Town and Country Planning Act 1990
Planning and Compulsory Purchase Act 2004

Appeal by A C Goatham & Son

Land off Pump Lane, Rainham

Proof of Evidence on Access, Safety, Transport and Accessibility
Prepared by Simon Tucker BSc (Hons) MCIHT
on behalf of the Appellant

PINS Ref: APP/A2280/W/20/3259868

LPA Ref: MC/19/1566

david tucker associates
transport planning consultants

Land off Pump Lane, Rainham

Proof Of Evidence of Simon John Tucker

25th January 2021

Prepared by:

David Tucker Associates
Forester House, Doctors Lane
Henley-in-Arden
Warwickshire
B95 5AW

Tel: 01564 793598
Fax: 01564 793983
inmail@dtatransportation.co.uk
www.dtatransportation.co.uk

Prepared For:

A C Goatham and Son

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Appendices

1.0 Qualifications And Experience

1.1 My name is Simon John Tucker. I am a Director of DTA Transportation Ltd, Transportation Planning Consultants. The consultancy specialises in expert advice on transport related issues throughout a broad range of projects for both the public and private sector. In particular, our expertise lies in evolving transportation strategies, identifying solutions and negotiating agreements.

1.2 I am a Member of the Chartered Institute of Highways and Transportation, a graduate member of the Institution of Civil Engineers. I hold an Honours Degree in Civil Engineering from the University of Manchester.

1.3 I have 20 years' experience in the field of Transport Planning. I have prepared transport and traffic reviews, Transport Assessments and contributed to the process of Environmental Impact Assessment for a wide range of projects for both the public and private sector. I have appeared as an expert witness at numerous Section 78 and Local Plan Inquiries and Hearings.

1.4 I have been instructed on behalf of the appellant since April 2018. The evidence which I have prepared and provide for this appeal reference APP/A2280/W/20/3259868 in this proof is true and I confirm that the opinions expressed are my true professional opinions.

2.0 Scope and Nature of Evidence

2.1 This evidence has been prepared on behalf of the appellant in support of its appeal against the refusal by Medway Council of an application for

> "Outline planning application with some matters reserved (appearance, landscaping, layout and scale) for redevelopment of land off Pump Lane to include residential development comprising of approximately 1,250 residential units, a local centre, a village green, a two form entry primary school, a 60 bed extra care facility, an 80 bed care home and associated access (vehicular, pedestrian, cycle).."

2.2 The application was supported by a significant and detailed transport evidence base which I will refer to below where relevant. This includes the original Transport Assessment and various technical notes prepared in support the application. The applicant sought to continue dialogue with the Council's highway authority (LHA) through the process and the appropriate evidence base is set out below.

Table 1 – Submissions to Medway Council

Document	Date of issue/receipt
Transport Assessment Scoping Note (No response ever received)	20 November 2018
Transport Assessment and Framework Travel Plan submitted with application	May 2019
Draft response from Medway Council	28 August 2019
Technical Note 1 to respond to initial highway comments to include: • Stage 1 Road Safety Audit • Walking, Cycling and Horse Riding Assessment Review • Revised Framework Travel Plan	21 October 2019
Technical Note 2 to respond to further highway comments	31 October 2019
Technical 3 (20230-10a) in response to Medway's modelling of the development impact	9 January 2020

Revised Technical Note 3 (20230-10f) including to include additional junction modelling	2 April 2020
2x letters to Medway requesting further details in respect of further information on the modelling inputs and clarification on reason for refusal 6 and 7	7 and 23 July 2020
Addendum Transport Assessment	21st September 2020

2.3 More recently, since the Case Management Conference a number of requests have been made of Medway to confirm their position in respect of various matters. These are summarised below.

- 08/12/20 @ 12.53 DTA wrote to Peter Canavan repeating requests for modelling information to be provided.
- 09/12/20 @ 10.54. DTA issued first draft SOCG requesting comments by 17th December 2020
- 14/12/20 @ 16.17. Canavan responded to 08/12 letter with details of modelling and requesting further modelling from DTA on the Technical note 2 traffic flows.
- 23/12/20 @ 19.00. Canavan returned draft SOCG.
- 23/12/20. DTA responded to PC request for additional model (the first time this has been asked for) saying that we would provide the modelling provided Medway confirmed they agreed the inputs to that modelling by 4th January and undertook to respond to that within 5 working days. Medway have not provided such confirmation but for expediency have prepared the additional modelling work which was as Technical Note 4 on 15/01/21.
- 04/01/21 @ 15.48. Mr Canavan forwards additional modelling and response on HE issues.
- 14/01/21 @ 11.09. Medway issue further modelling results for 2028 design year without notification that was being undertaken.

- 15/01/21 @ 15.45. DTA returns comments on SOCG and Technical Note 4 (notwithstanding lack of response from Council).
- 21/01/21 @ 16.55. Mr Canavan email confirming Councils witnesses and the documents they intend to rely on.
- 22/01/21 @ 08/54. Mr Canavan confirmed an additional document they intend to rely on (CD 12.1).

2.4 Given exchange of evidence is due on the 25th January this has only provided the appellant with two working days notice of the final documentation to be relied upon. Furthermore, as at the time of drafting this proof of evidence the appellant is still waiting for comments on the Statement of Ground and therefore a number of assumptions are made in respect of those matters which may require rebuttal in due course.

2.5 There are a number of highway and transport related reasons for refusal and these are all considered in detailed below. By way of summary, the position in relation to each of them is set out below:

Reason 4

The applicant has failed to satisfy Highways England that the development will not materially affect the safety, reliability and / or operation of the Strategic Road Network (SRN). This is contrary the tests set out in department for Transport Circular 2/13 paragraphs 9 & 10 and the NPPF at paragraph 109.

2.6 Significant progress has been made with Highways England and the current position is that the trip generation assumptions from the site as defined in the original Transport Assessment and subsequent responses to HE are agreed. The distribution of those movements is also agreed and the absolute number of additional trips on the Strategic Road Network is also agreed.

