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|-----------------------|--|----------------------------------|--------------------|-------------------------|
| <b>TECHNICAL NOTE</b> |  |                                  | <b>VELOCITY</b>    |                         |
| <b>Client</b>         | Ansty Village Parish Council           |                                  | <b>Page No.</b>    | 1 of 18                 |
| <b>Project</b>        | Land Adjoining Antsy, West Sussex      |                                  | <b>Project No.</b> | 22-163                  |
| <b>Subject</b>        | Outline Planning Application Objection |                                  | <b>Document No</b> | TN004                   |
| <b>Prepared By</b>    | DL                                     | <b>Checked and Authorised By</b> | CG                 | <b>Date</b><br>Dec 2024 |

# 1 INTRODUCTION

## 1.1 REPORT PURPOSE

1.1.1 This Technical Note has been produced by Velocity Transport Planning ('Velocity') on behalf of Ansty Village Parish Council (the 'client') to assess the Outline Planning Application (OPA) submitted by Fairfax Acquisitions Limited (the 'applicant') for the following proposed development:

"Outline planning application (All matters reserved except for access) for the redevelopment of land to the east of Ansty to create a new Garden Community, comprising of the erection of up to 1,450 homes (including 30% affordable housing), up to 90 residential care (C2 units), a primary school, new SEND school, sports facilities including all weather hockey pitches and tennis centre, allotments, retail, community and employment uses together with ancillary and associated development including new and enhanced pedestrian/cycle routes, open spaces, and landscaping"

1.1.2 The proposed development would be located between the villages of Cuckfield and Ansty which are located to the west of Haywards Heath. The applicant is an experienced property developer, who has been supported by Ardent Consulting Engineers (ACE) as the transportation and highways consultant for the OPA submission (ref: DM/23/2866).

1.1.3 As part of the OPA, a Transport Assessment was prepared by ACE, dated October 2023. Mid Sussex District Council (MSDC) are the Local Planning Authority and West Sussex County Council (WSSC) are the Local Highway Authority.

1.1.4 Following consultation responses from WSSC, National Highways (NH), Active Travel England (ATE) and the WSSC Public Rights of Way Officer, the applicant has submitted a Transport Addendum, prepared by ACE, dated November 2024.

1.1.5 This Technical Note has considered the additional information included within the Transport Addendum (November 2024), alongside the original Transport Assessment (October 2023), to assess the suitability of the site for residential development from a transport perspective. The Note should be read in conjunction with the previous Objection Note (TN003) prepared by Velocity on behalf of Ansty Village Parish Council and submitted to the planning application in December 2023.



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## 2 SITE ACCESSIBILITY

### 2.1 INTRODUCTION

2.1.1 This section reviews the site accessibility assessment undertaken within the ACE Transport Assessment (Chapter 3 – ‘Accessibility Review’) and subsequent ACE Transport Addendum, to establish whether or not the assessment is robust and whether the development location provides a genuine choice of transport modes, over private car use, in accordance with the requirements of the NPPF.

2.1.2 A copy of the Concept Masterplan included within the ACE Transport Assessment is provided below in Figure 2-1, for reference purposes.

Figure 2-1: Land at Ansty: Concept Masterplan



Source: ACE Transport Assessment

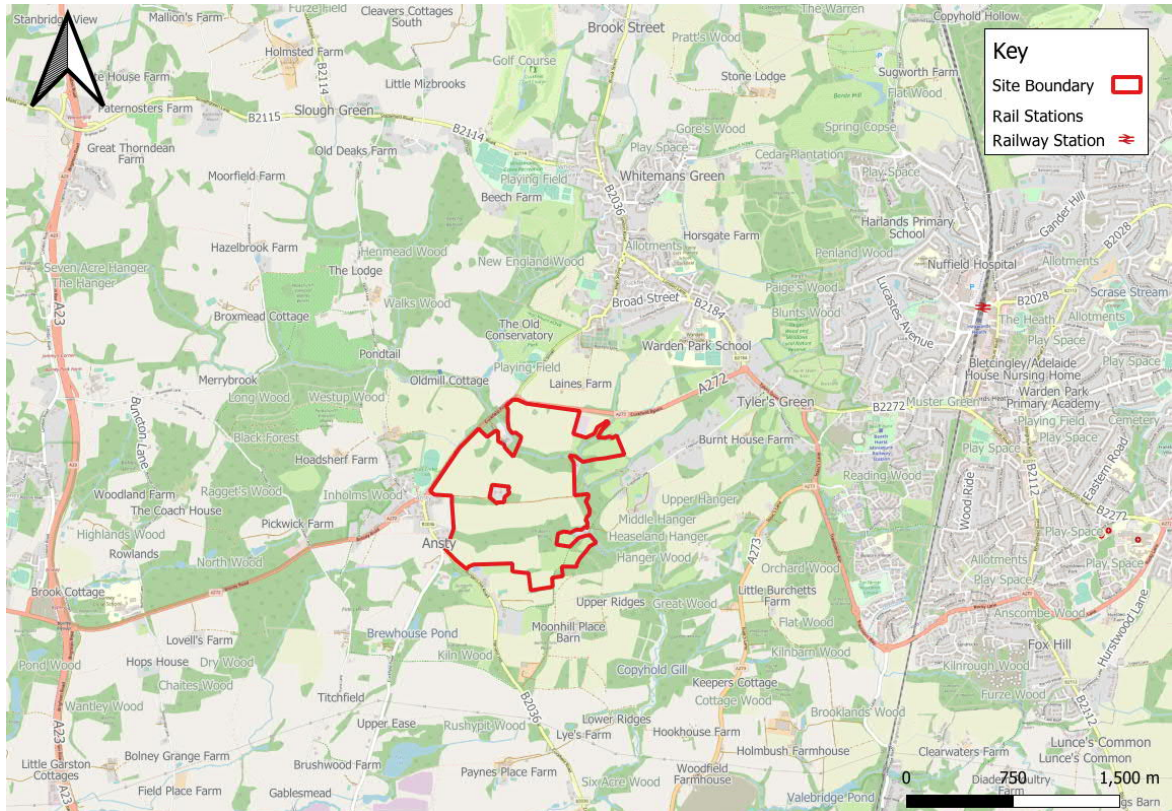


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## 2.2 SITE LOCATION

2.2.1 Figure 2-2 shows the site location and local context.

Figure 2-2: Site Location and local context



## 2.3 LOCAL AMENITIES AND FACILITIES

2.3.1 The ACE Transport Assessment makes very brief mention of local amenities and facilities, with little insight provided in relation to accessibility from the development site. A figure is provided illustrating six local amenities and facilities, of which only two are located in within a close proximity of the development site. No indication of walking distance or time is provided in relation to the development site, therefore it is difficult to determine the accessibility of these facilities within 'reasonable walking' parameters.

