Carter Jonas

MATTER 3 HEARING STATEMENT

Dover District Council Local Plan Examination

SUBMITTED ON BEHALF OF AXIS LAND PARTNERSHIPS LIMITED

October 2023

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1 INTRODUCTION

1.1 This statement has been prepared on behalf of our client Axis Land Partnerships Limited ('Axis') who have been appointed by the landowners to promote the site known as Land to the South of Aylesham ('the site') through the Local Plan process and ultimately bring the site forward for development. The site forms draft site allocation Policy SAP24.

1.2 Axis was appointed by the landowner, Trustees of the Lord Fitzwalter 1988 Settlement, in October 2022. As a land promotion and development company, Axis is experienced in delivering large strategic housing sites. Axis is owned by the Sir Robert McAlpine Group of companies which has over 150 years of experience of project delivery, including in-house design, project development, management and investment pre-construction support, building preservation and restoration and maintenance services.

1.3 Land to the South of Aylesham has been promoted for inclusion within the Dover District Council ('the Council') Local Plan at every consultation opportunity for the past decade. In 2019, Dover District Council (DDC) identified the site as a potential draft housing allocation and various meetings were held with members of the planning policy and highways teams at the Council. A high-level masterplan was also submitted via the Council's call for sites; demonstrating that the land could accommodate around 640 residential dwellings across a number of land parcels.

1.4 In December 2020, DDC's Cabinet approved the Draft Local Plan for Regulation 18 consultation. Representations were submitted in March 2021 in response to the then draft site allocation known as Strategic Policy 6 'South Aylesham' which were supported by masterplanning documents, movement plan and viability assessment (including commentary on the likely phasing of development) demonstrating the sites ability to deliver around 640 homes across nine parcels.

1.5 In November 2022, DDC published the Regulation 19 Submission Local Plan for consultation. As part of the submitted Dover Local Plan Regulation 18 representations, we had demonstrated that the site is able to accommodate circa 640 new dwellings. We therefore supported the renamed draft Policy SAP24's allocation to deliver an estimated 640 new homes over the Plan period to 2040.

1.6 Aylesham has proven to be a successful location in terms of housing delivery over the current Local Plan period and this site represents an exciting and logical opportunity to build on the successes achieved in Aylesham to date. South Aylesham is a large site which adjoins the existing settlement boundary, with the elements of the site which are proposed for development benefitting from few constraints in terms of topography, ecology and views.

1.7 As a result, Carter Jonas strongly support the inclusion of Policy SAP24 Land South of Aylesham and will attend the hearing sessions on Matter 3 Issue 4 on behalf of Axis.

1.8 This statement outline's Axis's comments in respect of Matter 3.

2 MATTER 3: HOUSING ALLOCATIONS

2.1 We respond to the specific issues arising in relation to Matter 3 below:

Issue 4: Aylesham Housing Sites

Question 1: What is the justification for allocation site SAP24, when considering the other reasonable alternatives for delivering growth around Aylesham? Is the chosen strategy an appropriate one?

2.2 Aylesham is defined as a rural service centre and is suitable for a scale of development that would reinforce its role as a provider of services to the rural area. The settlement benefits from a train station on the Dover to Canterbury railway line. Strategic Policy 3 (Housing Growth) establishes DDC's approach to the distribution of housing growth which is primarily based on settlement hierarchy, influenced by site availability, delivery factors and environmental constraints with Dover and Whitfield being the focus of new housing development. If following the settlement hierarchy, the secondary focus for development should be the district centre of Deal, followed by the rural service centres of Aylesham and Sandwich. However, given the limited supply of suitable and available housing sites in Deal and Sandwich the growth potential of these settlements is limited. As a result of this, the remaining housing growth not already identified in the settlements of Dover, Deal and Sandwich, will be delivered through the strategic expansion of Aylesham in accordance with the original vision conceived by Sir Patrick Abercrombie in 1928 for Aylesham to become a small garden town.

2.3 In line with this housing growth strategy, ED3 'Selection of Site Allocations Housing Site Addendum' (April 2023) sets out an overview of the history of the Aylesham site allocation selection process. As part of the Regulation 18 version of the Local Plan, DDC identified two potentially suitable sites for strategic site allocations. This included SAP24 (previously AYL003) and a site to the north of Aylesham (AYL004) for the delivery of 500 new homes. For both sites it was identified that further work was required as part of the assessment to identify mitigation for highway constraints.

2.4 Since 2019 the landowner and Axis, alongside the technical consultant team have completed a number of detailed assessments and technical reports to support the SAP24 draft allocation. This has included the production of a Vision Document comprising a concept masterplan establishing how the site can deliver 640 new homes, substantial open space, community facilities and a new access and the design principles that have informed this. Phasing and delivery are also considered in this document. Studies have also been undertaken with regards to highways including assessments to understand the impact of the allocation on the strategic and local highway and necessary mitigation to ensure that the scheme can come forward without any unacceptable impacts upon the road network. This has involved Axis, the landowner and technical team working closely with Kent County Council and DDC, with regular meetings to provide them with the required information to secure an appropriate draft allocation on this site.

2.5 Following the Regulation 18 consultation, AYL004 was considered unsuitable and was removed from the Regulation 19 Submission Local Plan, meaning that AYL003/SAP24 is the only remaining Aylesham strategic site allocation. ED3 concludes that SAP24 is considered to be a more suitable expansion to Aylesham, with the on-site constraints being able to be mitigated through the Local Plan policies and is preferred over AYL004 for a number of reasons.

2.6 One of the primary justifications for the inclusion of SAP24 instead of the alternative strategic allocation is the impact upon the road network. It was concluded that AYL004 would raise concerns in relation to the allocation's cumulative impact on the highways whereas SAP24 is likely to have a lesser impact upon the A257/High Street Junction location in Wingham. Analysis of the Regulation 18 transport models which included both sites show that in the AM and PM peak periods, SAP24 generates fewer trips travelling towards this junction. This is due to the location of SAP24 being a further distance from the A257/High Street junction and other alternative route options being available.

2.7 Due to the separation provided by Spinney Lane and the area of open space located at the Snowdown Colliery RFC, the SAP24 site allocation will have a lesser impact upon existing properties than the level of such impact arising from AYL004

2.8 In respect of landscape impact, whilst the assessment carried out for SAP24 identifies impacts upon the landscape as a result of the introduction of residential development on the site, it is considered that SAP24 is better screened and enclosed by existing landscape features including the Ancient Woodland, field boundary and highways verge landscaping than the alternative strategic allocation, AYL004. Mitigation in the form of a landscape buffer would also be contextually more appropriate to the landscape setting at SAP24 than to the north of Aylesham. Whilst SAP24 is a relatively contained and screened site, by contrast AYL004 is more visible in wider views.

2.9 The Sustainability Appraisal (SD03a) scores SAP24 (referenced therein as 'AYL003r2') higher in relation to SA2: access to amenities, SA4: transport, and SA8: climate change. SAP24 scores higher in this regard due to the proximity of the site to both Aylesham and Snowdown railway stations as well as the existing services and facilities in Aylesham village.

2.10 Given the above we consider that the inclusion of SAP24 is justified and this strategy is supported by the conclusions of the multiple assessments that have taken place to date.

Question 2: How does the site boundary relate to the possible development proposals in the emerging Canterbury Local Plan? When viewed in isolation, does it adequately reflect the form of the existing settlement?

2.11 The draft site allocation SAP24 and the site identified as draft site allocation 'R20' in Canterbury City Council's Regulation 18 Local Plan are both in the same ownership (Trustees of the Lord Fitzwalter 1988 Settlement). The administrative boundary between Dover and Canterbury effectively splits the wider land holding into two parts.

2.12 The Dover land has been promoted via the Local Plan process for the last decade as a logical, suitable and available site for residential led development which directly relates to the existing settlement of Aylesham. Via the Local Plan process, the masterplan for SAP24 has demonstrated that the site is capable of delivering a standalone new development to the south of Aylesham which simultaneously does not 'turn its back' on or close off the opportunity for further possible residential development to come forward on the Canterbury land in the future.

2.13 In terms of the Canterbury land (R20), the masterplan for this site would need to follow and reflect any future development at SAP24. The location of suitable pedestrian and vehicular connections between the two draft allocations have been confirmed by highways consultants to create synergy and connections between the potential future developments but neither site would be reliant upon the other for access.

2.14 When viewed in isolation, the Vision document submitted in support of the Regulation 19 representations for SAP24 clearly explains how the masterplan for the site has been developed to respect and reflect the existing settlement of Aylesham. The main axis of existing development in Aylesham from Market Place along Dorman Avenue South would continue through the proposed development creating both visual and transport connections between the existing settlement and any future development at SAP24. The main design principles seek to:

- respect the existing vale and restricting the proposed developable area to conclude at the bottom of the dry vale;
- connect the woodland within the site to surrounding woodlands;
- create gateways to the new development which respect the existing settlement; and
- create a connected community.

2.15 Whilst all of these features would also benefit draft site allocation R20 within Canterbury if it comes forward, their primary aim is to create a strong foundation for a new community which works with and complements the existing settlement of Aylesham.

Question 3: What is the justification for the suggested changes to Policy? Why are they necessary for the soundness and will they be affective in achieving the expected outcomes?

2.16 Between the Regulation 19 consultation on the draft Local Plan and its submission, Canterbury City Council published the Regulation 18 Version of its Local Plan which included a draft site allocation (R20) adjacent to proposed site allocation SAP24. Dover District Council's suggested changes to the supporting text for SAP24 at paragraph 4.200 - 4.204 of SD06 (reference AM51) acknowledge draft allocation R20. There is a Statement of Common Ground between Dover District Council and Canterbury City Council (Ref: GEB03) This is supported.

2.17 The suggested change to Figure 4.6 (reference AM52) follows representations we submitted to the Regulation 19 consultation of the Local Plan. Figure 4.6 showed site allocation SAP25 on an inset map which was titled SAP24. As the allocations are separate, it was requested that this was amended to avoid confusion and in the spirit of soundness.

2.18 The detailed amendments to criteria c, k, m and o of draft Policy SAP24 (reference AM53) are understood to reflect responses received at the Regulation 19 consultation. In particular the changes to parts k, m and o reflect responses from statutory consultees. These amendments are supported.

2.19 The collective amendments to the supporting text for draft allocation SAP24 and the supporting text reflect the most up to date position in respect of the site allocation and their inclusion is supported for soundness purposes.

Question 4: What effect will the allocation have on the landscape character of the area, having particular regard to views to and from the AONB?

2.20 The landscape character of the site and its immediate context are well represented by its host landscape character area, as outlined within the Dover District Landscape Character Assessment, undertaken by LUC and published in 2020. The site is situated within the Open Arable Chalk Farmland with Parkland Landscape Character Type (LCT), and more specifically within the Shepherdswell Aylesham Parklands E1 Landscape Character Area (LCA). The site contains stretches of well-established hedgerow which delineate field boundaries in the northern, eastern and southern areas of the site, these serve as key elements of the sites landscape fabric, along with Ackholt Wood - a prominent block of ancient woodland situated on the western edge of the site. Existing residential development and larger commercial buildings, situated upon topographically higher ground to the north, are visible from within the site and serve as urban detractors within the local landscape. In addition, the traffic along Spinney Lane and Aylesham Road serves to adversely impact the perceptual qualities of the site's landscape character.

2.21 The site lies around 600m outside of the Kent Downs AONB at its very closest point (the north western tip) and in excess of 1000m at it furthest point. Therefore the potential allocation/development of the site would not directly affect the AONB landscape and its special qualities. However, as outlined within national policy, the Kent Downs Management Plan 2021-2026 and more specifically the 'Setting Position Statement 2018', regard must be taken for the setting and views in and out of the AONB – in that they are primarily conserved and enhanced. Sustainable development principle SD8 and SD13 outline this clearly within the Kent Downs Management Plan.

2.22 The Kent Downs Way is a nationally promoted route which runs through the AONB, with views eastwards towards the well-wooded local landscape beyond the boundary of the Kent Downs AONB, in which the site is situated.

2.23 The masterplan and potential development of the site would be landscape-led, taking into account the potential effects upon the nearby AONB situated approximately 600m to the west of the site (at its closest). In respect

of visual amenity and views from within the AONB, the site is partially visible from a short section of the Kent Downs Way, between Adisham Road and where public footpath 0296/CB213/1 intersects it, west of Womenswold. The site can be partially seen situated below the well-wooded skyline, amongst a series of well-established mature hedgerow with hedgerow trees in the foreground, which serve to filter and partially screen areas of the site. The site forms a minor part of a much wider view out towards the AONB's eastward setting and is seen alongside existing larger scale commercial units situated within Aylesham Industrial Estate to the north, which are clearly visible upon the skyline, as well as large scale farm sheds within north Nonington.

