

Chartered Town Planners Chartered Surveyors

No: 24940 / 24714

Forest Heath District Council Single Issue Review Public Examination

Matter 4 "Spatial Distribution of Housing"

Submitted by Sellwood Planning on behalf of The Earl of Derby

September 2017

1.0 <u>Introduction</u>

- 1.1 This response has been prepared on behalf of Lord Derby who owns the Hatchfield Farm site which was previously proposed for 400 homes, a Primary School and a minimum of 5 hectares of employment land under Policy N1(c) of the Site Allocation Local Plan Preferred Options (April 2016). This proposal was assessed in the corresponding SA prepared by AECOM and found to be an appropriate site in the context of the spatial strategy in the adopted Core Strategy (May 2010).
- 1.2 The site was deleted from the pre-submission Single Issue Review (SIR) in January 2017 following the Secretary of State's refusal of an application for 400 homes in August 2016. Since then, the High Court has quashed the Secretary of State's decision but not the Inspectors Report recommending approval. The Newmarket Horsemans Group (NHG) sought leave to challenge this decision in the Court of Appeal, but leave was refused in August 2017. There is no further right of appeal.
- 1.3 The Inspectors have correctly identified the resulting low housing provision in Newmarket as a key issue to be examined.

2.0 (Q 4.1) "How has the distribution of housing set out in Policy CS7 been arrived at? In particular

- (a) What factors have influenced the distribution proposed?
- (b) What role has the SA had in influencing the distribution?
- (c) <u>Has the distribution of housing been based on a sound process of</u>
 sustainability appraisal and testing of reasonable alternatives, and is the SA
 adequate in this regard?"
- 2.1 The SIR only seeks to replace Policy CS7 from the adopted Core Strategy (2010). The rest of the Core Strategy, including the Spatial Strategy (Policy CS1) remains the statutory determinant of the housing distribution. Policy CS1 should, therefore, be the primary factor 'influencing the distribution proposed'. It should be recalled that the

____1

Core Strategy was the subject of its own SA and this found the adopted spatial strategy to be sound.

2.2 It is not considered that the 2017 SA has influenced the housing distribution, since the SA of the Preferred Options found Option 1 (968 homes in Newmarket and 1,654 homes in Red Lodge) the preferred distribution whereas the SA into the Pre-Submission SIR found 612 homes in Newmarket and 1,828 in Red Lodge also to be appropriate. This suggests that the SA has been used to justify each distribution rather than influence it. The SA has not sought to test the emerging SIR document against the adopted Core Strategy principles. As such, the SA is not fit for purpose.

3.0 (Q 4.2) "Is the broad distribution of housing set out in Policy CS7 consistent with the Core Strategy's vision for the district, its settlement specific visions, spatial objectives and settlement hierarchy?"

- 3.1 For the reasons set out under the response to Q4.3 below, the broad distribution set out in CS7 is not consistent with the vision, spatial objectives and settlement hierarchy of the statutory 2010 Core Strategy. Examples of this inconsistency can be seen as follows
 - Vision 1 (page 17) 'climate change adaptation ... will have influenced the location and design of development'
 - Vision 1 (page 17) 'Development will be focussed in the towns and key service centres'
 - Vision 2 'Newmarket' (page 18) 'Most of the additional housing development will have taken place to help meet the needs of local people and businesses'
 - Spatial Objective H1 (page 22) 'To provide enough decent homes to meet the needs of Forest Heath's urban and rural communities, in the most sustainable locations'
 - Spatial Objective T1 'To ensure that new development is located where there are the best opportunities for sustainable travel and least dependency on car travel'

- Paragraph 2.5.9 (page 27) 'To be in general conformity with the RSS the highest proportion of new development should be directed to the three market towns followed by the key service centres'.
- 3.2 Whilst the distribution of housing in Policy CS7 was quashed by the High Court, it is relevant to note that at that time, FHDC proposed 1,640 new homes in Newmarket as being in conformity with the same spatial strategy. There is no clear justification in the SIR for reducing the housing provision in Newmarket from 1,640 homes to 612.
- 4.0 (Q 4.3) "The three Market Towns of Newmarket, Brandon and Mildenhall are expected to provide around 34% of new housing over the plan period.

 Approximately 40% is anticipated in the two KSCs of Lakenheath and Red Lodge. It appears that the distribution of housing growth places greater emphasis on the two KSCs than on the three Market Towns
 - (a) What is the justification for focussing greater growth in the KSCs rather than the Market Towns?
 - (b) What factors have influenced and led to this distribution?
 - (c) <u>Does the SA support greater housing growth in the two KSCs than the three</u> Market Towns?"
- 4.1 The Council's response of the 27th June 2017 blurs this issue by treating the Market Towns and KSC's as a single category. For example, Table 4 refers to 55% of completions and commitments (2011 16) being in the Market Towns and KSCs. However, Table 1 discloses how far FHDC has departed from its adopted spatial strategy in that 78% of all completions and commitments are outside Market Towns. Furthermore, Table 3 of the response demonstrates that 66% of the total housing provision will be outside the three Market Towns.
- 4.2 The Inspectors Report into the 2010 Core Strategy explained what was understood to represent 'a Market Town' focus,

3

"Policy CS7 proposes that the three market towns will take approximately 59% of the future allocations to 2031. Collectively, this is below the level they could be expected to accommodate if growth was proportional to their population (70%). This difference is most evident at Newmarket and to a lesser extent at Brandon and appears in part to reflect the constraints affecting each town". ,. (para. 5.9)

- 4.3 In comparison to the Inspectors expectation of 59% of allocations being in the Market Towns, Table 2 of the June response discloses that the figure is now 41%.
- 4.4 Whilst providing only 34% of the overall housing provision in the Market Towns is not a strategy to focus most development in the most sustainable locations, the detailed distribution between the three Market Towns shows some alarming disparities. Of the 34%, 23% is located in Mildenhall, which is probably appropriate for the second largest town in FHDC even if it is constrained by SACs / SPAs and noise. However, this means that only 2% is provided at Brandon and 9% in Newmarket.
- 4.5 The FHDC justification in Table 4 of the 27th June response is that the 2010 'visions' were adopted in the context of the expectation of 1,400 homes in Newmarket and 500/1,000 at Brandon. In the case of Brandon, this cannot be achieved because of SPA / SAC constraints and in the case of Newmarket the reduction is stated to be due to 'a lack of available and achievable sites' (page 2). This is a coded reference to the removal of Hatchfield Farm.
- 4.6 If this is the extent of FHDC's justification, it should have gone back to first principles and expanded the scope of the SIR to revise the spatial strategy in Policy CS1, the spatial objectives and the 'visions'.
- 5.0 (Q 4.4) "Housing growth at both Newmarket and Brandon is quite low relative to other settlements. Both are Market Towns, in the 'top tier' of the settlement

hierarchy. Newmarket is the District's largest settlement with a wide range of services and facilities, and is recognised as one of its most sustainable settlements, if not the most.

- (a) What is the justification for Newmarket and Brandon respectively receiving only 9% and 2% of new housing growth?
- (b) <u>Does the SA support the relatively low levels of housing growth apportioned</u> to Newmarket and Brandon?

In relation to Newmarket:

- (c) What specifically would be the impacts of greater housing growth on the horseracing industry?
- (d) What evidence is there to demonstrate that greater housing growth in Newmarket would lead to more traffic in the town than the proposed distribution of housing?
- (e) <u>Could the impacts of increased traffic on the horseracing industry be</u> <u>addressed, for example through the provision of new or enhanced horse</u> walks?
- (f) How has the effect of housing growth on the horse racing industry been addressed in terms of the SA?"
- 5.1 This response primarily addresses Newmarket issues. It is proposed to first combine responses to 4(a), (c), (d) and (e) dealing with the low level of housing in Newmarket and the potential impacts on the horse racing industry. Responses relating to the SA in 4(b) and (f) then follow.
- 5.2 **Q4.4** (a), (c), (d) and (e): The Council's response of the 27th June is unequivocal in explaining why the proposed submission provision for Newmarket is significantly lower than that proposed at Preferred Options stage. Page 5 of the document states

"There is a lack of suitable, available and achievable sites on unconstrained land in Newmarket. The only identified site that is less constrained is to the north east of Newmarket at Hatchfield Farm, but it is not appropriate to allocate it on the basis that planning permission has recently been refused,

see response to Question 3(d). <u>It has resulted in the modest allocation</u> at Newmarket". (underlining added).

- 5.3 Given that the Secretary of State's refusal of 400 homes at Hatchfield Farm is cited as the sole reason for the reduction in the housing provision in Newmarket, can FHDC justify changing its previous strategy to reduce the level of housing in the town to 9%, particularly since the Secretary of State's decision has now been quashed? If it cannot, the plan is unsound and Hatchfield Farm should be reinstated as a main modification.
- 5.4 The chronology over the last five years is as follows:
 - <u>March 2012</u>: 1,200 homes at Hatchfield Farm refused at appeal. The only ground of refusal was development plan prematurity. The level of impact on the HRI in general, and on horse crossings in particular, was found to be acceptable
 - <u>July 2014</u>: FHDC resolves to approve 400 homes at Hatchfield Farm and the Secretary of State calls the application in
 - April 2015: FHDC gives evidence in support of 400 home application
 - <u>April 2016</u>: FHDC publishes the Preferred Options with Hatchfield Farm allocated for 400 homes and a minimum of 5 hectares of employment. The Inspectors Report and Secretary of State's decision are awaited
 - <u>August 2016</u>: Inspector recommends approval but the application refused by Secretary of State
 - <u>January 2017</u>: FHDC continues to support the 400 home application, but decides to delete Hatchfield Farm allocation on the basis of the refusal
 - <u>May 2017</u>: High Court quashes Secretary of State decision but favourable Inspectors Report remains. The NHG seeks leave to go to the Court of Appeal
 - August 2017 : Court of Appeal refuses NHG leave
 - <u>September 2017</u>: Public examination opens. FHDC continues to support the 400 home application.

5.5 It is unclear why FHDC felt it appropriate to allocate Hatchfield Farm in April 2016, but is unwilling to reinstate it as a main modification in September 2017, particularly since it still supports the application. In both cases the Secretary of State's decision was awaited, but in the September 2017 context the Council has the benefit of the Inspectors Report strongly supporting approval on the basis of no material harm to the horse racing industry. Moreover, this Hearing is into the Local Plan and its allocations which contrasts with the Secretary of State considering a specific planning application under S77 on the evidence before him at that time. In no part of his decision did the Secretary of State conclude that Hatchfield Farm is not a suitable site in principle for a housing development of the size proposed.

5.6 The Council's response of the 27th June 2017 (page 6) states that there is no evidence that the presence of more housing is a threat to the Horse Racing Industry. This conclusion is supported. What the Council do identify as a threat is the consequential increase in traffic and impact on horse crossings (Q4.4(c)).

5.7 In this regard, it is relevant to note what Mr Justice Gilbart said in his Judgement on the Secretary of State's findings on the horse crossing issue. At paragraph 166 he stated:

"......... it is very hard to see how an argument that the additional traffic would have any material impact on the conditions at the Rayes Lane crossing, whether or not improved in association with the scheme, could be sustained. It is even more difficult to see how it would affect the perception of extra conflicts".

5.8 The Judge concluded as follows on the point at paragraph 170:

"Whilst I readily accept that the case against this scheme on highway safety grounds (including the effects at the Rayes Lane crossing) was far from robust, or even very weak, that is not enough to conclude that the SSCLG's

decision was irrational and thus unlawful, although the NHG case on this, accepted by the SSCLG, was so weak that it came very close ".

5.9 In response to Question 4.4(d), the Council points to the AECOM reports (CD B18) and B19) to demonstrate that the removal of Hatchfield Farm will result in a material reduction in traffic movements at Rayes Lane. In particular, it suggests (pages 6 and 7 of 27th June response) that am peak movements would reduce by 173. WSP has analysed the AECOM report and have concluded that the Council has misunderstood the data. Whilst this is fully explained in Appendix 1 ('Technical Note'), the conclusion of WSP is that the Council has failed to factor in the inherent attraction of Newmarket for trips from the surrounding lower order settlements. So, whilst the deallocation of Hatchfield Farm removes all Hatchfield Farm traffic, the AECOM report demonstrates that this is largely counterbalanced by increased traffic driving into Newmarket from other outlying settlements such as Red Lodge. Rather than reduce am trips at Rayes Lane by 173 movements, WSP calculate from the AECOM work that the reduction is only 31 trips or 2.8% of the total flow (Table 3.1 of **Appendix 1**). There is no evidence that such a small increase in movements would make Hatchfield Farm unacceptable in highway terms or that the Council considered mitigation measures.

5.10 To conclude on 4.4(d)

- the AECOM reports were not intended to be used to assess the impact of Hatchfield Farm in isolation
- the AECOM reports do not, in any event, justify the Council's case, it has misinterpreted the data
- there is no evidence in either the SIR or its SA that an additional 2.8% traffic movements across Rayes Lane requires the removal of Hatchfield Farm.
- 5.11 In response to Question 4.4(e), there are practical measures that could be included in the SIR and SALP to significantly increase safety at horse crossings, including at Rayes Lane. For example, at the 2015 Inquiry, SCC produced a non signalised

scheme and the NHG put forward a proposal (the 'Cottee' scheme) for a signalised horse crossing at Rayes Lane with an associated widening of the Fordham Road horsewalk. This was reported at paragraph 387 of the Inspectors Report:

"The NHG put forward its own proposal for improvement in the form of a signalised junction or underpass with associated improvements to the width of the Fordham Road horsewalk. It was pointed out that the incident savings would be significantly greater being in the region of 73% to 86% respectively".

