Land North-East of Humber Doucy Lane, Ipswich

Transport Rebuttal – Jon Hassel BEng (Hons) MCIHT MTPS

Appeal Reference: APP/X3540/W/24/3350673

241083

JANUARY 2025

RSK GENERAL NOTES

Project No.: 241083-Transport Rebuttal (00)

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Site Location: Land North-East of Humber Doucy Lane, Ipswich

Date: 10 January 2025

Office: Manchester

Status: Final

Author	JH	**Reviewer**	IW
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1 INTRODUCTION AND SCOPE OF EVIDENCE

1.1. The Scope of my Evidence

1.1.1 My rebuttal considers the Proof of Evidence to PINS by SCC which is being relied upon by both IBC and ESC on matters relating to the grounds for refusal on Highways and Transport. It references my Proof of Evidence and the signed Statement of Common Ground as appropriate. It does not introduce any new evidence to the case put forward by the Appellants against the reasons for refusal cited by both Planning Authorities with input by SCC as Highways Authority.

1.1.2 My Proof of evidence is broken down into four key parts which aligns with the Statement of Common Ground on Highways Matters and in general keeping with SCC's highways proof of evidence:

- Highway Modelling,
- Access Junction Design, and
- Active Travel Interventions.

2 HIGHWAY MODELLING

2.1. TA – Trip Distribution

2.1.1 Para. 6.5 through 6.7 of Mr Cantwell-Forbes' Proof discusses the merits or otherwise of the use of journey to work census data. He suggests that journeys to work only represent a moderate proportion of the journeys making up the morning and evening peak periods. He does not indicate what is meant by 'moderate'. I would contend that the journey to work for many may comprise other linked trips such as the school drop off in the morning (less so in the evening) or picking up some shopping supplies in the evening.

2.1.2 Regardless, these matters are dealt with in more detail in Para. 4.4.19 through 4.4.21 of my main Proof.

2.1.3 Para. 6.6 of Mr Cantwell-Forbes' Proof also raises concern regarding the use Census 2011 as inappropriate compared to 2021 results and the potential underestimation of trips. 2011 Census data represent pre-COVID travel behaviour in terms of proportion of those who travel to work, rather staying at home and by what mode. I conclude in my main proof at Para. 4.4.5 that the use of Census 2011 data is more robust than Census 2021 as results in the latter are potentially impacted by COVID. I note that this is acknowledged by the National Highway's officer in his Appeal Statement (Para. 5.2) as being more appropriate from a worst-case traffic impact perspective which is what Mr Cantwell-Forbes is most concerned about.

2.2. TA – Traffic Growth Application

2.2.1 Mr Cantwell-Forbes' Proof Para. 6.7 through 6.9 is concerned with use of Census, the TA approach and impact on the application of traffic growth. Para. 4.3.1 and 4.3.9 of my main Proof describes the method of applying traffic growth used in the TA and SCTM, which are not dissimilar. Turning, to Mr Cantwell-Forbes' concern, I would point out that the TA, on traffic impacts, considers a base reference year (2023) with observed traffic count data, then a first development unit occupation scenario (2026) and a final development completion scenario (2032). Compare this against the SCTM which has a base year of 2019, which is several years out of date from the TA base year observed traffic conditions and therefore the former requires additional years of

traffic growth; then a design year of 2040 with and without the Proposed Development, again requiring further traffic growth assumptions in the SCTM compared to the TA completion year of 2032.

2.2.2 Given the difference in the junction modelling scenario years used in the TA and the fixed scenarios of the SCTM, I can make no direct comment on matters of traffic growth and its effect on the SCTM dynamic redistribution.