2.7 Highways England have confirmed that they see no reason to prevent planning being granted but have recommended that Medway secure a proportional and appropriate

contribution towards Junction 4 of the M2. The appellant agrees to this and the issue is discussed in more detail below in Section 7. This reason is therefore not being pursued by Highways England.

Reason 5

The cumulative impact from the increased additional traffic cannot be accommodated on the highway in terms of overall network capacity without a severe impact. This is contrary to Local Plan policy T1 and the NPPF at paragraph 109.

2.8 Fundamentally, as I set out in detail below, Medway have applied the wrong policy test with respect to NPPF paragraph 109 and Local Plan Policy T1.

2.9 The modelling approach that Medway Council have taken is wholly flawed in that it did not properly assess the scheme which has been submitted to the Council. This has been partially rectified by the provision of the Pump Lane and Lower Rainham Transport Impact Appraisal Addendum (16th December 2020) – CD 12.3, but significant issues still remain with the work.

2.10 In short, the modelling outputs cannot be properly scrutinised and the decision maker is expected to reach conclusions on the basis of an evidence base which is un-auditable and, therefore meaningless.

2.11 The Base model on which all the Medway submissions are founded does not validate appropriately and the Model Validation Report (CD12.5) confirms that it is intended only to assess Local Plan growth, with further validation necessary if it is to be used for planning applications. That process has not been undertaken.

2.12 The inspector is therefore invited to adopt in preference the evidence base in the Transport Assessment (CD CH5.25) Addendum (Appendix 1 of CD8.1) and Technical Note 4 (CD12.7) which sets out a coherent and auditable assessment of traffic generation, distribution and detailed junction models of each of the junctions where impacts are forecast.

2.13 This work concludes that the proposed development is wholly on accordance Paragraph 109 of the NPPF and Local Plan Policy T1. Mitigation is proposed where necessary and that can be secured by planning condition.

Reason 6

The cumulative impact from the increased additional traffic from the development is unlikely to be able to create a safe highway environment. This is contrary to Local Plan policy T1 and the NPPF at paragraph 109.

2.14 In their Statement of Case (**CD9.1**), the LPA confirm that:

> 5.38 While it is not agreed that the accident assessment as set out in the original TA covered a sufficient area to enable a proper assessment to be undertaken the expanded assessment contained in the applicants Transport Addendum appended to their Statement of Case does cover a sufficient area.
> 5.39 Given the importance of road safety issues the Council's request for additional safety information was entirely appropriate. The number of accidents cannot be completely immaterial for any scheme. Although the number of accidents in the area may increase due to increased traffic volumes it is accepted that the applicant's transport addendum, supplied with the Appeal documentation, shows this development is unlikely to significantly increase accident risk.
> 5.40 Given the new information now supplied by the Appellant, the Council has decided to withdraw this reason for refusal.

2.15 On this basis it is now agreed that the application is consistent with the requirements of the NPPF 109 and Policy T1 in respect of highway safety.

Reason 7

No assessment nor technical details have been provided regarding the two new access points along Pump Lane to serve the proposed development, therefore it has not been possible to appropriately assess the adequacy of these access points. This is contrary to Policy T1 of the Medway Local Plan 2003 and paragraph 109 of the NPPF.

2.16 As set out in the Transport Assessment Addendum (Appendix 1 of CD8.1), the following drawings set out the proposals in terms of the access arrangements (Appendix E of Addendum CD8.1):

20230-05 Rev E Overall Access Strategy and Key network. This shows the overall access strategy which includes a new right ghost island junction to the north of the site to Lower Rainham Road, a connection to Pump Lane south and two interim crossing points on Pump Lane itself. The detailed plans of each arrangement are thus:

20230-05-2 Rev E – Proposed Right Turn Lane Lower Rainham Road.

20230-05-6 Rev E – Northern Pump Lane crossing arrangement

20230-05-5 Rev E – Southern Local Access / Spine Road Junction

20230-05-1 Rev E – Pump Lane Proposed Railway Bridge Improvements

2.17 The strategy and the detail contained therein was subject to Road Safety Audit Stage 1 on 18th October 2019 (Appendix F). The design office response to that is attached at Appendix G of the Transport Assessment Addendum). It is clear from the Audit that there are no substantive issues raised and all can be dealt with through the normal detail design progression at the Section 278 stage, post consent. It is demonstrated that safe and suitable access to the site can be provided (NPPF paragraph 108).

2.18 Medway confirm in their Statement of Case that :

5.44 If the Appellant can clearly set out which plans should be considered to be the definitive drawing upon which the Development Proposal should be decided, and can demonstrate that the inclusion of any new drawing would not unduly prejudice any interested party, then the Council is prepared to withdraw this reason for refusal.

2.19 The applicant confirmed by email on 23rd November 2020 that these were the correct drawings and it is therefore assumed this reason for refusal is no longer pursued. It is therefore agreed that the applicant meets the necessary tests in NPPF 109 and Policy T1 with respect of achieving appropriate and safe access for all users.

2.20 In terms of other matters, none of the reasons for refusal are specifically related to public transport, however specific comments on the bus and rail network were included in the committee report. These are as follows:

It is noted that from the Letter of Arriva, they outline no plans to change the 182 service and would recommend extending the number 1 service. It was requested that a patronage test should be provided by the applicant to ensure that the bus service would be self-sufficient without the need for bus subsidy from Medway Council. No such assessment has been provided.

2.21 Further discussions have taken place with Arriva and it has been confirmed that during the current Covid-19 pandemic period services are being maintained at pre-pandemic levels based on special government funding support. While there is uncertainty regarding exact service levels in the post-pandemic period, Arriva expect to provide services in the Medway area broadly equivalent to today's route network. In particular in relation to the development site it agreed that the core services already running to the south of site will be maintained and provide significant opportunity for residents to use them.