2.24 A landscape-led approach to the draft allocation and future development of the site would ensure proposals do not break the skyline, in order to retain the character of the view and existing wooded backdrop to the site. In addition, mitigative measures would also ensure the site is brought forward without causing significant effects upon the setting on the Kent Downs AONB. An example of this would be to ensure the site's western edge is designed in a way that incorporates a rich planting corridor comprising native tree and shrub planting, which would serve to further filter and screen potential views of the proposals from within the AONB, but also enhance and better connect the existing green infrastructure assets within the immediate site context such as Ackholt and Aylesham Wood. Furthermore, existing key landscape features such as boundary hedgerow and hedgerow trees would be retained and reinforced with additional planting which would serve to enhance the landscape fabric of the site's character. Existing woodland should also be buffered against and enhanced to further ensure benefits to the wider green infrastructure network.

2.25 As outlined within the Kent Downs Setting Position Statement, many issues can be resolved through careful design and incorporation of appropriate mitigation and/or management measures. These primarily include:

- *"care over orientation, site layout, height, scale and massing of structures and buildings to minimise impact when viewed from the AONB;*
- *appropriate densities to allow for significant tree planting between buildings;*
- *consideration not just of the site but also the landscape, land uses and heritage assets around and beyond it;*
- *careful use of colours, materials and non-reflective surfaces;*
- *restraint and care over the installation and use of external lighting including street lighting, to prevent harm to the dark night skies of the AONB. Where essential, lighting should be well-directed and full cut off and of low level in form and lumen intensity;*
- *the grouping of new structures and buildings close to existing structures and buildings to avoid new expanses of development that are visible and out of context; and*
- *detailed mitigation and management measures, for example including native landscaping that is locally appropriate (where possible contributing to Biodiversity Action Plan targets) and noise reduction"*

2.26 The effect of the draft allocation on the landscape character of the area will be robustly tested through the LVIA process which is a requirement of part I of draft Policy SAP24. The site forms a minor element in a much wider

eastward facing view, from PRoW within the AONB. Taking this into account, along with a series of mitigative measures, it is deemed that the allocation of the site would be brought forward without causing adverse effects upon either the setting of the Kent Downs AONB, particularly views to and from, or the local landscape character.

Question 5: What effect will the allocation have on the safe and efficient operation of the highway network?

2.27 To assess the current operational and safety characteristics of the highway network, a comprehensive set of baseline traffic surveys comprising of 6 x Manual Classified Counts (MCCs) and 2 x Automatic Traffic Counters (ATCs) were conducted by an independent company during a neutral time period (w/c 11th September 2023).

2.28 The primary purpose of gathering the refreshed data was to establish if the highway network had experienced a material reduction in the volume of traffic during the weekday AM and PM peak periods, resulting from a change in working practices, travel patterns/behaviours since the COVID-19 pandemic. Consultants, WSP (acting on behalf of DDC) state that other Local Authorities have experienced a circa 10% reduction since 2020.

2.29 The defined study area for the MCCs included the A257 Canterbury Road/B2046 High Street; B2046 Adisham Road/Dorman Avenue; Holt Street/Aylesham Road; B2046 Adisham Road/Spinney Lane; B2046 Adisham Road/A2 Slips; Old Dover Road/A260 junctions. The ATCs were installed within the vicinity of the site's proposed accesses off the southern and western sides of Spinney Lane and Aylesham Road, respectively.

2.30 In comparison with the previously gathered dataset (2019/20), the results of the MCC survey undertaken at the A257 Canterbury Road/B2046 High Street junction revealed that there had been a significant reduction in southbound vehicular traffic movements on the northern arm during the weekday AM peak hour period. Further, a significant reduction in northbound movements along the A257 Canterbury Road was also observed during the PM peak hour period.

2.31 The 2023 MCC survey data has been modelled using industry standard software, to establish the baseline performance of the aforementioned junctions. Theses assessments revealed that with the exception of two (i.e. A257 Canterbury Road/B2046 High Street; B2046 Adisham Road/Dorman Avenue), all junctions operate within capacity during the weekday AM and PM peak hour periods. Of note, the A257 Canterbury Road/B2046 High Street junction currently operates at or near to capacity. Therefore, even a negligible increase in traffic at this junction will result in exceedance of capacity due to the sensitive nature of the junction. Additional analysis in this regard is presented in Section 5 of the supporting Technical Note.

2.32 In addition, the results of the ATCs revealed that the observed speeds (85th percentile) were significantly below the national speed limit (i.e. 60-mph) currently present along Spinney Lane and Aylesham Road. This data supports a speed limit reduction from 60-mph to 50-mph along the section of highway adjacent to the site's northern and eastern frontages, thereby providing safer access for all motorised and non-motorised users.

2.33 The emerging residential-led development proposals for SAP24 incorporate the provision of two accesses located off the southern and western sides of Spinney Lane and Aylesham Road, respectively. The geometric design of the site's proposed primary and secondary accesses off Spinney Lane and Aylesham Road can achieve visibility splays in accordance with the observed speeds. Please refer to Section 4 of the supporting Technical Note. Consequently, car drivers would be afforded sufficient intervisibility with other motorised and non-motorised users, thereby enabling safe manoeuvres to be undertaken at the proposed give-way priority junctions.

2.34 As outlined in Section 4 of the supporting Technical Note, mitigation schemes have been proposed for the Holt Street/Aylesham Road and B2046 Adisham Road/Spinney Lane junctions, to minimise the impact of the development proposals with regards to capacity, the formation of queues and anticipated delays.

2.35 Based on applying vehicular trip rates contained within the Transport Assessment (TA), prepared by WSP (2021), in support of DDC's Regulation 19 Local Plan, the development proposals would have the potential to generate in the order of 293 two-way vehicle movements (68 arrivals and 225 departures).

2.36 When applying the same methodology (i.e. 2011 Origin and Destination data) used by WSP in preparing the Transport Assessment for DDC's Regulation 19 Local Plan, the additional vehicular traffic generated by SAP24 through the A257 Canterbury Road/B2046 High Street junction only accounts for 1.7% and 2.8% of the total movements during the weekday AM and PM peak hour periods, respectively. Please refer to Section 3 for additional information.

2.37 To assess the impact of the emerging residential-led development proposals on the future operation of the highway network during the weekday AM and PM peak hour periods, a '2040 Future Year + Committed Development' (with/without development) has been modelled. This assessment includes the proposed mitigation schemes for the Holt Street/Aylesham Road; B2046 Adisham Road/Spinney Lane junctions.

2.38 The results of the junction capacity modelling assessment for both the '2040 + Committed Development (With and Without SAP24 Development) scenarios reveal that for the two junctions (i.e. A257 Canterbury Road/B2046 High Street; B2046 Adisham Road/Dorman Avenue) currently operating at or near to capacity, there will be a slight worsening during the weekday AM and PM peak hour periods, as reflected in the increased vehicle queues and delays.

2.39 However, with regards to the A257 Canterbury Road/B2046 High Street junction, it is noteworthy that when comparing the '2040 + Committed Development (With and Without SAP24 Development) scenarios, the length of the vehicle queue on the southern arm of the junction (B2046 High Street) increases from 12 to 18 (i.e. net increase of 6) during the weekday AM peak hour period. This equates to one additional movement every 10-minutes. Such a negligible amount will not have a material impact on the operational performance of the A257 Canterbury Road/B2046 High Street junction.

2.40 Similarly in relation to the future operation of the B2046 Adisham Road/Dorman Avenue junction, the increase in vehicles queuing on the eastern arm (Dorman Avenue North) junction during the weekday AM peak hour period will be negligible.

2.41 To further minimise the impact of the emerging residential-led development proposals on the highway network, specifically in relation to the above-mentioned junctions, a package of mitigation measures including the potential provision of a new/diverted bus service, walk and cycle infrastructural improvements will be implemented to encourage future households and end-users to adopt long-term sustainable travel patterns/behaviours for a multitude of journey purposes.

2.42 The provision of a diverted or new bus service connecting the SAP24 site to key employment destination centres located in north Kent (i.e. Sandwich, Margate and Ramsgate) in conjunction with other travel planning measures will have the potential to reduce the number of vehicular movements heading in a northerly direction (via the B2046 Adisham Road/Dorman Avenue and A257 Canterbury Road/B2046 High Street junctions) by 75% during the weekday AM and PM peak hour periods.

2.43 Section 6 of the supporting Technical Note demonstrates that the potential intervention of a diverted or new bus service to address an existing gap in public transport provision, would reduce the manifestion of queues and delays on the eastern and southern arms of the A257 Canterbury Road/B2046 High Street and B2046 Adisham Road/Dorman Avenue junctions during the weekday AM and PM peak hour periods.

2.44 Of note, the modelling does not consider the potential transfer of trips from vehicle to bus from other existing households in Aylesham during the AM and PM peak hour periods. Consequently, the assessment presented in Section 6 of the Technical Note is likely to underestimate the impact of diverting or creating a new bus service.

2.45 In line with paragraph 111 of the National Planning Policy Framework, the results of this assessment demonstrate that the emerging residential-led development proposals would not not have a severe impact on the future operational performance of the site's proposed primary access off Spinney Lane as well as the other 6 junctions comprising the defined highway network. Consequently, it is concluded that the safety and efficiency of the highway network will be maintained through the implementation of mitigation measures.

Question 6: What is the justification for Policy SAP24(q)? What are the existing facilities that need upgrading and why?

2.46 We anticipate Dover District Council responding to this question. Inspectors should note that a Statement of Common Ground has been signed between Dover District Council and the promoter of SAP24. This provides a detailed breakdown of the wider strategic highways mitigation measures and improvements, on site open space and sports facilities, an on-site community facility, and the potential level of financial contributions towards off site infrastructure on a per unit basis for a policy compliant scheme.

Question 7: How have the effects of the development on biodiversity, including the ancient woodland (Ackholt Wood) been considered? What is the justification for the suggested changes to the Plan which seek to increase the buffer?

2.47 The effects of development on biodiversity in SAP24 have been considered in a number of ways through the Regulation 18 and Regulation 19 consultation process, and reflected in the SAP Allocation wording, and relevant Local Plan policies. These are detailed below.

2.48 A number of the Regulation 18 and 19 Reps (including from statutory and non-statutory consultees) make reference to the ancient woodland, Ackholt Wood, and wildlife within the site, and policy wording has been amended to reflect these.

2.49 In terms of Policy SAP24 - policy requirement part “k”, specifically considers ancient woodland, including a buffer zone, specifications as to the nature of the buffer zone, and a requirement to undertake a tree survey and ecological survey in advance of a planning application.

2.50 Policy requirement part “m” requires consideration of the potential effects of the development on biodiversity, through the requirement to ensure appropriate habitat and species surveys are carried out prior to determination, to inform layout and design and avoid ecological impacts. This would thus allow for compliance with the mitigation hierarchy, by informing sequential avoidance, mitigation and compensation measures, and additional enhancement measures, along with implementation management and monitoring of such measures.

2.51 The emerging draft Local Plan Policies, including SP-13 Protecting the District's Hierarchy of Designated Environmental Sites and Biodiversity Assets, SP14-Enhancing Green Infrastructure and Biodiversity, and NE1-Biodiversity Net Gain will all facilitate consideration on effects of the development on biodiversity.

2.52 The Masterplanning Vision Document (submitted in support of our Regulation 19 Representations) demonstrates the ability to protect and celebrate the ancient woodland. This is illustrated through the design principles which seek to connect the local woodlands and through inclusion of a buffer within the concept masterplan. Furthermore, protection of biodiversity is viable and deliverable as demonstrated throughout the Vision Document, with references to biodiversity gain, and establishing habitats which support biodiversity. The inclusion of semi-natural habitats throughout the site, as shown within the concept masterplan, further show positive consideration of biodiversity.

2.53 The proposed buffer around Ackholt Wood was 15m up to and including the Regulation 19 Consultation on the draft Local Plan. The previously proposed buffer size aligned with the government’s standing advice which states there should be a buffer zone of at least 15 metres from the boundary of the woodland, or a minimum Root Protection Area for trees on the boundary, which ever is the larger.