2.3. TA – Trip Routing

2.3.1 Para 6.10 through 6.13 of Mr Cantwell-forbes' Proof deals with trip routing in the SCTM. Pointing to the data used in comparison to the TA methodology. He notes that the SCTM methodology, uses surveys and mobile data for Origin-Destination identification of trip routes and dynamic redistribution. I would point out that the survey and mobile data is used for calibration and validation of the base model scenario (in this case 2019, albeit I am aware that limited ATC data available for specific links were used in the model update as a calibration tool) and is not used for any future scenario testing beyond this stage. Mr Cantwell-Forbes notes that travel time has an effect on route choice. My main Proof Para. 4.4.8 through 4.4.18 discusses at length the TA methodology for the assessment of trip routing using Google Maps and there are similarities between that and the surveys and mobile data for the SCTM. Beyond the SCTM base year, when traffic growth and development trips are added the routing may change regardless of what the original survey and mobile data suggested in response to changes in the trips wishing to use the network at any specific future time and any intervening infrastructure schemes which Mr Cantwell-Forbes lists as included in the model at Para. 6.14.

2.4. Offsite Impacts - General

2.4.1 Mr Cantwell-Forbes' Proof Para. 6.15 through 6.20 discusses the offsite impact assessment of the TA. My original Proof Para. 4.5.1 through 4.5.20 discusses the impact assessment and results of the TA and compares that with results for the same junctions but using the SCTM model output using the dynamically redistributed traffic at Para. 4.6.1 through 4.6.11 and Para. 4.7.1 through 4.7.6. Unfortunately, as with SCC's holding response and SoC, the recurring concerns/issues put forward by Mr

Cantwell-Forbes is that the TA analysis is substandard compared with the SCTM but he does not provide requisite counter evidence as proof.

2.4.2 I note at Para. 6.17 of Mr Cantwell-Forbes' Proof he raises concern that the highway network considered does not extend beyond vehicles travelling north of Tuddenham Road and therefore excludes routing of traffic to the north of the site towards Tuddenham Village, Church Lane or Lower Road. I would point out that scoping dialogue was entered into prior to the preparation of the TA, part of which was the agreement of the study network (by email on the 28th September 2023) which in turn informed our traffic survey data collection scope. Moreover, Mr Cantwell-Forbes had ample opportunity at this stage to request the extension of the network even if any detailed analysis was ultimately discounted following a threshold analysis.

2.4.3 Para 6.18 of Mr Cantwell-Forbes' Proof discusses the location of the proposed main site signalised access and its potential influence on the route choice by users of the local roads. I would note that routing of trips generated by the Proposed Development of a nominal scale are assigned to/from Tuddenham Road north of the access due to the unattractiveness of these alternative routes which is demonstrated by the traffic flow diagrams presented in the Appendix 13 and 14 of the TA report. I have not been provided with evidence demonstrating a contrary conclusion by SCC.

2.4.4 Para 6.20 of Mr Cantwell-Forbes Proof summarises that SCC do not consider that the development's impacts on the local highway network have been adequately assessed and subsequently lacks confidence that the proposed mitigation is sufficient alleviate its highway impacts or would have an unacceptable impact on highway safety, or that any residual cumulative impacts on the road network would not be 'severe' per Para. 116 of the NPPF. My main Proof discusses the impact assessment at some reasonable length and outlines identified differences in the results of modelling of the offsite junctions as presented in the TA and then using the SCTM output traffic flows which assumes dynamic redistribution as broadly similar in conclusion with some limited exceptions and in the case of those exceptions the analysis identifies a strategic issue on performance before the Appellant allocated development site is included. But I would reiterate that unfortunately, as with SCC's

holding response and SoC the recurring criticism put forward by Mr Cantwell-Forbes is not backed up by requisite counter evidence.

2.5. TA – Junction Modelling

2.5.1 Mr Cantwell Forbes states at Para. 6.24 of his Proof that he would expect the junction models associated with the proposed site accesses to be submitted for review. In terms of the modelling of the access junctions, the TA clearly states the reason for omitting the assessment for the smallest parcel in the northwest part of the site. But both the main parcel signalised access and eastern parcel access junctions were analysed, and the results summarised in the TA report. Full print outs of the model inputs / outputs for the offsite junctions analysed were provided as Appendix 15 to the TA report. Input/output data for the access junctions were omitted from Appendix 15 in error. However, during post submission dialogue, SCC only requested a copy of the signalised access model file data. This was provided by email along with a copy of the output report file. If SCC had required additional electronic model files, we would happily have provided them (and are still happy to do so now), but we have never been asked. Notwithstanding, the expectation by SCC of the provision of the model files for all junctions (including accesses) assessed is not a significant issue as the appended output files provide all the relevant information to enable SCC to carry out their own checks. I do not therefore accept the criticism made by Mr Cantwell Forbes at Para. 6.24.

