Stonestreet Green Solar

Environmental Statement
Volume 2: Main Text
Chapter 13: Traffic and Access

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Planning Act 2008
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13 Traffic and Access

13.1 Introduction

13.1.1 This Chapter of the ES was prepared by Prime Transport Planning Ltd and presents an assessment of the likely significant effects on Traffic and Access in relation to effects arising from construction only. It was agreed through the EIA Scoping Opinion (**ES Volume 4, Appendix 1.2: Scoping Opinion (Doc. Ref. 5.4)**) that operational and decommissioning traffic of the Project could be scoped out of further assessment within the EIA. Mitigation measures are identified, where appropriate, to avoid, reduce or offset any significant adverse effects identified and/or enhance likely beneficial effects. The nature and significance of the likely residual effects are reported.

13.1.2 Descriptions of the Site, the Project and the different phases of development are provided in **ES Volume 2, Chapter 2: Site and Context** and **Chapter 3: Project Description (Doc Ref. 5.2)**. A glossary of terms and list of abbreviations used in this Chapter is provided in the **Glossary (Doc Ref. 1.6)**.

13.1.3 The Chapter is supported by the following figures:

ES Volume 3, Figures (Doc Ref. 5.3)

- **Figure 13.1:** Construction Traffic Route and Traffic Data Location Plan;
- **Figure 13.2:** PRoW Survey Locations & Average Daily Trips;
- **Figure 13.3:** PRoW Survey Results - Daily PRoW Trips; and
- **Figure 13.4:** Sensitive Receptor Location Plan

13.1.4 The Chapter is supported by the following appendices:

ES Volume 4, Appendices (Doc Ref. 5.4)

- **Appendix 13.1:** Transport Planning Policy;
- **Appendix 13.2:** Summary of Consultation Undertaken to Date;
- **Appendix 13.3:** Traffic Survey Data;
- **Appendix 13.4:** Summary of Traffic Data;
- **Appendix 13.5:** Accident Data and Plots;
- **Appendix 13.6:** PRoW User Survey Results; and
- **Appendix 13.7:** Access Drawings.

13.1.5 This Chapter is also informed by the following documents which are provided in **Book 7: Other Management Plans and Reports**.

- **Outline Construction Traffic Management Plan ('CTMP') (Doc Ref. 7.9);** and

- **Outline Decommissioning Traffic Management Plan ('DTMP') (Doc Ref. 7.13).**

13.1.6 This Chapter should be read in conjunction with the **Outline Rights of Way and Access Strategy ('RoWAS') (Doc Ref. 7.16)** which summarises the PRoW strategy for the Project. **ES Volume 2, Chapter 12: Socio-economics (Doc Ref. 5.2)** provides an assessment of the Project on the PRoW links within the Site with reference to the measures for management of rights of way and access during the construction, operational and decommissioning phases of the Project.

13.2 Legislation, Planning Policy and Guidance

Legislation

13.2.1 There is no specific legislation relevant to the assessment of traffic and access.

Planning Policy

13.2.2 A summary of the relevant national and local policy for this assessment is provided in **ES Volume 4, Appendix 13.1: Transport Planning Policy (Doc Ref. 5.4)** including:

- Overarching National Policy Statement ('NPS') for Energy (EN-1) (2023)[1];
- NPS for Renewable Energy Infrastructure (EN-3) (2023)[2];
- National Planning Policy Framework (2023)[3]; and
- Ashford Local Plan 2030 (2019)[4].

13.2.3 There is no regional planning policy relating to traffic and access which is relevant to the Project.

Guidance

13.2.4 The following guidance is relevant to the Project:

- National Planning Policy Guidance ('NPPG')5;
- Government's Planning Practice Guidance Transport evidence bases in plan making and decision taking (2015)[6];
- Manual for Streets (2007)[7] and Manual for Streets 2 (2010)[8];
- Kent County Council Local Transport Plan 4: Growth without Gridlock 2016 – 2031 (2017)[9];
- Kent and Medway Growth and Infrastructure Framework (2018)[10];
- Transport Analysis Guidance ('TAG') Unit M1.2 Data Sources and Surveys (2020)[11];
- Department for Transport ('DfT') Guidance on Transport Assessment ('GTA') (2007) (the 'DfT GTA')[12];
- Institute of Environmental Management and Assessment ('IEMA') Guidelines: Environmental Assessment of Traffic and Movement (2023)[13]

(the '2023 IEMA Guidelines'); and

- IEMA Guidelines for the Environmental Assessment of Road Traffic ('1993 IEMA Guidelines' in so far as they are referenced under the 2023 IEMA Guidelines)[14].

13.2.5 This ES Chapter has been prepared in accordance with the above policies and guidance to assess the likely significant effects of the Project and identify any required mitigation.

13.3 Stakeholder Engagement

13.3.1 This section summarises key stakeholder engagement undertaken to inform the assessment. It also summarises the key matters raised by consultees in relation to the EIA on the topic of Traffic and Access and explains how the ES has had regard to those comments or how they have been addressed in the ES.

EIA Scoping

13.3.2 **Table 13.1** provides a summary of the EIA Scoping Opinion (**ES Volume 4, Appendix 1.2: EIA Scoping Opinion (Doc Ref. 5.4)**) responses of relevance to the assessment of traffic and access and how the issues raised have been responded to.

Table 13.1: EIA Scoping Opinion Response Summary

Consultee and Comment	Response
Planning Inspectorate (30 May 2022)	
The Applicant proposes to scope out effects during the operational phase as operational traffic generation is predicted to result in a maximum of two (two-way) vehicle movements per day for maintenance purposes. The Inspectorate agrees to scope this matter out subject to confirmation of the type of maintenance visits and vehicles and confirmation that these would not exceed relevant thresholds of effect (e.g. as set out in the Guidelines for Environmental Assessment of Road Traffic, 1993), taking account of any potential cumulative traffic effects.	Details of the type of maintenance visits are provided within the **Outline Operational Management Plan ('Outline OMP') (Doc Ref: 7.11)** which accompanies the DCO Application. It is anticipated that maintenance and servicing will include the inspection, upkeep, repair, refurbishment, adjustment, alteration, removal, reconstruction and replacement of equipment to ensure the continued effective operation of the Project over the course of the 40-year operational lifespan. Such trips will typically be made by 4x4 vehicles (pick-up trucks) and Light Goods Vehicles ('LGVs'). Heavy goods vehicles ('HGVs') will only require infrequent access to the Site, such as for maintenance, servicing or to deliver replacement equipment, across the lifetime of the Project.

Consultee and Comment	Response
	Operational trips are expected to generate no more than 2 x two-way trips per day on average, which would not exceed relevant thresholds of effect and would therefore not result in any cumulative traffic effects.
The Applicant proposes to scope out effects during the decommissioning phase since these are not anticipated to exceed that set out for the construction phase. Furthermore, the Applicant considers that the decommissioning phase is too far in the future to be able to accurately predict traffic flows within the study area. The Applicant proposes to produce a Decommissioning Traffic Management Plan (DTMP) that will set out mitigation measures and that will be secured by DCO Requirement. Paragraph 6.15.3 of the Scoping Report states that during the decommissioning phase, site infrastructure, including waste, will be removed and recycled or disposed of. The DTMP should provide traffic calculations with regards to removing waste from the site. On the basis of the above information, the Inspectorate is content to scope this matter out.	The **Outline DTMP (Doc Ref 7.13)** provides estimates of traffic generation for the decommissioning stage of the Project inclusive of waste removal from the Site. The traffic generation figures are equivalent to the vehicle movements for the construction stage of the Project as outlined within **Tables 13.11** and **Table 13.12** of this Chapter.
Scoping Report paragraph 13.5.2 states that impacts are anticipated to be restricted to the road network within the study area identified in paragraph 13.3.1 and on Figure 5 based on professional judgement. The study area should be based on an identified Affected Road Network where changes in traffic volumes, flows and vehicle types may exceed threshold criteria for significant effects in line with relevant guidance (such as Guidelines for the Environmental Assessment of Road Traffic, 1993) as a result of the Proposed Development. Any links that meet/exceed these criteria, should be assessed in the ES. The ES should	**Section 13.4: Assessment Methodology** of this Chapter provides details of how the study area for the assessment has been identified in line with current guidance and the requirements set out by PINS. A total of 16 construction two-way trips are forecast to utilise the M20 Junction 10a junction per hour. This level is below the threshold (i.e. 30 two-way trips) that National Highways ('NH') typically request detailed junction capacity assessments to identify effects. On this basis the construction traffic is considered to have a negligible impact on the operation of J10a of the M20. No impact on the operation of

Consultee and Comment	Response
explain what impact construction traffic would have on the operation of J10a of the M20.	M20 J10a motorway of the M20 is therefore identified.
Paragraph 12.9.1 of the socio-economic Chapter of the Scoping Report states that a site- based survey of the PRoWs will be undertaken as part of the Traffic and Access ES Chapter. However, this is not proposed in Chapter 13 of the Scoping Report, so it is unclear whether impacts on PRoW will be assessed fully in the Socio-Economic or Transport and Access Chapter. For clarity, surveys should be undertaken to provide baseline data in relation to the use of the PRoWs affected by the Proposed Development. The ES should assess impacts to PRoW and on WCH [walkers, cyclists and horse-riders ('WCH')] receptors from the Proposed Development where significant effects are likely to occur and clearly signpost where this is assessed in the ES.	The assessment within this Chapter considers impacts on non-motorised (i.e. WCH) public highway users in terms of delay and severance. Impacts on the leisure / amenity value of the PRoW network that would be affected by the Project are assessed within **ES Volume 2, Chapter 12: Socio-economics (Doc Ref. 5.2)**. **ES Volume 4, Appendix 13.6: PRoW User Survey Results (Doc Ref. 5.4)** contains the Site based surveys of the PRoWs within the Site that have been used to inform the assessment with this Chapter and **ES Volume 2, Chapter 12: Socio-economics (Doc Ref. 5.2)**.
Scoping Report paragraph 13.9.7 states that an Abnormal Load Traffic Management Plan is proposed prior to confirmation of the likely port of entry. The sea-port and construction traffic routing from a sea-port is not identified in the Scoping Report or on Figure 5. Where abnormal loads are to be delivered by sea, the ES should describe the location, duration, routing and number of such deliveries and assess any associated significant effects where they are likely to occur.	Up to two one-way abnormal loads are forecast to be required during the construction stage with the same number forecast to be required during the decommissioning stage, these being the main 132kV transformer unit/s which will be delivered/taken away via articulated lorry to the Project Substation. Whilst not abnormal in length terms, the weight of the unit/s will likely see it classed as an abnormal load. NH and KCC's Abnormal Loads Officers will be contacted to discuss the arrangements in advance of the day of delivery, as per the requirements of the **Outline CTMP (Doc Ref. 7.9)**. The **Outline CTMP (Doc Ref. 7.9)** sets out that the majority of solar equipment, including the transformer units, will be transported from overseas. The port of entry is yet to be determined however the Applicant has identified six ports as being located within a suitable distance from the

Consultee and Comment	Response
	Site. The assessment within this Chapter includes an assessment for abnormal loads as required by guidance, however, due to the abnormal load classification being due to weight, significant effects are not expected.
Kent County Council ('KCC') PRoW	
Further consideration is required regarding the potential effects of the project on PRoW network and its users, assessing noise, air quality, drainage, and visual impacts. Consideration should be given to the impacts on the PRoW network during the pre-construction/early design stage of the project, in addition to the construction and operational phases of the project. For example, during the pre-construction phase, excavation works may be required to evaluate ground conditions and reptile fencing may be erected to conduct ecological surveys. The results of these investigations may influence and determine the final design of the development, but the process of collecting the data may cause disruption to PRoW users. The impact of the project on quiet rural lanes, in particular, during construction and decommissioning (HGVs and abnormal loads are cited) should be considered in conjunction with the PRoW network. Site access routes should avoid use of the PRoW network, but if this is unavoidable, efforts should be made to ensure the surface will be maintained and restored to a condition as good as, or better than, the current standard. PRoW should be clearly identified in order to monitor path use before, during and after the construction phase of the proposal; it is requested that people	The assessment within this Chapter considers impacts on non-motorised users of public highway in terms of delay and severance. Aside from the main roads in the study area (A20 Hythe Road, Station Road and Goldwell Lane), the impact on quiet rural lanes, particularly Roman Road/Bank Road and Laws Lane is considered. Impacts on the leisure / amenity value of the PRoW network (including noise, air quality, and visual impacts) that would be affected by the Project are assessed within **ES Volume 2, Chapter 12: Socio-economics (Doc Ref. 5.2)**. The **Outline RoWAS (Doc Ref. 7.16)** considers the potential for disruption during the pre-construction phase of the Project and how this will be managed. Mitigation measures relating to noise, air quality, dust, odour, and landscape and visual amenity are included within the **Outline CEMP (Doc Ref. 7.8)** and **Outline DEMP (Doc Ref. 7.12)**. In relation to the pre-commencement works, the **Outline RoWAS (Doc Ref. 7.16)** includes the following: ▪ A pre-commencement condition survey will be undertaken where the internal haulage road will cross public highway/BOAT/PRoW at the internal haulage road crossing points and at the shared section of AE474 and any defects arising solely as part of the construction activity will be rectified at the cost of the Applicant; ▪ The Principal Contractor will liaise with

Consultee and Comment	Response
counters are installed on PRoW at key gateway locations. Data obtained from these counters can be used to assess the impact of the proposals. It is recommended that electronic people counter sensors are installed, instead of manual surveys, as these counters will be able to operate 24 hours a day and capture sporadic path users. Path extinguishments and long-term severance of routes should be avoided in order to prevent fragmentation of the PRoW network. The County Council requests that further detail is provided regarding how the PRoW routes will be incorporated within the proposal. As Local Highway Authority, the County Council requests that the applicant engages with the County Council on all matters relating to the PRoW network. If the applicant is unable to accommodate the PRoW network, along its definitive alignments, applications will need to be submitted to permanently divert the routes. It should be noted that there is different legislation regarding a diversion of a Byway Open to all Traffic. It is requested that the PRoW are accommodated within wide green corridors at least 5m wide through the site, irrespective of any recorded path widths. Consideration should also be given to the future surface and maintenance of these routes, to ensure they do not become obstructed by vegetation. KCC recommends that the placement of cables across PRoW should be avoided where possible. The County Council also notes that the Cable Route Options, as demonstrated in Figure 3 – Grid Connection Route Options, would	KCC (Highways and Public Rights of Way) on a regular basis, which is envisaged to be once a month for the duration of the construction period, to ensure that the practices employed continue to be acceptable. **ES Volume 4, Appendix 13.6: PRoW User Survey Results (Doc Ref. 5.4)** contains the Site based surveys of the PRoWs within the Site that have been used to inform the assessment within this Chapter and **ES Volume 2, Chapter 12: Socio-economics (Doc Ref. 5.2)**. Video cameras rather than people counters have been used to survey the number of PRoW users, as review of the video footage allows for a more accurate tally than people counters which are often triggered by animals and birds. This is based on the advice of an experienced, independent traffic survey company and was agreed with KCC. **ES Volume 2, Chapter 12: Socio-economics (Doc Ref. 5.2)** provides details of existing PRoWs that cross the Site that will require temporary and permanent closures and diversions, as well as new and extended links to improve local connectivity and discussions have been ongoing with KCC, ABC and the Ramblers Association throughout the design process. The Applicant will seek to minimise the placement of cables across PRoW and diversions as far as reasonably practicable as part of the final design. All PRoWs within the Site will be a minimum of 2m wide and will sit within a corridor of 10m minimum width, with the exception of the section of PRoW ‘New 3’ adjacent to Work No. 4 (Project Substation) which will sit within a 5m corridor. This is secured in the **Outline RoWAS (Doc Ref. 7.16)**. The Applicant will be responsible for maintenance of the PRoW located within the Site during the construction and

Consultee and Comment	Response
both have an impact on the PRoW network. KCC requests clarification and further details regarding reference to 'pathway clearance and redirections'. Reference to the impact of the proposal on the PRoW network must be included within the Construction Environment Management Plan (CEMP), the Construction Traffic Management Plan (CTMP) and the Decommissioning Environment Management Plan (DEMP) The Schedule of Mitigation, which is to be included within the ES must include consideration of the impact of the proposal on the PRoW network.	operational phases. Further details of monitoring and maintenance of the PRoW network are provided in the **Outline RoWAS, Section 8 (Doc Ref. 7.16)**.
Kent County Council ('KCC') Highways	
The intervention set within Rule 1 for 30% uplift in HGVs is too high. KCC recommends that instead of a fixed threshold, the applicant should engage with KCC regarding the issue of conflicting traffic in detail. This engagement should take place once data has been obtained from the traffic surveys and the projected estimate on construction vehicle movements has been established. Vehicle track drawings will be required to demonstrate that sufficient space is available for vehicles to pass one another along the full length of the route. Without having the benefit of projected vehicle numbers, of particular concern to the County Council is the set of bends at Evegate Mill, where forward visibility is limited and the road narrows in width. This will require consideration and may require mitigation. The	The assessment contained within this Chapter makes reference to the 30% threshold as required by guidance but has also considered traffic conflict in greater detail with a more qualitative impact assessment based on professional judgement also presented. Traffic surveys have been undertaken and are included within **ES Volume 4, Appendix 13.3: Traffic Survey Data (Doc Ref. 5.4)**. Following discussions with KCC (**ES Volume 4, Appendix 13.2: Summary of Consultation Undertaken to Date (Doc Ref. 5.4)**, it was agreed that the vehicle tracking should focus on the tight bends on the construction traffic route, specifically on Station Road near Evegate Mill and on Goldwell Lane. Other sections of the route, particularly A20 Hythe Road and Station Road north of the Site are regularly used by two-way HGVs, and following the initial site visit, it was evidenced that there is sufficient width for such vehicles to pass.