2.22 In order to further enhance access to public transport, Arriva have proposed the most efficient solution would be to extend the existing Service 1 (or some future variant of it) to the site. This has been costed and based on current patronage forecast will be self supporting in the long term for a development of this scale. The cost of "pump-priming" the service in the early years is agreed with Medway and this is reflected in the Statement of Common Ground.

Overall Conclusions

2.23 On this basis, my evidence demonstrates that the appeal scheme is wholly acceptable in relation to highway matters.

2.24 It is further demonstrated that in the context of the Medway Council Area as a whole, the site can be considered an accessible and wholly sustainable location for development, and residential development in particular.

2.25 This conclusion is agreed by the LHA who have confirmed no objection on such matters.

2.26 This evidence concludes that the appeal scheme is fully consistent with the requirements of Paragraphs 108 / 109 of the NPPF and Policy T1 of the adopted Local Plan in that it provides safe and secure access by all modes, direct access to public transport and local public realm improvements to reduce conflict between vehicles and other road users.

2.27 The highway safety and traffic impact issues have been fully tested through a comprehensive Transport Assessment, Addendum and Road Safety Audits. There is no credible competing technical evidence in front of the inspector that refutes this in any credible way and nor was there at the time of the determination of the original application.

2.28 On this basis, it is clear that there are no highway or transportation reasons why planning consent should be withheld.

3.0 Planning Policy Context

3.1 National Planning Policy Framework

3.1.1 In February 2019, the Department of Housing Communities and Local Government published a revised version of the National Planning Policy Framework (NPPF).

3.1.2 The reasons for refusal put forward by the Council specifically refer only to Paragraph 109 of the NPPF but clearly that part of the policy needs to be considered in the context of the document as a whole and the pertinent transport related policies are discussed below.

3.1.3 The NPPF confirms that the Government will continue to encourage sustainable development. This is highlighted in Para 10 which confirms that:

> So that sustainable development is pursued in a positive way, at the heart of the Framework is a presumption in favour of sustainable development.
>
> Para 10

3.1.4 Paragraph 11 of the NPPF expands on paragraph 10 describing how sustainable development will be encouraged.

> For plan-making this means that:
> a) Plans should seek opportunities to meet the development needs of their area, and be sufficiently flexible to adapt to rapid change;
> b) Strategic policies should, as a minimum, provide for objectively assessed needs for housing and other uses, as well as any needs that cannot be meet within neighbouring areas, unless
> i. The application of policies in this framework that protect areas or assets of particular importance provides a strong reason for restricting the overall scale, type or distribution of development in the plan area, or
> ii. Any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.
>
> For decision-taking this means:
> c) Approving development proposals that accord with an up-to-date development plan without delay; or
> d) Where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:

i) The application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed, or
ii) Any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.

3.1.5 In terms of objectives to building a strong, competitive economy, Paragraph 84 notes that:

> Planning policies and decisions should recognise that sites to meet local business and community needs in rural areas may have to be found adjacent to or beyond existing settlements, and in locations that are not well served by public transport. In these circumstances it will be important to ensure that development is sensitive to its surroundings, does not have an unacceptable impact on local roads and exploits any opportunities to make a location more sustainable (for example by improving the scope for access on foot, by cycling or by public transport). The use of previously developed land, and sites that are physically well-related to existing settlements, should be encouraged where suitable opportunities exist.

3.1.6 In specific relation to transport issues it is confirmed that:

> Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:
> a) The potential impacts of development on transport networks can be addressed;
> b) Opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised- for example in relation to the scale, location or density of development that can be accommodated;
> c) Opportunities to promote walking, cycling and public transport use are identified and pursued;
> d) The environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and
> e) Patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.
>
> Para 102

3.1.7 The NPPF sets the following test in relation to development:

> All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.

> In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:
>
> - Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;
> - Safe and suitable access to the site can be achieved for all users; and
> - Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.
>
> Para 108

> Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.
>
> Para 109

3.1.8 The policy test in terms of new development in the NPPF relates to the need to ensure high quality access by all modes and that traffic impacts are not severe whilst cost effectively limiting infrastructure. To ensure high quality development, NPPF confirms that:

> Applications for development should:
>
> - Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;
> - Address the needs of people with disabilities and reduced mobility in relation to all modes of transport;
> - create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
> - allow for the efficient delivery of goods, and access by service and emergency vehicles; and
> - be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.
>
> Para 110

3.2 The Development Plan

3.2.1 The Reasons for Refusal specifically refer to Policy T1 of the Medway Local Plan 2003 – Impact of Development which is set out below:

In assessing the highways impact of development, proposals will be permitted provided that:

(i) the highway network has adequate capacity to cater for the traffic which will be generated by the development, taking into account alternative modes to the private car; and

(ii) the development will not significantly add to the risk of road traffic accidents; and

(iii) the development will not generate significant H.G.V. movements on residential roads; and

(iv) the development will not result in traffic movements at unsociable hours in residential roads that would be likely to cause loss of residential amenity.

3.2.2 Only the first two tests of Policy T1 are relevant to the proposed development given that points (iii) and (iv) relate specifically to HGV and operational impacts.

3.3 Conclusions

3.3.1 The key policy tests in NPPF/ DfT Circular 02/13 require the LHA and HE to give full consideration to the mitigation measures proposed by any development including Travel Planning and capacity / safety enhancements (Para 108a). The scale of such mitigation needs to be cost effective and appropriate (Para 108c).

3.3.2 The key considerations under relevant NPPF policy, as follows:

Test 1 – Have appropriate opportunities to promote sustainable transport modes been taken up, given the type of development and its location;

Test 2 – can safe and suitable access to and within the development be satisfactorily achieved for all people; and

Test 3 – can the impact of the development (including the impact of traffic) be safely and satisfactorily accommodated or mitigated?

3.3.3 The key tests in Policy T1 of Medway Local Plan differ in that they require a higher test than NPPF in terms of traffic impact stating: "The highway network has adequate capacity to cater for the traffic which will be generated by the development".