2.5.2 Para. 6.25 through 6.26 of Mr Cantwell-Forbes returns to the asserted advantages of using modelled traffic flows output from the SCTM and strategic modelling in general to ensure that all necessary offsite junctions are suitably assessed. I would point out that we have undertaken a re-evaluation of the development impacts on the junctions assessed in the TA using the SCTM where output data was provided by SCC and I discuss these in my main Proof.

2.5.3 Para. 6.27 of Mr Cantwell-Forbes' Proof raises the potential issue of transposition of traffic flow data entered in the junction modelling specifically for the Tuddenham Road / A2124 Colchester Road / Valley Road roundabout. As noted in my rebuttal to Mr Cantwell-Forbes' Proof Para. 6.24, the TA Appendix 15 provided all the necessary

input information for SCC to undertake their own checks of the junction modelling undertaken and results presented in the TA.

2.5.4 I have however undertaken a review, and I can confirm the error noted by Mr Cantwell-Forbes' at the Valley Road Roundabout. This has been corrected and the junction model scenarios re-run. I have included a tabulation of the output results summarising the before and after results of the correction at Appendix 1 of my rebuttal.

2.5.5 Appendix 1, Table TP-2.1 compares the completion year 2032 results for the baseline and baseline plus the proposed development scenarios as reported in the TA and with the corrected traffic flow allocation. As you can see the highlighted impacts flip from the Tuddenham Road roundabout approaches onto the Colchester and Valley Road but with the relative impacts broadly unchanged in terms of the RFC value but an overall improvement in the level of queuing.

2.5.6 Appendix 1, Table TP-2.2 provides the results for the committed improvements to the Valley Road Roundabout. Comparing the completion year 2032 results for the baseline and baseline plus the proposed development scenarios as reported in the TA and with the corrected traffic flow allocation. As you can see the highlighted impacts flip from the Tuddenham Road roundabout approaches onto the Colchester and Valley Road but with a relative reduction in the predicted maximum impacts reported in the TA, and all approaches operating within capacity. I would conclude therefore, with the error correction that the strategic improvement proposed at this junction is suitable to accommodate the trips predicted to be generated by the proposed development in the future.

2.5.7 At Para. 6.29 of his Proof, Mr Cantwell-Forbes refers to the use of a flat traffic flow profile in the junction analyses stating that it assumes that traffic flows are distributed evenly across the peak hour rather than what would typically be anticipated more commonly known as a 'synthesised' peak in the modelling software. This assumes a peak profile which results in a concentrated peak over a central 30-minute peak segment. The modelling software also synthetically creates 'shoulders' either side of the peak to ramp up and ramp down the profiled peak to create an overall 90-minute modelled period based on input traffic flow data equivalent to a 60-minute peak. Use

of a flat profile is acceptable should the input traffic data, in this case the observed base traffic surveys for the junctions in the study area, demonstrating no peakiness.

2.5.8 Mr Cantwell-Forbes' Proof Para 6.30 notes that SCC's holding objection requested the provision of detailed geometry plans for the modelled junctions for review. With a limited exception, specifically the access junctions and the committed mitigation proposals to the Tuddenham Road / A2124 Colchester Rd / Valley Road roundabout, the junction input model geometry was based that used in the submitted TAs for the major allocated sites for the Ipswich Garden Suburb. I would contend that the ready availability or otherwise of geometry measurements would not preclude SCC from undertaking their own independent assessment. That said, we are in no way being obstructive and again these drawings, where applicable, can be provided to SCC, if requested.