2.3.2 No further assessment of the accessibility of the site to local amenities and facilities is provided within the ACE Transport Addendum.

2.3.3 Therefore, to determine the suitability of ACE's assessment, a summary of walking accessibility to these facilities is provided in Table 2-1, based on the approximate walking distance calculated from the centre of the development site.



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Table 2-1: Local facilities and amenities (as per ACE Transport Assessment)

| FACILITY                        | VELOCITY ASSESSMENT |         |
|---------------------------------|---------------------|---------|
|                                 | Distance            | Time    |
| Ansty Community Hall            | 750m                | 11 mins |
| Ansty Football and Cricket Club | 750m                | 11 mins |
| Cuckfield Recreation Ground     | 2.0km               | 30 mins |
| Cuckfield Medical Practice      | 2.6km               | 38 mins |
| Warden Park Academy             | 2.8km               | 40 mins |
| Co-op Foodstore Cuckfield       | 2.8km               | 42 mins |

2.3.4 Table 2-1 demonstrates that, with the exception of facilities located within Ansty, comprising a Community Hall and Football/Cricket Club, the majority of facilities are beyond a 2.0km or 30-minute walking distance. The National Travel Survey notes that walking is the most frequent travel mode used for short-distance trips, which are considered to be no longer than one mile / 1.6km (20-minute walking distance). Therefore, when considering this to be a reasonable maximum walking distance that residents are likely to travel, the majority of facilities may be considered out of reach by foot.

2.3.5 Comparatively, the ACE Transport Assessment refers to Chartered Institution of Highways and Transportation (CIHT) guidance which recommends:

“acceptable walking distances of between 400m (“Desirable”) for general journeys and 2km (“Preferred Maximum”) for commuting and journeys to school purposes”

2.3.6 It goes on to compare this to the Manual for Streets (MfS) guidance for a walkable neighbourhood, which indicates a reasonable walking distance of 800m (10-minutes), with trips under 2km considered to have the greatest potential for replacing short car trips.

2.3.7 Whilst this provides a wider margin for what is considered a reasonable walking distance, it still demonstrates that the local facilities indicated within the ACE TA fall outside of the preferred maximum distance.

2.3.8 The conclusion to Chapter 3 of the ACE Transport Assessment states that:

“There are a number of local facilities located within Ansty and Cuckfield, which allows for a degree of ‘local living’ by catering for some of the needs to existing residents, thereby minimising the need to travel and/or reducing journey times.”

2.3.9 It is our view that, based on our review of accessibility to those facilities against recommended walking guidelines, they largely do not allow for the degree of local living suggested by ACE. Instead, this is likely to lead to increased rather than reduced travel by car.

## 2.4 ACCESSIBILITY BY FOOT AND CYCLE

### WALKING ACCESSIBILITY

2.4.1 The ACE Transport Assessment provides a brief summary of local Public Rights of Way (PRoWs) that dissect the development site and provide onward connection to the local area, providing options for accessibility by foot. The ACE Transport Addendum provides further details of local PRoWs and improvements works that will be undertaken.



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- 2.4.2 It is highlighted that the ACE Transport Addendum reduces the scope of proposed improvements to local PRowWs in comparison with that detailed within the original Transport Assessment.
- 2.4.3 It is Velocity's view that, given the distances involved and remoteness of the development site, the site should not be considered accessible by foot and will encourage additional travel by private car to the wider area, which would not be necessary for homes located in more sustainable locations.

#### ROUTE TO WARDEN PARK ACADEMY

- 2.4.4 Warden Park Academy is located to the north of the site in Cuckfield and, as stated at Paragraph 5.2 of the ACE Transport Assessment, the route to Warden Park Academy is one of the primary desire lines associated with the site. However, the information submitted within the ACE Transport Assessment and Transport Addendum do not provide a consistent approach to providing a safe and direct walking and cycling route on the desire line to Warden Park Academy. Furthermore, as demonstrated in the assessment above, Warden Park Academy is a 40-minute walk from the site and is therefore significantly in excess a recommended maximum desirable walking distance.
- 2.4.5 Paragraphs 2.20 to 2.26 of the ACE Transport Addendum Appendix C considers an ADPV<sup>2</sup> assessment of the proposed pedestrian crossing on the A272. The analysis presented by ACE states that "30% of pedestrian and cycle trips during the AM peak will utilise the crossing to access Warden Park Academy".
- 2.4.6 This statement suggests that there will be a significant number of students walking and cycling to Warden Park Academy. Given that the Academy is a 40-minute walk from the site, well in excess of recommended walking distances, it is considered unlikely that such a high number of students will walk/cycle this distance and will more likely travel car, as a passenger with a parent driving.
- 2.4.7 The ACE analysis suggests that students walking and cycling from the site to Warden Park Academy will use the proposed pedestrian crossing on the A272 to connect from the development site (on the southern side of the A272) to the northern side of the A272. However, no suitable onward walking or cycling facilities are provided on the northern side of the A272 on the route to the Academy. Pedestrian facilities on the northern side of the A272 are only provided between the site access roundabout and the access point to public footpath 8aCU. Public footpath 8aCU is an unmade route and is therefore not considered an appropriate all-weather route towards the school.
- 2.4.8 It is therefore unclear why ACE are indicating a significant number of students utilise the A272 crossing to access Warden Park Academy when this does not provide access to safe and suitable walking or cycling route to the Academy.
- 2.4.9 Based on the cycle improvement plan submitted alongside the ACE Transport Addendum, the development will provide a shared foot/cycleway along the southern side of the A272, meaning students would not need to use the proposed pedestrian crossing on the A272.
- 2.4.10 The proposed shared foot/cycleway along the southern side of the A272 connects from the northern site access roundabout to the Tylers Green Roundabout, where Broad Street provides a route to the Academy.
- 2.4.11 However, at the Tylers Green Roundabout, the most direct route to the Warden Park Academy would be to cross the A272 at the western arm of the roundabout and walk/cycle along western side of Broad Street towards the Academy. This is indicated by a red dashed line on Figure 2.3 below.