- 5.12 WSP reviewed both the SCC and Cottee / NHG schemes and prepared a further scheme ('Cottee no signals') which does not include traffic signals but retains many of the benefits of the Cottee proposal. The conclusion of WSP is that the 'Cottee no signals' solution would potentially reduce the number of traffic related incidents at Rayes Lane by at least 31% and potentially by around a half. This is significantly higher than the potential 19.8% reduction attributed to the SCC scheme which formed the basis of the Secretary of State's decision.
- 5.13 In answer to Question 4.4 (e), there are practical and deliverable schemes which would materially reduce the perceived conflict between horses and traffic at the Rayes Lane crossing. It is a major flaw that both FHDC and the AECOM reports have not considered mitigation measures. These would resolve the Secretary of State's main concerns regardless of the quashing of the 2016 decision.
- 5.14 **Q4.4 (b) and (f)** deal with how the SA has assessed the relatively low level of housing in Newmarket and the impact on the horseracing industry. The answer is that evidential justification is missing.
- 5.15 With regard to Q4.4(b), it is a matter of fact that the Preferred Options SA supported 400 homes at Hatchfield Farm. It is self-evident that the pre-submission SIR without Hatchfield Farm which redistributes housing to less sustainable settlements must be

9

an inferior solution in terms of both delivering sustainable development and Policy CS1.

- 5.16 The January 2017 SIR SA is useful in drawing together how the strategy has evolved over the last two years. This is summarised below.
- 5.17 <u>The 2015 Issues and Options SA</u> assessed the four options but makes no conclusion on relative merits. However, paragraph 8.22 of the 2015 SA does confirm that

"Newmarket is comfortably the largest town in the district, with a 2014 housing stock of 8,167. On this basis, given the established commitment to maintain the settlement hierarchy locally, Newmarket should be a focus of housing delivery".

5.18 The 2016 Preferred Options proposed two options. Option 1 would allocate 968 homes to Newmarket and Option 2 would allocate 1,368. It should be noted that growth options below 968 homes in Newmarket had been dropped as unreasonable or unsustainable. Box 6.1 of the 2017 SA justifies the Preferred Options choice of Option 1 with 968 homes at Newmarket on the basis that

"it conforms with Policy CS1 of the Core Strategy, in seeking to deliver the additional housing growth required in accordance with the settlement hierarchy" and

"the growth of Newmarket (ie. 968 homes) would balance the need to protect the Horse Racing Industry while delivering additional growth, meeting the needs of the whole Town".

5.19 <u>The 2017 SA</u> confirms the difference between the Preferred Option and the submission option was primarily due to the Secretary of State's refusal of 400 homes at Hatchfield Farm in August 2016 (para 6.5.5). As a consequence of that decision

10

"the Council determined a need for the preferred option to involve nil homes at the site, which necessitated finding houses elsewhere to meet the resulting shortfall".

- 5.20 However, the SA assessed an option without Hatchfield Farm (Option 1) against the previous Preferred Option (now Option 2) which included Hatchfield Farm. No attempt was made to assess whether the Secretary of State's concerns could be addressed through additional policy guidance in the SIR and SALP whilst retaining Hatchfield Farm; a site which had previously scored well in all previous SAs.
- 5.21 The comparative assessment on Table 7.1 and the conclusions at page 23 also contain some questionable conclusions about the merits of the two options. For example, in terms of health, Option 2 is scored more poorly because of the safety danger at Rayes Lane (page 23 and Appendix IV page 93). However, no recognition is given to the greater increase in traffic through the Bury Road crossing as a result of increased housing at Red Lodge or potential mitigation (**Appendix 1**). It is also curious that Option 2 scores less well in terms of 'land' given that the Preferred Options SA did not identify this as a significant issue and page 97 of the 2017 SA accepts that there will be a significant loss of best and most versatile land under both options.
- 5.22 The third SA negative for Option 2 is 'unemployment'. In this case, the SA concludes the conclusion 'is not entirely clear cut' (page 23). So, the summary (page 23) shows Option 2 (with Hatchfield Farm) scoring better in terms of renewable energy, biodiversity and transport and worse for health (dubious), land (inconsistent) and unemployment which is noted as 'not entirely clear cut'.
- 5.23 So, the conclusion in respect of Question 4.4(b) is that the SA previously supported a higher level of housing in Newmarket and there is no justification for a lower figure.
- 5.24 With regard to 4.4(f), the Council has failed to assess whether the adverse horse racing effects it identifies resulting from Hatchfield Farm were capable of being

mitigated. In particular, whether the concerns of the Secretary of State could be mitigated through policies in the SIR and SALP. The PPG is clear in its advice:

"the SA should identify any likely significant adverse effects and measures envisaged to prevent, reduce and, as fully as possible, offset them. The SA must consider all reasonable alternatives and assess them in the same level of detail as the option the plan maker proposes to take forward in the Local Plan (the preferred approach)" (para. 11-018-20140306).

- 5.25 Since schemes of mitigation were in the public domain, the SA should have followed the advice in the PPG. This failure to follow the correct approach renders the SA unsound.
- 6.0 (Q 4.5) "Housing growth at Red Lodge is close to twice as much as that for

 Lakenheath, the other KSC, is almost three times that proposed for Newmarket
 and is many times greater than that for Brandon. In short, relative to other
 settlements and considering its position in the settlement hierarchy, housing
 growth at Red Lodge is greater than might be expected
 - (a) What is the justification for Red Lodge receiving 27% of the district's new housing?
 - (b) <u>Does the SA support the relatively high level of housing growth apportioned to Red Lodge?".</u>
- 6.1 The arguments about the unsustainable level of housing in Red Lodge are the mirror image of the arguments in favour of more housing at Newmarket. In summary
 - 1828 houses at Red Lodge is contrary to the spatial strategy and settlement hierarchy in Policy CS1
 - Red Lodge has few services and facilities and is an unsustainable location

- The lack of services and facilities in Red Lodge and the attraction of Newmarket means that many car trips will be generated from Red Lodge to destinations in Newmarket, traversing horse crossings in the process.

7.0 (Q 4.6) "Overall is the spatial distribution of housing justified?"

- 7.1 In short, no. The spatial distribution conflicts with its 'parent' statutory Policy CS1. If the Council wishes to change its spatial strategy, it should have included Policy CS1 in the SIR. Since it did not, it must adhere to the adopted policy.
- 7.2 In addition, the Council clearly took fright at the Secretary of State's decision and reacted by removing Hatchfield Farm due to 'uncertainty' (SA, 11.1.4). However, the Secretary of State decision concerned a particular planning application, not the suitability of the site as an allocation. What the Council should have done is to analyse the Secretary of State's decision to see if Local Plan policies (both SIR and SALP) could address the concerns expressed. It is clear from the evidence at the 2015 Inquiry (IR para 387) that schemes exist which could reduce incidents at the Rayes Lane crossing by up to 73%.
- 7.3 These improvements in the horse infrastructure could have been included in the SIR and SALP policies. This would have allowed Hatchfield Farm to remain in the plan, thus delivering a spatial distribution which accorded with Policy CS1.

8.0 Conclusions on Matter 4

8.1 The Matter 4 questions test whether the spatial distribution is sound. In short, it is not. The reasons for this are:

13

- the housing distribution no longer reflects the strategy in CS1. If the Council wished to change its spatial strategy, it should have incorporated CS1 within the scope of the SIR
- the only reason for the low housing provision in Newmarket is the late decision of the Council to remove Hatchfield Farm. However, the SIR and its SA failed to consider how the traffic concerns at Rayes Lane expressed by the Secretary of State could be mitigated, thus allowing Hatchfield Farm to be retained
- the Council has misinterpreted the AECOM report, the differences in traffic levels in Newmarket, with and without Hatchfield Farm are marginal.
- 8.2 The SIR therefore fails all four tests of soundness for the following reasons :
 - it is not 'positively prepared' since it conflicts with the adopted Core Strategy Policy CS1
 - it is not 'justified' since it is not the most appropriate strategy to deliver the 2010
 Core Strategy. The SA also failed to assess whether mitigation measures could be put in place to allow Hatchfield Farm to remain in the plan
 - it is not 'effective' since not only does it not 'give effect' to the 2010 Core Strategy but it fails to retain Hatchfield Farm with appropriate mitigation measures as a deliverable site in the most sustainable town in the District
 - it is not 'consistent with national policy' since it promotes a strategy which will not deliver the sustainable pattern of development sought in the NPPF. In addition, the SA failed to reflect PPG advice to assess all reasonable alternatives with potential mitigation.
- 8.3 In order to make the SIR sound, the housing provision in Newmarket should be increased by 400 units to reflect the potential of the Hatchfield Farm site. The suggested modified Policy CS7 forms **Appendix 2**.

Appendix 1

WSP Technical Note

TECHNICAL NOTE ON TRAFFIC LEVELS IN NEWMARKET AND THE SCOPE FOR MITIGATION AT HORSE CROSSINGS.

Prepared by WSP in conjunction with RPS, on behalf of The Earl of Derby.

1 INTRODUCTION

- 1.1 This Technical Note has been prepared to address the Inspectors' Issues 4.4(c) (f), together with the Forest Heath District Council (FHDC) responses of the 27th June 2017 to the Inspectors' letter of the 2nd June 2017 as part of the Examination in Public for the Single Issue Review and Site Allocations Local Plan.
- 1.2 The response specifically relates to the Hatchfield Farm site at Newmarket. Accordingly this Technical Note addresses the following two main issues:-
 - Whether the proposed spatial distribution will lead to less traffic in Newmarket in particular at the horse crossings, and
 - Can the perceived safety concerns at horse crossings be acceptably mitigated?
- 1.3 In the first instance a review is undertaken of the traffic impacts of the proposed spatial distribution of the housing comparing the "with" Hatchfield Farm scenario to a "without" Hatchfield Farm scenario. This review addresses Matters and Issues 4.4 (c and d). It is considered that FHDC have not appropriately considered this nor have they considered the possibility of mitigating any harmful effects resulting from the development.
- 1.4 In this regard FHDC have commissioned two transport studies, prepared by AECOM as part of the SIR / SALP evidence base. One assumes the inclusion of Hatchfield Farm and the other with an alternative spatial distribution which excludes development at Hatchfield Farm.
- 1.5 The two studies are titled:
 - Forest Heath District Council Site Allocation Plan Cumulative Impact Study (August 2016) [CD B18]; and
 - Forest Heath District Council Site Allocation Plan Cumulative Impact Study Addendum (October 2016) [CD B17]
- 1.6 The scope of the August 2016 assessments [CD B18] is identified at para 1.1.3 of the report which states that: "It is understood that the request for this study has come from FHDC who are concerned about the potential cumulative highway impacts of growth across the district."
- 1.7 The August 2016 report [CD B18] provides the recommendations at section 9.3. Para 9.3.2 states:-
 - "A key consideration is that the continued growth of traffic at current mode share levels is unsustainable. In order to facilitate the proposed level of growth a holistic approach to transport is required and there is significant opportunity to support more sustainable travel patterns in the future. The potential to provide additional highway capacity is limited and will be very costly."
- 1.8 Finally the August 2016 report [CD B18] concludes at section 9.4. Para 9.4.1 states:-
 - "Whilst some key strategic improvements are required, particularly at junctions 37,38 on the A14 and the A11/A1101 Mildenhall Road / A1065 Brandon Road / A1101 Bury Road (A11 Fiveways), further detailed studies are needed to confirm the schemes for pricing purposes. Capacity improvement schemes within the towns need to be considered

against the need to improve the environment for active modes and the potential for reduced peak hour car travel."

- 1.9 The conclusions of the October 2016 Addendum report [CD B17] confirm that the recommendations of the August 2016 report remain the same despite the removal of Hatchfield Farm site which would have funded the Junction 37 improvements to the A14/ A142. What is evident from these reports is that:
 - i) No assessment has been carried out into the reason why the Secretary of State refused planning permission for Hatchfield Farm (which in turn led the Council to remove it from the plan) i.e. the potential for increased interaction between horses and vehicles at the Rayes Lane Crossing; and
 - ii) No detailed mitigation assessments have been undertaken to address the impacts of development (at Hatchfield Farm and elsewhere) on the horse crossings.
- 1.10 This is because the purpose of the October 2016 Addendum [CD B17] was to assess the cumulative effect of growth on highway capacity (and measures to address this). It did not focus on horse related safety issues.
- 1.11 These studies have then been referred to in FHDC's responses of the 27th June 2017 to the Inspectors' letter of the 2nd June 2017 as part of the Examination in Public for the Single Issue Review.
- 1.12 When assessing these studies this Technical Note shows that the inclusion of the Hatchfield Farm site results in only a small proportional increase in the traffic through the various horse crossings, over and above the increase which stems from other development traffic arising from the SIR/SALP outside of Newmarket, and general traffic growth.
- 1.13 The next matter considered is the possibility of mitigating any effects resulting from development within Newmarket, and specifically related to the development of the Hatchfield Farm site. This report considers the options for improvements to the Rayes Lane crossing and the benefits such measures can provide.
- 1.14 This is <u>not</u> an issue that has been reviewed by the Council in its evidence nor addressed within the Aecom reports. This matter deals more specifically with response 3(d) from Council and the Inspectors' matters and issues 4.4(e).
- 1.15 Finally this Technical Note considers sustainability in terms of transportation, and the overall opportunities for sustainable development which can be delivered from development within Newmarket as opposed to development elsewhere.
- 1.16 This matter seeks to address the issues raised related to response 5 and 6 from the Council, and the Inspectors' matters and issues 4.4(f).