3 ACCESS JUNCTION DESIGN

3.1. Humber Doucy Lane / Inverness Road / Main Parcel Signalised Access

3.1.1 Mr Cantwell-Forbes' Proof at Para. 6.31 makes a general statement about the non-availability of junction models in relation to the site access proposals and that SCC cannot advise on the robustness of the modelling. I would refer to my response to Mr Cantwell-Forbes' Proof Para. 6.24. at Para. 2.5.1 of my rebuttal. Specifically, that SCC had requested and were provided with the model file for the signalised access junction. I therefore do not accept this specific criticism regarding the signalised access.

3.1.2 Para. 6.33 through 6.36 Mr Cantwell-Forbes provides criticism of the assessment of traffic impacts resulting from the introduction of this new access on the Humber Doucy Lane opposite Inverness Road. Paras 4.5.10 (supported by Appendix 7, Table TP-4.2), and 4.6.9 through 4.6.11 of my proof outline the capacity assessment of the access junction as reported in the TA report and comparison with an updated assessment using the SCTM output flows, concluding in either case the junction is predicted to operate well within capacity with no predicted significant delays or queuing affecting road users of Humber Doucy Lane.

3.1.3 Para. 6.37 of Mr Cantwell-Forbes' proof deals with design of the said access junction with specific reference to visibility standards (and their achievement), offsite active travel interventions in proximity to the junction and other specific matters. My main Proof (Section 5.2) considers the design of all four access proposals and dialogue with SCC in this regard with the design comments received and how I consider these can be secured as part of an emerging planning permission for the Appellants proposals and the highways technical approval process. The principle of measures being introduced on Inverness Road in conjunction with the proposed signalised

access being supported at this location, subject to separate consultation and approval processes, has been agreed between the Appellant and SCC.

3.2. Tuddenham Road / Northwestern Parcel Priority-Controlled Access

3.2.1 Para 6.38 through 6.43 of Mr Cantwell-Forbes' Proof deals with the design of the proposed Tuddenham Road development parcel access. I note SCC are content with the form of access proposed given the limited number of residential units irrespective of the availability of junction modelling data for the specific access. Again, I would refer to Subsection 5.2 of my proof which considers the access junction designs and dialogue with SCC in this regard with the design comments received and how I consider these can be secured as part of an emerging planning permission for the Appellants proposals and the highways technical approval process.

3.3. Humber Doucy Lane / Bus Access (opp. Sidegate Lane)

3.3.1 Para 6.44 of Mr Cantwell-Forbes' Proof refers to the proposed bus access or one-way bus gate located opposite the junction of Sidegate Lane. Paras. 5.3.10 through 5.3.13 of my Proof details the points raised by SCC specifically regarding the design of the proposed bus only access and how I consider these can be secured as part of an emerging planning permission for the Appellants proposals and the highways technical approval process.

3.4. Humber Doucy Lane / Eastern Parcel Priority-Controlled Access

3.4.1 Para 6.45 of Mr Cantwell-Forbes' Proof refers to the proposed priority-controlled access to the eastern development parcel. Paras. 5.3.14 through 5.3.17 of my Proof details the points raised by SCC specifically regarding the design and how I consider these can be secured as part of an emerging planning permission for the Appellants proposals and the highways technical approval process.

3.5. Conclusion

3.5.1 Notwithstanding reaching agreement on matters of the highway modelling and the respective findings within the TA report, I consider that all other matters relating to

access and offsite works can be resolved by way of either planning condition and/or through the s278 technical approval process.

3.5.2 The respective agreed position between the Appellant and SCC is detailed in the signed Statement of Common Ground.

4 ACTIVE & SUSTAINABLE TRAVEL INTERVENTIONS

4.1. Pedestrian & Cycling Connectivity

4.1.1 Para. 6.50 through 6.77 of Mr Cantwell-Forbes' Proof details what SCC considers to be inadequate consideration of off-site active travel interventions to/from the Proposed Development and key destinations to support / encourage the use of more sustainable modes of transport. Section 6 of my Proof considers sustainable access and offsite interventions to improve access to support the development to the key destinations agreed and listed within the signed SOCG and illustrated in the appended plan (with the exception of the first bullet), these being:

- Ipswich Town Centre;
- Rushmere Hall Primary School;
- Northgate High Secondary School;
- Selkirk Road neighbourhood centre; and
- Local bus stops on Humber Doucy Lane and Inverness Road.