3.3.4 In terms of safety the test is that the development should not significantly add to the risk of road traffic accidents.

3.3.5 These are considered in turn below, and then I follow with responses where appropriate to third party representations to the appeal.

4.0 NPPF Test 1 – Site Accessibility

4.1 Introduction

4.1.1 Key to minimising the potential for car borne trips to the development is the availability of local services and public transport provision. The following section outlines the accessibility of the proposed development to local services available in Medway and broader services including employment and education available via walking, cycling and public transport infrastructure.

4.1.2 The context of the site in terms of local facilities and the town centre is shown on **Appendix ST 1**.

4.1.3 In terms of the broad accessibility to existing services, it is generally accepted that walking offers the greatest potential to replace short car trips, particularly for trips less than 2 km. Further, a cycling distance of 5 km is acknowledged as being representative of an acceptable cycling distance for most cyclists, particularly for journeys to work.

4.1.4 Paragraph 4.4.1 of Manual for Streets (Dft, 2007) confirms that:

> "Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes' (up to about 800 m) walking distance of residential areas which residents may access comfortably on foot. However, this is not an upper limit and PPS13 states that walking offers the greatest potential to replace short car trips, particularly those under 2 km. MfS encourages a reduction in the need to travel by car through the creation of mixed-use neighbourhoods with interconnected street patterns, where daily needs are within walking distance of most residents."

4.1.5 The most recent CIHT guidance with regard to walking is the 2015 guidance "Planning for Walking" (CD12.8) which is aimed at both planners and traffic managers to address the limited amount of guidance on providing for walking. This guidance sets out, amongst

other things that;

> The needs of pedestrians should be prioritised and this includes people with protected characteristics such as the elderly and disabled;
>
> Land use planning is the most important long-term solution to both our strategic and practical transport needs;
>
> Walkable neighbourhoods have a typical catchment of about 800 metres or 10 minutes walk;

4.2 Pedestrian and Cycle Facilities

4.2.1 The applicant has been subject of a detailed review of walking and cycling facilities as report in the WHCAR as set out in Appendix J of Technical Note 1.

4.2.2 Existing walking and cycling facilities within the immediate vicinity of the site are limited especially regarding Pump Lane which runs through the centre of the site. Pump Lane is a narrow single lane which does not currently have the capacity to accommodate for cyclists or any footway provision.

4.2.3 The walking and cycling provisions existing along Lower Rainham Road are variable. There are no designated cycle lanes along the carriageway meaning that cyclists are required to share the carriageway with motor vehicles. From approximately 1.1km west of the proposed sites north western boundary the speed limit of Lower Rainham Road changes to 40mph which compromises cyclist safety especially under shared use. Where Pump Lane meets Lower Rainham Road the carriageway narrows to a single lane where passage of vehicles is controlled by filter lights, this continues for approximately 200m and is not appropriate for cyclist use.

4.2.4 West of the site there is a smooth tarmac footway provided on one side of the carriageway (either southside or northside) at any one point. Where Pump Lane meets Lower Rainham Road this footway provision increases to existing on both sides of the carriageway. These footways are approximately 2.0m wide in compliance with Manual for Streets. The footway

reduces significantly to the east of Pump Lane. However, this is not a desire line from the development.

4.2.5 To the south of the site upon passage under the rail line, footways are established on both sides of the carriageway as Pump Lane widens and becomes a two-way carriageway. The footway provisions existing throughout Lower Rainham are more than adequate, footways are wide commonly with large grass verges between the roadside and footway. Signalised crossings are implemented regularly throughout the local highway network and dropped tactile paving where pedestrians have to cross roads in order to ensure safe crossing.

4.2.6 There are no designated cycle lanes on-road throughout the town and this is something which could be improved in the long term. Despite this the National Cycle Route (NR) 1 runs into Lower Rainham from the east, routing north along Berengrave Lane where it meets the Medway River path. This NR 1 is located approximately 1km east from the sites northern boundary allowing easy access to this off-road traffic free National Route.

4.2.7 It has been stated in the Rainham Vision Document 2018 that an important aspect of the proposed development is "full integration with the wider area, where key routes could provide highly sustainable access to both Lower Rainham and Lower Rainham railway station for pedestrians and cyclists". The document goes on to say that "Development at the site provides the opportunity to contribute towards enhancing the delivery of a comprehensive network of pedestrian and cycle routes and facilities both within the site and Lower Rainham as a whole".

4.2.8 The walking and cycling strategy for the site promotes these travel modes to reduce use of the private car. Given the proximity of the site to local centres, walking and cycling have the potential to be attractive alternatives to the private car. There are associated health and lifestyle as well as community benefits that would also come about from this transition.

4.2.9 An established network of footways and crossing points throughout the local area provides

direct and convenient access to a range of facilities and public transport connections. With regard to the latter, bus stops served by frequent services operate in close proximity to the sites southern boundary and rail services are accessible within walking/ cycling distance of the site. Measures to delivering enhanced connectivity between the proposed development and local services are identified below.

4.2.10 In terms of existing local pedestrian crossing facilities, dropped kerbs and tactile paving is provided along Lower Rainham Road, north of the site and Beechings Way, south of the site. There are also several clearly marked zebra crossing facilities along Beechings Way.

4.2.11 Key to promoting walking and cycling is the design of the development – specifically that the environment addresses actual and perceived safety issues. Underlying this is an emphasis on place making with a user hierarchy which places pedestrians at the top reflecting the ethos extolled by Manual for Streets (MfS).

4.2.12 It is important that the site is integrated into the existing built-up area both to ensure that there is a coherent network of routes, and to ensure that there are not external issues that would undermine the efforts to encourage walking and cycling within and to/from the site. This is achieved by identifying gaps in the provision for pedestrians and cyclists on the local road network.