2. BACKGROUND.

- 2.1 As background to any assessment of the impact of development affecting Newmarket, it is important to note that the interaction of traffic and horses that primarily occurs at the three main horse crossings within the town, namely the crossings at St Mary's Square, Bury Road and Rayes Lane. The locations are shown on the plan attached at **Appendix A**.
- 2.2 The Secretary of State refused planning permission for 400 dwellings at Hatchfield Farm, by reference only to the Rayes Lane crossing. It was agreed that Hatchfield Farm would result in a 5% increase in traffic at this crossing in the morning peak period.
- 2.3 The impact of this increase in traffic on "incidents" at the crossing was explored at the Inquiry into the development. It should be noted that the reference to incidents are where there is a horse behavioural occurrence. This may be triggered by traffic, pedestrians or other horses. These are not accidents. At the time of the inquiry the assessment of accidents along

- Fordham Road showed that there had been no accidents involving horses over the 5 year period assessed.
- 2.4 An assessment was undertaken of the saving in 'incidents' at the crossing as a result of the Hatchfield Farm development (with its proposed mitigation) by the Newmarket Horsemans Group ('NHG') consultant Mr Cottee, with reference to video recordings of the horses crossing, and were judgements by him as to whether such incidents would be expected to be removed from the crossing dependent on the scheme of improvements implemented. Lord Derby did not (and does not) dispute the judgements on the potential savings per scheme reached by Mr Cottee.
- 2.5 The mitigation proposed as part of the application included the 'Suffolk County Council' scheme which has a potential to reduce horse incidents by around 20%. In addition a scheme prepared by Mr Cottee (known as the 'Cottee Signal Scheme') was proposed by NHG which included traffic signals which has a potential to reduced incidents by around 73%.
- 2.6 Whilst the Inspector considered the SCC scheme as sufficient to mitigate the development resulting in a net safety improvement, (ref. Para 54 and 391 Inspector's Report [CD B19]), the Secretary of State rejected this view. The Secretary of State's decision letter did not evaluate whether the implementation of the Cottee Signal Scheme, with a 73% reduction in incidents, would address his concerns regarding the Rayes Lane Crossing.

3. INSPECTORS' MATTERS AND ISSUES 4.4 (C&D).

3.1 In the context of the Inspectors matters and issues 4.4 (c&d), the FHDC response at para 3, notably part (c), refers to extracts of the Aecom studies and specifically compares the trips generation rates within Newmarket with and without the Hatchfield Farm site. The specific tables are replicated below.

Figure 3.1 - Extracts from Table 5.2 AECOM Cumulative Impact Study August 2016 and Table 7 Aecom Cumulative Impact Study Addendum October 2016.

Vehicular Trip Generation Newmarket

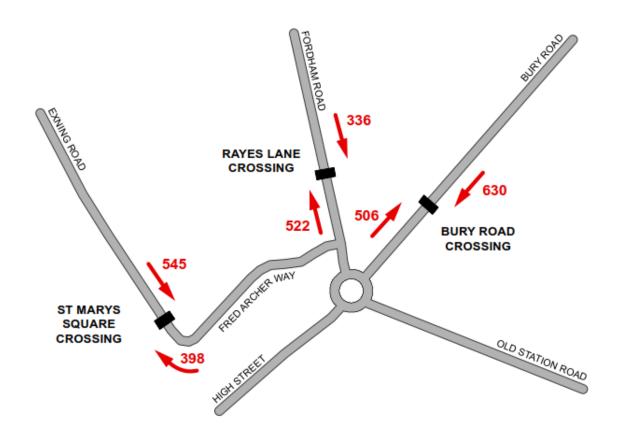
| AECOM Cu | AECOM Cumulative Impact Study August 2016 | | | | | |
|-----------------|---|---------------------------|------------|-------|--|--|
| Peak periods | Total number of dwellings | Vehicular Trip Generation | | | | |
| | | Arrivals | Departures | Total | | |
| 0800 - 0900 | 654 | 70 | 269 | 339 | | |
| 1700 - 1800 | | 177 | 111 | 288 | | |

| AECOM Cumulative Impact Study Addendum October 2016 | | | | | Difference in Vehicular Trip Generation from Previous (August 2016) Assessment | | |
|--|-----|----|-----|-----|---|------|------|
| 0800 - 0900 | 321 | 34 | 132 | 166 | -36 | -137 | -173 |
| 1700 - 1800 | | 87 | 55 | 141 | -90 | -67 | -147 |

3.2 This approach is a very simplistic comparison of trip generation effectively at a site entrance but does not properly answer the question posed by the Inspectors, that is, the effect of more traffic

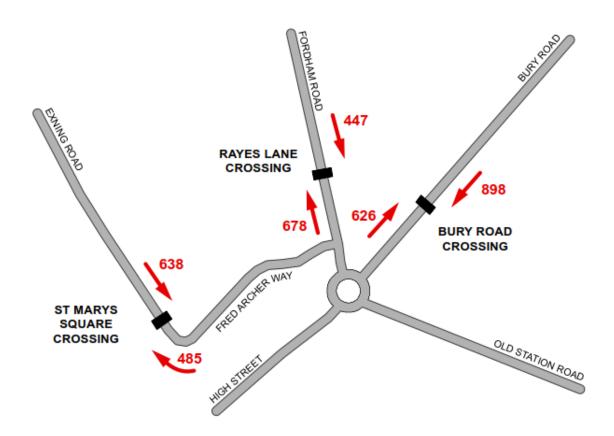
- within the town of Newmarket, and by extension the interaction with horses. This is the concern of the Horse Racing Industry and the reason why the Secretary of State refused planning permission. Displacing dwellings from Newmarket to other locations in the district will change the origin of trips, but the destination of employment and other purpose trips into Newmarket will remain unchanged even with a different spatial distribution of housing.
- 3.3 Therefore, the answer needs to address what traffic flow changes are caused by the change in distribution and in particular at the Rayes Lane Crossing. This is helpfully possible by a more detailed review of the traffic flow diagrams that are provided as appendices to the Aecom studies but which FHDC have failed to analyse and consider in relation to horse safety. In essence the studies provide diagrams of the traffic flows within the study area for the base situation and the proposed development scenarios both with and without the Hatchfield Farm site. These are included at Appendix G of the August 2016 report [CD B18] (Figures 4.5 and 5.1) and Appendix D of the October 2016 report [CD B17] (Figure 3). This analysis has been used to prepare the figures below. Extracts of the Aecom report marked up to show the origin of the flows used are provided at **Appendix B**.

<u>Figure 3.2 - Flows Extracted from Figure 4.5, of Aecom Report August 2016 – 2016 AM Base Flows.</u>

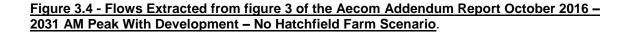


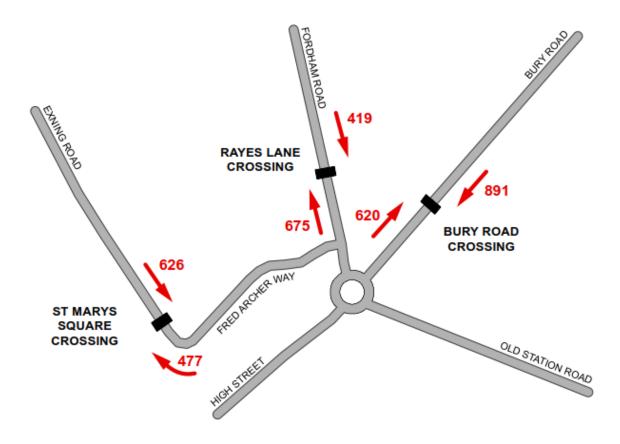
- 3.4 This figure illustrates the 2016 AM base situation (i.e the assumed existing peak hour traffic flows 0800-0900) used for the transport assessment work carried out by Aecom.
- 3.5 Summing the relevant flows through the St Mary's Square crossing gives the two-way flows as 943 vehicles in the AM peak
- 3.6 Similarly, the traffic flow through the Rayes Lane crossing can be established as 858 vehicles in the AM peak and the Bury Road Crossing as 1136 vehicles in the AM peak.

<u>Figure 3.3 - Flows Extracted from figure 5.1 of the Aecom Report August 2016 – 2031 AM Peak with Development including Hatchfield Farm</u>



- 3.7 This plan provides Aecom's predictions of future traffic flows in 2031 assuming the expected development comes forward including Hatchfield Farm from the August 2016 report [CD B18].
- 3.8 Summing the remaining highlighted figures at the various locations indicates that future flows through the crossings are as follows:
 - St Mary's Square 1123
 - Rayes Lane 1125
 - Bury Road 1524





- 3.9 This figure illustrates the traffic flows in the scenario where Hatchfield Farm is removed and an alternative spatial distribution is used from the October 2016 report [CD B17].
- 3.10 A similar exercise to sum the relevant highlighted traffic flows gives the 2031 future flows through the crossings, without Hatchfield Farm as follows:
 - St Marys Square 1103
 - Rayes Lane 1094
 - Bury Road 1511
 - 3.11 The various flows for different scenarios are summarised in the table below which analyse the overall impact of the development traffic through the various horse crossings comparing the effect of the inclusion of Hatchfield Farm within the spatial distribution to the scenario with the site excluded. This assessment has not been undertaken by FHDC in the consideration of the distribution of the housing within the district. All of the figures used to undertake this assessment are taken from the Aecom reports [CD B17 and B18]

Table 3.1. Comparison of Traffic Flows through the various Horse Crossings.

| | ST MARY'S SQUARE | | RAYES LANE | | Bury Road | |
|---------------------------|---------------------|-------------------------|--------------|------------------------|--------------|-------------------------|
| | Traffic flow | % Change | Traffic Flow | % Change | Traffic Flow | % Change |
| 2016 Base | 943 | 0 | 858 | 0 | 1136 | 0 |
| 2031 (including HF) | 1123 (+180) | 19% | 1125 (+267) | 31% | 1524 (+388) | 34% |
| 2031 (excluding HF) | 1103 (+160) | 17% | 1094 (+236) | 28% | 1511 (+375) | 33% |
| Hatchfield Farm Impact | +20 | (1.8% of total flow) | +31 * | (2.8% * of total flow) | +13 | (0.9% of total flow) |

^{* -} this is slightly higher than the comparison in 'development' flows on the Aecom diagrams, and therefore may overstate the increase. That is because it is not possible to generate total vehicle movements from their diagrams due to a lack of detail in the area around the Rayes Lane crossing. The absolute difference in 'development' flows from the Aecom studies as a result of Hatchfield Farm at the Rayes Lane Crossing is identified as only 24 vehicles or 2.2%. This is shown in detail in the diagrams included at Appendix B.

- 3.12 It is clear that the effect of the inclusion of the Hatchfield Farm site in the SIR/SALP does not result in the scale of changes within the town of Newmarket as identified by the Council in their responses (an additional 173 AM peak vehicle trips as set out in para 3.1 above), and specifically at the various horse crossings.
- 3.13 When assessing these figures it can be seen that the effect of the Hatchfield Farm site results in only a small proportional increase in the traffic through the various horse crossings, over and above the increase which stems from other development traffic outside of Newmarket and general traffic growth proposed under the SIR/SALP.
- 3.14 The main issue arising from the Secretary of State's decision is in relation to Rayes Lane crossing. From the above, it can also be seen that once the redistribution of traffic is taken into account for the revised spatial distribution, the change in flow by removing Hatchfield Farm at the Rayes Lane crossing is 31 vehicles in the AM peak, around 2.8% change in total flow. This is significantly less than the daily variation in traffic, which is typically 5-10% for a road of this type, but has been recorded at levels above this.

3.15 Two points emerge:

- 1) This level of change in traffic is around half that assessed at the Public Inquiry and upon which the Inspector made her conclusions i.e. the 5% increase; and
- Whilst the Secretary of State had found a 5% increase (with mitigation) at Rayes Lane unacceptable, the proposed Local Plan (without Hatchfield Farm) is proposing an increase of 28% with no mitigation. Given that the Secretary of State's decision was the sole basis for the Hatchfield Farm allocation being removed, it is striking that there is no explanation or evidence from the Council to explain why it has adopted the Secretary of State's conclusions to justify removing the Hatchfield Farm allocation, but disregarded his conclusions in so far as it affects the remainder of its spatial distribution of housing and results in a much higher level of traffic.
- 3.16 Not only have these points not been taken account by FHDC, but there is no evidence that an additional 2.8% traffic at the Rayes Lane Crossing resulting from 400 homes at Hatchfield Farm will have a material impact on user safety. Furthermore this assessment takes no account of the potential mitigation that can be introduced at this location which is discussed later in this technical note in Section 4 below.
- 3.17 It should also be recognised that the additional vehicles do not necessarily translate directly into an increase in potential incidents at the horse crossings. Where there is already traffic on the road present when horses approach the crossing, the addition of an additional vehicle from the Hatchfield Farm development will not affect the potential for interaction between vehicles and

horses (as there are vehicles already approaching the crossing at the time the horses start to cross). The additional "Hatchfield Farm vehicle" will simply increase the length of the queue at the crossing. Consequently, although the Hatchfield Farm development has been shown to increase peak traffic flow through the crossing by 2.8%, the increase in potential incidents as a result of this change would be expected to be even lower.