4.1.2 The review of the external active network to these destinations as presented in the TA report or my Proof is not meant to be exhaustive, but it does highlight key observations (including widths of paved areas, existence of grass verge feature separating footways from carriageway, surface material and general condition) to allow suitable interventions to be formulated subject to the detail being agreed. On this latter issue, as noted in my Proof at Para. 6.1.15 proposed, interventions which the Appellant considered to be necessary, specifically related to the site access points, and those which they considered to be desirable such as tactile paving at key crossing points along the respective routes and paving surface material improvements were tabulated and offered to SCC in the first draft of the SoCG. Corresponding 'necessary' and 'desirable' intervention columns for their own completion and discussion as part of the dialogue was included in the tables. Whilst Mr Cantwell-Forbes is critical of the quality of the route audits presented or lacking in the submitted TA, SCC confirmed in the first round of SoCG comments that they had not undertaken their own audit of the routes, and so the tables that I had prepared for

inclusion within the SoCG listing the views of each party on off-site interventions were not included.

4.1.3 Notwithstanding, Mr Cantwell-Forbes makes some useful observations or suggested improvements to the routes not dissimilar to those outlined in my Proof at Para 6.1.15 and at Appendix 13 as 'desirable'. He goes a step further by providing (Para. 6.70) what he considers to be the minimum protected space of 3.2m for joint pedestrian/cycle use along Sidegate Lane; referencing the LTN 1/20 guidance document and using the observed Automatic Traffic Counter flow data used for the SCTM (which unfortunately is not publicly available) and the posted 30mph speed limit (Para. 6.69).

4.1.4 Mr Cantwell-Forbes refers to there being many instances of existing footway widths being less than 2m – it is not clear whether these are his own observations from a subsequent personal site visit or is noted from the TA report. Similarly, at Para. 6.65 he notes the lack of tactile paving surfacing at various junctions along Sidegate route which are not specifically listed in the TA report, so either an audit has been undertaken by SCC or these are observations using Google Streetview imaging. Either way, I am unsure why there has been a reluctance by SCC to engage in dialogue regarding agreeing offsite active travel interventions at the SoCG stage. They clearly have an opinion on the matter, backed up by local/national policy and guidance.

4.1.5 Based on the various comments by Mr Cantwell-Forbes in his proof on offsite routes, I have taken the opportunity to reproduce the table included in the first draft of the Highways SoCG but this time with the SCC 'necessary' and 'desirable' columns populated based on his evidence, and in parallel relevant changes to the Appellants 'desirable' column. I have included these at Appendix 2 of my rebuttal.

4.1.6 Para. 6.78 of Mr Cantwell-Forbes' proof discusses the walking and cycling infrastructure provision as part of the development proposals between the eastern and western parcels on Humber Doucy Lane as generally being acceptable but with one exception, the proposed zebra walking and cycle crossing serving the eastern parcel. Instead, a parallel crossing is requested to permit cyclists to cross alongside pedestrians without the need to dismount. This will require the width of the crossing to be increased by 0.8m, an adjustment which can be easily accommodated within the adopted road space. The parallel crossing type emulates that proposed near the

bus only access for the main development parcel shown in RSK Drawing 004 of the planning submission. For clarity, as in my main Proof, I have included a side-by-side comparison of the change compared to the submitted planning drawing at Appendix 3 of my rebuttal. Whilst not explicitly defined, the principle is agreed in Section 2.8 (third bullet) of the signed SoCG. Para. 6.79 of his Proof refers to the pedestrian crossing measures in the access junction to the eastern parcel. Again, this detail is covered by Section 2.8 (fourth bullet) of the signed SoCG.