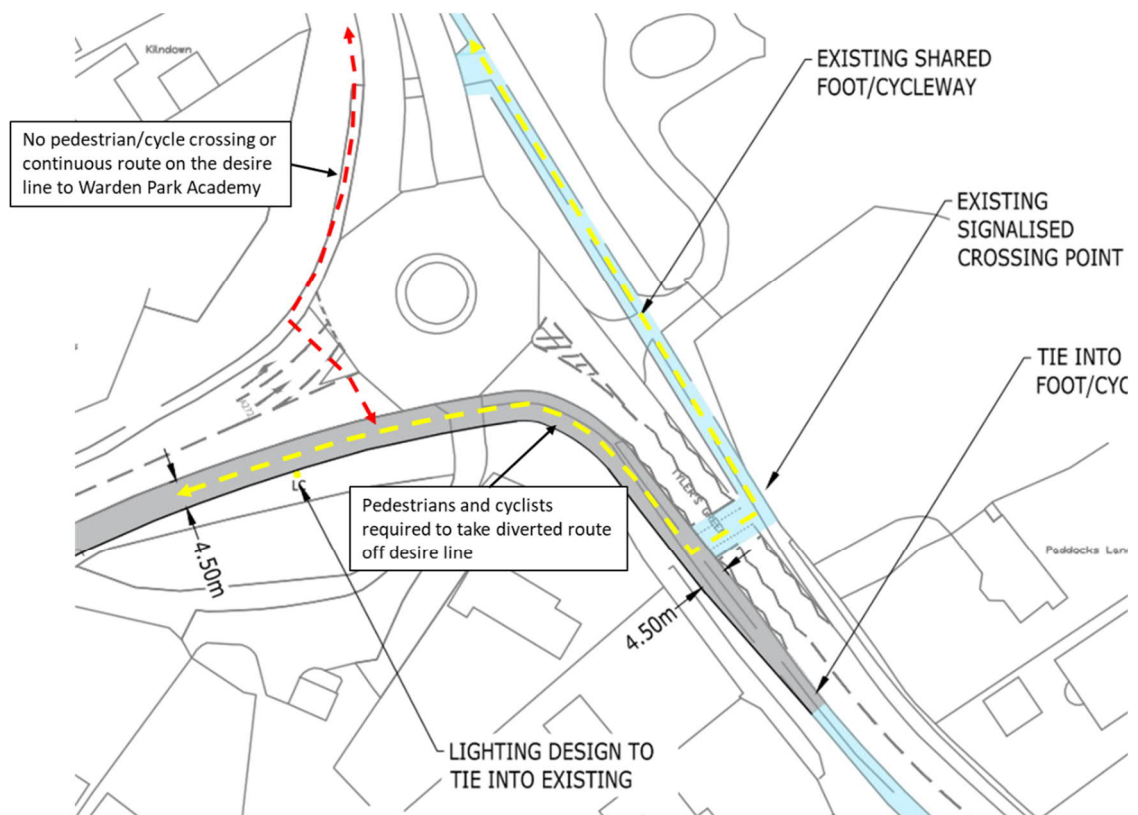


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2.4.12 However, no crossing facilities or continuous pedestrian/cycle route are provided on this desire line route to Warden Park Academy and no improvements to this route are proposed as part of the proposed development. Instead, students walking or cycling to Warden Park Academy via the A272 are required to divert around the southern side of the Tylers Green roundabout and route along the eastern side of Tylers Green and Broad Street. This route is indicated by the yellow dashed line on Figure 2.3 below.

2.4.13 It is evident that the safe route that pedestrians and cyclists are required to use when routing to/from Warden Park Academy does not follow the desire line and requires diversion from the desire line to follow a safe route. This is likely to result in students crossing at an unsuitable and unsafe location on the desire line to avoid significant diversion.

Figure 2-3: Comparison of Walking Routes at A272 Tylers Green Roundabout



### CYCLING ACCESSIBILITY

2.4.14 The ACE Transport Assessment refers to two bridleways in relation to cycling access but, as with footways, it does not address whether these would be suitable for cyclists to use in all weather conditions and at all times of year. Bridleways are extremely unlikely to provide suitable routes to encourage people to cycle to local facilities.