- 3.18 The Aecom studies [CD B17 and B18] therefore illustrate that the impact of the proposed allocation of Hatchfield Farm is minimal in relation to the other traffic growth and development that is assumed in the local plan. Growth in Red Lodge is generating additional trips into Newmarket regardless of Hatchfield Farm proceeding and Bury Road particularly sees an increase in traffic of 33% as a result of this. It is clear that the destination trips to Newmarket occur regardless of where growth happens, however more remote development means carborne trips are more likely.
- 3.19 Finally in dealing with this point, it should be noted that the Aecom August 2016 report [CD B18] says 'Where junctions had less than 20 vehicles associated with East Cambridgeshire through traffic, these vehicular trips were not added onto the highway network for assessment as the traffic impact would be insignificant.' (para 4.5.8). On this basis, it is considered that the change in spatial distribution has an insignificant difference on the flow of traffic through the horse crossings.

4. INSPECTORS' MATTERS AND ISSUES 4.4 (E).

- 4.1 In the context of this matter and issue, it is a question as to whether the effect of greater housing and hence traffic in Newmarket results in harmful impacts, and whether there is any mitigation to address these impacts.
- 4.2 Clearly the assessment above demonstrates that the premise of the effect of development at Hatchfield Farm has been misrepresented in relation to the changes in traffic movements. In practice the difference in the traffic movements from the Aecom studies have shown that the effect of Hatchfield Farm on the Rayes Lane Crossing would be between 24 and 31 vehicles in the AM peak hour (2.1-2.8%).
- 4.3 For the reasons set out above there is no evidence to suggest that a 24 to 31 vehicle increase has a detrimental impact on user safety. In any event there is no assessment by FHDC of whether any harmful effects can be mitigated (or improved)
- 4.4 As have been identified above, options were considered to improve the Rayes Lane crossing at the Inquiry. These included signalisation measures proposed by the NHG's own consultant Mr Cottee which were said to have the potential to reduce incidents at the crossing by 73% even taking account of the Hatchfield Farm development traffic together with the non-signalised SCC scheme with the potential of saving around 20% of the incidents.
- 4.5 WSP has considered an additional alternative which adopts much of the NHG Cottee scheme but excludes the signals from this proposal. This is referred to as the "Cottee No Signals" scheme. This is shown attached at **Appendix C.**
- 4.6 This additional scheme provides the following:
 - Kerb line adjustments to ensure visibility to and from horses are equivalent or better
 than the SCC Scheme. This enhances the existing visibility achieved at the crossing
 and will ensure horse riders have a better view of approaching traffic and likewise
 the approaching traffic has a better view of horses waiting at the crossing.
 - Road narrowing to 5.5m at the horse crossing to keep vehicle speeds low. This will
 act as a deterrent to drivers and help ensure vehicles speeds are reduced at the
 point of the crossing.
 - Introduction of ramps on approach to keep speeds low as per Cottee Signal scheme. As with the narrowing of the carriageway, the approach ramps will also assist in reducing traffic speeds.

- Widening of Fordham Road horse walk by narrowing carriageway to 6m as per Cottee Signal scheme. The measures to widen the horse walk along Fordham Road are considered to overcome the various incidents identified by Mr Cottee.
- Introduction of separate pedestrian signal crossing to north as per Cottee Signal scheme. Such a measure removes the existing pedestrians crossing at the horse crossing.
- Closure of Rayes Lane access for vehicles from Fordham Road as per Cottee Signal scheme. This aspect of the scheme takes away the issues associated with vehicles turning into and out of Rayes Lane and removes these incidents from the assessment of the crossing.
- Installation of improved LED signs on approaches to the crossing on Fordham Road. These improved signals will assist in alerting drivers to the presence of the crossing.
- Surfacing improvements. It is intended that there will be contrasting surfacing at the crossing to differentiate the horse crossing from the main carriageway.
- 4.7 The additional 'Cottee No Signals' scheme has been discussed with SCC at a meeting on 13 July 2017 and in subsequent correspondence with regard to its acceptability as a potential mitigation measure. SCC confirmed that it was one of a range of potential options for addressing safety concerns at the Rayes Lane crossing. Correspondence with SCC is provided at **Appendix D**.
- 4.8 The benefits of this crossing over the signalised version is that it provides a potential reduction in the number of incidents whilst avoiding the proposal to signalise the crossing.
- 4.9 The assessment of the potential incident savings for this option has included the potential savings included by Mr Cottee at the Public Inquiry for the signalised scheme, and relate to the closure of Rayes Lane and the widening of the horse walk etc. These would result in an improvement of potential savings by 11% over the SCC scheme providing an overall potential incident saving of 31%.
- 4.10 Beyond these measures the assessment includes for potential further savings relate to the reduced traffic speeds over the junction and the improved inter visibility of the horses and approaching cars etc. Accordingly these additional measures are considered to offer a further reduction in potential incidents of 23% and offer an overall reduction of potential incidents of around 54%. The overall assessment of the saving to incidents is included at **Appendix E** of this technical note.
- 4.11 It is considered that such mitigation would more than address the impact of the development at Hatchfield Farm as identified by SoS. However such measures would not be addressed by development outwith Newmarket, although these developments would still have an impact on this crossing and other crossings within Newmarket for the reasons set out above.
- 4.12 In essence the comparative assessments could be summarised as follows:
 - Submission Local Plan + 28% trips at Rayes Lane and no mitigation.
 - Submission plus Hatchfield Farm + 31% trips at Rayes Lane plus mitigation.
- 4.13 As previously identified there is no evidence to suggest that FHDC nor Aecom have considered any of the above mitigation measures in their assessment of development within Newmarket.

5. INSPECTORS' MATTERS AND ISSUES 4.4 (F).

5.1 Finally the Inspector raises the issue of sustainability within matters and issues 4.4 (f), in the context of development within Newmarket. Whilst it is accepted that sustainability encompasses more than transportation, it is considered that the impact in this regard is very much focused toward sustainable travel.

- 5.2 The Aecom report, August 2016 [CD B18] includes details of the mode share for journeys to work for the various settlements. These are included in section 3 of the report. These figures are replicated below, and include for the proportion of journeys made to work by sustainable modes.
- 5.3 In addition the second table below includes details of the key facilities within each of the settlements which will assist in supporting sustainable travel. The details for these facilities are also taken from the Aecom report, August 2016 [CD B18], Section 3.

Table 5.1. Journey to Work Mode Share.

| Mode Share | Brandon | Mildenhall | Red Lodge | Newmarket |
|--------------------|---------|------------|-----------|-----------|
| Walk | 8% | 8% | 2% | 16% |
| Cycle | 4% | 3% | 1% | 6% |
| Car Driver | 74% | 79% | 88% | 66% |
| Car Passenger | 9% | 6% | 5% | 6% |
| Rail | 1% | 0% | 1% | 1% |
| Bus | 3% | 1% | 2% | 3% |
| Sustainable Travel | 16% | 12% | 6% | 26% |

Table 5.2. Facilities in the various Settlements.

| Facilities | Brandon | Mildenhall | Red Lodge | Newmarket |
|-------------------|---------|------------|-----------|-----------|
| Primary Schools | 2 | 2 | 1 | 5 |
| Secondary Schools | 1 | 1 | 0 | 1 |
| Doctors Surgeries | 2 | 2 | 1 | 3 |
| Hospitals | | | | 1 |
| Supermarkets | 2 | 2 | 0 | 3 |
| Post Office | 1 | 1 | 1 | 1 |
| Rail Station | 1 | 0 | 0 | 1 |
| Dentists | 2 | 2 | 1 | 6 |

5.4 From the above it can be seen that it is Aecom's view that sustainable travel options within Newmarket are 20% higher than those within Red Lodge and 10% and 14% higher than those within Brandon and Mildenhall respectively. This no doubt reflects the greater employment

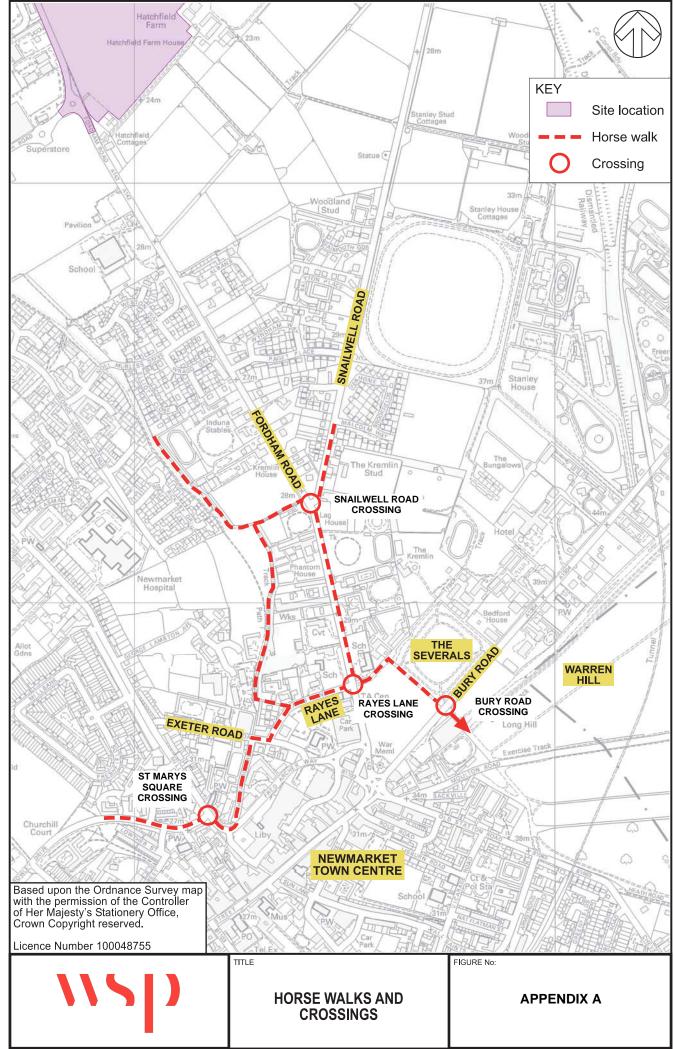
- opportunities within Newmarket and the general recognition that Newmarket is the districts largest settlement.
- 5.5 These mode shares are considered to be representative of the other purpose trips undertaken within the various settlements. They also provide an indication as to the likelihood of future trips being by sustainable travel as a consequence of travel planning initiatives. Hence development within Newmarket is likely to offer the greatest potential for sustainable travel with the potential for travel planning initiative to improve such sustainable mode shares.
- 5.6 As previously identified the conclusions of the Aecom report [CD B18] state:-
 - "A key consideration is that the continued growth of traffic at current mode share levels is unsustainable. In order to facilitate the proposed level of growth a holistic approach to transport is required and there is significant opportunity to support more sustainable travel patterns in the future."
- 5.7 Accordingly it is considered that Newmarket is the most sustainable settlement in Forest Heath with the greatest potential to maximise non car modes and to deliver more sustainable travel patterns in the future.
- 5.8 In relation to overall mitigation, it should be noted that the Aecom study [CD B18] also assumes that an improvement is carried out at the A14 / A142 junction that was to be delivered by Hatchfield Farm. However it is unclear as to how this improvement is funded.

6. CONCLUSION

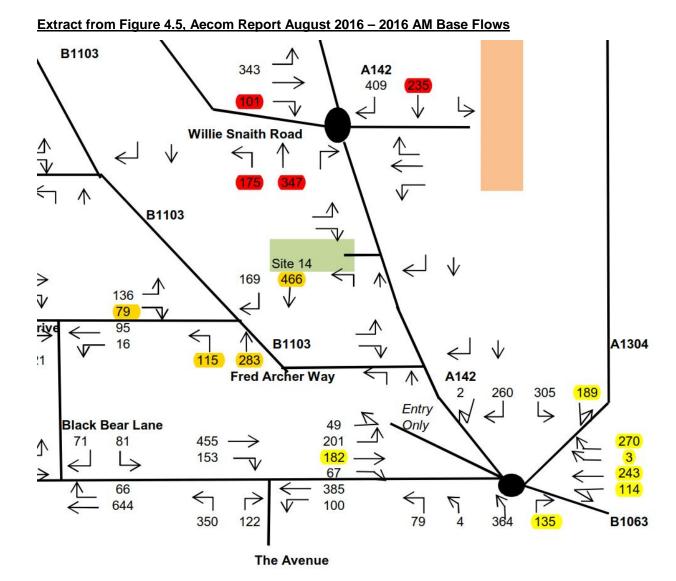
- 6.1 It is concluded that in answering the Inspectors' questions and in the evidence base, FHDC have not properly considered the relative impact of removing Hatchfield Farm from the spatial strategy.
- 6.2 The purpose of the Aecom reports [CD B17 and B18] was to consider the potential cumulative highway impacts of growth across the district, with no reference to the specific mitigation measures that developments could bring forward on horse related safety concerns in Newmarket.
- 6.3 However these reports do provide the information to enable the assessment of the level of development traffic at the horse crossings to be assessed and the analysis set out in this note provides this detail.
- 6.4 When the detailed assessment of the impact of the revised spatial distribution is carried out, it is evident that removing Hatchfield Farm and redistributing housing elsewhere will not have a material impact in reducing traffic flows at the town centre horse crossings.
- 6.5 In fact the assessments demonstrate that the overall effect of the inclusion of Hatchfield Farm within the spatial strategy increases traffic flows at the Rayes Lane crossing by only 2.8% of the overall traffic on Fordham Road.
- 6.6 There is no evidence that this increase in traffic at Rayes Lane crossing means that there is any material detriment to user safety with the inclusion of the Hatchfield Farm development.
- 6.7 In contrast the Aecom reports shows that other developments proposed in the SIR / SALP and traffic growth increase traffic flows on Fordham Road by some 28%.
- 6.8 Furthermore it is only the development at Hatchfield Farm that is proposing funding for measures to be provided at Rayes Lane to reduce horse incidents. The potential incident savings that stem from these measures range between 31% and 73% dependent on the scheme adopted
- 6.9 It is also relevant to consider the effects of the spatial distributions. The Aecom reports identify that a key consideration is that the continued growth of traffic at current mode share levels is unsustainable. In order to facilitate the proposed level of growth a holistic approach to transport is required and there is significant opportunity to support more sustainable travel patterns in the future.