2.54 The Reg 19 response from the statutory consultee Natural England (REP ID SDLP1456), does not directly comment on the ancient woodland buffer size, aside from that Natural England are pleased that the allocation considers impacts on the area of ancient woodland (Ackholt Wood) that falls within the site boundary and the

policy includes specific reference to the need to both protect and enhance this habitat (now included as policy requirement ‘k’).

2.55 Kent Downs AONB do not comment on the ancient woodland buffer in their Reg 19 responses (REP ID SDLP263).

2.56 The Woodland Trust submitted a general response to the Local Plan on biodiversity at REP ID SDLP652, relating to Strategic Policy 13 (Protecting the District's Hierarchy of Designated Environmental Sites and Biodiversity Assets) noting that guidance for woodland buffers to be a minimum of 15 metres with wider buffers being sought where appropriate was welcomed. In response to SAP24 specifically, REP ID SDLP675, relating to SAP24 - Land to the South of Aylesham (AYL003), The Woodland Trust noted their preference for ancient woodlands to be excluded from site allocations. However, the minimum buffer of 15 metres in part k the draft policy was acknowledged and the Trust asked for this to be increased to at least 20 metres.

2.57 Therefore, the request for a 20 metre buffer is at the suggestion of the Woodland Trust. We understand that discussions have taken place between Dover District Council and the Woodland Trust. As the draft masterplan for the site does not envisage any built form within a 20 metre radius of the Ancient Woodland the increase in the buffer is achievable and can be included in the site allocation to help ensure biodiversity on site is prioritised.

POLICY SAP25

Question 1: Is the intention of this allocation to come forward separately, or as part of land south of Aylesham (SAP24)? Does the masterplan for site SAP24 need to account for this development too?

2.58 The intention is that draft site allocations SAP25 and SAP24 would come forward independently. These sites are in different land ownerships, and they are physically separated by Aylesham Road to the west of SAP25 and a band of mature hedgerow along SAP25’s southern boundary. Whilst the masterplan for site SAP24 will clearly acknowledge and address the surrounding area, it is not realistic for this to include detail on neighbouring allocations.

Appendix 1

LAND SOUTH OF AYLESHAM, KENT

TECHNICAL NOTE

PROJECT NO. 22/221 DOC NO. D004

DATE: OCTOBER 2023

VERSION: 1.0

CLIENT: AXIS LAND PARTNERSHIPS

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VELOCITY
Transport Planning

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1 INTRODUCTION

1.1 SCOPE OF TECHNICAL NOTE

1.1.1 This Technical Note (TN) has been prepared by Velocity Transport Planning (VTP) on behalf of Axis Land Partnerships ('the promoter') to accompany an Examination in Public Hearing Statement (EiPHS) in support of a draft allocation for a residential-led development proposal that comprises the erection of 640 residential units (Use Class C3) of mixed tenure, type and size including affordable units and housing for older people (with and without care provision) together with employment opportunities, community facilities, formal and informal open spaces for leisure and recreation, and enhancements to the Public Rights of Way (PRoW) on land off Spinney Lane in Aylesham, Kent.

1.1.2 The site, known as SAP24 – Land to the South of Aylesham (AYL003) is allocated within Dover District Council's (DDC's) Local Plan to 2040 Regulation 19 Submission (October 2022). The proposals aim to create a new neighbourhood, incorporating garden village principles, and forms an extension to the Rural Service Centre of Aylesham.

1.1.3 The TN has been prepared to address the Planning Inspector's (PI's) Matters, Issues, and Questions (MIQ) for Policy SAP24 – Land South of Aylesham site, specifically, in relation to Question 5: What effect will the allocation have on the safe and efficient operation of the highway network? In responding to this question, the TN presents:

- The results of baseline traffic surveys (undertaken in September 2023) examining the operational characteristics of the local highway network comprising Aylesham and Wingham during the weekday AM and PM peak hour periods. It further presents a comparison with data gathered in late 2019/early 2020 to establish if there has been a material difference in vehicular flows/commuting patterns, which have occurred since the 2019 COVID-19 pandemic.
- The results of junction capacity assessments examining the future performance of the site's proposed access off Spinney Lane and other key local junctions during the weekday AM and PM peak periods, respectively.
- A strategy for mitigating the impact of the residential-led development proposals on the local highway and transport networks, which comprise a package of 'hard' infrastructural and 'soft' information-led measures aimed at encouraging future households and other end-users to adopt long-term sustainable travel patterns and behaviours for a variety of journey purposes.

1.1.4 The principal purpose of this note is to demonstrate how SAP24 – Land to the South of Aylesham (herein referred to as the 'site') complies with the key transport test outlined in paragraph 111 of the National Planning Policy Framework (NPPF, September 2023). This states *"development should only be prevented or refused on highway grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."*

1.1.5 The note concludes that the site will not have an unacceptable or severe impact on the safe and efficient operation of the highway network.

1.1.6 TN has been prepared in conjunction with Planning Policy and Highway/Public Transport Officers at the Local Planning (DDC) and Highways Authorities, respectively. Further, reference is also made to the Department for Transport's (DfT's) 'Design Manual for Roads and Bridges (DMRB) publications.

1.2 STRUCTURE

1.2.1 The remainder of this note is structured as follows: -

- **Section 2**: summarises the results of the baseline traffic surveys.
- **Section 3**: presents the methodology for deriving the vehicular trip generation, distribution, and assignment on the local highway network.
- **Section 4**: presents the highway impact assessment.
- **Section 5**: outlines the proposed mitigation measures, which will be delivered as part of the SAP24 development proposals, which include the provision of new 'hard' infrastructure and 'soft' information-led measures. aimed at encouraging future households and other end-users to adopt long-term sustainable travel patterns and behaviours.
- **Section 6**: summaries the note's main findings, clearly stating that the development proposals will not have a severe impact on the safe and efficient operation of the highway network, particularly to the conditions of amenity, capacity, and severity.

2 BASELINE TRAFFIC DATA

2.1 INTRODUCTION

2.1.1 This section of the note summarises the results of a number of baseline traffic surveys, which were recently undertaken to establish the operational characteristics of the local highway network comprising Aylesham and Wingham. It further compares the results of the 2023 traffic survey with data obtained in late 2019 and early 2020, specifically with regards to the A257 Canterbury Road/B2046 High Street junction, to establish whether the COVID-19 pandemic has had a material impact on travel behaviour/patterns.

2.1.2 When assessing the potential vehicular traffic implications of a residential development proposal, it is generally accepted by Transport Planning practitioners that the critical periods are the weekday AM (08:00 – 09:00) and PM (17:00 – 18:00) peak hour periods. It is during these periods that the level of vehicular traffic associated with the development proposals as well as that on the local highway network is likely to be at its greatest.

2.1.3 VTP commissioned an independent company, Advanced Transport Research (ATR) to conduct 6 Manual Classified Count (MCCs) surveys at the following junctions on Tuesday 12th September 2023 (a neutral time period).

- A257 Canterbury Road/B2046 High Street;
- B2046 Adisham Road/Dorman Avenue;
- Holt Street/Aylesham Road;
- B2046 Adisham Road/Spinney Lane;
- B2046 Adisham Road/A2 Slips;
- Old Dover Road/A260

2.1.4 In addition, ATR were commissioned to conduct 2 x Automatic Traffic Counter (ATCs) within the vicinity of the site's proposed access points off Spinney Lane and Aylesham Road for a 7-day period commencing 12th September 2023.

2.1.5 **Figure 2-1** shows the location of the baseline traffic surveys in context with the site (SAP24).

Figure 2-1: Baseline Traffic Survey Plan

2.2 MANUAL CLASSIFIED COUNT SURVEYS

2.2.1 The results of the MCC surveys revealed that the weekday AM and PM peak hour periods for each of the junctions were as follows: -

- A257 Canterbury Road/B2046 High Street
  - AM (07:15 – 08:15)
  - PM (16:45 – 17:45)
- B2046 Adisham Road/Dorman Avenue North
  - AM (07:30 – 08:30)
  - PM (17:00 – 18:00)
- Holt Street/Aylesham Road
  - AM (07:30 – 08:30)
  - PM (16:00 – 17:00)
- B2046 Adisham Road/Spinney Lane
  - AM (07:30 – 08:30)
  - PM (16:45 – 17:45)
- B2046 Adisham Road/A2 Slips
  - AM (07:30 – 08:30)
  - PM (16:45 – 17:45)

- Old Dover Road/A260
  - AM (07:30 – 08:30)
  - PM (16:45 – 17:45)

2.2.2 It is evident from above that for the majority of the above-listed junctions within the defined study area, the weekday AM and PM peak hours has been identified as 07:30 – 08:30 and 16:45 – 17:45, respectively. Consequently, this has been used as the network peak for the junction capacity assessments.

A257 CANTERBURY ROAD/B2046 HIGH STREET

2.2.3 The results of the MCC survey conducted at the give-way priority junction of the A257 Canterbury Road/B2046 High Street is summarised in **Table 2-1**.

Table 2-1: A257 Canterbury Road/B2046 High Street Junction – Total Movements

ARM	MOVEMENT	TIME PERIODS	
		AM (07:30 – 08:30)	PM (16:45 – 17:45)
A257 High Street (North)	Left to B2046 High Street	194	241
	Straight Ahead to A257 Canterbury Road	585	321
B2046 High Street	Left to A257 Canterbury Road	72	211
	Straight Ahead to A257 High Street (North)	211	222
A257 Canterbury Road	Left to A257 High Street (North)	314	485
	Right to B2046 High Street	50	87
TOTALS		**1,426**	**1,567**

B2046 ADISHAM ROAD/DORMAN AVENUE NORTH

2.2.4 **Table 2-2** presents the results of the MCC survey at the give-way junction of the B2046 Adisham Road/Dorman Avenue North.

Table 2-2: B2046 Adisham Road/Dorman Avenue North – Total Movements

ARM	MOVEMENT	TIME PERIODS	
		AM (07:30 – 08:30)	PM (16:45 – 17:45)
B2046 Adisham Road (North)	Left to Dorman Avenue North	52	133
	Straight Ahead to B2046 Adisham Road (South)	201	175
Dorman Avenue North	Right to B2046 Adisham Road (North)	463	164
	Left to B2046 Adisham Road (South)	142	74
B2046 Adisham Road (South)	Straight Ahead to B2046 Adisham Road (North)	110	337
	Right to Dorman Avenue North	184	196
TOTALS		**1,149**	**1,079**

AYLESHAM ROAD/HOLT STREET

2.2.5 **Table 2-3** presents the results of the MCC survey at the give-way junction of Holt Aylesham Road/Holt Street during the AM and PM peak hour periods.

Table 2-3: Holt Street/Aylesham Road – Total Movements

ARM	MOVEMENT	TIME PERIODS	
		AM (07:30 – 08:30)	PM (16:45 – 17:45)
Aylesham Road	Left to Holt Street (East)	57	55
	Right to Holt Street (West)	13	13
Holt Street (East)	Right to Aylesham Road	45	28
	Straight Ahead to Holt Street (West)	103	45
Holt Street (West)	Left to Aylesham Road	23	15
	Straight Ahead to Holt Street (East)	53	78
TOTALS		**294**	**234**

B2046 ADISHAM ROAD/SPINNEY LANE

2.2.6 **Table 2-4** presents the results of the MCC survey undertaken at the give-way junction of the B2046 Adisham Road/Spinney Lane during the AM and PM peak hour periods.

Table 2-4: B2046 Adisham Road/Spinney Lane – Total Movements

ARM	MOVEMENT	TIME PERIODS	
		AM (07:30 – 08:30)	PM (16:45 – 17:45)
B2046 Adisham Road (North)	Left to Spinney Lane	1	1
	Straight Ahead to B2046 Adisham Road (South)	644	402
Spinney Lane	Left to B2046 Adisham Road (North)	111	93
	Right to B2046 Adisham Road (South)	2	0
B2046 Adisham Road (South)	Straight Ahead to B2046 Adisham Road (North)	332	516
	Right to Spinney Lane	119	147
TOTALS		**1,209**	**1,159**

B2046 ADISHAM ROAD/A260/A2 SLIPS

2.2.7 **Table 2-5** presents the results of the MCC survey at the B2046 Adisham Road/A260/A2 slips roundabout junction during the weekday AM and PM peak hour periods on Tuesday 12th September 2023.