Consultee and Comment	Response
applicant should engage with KCC on this matter accordingly. The area of land forming the proposal site to the southwest of Station Road/Calleywell Lane has frontage to the highway on both Station Road and Calleywell Lane. Calleywell Lane also has a section of reduced forward visibility and localized narrowing in between the two sections of site frontage on this road. It would therefore make more sense for a site access be located on Station Road and an internal haul road used to avoid this area. Highways Condition Surveys will be required to establish whether any damage to the highway asset is caused by the development traffic. These will need to be carried out at pre-commencement and post completion stages as well as set intervals through the construction period. There are several highway structures within the construction vehicle routing study area which may require inspection to confirm their current condition and suitability for increased use by frequent HGV traffic. The use of rural lanes 'C' class, as accessed from the A20 during construction and decommissioning phases, gives potential conflict with pedestrians connecting across the PRoW network. Appropriate safety measures are therefore essential along these routes.	Swept path analysis has been undertaken of the proposed access points from the local highway for the Primary Site Access, internal haulage road to Goldwell Lane, Goldwell Lane bend, and Goldwell Lane Access as shown in **ES Volume 4, Appendix 13.7: Access Drawings (Doc Ref. 5.4)**. The swept path analysis is based on a 16.5m long articulated vehicle (the longest vehicle likely to utilise the access on a regular basis). No construction traffic will use Evegate Mill bend. As shown on the **Works Plans (Doc Ref. 2.3)**, the internal haulage road will cross the public highway at Station Road (between Fields 19-23) and at Roman/Bank Road (south of Field 10) but otherwise will ensure the use of local roads is minimised for the duration of the construction phase with the exception of Goldwell Lane. The Applicant has investigated the weight limits of the two bridges on the construction traffic route (M20 bridge and rail bridge, both on Station Road) and both can accommodate the weight of the forecast abnormal loads. As part of the measures secured by the **Outline CTMP (Doc Ref. 7.9)**, the Applicant will carry out pre and post completion condition surveys, and surveys at regular intervals, of the construction traffic route and highway structures. A KCC representative will be invited to attend the survey to witness the highway condition firsthand and so they can confirm the findings of the survey are accurate. Measures secured through the Outline CTMP ensure that defects arising solely as part of the construction activity will be rectified at the cost of the Applicant. Safety measures to be employed on the construction traffic route to protect pedestrians crossing between PRoW will include but are not limited to: additional signage, banksmen/marshals and escort

Consultee and Comment	Response
	vehicles as detailed in the **Outline CTMP (Doc Ref. 7.9) and Outline DTMP (Doc Ref. 7.13)**.
Aldington and Bonnington Parish Council	
Highway infrastructure concerns cited including road widths, lack of kerbs, sharp bends, damage to bridges. Developer must commit to making good the highway infrastructure. Access to eastern part of site adjacent to AE474 with adjacent fields being allocated sites S51 and S52, therefore access from here is not suitable. Construction traffic likely from other developments has been disruptive to workers and parents of school children at peak times as well as there being 'near misses', inferring that the Proposed Development may result in similar issues during the construction phase. Goldwell Lane and Calleywell Lane are rural lanes that do not have footpaths but are used by the residential core of Aldington. The roads are used by pedestrians, cyclists and horse-riders. Construction and decommissioning traffic must not use the local roads during the peak hours.	Please see comment above in relation to pre-commencement condition surveys and the Applicant's responsibility for rectifying damage that is secured in the **Outline CTMP (Doc Ref. 7.9)**. Appropriate measures to avoid and/or minimise effects during the construction and decommissioning stages of the Project on PRoW and other access users are also included in the **Outline CEMP (Doc Ref. 7.8), Outline DEMP (Doc Ref. 7.13), Outline CTMP (Doc Ref. 7.9) and Outline DTMP (Doc Ref. 7.13)**. Section 13.10 of this Chapter provides a cumulative assessment of the Project with other schemes. No HGVs or other construction traffic will pass through the centre of Aldington village, with impacts on the local highway network limited through use of the internal haulage road and adherence to the **Outline CTMP (Doc Ref. 7.9)**.
Mersham Parish Council	
The proposed access route during construction via A20 / Station Road junction needs to be assessed carefully due to the crash history at that crossroads. A number of abnormal traffic movements can be expected and speed of traffic movements at that junction can be problematic at times.	Detailed accident analysis using recent data obtained from KCC for the construction traffic route is provided in **Section 13.5** 'Baseline Conditions'. Severity of impact on safety is addressed in **Section 13.7** 'Assessment of Effects'. Only two one-way abnormal loads are forecast to be required during the construction and decommissioning stage, being the main transformer unit/s which

Consultee and Comment	Response
	will be delivered/taken away via articulated lorry to the Project Substation. Whilst not abnormal in length terms, the weight of the unit/s will likely see it classed as an abnormal load. NH and KCC's Abnormal Loads Officers will be contacted to discuss the arrangements in advance of the day of delivery, as per the requirements of the **Outline CTMP (Doc Ref. 7.9)**.

Non-statutory Consultation

13.3.3 **Table 13.2** provides a summary of responses to non-statutory consultation that was undertaken of relevance to traffic and access and how the assessment has responded to them. This includes pre-application discussions with ABC, KCC Highways and KCC PRoW officers. Further information on non-statutory consultation with KCC PRoW officers is provided in **ES Volume 2, Chapter 12: Socio-economics (Doc Ref. 5.2)**. **ES Volume 3, Appendix 13.2: Summary of Consultation Undertaken to Date (Doc Ref. 5.4)** provides meeting notes and email correspondence during pre-application discussions.

Table 13.2: Summary of Additional Meetings and Correspondence Held Eith KCC

Summary of Consultation Response	Response to Consultee
KCC PRoW Meeting on 13 June 2022	
PRoW user surveys to focus on sections of PRoW impacted by the development. Surveys to take place for a 7-day period in June or July.	User surveys were undertaken for a 7-day period in August 2022 and are detailed in **Section 13.4: Baseline Traffic Data.** August was chosen for the surveys in order to record what would reasonably be expected to be the highest period of PRoW use activity, allowing a worst case assessment in terms of maximum number of PRoW users. **ES Volume 3, Figure 13.6: PRoW Survey Results - Daily PRoW Trips (Doc Ref. 5.3)** shows the total PRoW trips per day in graphical form. The full survey results are provided in **ES Volume 4, Appendix 13.6: PRoW User Survey Results (Doc Ref. 5.4)**.
KCC Highways Meeting on 13 June 2022	
Automatic Traffic Counter ('ATC') surveys to be undertaken in June on construction	ATC surveys at agreed locations were undertaken in June 2022. Speed survey results have informed access design as

Summary of Consultation Response	Response to Consultee
KCC PRoW Meeting on 13 June 2022	
traffic route agreed. Speed survey results to inform access design. Detailed consideration of operational impact at bends near Evegate Mill required. Swept path analysis should be undertaken to investigate whether two HGVs can pass or if mitigation is required. Transport Statement not required as long as sufficient detail is provided in ES Chapter.	detailed in **Sections 13.4** and **13.5** of this Chapter. No construction traffic will navigtate the bends on Station Road near Evegate Mill and therefore swept path analysis is not provided of this section. As shown on the **Works Plans (Doc Ref. 2.3)**, the internal haulage road will cross the public highway at Station Road (between Fields 19-23) and at Roman/Bank Road (south of Field 10). A Transport Statement is not provided as sufficient detail is provided in this Chapter.

2022 Statutory Consultation

13.3.4 **Table 13.3** provides a summary of the main responses to the 2022 Statutory Consultation of relevance to traffic and access and how the assessment has responded to them.

Table 13.3: 2022 Statutory Consultation Response Summary

Consultee and Comment	Response
National Highways (28 November 2022)	
Any abnormal loads to be dealt with by the standard roadspace booking process. National Highways will review the CTMP and other supporting information. Further detail required in due course regarding hourly profile of traffic and consent will need to be sought from National Highways for any temporary construction signage on strategic road network.	The majority of requirements raised by NH involve standard post-consent approvals and procedures. Scheduling of abnormal load vehicles and appropriate escorts will take place with NH and KCC's Abnormal Loads Officers. The **Outline CTMP (Doc Ref. 7.9)** and **Outline DTMP (Doc Ref. 7.13)** which accompany the DCO Application within **Book 7: Other Reports and Management Plans** set out the process required for these approvals. The DCO will require implementation of an **Outline CTMP (Doc Ref. 7.9)** via detailed CTMP(s) during construction and an **Outline DTMP (Doc Ref. 7.12)** via detailed DTMP(s) during decommissioning which will include measures to minimise construction / decommissioning phase traffic and

Consultee and Comment	Response
	mitigate temporary disruption effects on road users, the local community and environment. The **Draft Development Consent Order (Doc Ref. 3.1)** secures submission of the detailed CTMP(s) / DTMP(s) to ABC for approval, with such approval to be in consultation with the relevant highway authority. Detailed CTMP(s) and DTMP(s) will be submitted for approval prior to the commencement of construction and decommissioning, respectively. The detailed CTMP(s)/DTMP(s) will ensure that construction/decommissioning traffic keeps to the construction/decommissioning approved route, the agreed hours of construction/decommissioning are adhered to, and interaction with PRoW and highway users is managed safely and effectively. Submission of detailed CTMP(s) and detailed DTMP(s) is secured by requirements in the **Draft Development Consent Order (Doc Ref. 3.1)**.
Aldington Parish Council (Highway Safety) (28 November 2022)	
Acknowledgement should be given that Goldwell Lane is integral to the village and should not be used as a construction route. Request for KCC to review swept path analysis and access. New access to Fields 19 - 21 should be proposed or Fields removed from the project.	There is no feasible alternative access to the South Eastern Area (Fields 20 to 22, previously labelled Field 19 to 21 within the 2022 Consultation Scheme). In order to access the South Eastern Area, an average of nine construction vehicles per day will be required to travel along Goldwell Lane in each direction for a period of approximately five months. Swept path analysis is presented in **ES Volume 4, Appendix 13.7: Access Drawings (Doc Ref. 5.4)**. Traffic surveys demonstrate that Goldwell Lane is lightly trafficked and the parallel Calleywell Lane could be used by drivers wishing to avoid any minor delay associated with temporary, short-term construction traffic and construction activities on Goldwell Lane. KCC, as the highway authority,

Consultee and Comment	Response
	has not raised concerns or objected to the principle of this access arrangement in terms of highway safety. An assessment of effects is provided for receptors using Goldwell Lane in **Section 13.7** of this Chapter.
Aldington Parish Council (Traffic) (28 November 2022)	
Concerns that baseline traffic data is dated and not all roads in close proximity have been surveyed.	KCC, as the highway authority, has not raised concerns with the traffic survey data in their S.42 response to the 2022 Statutory Consultation or at any other opportunity to date. The standard period of validity for traffic impact assessment is 3 years as defined in the DfT's TAG Unit M1.2 Data Sources and Surveys (2020)[11], with 5 years accepted for more strategic assessments. Traffic surveys were undertaken from 18 June 2022 to 24 June 2022 and are considered to remain valid for assessment and decision making. The surveys also took place during a neutral period as defined by the DfT and should be representative of typical traffic conditions. Data for the A20 Hythe Road was sourced from a DfT traffic counter from 2019 as the more recent data available at the time, this being for the years 2020 and 2021, would have been influenced by the Covid-19 pandemic. At the time of assessment this data remains the most recent data not influenced by the pandemic. Prime Transport Planning are not aware of any circumstances which would have significantly changed traffic flows on any of the roads assessed, therefore the data is considered to be representative of typical conditions and will likely continue to do so between the assessment and the end of the construction stage. Despite this, a new traffic survey on the A20 Hythe Road was completed for 7-days commencing on 13 November 2023. The recorded traffic flows have been reviewed and compared to the 2019 data. The 2023

Consultee and Comment	Response
	data is within a reasonable tolerance of the 2019 data and therefore validate it. Various sections of the proposed construction traffic route were surveyed as agreed with KCC as the local highway authority. There is no requirement to survey roads that construction traffic will not use.
Ashford Borough Council (ABC) (Traffic and Access) (8 December 2022)	
The Council fully endorses the S.42 consultation response of KCC Highways and Transportation in respect of traffic and access matters.	See relevant response to KCC Highways comments (15 December 2022) below. The assessment methodology was discussed and agreed with KCC Highways.
KCC (Highways) (15 December 2022)	
1. Available forward visibility at proposed main Site access needs to be maximised to reduce the risk of harsh braking that may result in shunts for other traffic approaching from the south. With this in mind, vegetation within the banked highway verge on the western side of Station Road at the bend opposite the Site access should be cleared to ground level. This should also be accompanied by 'SLOW - SITE TRAFFIC' warning signing and a qualified banksman stationed at the gate to assist. 2. The form of this traffic control i.e. signing layout, method of control (traffic signals or stop/go boards) at the crossings of Station Road and Goldwell Lane can be agreed by the County Council's Streetworks Team prior to commencement of works should the proposal gain approval. 3. The supporting information details potential traffic control or escort vehicle at the Goldwell Lane bend. An escort vehicle would be more appropriate. 4. The OS drawing used for the vehicle track drawing at the Goldwell Lane bend	1. Vegetation to be removed in the vicinity of the Primary Site Access is noted on **ES Volume 4, Appendix 13.7: Access Drawings (Doc. Ref. 5.4)**. It is acknowledged that appropriate temporary warning signage and use of a banksman will be required. 2. Temporary traffic control arrangements will be in place at the Station Road and all road crossings during construction to avoid unnecessary vegetation removal. Details of the form of traffic management will be agreed with KCC Streetworks Team prior to commencement and included within the detailed CTMP(s). 3. The **Draft Development Consent Order (Doc Ref. 3.1)** requirements include implementation of a detailed CTMP(s), which will require the use of an escort vehicle for Goldwell Lane HGV traffic. The same will apply for decommissioning through the detailed DTMP(s) for any HGVs. 4. Swept path analysis has been undertaken for Goldwell Lane based on topographical surveys as shown on **ES**

Consultee and Comment	Response
does not look to be totally accurate in line with the situation on the ground. If overrun does occur, remedial works may be required to prevent further damage to the verge and damage to the edge of the carriageway. 5. A highway condition survey should be carried out prior to commencement of works and post completion to ensure any damage is rectified at the cost of the developer. Anywhere that overrun is repeated to the point of risking ongoing damage to the highway should be rectified as soon as practical at the cost of the developer in co-ordination with the County Council's Highways Operations Team. 6. The Site workings should have available on-Site a mechanised street sweeper to ensure that any material dragged from the Site onto the highway is cleared as soon as possible so as to prevent a hazard to highway users.	**Volume 4, Appendix 13.7: Access Drawings (Doc Ref. 5.4)**. 5. The **Outline CTMP (Doc Ref. 7.9)** includes a requirement to complete a highway condition survey prior to construction and post completion and any damage caused by overrunning will be made good. 6. A mechanised street sweeper will be used as required for the duration of the construction and decommissioning phases. Further details on the measures 1 – 6 stated above are provided in the **Outline CTMP (Doc Ref. 7.9)** and **Outline DTMP (Doc Ref. 7.13)** which accompany the DCO Application.
KCC (PRoW) (15 December 2022)	
Requests the consideration of PRoW within the CEMP and the DEMP.	The DCO Requirements secure the implementation of a RoWAS which will include construction, operational and maintenance, and decommissioning phase measures. An **Outline RoWAS (Ref. 7.16)** accompanies the DCO Application. Appropriate measures to avoid and/or minimise effects during the construction and decommissioning stages of the Project on PRoW and other access users are also included in the **Outline CEMP (Doc Ref. 7.8), Outline DEMP (Doc Ref. 7.13), Outline CTMP (Doc Ref. 7.9)** and **Outline DTMP (Doc Ref. 7.13)**.

2023 Statutory Consultation

13.3.5 **Table 13.4** provides a summary of the responses to the 2023 Statutory Consultation of relevance to this assessment and how the assessment has responded to them.

Table 13.4: 2023 Statutory Consultation Response Summary

Consultee and Comment	Response
National Highways (17 July 2023)	
National Highway's focus is on the safety, reliability and/or operational efficiency of the strategic road network, specifically M20 in the vicinity of the Site. Construction traffic route acknowledged and understood as is the number of construction traffic trips forecast which would avoid the traditional peak hours. Acknowledged that a CTMP and DTMP will be submitted to ABC, in consultation with KCC and NH. Satisfied that the proposals would *'not have an unacceptable impact on the safety, reliability, and/or operational efficiency of the SRN. Our formal response to this consultation is No Objection.'* National Highways looks forward to being consulted on the detailed CTMP prior to commencement of construction.	The detailed CTMP(s) and detailed DTMP(s) will be approved by ABC, in consultation with the relevant highway authority, when available prior to construction and decommissioning as requested.
Aldington and Bonnington Parish Council (17 July 2023)	
Challenges the statement in para 12.3.2 of the PEIR Addendum Vol 1 that 'no construction traffic will pass through Aldington village'. Goldwell Lane is integral to the village and should not be used as a construction route. Both construction and maintenance access in to Fields 20, 21, 22 is proposed via a field access that is adjacent to PRoW AE474. This is unacceptable. The Parish Council also note that the baseline figures used for the PEIR are dated and not all of the roads in close proximity have been surveyed to convey the real current situation.	The main road that passes through Aldington village is the section of Roman Road between Forge Hill and the B2067. This does not form part of the construction traffic route. Only the section of Goldwell Lane on the edge of the village north of Goldwell Close will be used for construction traffic, with traffic only approaching from the north. Construction traffic with an average of nine vehicles per day will need to use this section of Goldwell Lane for approximately 5 months during construction. Appropriate traffic management measures will be in place to minimise any impact or disruption to other road users as detailed in the **Outline CTMP (Doc Ref. 7.9)**.

Consultee and Comment	Response
	Post construction the maximum number of maintenance trips likely to require access will be up to 2 two-way trips per day although it is likely to be lower, as maintenance within these fields would not be required daily. KCC, as the local highway authority, has not raised concerns with the traffic survey data in their S.42 response to the 2022 Statutory Consultation or at any other opportunity to date. The standard period of validity for traffic impact assessment is 3 years as defined in the DfT's TAG Unit M1.2 Data Sources and Surveys (2020)[11], with 5 years accepted for more strategic assessments. The data is therefore suitable for assessment. Only roads that constitute the construction traffic route detailed in the **Outline CTMP (Doc Ref. 7.9)** have been included in the assessment as construction traffic will not use other local roads.
Ashford Borough Council (17 July 2023)	
The Council disagrees with the Applicant's suggestion at paragraph 12.3.2 of the PEIR Addendum Volume 1: Non-Technical Summary June 2023 that 'no construction traffic will pass through Aldington village' because the Applicant is clearly using its own definition as to that which constitutes the village in order to justify the 'on-road construction route' that is proposed along Goldwell Lane in order to access outlying solar array Parcels 20, 21 and 22.	As noted in the response above, the main road that passes through Aldington village is the section of Roman Road between Forge Hill and the B2067. This section does not form part of the construction traffic route. Only the section of Goldwell Lane on the edge of the village north of Goldwell Close will be used for construction traffic, with traffic only approaching from the north.
Kent County Council Highways (20 July 2023)	
The County Council, as Local Highway Authority, has no further comment at this stage and would refer to commentary previously raised within the County Council's Statutory Consultation response dated 15 December 2022.	Noted.

2023 and 2024 Targeted Consultations

13.3.6 No specific comments of relevance to the assessment were received in response to either the 2023 or 2024 Targeted Consultations.

13.4 Assessment Methodology

General Approach and Scope

13.4.1 The generic EIA methodology to the assessment is detailed in **ES Volume 2, Chapter 6: EIA Methodology (Doc Ref. 5.2)**.

13.4.2 The **ES Volume 4, Appendix 1.1: EIA Scoping Report (Doc Ref. 5.4)** and Chapter 12: Traffic and Access of the PEIR stated that the methodology for the assessment of the environmental impact of the Project related to Traffic and Access would follow that of the 1993 IEMA Guidelines, which was agreed with statutory consultees and the Planning Inspectorate. This document has since been superseded by the 2023 IEMA Guidelines published in July 2023. The 2023 IEMA Guidelines remain closely aligned to the 1993 IEMA Guidelines, with the original categories for the consideration of impact expanded upon.

13.4.3 **Table 13.5** shows how the categories considered in the 2023 Guidelines update but align with the categories in the 1993 Guidelines.

Table 13.5: Traffic and Movement Category Alignment between 1993 and 2023 IEMA Guidelines

1993 IEMA Guidelines Category	2023 IEMA Guidelines Category
Severance	Severance of communities
Driver delay	Road vehicle driver delay and passenger delay
Pedestrian delay	Non-motorised user delay
Pedestrian amenity	Non-motorised user amenity
Fear and intimidation	Fear and intimidation on and by road users
Accidents and safety	Road user and pedestrian safety
Hazardous loads	Hazardous/large loads

13.4.4 Given the similarities in the category definitions in **Table 13.5**, it is clear that there is no requirement or need to re-scope the Traffic and Access Chapter; the category of effects considered in this assessment supersede the equivalent presented in the Scoping Report and PEIR Chapter 12: Traffic and Access. Additional detail is

provided in order to fully align this assessment with the 2023 IEMA Guidelines, for example non-motorised user delay also considers delay to cyclists and horse-riders rather than just pedestrians which the 1993 IEMA Guidelines required.

13.4.5 This Chapter therefore reports on the likely significant effects of the Project in terms of Traffic and Access in the context of the Site and surrounding area by reference to the 2023 IEMA Guidelines Categories presented in **Table 13.5**.

13.4.6 The impacts on PRoW users in this assessment are considered in relation to:

- Severance of communities (for example, as a result of changes in traffic flows on roads crossed by PRoW);
- Non-motorised user delay and amenity (for example, where users of the highway including walkers, cyclists and horse-riders may experience change in journey time or amenity as a result of a change in traffic flows); and
- Road user and pedestrian safety (where this relates to changes in traffic flows interacting with paths and highway used by walkers, cyclists and horse-riders).

13.4.7 **ES Volume 2, Chapter 12: Socio-Economics (Doc Ref. 5.2)** provides a link-level assessment to assess the changes to each PRoW link where they interact with, or are affected by the Project for any part of its length. This is considered in the context of embedded mitigation (via diversions, new or alternative links) that would be provided as part of the Project as diverted/replacement PRoW and the commitments in the **Outline RoWAS (Doc. Ref. 7.16)**. The assessment primarily considers where connectivity in terms of journey distance is changed as a result of the Project, in the context of replacement and alternative access.