4.2. Public Transportation

4.2.1 Para. 6.80 through 6.86 of Mr Cantwell-Forbes' proof stipulates the policy position by SCC on access to bus services bus new development which in turn he notes is based on learned society guidance (CDHW6). He concludes that the existing bus services serving this part of Ipswich constitute what is classified as a 'less frequent route' and consequently walking distances for residents of the proposed development to the nearest bus stops served by the route should be reduced to 300m and therefore supports the Appellants proposal to provide access and onsite infrastructure to allow bus penetration and offer residents convenient access to public transport. SCC consider it necessary to provide a 7-day-a-week bus service with a minimum 20-minute frequency with a planning obligation to cover the initial costs of providing the initial costs of providing such a service being requested. The Appellant has agreed in principle to the provision of such a contribution but requires to further understand the calculation of the sum (including compliance justification with CIL policy) before this is agreed, as per Section 4.1 of the signed SoCG.

4.3. Public Rights of Way

4.3.1 Para. 6.87 and 6.88 of Mr Cantwell-Forbes' Proof discusses the requirements for improvements to offsite PRoW, requested by the SCC PRoW team, to improve active travel connectivity for residents of the development proposals. Indeed, I would go further and conclude that the interventions to be facilitated by way of planning obligations will provide wider benefit to the surrounding community and Ipswich Town as a whole, and not just the Appellant's site, particularly when combined to other

wider active travel interventions / obligations agreed between the Appellant, SCC and the Local Planning Authorities.

4.4. Non-Inclusion of Ipswich Rugby Club Land

4.4.1 Mr Cantwell-Forbes' Proof Para. 6.89 through 6.91 discusses the issue of non-inclusion of land within control of Ipswich Rugby Football Club and its implications on walking, cycling and wheeling permeability between the main and eastern development parcels and the potential for the main signalised access being opposite Sidegate Lane.

4.4.2 Firstly, turning to the issue of the main site access and its location, as discussed in Para. 3.1.2 of my rebuttal is dealt with by my main proof of evidence in terms of capacity and operation. Furthermore, design issues are dealt with by Para. 5.2.2 through 5.2.6 (on visibility) and 5.3.6 through 5.3.9 on my main Proof, and the agreed position between the Appellant and SCC summarised in Section 2.2 through 2.4 and potential mitigation to Inverness Road in Section 2.5 of the signed SoCG. I see no reason to discuss this further at this juncture.

4.4.3 Moving to walking, cycling and wheeling permeability, Mr Cantwell-Forbes' evidence makes clear that far from being inadequate, the proposals as submitted on the application plan are deemed generally acceptable and therefore whether a better option exists or not (i.e. using rugby club land outside the Appellant's control) is not a material consideration. Moreover, SCC only ever requested that consideration be given to the feasibility of a contiguous segregated route between the main and eastern parcels and that the proposals could be improved if this could be secured.

4.4.4 In terms of the interconnectivity of the walking, cycling and wheeling proposals as submitted, Mr Cantwell-Forbes' evidence confirms that they present no issues in terms of highway safety.

5 CONCLUSION

5.1.1 Taking consideration of my main Proof, the Proof of Evidence prepared by Mr Cantwell-Forbes and my foregoing rebuttal; notwithstanding the matters of the highways modelling and the respective findings within the TA report, I consider that all other matters relating to access and offsite works can be resolved by way of either planning condition, s106 obligation or through the s278 technical approval process.