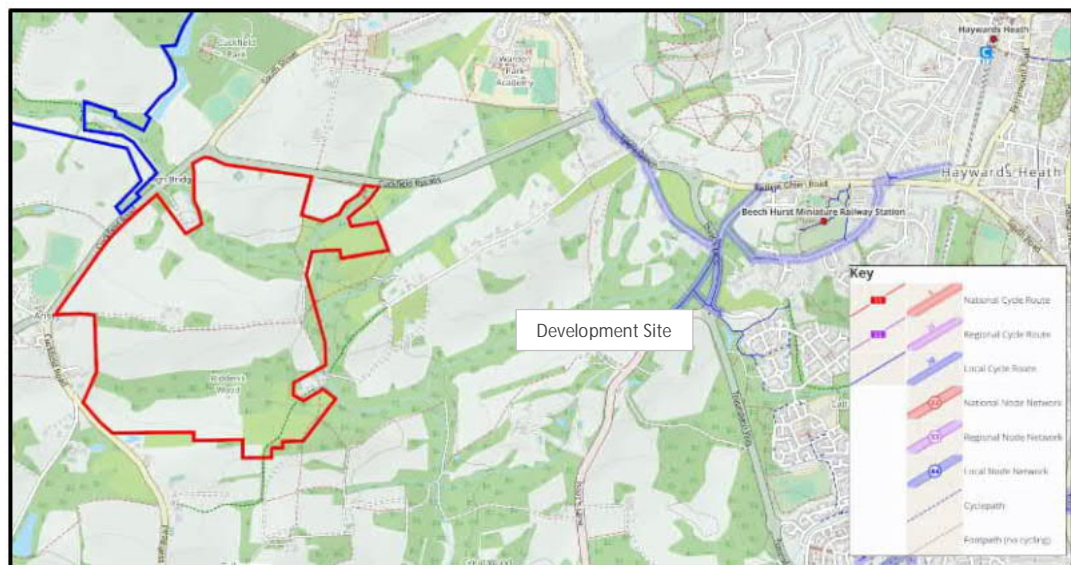
2.4.15 The A272 and B2036 do not provide any particular priority for cyclists and would likely be a major discouragement to most potential cyclists, thereby perpetuating reliance on the private car to leave the confines of the development.



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- 2.4.16 The ACE Transport Assessment makes reference to outputs produced by the Mid Sussex Local Cycling and Walking Infrastructure Plan (LCWIP), which denotes a desire line for cyclists between the village of Ansty and Haywards Heath (see Figure 3-4 of the ACE Transport Assessment).
- 2.4.17 Notwithstanding the findings of the LCWIP, Figure 3-3 of the ACE Transport Assessment, reproduced as Figure 2-4, below, demonstrates a clear lack of suitable cycling infrastructure within close proximity of the development site. The absence of suitable infrastructure combined with the nature of local roads is likely to discourage cycling journeys by residents or commuters at the proposed development.

Figure 2-4: ACE TA Figure 3.3



**Figure 3.3: Cycle Routes within the Vicinity of the Site**

- 2.4.18 The conclusion to Chapter 3 of the ACE Transport Assessment states that:  
 “There is an existing propensity to cycle from Ansty Village, with the primary pole of attraction being towards and East and Haywards Heath”
- 2.4.19 Other than repeating the finding of the LCWIP desire line study, the report does not go on to provide a relevant conclusion on accessibility of the proposed development site by cyclists.

#### PROPOSED CYCLE ROUTE TO CUCKFIELD

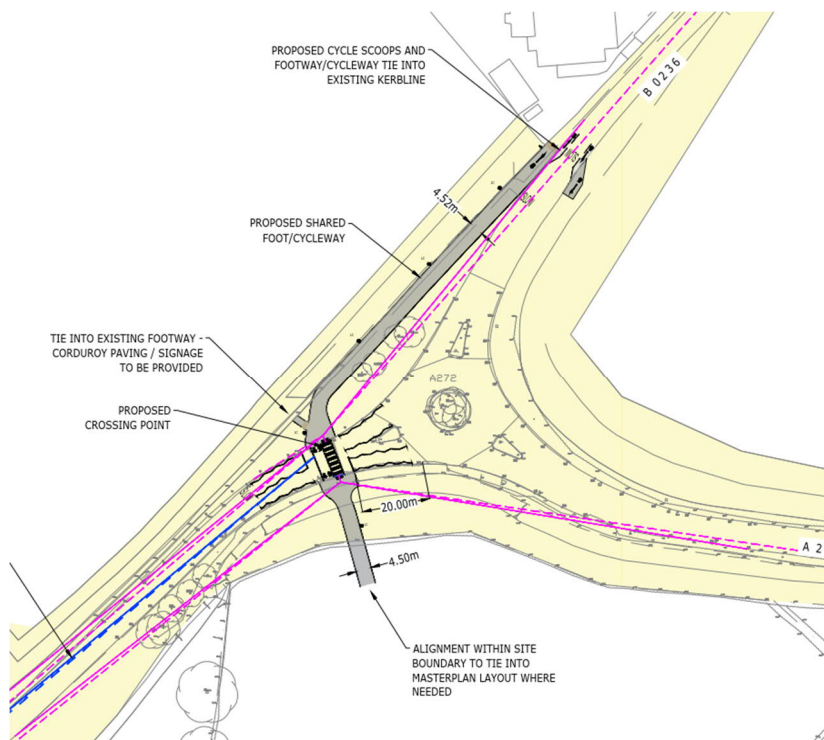
- 2.4.20 Paragraph 5.2 of the ACE Transport Assessment identifies key active travel routes in the vicinity of the site and states that the route to Cuckfield is a key active travel desire line from the site.
- 2.4.21 The ‘Cycle Improvement Plan’ submitted within the ACE Transport Assessment (Drawing 2207280-SK03 Rev C) proposed that a new cycle route will be provided along the B2036 from the site north towards Cuckfield.
- 2.4.22 Furthermore, Paragraph 5.4 of the ACE Transport Assessment states that the development will have:  
 “a focus on the continuity of routes, as per the LTN1/20 guidance, new shared pedestrian/cycle infrastructure will be delivered that knits together or plug the gaps in the existing network”



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2.4.23 Drawing 2207280-SK05 Rev H, titled 'Cycle Route Improvement Plan' is included within the ACE Transport Addendum and shows a shared foot/cycleway proposed to connect from the site and cross the A272 south of the B2036. The foot/cycleway is shown to terminate just north of the A272/B2036 roundabout. An extract of the ACE 'Cycle Route Improvement Plan' is shown at Figure 2.5 below.