13.4.8 Significant effects on public transport (bus / rail) are not expected due to the nature of the Project and its location.

Study Area and Scope

13.4.9 **ES Volume 2, Chapter 2: Site and Context (Doc Ref. 5.2)** includes a description of the Site's location and context. **ES Volume 3, Figure 2.1: Field Boundaries and Site Area Plan (Doc Ref. 5.3)** shows the main areas of the Site.

13.4.10 As the assessment includes the impact on the local highway network and the PRoW network, there are effectively two study areas. The highway study area comprises the roads that form the construction traffic route shown on **ES Volume 3, Figure 13.1: Construction Traffic Route and Traffic Data Location Plan (Doc. Ref. 5.3)**. In summary the study area consists of:

- Goldwell Lane and C609 Station Road between the Goldwell Lane Access and the A20 Hythe Road junction;
- A20 Hythe Road between the junction with C609 Station Road and M20 motorway Junction 10a;
- M20 motorway Junction 10a; and

- Roman Road/Bank Road at the Site frontage.

13.4.11 The characteristics of the roads stated above are described in **Section 13.5**.

13.4.12 The PRoW study area for the purposes of the traffic and access assessment comprises all existing PRoW which either pass through the Site or provide a connection with the Site. Based on the KCC Definitive Map[15], which is represented on **ES Volume 3, Figure 3.1: Existing Access Network (Ref. Doc Ref. 5.3)**, 16 public footpaths and one Byway Open to all Traffic ('BOAT') are included within the Site boundary.

13.4.13 It is important to note that it is illegal to ride bicycles or horses on public footpaths, but it is legal to ride bicycles and horses on BOATs.

13.4.14 The extent of the study area has been agreed with NH and KCC as highway authorities responsible for the strategic road network ('SRN') and the local road network ('LRN') respectively.

13.4.15 The temporal scope of the assessment assumes 2023 as the current baseline and 2026 as the future baseline. The assessment is based on the 2026 future baseline as this is considered to be representative of when peak periods of construction will likely occur and therefore reflects the worst case period for potential impact.

13.4.16 The study area remains consistent between the current baseline and the future baseline with no major local highway improvements identified.

Impacts/Aspects Scoped out of the Assessment

Study Area – Crossing Points (Station Road, Roman/Bank Road, Laws Lane and the BOAT)

13.4.17 Construction traffic travelling via the internal haulage road or across the south-western area of the Site will need to cross the above roads to access the various Site areas. The construction activity will not add traffic to these sections of road and therefore not impact the link in terms of increasing traffic flow. Construction traffic measures will be in place to ensure these crossing points are safely managed and to minimise disruption to all road users. These measures are secured through the **Outline CTMP (Doc Ref. 7.9)** and the **Traffic Regulations Measures Plan (Doc Ref. 2.4)**.

13.4.18 The greatest number of construction traffic trips at any one crossing point will be on Station Road between Fields 23 and 19, where the internal haulage road is estimated to have up to four (two-way) haulage vehicle trips per hour, meaning that traffic would only be stopped for an estimated crossing time of 20 seconds every 15-minutes which is not considered to be a significant effect on driver, pedestrian or non-motorised user delay. The crossing frequency will be less than this at the other crossing points as the construction traffic trips will be fewer.

13.4.19 An assessment of effects resulting from the crossing points has been scoped out of the assessment as significant effects are not expected.

Study Area – Bank Farm Access

13.4.20 The Bank Farm access road between Roman Road and the farmyard provides access to the south western area of the Site. Bank Farm is a working farm that sells eggs and other produce to the general public. The owner of the farm has confirmed to the Applicant *(pers comm.)* that they have an average of 30 customers per weekday and an average 50 per weekend day. Customers typically travel by car, with up to 10 on foot or by bicycle. Most sales take place between 9am and 4pm but some do call at other times with the on-Site 'egg machine' being open 24 hours a day. There are also around 3 - 4 van-based deliveries to the farm per week.

13.4.21 Assuming a reasonable worst case position of 50 customers visiting in the 7-hour period between 9am and 4pm, this would average 7 arrivals and 7 departures per hour, totalling 14-two-way trips, which is equivalent to less than one trip every four minutes. Only two haulage vehicle trips per hour and four light vehicle trips per hour are forecast to use the farm access during the construction phase, meaning that only one construction trip is forecast every 10-minutes.

13.4.22 The **Outline CTMP (Doc Ref. 7.9)** includes appropriate traffic management measures which will help to minimise potential conflicts between construction traffic and farm visitors (drivers, pedestrians or other non-motorised users).

13.4.23 An assessment of effects resulting from the Project on the Bank Farm access has been scoped out of the assessment as significant effects are not expected.

Church Lane

13.4.24 The extension works required at Sellindge Substation will require HGV access to the north of the railway bridge on Church Lane. It is expected that these works will take up to two months to be completed and it is anticipated that less than 10 construction trips per day will be made in each direction from/to the A20 Hythe Road along Church Lane.

13.4.25 Access to Sellindge Substation will be from the A20 Hythe Road, using an approximately 700m section of Church Lane that has been designed to facilitate HGV deliveries to Sellindge Substation. The carriageway has been constructed to a width that comfortably allows for the passage of HGVs. Similarly, the height of the M20 bridge is sufficient to allow standard height HGVs to pass beneath it given the lack of any restricted height warning signage. There are no sensitive receptors along this stretch of Church Lane.

13.4.26 The Cable Route Corridor will cross Church Lane and therefore will result in temporary disruption for a limited time period while the cable is installed pursuant to Work No. 4. Construction vehicles associated with the cable installation will also need to cross Church Lane but otherwise will not use this highway.

13.4.27 An assessment of effects resulting from the Project on Church Lane has been scoped out of the assessment as significant effects are not expected.

Partridge Farm

13.4.28 It is noted that ABC requested in their Scoping Opinion response (included in **Table 13.1**) that the ES consider traffic impacts of the existing solar park at Partridge Farm, which is located south of Church Lane. Partridge Farm is a small operational solar farm and therefore traffic impacts are expected to average 1 light vehicle visit per day. An assessment of effects resulting from the Project on Partridge Farm has been scoped out of the assessment as significant effects are not expected.

Junction Capacity Assessments

13.4.29 A total of 16 two-way trips are forecast to utilise the M20 Junction 10a junction per hour during the construction phase. Detailed junction capacity assessments using specialist software have not been undertaken as the level of predicted traffic is below the DfT GTA advised 30 two-way trip threshold in the peak hour. It is noted that NH typically request detailed junction capacity assessments when a development is above the 30 two-way trip threshold.

13.4.30 Whilst this DfT guidance document has been withdrawn it is often used by local highway authorities and NH as the starting point for the consideration of such assessments.

Operation and Maintenance

13.4.31 **ES Volume 4, Appendix 1.2: EIA Scoping Opinion (Doc. Ref. 5.4)** confirmed that operational phase impacts of the Project are agreed to be scoped out. This is because once operational, the Project would generate no more than 2 x two-way trips per day, which would be associated with maintenance. Such trips will be made by 4x4 vehicles (pick-up trucks) and LGVs. HGVs will only require infrequent access to the Site, such as for maintenance, servicing or to deliver replacement equipment, across the lifetime of the Project. Operational traffic is therefore not likely to give rise to any significant effects and has been scoped out of the assessment.

Decommissioning

13.4.32 **ES Volume 4, Appendix 1.2: EIA Scoping Opinion (Doc. Ref. 5.4)** confirmed that decommissioning phase impacts of the Project are agreed to be scoped out, subject to the preparation of detailed DTMP(s) that will set out mitigation measures and will be secured by DCO Requirement. The **Outline DTMP (Doc Ref. 7.13)** includes traffic calculations associated with waste removal which are not expected to be higher than the construction stage which are predicted as not significant. As for decommissioning traffic, this is therefore also not likely to give rise to any significant effects and has been scoped out of the assessment.

Establishing Baseline Conditions

13.4.33 Several sources of information have been used to establish baseline conditions which included the following:

- Relevant planning policy as set out in **Section 13.2**;
- Ordnance Survey ('OS') base mapping and topographical survey information relating to the Site;

- Highway boundary information from KCC Highways;
- Local travel and highway network, including public transport information from Traveline[16] and KCC Definitive Map of PRoW;
- Site visits undertaken by Prime Transport Planning on 4 July 2022 and 29 September 2022 and 28 February 2024;
- Personal Injury Collusion ('PIC') data from KCC for the period 1 April 2017 to 31 March 2023 (**ES Volume 4, Appendix 13.5: Accident Data and Plots (Doc Ref. 5.4)**); and
- Baseline traffic surveys undertaken in 2022 and 2023 (A20 Hythe Road).

Baseline Traffic Data

13.4.34 360TSL, an independent traffic survey and data collection specialist, was instructed to install 6 no. automatic traffic counters ('ATCs') for a 7-day period from 18 June 2022. June is a 'neutral' month by definition of the DfT's TAG Unit M1.2 Data Sources and Surveys (2020)[14]. There was a national rail strike on 21, 23 and 25 June 2022. However, it is unlikely that these strikes would have had a significant influence on local traffic flows given the lack of a local train station in close proximity to the Site. A review of the data has not identified any anomalies on the days of the strikes.

13.4.35 The ATCs recorded traffic volumes and traffic speeds. The ATCs were installed on Station Road, Goldwell Lane and Roman Road as shown on **ES Volume 3**, **Figure 13.1: Construction Traffic Route and Traffic Data Location Plan**. **(Doc Ref. 5.3)**. The extent of the traffic surveys is greater than that proposed in the EIA Scoping Report (**ES Volume 4, Appendix 1.1: EIA Scoping Report (Doc. Ref. 5.4)**), primarily in order to assist access design for the Project, particularly in terms of ascertaining visibility splay requirements based on local speed as explained below.

13.4.36 Some of the ATCs were installed for use in the assessment and some were installed to aid access design, while some were used for both. Traffic flow data has been used for assessment purposes while traffic speed data has been used to aid construction access design. The raw traffic survey data used in the assessment is included in **ES Volume 4, Appendix 13.3: Summary of Traffic Data (Doc Ref. 5.4).**

13.4.37 ATCs are a reliable and commonly accepted traffic count method but their accuracy in deriving vehicle classifications (cars, LGVs, HGVs, buses etc) is limited. As a result, heavy vehicle proportions on the local highway network have been calculated using June 2022 data, this being the latest available, from the DfT's Road Traffic Statistics website[17] for a location (count point 810289) on Goldwell Lane (National Grid Reference ('NGR') 606634, 137468), which recorded heavy vehicle volumes manually and therefore more accurately.

13.4.38 Traffic data for the A20 Hythe Road has also been obtained from the DfT's Road Traffic Statistics website[23]. The most appropriate data for use is from a 2015 manual count factored by the DfT to 2019 for a count site near Hatch Park (count point 36252, NGR 606220, 139898). The data used from both DfT count sites are included in **ES Volume 4, Appendix 13.3: Traffic Survey Data (Doc Ref. 5.4)**. The

data available from the DfT count site (36252) on the A20 Hythe Road has been reviewed and the data factored by DfT to 2019 remains the most recent and suitable data available for use. There is another count site further south-east on the A20 Hythe Road however, its original survey was undertaken in 2020 and may therefore have been influenced by the Covid-19 pandemic and as such was not considered appropriate for use.

13.4.39 In order to further consider the suitability of use of the data from the DfT count site on the A20 Hythe Road, in acknowledgement of the data being close to five years old and having not been updated by the DfT, a supplementary ATC was undertaken in the same location for a 7-day period from 14 November 2023. The survey was undertaken by Paul Castle Associates (formerly 360TSL). The full survey data is included in **Appendix 13.3: Traffic Survey Data (Doc Ref. 5.4)**.

13.4.40 A degree of variation would be expected between any two sets of survey data due to many factors including seasonality, weather, accidents, roadworks, congestion etc. as well as the typical daily variation in traffic flow which is commonly accepted to be equivalent to up to 10%. However, the 2023 and 2019 data were found to be closely comparable, despite this and a difference of almost five years including the potential influence of the Covid-19 pandemic. Northbound flows were found to be almost identical for all time periods considered. There was slightly greater variation in the southbound flows, with the 2023 flows being slightly higher, though the level of variation in two-way traffic flow was no greater than 8.5% in the peak hours and 2.8% across the 5-day 12-hours. Such differences will reduce with the addition of background traffic growth detailed in the following section 'Future Baseline Traffic Data'. Use of the 2019 data therefore remains valid for assessment purposes.

Future Baseline Traffic Data

13.4.41 Construction of the Project is anticipated to commence in 2026 and span a period of 12 months. Peak construction periods are expected to occur in 2026; this has therefore been assumed as the future baseline year for assessment purposes.

13.4.42 Current baseline traffic data, obtained from the ATC surveys and DfT count sites, has been factored to the future baseline year of 2026 using the DfT's Trip End Model Presentation Program ('TEMPro') software version 8.1 for light vehicles (cars, vans and other LGVs) and National Road Traffic Projections ('NRTP') (formerly known as Road Traffic Forecasts ('RTF')) factors for heavy vehicles (HGVs, buses and coaches).

13.4.43 TEMPro version 8.1 is the current version of the software at the time of this assessment, superseding version 7.2 which was used in the PEIR stage assessment. TEMPro allows different growth factors to be applied at the middle layer super output area ('MSOA') level. The assessment presented in the PEIR used the TEMPro MSOA Ashford 010 which included the entirety of the study area. However, in order to better consider traffic growth on the A20 Hythe Road associated with committed developments and planned growth beyond the study area, particularly in the Kingsnorth, Willesborough and Cheeseman's Green areas of Ashford and in the Sellindge and Hythe areas, the TEMPro MSOAs Ashford 006 and Shepway 009 have been combined with Ashford 010 to calculate average

growth for the three areas. Ashford 010 has been applied to local links, i.e. Station Road, Goldwell Lane and Roman Road given the local function of these roads as opposed to the more strategic function of the A20 Hythe Road. Whilst this is a departure from the methodology presented in the PEIR, it is a standard methodology and allows for a more accurate future baseline to be calculated.

13.4.44 NRTP factors from December 2022 supersede the RTF factors from 2018 used in the PEIR. Factors for the South East region have been applied to heavy vehicles.

13.4.45 A summary of the traffic growth factors applied to the roads in the study area is provided in **Table 13.6**. The factors for the A20 Hythe Road are from a base year of 2019 and are for 'A' roads, while the factors for the local roads (not 'A' classified) are from a base year of 2022 and are for 'minor' roads. The DfT's Core Scenario (which is representative of standard predicted growth levels) has been used to calculate both the TEMPro and NRTP growth.

Table 13.6: Future Baseline Growth Factors

User Class:	TEMPro (Cars/LGVs)		NRTP (HGVs)	
Road Type (Base Year)	A Roads (2019)	Minor Roads (2022)	A Roads (2019)	Minor Roads (2022)
Base Year:	2019	2022	2019	2022
Forecast Year:	2026	2026	2026	2026
AM	1.0455	1.0291	1.0176	1.0053
PM	1.0448	1.0284		
Saturday	-	1.0300		
Average Weekday	1.0473	1.0297		
Average Day	1.0476	1.0298		

13.4.46 The National Trip End Model ('NTEM') forecasts within TEMPro include three main elements of traffic growth: household related growth, job related growth and background growth (population change, car availability etc.). No adjustments have been made to these growth levels which should serve as a suitable proxy for traffic growth caused by local committed developments and allocations beyond the local study area that have not been explicitly modelled. There will however be a very small level of double-counting the growth on the local roads to a level which is insignificant and less than the typical daily variation in traffic flows.

13.4.47 The future baseline traffic data is provided in **Section 13.5** and **ES Volume 4, Appendix 13.4: Summary of Traffic Data (Doc Ref. 5.4)**. Further details of the development schemes explicitly modelled in order to consider the cumulative effects are detailed under **Section 13.10: Cumulative Effects** of this Chapter.

Baseline PRoW Data

13.4.48 In their EIA Scoping Response (provided in **Table 13.1**), KCC requested that surveys *'should be undertaken to provide baseline data in relation to the use of the PRoWs affected by the Project'*. The methodology and scope of the surveys was agreed with KCC during the virtual meeting on 13 June 2022, details of which are summarised in **Table 13.2**.

13.4.49 360TSL was commissioned to record the number of PRoW users on the network within the study area. High-definition CCTV cameras were mounted to suitable fixing points such as telegraph poles, fences and trees facing the paths in question. The cameras continuously recorded footage 24-hours a day for a 7-day period. Experienced staff from the survey company then watched the footage and tabulated the number of users, also noting the direction of travel to provide further context and detail.

13.4.50 The surveys captured what would reasonably be expected to be the highest period of PRoW use, being from midday Tuesday 23 August 2022 to midnight on Tuesday 30 August 2022 (7.5 days were recorded), and therefore included the August Bank Holiday weekend. As the PRoW network is relatively rural, rather than being paths regularly used by commuters, the August Bank Holiday weekend should have seen the highest possible number of users, with the majority using it predominantly for leisure use. The weather during the surveys was particularly pleasant but avoided the amber extreme heat warnings which had been in place during the week prior to the survey period. The survey results should therefore be considered to represent a worst case in terms of the number of users. The number of users per day throughout the year is likely to be lower than those recorded, particularly in autumn and winter months.

13.4.51 Eight survey locations were identified and agreed with KCC's PRoW Officer via email on 8 August 2022 prior to the surveys being undertaken. The locations are shown on **ES Volume 3, Figure 13.2: PRoW Survey Locations & Average Daily Trips (Doc Ref. 5.3)**. The locations were chosen to understand the usage in areas that could potentially be impacted by the Project, either due to potential improvement works to the PRoWs as part of the Project, potential diversions that may be required and proximity to potential construction access points. The results of the surveys were also used to inform PRoW enhancements proposed as part of the Project. The PRoW survey results are summarised in the **Section 13.5** under 'PRoW Usage Survey Data'.

Personal Injury Collision Data

13.4.52 A highway safety review has been undertaken across the highway study area using up-to-date available PIC data purchased from KCC covering the period of 1 April 2017 to 31 March 2023. This includes an additional year (i.e. 2023) from that included in the PEIR.

13.4.53 Plans provided by KCC showing the study area and the locations of the reported accidents are provided in **ES Volume 4, Appendix 13.5: Accident Data and Plots (Doc Ref. 5.4)** along with the accident reports.

Identifying Likely Significant Effects

Location of Effects

13.4.54 The 2023 IEMA Guidelines set out two rules to identify locations at which consideration of transport impacts should be considered for likely significant effects. As such, the assessment should:

Rule 1: 'Include highway links where traffic flows will increase by more than 30% (or the number of heavy goods vehicles will increase by more than 30%)'; and

Rule 2: 'Include highway links of high sensitivity where traffic flows have increased by 10% or more.'

13.4.55 The 30% threshold traditionally relates to a level at which people may perceive change and there may therefore be an effect, although increases above this level do not necessarily mean that there is a significant impact, only that further consideration is required. For changes in traffic below these levels the 2023 IEMA Guidelines suggest the significance of the effects can be stated to be low or insignificant and further detailed assessments are not required.

13.4.56 Increases in traffic flows of less than 10% are accepted within the 2023 IEMA Guidelines as having *'no discernible environmental impact'* (paragraph 2.18) which aligns with a negligible (very low) impact as daily variance in traffic flows can be of equal magnitude, unless there are sensitive geographic locations adjacent to links within the study area. Examples of such sensitive geographic locations given within the Guidelines include locations with concentrations of sensitive and/or vulnerable users or groups like hospitals, places of worship and schools, along with retail areas, recreational areas, tourist attractions, roads or junctions with road safety concerns or collision clusters and roads or junctions that are at or over capacity. People at home and people at work are also listed as sensitive geographic locations but clearly many roads in urban and semi-urban areas will pass people's homes and workplace so we will consider such impact more subjectively.

