guidelines').
64. A study was undertaken to assess the feasibility of modal options to move freight, existing highway infrastructure surrounding the site, and potential vehicular routeing options. This includes a review of Personal Injury Accident Data (PIA), obtained from KCC, local cycle and pedestrian routes and identification of local sensitive receptors.
65. The construction effects section presents the effect of the Development by adding trips associated with the construction of the site onto baseline traffic flows. Following this, any mitigation measures which may be required are identified.
66. An outline CTMP has been prepared as part of the DCO application. A final CTMP will be required under the DCO, if granted, and this will provide the methodology for managing traffic associated with the construction phase of the project; the outline CTMP is included as Technical Appendix A14.1.
67. During operation, up to three maintenance staff are expected to visit the site per day, the traffic impacts of which is deemed negligible.
68. The greatest effects will be during construction and demolition, in particular movement of plant and materials to site and the interaction between these movements and local sensitivity receptors along the proposed access route.
69. The transport related environmental effects (as defined by the IEA Guidelines) are being assessed are:
- Delay;
 - Road Safety;
 - Intimidation and fear;
 - Severance; and
 - Pedestrian amenity.
70. The assessment of these categories of potential effect are described in section 14.2.1 of this chapter.
71. In tandem with this, effects of noise and vibration are considered within Chapter 12: Noise and Vibration, and effects on air quality and receptors of air quality are considered within Chapter 16: Air Quality.

14.2.1 Magnitude of Effects

72. This section sets out the methodology for assessing the environmental effects as defined by the IEA Guidelines.

14.2.1.1 *Traffic Flows*

73. The assessment of effect on traffic flows considers key junctions and links which have been agreed with KCC as follows:
- Seasalter Road;
 - Head Hill Road South;
 - Head Hill Road North;
 - Sandbanks Lane;
 - Monkshill Road;
 - Faversham Road;
 - Staple Street Road;
 - Staple Street;
 - Whitstable Road;
 - A299 North;
 - A2;
 - M2; and
 - A249.
74. The construction phase of the project is expected to result in the greatest effect, therefore traffic flow assessment will consider this phase as a worst-case assessment.
75. The IEA Guidelines suggests that, to help with assessment, two broad rules can be used as part of a screening process. These rules state that a road should be considered within the assessment if the total increase in traffic flows or HGV flows exceeds 30%. In sensitive areas, roads should be considered where traffic has increased by 10% or more. Receptors and their sensitivity to traffic have been discussed below.
76. As such, those links or junctions that are not predicted to have an increase in total traffic of 30% or HGVs of 30% have not been assessed further, unless in areas with sensitive receptors.

14.2.1.2 *Delay*

77. IEA Guidelines note that driver delay can occur at several points on the network, although the effects are only likely to be significant when the traffic on the highway network is predicted to be at or close to the capacity of the system. Traffic delays to non-development traffic can occur at several points along the network surrounding the site:
- At the site entrance, where additional turning movements occur;
 - On the highways passing the site, where there is likely to be additional traffic and the flow might be affected by additional parked cars;
 - At other key intersections along the highway, which might be affected by increased traffic; and
 - At side roads where the ability to find gaps in traffic may be reduced, thereby lengthening delays.

14.2.1.3 *Road Safety*

78. A detailed review of Personal Incident Accident (PIA) data obtained from KCC has been undertaken for those highway links from the A299 Thanet Way to the site. This is set out in section 14.3.6.

14.2.1.4 *Intimidation and Fear*

79. There are no commonly agreed thresholds for estimating levels of fear and intimidation. As such, in line with the IEA Guidelines, professional judgement has been used to determine the level of intimidation and fear, with special consideration given to vulnerable groups such as school children.

80. Key factors that are identified within the IEA Guidelines as having a direct impact on fear and intimidation are the volume of traffic, its HGV composition and traffic speeds.

14.2.1.5 Severance

81. Severance is defined in the IEA Guidelines as 'division that can occur within a community when it becomes separated by a major traffic artery'. The extent of severance created by construction traffic has been assessed based on thresholds set out within the IEA Guidelines and as summarised in Table 14.3.

14.2.1.6 Pedestrian Delay

82. Changes in the volume, composition and speed of traffic may affect the ability of people to cross the road. As described within IEA Guidelines, for a road with no crossing facilities, a two-way flow of 1,400 vehicles per hour has been adopted as a threshold for assessment (equating to a mean 10 second delay for a link with no pedestrian facilities). Below this flow pedestrian delay is unlikely to be a significant factor.

83. It is noted, however, while this threshold can be applied to all road types, local factors and conditions can also influence pedestrian delay and professional judgement has also be used in this assessment.

14.2.1.7 Pedestrian/Cyclist Amenity

84. Pedestrian and cyclist amenity refers to the pleasantness of a journey which could be affected by traffic flow, composition and separation between traffic. Change in pedestrian/cyclist amenity has been assessed and the results presented within this chapter.

85. A tentative threshold for judging the significance of changes in pedestrian and cyclist amenity is described as instances where total traffic flow or its HGV component halves or doubles.

14.2.1.8 Public Transport Delay

86. The IEA Guidelines do not include any thresholds for identifying the magnitude of effect in relation to public transport delay.

87. Professional judgement has been used to identify those thresholds set out in Table 14.3 below.

14.2.1.9 Summary of Magnitude Criteria

88. Table 14.3 sets out the criteria by which any potential effects will be assessed.

Table 14.3 Assessment Criteria for Magnitude of Effect

Effect	Magnitude of Effect (Degree of Change)			
	Negligible	Minor	Moderate	Major
Delay	This will be assessed on a case by case basis using professional judgement subject to the sensitivity and vulnerability of the receptor			
Road Safety	This will be assessed on a case by case basis using professional judgement subject to the sensitivity and vulnerability of the receptor			
Intimidation and Fear	This will be assessed on a case by case basis using professional judgement subject to the sensitivity and vulnerability of the receptor			
Severance	Increase in total traffic flows of 30% or under (or increase in HGV flows under 10%)	Increase in total traffic flows of 30% – 60% (or increase in HGV flows over 10% based on the sensitivity of the receptors)	Increase in total traffic flows of 60% - 90% (or increase in HGV flows over 10% based on the sensitivity of the receptors)	Increase in total traffic flows of 90% and above. (or increase in HGV flows over 10% based on the sensitivity of the receptors)

Pedestrian Delay	Total traffic flows under 1,400 vehicles per hour.	This will be assessed on a case by case basis subject to the sensitivity and vulnerability of the receptor.
Pedestrian / cycle amenity	This will be assessed on a case by case basis using professional judgement subject to the sensitivity and vulnerability of the receptor/pedestrian route identified.	
Public Transport Delay	This will be assessed on a case by case basis using professional judgement subject to the sensitivity and vulnerability of the receptor/pedestrian route identified.	

14.2.2 Sensitive Receptors

89. The sensitivity of a receptor can be defined by the degree to which it responds to a change in its environment. In this assessment this will predominantly relate to the effects of an increase in road traffic on a particular receptor.
90. Within the IEA guidance, the following groups of people/places are identified as being susceptible to changes in traffic conditions:
- People at home;
 - People at work;
 - Children, elderly and disabled persons;
 - Sensitive locations such as hospitals, churches, schools, historical buildings;
 - Pedestrians;
 - Cyclists;
 - Open recreational spaces;
 - Sites of ecological/nature conservation value; and
 - Sites of tourist/visitor attraction.
91. Table 14.4 shows a range of receptors and their sensitivity to an increase in traffic. These have been classified as being negligible, minor, moderate and high.