Table 2-5: B2046 Adisham Road/A2 Slips – Total Movements

ARM	MOVEMENT	TIME PERIODS	
		AM (07:30 – 08:30)	PM (16:45 – 17:45)
B2046 Adisham Road	U-Turn to B2046 Adisham Road	0	1
	Straight Ahead to A260	747	422
	Right to A2 -On-Slip	142	126
A260	U-Turn to A260	0	0
	Straight Ahead to B2046 Adisham Road	271	353
	Left to A2 -On-Slip	44	64
A2 -On-Slip	U-Turn to A2 -On-Slip	0	0
	Left to B2046 Adisham Road	237	413
	Right to A260	258	386
TOTALS		**1,699**	**1,765**

OLD DOVER ROAD/A260

2.2.8 **Table 2-6** presents the results of the MCC survey conducted at the 3-arm roundabout junction of Old Dover Way and the A260 during the AM and PM peak hour periods.

Table 2-6: Old Dover Road/A260 – Total Movements

ARM	MOVEMENT	TIME PERIODS	
		AM (07:30 – 08:30)	PM (17:45 – 18:45)
Old Dover Way (North)	U-Turn to Old Dover Way (North)	0	0
	Left to A260	62	91
	Straight Ahead to Old Dover Way (South)	11	8
A260	U-Turn to A260	1	2
	Left to Old Dover Way (South)	381	496
	Right to Old Dover Way (North)	622	298
Old Dover Way (South)	U-Turn to Old Dover (South)	0	1
	Right to A260	248	319
	Straight Ahead to Old Dover Way (North)	480	271
TOTALS		**1,805**	**1,486**

2.3 AUTOMATIC TRAFFIC COUNTER SURVEYS

2.3.1 To assess the operational characteristics of both Spinney Lane and Aylesham and inform the geometric design of the site's proposed accesses of Spinney Lane and Aylesham Road, two Automatic Traffic Counters (ATCs) were installed for a 7-day period commencing 12th September 2023. The ATCs gathered both volumetric and vehicular speed data.

2.3.2 As shown in **Figure 2-2** the ATC along Spinney Lane was installed approximately 275-metres east of the give-way priority junction with Cooting Road, adjacent to the Public Right of Way (Footpath EE296/1). The other ATC was installed along Aylesham Road circa 180-metres north of the existing dwelling known as Ackholt House.

Figure 2-2: View of ATCs Installed along Spinney Lane and Aylesham Road

SPINNEY LANE

2.3.3 **Table 2-7** presents a summary of the observed two-way, average weekday flows and 85th percentile speeds within the vicinity of the site's proposed access off the southern side of Spinney Lane.

Table 2-7: Summary of ATC Survey along Spinney Lane (12th - 18th September 2023)

DIRECTION	DAILY (00:00 – 24:00)*	AM PEAK (08:00 – 09:00)*	PM PEAK (17:00 – 18:00)*	AVERAGE SPEED**	85TH PERCENTILE SPEED**
Eastbound	1,710	115	187	44.6-mph	51.5-mph
Westbound	1,358	121	84	42.6-mph	49.4-mph
TOTALS	**3,068**	**236**	**271**	-	-
**Based on 5-Weekday Average*					
*** Based on 7-Day Average*					

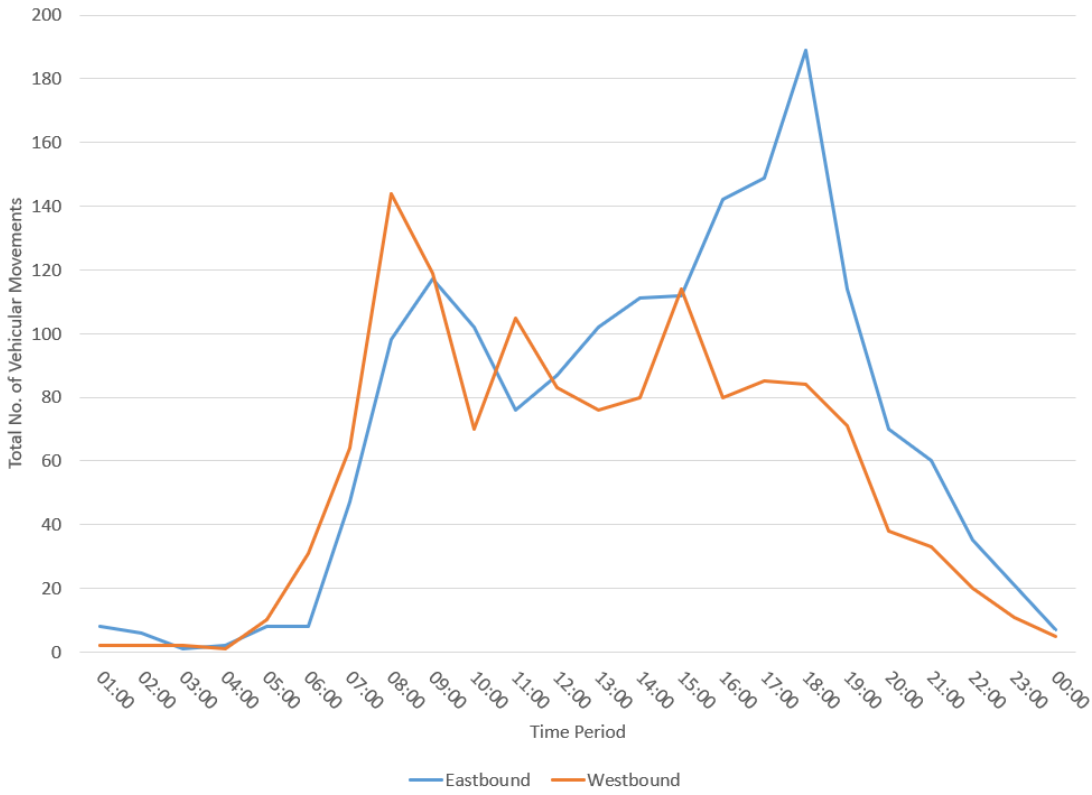
2.3.4 As shown in **Table 2-7**, the results of the ATC survey reveal that the section of Spinney Lane adjacent to the site's northern frontage experiences a moderate level of vehicular traffic movements throughout a typical weekday. The average total daily flow (5-weekdays) comprised of 3,068 two-way movements (1,710 eastbound and 1,358 westbound). Of these, a total of 236 and 271 were observed during the weekday AM (08:00 – 09:00) and PM (17:00 – 18:00) peak hour periods, equating to between 4 and 5 two-way movements every minute.

2.3.5 The 85th percentile speeds were observed to be 51.5-mph and 49.4-mph in an east and westbound direction, significantly below the national speed limit (i.e., 60-mph for single carriageway roads). The 85th percentile speed is the speed at or below which 85 percent of the drivers travel on a road segment. Motorists traveling above the 85th percentile speed are considered to be exceeding the safe and reasonable speed for road and traffic conditions.

2.3.6 In terms of composition, approximately 5% of the total number of vehicular traffic movements comprised of HGVs (i.e., OGV1, OGV2, and PSV).

2.3.7 As shown in **Figure 2-3**, a greater proportion (56%) of vehicular movements were observed to be heading in an eastbound direction along Spinney Lane throughout a typical weekday. Approximately 69% of movements during the PM (17:00 – 18:00) peak hour period was observed to be travelling in an eastbound direction along Spinney Lane. This reflects the likely commuting travel patterns, in which a significant proportion of vehicular traffic movements head to/from Aylesham via the B2046 Adisham Road/A2 to key local and regional destinations during the AM and PM peak hour periods.

Figure 2-3: Daily Profile of Vehicular Movements along Spinney Lane (Based on Average of Weekdays)



AYLESHAM ROAD

2.3.8 As shown in **Table 2-8**, the results of the ATC survey reveal that the section of Aylesham Road adjacent to the site experiences a moderate volume of vehicular movements throughout a typical weekday.

Table 2-8: Summary of ATC Survey along Aylesham Road (12th -18th September 2023)

DIRECTION	DAILY (00:00 – 24:00)*	AM PEAK (08:00 – 09:00)*	PM PEAK (17:00 – 18:00)*	AVERAGE SPEED**	85TH PERCENTILE SPEED**
Northbound	650	309	229	41.8-mph	49.2-mph
Southbound	672	269	350	41.1-mph	48.1-mph
TOTALS	**1,322**	**578**	**579**	-	-
**Based on 5-Weekday Average*					
*** Based on 7-Day Average*					

2.3.9 The 85th percentile speeds were observed to be 49.2-mph and 48.1-mph in a north and southbound direction, significantly below the national speed limit (i.e., 60-mph for single carriageway roads). In terms of composition, approximately 3% of the total number of vehicular traffic movements comprised of HGVs (i.e., OGV1, OGV2, and PSV).

Figure 2-4: Daily Profile of Vehicular Movements along Aylesham Road (Based on Average of Weekdays)

2.4 COMPARISON WITH 2019/2020 SURVEY DATA

2.4.1 Additional analysis has been undertaken to establish whether the COVID-19 pandemic has had a material impact on the travel patterns/behaviours of existing households in Aylesham. Of note, consultants (WSP) acting on behalf of DDC have suggested that other local authorities in England have experienced a 10% reduction in traffic growth due to changing travel patterns (i.e., increased hybrid working) since 2020.

A257 CANTERBURY ROAD/B2046 HIGH STREET

2.4.2 As part of the previous modelling assessment undertaken in support of Site SAP24, the A257 Canterbury Road/B2046 High Street junction was identified as operating near to capacity during the weekday AM and PM peak hour periods.

2.4.3 A mitigation scheme, which involved the conversion of the give-way priority to a signal-control operation was proposed. For reference, an extract of the proposed junction design is attached at **APPENDIX A** of this note. However, following consultation with KCC's Intelligent Transportation Systems (ITS) who are responsible for the design and maintenance of the Authority's traffic signals, the proposed mitigation was not considered to be technically viable due to a number of constraints.

2.4.4 However, prior to considering the implementation of other mitigation measures, this section of the note compares the recently obtained survey results with the 2019/20 data, to establish if there has been a material reduction in traffic flows on the 3-arms of the A257 Canterbury Road/B2046 High Street junction.

2.4.5 When comparing the recently gathered MCC data with the results of the 2019 traffic surveys, there has been a noticeable reduction in the volume of traffic movements on the northern arm (A257 High Street) of the A257 Canterbury Road/B2046 High Street junction during the AM peak hour period (07:30 – 08:30).

2.4.6 As shown in **Table 2-9**, there has been a 12% reduction in southbound movements travelling from the A257 High Street to the A257 Canterbury Road and B2046 High Street. Further, there is a smaller (3%) reduction in traffic movements on the southern arm (B2046 High Street).

Table 2-9: A257 Canterbury Road/B2046 High Street Junction – 2023 – 2019 Comparison (AM Peak)

ARM	MOVEMENT	TIME PERIODS AM (07:30 – 08:30)		
		2019	2023	DIFFERENCE
A257 High Street (North)	Left to B2046 High Street	200	194	-6
	Straight Ahead to A257 Canterbury Road	685	585	-100
B2046 High Street	Left to A257 Canterbury Road	90	72	-18
	Straight Ahead to A257 High Street (North)	193	211	+18
A257 Canterbury Road	Left to A257 High Street (North)	308	314	+6
	Right to B2046 High Street	54	50	-4
TOTALS		**1,530**	**1,426**	**-104**

2.4.7 As shown in **Table 2-10**, during the PM peak hour (16:45 – 17:45) there has been a significant reduction (14%) in the volume of northbound vehicular movements travelling from the A257 Canterbury Road to the A257 High Street (North) and B2046 High Street.

Table 2-10: A257 Canterbury Road/B2046 High Street Junction – 2023 – 2019 Comparison (PM Peak)

ARM	MOVEMENT	TIME PERIODS AM (16:45 – 17:45)		
		2019	2023	DIFFERENCE
A257 High Street (North)	Left to B2046 High Street	189	241	+52
	Straight Ahead to A257 Canterbury Road	260	321	+61
B2046 High Street	Left to A257 Canterbury Road	58	211	+153
	Straight Ahead to A257 High Street (North)	210	222	+12
A257 Canterbury Road	Left to A257 High Street (North)	569	485	-84
	Right to B2046 High Street	96	87	-9
TOTALS		**1,382**	**1,567**	**+185**

2.4.8 Of note, another Transport Consultant has observed a similar reduction in the volume of vehicular traffic movements when comparing pre and post COVID-19 traffic data.