13.4.57 The 2023 IEMA Guidelines also note that it would not normally be appropriate to consider links where flows have changed by less than 10%, unless there are *'significant changes in the composition of traffic'*, such as a significant increase in the number of heavy vehicles.

13.4.58 Sensitive geographic locations will be treated as 'sensitive receptors' which are detailed later in this Chapter.

13.4.59 The 2023 IEMA Guidelines also make reference to 'sensitive areas' as defined by the EIA Regulations which include SSSIs and AONBs (now National Landscapes) but it is noted that there are none within the highway study area.

13.4.60 It is acknowledged in KCC Highways' scoping opinion response (provided in **Table 13.1**) that concern was expressed with the proposed approach to apply the 'more than 30%' threshold. KCC recommended that, rather than working to a fixed threshold, the Applicant should engage with KCC regarding the issue of 'conflicting

traffic in detail'. The percentage uplift on the future baseline traffic conditions associated with the construction traffic generated by the Project has been presented in this Chapter, as it is required to quantify the impact numerically in adherence with 2023 IEMA Guidelines. However, a more qualitative impact assessment based on professional judgement is also presented. Percentage impact has been considered but not in isolation.

Construction

13.4.61 The assessment considers the potential for significant effects in relation to the construction stage of the Project on the aspects listed at **Table 13.5**.

13.4.62 The effects within each category have been quantified in line with the 2023 IEMA Guidelines, or the 1993 IEMA Guidelines where they have not been superseded, with the 2023 IEMA Guidelines stating as such for several categories. Where it is not possible to fully quantify the impact in certain categories, qualitative analysis based on professional judgement has been provided as appropriate, with the 2023 IEMA Guidelines permitting the competent expert to do so. Further details of the criteria by which the significance of effects have been judged are provided below.

Assessment Categories

13.4.63 Definitions of each 2023 IEMA Guidelines category included in the scope is provided below together with an explanation of each.

- **Severance of communities** – Severance is defined by the 2023 IEMA Guidelines as the '*perceived division that can occur within a community when it becomes separated by major transport infrastructure. The term is used to describe a complex series of factors that separate people from places and other people. Severance may result from the difficulty of crossing a heavily trafficked road or a physical barrier created by infrastructure'. It is acknowledged that the 'measurement and prediction of severance is extremely difficult. The correlation between the extent of severance and the physical barrier of a road is not clear…'*. The 2023 IEMA Guidelines reference the 30% (slight), 60% (moderate) and 90% (substantial) thresholds from the 1993 IEMA Guidelines and state that they have not been superseded and are established through planning case law. Severance of communities has therefore been considered from both a quantifiable approach using said threshold and a qualitative approach in terms of instances or levels of severance that the Project may bring.
- **Road vehicle driver delay and passenger delay** - The 2023 IEMA Guidelines identify points on the highway network where delay can occur, including at site accesses where there will be additional turning movements, on roads passing the site as a result of additional traffic and additional parked cars, at junctions and at side roads where increased main roads flow may make turning movements more difficult. Junction capacity assessment software is referenced as being a tool that can quantify delay, however standard practice, stemming from DfT guidance, suggests that use of such software should only need to be considered where peak hour flows are in excess of 30 trips which is not the case for

this Project as detailed in **Section 13.7** of this Chapter. The aforementioned 30%, 60% and 90% thresholds are commonly applied to consider delay and have also been used in this assessment to help quantify the magnitude of impact but are also supplemented by use of alternative quantifiable tools where possible along with qualitative consideration.

- **Non-motorised user delay and amenity** – This assessment considers impacts on non-motorised users of public highway in terms of delay and severance. Impacts on the leisure / amenity value of the PRoW network that would be affected by the Project are assessed within **ES Volume 2, Chapter 12: Socio-economics (Doc Ref. 5.2)**. Whilst this category applies to all non-motorised users, the 2023 IEMA Guidelines consider the assessment of pedestrian delay as a proxy for the delay that cyclists and horse-riders may experience. The 2023 IEMA Guidelines state *'Changes in the volume, composition or speed of traffic may affect the ability of people to cross roads. In general, increases in traffic levels are likely to lead to greater increases in delay. Delays will also depend on the general level of pedestrian activity, visibility and general physical conditions of the development site'.* The 2023 IEMA Guidelines recognise that pedestrian delay and severance are closely related, as such, the 30%, 60% and 90% thresholds have been applied with supporting qualitative analysis.
- **Fear and intimidation on and by road users** — The 2023 IEMA Guidelines state that the extent of fear and intimidation is dependent on: *'the total volume of traffic; the heavy vehicle composition; the speed these vehicles are passing; the proximity of traffic to people – and/or the feeling of the inherent lack of protection created by factors such as a narrow pavement median, a narrow path or a constraint (such as a wall or fence) preventing people stepping further away from moving vehicles'.* It is recognised that there are no commonly agreed thresholds for assessment and the 2023 IEMA Guidelines call for the *'need for judgement to be exercised in determining the degree of fear and intimidation. Special consideration should be given to areas where there are likely to be particular problems'.* The aforementioned thresholds have been used to help quantify the magnitude of impact though this has been supplemented with qualitative analysis.
- **Road user and pedestrian safety** - The advice suggested in the 2023 IEMA Guidelines for the consideration of road safety aligns with the traditional Transport Assessment/Statement method of reviewing PIC records to identify clusters of accidents and causation factors. Accident frequencies and severities do not necessarily correlate with increases in traffic flow, however the aforementioned thresholds in conjunction with qualitative analysis have been considered in the absence of definitive magnitude of impact guidance.
- **Dangerous/hazardous and large/abnormal loads** – The 2023 IEMA Guidelines suggest that a risk or catastrophe analysis should be undertaken where the number of dangerous/hazardous/large/abnormal loads is considered to be significant. All but two deliveries (i.e., transformer units) will be made by vehicles that are commonplace on the local roads

and no dangerous/hazardous loads are forecast. As such, a risk/catastrophe analysis is not required and the impact of the two abnormal loads forecast is considered qualitatively.

13.4.64 The assessment assumes that construction work will commence in 2026 and that will be completed in a period of 12 months, with the peak of construction activity likely to occur in the final six months of construction. In order to provide a robust assessment of a worst case programme it has been assumed that the Project would be bult out as a single phase.

13.4.65 The approach is considered a reasonable worst case assessment, which is based on construction periods and assumptions that would generate the highest number of peak hour and daily vehicle trips on the local network. Should the construction period be extended, then the impact on peak hour and daily flows would then be reduced across the construction period.

13.4.66 Details of the baseline and forecast trips during the construction stage are provided within **ES Volume 4, Appendix 13.4: Summary of Traffic Data (Doc Ref. 5.4)**. **Tables 13.11** and **Table 13.12** of this Chapter present the levels of traffic predicted during the average construction worker period (i.e. 132 workers) and a peak construction worker period (i.e. 199 workers), respectively.

13.4.67 Junction modelling has not been undertaken for the SRN as the Project is not expected to have any significant impacts on this part of the network including the M20. Furthermore, the level of construction traffic forecast to utilise M20 Junction 10a is less than 30 two-way trips per hour, above which is the threshold that NH typically request detailed junction capacity assessments for.

Cumulative Effects

13.4.68 With reference to **ES Volume 4, Appendix 6.1: Long List of Cumulative Schemes (Doc Ref. 5.4)**, the scale and location of the cumulative schemes from a traffic perspective have been considered in relation to the study area, which forms the zone of influence for this assessment.

13.4.69 Many of the cumulative schemes are unlikely to add significant levels of traffic to the study area due to a combination of their scale, distance from the study area, and/or the alternative routes available. The use of unadjusted TEMPro and NRTP based growth should serve as a suitable proxy for this level of growth within the study area. Whilst this means that these cumulative schemes form part of the future baseline rather than the cumulative development scenario, this is a standard methodology which is also acknowledged by the 2023 IEMA Guidelines, paragraph 2.29 which states:

'Derived forecast traffic growth (e.g. TEMPro) should be utilised to derive future year baseline traffic conditions. However, discrete projects within the agreed study area that are existing, approved or likely to come forward (where sufficient certainty and relevant information about the project exists) should not be added to the baseline scenario and should be considered in the cumulative scenario.'

13.4.70 The following projects have been identified from **ES Volume 4, Appendix 6.1: Long List of Cumulative Schemes (Doc Ref. 5.4)** and **ES Volume 3, Figures 6.1 to 6.3: Cumulative Schemes (Doc Ref. 5.3)** within the study area that are 'explicitly modelled' in the cumulative scenario. Explicitly modelled refers to the addition of traffic flows that represent these projects to the 2026 Future Baseline to form the cumulative traffic flows, which should not be confused with the 2026 Future Baseline traffic flows which are formed by the application of DfT based levels of traffic growth detailed later in this Chapter. These schemes have been included primarily due to their proximity to the Site and/or the potential for their construction or operational phases (indicated in brackets) to overlap with the construction phase of the Project in 2026:

- ID No. 3: Pivot Power Battery Storage;
- ID No. 4: Walsh Power Condenser Project;
- ID No. 7: Land north of 1 Church View, Aldington, Kent;
- ID No. 8: Land south west of Goldwell Court, Goldwell Lane; and
- ID No. 9: East Stour Solar Farm.

13.4.71 Traffic flow information for the above cumulative schemes has been sourced from the respective supporting traffic and transport related documents which accompany the planning applications. A reasonable worst case assumption has been applied that all developments will be generating traffic during the construction phase of the Project, however there will likely only be limited overlap with some of these schemes.

13.4.72 Some of the traffic generated by Cumulative Scheme ID No. 7 and ID No. 8 will share all sections of the construction traffic route (with the exception of use of the internal haulage road) with the Project's construction traffic, while the other three (i.e., ID No. 3/4/9) will only use the A20 Hythe Road and Church Lane. The traffic forecast by each cumulative scheme has been assigned to the study area based on the information contained in their relative assessments where available. Assumptions have been applied to account for any missing information.

13.4.73 Whilst Cumulative Scheme ID No. 7 and ID No. 8 are located adjacent to the Goldwell Lane access, the scope for potential conflict with construction vehicles will be limited given their relatively small scale, i.e. 6 and 11 dwellings respectively. It is considered that potential conflicts can be effectively addressed through the **Outline CTMP (Doc Ref. 7.5)**, which makes provision for co-ordination with other development projects.

Otterpool Park

13.4.74 Otterpool Park (Cumulative Scheme ID No. 10) is a large scale project within approximately 1km of the Site at its nearest point that is due to begin its first stage of construction in 2025. However, the Transport Assessment contained within the Environmental Statement[1] prepared for the planning application confirms that the

[1] Planning Application Y19/0257/FH https://folkestonehythedc.my.site.com/pr/s/planning-application/a1n2o000002zIzwAAE/y190257fh?tabset-185b1=2 Accessed May 2024

highway access strategy (for both construction and operational phase) is based on the main access to Otterpool Park being from Junction 11 of the M20 via the A20, and therefore there is not considered to be any significant cumulative impact.

13.4.75 As such, the Otterpool Park Development is scoped out of further consideration within the cumulative assessment.

Determining Effect Significance

13.4.76 The significance of traffic and access effects are determined by the magnitude of impact on the sensitivity of the receptor in line with standard EIA methodology (see **ES Volume 2, Chapter 6: EIA Methodology (Doc Ref. 5.2)**). In order to determine effect significance on the six categories detailed above, the IEMA Guidelines have been used.

Sensitivity of Receptor

13.4.77 The 2023 IEMA Guidelines, at paragraph 1.30, provide the following examples of sensitive receptors:

- People at home;
- People at work;
- Sensitive and/or vulnerable groups (including young age; older age; income; health status; social disadvantage; and access and geographic factors);
- Locations with concentrations of vulnerable users (e.g. hospitals, places of worship, schools);
- Retail areas;
- Recreational areas;
- Tourist attractions;
- Collision clusters and routes with road safety concerns; and
- Junctions and highway links at (or over) capacity.

13.4.78 The 2023 IEMA Guidelines do not classify the sensitivity of the receptors and provide limited examples. They also do not include reference to roads without footways which are commonplace in the study area. It is stated in the document that the *'Guidelines are intended to complement professional judgement and the experience of trained and competent assessors',* as such there is scope for the assessor to tailor their methodology appropriately. Receptor sensitivity classifications have therefore been applied from the 1993 IEMA Guidelines which were referenced as part of the **ES Volume 4, Appendix 1.1: EIA Scoping Report (Doc Ref. 5.4)**, as these are considered to be appropriate for the study area. Elements from the 2023 IEMA Guidelines have also been included, specifically people at home and people at work which have been classified as residential areas with limited or no footway provision and workplaces. Bus routes have also been included. The receptor sensitivity descriptors are detailed in **Table 13.7**. It should be noted that the 'negligible', 'minor', 'moderate' and 'substantial' receptor value

terminology from the 1993 IEMA Guidelines has been replaced with 'very low', 'low', 'medium' and 'high' respectively based on the 2023 IEMA Guidelines.

Table 13.7: Receptor Sensitivity Descriptors

Receptor Value (Sensitivity)	Receptor Type
High	Receptors of greatest sensitivity to traffic flows: schools, colleges, playgrounds, accident black spots, retirement homes, roads without footways that are used by pedestrians.
Medium	Traffic flow sensitivity receptors: congested junctions, doctors' surgeries, hospitals, shopping areas with roadside frontage, roads with narrow footways, recreation facilities, residential areas with limited or no footway provision, workplaces and bus routes.
Low	Receptors with some sensitivity to traffic flow: places of worship, public open space, listed buildings, tourist attractions and residential areas with adequate footway provision.
Very Low	Receptors with low sensitivity to traffic flows: undeveloped land, agricultural land, strategic roads including trunk roads and motorways with little or no pedestrian activity.

13.4.79 Specially sensitive areas are treated as receptors of 'high' or 'medium' sensitivity, while all other areas are treated as receptors of 'low' or 'very low' sensitivity.

13.4.80 Non-motorised users ('NMUs'), including public transport users, can also be considered to be sensitive receptors but unlike the above receptor types, do not have fixed locations. The impact on NMUs will be given full consideration as part of the assessment categories detailed above, particularly where levels of NMUs may be concentrated in the study area such as in proximity to residential and employment areas.

13.4.81 The receptor value of sensitive receptors that are accessed from or lie adjacent to links in the study area will determine the sensitivity of the link. Where more than one sensitive receptor in the Study Area is accessed from, or lies adjacent to, a single link, the receptor of the highest value will determine the sensitivity of the link.

Magnitude of Impact

13.4.82 The 2023 IEMA Guidelines states that the magnitude of each impact should be determined as the predicted deviation from the baseline conditions. **Table 13.8** summarises the criteria that have been used to determine magnitude of impacts.

Table 13.8: Magnitude of Impact Descriptors

2023 IEMA Guidelines Category	Magnitude of Impact			
	Very Low	Low	Medium	High
Severance of communities Road vehicle driver delay and passenger delay Non-motorised user delay and amenity Fear and intimidation on and by road user Road user and pedestrian safety	Change in total traffic or HGV flows of less than 30%	Change in total traffic or HGV flows of 30% to 60%	Change in total traffic or HGV flows of more than 60% to 90%	Change in total traffic or HGV flows over 90%
Dangerous/hazardous and large/abnormal loads	This will be assessed on a case by case basis, subject to the sensitivity of the receptor			

Assessing Significance of Effect

13.4.83 The significance of the effect is judged on the relationship of the magnitude of impact to the assessed sensitivity of the receptor and the associated link in line with the matrix provided in **ES Volume 2, Chapter 6: EIA Methodology (Doc Ref. 5.2)** and represented below for ease of reference as **Table 13.9**.

Table 13.9: Significance Criteria

Sensitivity / Value of Receptor	Magnitude of Impact			
	High	Medium	Low	Very Low
High	Major	Major	Moderate	Minor
Medium	Major	Moderate	Minor	Negligible
Low	Moderate	Minor	Negligible	Negligible
Very Low	Minor	Negligible	Negligible	Negligible

13.4.84 The application of the criteria has been based on professional judgement, both in terms of the magnitude of the impact, which has been quantified where possible, and the sensitivity of the receptor.

Limitations and Assumptions

13.4.85 The assessment is informed by the **Illustrative Project Layout (Book 2: Illustrative Project Drawings - Not for Approval) (Doc Ref. 2.6)** and construction information included in **ES Volume 2, Chapter 3: Project Description (Doc Ref. 5.2)** of the ES.

13.4.86 The **Design Principles (Doc Ref. 7.5), Works Plans (Doc Ref. 2.3)** and **Streets, Rights of Way and Access Plans (Doc Ref. 2.4)** have been considered and the assessment of construction traffic is based on reasonable worst case parameters in terms of daily construction staff and HGVs during the peak phase of construction. The approach and scope for the assessment has also been agreed with the local highway authorities at PEIR stage, including with respect to vehicular access, routing and mitigation. An **Outline CTMP (Doc Ref. 7.9)** has also been prepared which informs the assessment as Embedded Mitigation.

13.4.87 The following assumptions and limitations apply to the assessment:

- A schedule of forecast construction traffic trips is provided in **Section 13.7** 'Forecast Construction Traffic Data' of this Chapter. In order to enable a worst case assessment to be undertaken for the purposes of this ES Chapter, an overestimate, based on professional judgment, experience and data provided by the Applicant has been assessed.
- The level of construction traffic forecast is considered to be robust and representative of a reasonable worst case taking into account all proposed components of the Project and construction activities. The analysis for the 2023 Statutory Consultation assumed that Fields 26-29 would include PV panels and Inverter Stations but these have now been removed. Other adjustments have been made to the Project since the 2023 Statutory Consultation which have been reflected in the construction traffic trips.
- The construction traffic figures presented are based on the number of trips to/from the Primary Site Access off Station Road. The figures presented for the crossing points and Goldwell Lane do not take into account a likely reduction in trips following unloading from the road vehicles onto the trailers that will be pulled by tractor to the South Western, Central and South Eastern Areas. It is likely that equipment from more than one road trip will be condensed onto a single trailer trip that will travel via the internal haulage road, with some of these trips travelling via Goldwell Lane to the South Eastern Area. Not accounting for such a condensing of trips provides a conservative worst case assessment.
- Following 2022 Statutory Consultation feedback from KCC, the Applicant has committed to the use of escort vehicles to help HGVs safely navigate the bend on Goldwell Lane to and from Fields 20-22. A worst case approach of two escort vehicles per day is therefore included for a 5-month construction period of Fields 20-22, with two additional trips per HGV delivery added to the Goldwell Lane construction traffic figures.
- Escort vehicles may also be used where there is a crossing between the field accesses and PRoWs. Such vehicles are likely to be quad bikes or

motorcycles and will remain on-Site for the duration of construction. As the figures are likely to be low, the figures associated with light vehicles account for them.

- Construction is expected to commence in 2026 with works likely to take place over a 12-month period. The peak of construction activity will likely occur in the final 6-months of construction. 2026 has been treated as the future baseline as works are likely to mainly take place in this year.
- A 'worker peak' scenario has been assessed as a worst case within this Chapter. This assumes that up to 199 workers will be on-Site.
- The Applicant has advised that up to two abnormal loads comprising transformers for the Project Substation will be required and no hazardous loads are required. A single abnormal load is most likely, however up to two abnormal loads are being considered in this assessment as a worst case. The abnormal loads are due to weight of transformers rather than dimensions. The same number of abnormal load trips to remove the transformers are forecast in the decommissioning phase.
- It has been assumed that 75% of staff will be transported to/from the Site by mini-buses arranged by the Applicant with 13 seats on average. The mini-bus passengers will be picked-up/dropped-off at convenient locations to be determined pre-construction, but are likely to include local town centres and train stations such as Ashford and Ashford International.
- Of the staff who will arrive by car or van, a 1.5 person per car/van occupancy level has been applied. The majority of staff will be local, primarily living within Kent, and those driving to/from the Site will predominantly access the construction traffic route via M20 Junction 10a. Therefore all construction traffic has been assigned, for assessment purposes, via M20 Junction 10a.
- Existing traffic flow data for the A20 Hythe Road has been sourced from a DfT count site. This data is available for weekdays only and not weekends but this is not a material limitation.
- One of the baseline traffic data sources used is data from ATCs. This is the most commonly accepted industry standard method for counting traffic on roads. ATCs consist of two pneumatic tubes temporarily installed across a road, connected to a hardware unit. As vehicles drive over the tubes, the equipment records each movement.
- The ATC equipment also attempts to classify vehicles using their axle spacing. However, its ability to do this accurately is known to be limited. It generally overestimates heavy vehicle movements due to a number of reasons, such as misinterpreting trailers, long wheelbase vans and tailgating traffic. The heavy vehicle proportion of total traffic on a typical road would normally be expected to be around 2.5%-5%. The ATCs detailed in this Chapter recorded heavy vehicle proportions of total traffic in the region of 20%, which does not align with observations during the visits to the Site, including local roads, on Monday 4 July 2022, 29 September 2022 and 28 February 2024. As such, the DfT count site on Goldwell Lane (DfT reference 810289) has been used to calculate

indicative heavy vehicle proportions for each time period from June 2022 and applied to the ATC total vehicle counts. The PM peak heavy vehicle proportion has been used as a proxy for Saturdays. The DfT count is more accurate than the ATCs as it was undertaken manually.