Table 14.4 Receptors and their sensitivity in relation to traffic

Receptor	Sensitivity
Schools, colleges, playgrounds, retirement homes.	High
Congested junctions, shops/businesses, pedestrians/cyclists, areas of ecological/nature conservation value, residential properties close to the carriageway.	Moderate
Sites of tourist/visitor attraction, places of worship, residential areas set back from the highway with screening.	Minor
Those people and places located away from the affected highway link	Negligible

92. The assessment considers the quantity and classification of the sensitivity of receptors along each of the highway links which will be used during the construction of the Development.

14.2.3 Significance of Effects

93. The approach to evaluating significance is described within the Design Manual for Roads and Bridges (DMRB) Volume 11, Section 2, Part 5 (2008). It states that:
- "The significance of the effect is formulated as a function of the receptor or resource environmental value (or sensitivity) and the magnitude of project impact (change)."*
- "The approach to assigning significance of effect relies on reasoned argument, professional judgement and taking on board the advice and views of appropriate organisations."*
94. The DMRB Volume 11, Section 2, Part 5 (2008) sets out a table for helping to define the significance of effect. This has been used to develop Table 14.5 below.

Table 14.5 Significance of Effect

		Magnitude of Effect (Degree of Change)				
		No Change	Negligible	Minor	Moderate	Major
Environmental Value (Sensitivity)	Negligible	Neutral	Neutral	Neutral or Slight	Neutral or Slight	Slight
	Minor	Neutral	Neutral or Slight	Neutral or Slight	Slight	Slight or Moderate
	Moderate	Neutral	Neutral or Slight	Slight	Moderate	Moderate or Large
	High	Neutral	Slight	Slight or moderate	Moderate or Large	Large or Very Large

95. Effects that are assessed as being of Moderate, Large or Very Large are generally considered to be significant, in terms of the EIA Regulations. Professional judgement is applied, which may draw specific conclusions over and above this general rule.

14.3 Baseline Conditions

14.3.1 Site Location

96. The Development will be located on the north coast of Kent, in the district of Swale. The site is bound by Faversham Creek to the southwest and west, The Swale to the north and predominantly agricultural land to the south some of which is covered with polytunnels. Pockets of development are located at the periphery of the site including the existing Cleve Hill Substation and residential dwellings to the southeast.
97. The village of Graveney is located to the southeast of the site, formed of a small number of dwellings (circa 420 based on 2011 census), a primary school, a church, holiday lodges and farms.

14.3.2 Strategic Highway Network

98. The closest strategic road network to the site is the M2, accessed from Junction 7 approximately 1 km south of the Whitstable Road junction, which forms the A299 to the east of this junction.
99. The M2 continues north west and merges to form the A2, providing a link to Central London and the M25. The A2 is also accessed via Junction 7, providing a connection to the A28 and further south towards Dover.
100. At Junction 5 of the M2 in Sittingbourne, the A249 provides a direct route to Medway Port in Sheerness.
101. Traffic along the M2 has fluctuated slightly over recent years, with average annual traffic increasing by approximately 12% between 2014 and 2015, whilst only an increase of 1% was seen between 2015 and 2016. The Average Annual Daily Traffic for the M2 at junction 7 is approximately 37,177 vehicles in 2016.

14.3.3 Local Highway Network

102. The A299 is a two way dual carriageway following an east-west alignment, between Ramsgate in the east and forms the M2 to the west of Junction 7, approximately 1km to

- the south of the Staple Street slip road. It changes to a single carriageway after the roundabout between the A256 and Sandwich Road. The speed limit varies between national speed limit (70 mph) for the dual carriageway and 30 / 50 mph for the single carriageway section.
103. The western end of Staple Street forms a slip road on to the southbound A299 Thanet Way. Staple Street is a two way single carriageway with no lining provided on either side of the carriageway.
 104. Staple Street Road forms a bridge over the A299 Thanet Way and provides a connection between Staple Street and Whitstable Road. A narrow footway on the southern side of Staple Street Road and there is limited footway provision on Staple Street.
 105. Whitstable Road provides access to Faversham to the west and forms a slip road to the northbound A299 Thanet Way in northeast. It is formed of a two way single carriageway with no lining present on either side of the carriageway. No footway is provided on Whitstable Road to the east of Head Hill Road, whilst a narrow footway is located on the southern side of the carriageway to the west of Head Hill Road.
 106. Whitstable Road forms a cross roads with Staple Street Road and Head Hill Road, formed of a wide flare width to allow large vehicles to manoeuvre. There are no parking restrictions on the extents of Head Hill Road.
 107. Head Hill Road is rural in nature, formed of a two-way single carriageway and is subject to the national speed limit (60 mph) in the vicinity of the site. Approximately 350 m south of the site access, the speed limit reduces to 40 mph, which continues through the village of Graveney. In the North, Head Hill Road connects to Seasalter Road via Graveney and Goodnestone.
 108. In Graveney, Seasalter Road forms a priority junction with Monkshill Road, a narrow two-way rural road, subject to the national speed limit (60 mph), which merges to form Highstreet Road and then meets the A299 Thanet Way. Approximately 500 m east of the junction, a level crossing is provided at the railway line.
 109. Further North, Seasalter Road connects with Faversham Road in the north, following an alignment parallel to the Swale towards Seasalter and Whitstable.
 110. No parking restrictions are in place along the extent of Seasalter Road. Any parking along these stretches of road would therefore lead to a reduced carriageway width. At the bridge over the railway line to the south of Graveney, Head Hill Road narrows to approximately 5.2 m in width. No street lighting or footways are provided for the majority of Head Hill Road and Seasalter Road.
 111. The speed limit on Seasalter Road reduces further to 30 mph in the vicinity of Graveney Primary School (located between Graveney and Goodnestone). Directly to the south of the school, a bridge is provided over the railway line, with a separate pedestrian bridge, providing a connection between the car park and Graveney Primary School.
 112. The site is accessed via a limited network of rural roads, which connect to the surrounding local distributor road network. To the southeast of the site, the existing Cleve Hill Substation (which facilitates the export of electricity generated by London Array Offshore Wind Farm) is accessed via a rural gated private access road built for the substation. The access forms a priority junction with Seasalter Road, with ample room provided to accept large goods vehicles.
 113. There is no footway provision along the majority of Seasalter Road / Head Hill Road, apart from a small section to the south of the junction with Monks Hill and intermittent footway in the vicinity of Goodnestone Village / Graveney Village.