APPENDIX 1
VALLEY ROAD ROUNDABOUT RESULTS COMPARISON

Table TP-2.1: A1214 Colchester Road / Valley Road / Tuddenham Road Roundabout

	AM Peak			PM Peak		
Arm	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2032 Baseline – TA Results						
Colchester Rd	0.4	5.19	0.26	0.4	5.93	0.31
Tuddenham Rd (NB)	24.4	80.44	0.97	87.8	260.64	1.04
Valley Rd	0.5	7.49	0.33	0.7	8.76	0.42
Tuddenham Rd (SB)	9.8	36.15	0.91	45.8	155.33	1.01
2032 Baseline – Corrected Traffic Flow Inputs						
Colchester Rd	8.6	26.32	0.91	16.9	48.18	0.97
Tuddenham Rd (NB)	0.7	9.42	0.41	1.1	12.41	0.53
Valley Rd	13.1	45.20	0.95	39.8	113.51	1.04
Tuddenham Rd (SB)	0.7	9.24	0.41	0.9	11.19	0.48
2032 Baseline + Development – TA Results						
Colchester Rd	0.4	5.19	0.26	0.4	5.93	0.31
Tuddenham Rd (NB)	24.4	80.44	0.97	87.8	260.64	1.04
Valley Rd	0.5	7.49	0.33	0.7	8.76	0.42
Tuddenham Rd (SB)	9.8	36.15	0.91	45.8	155.33	1.01
2032 Baseline + Development – Corrected Traffic Flow Inputs						
Colchester Rd	12.3	37.84	0.94	21.7	60.05	0.99
Tuddenham Rd (NB)	0.8	10.60	0.44	1.2	13.47	0.55
Valley Rd	17.4	57.43	0.97	69.6	181.97	1.10
Tuddenham Rd (SB)	1.2	11.86	0.54	1.1	12.02	0.54

Table TP-2.2: A1214 Colchester Road / Valley Road / Tuddenham Road Roundabout Layout "Sensitivity Test"

	AM Peak			PM Peak		
Arm	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2032 Baseline – TA Results						
Colchester Rd	0.4	5.23	0.26	0.5	6.07	0.32
Tuddenham Rd (NB)	23.1	76.28	0.97	83.6	248.47	1.04
Valley Rd	0.4	6.11	0.29	0.6	6.95	0.36
Tuddenham Rd (SB)	2.7	9.79	0.73	4.1	13.83	0.81
2032 Baseline – Corrected Traffic Flow Inputs						
Colchester Rd	4.5	14.30	0.82	6.7	20.38	0.87
Tuddenham Rd (NB)	0.5	7.62	0.34	0.8	9.35	0.43
Valley Rd	3.4	12.10	0.77	5.3	17.86	0.84
Tuddenham Rd (SB)	0.4	5.22	0.26	0.5	5.98	0.31
2032 Baseline + Development – TA Results						
Colchester Rd	0.5	5.93	0.35	0.6	6.53	0.36
Tuddenham Rd (NB)	47.5	152.27	1.01	110.6	329.55	1.06
Valley Rd	0.4	6.51	0.30	0.6	7.17	0.37
Tuddenham Rd (SB)	3.0	10.52	0.75	5.6	18.10	0.85
2032 Baseline + Development – Corrected Traffic Flow Inputs						
Colchester Rd	5.5	17.54	0.85	7.7	23.54	0.89
Tuddenham Rd (NB)	0.6	8.32	0.36	0.8	9.98	0.45
Valley Rd	3.8	13.22	0.79	7.9	25.60	0.89
Tuddenham Rd (SB)	0.5	5.92	0.35	0.6	6.43	0.36

APPENDIX 2 OFFSITE ACTIVE TRAVEL INTERVENTION TABLES

Rushmere Hall Primary School

The table below shows the interventions that each party considers could be done to improve walking and cycling.

Road	Appellant "necessary" improvements	Appellant "desirable" improvements	SCC "necessary" improvements	SCC "desirable" improvements
Humber Doucy Lane	Safe crossing points from Parcel B to the west side of HDL. Safe crossing from Parcel C to south side of HDL	Tactile paving at crossing of PROW 48.	Not provided	Not provided
Sidegate Lane		Tactile paving to existing crossing point on the south side of the junction of Inverness Road (Parcel B) Tactile paving to existing crossing point at the junction of Lanark Road (Parcel B) Replacing paving with tarmac on south side between Humber Doucy Ln and Lanark Rd (Parcel B) Minimum of 3.2m shared cycle/pedestrian facility along Sidegate Lane between Humber Doucy Lane and Lanark Road (Parcel B).	Suitable tactile paving to be provided along Sidegate Lane at its junctions with: Inverness Road and Lanark Road. Minimum of 3.2m shared cycle/pedestrian facility along Sidegate Lane between Humber Doucy Lane and Lanark Road.	Not provided
Ayr Road	N/A	N/A	N/A	N/A