2.4.9 Within the 'Village Traffic Impact Assessment – Wingham report, which was prepared by GTA Civils on behalf of Barratt David Wilson Homes in December 2021 in association with the 'Aylesham Village' development (located off Dorman Avenue North), a reduction of 2% and 7% was observed at the junction during the AM and PM peak hour periods. The reductions were attributed to the change in travel patterns (i.e., increased homeworking), caused as a result of the COVID-19 pandemic.

2.4.10 The reduction in vehicular traffic movements on the northern arm of the A257 High Street arms of the junction is positive from a highways impact perspective, as it provides more gaps for vehicles heading in a northbound direction, reducing the potential for queues and delays during the AM peak hour period.

2.5 SUMMARY

2.5.1 The results of the 2023 baseline traffic surveys reveal: -

- Spinney Lane and Aylesham Road experience a moderate level of vehicular traffic movements throughout a typical weekday including the AM and PM peak hour periods.
- The 85th percentile speeds of vehicles travelling in an east and westbound direction along Spinney Lane was observed to be 51.5-mph and 49.4-mph, respectively. Further, the 85th percentile speeds of vehicles travelling in a north and southbound direction were observed to be 49.2-mph and 48.1-mph, respectively.
- The observed 85th percentile speeds are significantly below the national speed limit (i.e., 60-mph) currently imposed along Spinney Lane and Aylesham Road. This provides justification for lowering the speed limit along both sections of the local highway network to 50-mph.
- There has been a significant reduction (i.e., 12%) in southbound vehicular traffic movements on the northern arm (A257 High Street) of the A257 Canterbury Road/B2046 High Street junction during the AM peak hour period (07:30 – 08:30) since 2019/2020. There has been a significant reduction (14%) in the volume of northbound vehicular movements travelling from the A257 Canterbury Road to the A257 High Street (North) and B2046 High Street.

3 TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT

3.1 INTRODUCTION

3.1.1 This section of the note presents the methodology for deriving the anticipated vehicular trip generating potential of the SAP24 site and distribution/assignment on the local highway network.

3.2 TRIP GENERATION

3.2.1 To estimate the predicted level of impact arising from the SAP24 site, the trips rates contained within the Transport Assessment (TA), prepared by WSP (2021), in support of DDC's Regulation 19 Local Plan has been used.

3.2.2 The description of SAP24 of DDC's Regulation 19 Local Plan does not specify the quantum of different employment and community land uses, thereby making it difficult to accurately assess the vehicular trip generation characteristics over the course of a typical weekday. Given the potential for linked trips and internalisation, non-residential land uses have been excluded from the assessment.

3.2.3 **Table 3-1** provides the peak hour trips rates and associated vehicle movements, which could potentially be generated by the SAP24 site, during the typical AM (08:00 – 09:00) and PM (17:00 – 18:00) peak hours.

Table 3-1: WSP Vehicular Trip Rates and Generation

TIME PERIOD	TRIP RATES			TOTAL VEHICLE MOVEMENTS		
	ARR	DEP	TOTAL	ARR	DEP	TOTAL
AM Peak (08:00 – 09:00)	0.106	0.351	0.457	68	225	293
PM Peak (17:00 – 18:00)	0.320	0.176	0.496	205	113	318

3.2.4 **Table 3-1** indicates that in the AM peak hour (08:00 – 09:00), the SAP24 site has the potential to generate 293 two-way vehicle movements (68 arrivals and 225 departures). This equates to less than five vehicles per minute. In the PM peak hour (17:00 – 18:00), there are predicted to be 318 two-way vehicle movements (205 arrivals and 113 departures), equating to just over 5 vehicles per minute.

3.3 TRIP DISTRIBUTION/ASSIGNNMENT

3.3.1 The trip distribution has followed the methodology used to support SAP24's adoption in the DDC's Regulation 19 Local Plan, which was based on the origin-destination dataset 'Location of Usual Residence and Place of Work by Method of Travel to Work' (WU03EW) for the Dover 006 MSOA, which encompasses the site. This dataset was extracted from the 2011 Census via the Nomis (Official Labour Market Statistics) website.

3.3.2 **Table 3-2** provides the route distribution and assignment that was previously agreed with WSP for the local plan work.

Table 3-2: Vehicle Trip Distribution

ROUTE	TRIP DISTRIBUTION (%)	DESCRIPTION
A2-N	43.4%	West on Adisham Road and North on A2
A2-S	18.4%	West on Adisham Road and South on A2
Ad-W	0.4%	West on Adisham Road and West via Gravel Castle Road
Ad-E	6.8%	East on Adisham Road
Ad-E-Wi	7.4%	East on Adisham Road via Wingham
Ratling	0.0%	Via Ratling Road
Ackholt	0.7%	Via Ackholt Road
Holt	11.3%	Via Holt Street
A260	8.4%	West on Adisham Road and West via A260
Local	3.2%	Local Trips within Aylesham

4 PROPOSED ACCESS AND JUNCTION MITGATION SCHEMES

4.1 INTRODUCTION

4.1.1 This section of the report describes the design of the site's proposed access as well as a number of mitigation schemes for several key junctions, which were presented to KCC, as part of the modelling assessment work undertaken in support of Site SAP24 (adjacent to the site) being allocated in DDC's Regulation 19 Local Plan. Mitigation was proposed for the following junctions.

- Spinney Lane / Adisham Road; and
- Holt Street/Aylesham Road.

4.2 PROPOSED SITE ACCESS

PRIMARY ACCESS

4.2.1 The site's proposed primary access would take the form of a give-way priority junction with a right-turn pocket, located off the southern side of Spinney Lane, approximately 275-metres east of the intersection with Cooting Road. The design also incorporates the provision of an uncontrolled crossing comprised of dropped kerbs with tactile paving and a pedestrian refuge island, to facilitate safe and convenient access on-foot to destinations located in Aylesham village centre.

4.2.2 As shown on Drawing No 22-221-T-100-B (attached at **APPENDIX B**, visibility splays measuring 4.5-metres (X-distance) x 160-metres (Y-distance) based on the Design Manual for Roads and Bridges (DMRB) desirable minimum stopping sight distance (SSD parameters) and a 50-mph design speed can be achieved to the right (leading traffic direction) and left (trailing traffic direction) edge of carriageway within the publicly maintainable highway/land under Axis Land Partnership's control.

SECONDARY ACCESS

4.2.3 The site's secondary access would take the form of a give-way priority junction located off the western side of Aylesham Road circa 180-metres north of the existing dwelling known as Ackholt House.

4.2.4 Drawing No.22-221-T-120-B (attached at **APPENDIX C**) demonstrates that visibility splays measuring 4.5-metres (X-distance) x 160-metres (Y-distance) in accordance with the observed speeds (i.e., circa 50-mph) and the DMRB's desirable minimum SSD parameters can be achieved to the right (leading traffic direction) and left (trailing traffic direction) edge of carriageway within the publicly maintainable highway/land under Axis Land Partnership's control.

4.2.5 On the basis that the design of the site's proposed primary and secondary access points can achieve visibility splays in accordance with the observed 85th percentile speeds along Spinney Lane and Aylesham Road and the Department of Transport's (DfT's) Design Manual for Road and Bridges (DMRB) desirable minimum SSD parameters, it is considered that car drivers would be afforded sufficient intervisibility with other motorised and non-motorised users, thereby enabling safe manoeuvres to be undertaken at the two-way priority junctions.

COMMITTED JUNCTION MITIGATION SCHEMES

SPINNEY LANE / ADISHAM ROAD JUNCTION

4.2.6 As part of the modelling assessment work undertaken in support of Site SAP24 being allocated in DDC's Regulation 19 Local Plan, a mitigation scheme in conjunction with KCC was proposed for the Spinney Lane/Adisham Road junction, west of the site.

4.2.7 The proposed mitigation scheme for the junction includes the provision of a right-turn pocket and associated tapers based on a 60-mph design speed and standards set out in the DMRB guidance.

HOLT STREET / AYLESHAM ROAD JUNCTION

4.2.8 As outlined in the previous modelling assessment work undertaken in support of Site SAP24's adoption within DCC's Regulation 19 Local Plan, a signal improvement scheme for the junction of Holt Street/Aylesham Road was proposed.

4.2.9 The primary reason for upgrading the junction to a signal-control operation was to enhance the pedestrian environment and ensure future households would be afforded a safe walking route to/from Snowdown rail station.

SUMMARY

4.2.10 The design of the site's primary and secondary accesses off Spinney Lane and Aylesham Road will be able to achieve visibility splays in accordance with the DfT's DMRB's desirable minimum stopping sight distance requirements. As a consequence, car drivers would be afforded sufficient intervisibility with other motorised and non-motorised users, thereby enabling safe manoeuvres to be undertaken at the proposed give-way priority junctions.

5 HIGHWAY IMPACT ASSESSMENT

5.1 INTRODUCTION

5.1.1 This section of the note assesses the impact of SAP24 development-related trips and other committed development sites set out in DDC's Regulation 19 Local Plan on the capacity and safety characteristics of the surrounding local highway network during the weekday AM and PM peak hour periods.

5.2 SURVEYED TRAFFIC FLOWS

5.2.1 The results of baseline traffic surveys, undertaken in September 2023 have been used to inform the '2023 Base' scenario.

5.3 COMMITTED DEVELOPMENT

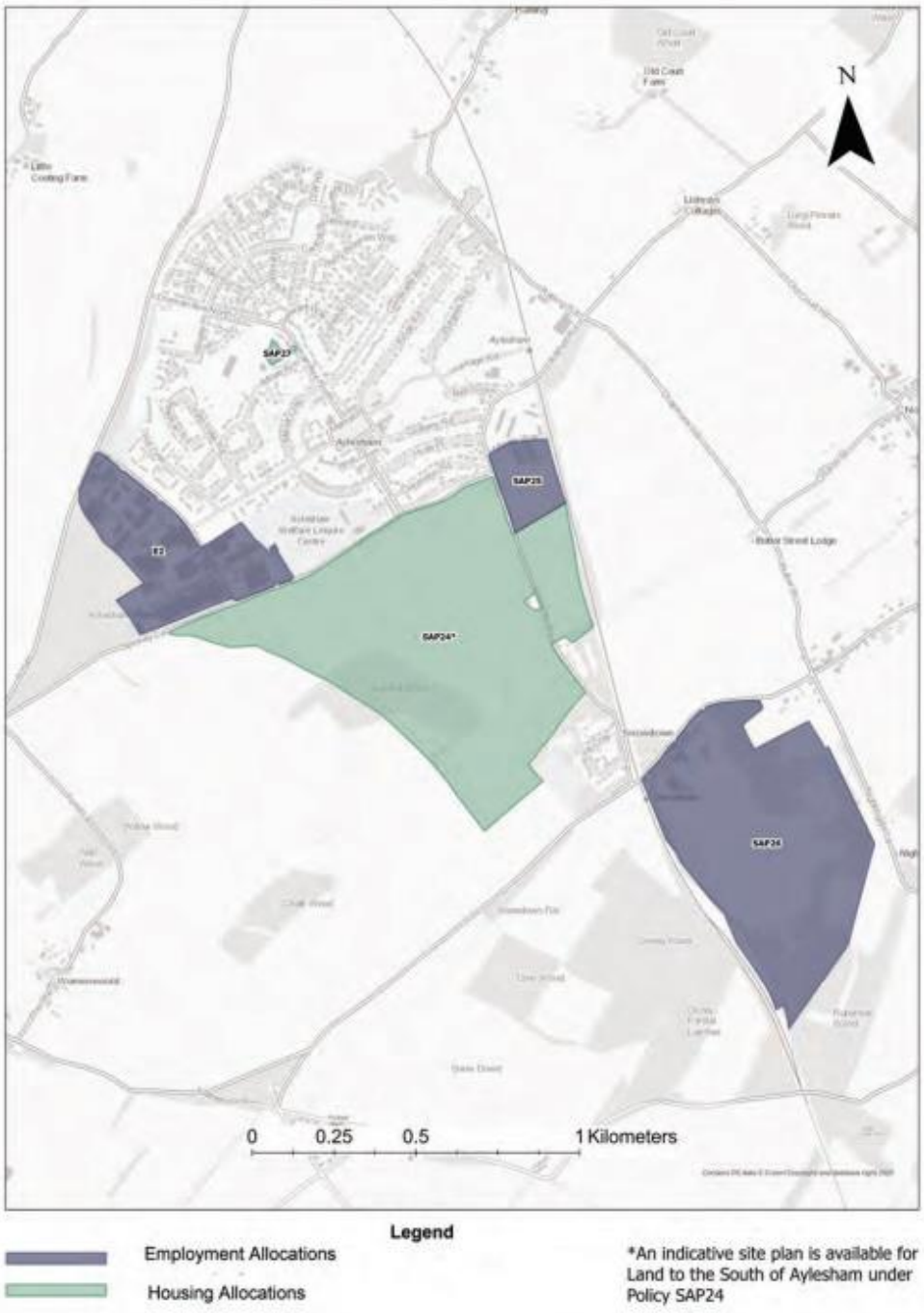
5.3.1 In addition to Site SAP24 (adjacent to the site), there are 4 other committed development sites located in Aylesham, which are identified in DDC's Regulation 19 Local Plan. Detail of these sites are summarised in **Table 5-1** and **Figure 5-1.**

Table 5-1: Summary of Committed Development Sites in Aylesham

SITE NAME (HELAA REF)	POLICY NUMBER	DEVELOPMENT TYPE	INDICATIVE HOUSING CAPACITY
Land to the South of Aylesham (AYL003)	SAP24	Urban extension to Aylesham delivering a mix of uses	640
Aylesham Development Area (ERL4)	SAP25	Employment	N/A
Former Snowdown Colliery, Aylesham (ELR14)	SAP26	Mixed Employment and Tourism	N/A
Land at Dorman Avenue North (AYL001)	SAP27	Housing	9
Aylesham Industrial Estate (ELR19)	E2	Employment	N/A

5.3.2 The vehicular traffic movements for the above-mentioned committed development sites in Aylesham have been extracted from the TA, prepared by WSP, in support of DDC's Regulation 19 Local Plan.