- The baseline PRoW data has been collected for one week of August in 2022 which includes the August Bank Holiday. As the data is for one week during the summer, it is not representative of all times of the year, however given the predominant usage of the PRoWs is for leisure activities the survey should have captured the busiest period and represent a worst case in terms of the highest number of local PRoW users.
- Sensitive receptors, other than sensitive links such as bus routes, roads used by pedestrians without footpaths, PRoW etc., have been identified and used to determine link sensitivity where they are adjacent to and accessed via the construction route, whereby construction traffic would have the potential to cause an impact. Nearby receptors that are beyond the construction traffic route, such as Aldington village centre, have been excluded for this reason. It is accepted that construction traffic may have the potential to impact on journeys to and from these receptors but other routes are available and as such have a lesser potential to be impacted on than receptors on the construction traffic route.

Port of Entry

13.4.88 The port of entry for Project components sourced from overseas is yet to be determined. However, the Applicant has identified the following ports as being suitable. They are listed in order of distance to the Site with the main construction traffic route also listed:

- Folkestone: 29km M20 south-east;
- Dover: 37km M20 south-east;
- Newhaven: 93km A2070-A259-A27-A26;
- London (Gravesend): 109km A20 north-west;
- Felixstowe: 201km A20 north-west-M25-A12-A14; and
- Southampton:216km M20 north-west-M25-M3-M271.

13.4.89 All ports and their surrounding highway networks regularly accommodate HGVs and abnormal loads.

13.5 Baseline Conditions

13.5.1 This section describes the existing and future baseline environmental conditions for the study area with reference to the strategic and local highway network, walking, cycling, equestrian and public transport facilities.

A20 Hythe Road and M20 Motorway

13.5.2 The A20 Hythe Road is a single carriageway road which largely runs parallel to the M20 motorway north of the Site, connecting Hythe to the south-east to Ashford to

the north-west and then on to Maidstone further north-west. More locally to the Site, the section of the A20 which forms part of the construction traffic route shown on **ES Volume 3, Figure 13.1: Construction Traffic Route and Traffic Data Location Plan (Doc Ref. 5.3)** runs from M20 motorway Junction 10a to the junction with Station Road located approximately 1.3km north of the Primary Site Access. The M20 connects the ports of Folkestone and Dover (via the trunked section of the A20 east of Folkestone) to the south-east to the M26 and M25 London Orbital to the north-west. For the avoidance of doubt, the section of the A20 Hythe Road that forms part of the construction traffic route is not a trunk road and is the responsibility of KCC.

13.5.3 M20 Junction 10a opened in late 2019 and is a grade separated roundabout with signal controlled off-slips built to accommodate traffic from planned growth and alleviate congestion at junction 10. The junction was designed to Design Manual for Roads and Bridges ('DMRB') standards, with lane allocation and spiral markings. A single lane exit is provided for the A20 Hythe Road south-eastbound, while the A20 Hythe Road approach to the roundabout has a single lane plus flare.

13.5.4 The junction on the A20 Hythe Road with C609 Station Road (which leads to the Primary Site Access) is a priority-controlled crossroads, with the A20 Hythe Road forming the north-west and south-east major arms, Station Road forming the south-west minor arm and Church Road forming the north-east minor arm. The crossroads benefits from ghost island right turn lanes for movements towards both side arms. The ghost island tapers accord with DMRB standards for the prevailing 60mph speed limit and illuminated traffic islands with bollards are present in the tapers to make drivers more aware of the presence of the junction. The north western approach to the A20 Hythe Road/Station Road junction benefits from crossroads warning signage on high visibility yellow backgrounds and added 'REDUCE SPEED NOW' advisory signage. A good level of forward visibility is available for the right turn to Station Road, while wide verges on the south western side aid visibility for turning traffic from Station Road. Reflective bollards are also present on the Station Road corner.

13.5.5 The section of the A20 Hythe Road that forms part of the Project construction traffic route is largely rural in nature but it does pass a number of sensitive receptors, specifically a roadside café (Blue and White Café), The Caldecott School and the Grade II listed Hatch Park Registered Park and Garden and Hatch Lodge. A continuous footway is provided on the northern side of the road.

Station Road/Goldwell Lane

13.5.6 Station Road/Goldwell Lane is a 'C' classified local distributor road ('C609'). At its southern extent, it links with Roman Road in Aldington, passing through Stonestreet Green. Its northern extent links with the A20 Hythe Road near Smeeth. The road is known as Goldwell Lane between Roman Road and Calleywell Lane. It is known as Station Road between Calleywell Lane and the A20 Hythe Road. Station Road bridges both the M20 motorway and High Speed 1 ('HS1')/ Channel Tunnel Rail Link and the Kent Route between Ashford and Westenhanger (operated by Network Rail) railway lines.

13.5.7 The road is relatively rural in nature over the majority of its length, providing access to farm properties, a small number of residential properties located primarily on the Goldwell Lane section, The Caldecott School close to the A20 Hythe Road junction and the businesses at Evegate Business Park. The Grade II* listed Evegate Manor is located adjacent to the Evegate Business Park.

13.5.8 Two lower category distributor roads take access from Station Road/Goldwell Lane to Roman/Bank Road. These comprise Calleywell Lane, which runs largely parallel to Goldwell Lane, and Bower Road (to the north of the Site). Both junctions take the form of simple priority-controlled ('T') junctions, with both roads forming the minor arms, i.e. giving-way to Station Road/Goldwell Lane. The aforementioned properties have traditional driveway accesses with the main road, except for two small residential estates, Church View and Goldwell Close off Goldwell Lane, which have minor residential access roads with simple priority-controlled junctions.

13.5.9 The road is a two-way single carriageway, with a single lane in each direction. It is primarily subject to the national speed limit (60mph for cars and motorcycles), except for a short section on the approach to Roman Road. The road varies in width, with several pinch points and bends. Grass verges of varying width are present on both sides of the carriageway. Footways are not present in the verges.

13.5.10 A circa 90° bend is located on Goldwell Lane approximately 210m east of the junction with Calleywell Lane. Woodleas Farm, which operates a waste management business takes access from the outside of the bend, while an access to Woodleas Camping and Caravan Site is located approximately 70m south of the bend.

13.5.11 The Central Area of the Site is bisected by Station Road with the smaller half in terms of PV panel numbers located on the eastern side in Fields 23 to 25. A section of Station Road in the vicinity of the Primary Site Access is within the Site as is a section of Station Road/Goldwell Lane between Fields 19/23 and the Goldwell Lane access to the South Eastern Area.

Roman Road/Bank Road

13.5.12 Roman Road/Bank Road is the main road which runs through Aldington, connecting the village with the small settlement of Cheeseman's Green to the north-west and to the B2067 towards Lympne to the south-east.

13.5.13 The road is in two distinct halves either side of its junction with Frith Road to the north of the village. The road is 'C' classified to the south-east of this junction, and predominantly residential in nature in proximity to Aldington, and unclassified to the north-west of Frith Road, where it narrows to a single track. It connects to Laws Lane, which is a narrow single track that connects with Frith Road. Footways are not present on the Roman Road/Bank Road.

13.5.14 The South Western Area is located to the south-west of Roman Road/Bank Road, with the Central Area that fronts Station Road located on the north eastern side of Roman Road/Bank Road. The section of frontage between these two Project areas is within the Site.

13.5.15 Bank Farm takes access from the southern side of the road approximately 400m north-west of the junction with Frith Road. This access is included within the Site (adjacent to Field 9).

Laws Lane

13.5.16 Laws Lane is a narrow county lane generally only wide enough for one-way movements though wide verges and field accesses provide passing places. It runs generally south to north connecting Frith Road to Bank Road and is subject to the national speed limit. The South Western Area spans both sides of the road for an approximate length of 300m between Fields 2 and 3.

Highway Safety Review

13.5.17 Plans provided by KCC showing the study area and the locations of the reported accidents are provided in **ES Volume 4, Appendix 13.5: Accident Data and Plots (Doc Ref. 5.4)** along with the accident reports.

13.5.18 No accidents occurred on the Roman Road/Bank Road section of the study area.

13.5.19 In total, there were 26 reported accidents within the study area and study period, comprising five 'serious' (19%) and 21 'slight' (81%) injury accidents. There were no fatal accidents recorded. The number of accidents reported varies between one and six per year, with no more than one serious accident occurring in any year.

13.5.20 The accidents occurred at various locations across the study area. The below paragraphs group the accidents into geographic locations to aid in the identification of any common causation factors. The causation factors mentioned are those listed in the reports provided by KCC and included in **ES Volume 4, Appendix 13.5: Accident Data and Plots (Doc Ref. 5.4)**. The focus of this analysis has been on the serious accidents as well as the slight accidents that involved HGVs or vulnerable road users (pedestrians, cyclists, horse-riders and motorcyclists).

M20 Motorway Junction 10a

13.5.21 There were five accidents reported at M20 Junction 10a, with one of these accidents resulting in serious injury and the others resulting in slight injury. Two of these accidents are not shown on **ES Volume 4, Appendix 13.5: Accident Data and Plots (Doc Ref. 5.4)** as they occurred on the M20 motorway carriageway and therefore are outside the study area.

13.5.22 The 'serious' accident occurred in August 2021 between a car and motorcycle. The driver of the car initially went to exit the roundabout onto the A2070 with the motorcycle following behind remaining on the roundabout. The car then changed lanes to stay on the roundabout and collided with the motorcyclist.

13.5.23 Two of the four 'slight' accidents involved HGVs though they both occurred on the mainline of M20 motorway and are therefore outside of the study area but were included in the accident search by default. Both accidents involved HGVs changing lanes and colliding with cars, with one of the HGV drivers failing a breath test.

13.5.24 The other two 'slight' accidents involved two cars in each. One was when a driver entered the roundabout without looking properly, the other was when a driver braked on approach to the roundabout but the driver behind failed to anticipate it and collided with the rear of the car.

A20 Hythe Road (between the junction with Station Road and M20 motorway Junction 10a)

13.5.25 Twelve accidents occurred on this circa 3km long section of the A20 Hythe Road. The first of the two serious accidents occurred 10m east of Caldecott House in June 2017. The accident involved two cars travelling in opposite directions, and for an unknown reason, one of the cars veered into the path of the other resulting in a head-on collision.

13.5.26 The second serious accident occurred on a May morning close to M20 Junction 10a when a jogger reportedly ran into traffic without looking and was hit by a car.

13.5.27 Three of the slight accidents involved vulnerable road users. The first in 2017 occurred when a pedestrian, who was using their mobile phone, ran out into the road and was struck by a car at a slow speed. The second in 2018 occurred when a car pulled out of Mersham Le Hatch Business Village without seeing a cyclist and collided with them, knocking the rider off the bicycle. The third in 2022 occurred when a car emerging form a side road collided with a motorcyclist travelling ahead on the A20 Hythe Road.

13.5.28 One accident involved an HGV which had to drive on the verge to try and avoid a car travelling in the opposite direction that strayed onto the wrong side of the road. Despite this, the two vehicles collided.

13.5.29 Three accidents involved LGVs, the first one when the vehicle failed to brake in time, colliding with a car in front, the second when the driver of an LGV driving without a UK license pulled out from Bockham Lane in front of a car, and the third, also at the Bockham Lane junction, when an LGV collided with a car which was indicating to turn.

13.5.30 The other three slight accidents on this section involved two cars in each. The causation factors listed, such as failing to look properly, not keeping to their side of the road and poor indication, suggests that driver error was the main reason for the accidents.

A20 Hythe Road/Station Road Junction

13.5.31 One 'serious' and six 'slight' accidents occurred at this junction. The 'serious' accident occurred on a March evening in 2023 when it was dark with no street lights lit. An HGV emerging from Church Road (northern arm) collided with a car travelling ahead on the A20 Hythe Road. No causation factors are listed but it would appear that the driver of the HGV failed to look properly.

13.5.32 Of the six 'slight' accidents, five were collisions between two cars and one was a collision between a car and a motorcycle.

13.5.33 The accident involving the motorcycle occurred when the motorcyclist was in the act of overtaking two left turning cars, but a car pulled out not seeing the motorcycle and collided with it. The five car vs car collisions appear to have occurred in the act of turning either from or into one of the side roads, with drivers failing to stop in time or misjudging the speed of the other cars.

Goldwell Lane and Station Road (between Church View and the A20 Hythe Road junction)

13.5.34 Only two accidents occurred on this circa 3.5km long road section, with neither occurring at any sections of the Site frontage. The 'serious' accident occurred close to Evegate Business Park (north of the Site) and involved a motorcyclist at night in 2018. As the rider approached the lefthand bend, they applied the brakes after seeing an oncoming vehicle and the motorcycle slid from under the rider who suffered serious injury. There were no other casualties. The conditions were described as dark, with no streetlights in the vicinity.

13.5.35 The 'slight' accident occurred at one of the bends in the vicinity of Evegate Mill in December 2017. An LGV was approaching the bend behind a car. The car braked to give-way to an oncoming car but the LGV failed to stop in time, striking the rear of the car in front, shunting it into the side of the oncoming car resulting in slight injury to its driver.

Accident Summary

13.5.36 The number of accidents does not appear to be unusually high given the extent of the study area and six year study period. No fatal accidents occurred and only five resulted in serious injury. No accidents occurred at the Site frontage.

13.5.37 Seven accidents involved vulnerable road users, two of which appeared to be the fault of pedestrians, one involved a cyclist and the other four involved motorcyclists. Only two accidents in the defined study area involved an HGV, one of which being the result of a car driver error. LGVs were involved in four accidents.

13.5.38 All of the reported accidents would appear to have been the result of driver, rider or pedestrian error.

13.5.39 No locations in the study area are considered to be accident black spots, both through review of the accident data and by virtue of no on-road accident black spot signage. With reference to the 2023 IEMA Guidelines for receptor sensitivity (**Table 13.7** of this Chapter), the absence of accident black spots demonstrates there are no sensitive receptors of high sensitivity with regards to highway safety within the study area.

Site Visit Observations

13.5.40 A Site visit was undertaken between midday and late afternoon on Monday 4 July 2022. During the Site visit, it was observed that the local roads (Goldwell Lane and Station Road between Church View and the A20 Hythe Road junction) were lightly trafficked, with no queues observed. There was some occasional HGV and coach

use. Traffic had to give-way to oncoming traffic on approach to several bends, particularly the two near Evegate Mill due to the narrow width. The A20 Hythe Road was more heavily trafficked as would be expected given its designation as an A-classified road, but turning to and from Station Road was relatively easy with little delay.

13.5.41 Pedestrian activity was very limited in the vicinity of the Site. It was observed that the local PRoW network was very lightly used, with no pedestrian activity witnessed on any of the paths during the Site visit. There was further evidence that many of the paths were rarely used as they were overgrown, often with weeds and brambles, with little sign of recent footfall. Several paths were inaccessible due to the level of vegetation growth, including the BOAT which was completely overgrown.

13.5.42 A second Site visit took place during the morning of Thursday 29 September 2022 which focused on the Bank Farm access. Very little customer activity was witnessed and despite the single track width of Bank Road/Roman Road, the Farm was accessed without having to stop and give-way to oncoming traffic due to the very lightly trafficked nature of the road. Approach visibility to the Farm access and proposed crossing point was reasonable, particularly given the slow speed of the road. Laws Lane was also witnessed during this visit, with traffic flows being similarly very low as per Bank Road/Roman Road. Observations made during the first Site visit regarding the wider Study Area and PRoW use were reaffirmed.

13.5.43 A third Site visit took place during the afternoon of Wednesday 28 February 2024 to confirm no significant changes to the baseline conditions as identified during the previous Site visits. Some horse-riding activity was observed on Goldwell Lane, Roman Road and Laws Lane. The BOAT appeared to have been cleared of vegetation, at least at its northern and southern ends but the poor surfacing meant that it was not navigable for typical motor vehicle traffic and bicycles. Cars were witnessed to be parked in the vicinity of the Roman Road/Goldwell Lane junction associated with school pick-up activity, however this parking did not extend to the Goldwell Lane Access that will be used by the Project.

Current Baseline Traffic Data

13.5.44 A summary of the current baseline traffic data is provided in **ES Volume 4, Appendix 13.4: Summary of Traffic Data, Table 13.3A: Current Baseline Traffic Data Summary (Doc Ref. 5.4)**. The ATC data included in Table 13.3A is from 2022 while the DfT data is from 2015 factored to 2019. The ATC data is valid for assessment purposes with reference to the DfT's TAG Unit M1.2[11]. The DfT data has been validated for use by a supplementary ATC survey undertaken in November 2023. All flows are in numbers of vehicles.

Protected Lanes

13.5.45 There are no Protected Lanes in the study area.

Walking, Cycling and Equestrian Facilities

13.5.46 A fairly extensive PRoW network exists within and in close proximity to the Site as shown in **ES Volume 3, Figure 3.1: Existing Access Network (Doc Ref. 5.3)**. All but one of these PRoW are footpaths with one, AE396, being a BOAT. The footpaths are unmade and unlit, typically consisting of trodden paths across fields. The BOAT is currently overgrown and inaccessible but surfaced.

13.5.47 With the exception of the A20 Hythe Road, which has a footway on one side, the other roads in the study area lack footways meaning that any pedestrians traversing these roads walk in the road or in the verge, though such activity was not witnessed during the Site visits, suggesting that few pedestrians walk along these roads which is logical given their rural nature.

13.5.48 There are no bridleways or cycleways in the study area, likely meaning that any horse-riders and cyclists will need to ride in the road, as observed during the third Site visit. There are no National Cycle Routes ('NCR') in the study area with the Site located approximately halfway in between NCR 2 south of Aldington, and NCR 18 east of Ashford.

PRoW Usage Survey Data

13.5.49 **ES Volume 3, Figure 13.3: PRoW Survey Results - Daily PRoW Trips (Doc Ref. 5.3)** shows the total PRoW trips per day in graphical form. The full survey results are provided in **ES Volume 4, Appendix 13.6: PRoW User Survey Results (Doc Ref. 5.4)**.

13.5.50 From a review of the results, it can be concluded that observations made during the Site visits that the local PRoW network is relatively lightly used are confirmed by the survey data. This is not unexpected given that the PRoW network currently offers limited connectivity between settlements. Fewer than 10 one-way trips per day were observed at six of the survey locations across the 7.5-day survey period. Survey location 3, which arguably offers the greatest connectivity of the local routes as it connects Goldwell Lane to Church Lane, and is the closest PRoW in the study area to Aldington, was the busiest survey location with an average of 26 one-way trips per day'. Whilst it is possible to turn north from this survey location, all recorded trips involved an east-west direction from Goldwell Lane towards Church Lane. The vast majority of trips were return trips, so in most cases, two trips would be made by a single user i.e. an outbound trip and a return trip and many of the users were local dog-walkers rather than longer distance walkers.

13.5.51 Whilst the trip numbers are generally low, the PRoW network offers traffic-free recreational routes and traffic-free alternatives to local roads despite largely being unsurfaced and not easily navigable in all-weather or regularly maintained. Some paths do not appear well maintained.