14.3.4 Traffic Flows

114. Traffic surveys have been undertaken on the following roads:
- Head Hill Rd (South);
 - Head Hill Rd (North);
 - Seasalter Road;
 - Sandbanks Lane;
 - Monkshill Road;
 - Faversham Road;
 - Staple Street;
 - Staple Street Road; and
 - Whitstable Road.
115. ATCs (Automatic Traffic Counters) were undertaken on seven consecutive days in May 2017, a neutral month, as specified by the Department for Transport which suggest that traffic data should reflect the normal traffic flow conditions on the transport network (e.g. non-school holiday periods, typical weather conditions etc.) in the vicinity of the site, and should be valid for the intended purposes.
116. It should also take account of holiday periods in tourist areas, where peaks could occur in periods that might normally be considered non-neutral. The recommended periods for data collection are spring and autumn, which include the neutral months of April, May, June, September and October.
117. ATCs were undertaken on Head Hill Road North and South, Seasalter Road in 2017, whilst an additional count was undertaken on Whitstable Road, Staple Street Road and Staple Street in October 2018 (also classified as neutral). The data from May 2017 has then been uplifted to provide a 2018 baseline using a TEMPRO growth factor.
118. Traffic counts were then extracted from the DfT for the strategic road network (A249, A299, M2 and A2). A summary detailing the average 12-hours flows for each road is shown in Table 14.6 which have been obtained from the Department of Transport (DfT). As the data was recorded in 2016 and 2017, it has been uplifted to provide a 2018 baseline using a TEMPRO growth factor.
119. TEMPro is a software package published by the Department for Transport (DfT) which allows users to generate growth factors which can be applied to observed traffic data in order to establish forecast future year scenarios. The software produces growth factors based on various input parameters which can be tailored to suit the needs of a particular geographical locations and road type. For the purposes of this assessment, TEMPro has been used to generate growth factors for background traffic.
120. TEMPro also employs the use of the National Trip End Model (NTEM) forecasts to allow growth factor forecasts to be made based on population, employment, households – by car ownership, trip ends and simple traffic growth factors for rural and urban roads, broken down into minor, principle and trunk roads. A factor for 'rural minor' roads has been used to factor up the LRN, whilst a factor for 'rural trunk' roads has been applied to the SRN and the A299.

Table 14.6: 2018 Baseline Annual Average Daily Traffic (AADT) Flows

Road Name	Total	HGV	Percentage of HGVs
Head Hill Rd (South)	2,833	199	7%
Head Hill Rd (North)	2,450	123	5%
Seasalter Road	1,625	65	4%
Staple Street Road	5,763	111	2%
Staple Street	4,763	125	3%
Whitstable Road	5,372	392	7%
A299	47,213	1,840	4%
A2	38,320	2,778	7%
M2	59,975	5,411	9%
A249	36,795	4,085	11%

121. For comparison, separate surveys were also undertaken during seven consecutive days in August, a non-neutral month (in the summer holiday period), on Seasalter Road, Head Hill Road South and Head Hill Road North to identify any significant changes between a neutral and summer month.
122. The surveys undertaken during the summer holidays were circa 4% less than those recorded during the school term time. It is widely accepted that traffic flows can vary by up to 10% on a daily basis, therefore this is seen as a non-material fluctuation for this assessment. These were undertaken in a non-neutral month, therefore have not been used for this assessment.
123. Furthermore, during the London Array Onshore Substation EIA, a similar exercise was undertaken, which demonstrated similar levels of traffic and HGV flows to those set out in Table 14.6. Therefore, these are deemed representative baseline flows.

14.3.5 Agricultural Traffic

124. Information provided by the current user of the site demonstrates that during a two-week summer harvest period, the agricultural land making up the site can generate up to 20 two-way HGV movements per day. These would be removed following the construction and operation of the solar park.

14.3.6 Personal Injury Accident Data (PIA)

125. Detailed PIA records for the area surrounding the site, illustrated in Plate 14.1, have been obtained from KCC for the most recent 36 months period available at the time of writing, up until 20/09/2017.
126. The local highway network considered for this assessment includes the following junctions and links:
- Junction: A299/Whitstable Road;
 - Junction: Whitstable Road/Head Hill Road;
 - Link: Faversham Road;
 - Link: Seasalter Road;
 - Link: Staple Street Road;
 - Link : Staple Street;
 - Link: Head Hill Road; and

- Link: A299.

127. Details of recorded accidents are discussed below and are shown in Table 14.7 and Figure 14.2, with each accident assigned a reference number.

Plate 14.1– PIA Survey Area



128. The data revealed that within the catchment area, 13 accidents occurred within the three-year period and no accidents were recorded at the site access.
129. Two of the thirteen accidents were serious in severity and the remaining 11 were slight. No fatal accidents recorded during the period.

Head Hill Road

130. A serious collision was recorded when a cyclist travelling north along Head Hill Road hit another cyclist in front, causing one of the cyclists to fall off. (A3)
131. A slight collision was recorded when a vehicle travelling south along Head Hill Road, attempted to overtake two cyclists, but hit one of them. (A5)
132. A slight accident was recorded when a motorcycle travelling over Graveney bridge rear shunted the vehicle in front, which had braked suddenly due to an oncoming van. (A4)

Head Hill Road / Whitstable Road

133. A slight accident was recorded when a vehicle intending to turn left into Head Hill Road at speed, collided front on with a vehicle waiting to exit the junction. (A6)

Whitstable Road

134. A slight collision was recorded when a vehicle travelling west along Whitstable Road lost control due to bad weather conditions and collided with a vehicle travelling in the opposite direction. (A7)

A299

- 135. A slight collision was recorded when a motorcyclist travelling north east along the A299 aquaplaned, causing the rider to fall off. (A8)
- 136. A slight collision was recorded when a vehicle travelling north east along the A299 collided with the back of the vehicle in front. (A13)
- 137. A slight collision was recorded when a vehicle travelling north east along the A299 lost control due to strong winds causing the vehicle to mount the embankment. (A11)
- 138. A slight collision was recorded when a vehicle travelling south west along the A299 has a burst tyre, causing the driver to lose control and collide with the central reservation. (A9)
- 139. A slight collision was recorded when three vehicles travelling south west along the A299 rear-shunted the vehicle in front when the traffic had stopped. (A12)

Seasalter Road

- 140. A slight collision was recorded when a car travelling north along Seasalter Road, approaching a bend saw an oncoming farm vehicle. Due to icy conditions the vehicle was unable to slow down in time causing a collision. (A2)
- 141. A serious collision was recorded when a vehicle emerging from a property on Seasalter Road collided with a vehicle travelling north along Seasalter Road. (A1)

Staple Street

- 142. A slight accident was recorded when a cyclist travelling southeast along Staple Street skidded on gravel and fell off. (A10)

Table 14.7: Personal Injury Accident Data Summary

Location	2014	2015	2016	2017	Slight	Serious
Head Hill Road		1	1	1	2	1
Head Hill Road / Whitstable Road				2	2	
Whitstable Road			1			
A299		1	2	1	5	
Seasalter Road			2		1	1
Staple Street				1	1	
Total	0	2	6	5	10	3

- 143. Only two accidents across the three year study period occurred between a cyclist and a vehicle.
- 144. The PIA data demonstrates that the highest number of accidents occurred on the A299. Six accidents were recorded at points along Head Hill Road and Whitstable Road, two of which were classified as serious in severity. The first was due to a vehicle emerging from a property along Head Hill Road and the second was due to two cyclists, with no vehicles involved.
- 145. In conclusion, it is evident that no areas of the study area have high levels of accidents and there is nothing to suggest that the highway layout or condition were significant contributing factors to any accidents along the construction route.
- 146. It is therefore considered that the designated construction route does not have a significant existing highway safety issue.

14.3.7 Pedestrian and Cycle Provision

- 147. Figure 14.3 illustrates the PRoWs through or in proximity to the site.

148. This includes National Cycle Route (NCR) 1, which follows Seasalter Road and Sandbanks Road connecting Whitstable and Faversham. It follows the construction access route for 1.9 km along Seasalter Road.
149. The Saxon Shore Way provides a long distance coastal route located along the northern boundary of the site. This follows PRoW ZR484 and continues along the edge of the peninsular and connects to route ZR486 and ZF39 in the south.
150. Figure 14.3 illustrates that there are PRoWs through or in close proximity to the site, highlighted in green. These are discussed in more detail in Chapter 13: Socio-economics, tourism, recreation and land use.
151. PRoW ZR485 bisects the site following a north south alignment between PRoW ZR484 / Saxon Shore Way along the northern boundary of the site and the point where the ZR484 and ZR486 meet. ZR486 provides a connection to Broom Street, whilst ZF39 provides a route towards Faversham.
152. Directly to the east of Broom Street, the ZR489 follows a route to the village of Graveney, whilst the ZR488 routes northwards towards the London Array site access. The ZR692 is located directly to the north of the access, which links ZR488 to the Sportsman, via a gate on either side of the access.
153. ZR485, ZR692 and ZR488 are the only routes which are directly affected by the construction of the Solar Park. There is only one point where the construction route conflicts with the latter two routes.