Road	Appellant “necessary” improvements	Appellant “desirable” improvements	SCC “necessary” improvements	SCC “desirable” improvements
Renfrew Road		Replacing paving with tarmac on north side between Ayr Road and Lanark Rd at St Christopher’s Academy (Parcel C)	Not provided	Not provided
Lanark Road		Tactile paving to the existing crossing points at junction of Renfrew Road (Parcel C)	Not provided	Not provided

Northgate High School

The table below shows the interventions that each party considers could be done to improve walking and cycling

Road	Appellant "necessary" improvements	Appellant "desirable" improvements	SCC "necessary" improvements	SCC "desirable" improvements
Humber Doucy Lane	Safe crossing points from Parcel B to the west side of HDL. Safe crossing from Parcel C to south side of HDL	Tactile paving at crossing of PROW 48. Replacing paving with tarmac on south side between Sidegate Lane and Ayr Road (Parcel C)	Not provided	Not provided
Sidegate Lane		Tactile paving to existing crossing point on at the junction of Lanark Road (Parcel B+C) As Rushmere PS plus replacing paving with tarmac on south side between Lanark Road and junction of Sidegate Lane West (Parcel B+C) Minimum of 3.2m shared cycle/pedestrian facility along Sidegate Lane between Humber Doucy Lane and Sidegate Lane West junction (Parcel B+C)	Suitable tactile paving to be provided along Sidegate Lane at its junctions with: Inverness Road, Lanark Road and Fairlight Close. Minimum of 3.2m shared cycle/pedestrian facility along Sidegate Lane between Humber Doucy Lane and Sidegate Lane West junction.	Not provided

Selkirk Road Neighbourhood Centre

The table below shows the interventions that each party considers could be done to improve walking and cycling.

Road	Appellant "necessary" improvements	Appellant "desirable" improvements	SCC "necessary" improvements	SCC "desirable" improvements
Humber Doucy Lane	Safe crossing points from Parcel B to the west side of HDL. Safe crossing from Parcel C to south side of HDL	Tactile paving at crossing of PROW 48. Tactile paving to existing crossing point on the junction of Sidegate Lane (Parcel B) Replacing paving with tarmac on south side between Sidegate Lane and Ayr Road (Parcel B)	Not provided	Not provided
Ayr Road		Tactile paving to the existing crossing points at Renfrew Road Junction (Parcel B+C)	Not provided	Not provided
Renfrew Road		Tactile paving to the existing crossing points at junction of Fife Road and Selkirk Road (Parcel B+C) Replacing paving with tarmac on west side between Ayr Road and Selkirk Road (Parcel B+C)	Not provided	Not provided

Road	Appellant "necessary" improvements	Appellant "desirable" improvements	SCC "necessary" improvements	SCC "desirable" improvements
Roxburgh Road		Tactile paving to the existing crossing point at junction of HDL (Parcel C) Dropped crossing and tactile paving at junction of Seven Cottages Lane Replacing paving with tarmac on north side between HDL and Renfrew Road.	Not provided	Not provided

Local Bus Stops on Humber Doucy Lane and Inverness Road

The table below shows the interventions that each party considers could be done to improve walking and cycling.

Road	Appellant "necessary" improvements	Appellant "desirable" improvements	SCC "necessary" improvements	SCC "desirable" improvements
Humber Doucy Lane	Safe crossing points from Parcel B to the west side of HDL. Safe crossing from Parcel C to south side of HDL	Tactile paving at crossing of PROW 48.	Not provided	Not provided

APPENDIX 3 RSK DRAWING 890695-RSK-ZZ-XX-DR-C-0005 COMPARISON WITH PARALLEL CROSSING