Public Transport Facilities

13.5.52 The only road in the study area that forms part of a bus route is the A20 Hythe Road with bus stops in the vicinity of Hatch Park served by the hourly number 10/10A service between Ashford and Folkestone and Hythe, Monday to Saturday. The

single daily Monday-Friday 18A service between Ashford and Canterbury also runs via this route.

13.5.53 Aldington is served by the number 125 circular bus service which provides up to six services per day Monday to Friday between Ashford, Mersham and Bonnington. The 125 service also uses the A20 Hythe Road, but for a shorter section than the 10/10A, from M20 Junction 10a to The Street at Mersham, then on to Frith Road before calling at stops outside Aldington Fire Station on Roman Road which are outside of the study area.

13.5.54 The closest train stations to the Site are Westenhanger and Ashford International which are both over 9km from the Primary Site Access which is beyond commonly accepted walking and cycling distance for such trips. Any rail passengers in the Aldington area are therefore likely to drive or take the bus or taxi to access rail services.

Future Baseline

13.5.55 No significant changes to the existing baseline are forecast in the future baseline year (2026) which is relevant to the construction stage assessment. No significant changes to highway infrastructure, PRoW or public transport provision are proposed by others within the study area. The only measurable change to the existing baseline will likely be traffic growth which has been accounted for by use of TEMPro and NRTP factors detailed above.

13.5.56 A summary of the future baseline traffic data, including projected background traffic growth but excluding trips associated with the cumulative schemes, is provided in **ES Volume 4, Appendix 13.4: Summary of Traffic Data, Table 13.3B: Future Baseline (2026) Traffic Data Summary (Doc Ref. 5.4)**.

Summary of Receptors and Sensitivity

13.5.57 **Table 13.10** presents the sensitive receptors identified along the construction traffic route from the M20 Junction to the most south-easterly existing Site access on Goldwell Lane. **ES Volume 3, Figure 13.4: Sensitive Receptor Location Plan (Doc Ref. 5.3)** shows the location of these receptors. The level of sensitivity is based on the sensitivity matrix in **Table 13.5**. Whilst the receptors may be sensitive to changes in traffic levels, it is the adjacent links that carry the traffic to, from or past them, therefore the roads that front or provide access to these receptors have been classified in accordance with the sensitivity matrix.

13.5.58 All receptors are existing with no changes anticipated in the future baseline year.

Table 13.10: Summary of Receptor Sensitivity

Link	Receptor	Sensitivity (Value)
Existing		
A20 Hythe Road between and including M20 Junction 10a and Stock Lane	1. 10/10A, 18A and 125 bus routes	Medium: bus route
	2. Hatch Park & Hatch Lodge	Low: Grade II listed building and Grade II Registered Park and Garden
	3. Blue and White Café	Medium: Small café with roadside frontage on southern carriageway of A20 Hythe Road. Open Daily 7am – 2.30pm
A20 Hythe Road between Stock Lane and Station Road and Station Road between A20 Hythe Road and M20 bridge	4. The Caldecott School	High: School (Special Educational Needs) and residential care fostering families and vulnerable young people
Station Road between M20 bridge and Primary Site Access	5. Evegate Business Park	Medium: Rural business park with office, retail and industrial outlets; Grade II* listed building (Evegate Manor) is adjacent (low)
Goldwell Lane between Calleywell Lane and south of Goldwell Court	6. Goldwell Lane bend, Woodleas Camping and Caravan Site and Woodleas Farm	Medium: Highway constraint (bend), holiday accommodation, working farm, waste collection business and dwelling
	7. Symnells & Walled Forecourt (listed) and neighbouring properties	Medium: Small number of residential/business properties and Grade II listed building (low)
	8. Goldwell (listed) and neighbouring properties	Medium: Small number of residential/business properties and two Grade II listed buildings (low)
Goldwell Lane between south of Goldwell Court and Footpath AE474 (Goldwell Lane Site Access)	9. Aldington Eco Centre	Medium: Conference centre – occasional use

Link	Receptor	Sensitivity (Value)
Footpath AE474	10. Footpath AE474	Medium: Footpath shared with construction access

13.6 Embedded Design Mitigation

Construction Phase

13.6.1 The embedded mitigation measures set out in this section to be implemented during the construction phase will be secured through the DCO by the **Outline CTMP (Doc Ref. 7.9)**. These measures are set out in relation to Construction Vehicle Routing, Vehicular Access, Internal Haulage Road, Safety Management, Condition Survey and Public Engagement.

13.6.2 The **Outline CTMP (Doc Ref. 7.9)** sets out the strategy and approach to traffic routing and management to minimise disruption effects on the local community and environment. It describes the framework of measures that will be implemented in detailed CTMP(s) prior to construction.

Construction Vehicle Routing

13.6.3 The proposed route for construction delivery vehicles between the SRN and the Site is shown on **ES Volume 3, Figure 13.1: Construction Traffic Route and Traffic Data Location Plans (Doc Ref. 5.3)**. Construction traffic will exit the M20 motorway at Junction 10a, travel south-east along the A20 Hythe Road, then turn right onto C609 Station Road, continuing south of the railway bridge and entering the Site at the Primary Site Access at Field 26. The construction traffic route will avoid the use of more sensitive local roads by construction traffic, particularly Roman Road in Aldington village centre.

13.6.4 Primary Construction Compounds are located in Fields 25 and 26, adjacent to the Primary Site Access. At this point, equipment and materials will typically be unloaded from the HGVs and LGVs then loaded onto trailers which will be pulled via tractor to various parts of the Site, primarily using the internal haulage road with a lower volume of traffic utilising Goldwell Lane. Depending on the final electrical infrastructure used in the design of the Project, some of the electrical infrastructure may be required to be transported across the Site via HGVs using the internal haulage road. In addition, it is expected that a small percentage of the total Ready Mixed Concrete trucks for the Project would use the internal haulage road to deliver concrete for foundations and access tracks for Works No. 2 and No. 5. Use of the Primary Construction Compounds will support the use of the internal haulage road.

13.6.5 Construction traffic will travel south and west through the Site via the internal haulage road along the edge of Fields 24 and 23. The internal haulage road will exit west of Field 23 then cross Station Road south of the bends near Evegate Mill into the Central Area at Field 19. It will continue south-west through the Central Area to the South Western Area exiting south of Field 12 and crossing Bank Road to the

existing Bank Farm access road which provides access to the South Western Area. Road crossing points are included in the South Western Area to facilitate the crossing of the BOAT and Laws Lane. The internal haulage road will allow construction traffic to bypass the two tight bends on Station Road near Evegate Mill and minimise use of the local road.

13.6.6 Traffic management measures will be in place at all road and BOAT crossing points which are shown illustratively on **ES Volume 3, Figure 13.1: Construction Traffic Route and Traffic Data Location Plan (Doc Ref. 5.3)**. The exact crossing point locations and internal haulage road route will be subject to detailed design. These measures are secured through the **Outline CTMP (Doc Ref. 7.9).** On exit from Field 23, construction traffic heading to the South Eastern Area (Fields 20, 21 and 22) will turn left onto Station Road/Goldwell Lane continuing south along Goldwell Lane to the Goldwell Lane Access.

13.6.7 Outbound movements will travel in the reverse direction. No HGVs will pass through the centre of Aldington village on Roman Road.

13.6.8 Two abnormal loads are forecast to be required during the construction and decommissioning stage, being the main transformer unit/s which will be delivered/taken away via articulated lorry to the Project Substation in Field 26. These will travel via the M20/A20 Hythe Road/C609 Station Road, again minimising use of local roads and any weak highway structures. The weight limits of two bridges on Station Road have been investigated by the Applicant and confirmed to accommodate the abnormal load(s).

Vehicular Access

13.6.9 The main embedded mitigation for access is the provision of a single Primary Site Access for construction vehicles which utilises an existing gated priority-controlled access off C609 Station Road south of the HS1/Channel Tunnel Rail Link railway line with access directly into Field 26. Use of a single access limits the number of conflict points where road users have to give-way to each other on the public highway network and will help drivers to better anticipate the possibility of turning movements into and out of it.

13.6.10 An appropriate level of visibility is available at the Primary Site Access, with visibility splays of 2.4m x 120m available, which is based on the DMRB recommended stopping sight distances for design speeds of up to 43.5mph, with the observed 85th percentile speeds being 36mph northbound and 38mph southbound, as shown in **Table 13.3A** of **ES Volume 4, Appendix 13.4: Summary of Traffic Data (Doc Ref. 5.4)**.

13.6.11 The Primary Site Access is shown in **ES Volume 4, Appendix 13.7: Access Drawings (Doc Ref. 5.4)**. A swept path analysis is shown for a 16.5m long articulated vehicle which is the longest vehicle likely to utilise the Primary Site Access.

13.6.12 Construction traffic will be turning left in and right out only (away from Aldington) at the Primary Site Access and will be enforced by temporary signage as stated in the

Outline CTMP (Doc Ref: 7.9). As requested by KCC as part of their 2022 Statutory Consultation, vegetation such as tall grass and other low growing vegetation on the highway verge on the inside of the bend opposite the Site access will be cut-back to ensure adequate visibility on approach from the south west will be undertaken as part of the Project.

13.6.13 Minor highway works associated with the upgrade of the Station Road access are included within the **Draft Development Consent Order (Doc Ref. 3.1)**. Detailed design drawings will be shared with KCC's Streetworks team.

Internal Haulage Road

13.6.14 The Primary Site Access will provide access to the two Primary Construction Compounds and the internal haulage road. The internal haulage road was included in response to KCC Highways' EIA Scoping response, which raised the issue of the two tight bends close to Evegate Mill on Station as being major constraints for the Site. It is acknowledged from Site visits that it is difficult for two cars to pass at the two bends, with many drivers opting to give-way to oncoming traffic. The internal haulage road enables the two tight bends near to Evegate Mill to be avoided and minimises the amount of construction traffic on the local road network.

13.6.15 The internal haulage road will be routed through the North Eastern, Central and South Western Areas, passing around the edge of the PV panels and avoiding Evegate Mill.

13.6.16 The internal haulage road will be constructed using temporary ground protection mats or similar which will be removed at the end of the construction phase. The internal haulage road will be reinstalled as required for decommissioning activities.

Temporary Bridge Crossings

13.6.17 Temporary bank to bank bridge crossings for vehicle access will be required in the locations shown on **ES Volume 3, Figure 3.4 (Doc Ref. 5.3):**

- East Stour River: between Field 24 and Field 25;
- Ordinary Watercourse: between Field 23 and Field 24;
- Drain: between Field 18 and Field 19;
- East Stour River: between Field 27 and Field 28;
- East Stour River: between Field 27 towards Sellindge Substation.

13.6.18 As outlined within the **Design Principles (Doc Ref. 7.5)**, the temporary bank to bank bridges will be pre-engineered modular steel bridges. This type of temporary bridge means that there is no construction work required within the watercourse/drains as the bridges span the width of the watercourse/drain. Further information on watercourse crossings is provided in **ES Volume 4, Appendix 10.5: Schedule of Watercourse Crossings (Doc Ref. 5.4)**.

Goldwell Lane Access

13.6.19 Any vehicle heading to/from the South Eastern Area will turn left at the Station Road crossing point and continue towards the associated Goldwell Lane Access, which will be left in and right out only. This is shown in **ES Volume 4, Appendix 13.7: Access Drawings (Doc Ref. 5.4)**.

13.6.20 Visibility splays of 2.4m x 120m are easily achievable from the Goldwell Lane access as in **ES Volume 4, Appendix 13.7: Access Drawings (Doc Ref. 5.4)**, these being appropriate for the observed 85th percentile speeds shown in **Table 13.3A of ES Volume 4, Appendix 13.4: Summary of Traffic Data (Doc Ref. 5.4).**

13.6.21 Minor highway works associated with the upgrade of the Goldwell Lane access are included within the **Draft Development Consent Order (Doc Ref. 3.1)**. Detailed design drawings will be shared with KCC's Streetworks team.

13.6.22 The swept path analysis shown in **ES Volume 4, Appendix 13.7: Access Drawings (Doc Ref. 5.4)** demonstrates that the haulage road vehicle will be able to navigate the bend on Goldwell Lane.

Safety Management

Highway Users

13.6.23 Highway safety management measures will be secured via the **Outline CTMP (Doc Ref. 7.9)**. Temporary traffic lights or 'stop / go' boards will be used at the four locations where the internal haulage road crosses public highway and the BOAT as provisionally agreed with KCC during pre-application discussions.

13.6.24 Escort vehicles will be used to help tractor-trailers/HGVs navigate the circa 90° bend on Goldwell Lane during the 5 month construction period for the South Eastern Area of the Site.

13.6.25 Temporary warning signage will be provided at the two points where the internal haulage road crosses the public highway network as well as on approach to the Goldwell Lane bend and where the Cable Route Corridor crosses Church Lane.

PRoW and Non-Motorised Users

13.6.26 Safety management measures will be secured via the **Outline CTMP (Doc Ref. 7.9).** Temporary signage warning users of the potential for construction traffic, and to remind construction drivers of the presence of pedestrians, cyclists and other non-motorised users, will be provided.

13.6.27 A temporary 5mph speed limit with associated signage for construction vehicles will be provided at the Primary Site Access, along the shared section with AE474 at the Goldwell Lane Access and at the internal haulage road crossing points.

13.6.28 Escort vehicles, such as quad bikes, and / or vehicle marshallers / lookouts will be used where construction traffic will cross PRoW within the Site to ensure pedestrian and non-motorised user safety.

13.6.29 An 8m PRoW buffer zone demarcated by temporary barrier fencing will be provided at the Goldwell Lane access, as shown in **ES Volume 4, Appendix 13.7: Access Drawings (Doc Ref. 5.4)**, to keep users of AE474 and construction vehicles accessing the South Eastern Area apart.

13.6.30 A vehicle marshaller will be made aware of construction related traffic movements prior to a vehicle's arrival / departure and warn passing pedestrians of the pending movement.

Condition Survey

13.6.31 The Applicant will carry out a pre-commencement condition survey of the construction traffic route, including locations where the internal haulage road or construction activities will cross any highway / PRoW, the Church Lane crossing and the section adjacent to the AE474 at the Goldwell Lane Access as part of their commitment to maintaining the standard of the routes. The condition surveys will be repeated post completion and at set intervals through the construction period.

13.6.32 Any defects arising solely as part of the construction activity will be rectified at the cost of the Applicant.

13.6.33 Highway verges will be returned to their previous condition should temporary surfacing be laid across them to aid the passage of construction traffic.

Worker Travel Plan

13.6.34 The **Outline CTMP (Doc Ref. 7.9)** includes a commitment to a Worker Travel Plan as part of the detailed CTMP(s) which will include further measures designed to encourage use of shared and sustainable transport modes to access the Site.

Public Engagement

13.6.35 Local residents, businesses and schools will receive correspondence prior to commencement and during key stages of the construction period advising on the works involved, duration of development and necessary contact information.

13.6.36 A contact telephone number will be available, and records kept for availability of local authority and health and safety representatives. These measures are secured through the **Outline CTMP (Doc Ref. 2.9)**.

Other Embedded Mitigation Measures

13.6.37 Other standard mitigation measures will be employed through the **Outline CTMP (Doc Ref. 7.9)** including:

- Use of best working practices including the principles of the Considerate Constructors Scheme ('CCS') and its Code of Considerate Practice;
- Delivery management including appointment of an on-Site delivery manager who will advise delivery drivers / companies of appropriate routing and procedures when accessing the Site, a requirement for

delivery drivers to call the delivery manager in advance of arrival, and use of modern technological advancements such as real-time GPS vehicle tracking where possible to help deliveries to be timed / staggered in an appropriate manner;

- Minimisation of excavation and movement of materials across the Site using the internal haulage road where possible;
- Storage of plant, materials, tools and equipment in designated secure storage areas;
- Storage of hazardous substances in secure locked containers;
- Use of wheel and underbody vehicle washing facilities at the Primary Site Access to minimise the spill-over of any debris generated by the construction works onto the local highway network. Such washing facilities will not be required at the Goldwell Lane Site access or at the crossing points as the vehicles will be driving on ground protection matting which will be kept clear of mud and debris;
- A mechanised road sweeper will be deployed on the approach to the Primary Site Access, the Goldwell Lane access and at the highway crossing points to remove any debris, if required;
- The surfaced accesses / internal haulage road will help to reduce the transfer of any mud or other debris onto the public highway in conjunction with the vehicle washing facilities; and
- Site security measures will be provided, as appropriate, including but not limited to: palisade security fencing, gated accesses and CCTV to enable construction to be monitored remotely.

Operational Phase

PRoW Improvements

13.6.38 All PRoWs will be a minimum of 2m wide and will be sited within a corridor with a minimum width of 10m. The exception to this is PRoW 'NEW 3' adjacent to the Project Substation which will be sited within a 5m corridor for a distance of approximately 70m. As such, the 5m minimum width required by KCC for PRoW corridors is met.

13.6.39 The Applicant's proposals focus on user experience and has agreed a minimum width of 10m (versus the 5m requirement), with the aspiration to provide better quality routes than the existing in order to offset any increase in walking distance. The provision of new, wider paths can be considered to be a primary form of embedded mitigation.

13.6.40 Further details of the PRoW improvements are provided in the **Outline RoWAS (Doc Ref. 7.16)**.

13.7 Assessment of Effects

13.7.1 This section describes the impacts and effects associated with construction of the Project. The assessment has been carried out taking into account the embedded mitigation measures set out in **Section 13.6** of this Chapter.

Forecast Construction Traffic Data

13.7.2 Indicative construction traffic vehicle trips have been calculated based on past experience of solar park construction in the UK. The construction traffic vehicle trips are forecast on a reasonable worst case basis, with the actual trip numbers expected to be fewer than those shown.

13.7.3 **Table 13.11** presents the average number of construction traffic trips and **Table 13.12** presents the peak number of construction traffic trips. **Table 13.11** is based an average of on 132 construction workers on-Site and **Table 13.12** is based a peak of 199 construction workers on-Site.

13.7.4 In both cases a buffer uplift of 40% is added to the calculated figures to ensure a reasonable worse case assessment is provided.

Table 13.11: Construction Traffic Vehicle Trips – Average

Construction Activity / Project Component	Expected Type of Vehicle	1-way	2-way
Heavy Vehicles for Construction			
PV Panels	15.4m Articulated (40' HQ)	448	896
PV Mounting Structures	15.4m Articulated (40' HQ)	448	896
Cabling	15.4m Articulated (40' HQ)	90	180
Fencing	15.4m Articulated (40' HQ)	100	200
Combiner boxes	15.4m Articulated (40' HQ)	45	90
Inverters, transformers and switchgear	11m Rigid	30	60
Project Substation and Buildings	10m Rigid for internal equipment	3	6
	10m Rigid for external equipment	6	12
	15.4m Articulated for 132kV transformer unit (abnormal load due to weight)	2	4
	Tipper, cement mixer for foundations & hardstanding	664	1,328
	Cement mixer for piles	80	160
	10m Rigid for rebar for piles	100	200
Distribution Network Operator Substation and structures (Sellindge Substation Extension)	10m Rigid	20	40
Temporary Bank to Bank Access bridges	16.5m articulated, low loaders, 10m rigid, crane	30	60

Construction Activity / Project Component	Expected Type of Vehicle	1-way	2-way
Access Tracks	10m Rigid	300	600
Internal Access Tracks (permeable hardstanding & base course)	16.5m articulated for steel and formers	20	40
	Cement mixer for concrete	393	786
	Tipper	600	1,200
Mobilisation (including cranes)	16.5m articulated, low loaders, 10m rigid	120	240
Heavy Vehicles for BESS			
BESS Units	16.5m Articulated	408	816
DC-DC Converters	16.5m Articulated	51	102
General Deliveries (cables, fencing, Inverters etc.)	16.5m Articulated or 10m Rigid	65	130
Contractor Compounds	16.5m Articulated	10	20
Light Vehicles for General Deliveries and Workers			
General deliveries	Transit van/ truck	50	100
Goldwell Lane Escort vehicles	Transit van/ car	260	520
Workers (132 average)	Mini-bus/car/van	30	60
Totals & Averages	Total Number of Deliveries	1-way	2-way
	HGVs	4,033	8,066
	LGVs excluding workers	310	620
	Construction period (weeks)	50	50
	Working days in 52 week period	305	305
	HGVs per day	**13.22**	**26.45**
	LGVs per day	**1.02**	**2.03**
	Worker trips per day	**30**	**60**
	HGVs per day + buffer	**18.5**	**37.0**
	LGVs per day + buffer	1.4	2.8
	Worker trips per day + buffer	42.0	84.0
	Lights per day inc. buffer (AADT/AAWT)	**43.4**	**86.8**
	Total trips per day inc. buffer (AADT/AAWT)	**61.9**	**123.9**
	HGV% inc. buffer	**29.9%**	**29.9%**
	Average trips per hour inc. buffer	**5.16**	**10.32**
	Average Lights per hour inc. buffer	**3.62**	**7.24**
	Average HGVs per hour inc. buffer	**1.54**	**3.09**
	Average Lights per hour inc. buffer rounded up	**4**	**8**
	Average HGVs per hour inc. buffer rounded up	**2**	**4**

13.7.5 **Table 13.11** shows that the 12-month construction phase for the Project is forecast to generate up to 124 two-way construction vehicle trips per day (including workers travelling to and from the Site). Across a 12-hour working day, this equates to 10 two-way construction vehicle trips per hour.