Figure 2-5: Extract: ACE Drawing 2207280-SK05 Rev H 'Cycle Route Improvement Plan'



2.4.24 The ACE 'Cycle Route Improvement Plan' shows that just north of the B272/B2036 roundabout cyclists will be required to join the carriageway of the B2036 and no off-carriageway route is provided north of the roundabout to continue the majority of the route towards Cuckfield. It is highlighted that this section of the B2036 is subject to the national speed limit (60 mph) and is therefore not considered to be a safe or suitable route to cycle on carriageway.

2.4.25 It is therefore evident that the proposed development does not provide continuity of the cycle route from the site to Cuckfield and does not provide an appropriate cycle facility on a route which has been identified as a key active travel desire line by the applicant.

2.4.26 It is Velocity's view that, in the absence of suitable cycle infrastructure and given the distances involved, the site should not be considered accessible by cycle and is likely to result in reliance on private car usage.

## 2.5 ACCESSIBILITY BY PUBLIC TRANSPORT

2.5.1 The ACE Transport Assessment makes brief reference to the availability of local bus and rail services.



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## EXISTING BUS ACCESSIBILITY

- 2.5.2 In relation to existing bus services, although a brief summary of Route 89 is provided within the ACE Transport Assessment, there is no commentary on the distance between the centre of the development site and the nearest bus stop located at Ansty Cross, at a walking distance of approximately 700m (10-minutes).
- 2.5.3 Additionally, a review of bus frequency undertaken by Velocity has determined that the statement within the ACE Transport Assessment appears to significantly overestimate service provision across a typical week. The ACE report states the following in relation to Route 89:
- “...which operates at a frequency of one bus per hour on weekdays, with no service on Saturdays or Sundays.”
- 2.5.4 A review of the timetable for Route 89, available via Compass Travel’s website, suggests that service provision is not hourly, nor daily. A copy of the timetable (included within our previous Objection Note) suggests that only one service is available every day from Ansty Cross at 17:08 or 17:48, depending on direction of travel. Other services across the day, which are not hourly, either operate as a school service, during School holidays-only, or on Mondays, Wednesdays and Fridays only.
- 2.5.5 It is highlighted that the consultation response from WSCC dated 29 January 2024 states that the “site is not well served by existing bus services.”
- 2.5.6 On this basis, the very low level of service provision does not provide an acceptable alternative to private car use for the majority of most people’s journeys and will lead to an increased reliance on private car journeys compared to more suitable sustainable locations for housing growth within the district.

## PROPOSED BUS ROUTE

- 2.5.7 The ACE Transport Assessment states that discussions have been held with local operators with a view to diverting an existing route, or creating a new service, that will provide a direct connection between the development and Haywards Heath. However, the ACE Transport Assessment does not provide details of the final bus services that will be in place to support the development and therefore does not demonstrate that appropriate access to bus services will be provided.
- 2.5.8 The ACE Transport Addendum does not provide any further details confirming what bus services will be provided to support the development proposals, the frequency of the services, the destinations that they service or how this will be secured to ensure the bus services are viable.
- 2.5.9 The ACE Transport Addendum states that a bus report has been shared confidentially with WSCC and that a bus commercial sustainability assessment has been conducted but does not provide full details of those assessments/reports.
- 2.5.10 The application site is situated in an inaccessible location and, as concluded by WSCC, is not well served by existing bus services. The need to provide viable and regular bus services is imperative to ensuring that the development has appropriate access to public transport.
- 2.5.11 Full details of the bus services that will serve the development should be provided prior to any determination of a planning application. This should include details of the proposed routes, destinations served, frequency of services, how they will be secured to ensure that they are viable, and any financial contributions required to ensure the future operation of these services.



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- 2.5.12 In addition, details of any bus commercial and viability assessment should be submitted and made public alongside the planning application and demonstrate the future viability of the bus services and any impacts on existing local bus services, should service diversions be proposed.
- 2.5.13 A service extension is likely to require one or two additional buses, and a new service could require many more. Given that each additional bus that is required to make a service operational can come at a cost of approximately £300,000 per annum, there is concern regarding the viability of bus route diversion or creation, given the isolated rural location of the site and anticipated travel patterns. Importantly, if the bus service is not self-sustaining after five years, it would fall to the local authority to fund or subsidise the route. If this is not viable, the bus service would be removed leaving residents with no other viable alternative than the private car.
- 2.5.14 Additionally, if the bus service is a diversion of an existing route, this may lead to an increase in journey times for existing passengers reducing the desirability of the service and potentially resulting in some existing passengers switching modes to private car.
- 2.5.15 As set out at Section 3.2 of this Note, there are concerns regarding the mode share analysis which has been presented within the ACE Transport Addendum. The mode share analysis has been based on the Haywards Heath 009 Census Middle Super Output Area. This area includes Haywards Heath Town Centre, Haywards Heath railway station and multiple frequent bus services and is therefore a significantly more accessible and sustainable location than the application site.
- 2.5.16 On that basis, the mode share analysis presented in the ACE Transport Addendum is likely to over-estimate public transport usage as a proportion of the overall mode share. If that public transport mode share estimate has been used to assess likely bus patronage as part of a bus commercial sustainability assessment, then this could have over-estimated bus patronage and income, impacting on the viability of bus services. This highlights the importance of the full bus report and bus commercial sustainability assessment, including all assumptions made, being submitted alongside the planning application for appropriate review and scrutiny.

## RAIL ACCESSIBILITY

- 2.5.17 The ACE Transport Assessment makes brief reference to the availability of rail services at Haywards Heath Railway Station, which is reported to be “approximately 3.5km from the centre of the proposal site”.
- 2.5.18 Velocity has conducted a review of this statement and has determined that the station is located approximately 4.5km from the centre of the development site. In comparison, the station is actually located 3.5km from the proposed northern access point to the development site on the A272.
- 2.5.19 Notwithstanding the above, it is Velocity’s view that local rail services are not easily accessible by walking or cycling, given the distances involved and lack of suitable cycle infrastructure between the development site and Hayward’s Heath. Whilst it is noted that Bus Route 89 provides a connection between the local bus stop and the station, the relatively low service frequency does not make this a preferable option for commuters and is unlikely to deter significant modal shift from private vehicle use.
- 2.5.20 Any future resident wishing to travel by rail from Haywards Heath is therefore likely to rely on private car trips, with a high likelihood of single occupancy car trips exacerbating the traffic generation of this highly inaccessible location.