- 6.10 Newmarket is the most sustainable settlement within the district and hence only by appropriate levels of housing within Newmarket is it possible to maximise non car modes and deliver a holistic approach to transport.
- 6.11 In relation to overall mitigation, it should be noted that the Aecom studies also assumes that an improvement is carried out at the A14 / A142 junction that was to be delivered by Hatchfield Farm. However it is unclear as to how this improvement is funded.
- 6.12 Finally it is considered that there is no evidence to show that the Aecom reports considered any mitigation measures when assessing the spatial distributions.

APPENDIX A – CROSSING LOCATION PLAN



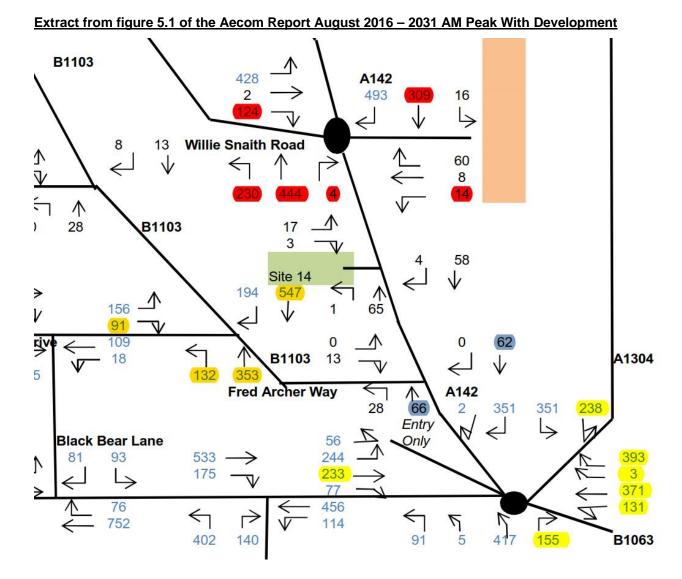
APPENDIX B – EXTRACTS FROM AECOM REPORTS



This figure illustrates the 2016 AM base situation used for the transport assessment work carried out by Aecom. The numbers represent vehicle turning movements at the various junctions.

Summing the relevant flows through the St Mary's Square crossing gives the two-way flows as 943 vehicles in the AM peak

Similarly, the traffic flow through the Rayes Lane crossing can be established as 858 vehicles in the AM peak and the Bury Road Crossing as 1136 vehicles in the AM peak.



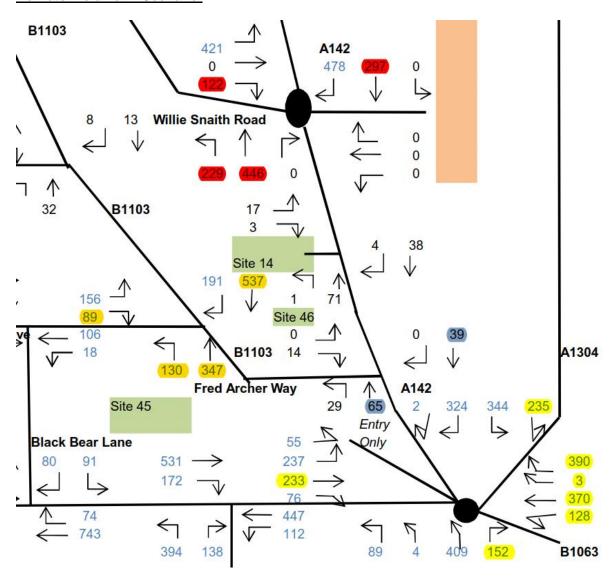
This plan helpfully provides information in two forms, firstly the impacts of development at Rayes Lane and also allows the change in flows through all the three main horse crossings to be calculated. Light blue figures are predicted flows in 2031 and the black figures represent development related flows in 2031.

The Fred Archer Way junction flows northbound and southbound, highlighted as blue, indicate that Aecom's assessment of all development traffic through Rayes Lane is 128 vehicles, 62 southbound plus 66 northbound. (WSP highlight in light blue).

Summing the remaining highlighted figures at the various locations indicates that future flows through the crossings are as follows:

- St Mary's Square 1123 (WSP highlight in orange)
- Rayes Lane 1125 (WSP highlight in red
- Bury Road 1524 (WSP highlight in yellow)

<u>Extract from figure 3 of the Aecom Report October 2016 – 2031 AM Peak With Development – No Hatchfield Farm Scenario.</u>



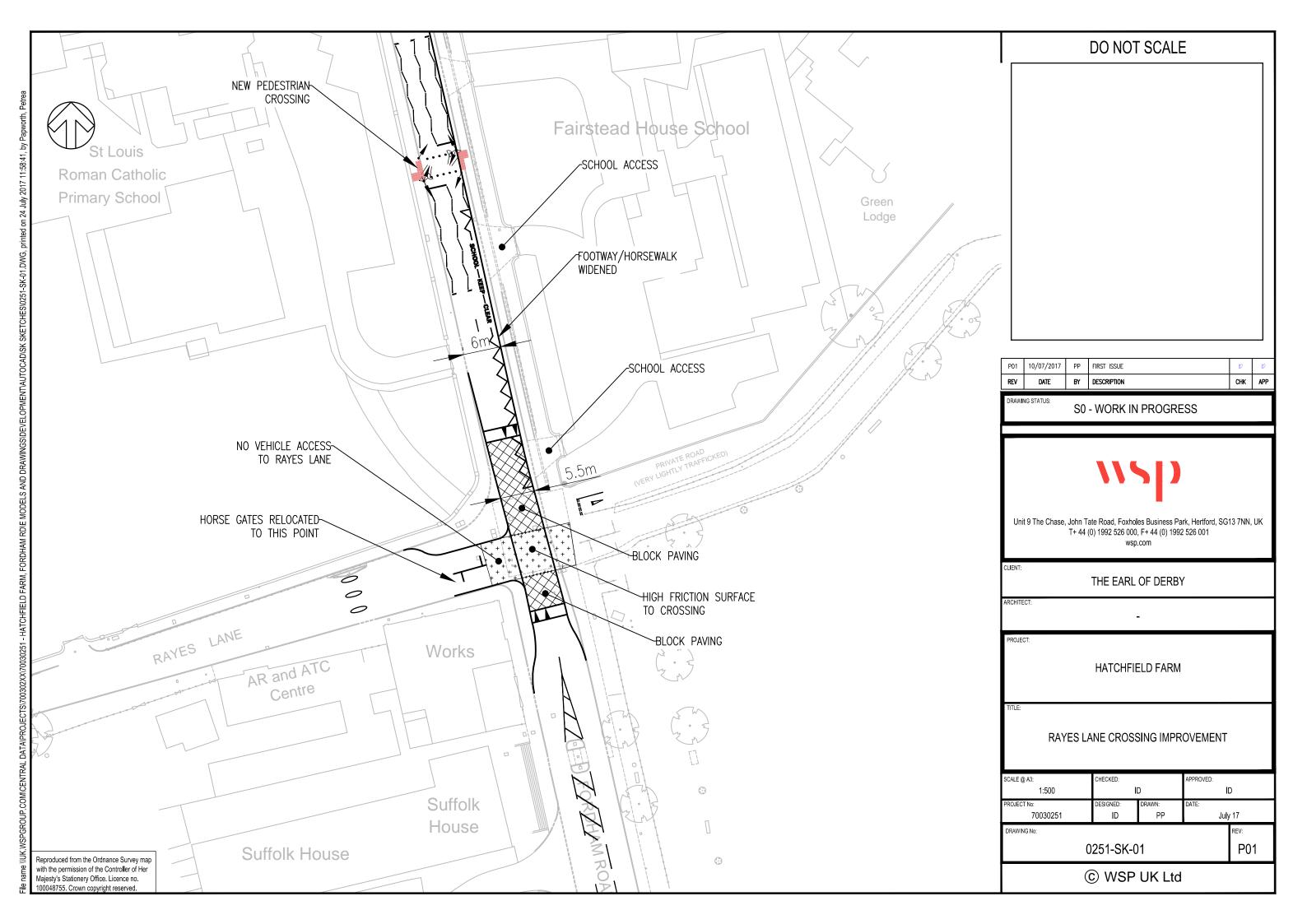
This figure illustrates the traffic flows in the scenario where Hatchfield Farm is removed and an alternative spatial distribution is used.

This demonstrates the development-only impact at Rayes Lane without Hatchfield Farm is 104 vehicles in the AM Peak, 65 northbound and 39 southbound (WSP highlight in light blue).

A similar exercise to sum the relevant highlighted traffic flows gives the future flows through the crossings, without Hatchfield Farm as follows:

- St Marys Square 1103 (WSP highlight in orange)
- Rayes Lane 1094 (WSP highlight in red)
- Bury Road 1511 (WSP highlight in yellow)

APPENDIX C - 'COTTEE NO SIGNALS' SCHEME DRAWING



APPENDIX D – SCC CORRESPONDENCE

Dimbylow, Ian

From: Luke Barber < Luke.Barber@suffolk.gov.uk >

Sent: 27 July 2017 16:25 To: Dimbylow, Ian

Cc: Brian Plumb; Carl Ashton
Subject: RE: Newmarket - Rayes Lane

Hi lan,

I've discussed this scheme with Carl and we are in agreement with the approach set out in your email, that there are a range of potential options for addressing the safety concerns at the Rayes Lane junction, and we would seek an improvement linked to the Hatchfield Farm development, should it proceed. The selected scheme would be subject to a road safety audit process, and consultation with stakeholders, including the Jockey Club. These processes would highlight the best option in terms of meeting the safety objectives of the scheme.

We are not aware of any confirmed plans for this location, and I do not believe the Rowley Drive scheme has progressed since the drawing you are aware of.

Regards

Luke

From: Dimbylow, Ian [mailto:lan.Dimbylow@wsp.com]

Sent: 24 July 2017 12:19

To: Luke Barber < Luke.Barber@suffolk.gov.uk>; Carl Ashton < Carl.Ashton@suffolk.gov.uk>

Cc: Brian Plumb < Brian. Plumb@rpsgroup.com>

Subject: Newmarket - Rayes Lane

Luke.

Further to our meeting on 13 July, please find attached the three plans we discussed.

- 1. The SCC scheme from the Inquiry
- 2. The CTP signalisation scheme from the Inquiry
- 3. The alternative 'no signals' scheme following the principles of the CTP design. We have made a few small amendments to the plan we discussed.

I would be grateful for SCC comments on the above on the basis of the general principles of each of the schemes shown. We would like SCC agreement that there are a range of potential solutions at the Rayes Lane crossing and that the highway authority would seek an improvement in some form on the basis of one of the above schemes or similar, should the Hatchfield Farm development proceed. We also accept that the detailed design of any solution would be in consultation with the Jockey Club.

You were also going to confirm if there were any current improvement plans at Rayes Lane.

I have found a November 2013 plan for the Rowley Drive works – if there is any update on this I would be grateful for a copy.

Regards,

Ian Dimbylow CEng MICE MCIHT

Technical Director



T+ 44 (0)1992 526 048 M+ 44 (0)7500 227 157

Please note I am on leave 4-18 August inclusive.

WSP House, Unit 9 The Chase, John Tate Road, Hertford SG13 7NN

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APPENDIX E – ASSESSMENT OF POTENTIAL INCIDENT REDUCTIONS

APPENDIX E – ASSESSMENT OF POTENTIAL INCIDENT REDUCTIONS.

ASSESSMENT OF POTENTIAL INCIDENT REDUCTION

An update to the Cottee assessment on potential incident reduction has been undertaken to compare the earlier 2015 WSP and SCC Schemes, the Cottee signals scheme and the 2017 Cottee No Signals scheme. These incidents are taken from the assessment undertaken by Mr Cottee and included in his evidence at Appendix MC2. This assessment has been replicated on the following pages 2-8. The assessment replicates Mr Cottee's table but includes an additional column which provides the assessment of the Cottee No Signals scheme undertaken by WSP.