13.7.6 Construction worker trips account for the majority of Site traffic, with the Project forecast to generate up to only three HGVs per hour during the construction phase. Only two abnormal loads, the Project Substation transformer units, are forecast for delivery during the construction stage.

13.7.7 Given that workers are the largest traffic generator, an assessment has been undertaken of a peak of 199 workers on-Site. The resultant trip numbers for the peak worker scenario are presented in **Table 13.12**.

Table 13.12: Construction Traffic Vehicle Trips – Worker Peak

Construction Activity / Project Component	Expected Type of Vehicle	1-way	2-way
Heavy Vehicles for Construction			
PV Panels	15.4m Articulated (40' HQ)	448	896
PV Mounting Structures	15.4m Articulated (40' HQ)	448	896
Cabling	15.4m Articulated (40' HQ)	90	180
Fencing	15.4m Articulated (40' HQ)	100	200
Combiner boxes	15.4m Articulated (40' HQ)	45	90
Inverters, transformers and switchgear	11m Rigid	30	60
Project Substation and Buildings	10m Rigid for internal equipment	3	6
	10m Rigid for external equipment	6	12
	15.4m Articulated for 132kV transformer unit (abnormal)	2	4
	Tipper, cement mixer for foundations & hardstanding	664	1,328
	Cement mixer for piles	80	160
	10m Rigid for rebar for piles	100	200
Distribution Network Operator Substation and structures (Sellindge Substation Extension)	10m Rigid	20	40
Temporary Bank to Bank Access bridges	16.5m articulated, low loaders, 10m rigid, crane	30	60
Access Tracks	10m Rigid	300	600
Internal Access Tracks (permeable hardstanding & base course)	16.5m articulated for steel and formers	20	40
	Cement mixer for concrete	393	786
	Tipper	600	1,200
Mobilisation (including cranes)	16.5m articulated, low loaders, 10m rigid	120	240
Heavy Vehicles for BESS			

Construction Activity / Project Component	Expected Type of Vehicle	1-way	2-way
BESS Units	16.5m Articulated	408	816
DC-DC Converters	16.5m Articulated	51	102
General Deliveries (cables, fencing, Inverters etc.)	16.5m Articulated or 10m Rigid	65	130
Contractor Compounds	16.5m Articulated	10	20
Light Vehicles for General Deliveries and Workers			
General deliveries	Transit van/ truck	50	100
Goldwell Lane Escort vehicles	Transit van/ car	260	520
Workers (199 peak)	Mini-bus/car/van	44	88
Totals & Averages	Total Number of Deliveries	1-way	2-way
	HGVs	4,033	8,066
	LGVs excluding workers	310	620
	Construction period (weeks)	50	50
	Working days in 52 week period	305	305
	HGVs per day	**13.22**	**26.45**
	LGVs per day	**1.02**	**2.03**
	Worker trips per day	**44**	**88**
	HGVs per day + buffer	**18.5**	**37.0**
	Lights per day + buffer	1.4	2.8
	Worker trips per day + buffer	61.6	123.2
	Lights per day inc. buffer (AADT/AAWT)	**63.0**	**126.0**
	Total trips per day inc. buffer (AADT/AAWT)	**81.5**	**163.1**
	HGV% inc. buffer	**22.7%**	**22.7%**
	Average trips per hour inc. buffer	**6.79**	**13.59**
	Average Lights per hour inc. buffer	**5.25**	**10.50**
	Average HGVs per hour inc. buffer	**1.54**	**3.09**
	Average Lights per hour inc. buffer rounded up	**6**	**11**
	Average HGVs per hour inc. buffer rounded up	**2**	**4**

13.7.8 The above analysis, based on the worker peak scenario, predicts a total of 163 two-way daily trips, as shown in **Table 13.12**, which is equivalent to an average of up to 15 two-way trips per hour (i.e., 11 Lights and 4 HGVs). The assessment however uses the average 1-way Lights and HGVs per hour inc. buffer within **Table 13.12**, i.e. 6 Lights and 2 HGVS, to assess two-way trips to ensure an even number of inbound and outbound trips within the traffic model. As such, 16 two-way trips per hour has been assessed in the worker peak scenario within this Chapter.

13.7.9 It is anticipated that during the peak of construction up to 37 two-way HGV movements (18-19 vehicles) will be generated per day. Up to 126 two-way light movements (63 vehicles) will be generated per day.

13.7.10 No variations in HGV movements are considered between the average and worker peak scenarios with the figures based on reasonable worst case assumptions with application of a 40% buffer.

13.7.11 The detailed CTMP(s) will include details of the daily traffic flow profile, i.e. more precise numbers of trips per hour. This information will be included once the timing of deliveries to the port of entry and general availability of other materials and staff is known. This is secured through the **Outline CTMP (Doc Ref. 7.9).**

13.7.12 The construction trips have been assigned based on the proportion of PV panels anticipated to be provided within each field based on the **Illustrative Project Layout** (**Book 2: Illustrative Project Drawings - Not for Approval (Doc Ref. 2.6))** as detailed in **Table 13.13**.

Table 13.13: Construction Traffic Assignment for PV Panels

Area	Fields	Approx. No. PV Panels*	Proportion
South Western Area	1-9	76,481	34.8%
Central Area	10-19	116,479	53.0%
South Eastern Area	20-22	17,362	7.9%
Central Area	23-25	9,450	4.3%
Total		**219,772**	**100.0%**

*Based on **Illustrative Project Layout (Book 2: Illustrative Project Drawings - Not for Approval (Doc Ref. 2.6))**

13.7.13 Whilst each Field will contain other equipment, the proportion of such equipment largely follows that of the PV panels. The trip assignment is an overestimate as the equipment associated with the Project Substation in Field 26 in the Northern Area has not been discounted from the total, nor has any decanting of trips from multiple deliveries onto a single tractor and trailer journey which will likely occur.

13.7.14 The construction traffic trips have not been assigned to ATC 6 Roman Road (**ES Volume 3, Figure 13.1: Construction Traffic Route and Traffic Data Location Plan (Ref Doc. 5.3)**, as they will cross the road rather than share the road with the baseline traffic. The low two-way peak hour traffic flows, equivalent to around one trip every two minutes shown in **ES Volume 4, Appendix 13.4: Summary of Traffic Data, Table 13.3A: Current Baseline Traffic Data Summary (Doc Ref. 5.4)**, will mean that the crossing can be easily managed through standard traffic management measures included in the **Outline CTMP (Doc Ref. 7.9).**

13.7.15 ATC 3 Station Road (north of Calleywell Lane) (**ES Volume 3, Figure 13.1: Construction Traffic Route and Traffic Data Location Plan (Ref Doc. 5.3)** is north of the point where construction traffic heading to/from Fields 23-25 in the

Central Area will join/exit Station Road. However, these construction traffic flows will be representative of the flows on the link south of this point and north of Calleywell Lane. Construction traffic heading to/from the Central and South Western Area will cross Station Road at this point and not share it with the baseline traffic.

13.7.16 Based on the figures in **Table 13.13**, 100% of the construction trips have been assigned to ATC 1, ATC 2 and the A20 Hythe Road (DfT count site), with 7.9% of construction traffic trips assigned to ATC 3 (serving as a proxy for Station Road south of the road crossing point), ATC 4 and ATC 5 **(ES Volume 3, Figure 13.1: Construction Traffic Route and Traffic Data Location Plan (Ref Doc. 5.3))**.

13.7.17 **Table 13.3C** of **ES Volume 4, Appendix 13.4: Summary of Traffic Data (Doc Ref. 5.4)** details the assigned construction traffic trips for the average worker scenario (Table 13.11). **ES Volume 4, Appendix 13.4: Summary of Traffic Data, Table 13.3D (Doc Ref. 5.4)** details the assigned construction traffic trips for the worker peak scenario (**Table 13.12**). Averages have been rounded up to the nearest whole number which has led to some of the two-way trips increasing by one. The above figures are the proportion of trips assigned to the study area; they are not percentage change figures.

13.7.18 No construction traffic will route through Aldington village centre as secured by the **Outline CTMP (Doc Ref. 7.9)**.

13.7.19 The term 'heavy vehicles' has been used in this assessment in place of the term 'HGV' specified in the 2023 and 1993 IEMA Guidelines so that vehicles such as coaches and large agricultural vehicles are treated as such.

13.7.20 The average construction traffic flows have been added to the 2026 Future Baseline traffic flows within **Table 13.3B** of **ES Volume 4, Appendix 13.4: Summary of Traffic Data (Doc Ref. 5.4)** for ATC locations 1 to 5 and the DfT count site location on the A20 Hythe Road to form the '2026 Future Baseline plus Project Construction Traffic – Average' flows, as shown in **Table 13.3E** of **ES Volume 4, Appendix 13.4: Summary of Traffic Data (Doc Ref. 5.4)**. The percentage differences are shown in **Table 13.3F** of **ES Volume 4, Appendix 13.4: Summary of Traffic Data (Doc Ref. 5.4)**.

13.7.21 The results shown in **Table 13.3C, Table 13.3E** and **Table 13.3F** of **ES Volume 4, Appendix 13.4: Summary of Traffic Data (Doc Ref. 5.4)** indicate the following for the average construction traffic flows:

- A total of 12 two-way trips, consisting of 8 light vehicles and 4 heavy vehicles, will travel along the construction traffic route between M20 Junction 10a and the Primary Site Access, in the AM, PM and Saturday peak hours, equivalent to around 1 trip every 5 minutes;
- A total of 8 two-way trips, consisting of 6 light vehicles and 2 heavy vehicles, will travel between the Station Road crossing point and the Goldwell Lane Site Access, in the AM, PM and Saturday peak hours, equivalent to around one trip every 7.5 minutes;

- The average and maximum light vehicle two-way flow increases at all ATC locations are between 3.0% and 6.7% respectively;
- The maximum heavy vehicle percentage increase is greater than the maximum light vehicle percentage increase in the 12-hour periods, however this is primarily due to lower heavy vehicle baseline flows, with small flow increases on low baseline flows leading to notable percentage increases;
- As zero heavy vehicles were recorded by the Goldwell Lane DfT count site in the peak hours, the percentage increase is zero at the ATC locations but the highest absolute increase is just 4 heavy vehicles on Station Road at ATC1 and ATC2. The highest weekday 12-hour heavy vehicle percentage increase occurs on ATC 2: Station Road, with an increase from a baseline figure of 11 heavy vehicles to 49 heavy vehicles, equivalent to an average of just 4 per hour;
- The average and maximum total vehicular flow increases at the ATC locations are 4.1% and 8.9% respectively, with the maximum increase occurring during the PM peak hour on ATC 5: Goldwell Lane, this being associated with an increase from a baseline figure of 90 to 98, an increase of just 8 vehicles which is equivalent to 1 vehicle every 7.5 minutes. It is more appropriate to consider the impact on total two-way flows, as these increases are not as exaggerated as the low baseline HGV flows; and
- The maximum total two-way percentage increase on the A20 Hythe Road across 12-hours is 1.2%.

13.7.22 The above analysis has been repeated for the construction worker peak, which represents a worst case scenario and includes a 40% buffer to the anticipated peak levels. The construction worker peak '2026 Future Baseline plus Project Construction Traffic – Worker Peak' flows are presented in **Table 13.3G**, with the percentage impact shown in **Table 13.3H** of **ES Volume 4, Appendix 13.4: Summary of Traffic Data (Doc Ref. 5.4)**.

13.7.23 The results shown in **Table 13.3D, Table 13.3G** and **Table 13.3H** of **ES Volume 4, Appendix 13.4: Summary of Traffic Data (Doc Ref. 5.4)** indicate the following for the construction worker peak scenario:

- A total of 16 two-way trips, consisting of 12 light vehicles and 4 heavy vehicles, will travel along the construction traffic route between M20 Junction 10a and the Primary Site Access, in the AM and PM peak hours, equivalent to around 1 trip every 4 minutes. In the Saturday peak hour these trips are slightly fewer at a total of 14 trips consisting of 10 light vehicles and 4 heavy vehicles;
- A total of 8 two-way trips, consisting of 6 light vehicles and 2 heavy vehicles, will travel between the Station Road crossing point and the Goldwell Lane Site Access, in the AM, PM and Saturday peak hours, equivalent to around one trip every 7.5 minutes. These figures are the same as the construction average scenario as the Goldwell Lane trips are largely dictated by the forecast number of heavy vehicles on this road, however, a greater number of trips are forecast across the 12-hour day in

the worker peak;

- The average and maximum light vehicle two-way flow increases at the ATC locations during the worker peak are 3.6% and 6.7% respectively. The total two-way traffic flow percentage increase on the A20 Hythe Road is 1.4% to 1.5% in the peak hours and 1.6% across 12-hours;
- There will be no difference in heavy vehicle flows between the average and worker peak scenarios; and
- The worker peak will only occur for no more than 6-months of the Project's 12-month construction period.

13.7.24 As the worker peak represents a worst case in terms of impact, this will be used as the basis for the assessment below.

13.7.25 The likely significant effects of the Project for the construction phase on each of the six 2023 IEMA Guideline categories identified in **Table 13.5** are considered below.

Severance of Communities

13.7.26 When considering severance effects it is important to consider the existing levels of severance. The only communities in the vicinity of the study area are Aldington village and the outlying small numbers of dwellings to the north of the settlement off Goldwell Lane and Calleywell Lane which connect to the village via these roads. Both of these roads lack footways and cycle infrastructure but are relatively lightly trafficked. The A20 Hythe Road also has very limited numbers of residential properties on either side, though a footway is present on the northern side of the road. It would also be unlikely for a resident of Aldington to walk the roads between the village and Smeeth or Brabourne Lees and vice versa given the distance involved and the limited footways. Whilst there is a degree of severance currently, this severance is not impacting on communities from a day-to-day practical perspective.

13.7.27 The 2023 IEMA Guidelines advise that severance occurs when there is difficulty experienced in crossing a heavily trafficked road. It is recognised that the HGV percentage impact increases on some links are greater than the thresholds shown in **Table 13.6**. However, these are based on low baseline HGV traffic volumes. As set out previously, construction traffic flows represent a small proportion of the total traffic and are well within the 30% very low impact threshold shown in **Table 13.6**, with no more than 16 two-way trips per hour in the worker peak scenario which is equivalent to around one trip every four minutes. The maximum number of HGV trips forecast per hour is only three two-way trips.

13.7.28 In terms of percentage increase on any one link, the worst case light vehicle impact is forecast to be 6.7% on Goldwell Lane (ATC 5) in the PM peak hour. The worst case total vehicle impact is also forecast on this link, with an increase of 8.9%. The worst case heavy vehicle impact is forecast on Station Road south of the railway line (ATC 2) across the weekday 12-hour period, with a 345.5% increase, however in real terms this is an increase in 38 heavy vehicles, equivalent to 3 per hour on average, from a baseline of just 11 heavy vehicles.

13.7.29 Any temporary severance at the two locations where the internal haulage road crosses public highway and the construction access crossings of the BOAT and Laws Lane, along with the Church Lane crossing will be mitigated with traffic management as secured by the **Outline CTMP (Doc Ref. 7.9).** Similarly, there will be embedded mitigation in place at sensitive receptor No. 10, PRoW AE 474, specifically the temporary 8m separation of the public footpath from the construction route with marshals also present, which will mitigate temporary severance effects in this location. This will be secured via the **Outline CTMP (Doc Ref. 7.9)**.

13.7.30 When considering the practical implications on severance of communities of an increase in traffic along the construction route, there are only a small number of residential properties sited along the route which itself could be considered to run along the edge of local communities rather than through the centre of them. The internal haulage road bypasses several properties and avoids the need for traffic to pass through the centre of Aldington village and other local settlements. There is therefore no evidence to suggest that local communities will become severed during construction.

13.7.31 The increase in construction traffic resulting from the Project is considered to have a temporary very low magnitude of impact. The significance of the effect will be a temporary **Minor Adverse** (not significant) effect on the A20 Hythe Road between Stock Lane and Station Road and Station Road between A20 Hythe Road and M20 bridge due to sensitive receptor No. 4, The Caldecott School, which has high sensitivity. The temporary very low magnitude of impact on all other sensitive receptors, which range from low to medium sensitivity, will result in an effect on severance of communities that is **Negligible** (not significant).

Road Vehicle Driver Delay and Passenger Delay

13.7.32 The 2023 IEMA Guidelines identify the following points on a highway network where delay can occur:

'At the site entrance where there will be additional turning movements

On the highways passing the development 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

At side roads where the ability to find gaps in the traffic may be reduced, thereby lengthening delays.'

13.7.33 The Primary Site Access and Goldwell Lane Access will be left-in and right-out only. Therefore the only delay to users of the main road at these locations directly caused by construction traffic will be as a result of the construction traffic slowing down to make the left turn in. However, traffic approaching the Primary Site Access on Station Road should be slowing anyway as it approaches the bend, with 'SLOW' road markings and side road on outside of bend warning signage being present. Similarly, traffic on Goldwell Lane should be slowing down as it is approaching

Aldington village centre, with the access location also inside the 30mph speed limit section. The right turns out of both accesses will only result in delay to Project traffic turning out rather than any traffic on the public highway.

13.7.34 There may be very limited, short term delays caused at the two points where the internal haulage road will cross the public highway, as shown on **ES Volume 3, Figure 13.1: Construction Traffic Route and Traffic Data Location Plan (Doc Ref. 5.3)**, however this is necessary from a highway safety perspective, with traffic management to be employed to manage road crossings for the haulage vehicles. No delay is anticipated for construction traffic crossing the BOAT or Laws Lane, which are very lightly trafficked.

13.7.35 It is acknowledged that the use of traffic management in the form of temporary traffic lights, stop/go boards, escort vehicles and lookouts/banksmen will naturally cause road vehicle driver delay and passenger delay and non-motorised user delay to increase.

Goldwell Lane

13.7.36 Minor delays will be incurred along on Goldwell Lane when cables are laid to connect the South Eastern Area and traffic is held by temporary traffic lights. During this period Calleywell Lane could be used as an alternative route to Goldwell Lane for non-resident road users. This level of delay is a low magnitude of impact on receptors of medium sensitivity, meaning that a temporary **Minor Adverse** (not significant) effect on driver delay is anticipated on Goldwell Lane.

Station Road / A20 Hythe Road

13.7.37 Any vehicles associated with construction of the Project will be parked internally within the Site in the Primary Construction Compounds in Field 25/26, so there will be no parking of Project related traffic on the public highway network.

13.7.38 Project traffic will increase traffic flows on the local roads, however, the predicted worst case construction traffic flows resulting from the Project total just 16 two-way trips per hour, which is less than the typical daily fluctuation in traffic flow, and with a percentage increase less than 30% results in a very low magnitude of impact.