4.2.13 Foot/ cycle access to the proposed development would be achieved through a number of connection points, as indicated on the illustrative masterplan including:

- Via the proposed vehicle access from Lower Rainham Road
- Via a series of footpath links to the site including from Lower Rainham Road (north), Lower Bloors Lane (east), and Lower Twydall Lane to the (west);
- Via the proposed vehicle access from Beechings Way and on to Pump Lane (south).

4.2.14 These connections to the north, east, south and west will provide a good level of connectivity to the local area and nearby facilities. The location of local facilities are shown

on Figure 4. Furthermore, the footway and cycleway links proposed within the site itself is extensive.

4.2.15 With regards to cycling, the National Cycle Route 1 runs into Lower Rainham from the east, routing north along Berengrave Lane where it meets the Medway River path. This National Route 1 is located approximately 1km (at its closest point) east from the sites northern boundary allowing easy access to this off-road traffic free route.

4.2.16 With regard to the development site, it would be designed to facilitate foot and cycle movements along desire lines through the development, linking to the external access points. This will include the provision of the following where appropriate in line with the DfT's MfS and MfS2:

- A good level of street and path lighting;
- Warning signs prior to junctions;
- On-site roads will be designed to 20mph;
- Tactile and coloured surfacing;
- Safety kerbing;
- Reduced junction mouth widths to promote slower vehicle speed where appropriate; and
- Signage to direct pedestrians and cyclists to key facilities and places of interest, including distances.

4.2.17 A mix of cycle parking facilities will be provided at the development to comply with local standards and will be designed and tailored to the likely needs of future occupants. Cycle parking will be provided within the confines of a dwelling/ garage, or alternatively provided in secure, well lit, covered cycle storage facilities.

4.3 Public Transport Network

Bus Services

4.3.1 Public transport access to the development will be via the two main vehicular access points to the north and south of the site. Traditionally bus stop walk distances have been set at 400m. In a practical sense people will clearly walk further than that to reach a bus stop.

4.3.2 As shown on the plans at **Appendix ST3**, around 80%of the site will be within 800m walk distance of the significant services running along Beechings Way. This is consistent with the limit set by:

> CABE, 2001 [CABE, 2001: 'Better Places To Live By Design: a companion guide to planning policy guidance 3'; London: Thomas Telford.] identifies 800m as being a threshold distance for access to facilities on foot and "... opportunities to reach more distant facilities by public transport."
>
> DfT, 2007 ['Manual for Streets'] defines walkable neighbourhoods as "... having a range of facilities within ... up to about 800 m ... walking.

4.3.3 In reality, more than half of existing bus users across the Country walk over 480m, i.e. around 6 minutes, to where they board their bus; one-in-six walk around 800m, i.e. around ten minutes, or further. In this case it is considered that quality of service is as important as walk distance, particularly here where the topography is flat.

4.3.4 The matter of walk distances to bus stops has been considered at four appeals since the publication of NPPF as follows:

> Land off Iveshead Road, Shepshed, Leicestershire': 75 dwellings; Morgan, 2012 [APP/X24IO/Af12/2177327]. Appeal Decision paragraph reference 14 – 20 (**Appendix ST2**).
> Land off Church Road, Webheath, Redditch':200 dwellings; Kirkbride, 2014 [APP/Q1825/Nl3/2205688]. Appeal Decision paragraph reference 47 – 54

(**Appendix ST2**).

Land south of Knockhall Road, Greenhithe', Kent: 40 dwellings; O'Rourke, 2014, [APP/R2215/Nl3/2203710]. Appeal Decision paragraph reference 21 – 26 (**Appendix ST2**).

Land West Of Knights Hill Village, Grimston Road, South Wootton, Norfolk: 600 dwellings; Barrett and SoS, 2020 [APP/V2635/W/19/3237042]. Appeal Decision paragraph reference 164 – 168 (**Appendix ST2**).

4.3.5 All four appeals dismiss concerns regarding walking distances to public transport purporting to render the sites inaccessible. They conclude that walking distance to bus stops being in excess of a local authority's policy preference does not in itself render the sites as being unstainable in transportation terms, and that the nature of the public transport offer and thus the overall accessibility of the site must be considered.

4.3.6 Public Transport is clearly and sufficiently addressed in the Transport Assessment. In summary, a high quality 10 minutes bus service (the Service 182 – see Table 1 of the TA running to the south of the site would fall within a reasonable walking distance of 80% of the houses on the development. This is highlighted in the plans at **Appendix ST 3**.

4.3.7 The bus service connects to the Town Centre and Chatham Station.

4.3.8 A significant proportion of the site can therefore be served without the need for changes to the local service network. Changes might nonetheless provide betterment both in terms of the development and also the wider area.

4.3.9 On this basis, discussions were held in late 2018/early 2019 with Arriva about the scope for further improving the existing bus service. Since then further discussions with Arriva have been undertaken and these confirm the following.

4.3.10 It is agreed with Arriva and the Council as reported in the SOCG that the most appropriate way to serve those areas of the site which are more remote from the services to the south will be to extend Bus Service 1 which currently terminates at The Strand will continue

along Lower Rainham Road into the site to the north.

4.3.11 To the south there is more than adequate existing bus provision within walking distances of the site via service 182 and 101. The existing and proposed bus services are shown on the attached plan.

4.3.12 In terms of the detail, the implementation of the changes will depend on the timing and phasing of delivery. It is assumed that housing development will commence to the south of the site and therefore the new service will not be required from day 1.

4.3.13 It is proposed that the service be triggered on the basis of "more than 100 dwellings more than 500m from an existing bus stop south of the railway line" Given the need to provide in particular peak hour rail connections, the extension is likely to start off as a peak only service and then be expanded to an all day service.