Non-Motorised User Surveys

154. In order to understand the usage of PRoW in the vicinity of the site, Non-Motorised User (NMU) surveys were undertaken on a number of routes which pass through or near the site. This approach was discussed and agreed with the PRoW officer at KCC. These were undertaken on a Friday (07:00 – 13:00) and Saturday (07:00 – 19:00) both in school term times and during school holidays. The surveys were undertaken in the following locations, which are also illustrated in Figure 14.3:
 - Link 1 – Located at the southern end of ZR486 on the southern boundary of the site;
 - Link 2 – Located at the eastern end of the SSW, adjacent to the Sportsman;
 - Link 3 – Located at the southern end of ZR88 to the east of Broom Street ;
 - Link 4 – Located on Seasalter Road adjacent to the site access;
 - Link 5 – Located mid-way along SSW / ZR484 on the northern boundary of the site;
 - Link 6 – Located on the ZR485 on the southern boundary of the site to the north of Sandbanks Lane;
 - Link 7 – Located on the ZR486 which bisects the western section of the site; and
 - Link 8 – Located at the northern end of ZR488 / southern end of ZR692, at the gate adjacent to site access.
155. The results of these surveys are set out in Table 14.8.

Table 14.8 – NMU Survey Results

Survey Location	Friday 13 th July (07:00 - 19:00)	Friday 10 th August (07:00 – 19:00)	Saturday 14 th July (07:00 - 13:00)	Saturday 11 th August (07:00 – 13:00)
Link 1 – Southern end of SSW	46	29	48	40
Link 2 – Eastern end of SSW	143	62	80	68
Link 3 – ZR488	1	4	3	2
Link 4 – Seasalter Rd (NCN Route 1)	31	87	50	166
Link 5 – Mid-way along SSW	5	7	25	26
Link 6 – ZR486	20	64	3	14
Link 7 – ZR485	18	21	20	29
Link 8 – ZR488 / ZR692	2	0	0	0

Friday 13th July (school term-time, weekday)

156. The weather experienced during the Friday 13th survey was hot, with temperatures ranging between 26 to 34°C.
157. Table 14.8 illustrates that during the school term-time surveys, the highest level of activity was recorded at the eastern end of the SSW (143 people at Link 2). However, only 3.5% of the number recorded here was recorded midway along the SSW (5 people at Link 5) suggesting that users did not continue along the whole route.
158. Moderate activity was also recorded at the southern end of the SSW (46 people at Link 1), which is also used to access ZR485, and on Seasalter Road (31 people at Link 4). Only six out of the 31 people recorded were pedestrians, the others being cyclists on NCN Route 1.
159. A low level of activity was recorded on the ZR485 and ZR486 (18 and 20 people respectively). Only one person was recorded using the ZR488 near Broom Street, and 2 at the crossing of the Cleve Hill Substation access road.

Friday 10th August (school holiday, weekday)

160. The weather experienced during the Friday 10th August survey consisted of rain all day, with heavy rain observed between 15:00 and 18:15. Temperatures ranged between 14 and 17°C.
161. During the school holiday survey, the highest level of activity was recorded on Seasalter Road (87 people). Only eight of the 87 people recorded were pedestrians, the others being cyclists on NCN Route 1.
162. The number of users recorded at the southern end of the SSW (29 people) and eastern end of the SSW (62) was significantly less than the school term survey (62% and 43% respectively), and still with a low number (7) midway along the SSW.
163. Three times as many people utilised the ZR486 (64) when compared to the school term survey. Of the 64 people recorded across the day, 29 people formed a group at 8:00 travelling westbound and 23 formed a group at 14:45 travelling westbound. Noting the proximity of the route to seasonal fruit and vegetable picking fields, it is assumed that these were a group of seasonal workers arriving and departing work.
164. Overall, the total level of activity across all routes on both Fridays was comparable, despite the weather conditions.

Saturday 14th July (school term-time, weekend)

165. The weather experienced during the Saturday 14th July survey was hot, with temperatures ranging between 27 to 33°C.

166. The highest level of usage was recorded at the eastern end of SSW (80), whilst only 30% continued west along the route to the mid-way point (25), although this was notably more than on either of the weekday surveys.
167. Low levels of usage were recorded along the ZR488 near Broom Street and ZR486 (three on each day respectively).
168. Four pedestrians and 46 cyclists were recorded along Seasalter Road.
Saturday 11th August (school holidays, weekend)
169. The weather experienced during the Saturday 11th August survey was sunny in the morning and over cast in the afternoon, with temperatures ranging between 17 and 27°C.
170. The highest level of activity was recorded on Seasalter Road (166 people), which was approximately three times higher than the term-time Saturday. Only two of the 166 people recorded were pedestrians.
171. 68 people were observed at the eastern end of the SSW and 40 at the southern end, with 26 recorded at the midway point. This pattern of a higher ratio of people at the midway point to either end was the same on both Saturdays, compared to a much lower ratio on both Fridays.
172. Overall, in comparison to the usage recorded on Saturday 14th July across all routes, activity was broadly consistent, with the exception of a substantial increase in the number of cyclists on Seasalter Road.
Summary
173. The results show that the highest level of activity recorded was on Seasalter Road (principally cyclists) across all 4 days, and notably more in the school holidays. The eastern end of the SSW was also a popular point, however a high proportion of people did not continue west along the route, along the north side of the Development site, particularly during term-time.
174. The highest level of activity recorded along the PRoW through the site (Link 7, ZR485) occurred on Saturday 11th August (school holidays), when 29 users were recorded across the day.
175. At most, nine pedestrians were observed using Seasalter Road during a survey, which occurred on Friday 13th July, with the remaining users being cyclists. There are no bridleways in the vicinity of the site and no equestrians were observed during the survey period.
176. Only two people were observed using the PRoW across the Cleve Hill Substation access road (ZR488/ZR692) across all four days.

14.3.8 Public Transport

177. Two bus stops are located along Seasalter Road and Head Hill Road, which provide a small covered waiting area. The locations of these stops are illustrated on Figure 14.4. Table 14.9 below provides information on the service provided from these stops.

Table 14.9: Bus Service to Seasalter Road

Service Number	Route	Frequency Monday - Friday	Frequency Saturday	Service Provider
660 from Murton Place	Stalisfield - Faversham - Graveney - Whitstable - Tankerton	Variable (Approximately every 1.5 hours)	Variable (Approximately every 1.5 hours)	Regent Coaches

178. Faversham railway station is the nearest railway station to the site, located 5.9 km to the southwest. Faversham provides services to London Victoria, London St Pancras International, Dover Priory, Deal, and Ramsgate.

14.3.9 Sensitive Receptors

179. Whilst the site is located in a predominantly rural area, a number of receptors likely to be sensitive to traffic have been identified in the vicinity of the site. The main route to the site utilises Seasalter Road and Head Hill Road which passes through the villages of Graveney and Goodnestone and supports local community facilities including:

- Graveney Primary School;
- All Saints Church;
- Country View Park Holiday Park;
- Local Businesses;
- National Cycle Route 1;
- Residential dwellings along Seasalter Road; and
- Local bus route 660.