Figure 5-1: Site Allocations in Aylesham Plan



5.4 ASSESSMENT SCENARIOS

5.4.1 The junctions that have been taken forward for capacity assessments have been modelled within the following scenarios:

- 2023 Baseline (observed flows);
- 2040 with Committed Development (TEMPro); and
- 2040 with Committed Development + SAP24

5.5 FUTURE YEAR SCENARIOS

5.5.1 Traffic growth predictions for the proposed assessment years were taken from Trip End Model Program (TEMPro) v7.2c to predict the level of background traffic growth within the local area between the surveyed years and a future year, set at 2040, which is the end of the Local Plan period.

The TEMPro growth rates are based on the following parameters:

- Result type – Trip ends of time period;
- Transport mode – Car driver;
- Trip end type – Origin/Destination;
- Area type – Urban;
- Road type – All;
- Area it serves - Region; and
- MSOA 'Dover 006'.

5.5.2 It is noteworthy that the TEMPro Growth Rates for the Dover 006 MSOA will include the SAP24 site. To avoid 'double counting', the standard predicted TEMPro growth rates for the weekday AM and PM peak periods have been adjusted, using the databases 'alternative assumptions' option to take account of the vehicular traffic generation of the SAP24 site.

5.5.3 It is considered that that growth factors obtained from TEMPro v7.2c are extremely robust for the purposes of this assessment, particularly given that some parts of the local highway network (i.e., Wingham High Street junction) have experienced a significant reduction in vehicular traffic movements since 2019. It further assumes that future increases in car ownership and traffic patterns would be unaffected by the change in working practices, which have become more prevalent since the COVID-19 pandemic.

5.6 JUNCTION CAPACITY ASSESSMENTS

5.6.1 This section of the note assesses the potential impact of the residential-led mixed-use development proposals on the capacity of the following junctions during the weekday AM and PM peak hour periods.

- Site Access
- B2046 Adisham Road/Spinney Lane
- A257 Canterbury Road/B2046 High Street
- Holt Street/Aylesham Road
- B2046 Adisham Road/Dorman Avenue North
- B2046 Adisham Road/A2 Slips
- Old Dover Road/A260

5.6.2 The industry standard junction modelling software packages, Junctions 10, which contains PICADY and ARCADY has been used for the priority-controlled junctions, while LinSig (Version 3) has been used for the proposed signalisation of the Aylesham Road/Holt Street junction.

5.6.3 PICADY and ARCADY provide an assessment of the operational capacity of a junction through the Ratio of Flow to Capacity (RFC) with commonly accepted standards of a junction with RFC values of 0.9 and below considered to be operating at the higher end of their capacity.

5.6.4 The LinSig modelling software assesses the operational capacity of a signalised junction in terms of 'Practical Reserve Capacity' (PFC), which is a percentage measurement of how much additional traffic can pass through a junction whilst maintaining a maximum Degree of Saturation of 90% on all links. The capacity of links is expressed in terms of Degree of Saturation (DoS) and maximum queues in PCUs.The theoretical capacity of a junction is taken at a PRC of zero and the link capacity is taken as a value of 0.90 (i.e., a maximum degree of saturation of 90% or below normally indicates an acceptable level of junction operation). Values in excess of this normally represent operational problems in the form of vehicle delays and the formation of traffic queues along the arms of the junction.

SITE ACCESS

5.6.5 The site's primary access would take the form of a priority junction with a right-turn pocket, located off the southern side of Spinney Lane, approximately 275-metres east of the intersection with Cooting Road. An additional secondary access would be provided off the western side of Aylesham Road, located approximately180-metres north of the existing dwelling known as Ackholt House.

5.6.6 The provision of a secondary access would enable the anticipated vehicular traffic movements resulting from SAP24 to be distributed to other parts of the local highway network during the AM and PM peak hour period. However, since the masterplan for SAP24 has not yet been fixed, the assessment assumes that 100% of all vehicular traffic generated by SAP24 will route to/from the site's primary access off Spinney Lane. An assessment of the future operation of the site's secondary access off Aylesham Road would be undertaken once the masterplan for SAP24 has been fixed.

5.6.7 Since there would be no junction at this location without the proposed development, the junction has been assessed for the 2040 With Development ('+ SAP24') scenario only. The results of the junction capacity assessment are presented in **Table 5-2.**

Table 5-2: Spinney Lane/Site Access Junction Capacity Modelling Results

	AM				PM			
	Set ID	Queue (PCU)	Delay (s)	RFC	Set ID	Queue (PCU)	Delay (s)	RFC
	2040 + SAP24							
Stream B-C	D1	0.4	7.63	0.27	D2	0.2	6.65	0.14
Stream B-A		0.1	9.71	0.08		0.1	10.38	0.11
Stream C-AB		0.1	5.28	0.07		0.3	6.35	0.22

5.6.8 As shown in **Table 5-2,** the results indicate that the site's primary access junction off Spinney Lane would operate well within its capacity across both scenarios in the AM and PM peak hours. However, as noted previously, SAP24 will benefit from having two points of access onto the local highway network. Consequently, the results presented in **Table 5-2** represent a 'worst' case scenario.

ADISHAM ROAD/ SPINNEY LANE (WITH COMMITTED MITIGATION)

5.6.9 It should be noted that the Spinney Lane / Pond Lane / Adisham Road junction has been improved in recent years. The Pond Lane arm now feeds into Spinney Lane itself, and the Spinney Lane approach to Adisham Road has been re-oriented such that the angle of the junction is closer to 90 degrees. This improves visibility to the right for drivers exiting Spinney Lane, albeit it is still constrained by the trees.

5.6.10 Further improvements have been proposed by VTP to further improve the visibility for drivers exiting Spinney Lane and to add a dedicated right-turn facility into Spinney Lane from Adisham Road given this will be an important movement for traffic associated with the proposed development. The proposed improvements for the Spinney Lane / Adisham Road junction have been assessed using the industry standard software package, Junctions 10. The results of the modelling of this junction are summarised in **Table 5-3**.

Table 5-3: Spinney Lane / Adisham Road Proposed Improvements Capacity Modelling Results

	AM				PM			
	Set ID	Queue (PCU)	Delay (s)	RFC	Set ID	Queue (PCU)	Delay (s)	RFC
	2023 Base							
Stream B-AC	D1	0.4	11.06	0.27	D2	0.2	8.67	0.20
Stream C-AB		0.4	9.62	0.27		0.5	8.56	0.29
	2040 with Committed Dev							
Stream B-AC	D3	0.5	12.11	0.33	D4	0.6	10.89	0.36
Stream C-AB		0.9	11.64	0.44		0.5	8.75	0.32
	2040 + SAP24							
Stream B-AC	D5	2.4	28.01	0.72	D6	1.1	14.77	0.53
Stream C-AB		1.5	13.53	0.55		2.1	12.20	0.61

5.6.11 The results demonstrate that the Spinney Lane / Adisham Road junction would operate within capacity across all scenarios in both the AM and PM peak hours.

A257 / B2046 WINGHAM HIGH STREET JUNCTION

Table 5-4: A257 / B2046 Wingham High Street Modelling Results

	AM				PM			
	Set ID	Queue (PCU)	Delay (s)	RFC	Set ID	Queue (PCU)	Delay (s)	RFC
	2023 Base							
Stream B-AC	D1	8.1	95.96	0.93	D2	4.4	55.77	0.83
Stream C-AB		0.1	9.19	0.12		0.2	8.55	0.19
	2040 + Committed Dev							
Stream B-AC	D3	12.4	136.47	0.99	D4	5.5	67.47	0.87
Stream C-AB		0.2	9.50	0.13		0.2	8.55	0.19
	2040 + SAP24							
Stream B-AC	D5	18.6	186.63	1.05	D6	6.7	79.90	0.90
Stream C-AB		0.2	9.54	0.13		0.3	8.63	0.19

5.6.12 As shown in **Table 5-4** the results show that the A257 / B2046 Wingham High Street Junction is at or over capacity across all scenarios in the AM peak hour. In the PM peak hour, the junction is operating just within capacity in the 2023 Base, but just over capacity in the 2040 and 2040 with Development scenario.

5.6.13 It should be noted that the junction is already operating at or near to capacity in the 2023 Base, therefore, even a negligible increase in traffic at this junction would result in exceedance of capacity due to the sensitive nature of the junction. The difference in vehicle queues between the 2023 Base and the 2040 + SAP24 scenario on the 2046 High Street (S) arm is circa 9 vehicles, equating to less than two vehicles every 10-minutes. It is therefore considered that additional trips generated by the SAP24 site at this junction will not have severe impact.

HOLT STREET / AYLESHAM ROAD JUNCTION (WITH COMMITTED MITIGATION)

5.6.14 The Aylesham Road/Holt Street junction accommodates relatively low traffic flows and there is no anecdotal evidence of congestion. However, VTP have previously proposed a signalised improvement at this location in order to improve the walking route to/from Snowdown rail station.

5.6.15 LinSig (Version 3) has been used to assess how the proposed signalised improvement would operate. The results of this are summarised in **Table 5-5**.

Table 5-5: Aylesham Road / Holt Street Proposed Improvements Capacity Modelling Results

APPROACH ARM	AM PEAK HOUR (CYCLE TIME: 60 SECONDS)		PM PEAK HOUR (CYCLE TIME: 60 SECONDS)	
	MEAN MAX QUEUE (PCU)	DEGREE OF SATURATION (DOS)	MEAN MAX QUEUE (PCU)	DEGREE OF SATURATION (DOS)
2023 SURVEYED FLOWS				
Aylesham Road	1.4	33.2%	1.2	27.1%
Holt Street (E)	2.7	45.5%	1.3	30.0%
Holt Street (W)	1.4	32.5%	1.5	28.8%
2040 FUTURE BASE (WITH COMMITTED DEVELOPMENT)				
Aylesham Road	1.4	34.1%	1.2	27.5%
Holt Street (E)	2.8	47.4%	1.3	30.9%
Holt Street (W)	1.5	33.7%	1.5	29.4%
2040 WITH DEVELOPMENT				
Aylesham Road	2.0	45.5%	1.5	32.8%
Holt Street (E)	2.9	49.6%	0.8	16.6%
Holt Street (W)	1.5	33.7%	1.6	32.7%

5.6.16 The results demonstrate that the proposed signalised crossing and junction arrangement would operate well within a 90% degree of saturation in all scenarios. Queueing on all approaches clears within the 60 second cycle time thereby minimising the delay to drivers whilst improvement pedestrian safety and amenity particularly for those people walking to and from the station.