13.7.39 It is recognised that due to construction there is potential for limited additional delay to side roads. The only side roads along the construction traffic route on Station Road are Calleywell Lane and Bower Road which are both very lightly trafficked and therefore any increase in delay would be very low.

13.7.40 The main vehicular access to The Caldecott School is located off Station Road south of the A20 Hythe Road which is predominately used during school drop-off and pick-up times during term time, so any delay would primarily occur during these periods. Any such delay will however be mitigated through the **Outline CTMP (Doc Ref. 7.9)** which aims to time deliveries so that they avoid school drop-off and pick-up times.

13.7.41 Traffic turning into Station Road from the A20 Hythe Road will benefit from the ghost island which at an effective length of 50m inclusive of unrestricted hatching, can accommodate up to three 16.5m long articulated lorries or around 8 cars without

them blocking eastbound ahead movements when gap-seeking. Only two southbound (inbound right turns) heavy vehicle trips are forecast per hour so it highly unlikely that more than one HGV will be queuing at the same time. When considering future baseline plus worker peak total vehicle flows heading southbound, the maximum forecast on Station Road is 240 in the AM peak, however some of these trips will have turned left into Station Road. Even if all were to turn right, these would be an average hourly demand of four per minute, which is fewer than the up to 8 vehicle storage at the ghost island.

13.7.42 It is useful to consider traditional guidance when it comes to traffic impact in the form of the DfT's Guidance on Transport Assessment (2007)[12]. Whilst the document has been superseded, it set an indicative threshold of 30 two-way trips per hour for junction capacity assessment, which it is still referenced by numerous highway authorities, NH and practitioners. The forecast number of trips at the A20 Hythe Road junction (i.e., 16-two-way movements) is just over half of this figure. As the sensitivity of the links in the vicinity of the junction is high, due to the proximity of The Caldecott School, the very low impact results in a **Minor Adverse** (not significant) effect.

13.7.43 There is evidence of vehicles overrunning grass verges on Station Road, which may have occurred where two HGVs, including agricultural vehicles have attempted to pass. The instances where two HGVs will need to pass will be limited, however it is acknowledged that the increase in HGVs using Station Road during the construction phase may result in a limited degree of conflict with other HGVs using the road.

Non-motorised User Delay and Amenity

13.7.44 Pedestrian amenity is broadly defined as the relative pleasantness of a journey and is considered to be affected by traffic flow, composition and separation from traffic. Footways, cycle facilities and equestrian facilities are not present on the roads that constitute the construction traffic route, with the exception of a footway on the northern side of the A20 Hythe Road. No national or local cycle routes are present in the vicinity of the Site or construction traffic route, neither are any bridleways. Whilst cyclists and horse-riders are legally allowed to travel along the BOAT, its surfacing was observed to be too poor for cycling and it does not appear to be regularly used by horse-riders, it appears to have been impassable for all users at times in recent years as observed during the first two Site visits.

13.7.45 Very limited pedestrian, cycle and horse-rider activity has been witnessed through the Site visits and PRoW user survey. The internal haulage route and construction traffic route would therefore be unlikely to add delay or reduce amenity to any established routes. This is with the exception of AE474 that runs alongside the proposed Goldwell Lane access, as AE474 was the most popular PRoW route based on the PRoW user survey results.

13.7.46 A worst case increase in 16 construction trips per hour or less within the study area represents a very small proportionate increase in total traffic, which is likely to represent a very low impact across the majority of the study area.

13.7.47 Up to 8 two-way peak hour trips, inclusive of 2 heavy vehicles, are forecast to travel along Goldwell Lane and into Fields 20-22, equivalent to around one trip every 7.5 minutes. The length of AE474 between Goldwell Lane and Field 20 is around 170m. To walk this distance at a leisurely pace would take around one minute making the scope for conflict very limited. This will be mitigated by the creation of a buffer that will allow separation between PRoW users along with other measures detailed and secured in the **Outline CTMP (Doc Ref. 7.9)** including marshals to actively manage any conflict.

13.7.48 The 1993 IEMA Guidelines suggest that a 'tentative' threshold for judging the significance of changes in pedestrian and cyclist amenity would be where the traffic flow (or its HGV component) is doubled.

13.7.49 Heavy vehicle traffic flows do increase from a baseline peak hour figure of zero heavy vehicles on some links during the Project's construction phase, but a heavy vehicle flow of no greater than 4 two-way peak hour trips is forecast on the local roads excluding the A20 Hythe Road. Considering that the increase based on total traffic flow is 4.7% on average and 8.9% on the most impacted link, the magnitude of impact associated with the construction phase of the Project will be very low. Any delay, whilst limited, would likely only apply to cyclists for the majority of the construction route, as the Station Road and Goldwell Lane sections lack footways, though pedestrians can walk in the verges.

13.7.50 Therefore, a temporary **Negligible** (not significant) effect on non-motorised user delay and amenity is anticipated on all but one sensitive receptor given the low to medium range of sensitive receptors in the study area. Sensitive receptor 4: The Caldecott School and adjacent links will experience a **Minor Adverse** (not significant) effect given its high sensitivity.

13.7.51 The temporary impact on PRoW user amenity as a result of PRoW diversions is considered in **ES Volume 2, Chapter 12: Socio-Economics (Doc Ref 5.2)**.

Fear and Intimidation On and By Road Users

13.7.52 The non-motorised road user's level of fear and intimidation can be established by the volume of traffic, its heavy vehicle composition, the speed vehicles are passing, and its proximity of traffic to people, such as a narrow pavement width. There are no commonly agreed thresholds for assessing fear and intimidation and therefore professional judgement is applied.

13.7.53 The 16 two way trips or less per hour resulting from the construction phase of the Project represents a very small proportion of the total traffic, much less than the 30% very low impact threshold. Any increase in heavy vehicle traffic is likely to represent an impact of very low magnitude, particularly given the low traffic flows on Station Road and Goldwell Lane.

13.7.54 Heavy vehicle traffic, including agricultural vehicles, currently utilises the local roads so the presence of such vehicle types is not uncommon. Pedestrian, cyclist and horse-rider use of the local roads is fairly limited given the semi-rural nature of the area, distance between amenities and lack of footways and bridleways. A footway

is present on the northern side of the A20 Hythe Road and the increase in construction traffic should have a minimal effect on the pedestrians who currently use it, particularly as construction traffic will not be added to side roads, unaffecting the crossing of side roads.

13.7.55 Tables 3.1 to 3.3 of the 2023 IEMA Guidelines provides a scoring system to consider the degree of hazard for fear and intimidation. Whilst the links in the study area achieve scores that range from small to great, the construction traffic will not result in a step change, resulting in a very low magnitude of impact. The traffic management measures secured by the **Outline CTMP (Doc Ref 7.9)** will help to minimise fear and intimidation that could be caused by the construction traffic.

13.7.56 With reference to **Table 13.9**, when, considering the low to medium sensitivity of the 9 of the 10 receptors in the study area, there is a temporary **Negligible** (not significant) effect significance for fear and intimidation on and by road users. Sensitive receptor 4: The Caldecott School and adjacent links will experience a **Minor Adverse** (not significant) effect given its high sensitivity.

Road User and Pedestrian Safety

13.7.57 No accident black spots have been identified following a detailed review of accident records over the six-year period of 1 April 2017 to 31 March 2023.

13.7.58 Local concerns regarding the safety of A20 Hythe Road/Station Road junction are however acknowledged. This location contains the greatest cluster of collisions in the study area, however only one serious and six slight accidents were reported in the six year study period. This is not a high frequency when considering the volume of traffic on the A20 Hythe Road and its function as a local distributor road. Five of the six slight accidents were collisions between two cars and the other was a collision between a car and a motorcycle, as was the serious accident. No haulage vehicles were involved in the accidents and all of the collisions would appear to be as a result of driver error. The construction traffic is forecast to add up to only six light vehicles and two heavy vehicles turning right into Station Road and the same numbers turning left out per hour.

13.7.59 The local roads in the vicinity of the Site already accommodate regular heavy vehicle movements, including agricultural vehicles. The Project's internal haulage road will bypass two tight bends on Station Road and minimise the use of the local road network including the centre of Aldington village which experiences higher levels of footfall than the construction traffic route.

13.7.60 From the accident review, there is no evidence to suggest that the Project will exacerbate the frequency or severity of local accidents.

13.7.61 Use of the existing Station Road access as the Primary Site Access and other existing field accesses help to minimise safety issues by utilising locations that road users are familiar with in terms of the potential for turning traffic as they are existing field accesses used by large agricultural vehicles. It has also been demonstrated that the access points off Station Road and the Goldwell Lane are in locations where a safe level of visibility based on measured vehicle speeds is achievable.

13.7.62 The Project would result in a temporary very low magnitude of impact on road user and pedestrian and safety. For 9 of the 10 sensitive receptors, this is considered to result in a **Negligible** (not significant) effect. Given that sensitive receptor no. 4, The Caldecott School, has high sensitivity and lies adjacent to the A20 Hythe Road/Station Road junction, it is considered to result in a temporary **Minor Adverse** (not significant) effect on road user and pedestrian safety.

Dangerous/Hazardous and Large/Abnormal loads

13.7.63 No unusually hazardous or dangerous loads are anticipated for the construction phase of the Project.

13.7.64 Only two abnormal loads are forecast to be required during the construction and decommissioning stages, being the main transformer unit/s which will be delivered/taken away via articulated lorry to the Project within Field 26 (adjacent to the Primary Site Access). It is the weight of the transformer unit that is considered to constitute an abnormal load. The Applicant has reviewed the loading capacities of the two bridges on Station Road and they are capable of safely accommodating such vehicles.

13.7.65 The abnormal loads would only be required to use a short section of Station Road (between the A20 Hythe Road junction and the Primary Site Access). The Project would result in a temporary very low magnitude of impact. Considering the low to medium sensitivity of the 9 of the 10 receptors in the study area, there is a temporary **Negligible** (not significant) effect significance. Sensitive receptor 4: The Caldecott School and adjacent links will experience a **Minor Adverse** (not significant) effect given its high sensitivity.

13.8 Additional Mitigation, Monitoring and Enhancement Measures

13.8.1 No significant adverse effects have been identified which require additional mitigation.

13.8.2 However, monitoring will be carried out during the construction stage of the Project as secured as part of the **Outline CTMP (Doc Ref. 7.9)**. This will include:

- Collisions – particularly at the A20 Hythe Road/Station Road junction, but also along all sections of the construction traffic route and at PRoW and other road crossing points.
- Adherence to agreed routing strategy – HGVs will be monitored to ensure drivers are adhering to the agreed routing strategy and left in right out of the Primary Site Access and Goldwell Lane Access defined within the detailed CTMP(s).
- Road safety – road safety will be monitored on Station Road from the A20 Hythe Road to the Primary Site Access, on Goldwell Lane between the Station Road crossing point the Goldwell Lane Access, at public highway and PRoW crossing points for the internal haulage road, at the Church Lane crossing point and at PRoWs in proximity to construction traffic routes such as AE474.

13.8.3 Monitoring information will be reviewed to inform and adjust traffic management measures implemented under the detailed CTMP(s), as necessary, such as delivery management.

13.9 Residual Effects

13.9.1 The embedded mitigation measures ensure that the impact of construction traffic on the local highway network and PRoW network and their users will be minimised, particularly during the traditional network peak hours and drop-off/pick-up times at the Caldecott School.

13.9.2 The magnitude of impact will likely remain very low to low magnitude resulting in a **Negligible to Minor Adverse** (not significant) effect.

13.9.3 A summary of residual effects is provided in **Table 13.14**.

13.10 Cumulative Effects

13.10.1 The cumulative schemes within the study area for the assessment have been added to the 2026 future baseline traffic flows in order to consider the cumulative impact of the Project. These schemes include:

- ID No. 3: Pivot Power Battery Storage;
- ID No. 4: Walsh Power Condenser Project;
- ID No. 7: Land north of 1 Church View, Aldington, Kent;
- ID No. 8: Land south west of Goldwell Court, Goldwell Lane; and
- ID No. 9: East Stour Solar Farm.

13.10.2 When considering cumulative schemes, their peak traffic flows have been aligned with the worker peak, however it is likely that these peaks will occur at different times so the cumulative traffic flows will be lower than those presented.

13.10.3 Where the supporting information for the cumulative schemes has not contained details of traffic distribution, all traffic associated with the non-residential schemes has been assigned to the A20 Hythe Road via M20 Junction 10a. Traffic associated with Cumulative Schemes ID No. 7 and ID No. 8 has been assigned based on the information contained a non-cumulative scheme application (Land to the West of Calleywell Lane planning application, ABC planning ref. 20/00154/AS) as no traffic assignment data is available within the planning applications for Cumulative Schemes ID No. 7 and ID No. 8. The “Land to the West of Calleywell Lane” planning application provided detailed traffic data for a 33 unit residential scheme off Calleywell Lane. The application was dismissed following appeal, the traffic data used remains fit-for-purpose.

13.10.4 The associated cumulative traffic flows are shown in Table 13.3l: 2026 Future Baseline plus Committed Development Traffic of **ES Volume 4, Appendix 13.4: Summary of Traffic Data (Doc Ref. 5.4)**.

13.10.5 In order to consider the worst case cumulative impact of the Project, the worker peak construction traffic flows have been added to the future baseline plus committed developments, with the traffic flows shown in **Table 13.3J (ES Volume 4, Appendix 13.4: Summary of Traffic Data (Doc Ref. 5.4)**. The percentage increase of the Project traffic and the total cumulative traffic compared to the 2026 Future Baseline shown in **Table 13.3K (ES Volume 4, Appendix 13.4: Summary of Traffic Data (Doc Ref. 5.4)**.

A20 Hythe Road/Station Road/Goldwell Lane

13.10.6 The average and maximum light vehicle flow increases at the ATC locations in the cumulative worker peak are 7.0% and 14.4% respectively. The highest heavy percentage increase occurs on ATC2: Station Road during the weekday 12-hour period, remaining unchanged from the residual effects assessment included within **Section 13.7** of this Chapter.

13.10.7 The average and maximum total vehicular flow increases at the ATC locations are 8.1% and 16.7% respectively, with the maximum increase (16.7%) occurring during the weekday PM peak hour at ATC 5: Goldwell Lane, this being associated with an increase from a baseline figure of 90 to 105, an increase of just 15 vehicles which is equivalent to 1 every 4 minutes. The only other locations where the 10% impact threshold is exceeded is during AM and Saturday peak hours at ATC 5 and during the AM, PM and Saturday peak hours at ATC 4: Goldwell Lane with a maximum total two-way vehicle increase of 15.8% in the PM peak due to an increase from a baseline figure of 95 to a cumulative increase to 110, as a result of a 15 vehicle increase with the majority consisting of light vehicles.

13.10.8 The total two-way percentage increase on the A20 Hythe Road is 3.3% to 3.5%.

13.10.9 The conclusions of the assessment of the Project on A20 Hythe Road/Station Road/Goldwell Lane related to: severance of communities; road vehicle driver delay and passenger delay; non-motorised user delay and amenity; fear and intimidation on and by road users; road user and pedestrian safety; and dangerous/hazardous and large/abnormal loads remain unchanged with cumulative schemes. A temporary **Negligible** (not significant) effect is determined save for road vehicle driver delay and passenger delay which is **Minor Adverse** (not significant).

Residual Effects

13.10.10 The residual cumulative effects remain as outlined above.

13.11 Summary

13.11.1 A summary of the effects considered in this Chapter is provided **in Table 13.14**. Residual significant effects (adverse or beneficial) are shown in bold following Embedded Mitigation and any additional mitigation.

Table 13.14: Summary of Residual Effects

Link	Receptor	Description of Impact	Effect (without additional mitigation)	Additional Mitigation/ Enhancement measure	Residual effect (after additional mitigation)
A20 Hythe Road between and including M20 Junction 10a and Stock Lane	1. 10/10A, 18A and 125 bus routes 2. Hatch Park & Hatch Lodge 3. Blue and White Café	Severance of communities	Negligible	N/A	Negligible
		Road vehicle driver delay and passenger delay	Minor adverse	N/A	Minor adverse
		Non-motorised user delay and amenity	Negligible	N/A	Negligible
		Fear and intimidation on and by road users	Negligible	N/A	Negligible
		Road user and pedestrian safety	Negligible	N/A	Negligible
		Large/abnormal loads	Negligible	N/A	Negligible
A20 Hythe Road between Stock Lane and Station Road and Station Road between A20 Hythe Road and M20 bridge	4. The Caldecott School	Severance of communities	Minor adverse	N/A	Minor adverse
		Road vehicle driver delay and passenger delay	Minor adverse	N/A	Minor adverse
		Non-motorised user delay and amenity	Minor adverse	N/A	Minor adverse
		Fear and intimidation on and by road users	Minor adverse	N/A	Minor adverse
		Road user and pedestrian safety	Minor adverse	N/A	Minor adverse
		Large/abnormal loads	Minor adverse	N/A	Minor adverse

Link	Receptor	Description of Impact	Effect (without additional mitigation)	Additional Mitigation/ Enhancement measure	Residual effect (after additional mitigation)
Station Road between M20 bridge and Primary Site Access	5. Evegate Business Park	Severance of communities	Negligible	N/A	Negligible
		Road vehicle driver delay and passenger delay	Minor adverse	N/A	Minor adverse
		Non-motorised user delay and amenity	Negligible	N/A	Negligible
		Fear and intimidation on and by road users	Negligible	N/A	Negligible
		Road user and pedestrian safety	Negligible	N/A	Negligible
		Large/abnormal loads	Negligible	N/A	Negligible
Goldwell Lane between Calleywell Lane and south of Goldwell Court	6. Goldwell Lane bend, Woodleas Camping and Caravan Site and Woodleas Farm 7. Symnells & Walled Forecourt (listed) and neighbouring properties 8. Goldwell (listed) and neighbouring properties	Severance of communities	Negligible	N/A	Negligible
		Road vehicle driver delay and passenger delay	Minor adverse	N/A	Minor adverse
		Non-motorised user delay and amenity	Negligible	N/A	Negligible
		Fear and intimidation on and by road users	Negligible	N/A	Negligible
		Road user and pedestrian safety	Negligible	N/A	Negligible

Link	Receptor	Description of Impact	Effect (without additional mitigation)	Additional Mitigation/ Enhancement measure	Residual effect (after additional mitigation)
		Large/abnormal loads	Negligible	N/A	Negligible
Goldwell Lane between south of Goldwell Court and Footpath AE474 (Goldwell Lane Site Access)	9. Aldington Eco Centre	Severance of communities	Negligible	N/A	Negligible
		Road vehicle driver delay and passenger delay	Minor adverse	N/A	Minor adverse
		Non-motorised user delay and amenity	Negligible	N/A	Negligible
		Fear and intimidation on and by road users	Negligible	N/A	Negligible
		Road user and pedestrian safety	Negligible	N/A	Negligible
		Large/abnormal loads	Negligible	N/A	Negligible
Footpath AE474	10. PRoW AE474	Severance of communities	Negligible	N/A	Negligible
		Road vehicle driver delay and passenger delay	Minor adverse	N/A	Minor adverse
		Non-motorised user delay and amenity	Negligible	N/A	Negligible
		Fear and intimidation on and by road users	Negligible	N/A	Negligible
		Road user and pedestrian safety	Negligible	N/A	Negligible

Link	Receptor	Description of Impact	Effect (without additional mitigation)	Additional Mitigation/ Enhancement measure	Residual effect (after additional mitigation)
		Large/abnormal loads	Negligible	N/A	Negligible
Cumulative Effect					
A20 Hythe Road/Station Road/Goldwell Lane	Road users	Severance of communities	Negligible	N/A	Negligible
		Road vehicle driver delay and passenger delay	Minor adverse	N/A	Minor adverse
		Non-motorised user delay and amenity	Negligible	N/A	Negligible
		Fear and intimidation on and by road users	Negligible	N/A	Negligible
		Road user and pedestrian safety	Negligible	N/A	Negligible
		Large/abnormal loads	Negligible	N/A	Negligible

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