180. The National Cycle Network Route 1 is identified along Seasalter Road and Head Hill Road.

181. Residential dwellings are located along sections of Head Hill Road and Seasalter Road. There are approximately 75 properties in close proximity to the highway edge (<20 m), with 60 of these not having substantial screening from the road. One property is located on Whitstable Road directly to the west of the A299 and three properties are located on Staple Street to the east of the A299.

182. Graveney Primary School is located directly to the north of the railway bridge. As part of the previous London Array project, a segregated pedestrian bridge and car park was created to avoid pedestrians walking along the carriageway and HGVs crossing the narrow bridge conflicting.

183. As part of the mitigation measures set out in the CTMP, HGVs will be restricted to time periods outside of school start and end times.

184. All Saints Church is located on the western side of Seasalter Road, approximately 1.4km south of the site access. There is off-road car park located adjacent to the Church which is accessed from Seasalter Road.

185. Three local businesses have been identified that front onto the construction traffic route; the Freewheel Pub and Hilderbrand's Removals and Storage on Head Hill Road and Dunster House Ltd on Staple Street. Hilderbrand's Removals and Storage is industrial in nature and the site itself is not an attractor for customers. Dunster House Ltd is also light industrial.

186. No sensitive receptors have been identified on Staple Street Road, which provides a link between Whitstable Road and Staple Street and enables vehicles to access the southbound lane of the A299.

187. Figure 14.4 illustrates the local sensitive receptors and constraints in the vicinity of the site.

188. The sensitive receptors detailed above have been assessed against the criteria set out in Table 14.4. Table 14.10 details local receptors and their sensitivity ratings in relation to traffic.

Table 14.10 Receptors and their sensitivity in relation to traffic

Receptor	Sensitivity
Graveney Primary School, Seasalter Road	High
Residential dwellings along Seasalter Road / Head Hill Road / Staple Street and Whitstable Road (close to carriageway)	Moderate
Local Businesses on Head Hill Road and Staple Street	Minor
National Cycle Route 1	Moderate
All Saints Church, Seasalter Road	Minor
Country View Park Holiday Park	Minor
Residential dwellings along Seasalter Road / Head Hill Road (set back)	Minor
Local bus route 660	Minor

14.4 Prediction and Assessment of Significance of the Potential Effects

14.4.1 Proposed Construction Traffic and Phasing

189. The primary traffic and transportation effects associated with the Development will be the increase in traffic flows on the highway links between the strategic road network and the site via Seasalter Road and Head Hill Road, particularly HGVs bringing plant and equipment to site.
190. The anticipated level of vehicular movements associated with each construction activity has been based on information provided by specialist solar farm and civil contractors. The construction programme is expected to be approximately 24 months.
191. Plate 14.2 illustrates the phasing of each high-level construction activity across the 24 month period.

Plate 14.2 – Construction Phasing

CONSTRUCTION ACTIVITY	DURATION IN MONTHS																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Site Access Road	█	█	█																					
Solar Access Track			█	█	█	█	█																	
Drainage			█	█	█	█	█	█	█															
Import of Bund Material																					█	█		
Bund Construction			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Compound Roads			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Structural Concrete			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Traffic Signs	█																							
CCTV	█																							
Temporary Compound	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Solar Array Construction																								
Electrical Compound Installation																								
Tesla Option Concrete																								
Tesla cabinet delivery and installation																								
440KV Cable																								
Perimeter Fencing	█																							
Waste	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Workers	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█

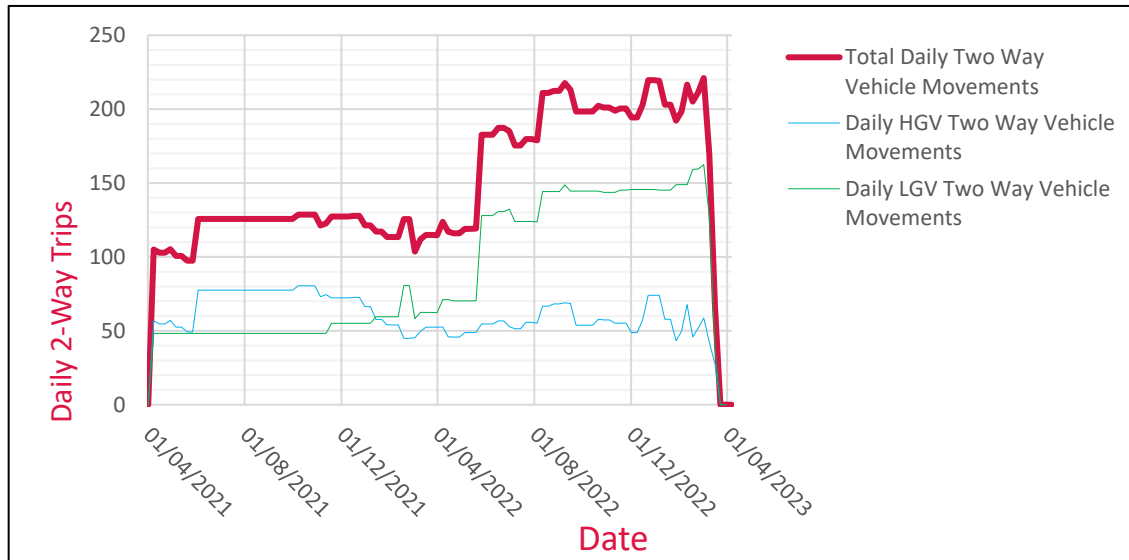
192. Plate 14.2 illustrates that the first construction activity to be undertaken is the creation of the site access road. The temporary compound will also be constructed at the start of the construction period, alongside fencing, traffic signs and CCTV at the same time for a short duration. Construction of the bund around the energy storage facility and substation is expected to commence after one month and is split into two elements, the first lasting 7 weeks. This is expected to be completed in month 21.
193. Following the completion of the site access road, the remaining civils work can be undertaken which includes the solar access track, drainage, compound roads and structural concrete. The concrete infrastructure for the energy storage facility can begin to be constructed at this stage, followed by the installation of the energy storage facility.

194. Once the solar access track (spine road) is completed, the erection of the solar arrays can start. This is expected to be staggered by block, with the total duration approximately 16 months.
195. Waste collection and removal from site will continue throughout the construction period.
196. The estimated volume and type of vehicles that would be generated throughout the construction phase of development has been informed by the Applicant's anticipated construction programme, and a first principles approach based on the volume and quantity of material required. This is considered to give a robust, worst-case assessment of the expected traffic volumes during construction. There are a number of phases of development that could be extended within the 24 month construction programme which would reduce peak vehicle activity for that particular phase and any other phase that overlaps with it.
197. Furthermore, to ensure a robust assessment a number of worst-case design principles with regards to traffic have been used, as included in the candidate design. These include:
- The construction of a new section of access road to the north of the existing Cleve Hill Substation. This option would result in approximately 350 m of additional access road; and
 - The installation of a non-containerised energy storage facility. This option requires significantly more vehicle movements compared to a containerised energy storage facility.
198. It is anticipated that, during the peak of construction, up to 80 two-way HGV movements (40 vehicles) will be required per day. The peak is expected to last for four weeks starting in week 27 of construction.
199. This compares to 150 two-way HGV movements per day as anticipated and reported in the PEIR in May 2018, with the large reduction being a result of further information being available on the volume of materials required to construct the Development and further understanding of phasing throughout the construction period.
200. The on-site activities occurring during peak HGV movements include:
- On-site drainage;
 - Import of bund material;
 - Bund construction;
 - Solar array construction;
 - Compound roads;
 - Import of material for construction concrete; and
 - Waste removal.
201. To ensure a robust worst case prediction of the number for construction vehicles, it has been assumed that all vehicles arrive loaded and depart empty. In reality, exiting vehicles would remove waste/materials from the site, therefore, a more realistic peak numbers of HGVs could be 25% lower than that assessed here.
202. It is expected that the majority of HGV movements would occur between 09.30 and 15.30 reflecting school start and finish times.
203. The peak in total vehicles volumes is expected to occur when civils, solar array construction and the energy storage facility are all being undertaken at the same time. At this stage (excluding waste vehicle movements, which would likely occur at the end of each day), this would equate to 12 two-way HGV movements an hour if spread evenly throughout a 5.5 hour delivery window. Making deliveries during these times will also avoid highway network peak periods.
204. Peak daily total construction traffic is expected to occur in week 100 of the construction programme. This comprises of 222 two-way vehicle movements (111 vehicles), which