ADISHAM ROAD / DORMAN AVENUE NORTH JUNCTION

Table 5-6: Adisham Road / Dorman Avenue Modelling Results

	AM				PM			
	Set ID	Queue (PCU)	Delay (s)	RFC	Set ID	Queue (PCU)	Delay (s)	RFC
	2023 Base							
Stream B-C	D1	6.0	44.63	0.88	D2	0.4	7.70	0.28
Stream B-A		2.1	50.66	0.70		0.3	14.01	0.24
Stream C-AB		0.3	7.46	0.20		1.5	14.58	0.60
	2040 with Committed Dev							
Stream B-C	D3	9.1	65.34	0.94	D4	0.4	7.82	0.28
Stream B-A		4.4	104.32	0.89		0.3	14.44	0.25
Stream C-AB		0.3	7.57	0.21		1.6	15.14	0.62
	2040 + SAP24							
Stream B-C	D5	17.9	119.47	1.02	D6	0.4	8.23	0.29
Stream B-A		8.8	167.78	1.00		0.4	15.55	0.30
Stream C-AB		0.3	7.61	0.21		1.7	15.70	0.63

5.6.17 The results show that the Adisham Road / Dorman Avenue junction is operating over capacity across all scenarios in the AM peak hour. In the PM peak hour, the junction is operating well within capacity.

5.6.18 It should be noted that the junction is already operating at or near to capacity in the 2023 Base, therefore, even a negligible increase in traffic at this junction would result in exceedance of capacity due to the sensitive nature of the junction. The difference in vehicle queue between the 2023 Base and the 2040 + SAP24 scenario on the Dorman Avenue North arm is circa 12 vehicles, equating to 2 vehicles every 10-minutes. It is therefore considered that additional trips generated by the SAP24 site at this junction will not have a severe impact.

5.6.19 The results indicate that in the 2040 Committed Development scenario the existing junction will operate close to its limit of capacity in the AM peak, with queue length exceeding nine vehicles. When examining the 2040 + Committed Development + SAP24 scenario, it is evident that the development proposals will only have a minor impact on performance but is expected to bring the current junction above its capacity in the AM peak.

5.6.20 It is expected that minor junction improvements consisting of widening the Dorman Avenue North junction approach in order to increase the flare length or implement a separate left / right turn lane would result in sufficient capacity improvements to bring the RFC below the 0.85 threshold.

ADISHAM ROAD / A2 JUNCTION

Table 5-7: Adisham Road / A2 Modelling Results

	AM				PM			
	Set ID	Queue (PCU)	Delay (s)	RFC	Set ID	Queue (PCU)	Delay (s)	RFC
	2023 Base							
1 - Adisham Rd (N)	D1	2.0	7.40	0.67	D2	0.8	4.73	0.44
2 - A260 (S)		0.3	3.04	0.22		0.4	3.24	0.29
3 - A2 Slip Rd (W)		0.5	2.94	0.31		1.0	3.95	0.49
	2040 with Committed Dev							
1 - Adisham Rd (N)	D3	2.4	8.35	0.71	D4	1.1	5.39	0.51
2 - A260 (S)		0.4	3.21	0.26		0.4	3.36	0.31
3 - A2 Slip Rd (W)		0.6	3.16	0.34		1.0	4.09	0.50
	2040 + SAP24							
1 - Adisham Rd (N)	D5	4.5	13.76	0.82	D6	1.4	6.20	0.57
2 - A260 (S)		0.4	3.35	0.28		0.5	3.61	0.35
3 - A2 Slip Rd (W)		0.6	3.30	0.36		1.4	4.86	0.57

5.6.21 The Adisham Road / A2 junction is shown to operate within capacity across all scenarios in the AM and PM peak hours.

A2 / A260 JUNCTION

Table 5-8: A2 / A260 Modelling Results

	AM				PM			
	Set ID	Queue (PCU)	Delay (s)	RFC	Set ID	Queue (PCU)	Delay (s)	RFC
	2023 Base							
1 - A260 (N)	D1	2.6	8.30	0.72	D2	1.3	5.45	0.57
2 - A260 (SE)		2.0	8.87	0.66		0.8	4.63	0.45
3 - A2 Slip Rd (NW)		0.1	2.83	0.06		0.1	2.92	0.08
	2040 with Committed Dev							
1 - A260 (N)	D3	3.0	9.27	0.75	D4	1.6	6.06	0.61
2 - A260 (SE)		2.4	10.15	0.70		0.9	4.91	0.47
3 - A2 Slip Rd (NW)		0.1	2.95	0.09		0.1	2.95	0.09
	2040 + SAP24							
1 - A260 (N)	D5	4.8	13.59	0.83	D6	1.9	6.75	0.65
2 - A260 (SE)		3.1	13.26	0.76		1.1	5.60	0.53
3 - A2 Slip Rd (NW)		0.1	2.98	0.09		0.1	3.04	0.09

5.6.22 The A2 / A260 junction is shown to operate within capacity across all scenarios in the AM and PM peak hours.

6 MITIGATION

6.1 INTRODUCTION

6.1.1 To further minimise the impact of the emerging residential-led development proposals on the highway network, this section of the report presents a mitigation strategy for SAP24, which comprises a package of 'hard' infrastructural and 'soft' information-led measures. These measures accord with Appendix 1 of DDC's Infrastructure Delivery Schedule (September 2022).

6.1.2 It further presents the results of an additional modelling assessment examining the impact of the mitigation on the future performance of junctions operating at or close to capacity.

6.2 EXTENDED OR NEW BUS SERVICE PROVISION

6.2.1 When conducting a review of existing public transport infrastructure/services, it is evident that there is a gap in provision between Aylesham and other key locations in northern Kent, most notably Wingham, Sandwich, Canterbury, Margate, and Ramsgate.

6.2.2 To address the gap in provision, the promoter is currently engaged with KCC's Public Transport Officers to establish the viability of diverting or creating a new bus route to serve the needs of both future households/end-users of SAP24 and other allocated sites as well as existing members of the wider community.

6.3 RAIL STATION IMPROVEMENTS

6.3.1 To enhance the attractiveness amongst future households and end-users to travel by rail for various journey purposes, the following measures will be investigated: -

- Investigation into whether there could be a second entrance to the station.
- Improvements to regrade the existing access path. Currently there are steps and a ramp. It would be beneficial to make this access fully DDA compliant.
- First and last mile improvements, e.g., car parking, cycle parking, pedestrian access improvements.
- More waiting shelters or a canopy.

6.4 WALKING AND CYCLING INFRASTRUCTURE

6.4.1 To increase the accessibility on foot and by cycle to local public transport infrastructure/services and amenities available in Aylesham, measures to enhance existing walking and cycling routes including parts of the Public Rights of Way network to Aylesham and Snowdown rail stations will be investigated.

6.5 JUNCTION ASSESSMENT WITH PROPOSED MITIGATION

6.5.1 To reflect the potential impact of the above-mentioned interventions on the operation of the highway network, most notably with regards to the two junctions operating at or close to capacity during the weekday AM and PM peak hour periods, this section of the report presents the results of an additional modelling assessment.

6.5.2 A sensitivity test has been undertaken whereby a 75% reduction in vehicular movements routing north from the SAP24 site has been applied to reflect the shift from private car to sustainable travel modes.

6.5.3 As presented in the trip distribution section **(Table 3-2**), only 14.2% of trips would route north of the SAP24 site, via the Spinney Lane / Dorman Road, which reduces to 7.4% through the A257 / B2046 Wingham High Street junction, meaning that a 75% reduction would not translate to high number of vehicle movements.

6.5.4 Therefore, the Spinney Lane / Dorman Avenue and A257 / B2046 Wingham High Street Junction have been reassessed based on this 75% reduction.

Table 6-1: Spinney Lane / Dorman Avene Modelling Results (Proposed Mitigation)

	AM				PM			
	Set ID	Queue (PCU)	Delay (s)	RFC	Set ID	Queue (PCU)	Delay (s)	RFC
	2040 with Committed Dev							
Stream B-C	D3	9.1	65.34	0.94	D4	0.4	7.82	0.28
Stream B-A		4.4	104.32	0.89		0.3	14.44	0.25
Stream C-AB		0.3	7.57	0.21		1.6	15.14	0.62
	2040 + SAP24							
Stream B-C	D5	17.9	119.47	1.02	D6	0.4	8.23	0.29
Stream B-A		8.8	167.78	1.00		0.4	15.55	0.30
Stream C-AB		0.3	7.61	0.21		1.7	15.70	0.63
	2040 + SAP24 with Mitigation							
Stream B-C	D7	10.8	76.38	0.96	D8	0.4	7.91	0.29
Stream B-A		5.8	124.76	0.94		0.4	14.69	0.26
Stream C-AB		0.3	7.58	0.21		1.6	15.27	0.62

6.5.5 The proposed mitigation would see the Spinney Lane / Dormane Avenue junction operate within capacity in the AM and PM peak hours periods.

Table 6-2: A257 / 22046 Wingham High Street Junction Modelling Results (Proposed Mitigation)

	AM				PM			
	Set ID	Queue (PCU)	Delay (s)	RFC	Set ID	Queue (PCU)	Delay (s)	RFC
	2040 + Committed Dev							
Stream B-AC	D3	12.4	136.47	0.99	D4	5.5	67.47	0.87
Stream C-AB		0.2	9.50	0.13		0.2	8.55	0.19
	2040 + SAP24							
Stream B-AC	D5	18.6	186.63	1.05	D6	6.7	79.90	0.90
Stream C-AB		0.2	9.54	0.13		0.3	8.63	0.19
	2040 + SAP24 with Mitigation							
Stream B-AC	D7	13.7	147.83	1.01	D8	5.7	70.31	0.88
Stream C-AB		0.2	9.51	0.13		0.2	8.57	0.19

6.5.6 The proposed mitigation would see a reduction of 5 vehicles on the B2046 High Street (S) arm in the AM peak hours, however, the junction would remain operating over capacity. Compared to the 2023 Base, the proposed mitigation scenario would result in an increase of circa 6 vehicles, equating to 1 vehicle every 10-minutes. It is therefore considered that additional trips generated by the SAP24 site at this junction will not have severe impact.

7 SUMMARY AND CONCLUSIONS

7.1.1 This TN has been prepared by VTP on behalf of the promoter to accompany to accompany an EiPHS in support of a draft allocation for a residential-led development proposal that comprises the erection of 640 residential units (Use Class C3) of mixed tenure, type and size including affordable units and housing for older people (with and without care provision) together with employment opportunities, community facilities, formal and informal open spaces for leisure and recreation, and enhancements to the PRoW on land off Spinney Lane in Aylesham, Kent.

7.1.2 In summary, the TN demonstrates: -

- Spinney Lane and Aylesham Road experience a moderate level of vehicular traffic movements throughout a typical weekday including the AM and PM peak hour periods.
- The 85th percentile speeds of vehicles travelling in an east and westbound direction along Spinney Lane was observed to be 51.5-mph and 49.4-mph, respectively. Further, the 85th percentile speeds of vehicles travelling in a north and southbound direction were observed to be 49.2-mph and 48.1-mph, respectively. The observed 85th percentile speeds are significantly below the national speed limit (i.e., 60-mph) currently imposed along Spinney Lane and Aylesham Road. This data would support a lowering of the speed limit from 60-mph to 50-mph, which would in-turn provide safer conditions for future households and other end-users to access the SAP24 site.
- There has been a significant reduction (i.e., 12%) in southbound vehicular traffic movements on the northern arm (A257 High Street) of the A257 Canterbury Road/B2046 High Street junction during the AM peak hour period (07:30 – 08:30) since 2019/2020. Conversely, there has been a significant reduction (14%) in the volume of northbound vehicular movements travelling from the A257 Canterbury Road to the A257 High Street (North) and B2046 High Street.
- The design of the site's primary and secondary accesses off Spinney Lane and Aylesham Road will be able to achieve visibility splays in accordance with the DfT's DMRB's desirable minimum stopping sight distance requirements. As a consequence, car drivers would be afforded sufficient intervisibility with other motorised and non-motorised users, thereby enabling safe manoeuvres to be undertaken at the proposed give-way priority junctions.
- The additional trips generated by the SAP24 site through the Wingham Junction only account for 1.2% and 1.5% of the total trips through the junction in the AM and PM peak hours respectively, in the scenario without any modal shift mitigation.
- The results of the junction capacity assessments reveal that with the exception of two junctions (i.e., A257 Canterbury Road/B2046 High Street, and B2046 Adisham Road/Dorman Avenue North) junctions, the theoretical capacity is not exceeded during the weekday AM and PM peak hour periods, respectively.