4.3.14 Arriva have confirmed that this can be delivered with a single additional bus. An assessment has been undertaken of patronage for the site when fully occupied and this is shown below in the Tables below:

Step 1 All Modes Trip Forecasts				
			Trips	Source
All Modes	Trip Rate / Dwelling	07h-19h	7.883	DTA Tranport Assessment Appendix G:
	Trips, 7am-7pm		9,854	
Weekday:	All-Day Factor		1.151	National Travel Survey, Table 0503
	Trips, 24-hours	00h-23h	11,342	
Weekend Factors				
Saturday	Trip volume cf. Weekday		0.900	National Travel Survey, Table 0504
	Trips, 24-hours	00h-23h	10,210	
Sunday	Trip volume cf. Weekday		0.728	National Travel Survey, Table 0504
	Trips, 24-hours	00h-23h	8,260	
Annualisation Factors				
Weekdays exc. PH			253	days/year; 365 less 104 Weekend and 8 Pub/hol.
			2,869,500	
Saturdays			52	days/year
			530,900	
Sundays & Public Holidays exc. Xmas			58	days/year; 52 plus 6 Pub.Hol [not Xmas and NY].
			479,100	
Annual Total			3,879,500	

Step 2 Bus Patronage Forecasts				
			Trips	Source
All Modes	Annual Total	all days	3,879,500	Table 1 [above]
Public Transport:				
Bus Mode Share	South-East England		3.15%	National Travel Survey, Table 9903
Bus Trips		annual	122,200	
Train Mode Share	South-East England		2.57%	National Travel Survey, Table 9903
Train Trips		annual	99,700	
Bus Share of Rail Access/Egress			33.3%	Consultants assumption: dawing on ATOC Station Travel Plans research and local circumstances.
Bus-Rail Feeder Trips		annual	33,200	
Bus as Main Mode		one-way trips	122,200	
Bus as Rail Feeder		one-way trips	33,200	
Bus Trips, Main and Feeder		annual	155,400	
Average fare revenue per boarding			£1.10	Consultants assumption: based on previous analysis for Arriva service in comparable area.
Fare Revenue, All Bus Trips		annual	£170,900	

4.3.15 This shows that at full occupation and current prices, the site will generate around £170,000 of revenue per year. This is in excess of the cost which will range from £85,000 to £165,000 per year and is hence sustainable without ongoing subsidy.

4.3.16 This conclusion is consistent with Arriva's own significant experience as reported in their letter attached at **Appendix ST4**.

4.3.17 It is also important to note that these forecasts are based on DTA's assessment of trip rates which are lower than the rates Medway have adopted in their modelling. On that basis the figures provided are clearly robust.

4.3.18 There will be the need for initial 'pump-priming of services and based on a built out of 10 years for the whole development.

4.3.19 It is therefore proposed that the development will be subject to a planning obligation which secures the extension of the #1, or its future equivalent under a service support contract; and to ensure the developer provides adequate funding to allow that to be implemented.

4.3.20 The subsidy requirement for service provision achieved through deployment of one additional bus, with fare revenue to be off-set against operating cost. Based on our agreed forecasts with Arriva this suggests a cap to that funding liability of £736.7k.

School Travel

4.3.21 The Medway Council has adopted the MY school bus service, providing local school students who attend schools within the Medway district with specific bus services to their school destination.

4.3.22 In order to use these bus service students are required to have a MY school bus pass. The purchase options and costs of this pass are as follows:

- *One term £51.30*
- *Two terms £97.40*
- *Six terms (full school year) £276.80*

4.3.23 Each MY bus service provides access to different schools within the Medway district. The MY2 and MY3 services run from Gillingham to Rainham Mark Grammar School and Rainham Girls School. The MY4 service runs to the Rainham Mark Grammar School from

Wigmore. The MY5 and MY7 services run to Rainham Mark Grammar School from Wigmore and Hempstead respectively.

4.3.24 Each of the MY school bus services operates a single morning 'home-to-school' operation and a single afternoon 'school-to-home' operation. In addition to this service the regular bus services such as the 715 or 116 can be used by students who wish to access schools including St John Fisher School and the Holcombe Grammar School which are both over 3 miles away from the proposed development site.

Rail Services

4.3.25 Chatham Station is considered to be the most likely used by new residents of the site as it provides frequent high speed travel to London as well as local services. It will be accessible from the site by both the existing services 101) and the proposed extension to Service 1).

4.3.26 The station lies on the principal south east rail route. Train services are available directly to and from the main regional centres at London and Dover. These destinations provide access to regions further-a-field including north west from London to Birmingham and Manchester for example. Selected towns/cities that are served directly are presented in Table 3, with a summary of the weekday service level. This shows a good frequency to key employment, higher education, retail and personal service centres. On-board journey times are short relative to car travel.

Table 1 – Train Services from/to Selected Towns/Cities from Chatham

Destination	Frequency [1], trains/hour			Typical Journey Time minutes
	Peak [2]		Inter-Peak	
	To	From		
London (stations)	5	3	3	1hr 3mins
Dover Priory	3	2	2.5	46mins – 1hr 32mins
Ramsgate	2	2	2	56mins - 1hr
Faversham	4	5	2	16mins
Notes:				
1. Includes both direct trains and departures with a change of train.				
2. To-destination based on AM; From-destination based on PM				

4.3.27 To the south, Rainham train station is located approximately 2.5km south east of the proposed development site which is well within walkable and cyclable distance (29 and 8 minutes respectively). It can be accessed via Pump Lane and lower Rainham Road to the north or Pump Lane and Beechings Way/ Tufton Road to the south. Bus service 783 and 131 stop at the station access.

4.3.28 The station is operated by Southeastern rail and provides a number of facilities to travellers. There are enough bicycle parking stands to store 64 bikes securely, and a car park which has 233 spaces including 4 accessible spaces. The car park is in operation 24 hours a day between Monday and Sunday. Parking charges apply and are summarised in Table 2 below.

Table 2 - Summary of Train Station Car Parking Cost – Rainham Station

Time	Cost
Daily Rate	£5.00
Off Peak Rate	£4.50
Saturday	£2.80
Sunday	£1.00
Weekly	£22.10
Monthly	£81.50
3-month	£243.60
6-month	£486.20
Annual	£847.40

4.3.29 Clearly, on the basis of these costs, public transport access to the stations would be more preferable than new residents driving and parking. There is therefore considered there will not be significant parking demand generated by the site.