breaks down as 162 two-way LGV movements (81 vehicles) and 60 two-way HGV movements (30 vehicles). This is also lower than anticipated in the PEIR, which reported up to 246 two-way movements per day.

205. Plate 14.3 illustrates the profile for vehicular trip generation across the construction period.

Plate 14.3 – Construction Traffic Movements



206. The average number of daily two-way HGV movements throughout the 24 month construction programme is 62 (31 vehicles).
207. The average number of daily two-way LGV movements throughout the 24 month construction programme is 90 (45 vehicles).
208. The number of LGV movements increase in the second half of the construction programme associated with the more intricate electrical equipment installations.
209. If the energy storage facility were to not be constructed, or constructed at a later date, the average number of vehicle movements would reduce significantly throughout the 24 month construction programme. It is noted that if construction of the energy storage facility were to happen outside of the proposed 24 month construction programme, construction traffic would be generated at a later date, however, it is expected that the volume of construction traffic (including HGVs) would be less than that assessed within this chapter. As the majority of the civils elements of the energy storage facility (creation of the bund and associated earthworks), would occur within the main construction phase under either scenario, it is expected that, if delayed to a separate phase 2, the final installation of batteries would take up to six months to complete outside of the main 24 month construction window.
210. At its peak it is anticipated that up to 400 construction staff will be based at the site.
211. It is anticipated that there will be approximately five abnormal loads throughout the whole construction period.
212. All vehicles will access the site via the main entry point adjacent to the existing Cleve Hill Substation. As illustrated in Figure 14.1, all vehicles will travel along the section of Seasalter Road to the site access. To ensure a robust assessment, the vehicle trips have been distributed at 100% on each of the A299, A2, M2 and A249 respectively, however in reality these are highly likely to be split.
213. No vehicles associated with the Development are envisaged to use Sandbanks Lane, Monkshill Road and Faversham Road.

14.4.2 Construction Traffic Effects

214. Construction is anticipated to start in spring 2021, and with a 24-month construction programme would last until spring 2023. On this basis, a future baseline year of 2022 has been used for the assessment.
215. TEMPro has been used to factor up the baseline flows set out in Table 14.6, to take into account local growth and development between 2018 and 2022. No growth factor has been applied to the NMU surveys undertaken in 2018.
216. These traffic flows have then been used to calculate the percentage increase in vehicles. The total level of traffic considers the peak level of total traffic, whilst the change in HGVs uses the peak number of HGVs across the construction phase, which is illustrated in Table 14.11.

Table 14.11: Future Baseline + Construction Daily Traffic and Percentage Change

Road Name	Future Baseline (2022)		Future Baseline + Construction Traffic		Percentage change	
	Total	HGV	Total	HGV	Total	HGV
Head Hill Rd (South)	2,983	210	3,205	290	7%	38%
Head Hill Rd (North)	2,581	130	2,803	210	9%	62%
Seasalter Road	1,711	69	1,933	149	13%	116%
Staple Street Road	6,069	117	6,291	197	4%	69%
Staple Street	5,016	132	5,238	212	4%	61%
Whitstable Road	5,657	413	5,879	493	4%	19%
A299	50,328	1,961	50,550	2,041	0%	4%
A2	40,848	2,962	41,070	3,042	1%	3%
M2	63,932	5,768	64,154	5,848	0%	1%
A249	39,223	4,355	39,445	4,435	1%	2%

217. Based on the data above and the criteria set out in Table 14.3, the magnitude of effect has been determined and is discussed below.

Traffic Flows

218. The strategic road network and A299 already experiences high levels of traffic, therefore the additional vehicle activity is expected to be between 0 – 1% in total traffic and 1 – 4% in HGVs. Therefore, as set out in section 14.2.1, these roads have not been considered further within this assessment.
219. Similarly, the percentage increase in total traffic and HGVs on Whitstable Road are below the 30% threshold, therefore it will not be considered further within this assessment.
220. Staple Street Road and Staple Street are anticipated to experience an increase of below 5% in total traffic but an increase in HGVs of up to 69%.
221. Seasalter Road is expected to experience the highest percentage change in total traffic (13%), whilst Head Hill Road is expected to experience an increase of between 7% and 9% in total traffic. Along these roads, the increase in HGVs is substantially higher than the current level experienced. HGV flows along Seasalter Road are expected to increase by 116% and between 38% and 62% on Head Hill Road. These percentage increases reflect the relatively low levels of HGV flows that currently use these links.

Delay

222. It is acknowledged that there are number of points along Head Hill Road and Seasalter Road where the carriageway width reduces, creating pinch points. However, the visibility at these points is over 60 m and in excess of 100 m in some locations. Therefore, vehicles can give way to allow an approaching vehicle to pass. This will potentially result in a small delay to vehicles utilising the route.

223. During onsite observations, no existing capacity issues were observed, therefore the magnitude of effect is classified as minor on Head Hill Road South, North, Seasalter Road, Staple Street and Staple Street Road.
224. HGV drivers travelling to and from the site will be instructed to give priority to any oncoming traffic to reduce delay. It is anticipated that during the peak of construction traffic, up to six HGVs will be required per hour (12 two way movements).
225. Only bus route 660 operates along the route that will be utilised by construction traffic, with infrequent services. Due to the increased level of HGVs along the bus route and the areas where a bus and HGV may not be able to pass each other on the construction route, this may lead to minor delays.
226. The bus service is infrequent with a service every 1.5 hours. In addition, there are few bus stops located along the construction traffic route. Therefore, the delay effect on public transport is anticipated to be minor on Head Hill Road and Seasalter Road. No bus route follows Staple Street or Staple Street Road therefore there is no public transport delay on these links.

Highway Safety

227. The highway safety assessment set out in section 14.3.6 illustrated that no correlations in data suggest that highway condition, layout or design were significant contributory factors in the pattern of accidents.
228. Given the low vehicle speeds and good visibility, it is not anticipated that there would be any significant increased risk of road accidents along the proposed construction traffic route.

Intimidation and Fear

229. Higher levels of HGVs along the rural road network may lead to an increase in intimidation and fear for pedestrians and cyclists. However, the area is highly agricultural and as such already has movements by large vehicles during certain times of the year.
230. There are a number of residential properties located close to the carriageway. Furthermore, the NCR1 follows Seasalter Road. Therefore, the magnitude of effect on intimidation and fear along Seasalter Road is classified as moderate. The magnitude of change is less along Head Hill Road, Staple Street and Staple Street Road, therefore these are classified as minor.