- Notwithstanding this, both junctions are operating at or close to their maximum theoretical capacities during the '2023 Base' and '2040 with Committed Development' scenarios during the weekday AM and PM peak hour periods, respectively. Consequently, the impact of the SAP24 development proposals is not considered to have a 'severe' impact on the operational performance of the junctions.
- The provision of a diverted or new bus service connecting the SAP24 site to key employment destinations/centres located in north Kent (i.e., Sandwich, Margate and Ramsgate) in conjunction with other travel planning measures will have the potential to reduce the number of vehicular movements heading in a northerly direction (via the B2046 Adisham Road/Dorman Avenue and A257 Canterbury Road/B2046 High Street junctions) by 75% during the weekday AM and PM peak hour periods.
- In line with paragraph 111 of the NPPF, the results of this assessment demonstrate that the emerging residential-led development proposals would not have a severe impact on the future operational performance of the site's proposed primary access off Spinney Lane as well as the other 6 junctions comprising the defined highway network. Consequently, it is concluded that the safety and efficiency of the highway network will be maintained through the implementation of mitigation measures.

APPENDIX A

A257 CANTERBURY ROAD / B2046 HIGH STREET MITIGATION SCHEME

VELOCITY
Transport Planning

VELOCITY
Transport Planning
www.velocity-tp.com

Ashtree Lodge
Wingham House
Old College Barn
Canterbury Road (A257)
High Street (B 2046)
Harris's Alley
Clement Cottage
The Red Lion
40
34
33
32
31
31a
31b
2.0m
4.5m
3.5m
R16.0m
4.0m
4.2m
2.2m
R6.0m
3.0m
3.1m
KEEP CLEAR

Traffic signal head to cantilever over highway at appropriate height clearance

Key:
- Highway boundary

1. 2.

Indicative staging and phasing

Rev	Date	Comment	App
C	19.01.21	Amendments based on KCC comments	OF
B	22.05.20	Minor amendments	OF
A	22.05.20	First Issue	OF

Revision Details

Drawing No.
3860-1100-T-004

Drawn	Approved	Date
EP	OF	Jan 21

Scale	Rev
1:500 @ A3	C

Client
Womenswold Trust

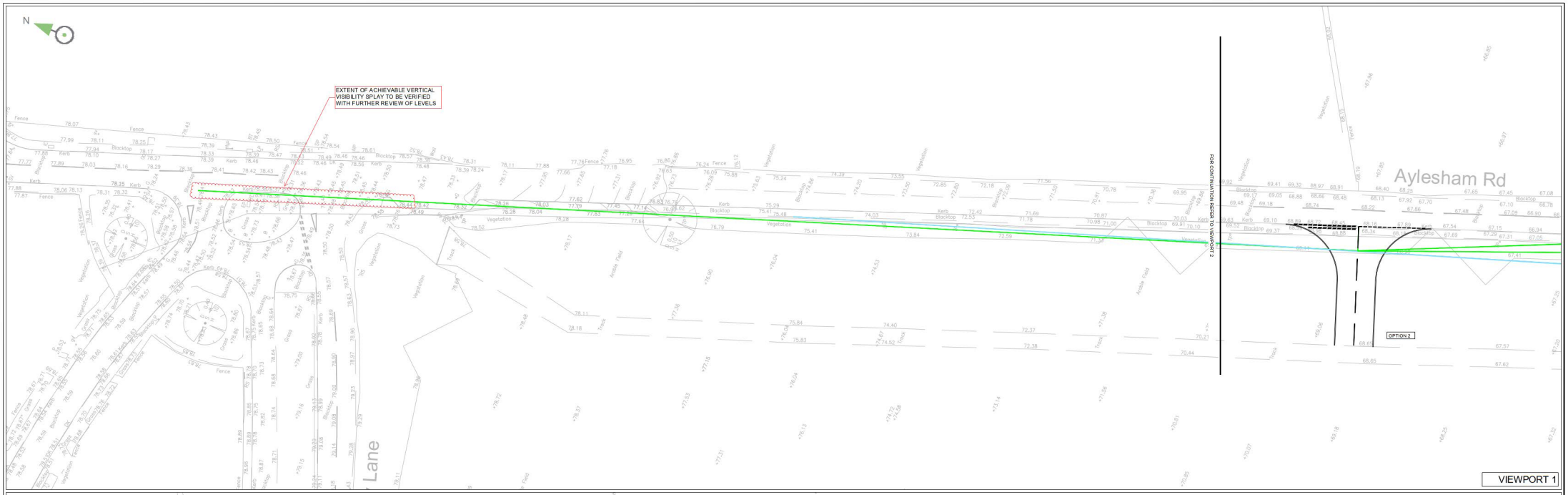
Project
Spinney Lane

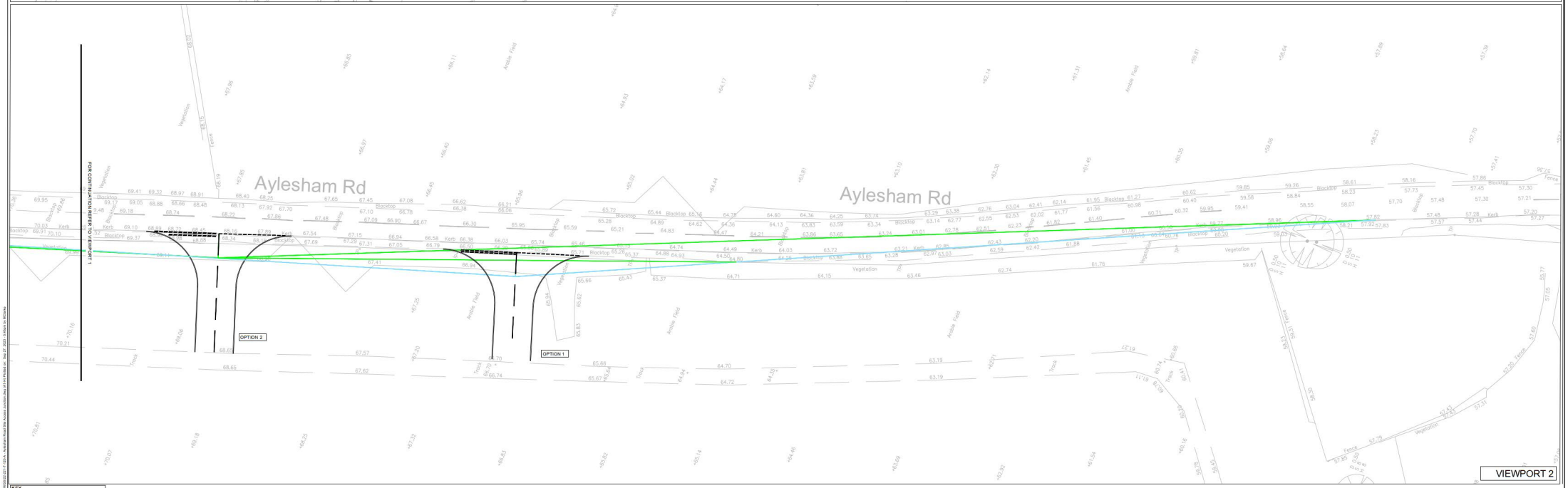
Drawing Title
A257 Canterbury Road / High Street, Wingham
Signalised Junction Arrangement

APPENDIX B

TECHNICAL DRAWINGS

VELOCITY
Transport Planning





KEY

- PROPOSED KERBS
- 4.5m x 160m VISIBILITY SPLAY
- 4.5m x 215m VISIBILITY SPLAY
- PROPOSED ROAD MARKINGS

1:250
0 5m 10m 15m 20m 25m

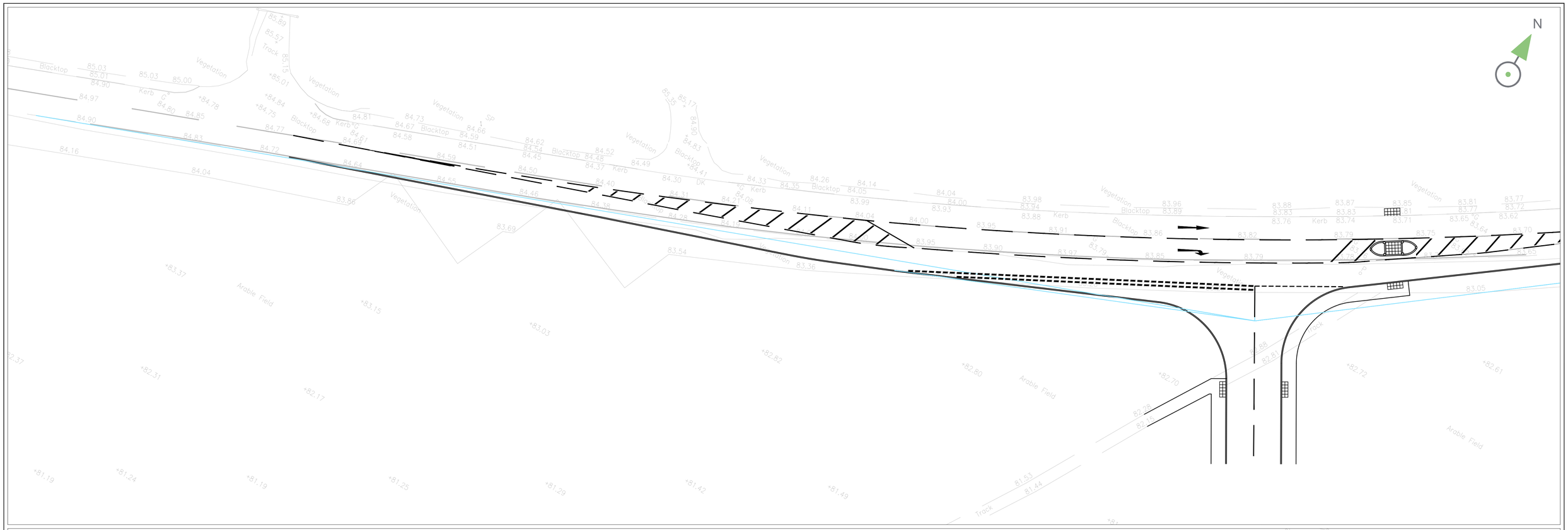
Rev	Date	Description	Drn	Chk	App
B	27/09/23	TOPO SURVEY UPDATED	CI	MC	LH
A	13/07/23	FIRST ISSUE	CI	LH	LH

Notes:

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
3. THIS DRAWING IS TO BE PRINTED IN COLOUR.
4. THE TOPOGRAPHICAL SURVEY INFORMATION HAS BEEN PROVIDED BY CARTER JONAS SURVEYS LTD (DRAWING NO J007127-23-01_ISSUE 02) AND VELOCITY TRANSPORT PLANNING SHALL NOT BE LIABLE FOR ANY INACCURACIES OR DEFICIENCIES.
5. THIS DRAWING HAS BEEN ISSUED FOR INFORMATION PURPOSES AND MUST NOT BE USED FOR CONSTRUCTION.

VELOCITY Transport Planning
A VELOCITY TRANSPORT PLANNING LTD

Drawing Status	S1 - FOR COORDINATION
Client	AXIS LAND PARTNERSHIPS
Architect	
Project Title	LAND SOUTH OF AYLESHAM
Drawing Title	AYLESHAM ROAD SITE ACCESS JUNCTION GENERAL ARRANGEMENT
Scale @ A3	1:250
Date	13/07/23
Designed/Drawn	CI
Checked	LH
Approved	LH
Project Ref	22-221
Drawing Number	22-221-T-120
Rev	B



1:250
0 5m 10m 15m 20m 25m

Rev	Date	Description	Drn	Chk	App
B	27/09/23	UPDATED TO LATEST TOPO SURVEY AND 50mph	CI	MC	LH
A	13/07/23	FIRST ISSUE	CI	LH	LH

Notes:

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Drawing Status	S1 - FOR COORDINATION
Project Title	LAND SOUTH OF AYLESHAM
Client	AXIS LAND PARTNERSHIPS
Drawing Title	SPINNEY LANE SITE ACCESS JUNCTION GENERAL ARRANGEMENT (50MPH SPEED LIMIT)
Architect	

Scale @ A1	Date	Designed/Drawn	Checked	Approved
1:250	13/07/23	CI	LH	LH

Project Ref	Drawing Number	Rev
22-221	22-221-T-100	B

P:\0-2022-221 Land to South of Aylesham\02 TECHNICAL\B DWGS\ CAD\DWGS\22-221-T-100-A - Spinney Lane Site Access Junction Option 1.dwg (A1-H) Plotted on: Sep 27, 2023 - 5:45pm by MClarke

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