Fordham Road / Rayes Lane - 23 September 2014

| | | | | | ential to Avoid mple | Incident or | |
|---------------------|--------------|--|--------------|-------------------------|-------------------------|-------------------|----------------------|
| Incident | Time | Description | | WSP 2015 Proposed | SCC Proposed | Cottee Signals | Cottee No Signals |
| Horse Crossing Inc | idents | | | | | | |
| RL-23SEP-H1 | 06:38 | Westbound horse reacts to a northbound vehicle moving away from the crossing. | Dry / Bright | × | × | ✓ | ✓ |
| RL-23SEP-H2 | 06:39 | Westbound horses react to a southbound motorcycle moving away from the crossing. | Dry / Bright | × | × | ✓ | ✓ |
| RL-23SEP-H3 | 07:29 | Behavioural incident when string crosses westbound. | Dry / Bright | × | × | × | × |
| RL-23SEP-H4 | 07:30 | Northbound vehicle moves away from the crossing whilst eastbound string is still crossing. | Dry / Bright | × | × | ✓ | × |
| RL-23SEP-H5 | 07:53 | Northbound vehicle stops very close to the crossing; horses on Fordham Road horse walk are queuing. | Dry / Bright | ✓ | ✓ | ✓ | ✓ |
| RL-23SEP-H6 | 08:23 | Northbound vehicle fails to notice westbound crossing string. Stops on crossing. | Dry / Bright | × | ✓ | ✓ | ✓ |
| RL-23SEP-H7 | 08:35 | Southbound vehicle fails to judge queue correctly - stops on crossing partially blocking strings. | Dry / Bright | × | × | ✓ | ✓ |
| RL-23SEP-H8 | 09:18 | Northbound HGV passes close to string on Rayes Lane approaching the crossing. | Dry / Bright | ✓ | ✓ | ✓ | ✓ |
| RL-23SEP-H9 | 10:23 | Behavioural incident whilst horse is crossing westbound. | Dry / Bright | × | × | × | × |
| RL-23SEP-H10 | 11:27 | Behavioural incident whilst horse is crossing westbound. | Dry / Bright | × | × | × | × |
| RL-23SEP-H11 | 12:01 | Southbound and northbound vehicles fail to give way at the crossing - near collision with westbound horse and rider. | Dry / Bright | × | × | ✓ | ✓ |
| Operational Examp | les | | | | | | |
| RL-23SEP-O1 | 06:36 | Hack stops traffic on Fordham Road. | Dry / Bright | × | × | ✓ | × |
| RL-23SEP-O2 | 07:16 | Trainer stops traffic on Fordham Road. | Dry / Bright | × | × | ✓ | × |
| RL-23SEP-O3 | 08:32 | Vehicle parks on southern footway of Rayes Lane to drop child off for school. | Dry / Bright | × | × | ✓ | ✓ |
| RL-23SEP-O4 | 09:44 | Trainer on bicycle stops traffic on Fordham Road. | Dry / Bright | × | × | ✓ | × |
| RL-23SEP-O5 | 10:55 | Trainer stops westbound string on horse walk whilst waiting for traffic to clear. | Dry / Bright | × | × | ✓ | × |
| Pedestrian Incident | s / Examples | | | | | | |
| RL-23SEP-P1 | 08:16 | Pedestrian waits for string crossing to stop traffic on Fordham Road to enable crossing. | Dry / Bright | × | ✓ | ✓ | ✓ |
| RL-23SEP-P2 | 08:21 | Pedestrians including children crossing Fordham Road between stationary traffic. | Dry / Bright | × | ✓ | ✓ | ✓ |
| RL-23SEP-P3 | 08:21 | Pedestrian waits for string crossing to stop traffic on Fordham Road to enable crossing. | Dry / Bright | × | ✓ | ✓ | ✓ |
| RL-23SEP-P4 | 08:23 | Pedestrians including children cross Fordham Road as traffic begins to move away from crossing. | Dry / Bright | × | ✓ | ✓ | ✓ |
| RL-23SEP-P5 | 08:28 | Pedestrians including children cross Fordham Road between stopped traffic in front of HGV. | Dry / Bright | × | ✓ | ✓ | ✓ |
| RL-23SEP-P6 | 08:30 | Pedestrians cross Fordham Road around stationary traffic. | Dry / Bright | × | ✓ | ✓ | ✓ |
| RL-23SEP-P7 | 08:33 | Pedestrians cross Fordham Road in front of a vehicle emerging from Fairstead House School entrance. | Dry / Bright | × | ✓ | ✓ | ✓ |
| RL-23SEP-P8 | 08:36 | Pedestrian and child run across Fordham Road. | Dry / Bright | × | ✓ | ✓ | ✓ |
| RL-23SEP-P9 | 08:41 | Pedestrian crosses Fordham Road behind a southbound vehicle, almost in front of northbound vehicle. | Dry / Bright | × | ✓ | ✓ | ✓ |
| RL-23SEP-P10 | 08:42 | Pedestrian with push chair attempts to cross Fordham Road in front of southbound HGV. | Dry / Bright | × | ✓ | ✓ | ✓ |
| RL-23SEP-P11 | 09:27 | Pedestrian runs across Fordham Road to cross in front of an emerging eastbound string on Rayes Lane. | Dry / Bright | × | ✓ | ✓ | ✓ |

Fordham Road / Rayes Lane – 24 September 2014

| | | | | | ential to Avoid Ir | ncident or | | | |
|--------------------|---------------|---|----------------|--------------------------------|--------------------|-------------------------|-----------------|-------------------|----------------------|
| Incident | Time | Description | | ne Description Weather / Light | Weather / Light | WSP 2015 Proposed | SCC Proposed | Cottee Signals | Cottee No Signals |
| Horse Crossing Inc | cidents | | | | | | | | |
| RL-24SEP-H1 | 07:31 | Southbound vehicle passes as horse is emerging westbound causing a behavioural incident. | Wet / Overcast | × | × | ✓ | ✓ | | |
| RL-24SEP-H2 | 07:32 | Northbound vehicles fail to give way to an emerging eastbound string. | Wet / Overcast | ✓ | ✓ | ✓ | ✓ | | |
| RL-24SEP-H3 | 07:45 | Northbound vehicle stops on crossing - eastbound jockey waves vehicle to continue. | Wet / Overcast | × | × | ✓ | × | | |
| RL-24SEP-H4 | 07:56 | Southbound vehicle fails to give way to westbound emerging horse - almost collides with horse and rider. | Wet / Overcast | × | × | ✓ | ✓ | | |
| RL-24SEP-H5 | 08:08 | Northbound HGV passes whilst string is waiting to cross eastbound causing horse behavioural incident. | Wet / Overcast | ✓ | ✓ | ✓ | ✓ | | |
| RL-24SEP-H6 | 08:11 | Northbound vehicle passes at speed and fails to give way to eastbound emerging string. | Wet / Overcast | ✓ | ✓ | ✓ | ✓ | | |
| RL-24SEP-H7 | 08:32 | Northbound vehicle stopping suddenly at crossing results in behavioural incidents for eastbound horses. | Raining | ✓ | ✓ | ✓ | ✓ | | |
| RL-24SEP-H8 | 08:45 | Westbound horse has a behavioural incident as a stationary northbound vehicle has stopped close to the crossing. | Raining | × | × | ✓ | × | | |
| RL-24SEP-H9 | 08:50 | Northbound vehicle fails to give way to westbound horses on the crossing. | Raining | × | × | ✓ | × | | |
| RL-24SEP-H10 | 09:58 | Rear horse in westbound string has a behavioural incident whilst crossing. | Wet / Bright | × | × | × | × | | |
| RL-24SEP-H11 | 10:09 | Northbound vehicles fail to give way to an emerging eastbound string. | Wet / Overcast | × | × | ✓ | ✓ | | |
| RL-24SEP-H12 | 10:16 | Northbound vehicles fail to give way to an emerging eastbound string. | Wet / Overcast | × | × | ✓ | ✓ | | |
| RL-24SEP-H13 | 11:49 | Vehicle turning right from Fordham Road into private access road causes behavioural incident for a westbound horse on the horse walk, throwing the rider off. Rider walks horse across. | Dry / Bright | × | × | × | × | | |
| Operational Examp | oles | | | | | | | | |
| RL-24SEP-O1 | 07:28 | Trainer parks vehicle on Rayes Lane before stopping traffic on Fordham Road. | Wet / Overcast | × | × | ✓ | ✓ | | |
| RL-24SEP-O2 | 12:13 | Delivery vehicle parks on Rayes Lane for 5 minutes. | Dry / Bright | × | × | ✓ | ✓ | | |
| Pedestrian Inciden | ts / Examples | | | | | | | | |
| RL-24SEP-P1 | 08:32 | Vehicles fail to give way to pedestrians crossing, pedestrians required to wait in carriageway. | Raining | × | ✓ | ✓ | ✓ | | |
| RL-24SEP-P2 | 11:51 | Southbound vehicle fails to give way to pedestrian/cyclist crossing Fordham Road. | Dry / Bright | × | ✓ | ✓ | ✓ | | |
| RL-24SEP-P3 | 11:56 | Dog walker begins to cross Fordham Road whilst raising arm to attempt to stop / slow traffic. | Dry / Bright | × | ✓ | ✓ | ✓ | | |

Fordham Road / Rayes Lane - 12 January 2015

| | | | | | ential to Avoid | Incident or | |
|--------------------|---------------|---|-----------------|-------------------------|---------------------|-------------------|----------------------|
| Incident | Time | Time Description | Weather / Light | WSP 2015 Proposed | SCC Propose d | Cottee Signals | Cottee No Signals |
| Horse Crossing Inc | idents | | | | | | |
| RL-12JAN-H1 | 07:52 | Westbound horse 'slips' on the crossing causing behavioural incidents for entire string following. | Dry / Dark | ✓ | ✓ | ✓ | ✓ |
| RL-12JAN-H2 | 08:16 | Behavioural incident whilst horse is crossing eastbound. | Dry / Sunrise | × | × | × | × |
| RL-12JAN-H3 | 08:20 | Northbound vehicle moves away from the crossing before eastbound string has completed crossing. | Dry / Sunrise | × | × | ✓ | × |
| RL-12JAN-H4 | 08:39 | Westbound horse stops in carriageway as school children are cycling across Rayes Lane. Southbound vehicle moves away before horse has cleared the crossing. | Dry / Sunrise | × | × | ✓ | × |
| RL-12JAN-H5 | 08:39 | Vehicle exiting Fairstead House School blocks Fordham Road horse walk for northbound string. | Dry / Sunrise | × | × | × | × |
| RL-12JAN-H6 | 08:40 | Southbound HGV causes behavioural issues for westbound string on the Severals horse walk. | Dry / Sunrise | × | × | × | × |
| RL-12JAN-H7 | 09:31 | Southbound vehicle fails to give way to emerging westbound string. | Dry / Bright | × | × | ✓ | ✓ |
| RL-12JAN-H8 | 09:52 | Northbound HGV passes the crossing at speed causing a reaction for eastbound horse on Rayes Lane. | Dry / Bright | × | ✓ | ✓ | ✓ |
| RL-12JAN-H9 | 10:09 | Southbound vehicle fails to give way to emerging eastbound string. | Dry / Bright | × | × | ✓ | ✓ |
| RL-12JAN-H10 | 12:34 | Southbound vehicle fails to give way to emerging westbound string. | Dry / Bright | × | × | ✓ | ✓ |
| Operational Examp | oles | | | | | | |
| RL-12JAN-01 | 09:52 | Trainer stops traffic on Fordham Road. | Dry / Bright | × | × | ✓ | × |
| RL-12JAN-O2 | 10:35 | Trainer stops traffic on Fordham Road. | Dry / Bright | × | × | ✓ | × |
| RL-12JAN-O3 | 10:38 | Trainer stops traffic on Fordham Road. | Dry / Bright | × | × | ✓ | × |
| RL-12JAN-04 | 11:52 | Trainer and Hack stops traffic on Fordham Road. | Dry / Bright | × | × | ✓ | × |
| Pedestrian Inciden | ts / Examples | | | | | | |
| RL-12JAN-P1 | 08:30 | Pedestrian exiting Fairstead House crosses in front of emerging vehicle and northbound vehicle. | Dry / Sunrise | × | ✓ | ✓ | ✓ |
| RL-12JAN-P2 | 08:33 | Pedestrian exiting Fairstead House School has difficulty crossing Fordham Road safely. | Dry / Bright | × | ✓ | ✓ | ✓ |
| RL-12JAN-P3 | 11:57 | Pedestrian and pushchair have difficulty crossing Fordham Road safely. | Dry / Bright | × | ✓ | ✓ | ✓ |