Severance

231. Based on the thresholds set out in Table 14.3, the increase in construction traffic is expected to have a minor effect on severance along Head Hill Road and a moderate effect on Seasalter Road respectively. It is expected that up to 12 two-way HGV movements will be generated per hour between 09:30 and 15:00. This is not deemed sufficient to cause noticeable difficulty for a pedestrian in crossing Seasalter Road or other local roads.

Pedestrian Delay

232. The thresholds set out in Table 14.3 note that traffic flows below 1,400 per hour are deemed as negligible to minor. The maximum total predicted traffic flow on the Seasalter Road and Head Hill Road is 1,605 and 2,505 vehicle movements per day respectively, which is much lower than this threshold.
233. The majority of Seasalter Road and Head Hill Road provides no footways, therefore levels of pedestrian activity is low.
234. Therefore, the construction process is expected to have a negligible effect on pedestrian delay.

Pedestrian and cycle amenity

235. This chapter assesses construction traffic effects only, therefore only routes which coincide with the construction traffic route have been considered. Off-road amenity effects are assessed in Chapter 13 (including Recreation) of this ES.
236. The Development does not divert or close any of the existing PRoW, footways or cycle routes.
237. The gated entrance to PRoW ZR692 and ZR488 is located adjacent to the site access, however NMU surveys demonstrated that use of this is minimal (2 people across 4 days in summer). A separate PRoW Management Plan has been developed which is provided as Appendix G to the CTMP, which is Technical Appendix A14.1 of this ES.
238. The NCR1 follows Seasalter Road, which experienced 164 cyclists during the Saturday survey during the school holidays. However, half this amount was recorded throughout the Friday survey and under 46 were observed on the school term-time survey. NCR1 is 2,727 km long¹, with the section between Whitstable and Faversham being 14 km. Of this, 1.9 km is co-located with the Development construction access route.
239. No cycle routes are located on Staple Street or Staple Street Road, and the Development will not affect pedestrian infrastructure along these roads.
240. Given the low increase in overall traffic on this section (13%) and noting the much higher increase in HGV traffic (116%) would only occur during construction hours (which exclude Saturday afternoons, Sundays and bank holidays), construction traffic is expected to have a moderate effect on pedestrian and cyclist amenity along Seasalter Road, a minor effect along Head Hill Road and a negligible effect on Staple Street and Staple Street Road.

14.4.2.1 *Summary of Magnitude of Construction Traffic Effects*

Table 14.12 summarises the environmental effects associated with the construction traffic of the Development.

¹ Sustrans (2018). Route 1: A long distance cycle route connecting Dover and the Shetland Islands - via the east coast of England and Scotland. Available at: <https://www.sustrans.org.uk/ncn/map/route/route-1> [accessed on 16/10/2018]

Table 14.12: Summary of Magnitude of Environmental Effects of Construction Traffic on the Local Road Network

Effect	Road	Magnitude of Effect
Delay	Seasalter Road Head Hill Road Staple Street	Minor
Public Transport Delay	Seasalter Road Head Hill Road Staple Street	Minor Minor No change
Road Safety	Seasalter Road Head Hill Road Staple Street	No significantly increased safety risk
Fear and Intimidation	Seasalter Road Head Hill Road Staple Street	Moderate Minor Minor
Severance	Seasalter Road Head Hill Road Staple Street	Moderate Minor Negligible
Pedestrian delay	Seasalter Road Head Hill Road Staple Street	Negligible
Pedestrian and cycle amenity	Seasalter Road Head Hill Road Staple Street	Moderate Minor Negligible

14.4.2.2 Evaluation of significance of effects

241. Table 14.12 sets out the magnitude of effects from the increase in traffic flows. Using the sensitivity assigned to each receptor, the approach in Table 14.4 has been applied in Table 14.13 to provide a significance for relevant types of effect on each receptor.
242. Table 14.13 sets out the receptors identified and the significance of effect. The significance of effect has been considered for Seasalter Road, Head Hill Road, Staple Street and Staple Street Road where appropriate.

Table 14.13 The Significance of Effects on Receptors

Receptor (Sensitivity)	Type of Effect	Magnitude of Effect*	Significance of Effect		
			Seasalter Road	Head Hill Road	Staple Street
Bus route 660 along Seasalter Road (Minor)	Public Transport Delay	Minor	Slight	Slight	-
Properties along Seasalter Road / Head Hill Road close to the carriageway edge (Moderate)	Delay	Minor	Slight	Slight	-
	Road Safety	No Change	Neutral	Neutral	-
	Fear/Intimidation	Moderate / Minor	Moderate	Slight	-
	Severance	Moderate / Minor	Moderate	Slight	-
Properties set back from Seasalter Road / Head Hill Road / Staple Street (Minor)	Delay	Minor	Slight	Slight	Slight
	Road Safety	No Change	Neutral	Neutral	Neutral
	Fear/Intimidation	Moderate / Minor / Minor	Slight	Slight	Slight
	Severance	Moderate / Minor / Minor	Slight	Slight	Slight
Graveney Primary School, Seasalter Road (High)	Delay	Minor	Moderate	-	-
	Road Safety	No Change	Neutral	-	-
	Fear/Intimidation	Moderate	Large	-	-
	Severance	Moderate	Large	-	-
	Pedestrian delay	Negligible	Slight	-	-
All Saints Church, Graveney, Seasalter Road (Minor)	Delay	Minor	Slight	-	-
	Road Safety	No Change	Neutral	-	-
	Fear/Intimidation	Moderate	Slight	-	-
	Severance	Moderate	Slight	-	-
Country View Park, Seasalter Road (Minor)	Delay	Minor	Slight	-	-
	Road Safety	No Change	Neutral	-	-
	Fear/Intimidation	Moderate	Slight	-	-
	Severance	Moderate	Slight	-	-
National Cycle Route (Moderate)	Delay	Minor	Slight	-	-
	Road Safety	No Change	Neutral	-	-
	Fear/Intimidation	Moderate	Moderate	-	-
	Severance	Moderate	Moderate	-	-
	Pedestrian / cyclist amenity	Moderate	Moderate	-	-
Local Businesses on Head Hill Road and Staple Street (Moderate)	Delay	Minor	-	Slight	Slight
	Road Safety	No Change	-	Neutral	Neutral
	Fear/Intimidation	Minor	-	Slight	Slight
	Severance	Minor / Minor	-	Slight	Slight

*Seasalter Road / Head Hill Road / Staple Street

14.4.3 Operation Phase Effects

243. Once operational, approximately three members of maintenance staff are expected to attend the site per day, resulting in six additional vehicle trips per day. Staff are anticipated to work at the site between 08:00 and 17:00 and will likely be driving a 4x4 vehicle.
244. This is envisaged to have a negligible effect on traffic flows, delay, road safety, intimidation and fear, severance, pedestrian delay, pedestrian amenity and public transport delay, leading to negligible significant effects on all receptors.

14.4.4 Decommissioning Effects

245. Effects associated with the decommissioning of the Development are difficult to predict at this stage, given the potential changes in receptors over the long time period until

decommissioning may occur, however they are likely to be less adverse than those during the construction phases as less plant and material will be required and will therefore be of the same, or lesser significance than construction effects. An Outline Decommissioning and Restoration plan has been produced to accompany the ES. It is expected that a Decommissioning Traffic Management Plan would be produced and agreed with the Local Highways Authority prior to decommissioning commencing.