4.4 Access to Local Services

4.4.1 Twydall local centre is located around 1.4km from the centre of the site and includes a Co-op, Spar, Costa Coffee, Post Office, Library, Chemist and hot food takeaway facilities. All of these facilities are well within walking distances for all residents.

4.4.2 A local centre is also located off Beechings Way around 2km from the centre of the site. Facilities include a Co-op, McDonalds, vehicle repair centre, hair and beauty shop and Gillingham Surgical Centre.

4.4.3 Rainham High Street and Rainham Shopping Centre is located around 2.3km from the centre of the site. Facilities include Tesco Metro, Wilko, Iceland, Boots, banks, eateries and hot food takeaways.

4.4.4 The nearest larger supermarket is Tesco Extra located around 2km from the centre of the site at the Bowaters Roundabout. There are also other facilities in this location including Aldi, Iceland, Dobbie's Garden Centre, Pets at Home, B&Q, Screwfix, Furniture Village and hot food takeaways.

4.5 Education

4.5.1 The site proposals will include a primary school which will serve the majority of residents. There will also be some trips off-site with the resulting trips to access the local schools.

4.5.2 Given the timing for educational trips, these will overlap with the network AM peak hour, indeed according to the national travel survey (2008) around 43% of trips in progress during the AM peak (08:00 – 09:00) are school related.

4.5.3 The nearest primary school is Thames View Primary School located on Beechings Way south of the site within a walking distance of 1km. Twydall Primary School is located on Sturry Way approximately 1.5km walking distance from the centre of the site. Further afield, Riverside Primary School is located on Wakeley Road around 3.0km from the site.

4.5.4 In terms of secondary schools, the Rainham Mark Grammar School is located on Pump Lane south of the site by around 770m within walking distance. The Howard School (boys school) and Rainham School for Girls are located adjacent to one another are situated on Derwent Way south of London Road by around 2.6km from the centre of the site.

4.6 Employment

4.6.1 There is a significant and local employment areas the area and the data agreed with HE in relation to highway impacts confirms around 65% of all peak hour journey to work trips will be within Medway.

4.6.2 Small scale industrial units are located north of Beechings Way around 2km from the centre of the site.

4.6.3 Gillingham Business Park is located off the A2 Sovereign Boulevard around 3km from the centre of the site. Further employment floorspace is located on the eastern side of Hoath Way.

4.6.4 Rochester Airport Industrial Estate is located adjacent to the A229 Maidstone Road located around 9.8km from the centre of the site.

4.6.5 Significant areas of employment floorspace are located on the Medway City Estate across the River Medway and around 8km from the centre of the site. Further employment floor space is located adjacent to the A228 Cuxton Road around 10km from the centre of the site.

4.7 Summary

4.7.1 It is clear from the above that Medway and Rainham as settlements have excellent transport links including public transport, with bus, foot and cycle links within the settlement connecting well to adjacent communities and good road links to the principal road network. The need to travel however is significantly reduced by the facilities already available within the local and surrounding areas.

4.7.2 As part of the development proposals, the developer will be required to finance the provision of a Travel Plan including sustainable travel information packs for every household within the development. This information pack will provide site specific information of sustainable travel options available to new residents.

4.7.3 The site itself proposes a range of local facilities within the site including a primary school and a local centre for uses A1, A2, A3 and/or A5 (600m²) with the total quantum of A1 net sales area not to exceed 279m2 in the alternative, D2 community floorspace (upto 500m²), open space, formal sports pitches. All of these will be within ready walk distance of all new occupants and provide benefit to existing residents to the immediate west of the site.

4.7.4 Whilst the precise detail of these facilities are not fixed by the outline they will clearly be of benefit to existing and new residents of the area.

4.7.5 The site is well located with respect to accessing education and is within acceptable access. Retail, health and leisure accessibility has been considered. Accessibility by all modes is very good and a convenient supermarket, shops, dentist surgery and in total a range of different services and facilities, which are within the average trip lengths from the NTS as a whole.

4.7.6 The development will fund improvements to local bus services which will not only serve the site but also improve bus services for existing residents.

4.7.7 Overall given the good locational benefits of the site, it is concluded that the development of the site is in full accordance with the transport policy objectives and would make an important contribution to sustainable development within the wider Council area. The proposed development therefore fully meets the requirements of the first test as set out above.

4.7.8 In this regard therefore the proposed development is in full accordance with the NPPF 108/109 and with Policy T1.

5.0 NPPF Test 2 – Can safe and suitable access to and within the development be satisfactorily achieved for all people?

5.1 Access Arrangements

5.1.1 The overall access strategy for the site is set out in the Addendum TA and this confirms the strategy as discussed above for all modes.

20230-05 Rev E Overall Access Strategy and Key network. This shows the overall access strategy which includes a new right ghost island junction to the north of the site to Lower Rainham Road, a connection to Pump Lane south and two interim crossing points on Pump Lane itself. The detailed plans of each arrangement are thus:
20230-05-2 Rev D – Proposed Right Turn Lane Lower Rainham Road
20230-05-6 Rev E – Northern Pump Lane crossing arrangement
20230-05-5 Rev E – Southern Local Access / Spine Road Junction
20230-05-1 Rev E – Pump Lane Proposed Railway Bridge Improvements

5.1.2 The proposals were subject to an independent Road Safety Audit (Appendix F and G of **CD8.1 - Appendix 1**). The audit covered all matters including vehicular and non-motorised user access. All except three of the recommendations of the Audit were accepted.

5.1.3 It is clear from the Audit that there are no substantive issues raised and all can be dealt with through the normal detail design progression at the Section 278 stage, post consent. It is demonstrated that safe and suitable access to the site can be provided (NPPF paragraph 108 and Policy T1).