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- 2.5.21 The Transport Addendum provided by ATE provides no further information regard how future residents could access rail services or whether new bus services will provide a connection between the site and rail services.
- 2.5.22 It remains Velocity's view that, based on the information provided, the site is not accessible to rail services, and this will encourage reliance on private car usage.

## 2.6 SUMMARY OF ACCESSIBILITY

- 2.6.1 The assessment of accessibility set out in both the ACE Transport Assessment and subsequent Transport Addendum lack detail, useful insight and fails to comment on realistic accessibility by walking, cycling and public transport. Certain information, such as travel distance, appears to be taken from the site boundary rather than its centre, or is omitted altogether. Where evidence is provided, such as local cycle routes and bus service availability, it does not justify an acceptable level of accessibility to the local area.
- 2.6.2 The local facilities and amenities used within the accessibility assessment are deemed to be largely out of reach by walking and cycling modes, given the majority are located beyond 2km from the centre of the proposed development site.
- 2.6.3 The submitted information does not demonstrate that suitable access to bus services will be provided. The diversion of an existing bus route or creation of a new bus route to serve the development appears unlikely to be viable in the long term. If the service is not self-sustaining after its initial funding period, then it would be withdrawn should it not be adopted by the local authority. Increased journey times for existing passengers may also reduce the desirability of the service and any increases in passenger uptake from the development may be offset by falls in patronage elsewhere. Therefore, without a suitable strategy that secured a long-term service provision, it is likely that there will be a greater reliance on private car usage and higher levels of vehicle trips will be generated.
- 2.6.4 In summary, based on the information we have available, the location of the site and the lack of sustainable transport infrastructure mean that the proposed development will not provide a genuine choice of transport modes contrary to the requirements of the NPPF. The proposed development will therefore be reliant on the private car and would lead to very few journeys being made to destinations outside of the site being made by active or sustainable modes of travel.
- 2.6.5 Therefore, the proposals do not accord with national, regional and local transport policy with regard to locating developments in locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes.
- 2.6.6 In conclusion, it is Velocity's view that the accessibility assessment contained within the ACE Transport Assessment and Transport Addendum does not address the significant deficiencies in accessibility by walking, cycling and public transport that combined lead to the conclusion that this is a highly inaccessible, unsustainable location (in transport terms) that is highly unsuitable for significant residential development.



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## 3 TECHNICAL ANALYSIS

### 3.1 TRIP RATES AND TRIP GENERATION

- 3.1.1 As set out within our previous Objection Note, dated December 2023, it is not clear from the Transport Assessment and Transport Addendum how the discounts to trip generation rates have been calculated, and this information should be provided for transparency.
- 3.1.2 Furthermore, our previous Objection Note highlighted that the ACE Transport Assessment states that the flows “reflect ‘Actual Flows’ (rather than ‘Demand Flows’), therefore include the effect of capacity and queuing to present the most likely forecast of traffic across the local highway network”.
- 3.1.3 Appendix G of the ACE Transport Assessment includes traffic flow diagrams of the “Proposed Development Traffic Effect”. Our previous Objection Note highlights that the total predicted flows into and out of the development are substantially lower than the predicted development trips (with reduction) presented in Table 6.2 of the TA, presumably because the network is so congested that the expected number of trips cannot take place.
- 3.1.4 Velocity’s previous review identified that the number of vehicular trips used in the models reflect assumed network constraint from the strategic model, rather than assessing demand flows both from the wider highway network and from the proposed development. In our view demand flow models should be presented as a baseline and if necessary additional models presented with justification for any reductions in flows.
- 3.1.5 Velocity’s previous review identified that a substantial proportion of expected trips are missing from the modelling. The “Proposed Development Traffic Effect” diagrams show negative traffic flows on the A272, suggesting that existing traffic is either routing via different, potentially less suitable, roads or the model assumes the traffic is being suppressed. Given the potential for this traffic to have severe negative impacts on existing road users, the applicant should test ‘Demand Flows’ from the Saturn model, with the results compared to the actual flows.
- 3.1.6 Our previous Objection Note highlighted that the applicant should explain why the development results in negative effects on baseline traffic flows in some locations, for example reductions in traffic on to the A23, west to Cowfold, traffic through the Haywards Heath and through Burgess Hill, all experiencing unexplained reductions in traffic flows which do not appear to be redistributed elsewhere within the model. The ACE Transport Addendum does not reconcile these issues.
- 3.1.7 It is highlighted that the most recent consultation response from National Highways, dated 4 December 2024, continues to raise objection to the proposed development and queries the traffic flow diagrams and distribution analysis stating that:
- “We therefore reiterate that information is provided which provides greater clarity as to what main routes the generated traffic is travelling to and from the development during each peak period, for example, A23 (southbound), A23 (northbound) etc.”



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3.1.8 The applicant must be able to demonstrate that their development traffic can be sufficiently accommodated on the transport network. Further assessment should be undertaken to ensure that the proposed trip rates reflect the nature and location of the development (I.e., the non-residential land uses should be considered, and any internalisation assumptions clearly set out and justified for audit purposes). A vast array of uncertainties regarding future trip generation forecasts leans to the possibility that travel behaviours may trend towards higher vehicular use in rural areas that are not suitably connected to urban areas through proposed active travel and/or public transport solutions.