Fordham Road / Rayes Lane - 13 January 2015

| | | | | Pote Exar | ntial to Avoid In | ncident or | |
|--------------------|---------------|---|----------------|-------------------------|-------------------|-------------------|----------------------|
| Incident | Time | Description | | WSP 2015 Proposed | SCC Proposed | Cottee Signals | Cottee No Signals |
| Horse Crossing Inc | idents | | • | | | | |
| RL-13JAN-H1 | 06:44 | Northbound vehicle stops at late notice for eastbound crossing string. | Dark | × | × | ✓ | ✓ |
| RL-13JAN-H2 | 08:53 | Northbound vehicle stops at late notice for eastbound crossing string. | Wet / Sunrise | ✓ | ✓ | ✓ | ✓ |
| RL-13JAN-H3 | 09:02 | Northbound vehicle stops at late notice for horse crossing westbound. | Wet / Overcast | × | × | ✓ | ✓ |
| RL-13JAN-H4 | 09:48 | Obstructed view - Northbound HGV causes behavioural incident for eastbound string on Rayes Lane. | Wet / Bright | × | ✓ | ✓ | ✓ |
| RL-13JAN-H5 | 10:10 | Southbound vehicle turning right into Rayes Lane fails to notice westbound string on Rayes Lane. | Wet / Bright | × | × | ✓ | ✓ |
| RL-13JAN-H6 | 10:14 | Southbound vehicles on Fordham Road fail to give way to westbound emerging string. | Wet / Bright | × | ✓ | ✓ | ✓ |
| RL-13JAN-H7 | 10:32 | Northbound horses queuing for Fordham Road horse walk to become available. | Wet / Bright | × | × | ✓ | ✓ |
| RL-13JAN-H8 | 10:35 | Southbound HGV stops at late notice followed by a northbound vehicle failing to give way - causing behavioural incidents for westbound emerging string. | Wet / Bright | * | × | ✓ | ✓ |
| RL-13JAN-H9 | 11:12 | Sun glare from Northbound vehicle on Fordham Road causes behavioural incidents for westbound string. | Wet / Bright | × | × | ✓ | ✓ |
| RL-13JAN-H10 | 11:13 | Behavioural incident for an eastbound horse on approach to the crossing. | Wet / Bright | × | × | × | × |
| RL-13JAN-H11 | 11:24 | Southbound horse on Fordham Road horse walk has a behavioural incident crossing private access. | Wet / Bright | × | × | × | × |
| RL-13JAN-H12 | 12:05 | Northbound refuse vehicle stops just north north of Rayes Lane restricting view, southbound HGV observes eastbound crossing string at very late notice. | Wet / Bright | * | × | ✓ | ✓ |
| Operational Examp | les | | | | | | |
| RL-13JAN-O1 | 08:23 | Trainer parks on Rayes Lane to stop traffic on Fordham Road. | Wet / Sunrise | × | × | ✓ | ✓ |
| RL-13JAN-O2 | 08:52 | Trainer parks on Rayes Lane to stop traffic on Fordham Road. | Wet / Sunrise | × | × | ✓ | ✓ |
| RL-13JAN-O3 | 10:40 | Trainer stops traffic on Fordham Road. | Wet / Bright | × | × | ✓ | × |
| RL-13JAN-04 | 10:54 | Parent parks on Rayes Lane to drop off a child for school. | Wet / Bright | × | × | ✓ | ✓ |
| RL-13JAN-O5 | 12:00 | Northbound refuse vehicle stops on Fordham Road and reverses down Rayes Lane. | Wet / Bright | * | × | ✓ | ✓ |
| Pedestrian Inciden | ts / Examples | | | | | | |
| RL-13JAN-P1 | 08:31 | Northbound vehicle stops at late notice for pedestrians and children crossing eastbound to School. | Wet / Sunrise | × | ✓ | ✓ | ✓ |
| RL-13JAN-P2 | 08:33 | Pedestrian crossing Fordham Road eastbound starts to cross in front of an emerging vehicle. | Wet / Bright | × | ✓ | ✓ | ✓ |
| RL-13JAN-P3 | 12:11 | Pedestrian crossing Fordham Road eastbound starts to cross before the carriageway is clear. | Wet / Bright | × | ✓ | ✓ | ✓ |

Fordham Road / Rayes Lane - 14 January 2015

| | | | | Pote Exar | ntial to Avoid Inc | ident or |
|--------------------|---------------|--|-----------------|-------------------------|--------------------|-------------------|
| Incident | Time | Description | Weather / Light | WSP 2015 Proposed | SCC Proposed | Cottee Signals |
| Horse Crossing Inc | idents | | | | | |
| RL-14JAN-H1 | 07:57 | Vehicle exiting left from Fairstead House School notices a string crossing westbound at late notice. | Damp / Sunrise | × | × | ✓ |
| RL-14JAN-H2 | 08:07 | Lead horse in westbound string has a behavioural incident at the crossing waiting for remaining string. | Damp / Sunrise | × | × | × |
| RL-14JAN-H3 | 08:08 | Vehicle attempts a turning manouevre on Rayes Lane in front of a string travelling westbound, vehicle blocks the crossing causing string to have a behavioural incident. | Damp / Sunrise | × | × | ✓ |
| RL-14JAN-H4 | 08:15 | Northbound HGV turns left from Fordham Road to Rayes Lane. Potential for head on collision with string travelling eastbound on Rayes Lane. | Damp / Sunrise | × | × | ✓ |
| RL-14JAN-H5 | 08:33 | Vehicle emerging from Fairstead House School blocks the horse walk for northbound string. | Damp / Bright | × | × | × |
| RL-14JAN-H6 | 08:57 | Northbound vehicle moves away from the crossing between two strings of eastbound horses. | Damp / Bright | × | × | ✓ |
| RL-14JAN-H7 | 09:01 | Northbound vehicle fails to give way to eastbound emerging string causing behavioural incidents for horses on Rayes Lane. | Damp / Bright | × | × | ✓ |
| RL-14JAN-H8 | 09:13 | Northbound vehicles on Fordham Road fail to give way to eastbound emerging string. | Damp / Bright | × | × | ✓ |
| RL-14JAN-H9 | 09:35 | Vehicle emerging from Fairstead House School almost collides with southbound horse on horse walk. | Damp / Bright | × | × | × |
| RL-14JAN-H10 | 09:38 | Southbound vehicles on Fordham Road fail to give way to westbound emerging string. | Damp / Bright | × | × | ✓ |
| RL-14JAN-H11 | 09:47 | Behavioural incident whilst horse is crossing westbound. Northbound vehicle fails to give way. | Damp / Bright | × | × | ✓ |
| Operational Examp | les | | | | | |
| RL-14JAN-O1 | 08:23 | Trainer stops traffic on Fordham Road. | Damp / Bright | × | × | ✓ |
| RL-14JAN-O2 | 08:43 | Hack stops traffic on Fordham Road. | Damp / Bright | × | × | ✓ |
| RL-14JAN-O3 | 09:00 | Trainer stops traffic on Fordham Road. | Damp / Bright | × | × | ✓ |
| RL-14JAN-O4 | 11:54 | Trainer and Hack stop traffic on Fordham Road | Dry / Bright | × | × | ✓ |
| Pedestrian Inciden | ts / Examples | | | | | |
| RL-14JAN-P1 | 08:28 | Pedestrian and pushchair cross before carriageway is clear causing southbound vehicle to give way. | Damp / Bright | × | ✓ | ✓ |
| RL-14JAN-P2 | 08:35 | Pedestrian crossing westbound from Fairstead House School uses an emerging vehicle to cross. | Damp / Bright | × | ✓ | ✓ |

| Cottee No Signals |
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Fordham Road / Rayes Lane - 15 January 2015

| | | | | Pote Exar | ntial to Avoid Ir | ncident or | |
|---------------------------|---------------|--|-----------------|-------------------------|-------------------|-------------------|----------------------|
| Incident | Time | Description | Weather / Light | WSP 2015 Proposed | SCC Proposed | Cottee Signals | Cottee No Signals |
| Horse Crossing Inc | idents | | | | | | |
| RL-15JAN-H1 | 07:44 | Van turns right into Rayes Lane while strings are travelling in both directions on Rayes Lane. | Damp / Dark | × | × | ✓ | ✓ |
| RL-15JAN-H2 | 07:55 | Westbound horse behaving unpredictably on the crossing. | Damp / Sunrise | × | × | × | × |
| RL-15JAN-H3 | 08:08 | Southbound vehicle on Fordham Road stops quickly for westbound emerging string. | Damp / Light | × | ✓ | ✓ | ✓ |
| RL-15JAN-H4 | 08:28 | Vehicle exiting Fairstead House School between two northbound strings blocks horse walk. | Damp / Light | × | × | ✓ | ✓ |
| RL-15JAN-H5 | 08:33 | Northbound vehicle stops late for a horse crossing eastbound. Vehicle 'creeps' forward during crossing. | Damp / Light | × | × | ✓ | ✓ |
| RL-15JAN-H6 | 08:46 | Southbound horses on Fordham Road horse walk have a behavioural incident due to passing cars. | Damp / Light | × | ✓ | ✓ | ✓ |
| RL-15JAN-H7 | 09:11 | Southbound vehicle fails to give way to string crossing eastbound. | Damp / Light | × | × | ✓ | × |
| RL-15JAN-H8 | 09:14 | Northbound vehicles fail to give way to string waiting to cross eastbound. | Damp / Light | ✓ | ✓ | ✓ | ✓ |
| RL-15JAN-H9 | 09:18 | Horse crossing westbound is behaving unpredictably on approach to the crossing. | Damp / Light | × | × | × | × |
| RL-15JAN-H10 | 09:28 | Northbound vehicle fails to give way to horse crossing eastbound. | Damp / Light | × | × | ✓ | × |
| RL-15JAN-H11 | 09:31 | Second horse in string has a behavioural incident on Fordham Road horse walk due to passing vehicle. | Damp / Light | × | × | ✓ | ✓ |
| RL-15JAN-H12 | 10:01 | Northbound vehicle stops late for string crossing eastbound, trainer waves vehicle past. Horse at the rear of the string has a behavioural incident on the crossing. | Damp / Light | ✓ | ✓ | ✓ | ✓ |
| RL-15JAN-H13 | 11:03 | Northbound string on Fordham Road horse walk attempt to slow southbound HGV. HGV passes at speed causing a behavioural incident. | Damp / Light | × | ✓ | ✓ | ✓ |
| RL-15JAN-H14 | 11:05 | Northbound vehicle on Fordham Road passes between a break in the westbound string. | Damp / Light | × | × | ✓ | × |
| RL-15JAN-H15 | 11:13 | Eastbound horses behaving unpredictably at the crossing. | Damp / Light | × | × | × | × |
| RL-15JAN-H16 | 11:29 | Rear horse in westbound string has a behavioural incident due to pedestrian/dog walking behind it. | Damp / Light | × | × | × | × |
| RL-15JAN-H17 | 11:38 | Eastbound horse behaving unpredictably on approach to the crossing. Northbound vehicle on Fordham Road fails to give way to the emerging horse. | Damp / Light | * | × | ✓ | × |
| RL-15JAN-H18 | 11:41 | Behavioural incident whilst horse is crossing westbound. | Damp / Light | × | × | × | × |
| RL-15JAN-H19 | 11:57 | Northbound vehicle fails to give way to trainer and hack in the carriageway. | Damp / Light | × | × | ✓ | × |
| Operational Examp | les | | • | | | | |
| RL-15JAN-O1 | 06:49 | Trainer stops traffic on Fordham Road. | Dark | × | × | ✓ | × |
| RL-15JAN-O2* | 07:15 | Trainer stops traffic on Fordham Road. | Dark | × | × | ✓ | × |
| RL-15JAN-O3 | 09:47 | Trainer on bicycle stops traffic on Fordham Road. | Snowing | × | × | ✓ | × |
| RL-15JAN-O4 | 11:04 | Southbound vehicle drops off passenger on horse walk - uses Rayes Lane to complete U-turn manouvre. | Damp / Light | × | × | ✓ | ✓ |
| Pedestrian Incident | ts / Examples | | • | | | | |
| RL-15JAN-P1 | 08:19 | Pedestrians and children crossing Fordham Road eastbound to Fairstead House school. | Damp / Light | × | ✓ | ✓ | ✓ |
| RL-15JAN-P2 | 08:31 | Children cycling across Rayes Lane to St Louis Catholic school. | Damp / Light | × | × | ✓ | ✓ |
| RL-15JAN-P3 | 11:50 | Cyclist crossing Fordham Road almost collides with northbound vehicle. | Damp / Light | × | × | × | ✓ |
| RL-15JAN-P4 | 11:54 | Two cyclists crossing Fordham Road almost collide with northbound vehicle. | Damp / Light | × | × | × | × |