14.4.5 Cumulative Effects

246. Within this assessment, baseline traffic volumes have been factored to future assessment years using industry standard techniques (TEMPro) to 2022. As such the future baseline traffic flows used within this assessment are considered to include operational phase flows from the cumulative and committed developments.
247. As such this approach differs from other ES chapters as the committed/cumulative development traffic flows have been added to the future baseline traffic flows.
248. None of the cumulative developments identified in Chapter 2, EIA, of this ES are considered likely to use the same Local Road Network (i.e., Seasalter Road and Head Hill Road) for their construction phases during the same period, and hence no cumulative construction traffic effects are anticipated.

14.5 Mitigation

249. A strategy to manage the effect of traffic generated as part of the Development has been created. This section details the anticipated mitigation measures, helping to reduce the effects of construction traffic from the Development.
250. An outline CTMP has been written and is included as Technical Appendix A14.1, which details the measures to be implemented to mitigate against traffic generated during the construction phase. The outline CTMP, which is appended to this report, is accompanied by a Travel Planning Statement, Traffic Incident Management Plan and PRoW Management Plan.
251. The outline CTMP will inform Highways Officers at Highways England, KCC, Swale Borough Council and other relevant transport stakeholders with regards to the highway access matters associated with the Development. A final CTMP, in line with the outline CTMP, will be provided for approval by KCC prior to commencement of development.
252. The outline CTMP details the routing of HGVs, and control measures ensuring the effect of construction traffic on the surrounding network is kept as low as possible. This includes:
- Traffic timing and routing strategies;
 - Staff routing and minibuses;
 - Staff travel planning;
 - PRoW Management;
 - Vehicle cleaning;
 - Highways conditions surveys;
 - Information packs and communication;
 - Speed restrictions;
 - Delivery management systems;
 - Temporary signage;
 - Traffic marshals; and
 - Where possible construction traffic will be restricted to outside school opening and closing timings.

14.6 Residual Effects

253. Extensive mitigation is proposed along Head Hill Road and Seasalter Road which is detailed in the outline CTMP.
254. Vehicles travelling to and from the Development will be required to use specific construction traffic routes and will be carefully programmed in order to manage the number of HGVs travelling on the local road network at a time. Furthermore, a number of timing restrictions are proposed to avoid HGV movements at Graveney Primary School during school start/finish times. This will also be effective in limiting vehicle movements on the local highway network during traditional peak periods. This will reduce the potential effects of construction traffic on delays, severance, and fear and intimidation.
255. Temporary signage will be positioned along the construction traffic routes to the Development and temporary speed limits for construction vehicles will also be introduced through sensitive areas. In addition, all drivers of vehicles to the site will be briefed in detail regarding the content of the outline CTMP and any proposed traffic management measures. As such, it is not expected that any significant increased risk of road accidents would result from the proposed construction traffic.
256. It is the intention to keep all PRow routes in proximity to the site intention open during construction of the Development. Two metre high fencing will be placed between the PRow and Development equipment and infrastructure, and CCTV will not directly cover any PRow.
257. Where the PRow borders the site, but is not directly impacted, appropriate fencing will be provided to form a safe corridor for users. This will regularly be inspected to ensure it is in good condition. This will mitigate against the potential effects to pedestrian amenity.
258. However, there is a level of residual and adverse environmental effect that cannot be completely eliminated. The anticipated residual environmental effects are summarised in Table 14.14.

Table 14.14: Summary of Magnitude of Residual Environmental Effects

Effect	Road	Magnitude of Effect
Delay	Seasalter Road Head Hill Road Staple Street	Minor
Public Transport Delay	Seasalter Road Head Hill Road Staple Street	Minor Minor No change
Road Safety	Seasalter Road Head Hill Road Staple Street	No significantly increased safety risk
Fear and Intimidation	Seasalter Road Head Hill Road Staple Street	Minor Minor Minor
Severance	Seasalter Road Head Hill Road Staple Street	Minor Minor Negligible
Pedestrian delay	Seasalter Road Head Hill Road Staple Street	Negligible
Pedestrian and cycle amenity	Seasalter Road Head Hill Road Staple Street	Moderate Minor Negligible

259. Table 14.15 illustrates the anticipated outcome mitigation will have on the receptors.

Table 14.15: The Residual Significance of Effects on Receptors

Receptor (Sensitivity)	Type of Effect	Magnitude of Effect*	Significance of Effect		
			Seasalter Road	Head Hill Road	Staple Street
Bus route 660 along Seasalter Road (Minor)	Public Transport Delay	Minor	Slight	Slight	-
Properties along Seasalter Road / Head Hill Road close to the carriageway edge (Moderate)	Delay	Minor	Slight	Slight	-
	Road Safety	No Change	Neutral	Neutral	-
	Fear/Intimidation	Minor / Minor	Slight	Slight	-
	Severance	Minor / Minor	Slight	Slight	-
Properties set back from Seasalter Road / Head Hill Road / Staple Street (Minor)	Delay	Minor	Slight	Slight	Slight
	Road Safety	No Change	Neutral	Neutral	Neutral
	Fear/Intimidation	Moderate / Minor / Minor	Slight	Slight	Slight
	Severance	Moderate / Minor / Minor	Slight	Slight	Slight
Graveney Primary School, Seasalter Road (High)	Delay	Minor	Slight	-	-
	Road Safety	No Change	Neutral	-	-
	Fear/Intimidation	Minor	Slight	-	-
	Severance	Minor	Slight	-	-
	Pedestrian delay	Negligible	Slight	-	-
All Saints Church, Graveney, Seasalter Road (Minor)	Delay	Minor	Slight	-	-
	Road Safety	No Change	Neutral	-	-
	Fear/Intimidation	Minor	Slight	-	-
	Severance	Moderate	Slight	-	-
Country View Park, Seasalter Road (Minor)	Delay	Minor	Slight	-	-
	Road Safety	No Change	Neutral	-	-
	Fear/Intimidation	Moderate	Slight	-	-
	Severance	Moderate	Slight	-	-
National Cycle Route (Moderate)	Delay	Minor	Slight	-	-
	Road Safety	No Change	Neutral	-	-
	Fear/Intimidation	Minor	Slight	-	-
	Severance	Minor	Slight	-	-
	Pedestrian / cyclist amenity	Moderate	Moderate	-	-
Local Businesses on Head Hill Road and Staple Street (Moderate)	Delay	Minor	-	Slight	Slight
	Road Safety	No Change	-	Neutral	Neutral
	Fear/Intimidation	Minor	-	Slight	Slight
	Severance	Minor / Minor	-	Slight	Slight

*Seasalter Road / Head Hill Road / Staple Street / Staple Street Road

260. Table 14.15 demonstrates that, following the implementation of mitigation set out in the CTMP, the significance of all effects has been reduced to moderate or slight.
261. The moderate adverse effect predicted is in relation to cycle amenity along Seasalter Road. This relates to the pleasantness of a journey. While the number of vehicles (including HGVs) is expected increase along Seasalter Road it is acknowledged that the pleasantness of a journey can be very subjective.
262. Taking this into account and given that the majority of HGV movements are expected during the hours of 09.30 to 15.30 Monday to Friday, the wider mitigation proposed and that the effects will be temporary, this adverse effect is not considered significant in EIA terms.
263. Furthermore, there are likely to be some minor beneficial effects for the National Cycle Route through the improvement of the road surface both before and during construction.

14.7 Statement of Significance

264. This chapter has assessed the likely significance of effects of the Development on road traffic. Following the application of a CTMP to mitigate effects on the Local Road Network, the Development has been assessed as having no significant residual effects on the identified receptors in terms of the EIA Regulations.
265. All identified potential effects will be temporary in nature, and detailed mitigation discussions will continue with all relevant stake holders to ensure the effects are limited further where possible.