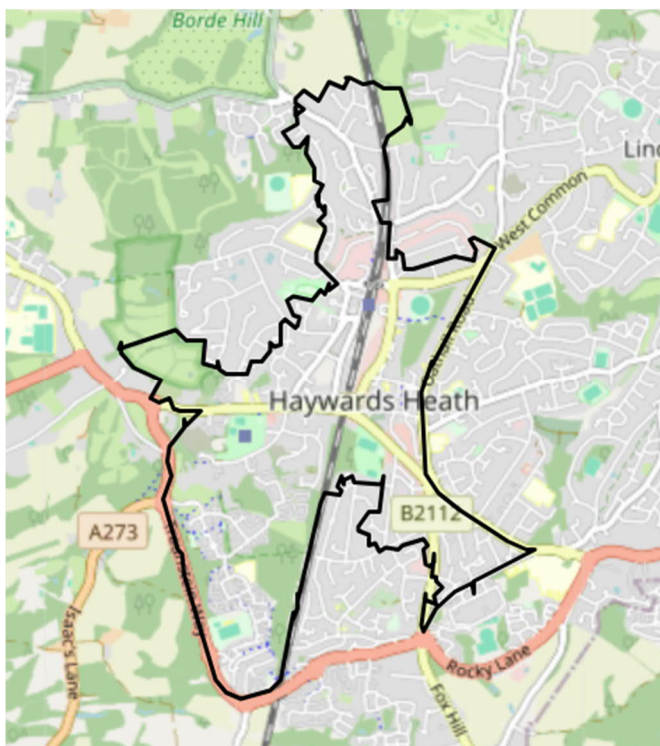
## 3.2 MODE SHARE

3.2.1 The ACE Transport Addendum includes a multi-modal assessment, and this is presented at Table 2.1 of their response to Active Travel England, at Appendix A of the Transport Addendum.

3.2.2 The assessment undertaken by ACE at Table 2.1 suggests that the proposed development will generate 12,993 person trips per day and the analysis suggests that 61% of trips will be undertaken by private car, equating to 7,962 trips per day by private car.

3.2.3 Paragraph 2.2 of the ACE Transport Addendum states that the mode share analysis has been based on mode share information for the 2021 Census for the Middle Super Output Area of Haywards Heath 009. Image 3.1 below shows the geographical area covered by Middle Super Output Area of Haywards Heath 009.

Figure 3-1: Census Middle Super Output Area Haywards Heath 009



3.2.4 The census output area utilised to assess the mode share of the proposed development has been based on an output area which include Haywards Heath urban area including the town centre, a wide range of shops and services, Haywards Heath railway station and a number of frequent bus routes.



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3.2.5 It is evident that the mode share data for residents living in the urban area of Haywards Heath including the town centre and a railway station is not comparable to the location of the development in an isolated rural area with limited access to shops, services, infrequent bus service and no train station. As such the mode share assumptions presented in the ACE Transport Addendum will significantly overestimate likely non-car modes of travel including public transport mode share and underestimate private car usage.

3.2.6 Furthermore, the assessment of mode share has been based on data from the 2021 census. That census was undertaken in March 2021 at a time when COVID pandemic travel and working restrictions were in place. Mode share estimates based on census data collected at that time will therefore be affected by the travel and working restrictions and are not considered a reliable estimate of mode share.

### 3.3 JUNCTION ASSESSMENTS

3.3.1 The ACE Transport Assessment state that a sifting exercise has been undertaken whereby only junctions with more than 30 additional movements would require junction assessment modelling. As set out in our previous Objection Note, this fundamentally underestimates the possibility of an additional 30 movements in one direction having a severe impact even where there is a corresponding decrease in movements in another direction. Therefore, the sifting operation should be re-run to include any junction where any movement experiences an increase of more than 30 movements in the hour should be assessed with junction modelling.

3.3.2 In addition, as highlighted in our previous Objection Note, the repeat of the sifting operation should be undertaken with demand flows, as it is impossible to tell where the development may generate a severe impact, when the detailed junction modelling traffic flow data is taken from a strategic traffic model output which has already limited the flows to the maximum values that can be absorbed by the network (i.e. within the theoretical capacity of junctions).

#### MODEL CALIBRATION AND VALIDATION

3.3.3 The ACE Transport Assessment and Transport Addendum include junction capacity modelling of individual junctions using ARCADY. The documents make no reference to any calibration or validation of the ARCADY models to ensure that baseline models accurately reflect existing baseline operation of the junction.

3.3.4 It is highlighted that the most recent consultation response from National Highways, dated 4 December 2024, raises concern with regard to the accuracy and calibration of at least one baseline junction model and states that:

“The model should be calibrated by use of direct intercept adjustment to ensure that the queues within the model have close alignment with those occurring on site.”

3.3.5 If a junction capacity model has not been corrected calibrated and validated, then any assessments undertaken using that model cannot be relied upon and development impacts may be greater than shown by the modelling. It is Velocity's view that the applicant should demonstrate that all junction models presented within the assessment be calibrated and validated to ensure that they are fit-for-purpose.

3.3.6 The ACE Transport Assessment and Transport Addendum do not provide drawings demonstrating how geometric parameters included within the ARCADY junction models have been measured and calculated. As such it is not possible to check and verify that these have been accurately inputted into the junction models.