| | - | | Weather / Light | | ential to Avoid In | ncident or | | | | |
|--------------------------|---------------|---|-----------------|-------------------------|--------------------|-------------------|----------------------|--|--|--|
| Incident | Time | Description | | WSP 2015 Proposed | SCC Proposed | Cottee Signals | Cottee No Signals | | | |
| Horse Crossing Incidents | | | | | | | | | | |
| RL-16JAN-H1 | 07:08 | Northbound vehicle enters Rayes Lane as a string is emerging to cross. | Dark | × | × | ✓ | ✓ | | | |
| RL-16JAN-H2 | 07:13 | Behavioural incident whilst horse is crossing eastbound. | Dark | × | × | × | × | | | |
| RL-16JAN-H3 | 07:14 | Northbound vehicle on Fordham Road fails to give way to an eastbound emerging string. | Dark | × | × | ✓ | ✓ | | | |
| RL-16JAN-H4 | 07:26 | Eastbound horses have a behavioural incident on approach to the crossing. | Dark | × | × | ✓ | × | | | |
| RL-16JAN-H5 | 07:48 | Behavioural incident whilst horse is crossing westbound. | Damp / Sunrise | × | × | × | × | | | |
| RL-16JAN-H6 | 07:54 | Westbound string spooked on the crossing, likely due to presence of northbound HGV. | Damp / Sunrise | × | × | ✓ | × | | | |
| RL-16JAN-H7 | 08:04 | Vehicle emerges from private access road in front of southbound horse on Fordham Road horse walk . | Damp / Sunrise | × | × | × | × | | | |
| RL-16JAN-H8 | 08:19 | Northbound vehicle fails to give way to an eastbound emerging string. | Damp / Sunrise | × | ✓ | ✓ | ✓ | | | |
| RL-16JAN-H9 | 08:29 | Lead horse in string has a behavioural incident on entering the Fordham Road horse walk northbound. | Damp / Overcast | × | × | ✓ | × | | | |
| RL-16JAN-H10 | 08:37 | Behavioural incident whilst horse is crossing westbound. | Damp / Overcast | × | × | × | × | | | |
| RL-16JAN-H11 | 08:43 | Southbound horse on Fordham Road horse walk has a behavioural incident and enters the carriageway, before travelling to the Rayes Lane horse crossing using the Fordham Road carriageway. | Damp / Overcast | × | × | ✓ | ✓ | | | |
| RL-16JAN-H12 | 09:03 | Northbound HGVs cause behavioural incidents for string travelling eastbound on Rayes Lane. | Damp / Overcast | × | × | ✓ | × | | | |
| RL-16JAN-H13 | 09:30 | Behavioural incident whilst string is crossing westbound. | Damp / Overcast | × | × | × | × | | | |
| RL-16JAN-H14 | 09:48 | Northbound horse on Fordham Road horse walk has a behavioural incident at Fairstead House school. | Damp / Light | × | × | ✓ | ✓ | | | |
| RL-16JAN-H15 | 09:59 | Rear horse in eastbound string has a behavioural incident on approach to the crossing. | Damp / Light | × | × | × | × | | | |
| RL-16JAN-H16 | 10:39 | Lead horse in eastbound string has a behavioural incident on approach to the crossing. | Damp / Bright | × | × | ✓ | × | | | |
| RL-16JAN-H17 | 10:46 | Lead horse in eastbound string has a behavioural incident due to passing northbound HGV at speed. | Damp / Light | × | ✓ | ✓ | ✓ | | | |
| RL-16JAN-H18 | 10:51 | Behavioural incident whilst horse is crossing eastbound. | Damp / Light | × | × | × | × | | | |
| RL-16JAN-H19 | 11:05 | Northbound string on Fordham Road horse walk use the carriagway to pass southbound string. | Damp / Light | × | × | ✓ | ✓ | | | |
| RL-16JAN-H20 | 11:16 | Eastbound horse (mid-string) has a behavioural incident on approach to the crossing. | Damp / Light | × | × | × | × | | | |
| Operational Examp | les | | | | • | | | | | |
| RL-16JAN-O1 | 06:52 | Trainer stops traffic on Fordham Road. | Dark | × | × | ✓ | × | | | |
| RL-16JAN-O2 | 07:06 | Trainer stops traffic on Fordham Road. | Dark | × | × | ✓ | × | | | |
| RL-16JAN-O3 | 07:43 | Construction vehicle reversing eastbound on Rayes Lane performs a U-turn in front of a string of horses. | Dark | × | × | ✓ | ✓ | | | |
| RL-16JAN-O4 | 08:45 | Hack stops traffic on Fordham Road. | Damp / Sunrise | × | × | ✓ | × | | | |
| RL-16JAN-O5 | 09:14 | HGV using Rayes Lane as a turning area. | Damp / Light | × | ✓ | ✓ | ✓ | | | |
| RL-16JAN-O6 | 09:40 | Trainer on bicycle almost collides with northbound vehicle on Fordham Road when emerging. | Damp / Light | × | × | ✓ | ✓ | | | |
| RL-16JAN-07 | 10:16 | HGV using Rayes Lane as a turning area. | Damp / Light | × | ✓ | ✓ | ✓ | | | |
| RL-16JAN-08 | 10:26 | Hack stops traffic on Fordham Road. | Damp / Light | × | × | ✓ | × | | | |
| RL-16JAN-09 | 12:01 | Trainer stops traffic on Fordham Road. | Damp / Light | × | × | ✓ | × | | | |
| Pedestrian Incident | s or Examples | | | • | • | • | | | | |
| RL-16JAN-P1 | 08:55 | Pedestrian runs across Fordham Road to cross in front of northbound vehicle. | Damp / Overcast | × | ✓ | ✓ | ✓ | | | |
| RL-16JAN-P2 | 09:35 | Pedestrian exits Fairstead House School and runs across Fordham Road to Rayes Lane. | Damp / Overcast | × | ✓ | ✓ | ✓ | | | |

Within the above assessment, the following incidents considered to be removed or potentially removed by the Cottee No Signal scheme. Those marked in green are assumed to be removed by the proposed scheme as they relate to incidents associated with Rayes Lane which is closed under the scheme, together with incidents removed by the widening of the horse walk. Those marked in orange have the potential to be removed as a consequence of the improved inter visibility at the crossing or through the slowing of traffic.

| RL-23SEP-H1 | Westbound horse reacts to a northbound vehicle moving away from the crossing. | Scheme provides narrower carriageway and more space away from traffic. Not considered to be any difference than Cottee scheme in this regard. |
|--------------|--|---|
| RL-23SEP-H2 | Westbound horses react to a southbound motorcycle moving away from the crossing. | Scheme provides narrower carriageway and more space away from traffic. Not considered to be any difference than Cottee scheme in this regard. |
| RL-23SEP-H7 | Southbound vehicle fails to judge queue correctly - stops on crossing partially blocking strings. | Scheme improves driver visibility of crossing by providing clear markings. |
| RL-23SEP-H11 | Southbound and northbound vehicles fail to give way at the crossing - near collision with westbound horse and rider. | Scheme improves visibility giving drivers more time to see emerging horses and react accordingly. |
| RL-24SEP-H1 | Southbound vehicle passes as horse is emerging westbound causing a behavioural incident. | Scheme improves visibility giving drivers more time to see emerging horses and react accordingly. |
| RL-24SEP-H4 | Southbound vehicle fails to give way to westbound emerging horse - almost collides with horse and rider. | Scheme improves visibility giving drivers more time to see emerging horses and react accordingly. |
| RL-24SEP-H11 | Northbound vehicles fail to give way to an emerging eastbound string. | Scheme improves visibility giving drivers more time to see emerging horses and react accordingly. |
| RL-24SEP-H12 | Northbound vehicles fail to give way to an emerging eastbound string. | Scheme improves visibility giving drivers more time to see emerging horses and react accordingly. |
| RL-12JAN-H7 | Southbound vehicle fails to give way to emerging westbound string. | Scheme improves visibility giving drivers more time to see emerging horses and react accordingly. |
| RL-12JAN-H9 | Southbound vehicle fails to give way to emerging eastbound string. | Scheme improves visibility giving drivers more time to see emerging horses and react accordingly. |
| RL-12JAN-H10 | Southbound vehicle fails to give way to emerging westbound string. | Scheme improves visibility giving drivers more time to see emerging horses and react accordingly. |

| RL-13JAN-H1 | Northbound vehicle stops at late notice for eastbound crossing string. | Scheme improves visibility giving drivers more time to see emerging horses and react accordingly. | |
|--------------|--|---|--|
| RL-13JAN-H3 | Northbound vehicle stops at late notice for horse crossing westbound. | Scheme improves visibility giving drivers more time to see emerging horses and react accordingly. | |
| RL-13JAN-H5 | Southbound vehicle turning right into Rayes Lane fails to notice westbound string on Rayes Lane. | Scheme closes vehicle access into Rayes Lane | |
| RL-13JAN-H7 | Northbound horses queuing for Fordham Road horse walk to become available. | Scheme widens horsewalk in similar manner to Cottee scheme | |
| RL-13JAN-H9 | Sun glare from Northbound vehicle on Fordham Road causes behavioural incidents for westbound string. | Incident assumed to be removed by Cottee scheme – considered no difference. | |
| RL-13JAN-H12 | Northbound refuse vehicle stops just north north of Rayes Lane restricting view, southbound HGV observes eastbound crossing string at very late notice. | Scheme improves visibility giving drivers more time to see emerging horses and react accordingly. | |
| RL-14JAN-H1 | Vehicle exiting left from Fairstead House School notices a string crossing westbound at late notice. | Scheme improves visibility giving drivers more time to see emerging horses and react accordingly. | |
| RL-14JAN-H3 | Vehicle attempts a turning manouevre on Rayes Lane in front of a string travelling westbound, vehicle blocks the crossing causing string to have a behavioural incident. | Scheme closes vehicle access into Rayes Lane | |
| RL-14JAN-H4 | Northbound HGV turns left from Fordham Road to Rayes Lane. Potential for head on collision with string travelling eastbound on Rayes Lane. | Scheme closes vehicle access into Rayes Lane | |
| RL-14JAN-H7 | Northbound vehicle fails to give way to eastbound emerging string causing behavioural incidents for horses on Rayes Lane. | Scheme improves visibility giving drivers more time to see emerging horses and react accordingly. | |
| RL-14JAN-H8 | Northbound vehicles on Fordham Road fail to give way to eastbound emerging string. | Scheme improves visibility giving drivers more time to see emerging horses and react accordingly. | |
| RL-14JAN-H10 | Southbound vehicles on Fordham Road fail to give way to westbound emerging string. | Scheme improves visibility giving drivers more time to see emerging horses and react accordingly. | |
| | | | |

| RL-15JAN-H1 | Van turns right into Rayes Lane while strings are travelling in both directions on Rayes Lane. | Scheme closes vehicle access into Rayes Lane |
|---------------|---|---|
| DI 45 (A) (1) | Vehicle exiting Fairstead House School between | Scheme widens horse walk in this area. |
| RL-15JAN-H4 | two northbound strings blocks horse walk. | ocheme wachs horse walk in this area. |
| RL-15JAN-H5 | Northbound vehicle stops late for a horse crossing eastbound. Vehicle 'creeps' forward during crossing. | Scheme improves visibility giving drivers more time to see emerging horses and react accordingly. Ramps will mean vehicles stay clear of crossing. |
| RL-15JAN-H6 | Southbound horses on Fordham Road horse walk have a behavioural incident due to passing cars. | Scheme widens horse walk in this area and will slow vehicles passing. |
| RL-15JAN-H11 | Second horse in string has a behavioural incident on Fordham Road horse walk due to passing vehicle. | Scheme widens horse walk in this area and will slow vehicles passing. |
| RL-16JAN-H1 | Northbound vehicle enters Rayes Lane as a string is emerging to cross. | Scheme improves visibility giving drivers more time to see emerging horses and react accordingly. |
| RL-16JAN-H3 | Northbound vehicle on Fordham Road fails to give way to an eastbound emerging string. | Scheme improves visibility giving drivers more time to see emerging horses and react accordingly. |
| RL-16JAN-H11 | Southbound horse on Fordham Road horse walk has a behavioural incident and enters the carriageway, before travelling to the Rayes Lane horse crossing using the Fordham Road carriageway. | Scheme widens horse walk in this area and will slow vehicles passing. |
| RL-16JAN-H14 | Northbound horse on Fordham Road horse walk has a behavioural incident at Fairstead House school. | Scheme widens horse walk in this area and will slow vehicles passing |
| RL-16JAN-H19 | Northbound string on Fordham Road horse walk use the carriageway to pass southbound string. | Scheme widens horse walk in this area. |

A summary table is provided below of the revised assessment.

| | | HORSE CR | DSSING INCIDENT | S POTENTIALLY A | VOIDED BY PROPO | OSED SCHEMES |
|------------|-----------------------|----------------------|-----------------|-------------------|-----------------|----------------|
| DATE | Total Number of Horse | WSP 2015 Proposed | SCC Proposed | Cottee Signals | Cottee | No Signals |
| | Crossing Incidents | | | | Green | Green + Orange |
| 23/09/2014 | 11 | 2 | 3 | 8 | 3 | 7 |
| 24/09/2014 | 13 | 4 | 4 | 11 | 4 | 8 |
| 12/01/2015 | 10 | 1 | 2 | 7 | 2 | 5 |
| 13/01/2015 | 12 | 1 | 3 | 10 | 5 | 9 |
| 14/01/2015 | 11 | 0 | 0 | 8 | 2 | 6 |
| 15/01/2015 | 19 | 2 | 5 | 14 | 9 | 10 |
| 16/01/2015 | 20 | 0 | 2 | 12 | 6 | 7 |
| Total | 96 | 10 | 19 | 70 | 31 | 52 |
| Total (%) | | 10.4% | 19.8% | 72.9% | 31.3% | 54.2% |

It can be seen that the Cottee No Signals scheme provides additional benefits over the previous scheme and will remove between 31% and 54% of the potential incidents.

Appendix 2

Modified Policy CS7

Policy CS7 Overall housing provision and distribution

Provision

To meet Forest Heath's full and objectively assessed need for housing, provision is made for at least 6800 new dwellings and associated infrastructure to be delivered in the period 2011 to 2031.

Broad Distribution

Development will be brought forward in line with the broad distribution of housing as set out below:

| Settlement | Existing completions and commitments (2011-2016) | Additional provision | Totals |
|------------------|--|---------------------------|----------------------|
| Brandon | 59 | 71 | 130 |
| Mildenhall | 185 | 1412 | 1597 |
| Newmarket | 291 | 321 721 | 612 1012 |
| Lakenheath | 95 | 828 | 923 |
| Red Lodge | 699 | 1129 | 1828 |
| Primary Villages | 953 | 454 | 1407 |
| Other* | 155 | 0 | 155 |
| Windfall | | 225 (25 a year x 9 years) | 225 |
| TOTALS | 2437 | 4440 | 6877 7277 |

^{*}Other includes completions and commitments within rural areas, secondary villages and small settlements.

To deliver the broad distribution outlined above, sites will be identified through the Site Allocations Local Plan and/or neighbourhood plans.