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- 3.3.7 This position is shared by National Highways, who stated in their January 2024 consultation response that:  
 “A CAD drawing should be provided which demonstrates the geometric parameters which have been input to Junctions 10”
- 3.3.8 The ACE Transport Addendum has not resolved this matter and the most recent response from National Highways (4 December 2024) highlights numerous discrepancies with geometric parameters included within junction models and confirms that:  
 “There has been no CAD drawing provided which demonstrates the geometric parameters input to the model”
- 3.3.9 Until the applicant has demonstrated, via appropriate drawings, that that all geometric parameters which have been included in all junction models are accurate and appropriate calibration and validation of all junction models has been undertaken, the junction modelling presented within the ACE Transport Assessment and Transport Addendum should not be relied upon to provide a reliable assessment of development impacts.
- 3.4 ROUNDABOUT GEOMETRY**
- 3.4.1 A review of the access junction design prepared in support of the OPA has been undertaken to ensure that layouts take in to account the relevant design parameters set by the Design Manual for Roads and Bridges (DMRB) and Manual for Streets (MfS).
- 3.4.2 The following drawings were subject to a high-level design review:
- ⊙ 2207280-003-F (Access 1)
  - ⊙ 2207280-004-D (Access 2)
  - ⊙ 2207280-005-D (Access 3)
- 3.4.3 It is noted that on each of proposed access junctions, deflection distances do not appear to meet the minimum requirements for a 40mph road (where proposed by the design):
- 3.4.4 CD116 of the DMRB states that:  
 “Where the speed limit is 40mph or less within 100 metres of the give way line on any approach, the entry path radius shall not exceed 70 metres”
- 3.4.5 A high-level review of the drawings indicates that on at least one arm of each junction, where a speed limit reduction to 40mph is proposed, the entry path radius exceeds 70m. Noting that we have not had access to the applicants CAD models, our assessment is based on dimensions annotated on ACE drawings.
- 3.4.6 DMRB CD116 Notes that: “The entry path radius is a measure of the deflection to the left imposed on vehicles entering a roundabout. It is the most important determinant of safety at roundabouts because it governs the speed of vehicles through the junction and whether drivers are likely to give way to circulating vehicles.” [Our emphasis].



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3.4.7 It is recommended therefore that additional analysis is undertaken, by the local authority obtaining the access junction designs in .dwg format, in order to accurately measure the proposed deflection for each arm. If the deflection is substandard, it is likely that significantly larger inscribed circle diameters (ICDs) will be required [i.e. larger roundabouts].



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## 4 SUMMARY

4.1.1 This Technical Note has been produced by Velocity Transport Planning ('Velocity') on behalf of Ansty Village Parish Council (the 'client') to assess the Outline Planning Application (OPA) submitted by Fairfax Acquisitions Limited (the 'applicant') for the following proposed development:

"Outline planning application (All matters reserved except for access) for the redevelopment of land to the east of Ansty to create a new Garden Community, comprising of the erection of up to 1,450 homes (including 30% affordable housing), up to 90 residential care (C2 units), a primary school, new SEND school, sports facilities including all weather hockey pitches and tennis centre, allotments, retail, community and employment uses together with ancillary and associated development including new and enhanced pedestrian/cycle routes, open spaces, and landscaping"

4.1.2 The findings of this Technical Note demonstrate that the site's accessibility assessment, undertaken by ACE, lack detail, useful insight and fails to comment on realistic accessibility by walking, cycling and public transport. Analysis undertaken by Velocity has demonstrated that the facilities, amenities and local settlements would be largely inaccessible for the majority of residents in the proposed development, given the distances involved and lack of supporting infrastructure.

4.1.3 Despite proposed improvements to public transport accessibility, there lacks sufficient confidence in the proposal that a re-diverted or entirely new bus route through the development site would be viable in the long-term (i.e. after a 5-year funding period).

4.1.4 The submitted information does not demonstrate that suitable access to bus services will be provided. The suitable self-sustaining bus services are not provided, then it would be withdrawn should it not be adopted by the local authority. Therefore, without a suitable strategy that secured a long-term service provision, it is likely that there will be a greater reliance on private car usage and higher levels of vehicle trips will be generated.

4.1.5 In our view the ACE report does not provide sufficient confidence in its strategic assumptions around trip rates and trip generation, and additional work is required to understand the likely impact of the development proposals, including an assessment of the non-residential trip generation, clearly identified auditable justification for internalisation rates, and use of 'demand flow' data, rather than suppressed 'actual flow' data.

4.1.6 All junction impact sifting and modelling assessment should be repeated once the trip generation has been appropriately updated and audited, and any junction where a movement is increased by 30 vehicles in an hour should be assessed.



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- 4.1.7 Given the strategic model appears to remove traffic from the network to provide ‘actual flows’ rather than ‘demand flows’ it is likely that the highway network is already operating largely at or beyond theoretical capacity without the ability to accommodate significant additional traffic without substantial highway capacity improvements. The provision of substantial highway capacity improvements would be fundamentally at odds with the principles of sustainable development. It is clear that if the district needs additional homes (which we understand it does not, by virtue of its five-year land supply), these should be located close to amenities with good pedestrian, cycle and public transport connectivity, and not in a location which will always be fundamentally reliant on private car transport by virtue of its remoteness.
- 4.1.8 At a local level, the applicant has not demonstrated that the geometric parameters included in junction modelling are accurate and no evidence of individual junction model calibration or validation has been provided. Further analysis is therefore recommended in relation to the ARCADY modelling to ensure that junction models are fit-for-purpose and can be relied upon to provide a reliable assessment of development impacts.
- 4.1.9 A high-level review of access junction design has been undertaken, to ensure that relevant design standards and principles have been applied correctly. This review found that the deflection radii appear to be substandard for the proposed access roundabouts, and as this is “the most important determinant of safety at roundabouts because it governs the speed of vehicles through the junction and whether drivers are likely to give way to circulating vehicles” [Ref DMRB CD116 Note to para 3.21], the highway authority should undertake detailed checks of the deflection geometry, which may necessitate significantly larger roundabouts.
- 4.1.10 The findings of the assessment undertaken by Velocity and summarised within this Technical Note demonstrate that the residential development proposals put forward by the applicant are not sustainable in transport terms and would be much more heavily reliant on private car use than appears to be set out in the ACE Transport Assessment and Transport Addendum. The location is inherently disconnected from many essential destinations apart from by private car transport.
- 4.1.11 The transport assessment appears to underplay the likely severity of the impacts of the additional vehicle borne traffic, and it is not possible to ascertain what those impacts would be until the assessment is revised. Irrespective of this housing development could be better and more sustainably located in other areas of the district, and as there is no shortfall of proposed housing within the district, there is no justification for permitting large scale development in an inherently unsustainable location.
- 4.1.12 Based on this, it is Velocity’s view that the proposed development transport assessment leaves substantial concerns that severe transport impacts could arise and the OPA should therefore be refused on transportation and highways grounds.