5.1.4 The Council have confirmed this is acceptable and have withdrawn Reason for Refusal 7 as a result.

5.2 Wider Accident Assessment

5.2.1 In terms of safety on the network, the Transport Assessment Addendum (**CD8.1** at **Appendix D**) includes a thorough assessment of the existing highway safety issues on the local highway network.

5.2.2 It confirms that the extent of the accident assessment as set out within the TA is wholly appropriate to enable a proper judgement as to whether the development complies with Policy T1 and NPPF Para 108/109.

5.2.3 Notwithstanding this the assessment was widened to cover the main carriageways and junctions connecting to A2 and Ito Way as requested by the LHA.

5.2.4 The LHA initial raised concerns with accidents at the A2/ Ito Way roundabout (Will Adams Roundabout) and at the A289 Yokosuka Way/ Cornwallis Roundabout in particular, the LHA comment that, "they have significant concerns that, with the substantial forecast increase in vehicles, incidents are more likely to occur."

5.2.5 The LHA had not addressed the accident data in terms either of significant addition, or rather, unacceptability in safety impact terms, as national policy advises it must do. The assessment demonstrates that the recorded number of accidents is not significant and there is no evidence to suggest that the development proposals will "significantly add to the risk of road traffic accidents" (Policy T1) nor will it have an unacceptable impact on road safety (NPPF Para 109).

5.2.6 This comprehensive assessment demonstrates that the recorded number of accidents is immaterial, and certainly not significant. Similarly, there is no evidence to suggest either that the development proposals will "significantly add to the risk of road traffic accidents" (Policy T1) or that it will have an unacceptable impact on road safety (NPPF Para 109).

5.2.7 In respect of accident data on Lower Rainham Road and Pump Lane, these were reviewed as part of the TA. Accident data on Beechings Way and Pump lane adjacent to the A2 is

reviewed in this note. A review of each of these locations does not give rise to any objectionable concerns in policy terms.

5.2.8 Furthermore, the accident rate at the main junctions on the A2 and Ito Way are below national accident rates. The assessment this confirmed that there will be no adverse impacts justifying refusal and subsequently, there is no firm evidence to substantiate reason for refusal 6.

5.2.9 Medway have now agreed that assessment and withdrawn RfR6.

5.2.10 Overall therefore there are no constraints to provide safe and appropriate access to all modes. The proposed scheme has been subject to significant and appropriate scrutiny both by the highway authority and independent Road Safety Audit. I agree with those conclusions and it is clear that the proposals are fully compliant with the policy test.

5.2.11 In this regard therefore the proposed development is in full accordance with the NPPF 108/109 and with Policy T1.

6.0 Test 3 – can the impact of the development (including the impact of traffic) be safely and satisfactorily accommodated or mitigated?

6.1 Introduction

6.1.1 This issue is the only one where there is any substantive disagreement between the LPA and the appellant in respect of transport matters. There are two competing appraisals in front of the inspector to consider and they reach different conclusions.

6.1.2 From the appellants perspective the traffic impact of the development was considered in detail in the Transport Assessment (**CD CH5.25**) and Transport Assessment Addendum (**Appendix 1 of CD8.1**). This process following an appropriate approach of setting out, in detail, the traffic generation of the site on a first principles basis. That approach has been agreed with Highways England and was not disputed by the LHA during the determination of the application.

6.1.3 The Appellant's approach to traffic generation is reflected in the Transport Assessment (Section 5, Page 30 onwards). This was subject to some minor amendments in detail, following queries raised by Medway Highways during the consideration of the application. These changes are reported in Technical Note 1 and 2, with the final traffic forecasts set out in Table 2 of **CD6.7** 20230-09 Technical Note 2 dated October 2019.

6.1.4 These documents have been prepared following discussions with Medway Council in respect of overall traffic generation.

6.1.5 The Appellant's assessment has responded to all comments, queries and concerns raised by Medway Council during the determination of the application.

6.1.6 The Appellant's assessment is understood to be agreed by Medway Council in terms of method and output.

6.1.7 Medway Council has not provided any evidence in support of any response made to the

Appellant's assessment, refuting either the inputs or the outputs of the Appellant's assessment.

6.1.8 It is agreed that notwithstanding a concern, formerly expressed about inputs (principally person trip generation assumptions), the approach adopted by the Appellant satisfies Planning Practice Guidance, at paragraph: 014 Reference ID: 42-014-20140306 and at paragraph: 015 Reference ID: 42-015-20140306.

6.1.9 The traffic generation of the site was then distributed onto the local and wider network using established methodologies, including Census data for journey to work trips and detailed consideration of other destinations such as leisure, education and retail. Again that approach is agreed with Highways England and was not disputed by the LHA during the determination of the application.

6.1.10 Committed development was included at the request of Medway. This included applying growth based on TEMPRO forecasts (Para 6.1.1 of the TA **(CDCH2.25**) This also allowed for five specific residential developments at the request of the LHA. A future forecast year of 2029 was adopted in agreement with Medway.

6.1.11 The assessment of impacts at individual junctions was undertaken using industry standard software packages.

6.1.12 Within a transport planners toolkit are a range of traffic modelling programmes that can used to represent roads networks or individual junctions. On a local level programmes such as Junctions and LINSIG are routinely and appropriately applied for the operation of individual junctions typically based on demand flows.

6.1.13 These models, which have be used by the appellant are well established and based on UK empirically derived relationships between junction geometry and capacity.

6.1.14 Whilst on a regional level are assignment models are routinely applied these typically have a more abstract structure but are capable of routeing traffic within a network. Unless the

model is clearly and accurately validated to junction level of detail (including localised geometrical parameters) they should always be assessed against more accurate localised models.

6.1.15 A number of localised junction improvements were identified and included in the mitigation package for the works. On the basis of those improvements the Transport Assessment concluded the scheme could be properly accommodated in the context of the requirements of NPPF Para 108/109 and Policy T1.

6.1.16 Medway Council have provided no evidence or response to that assessment which refutes either the inputs nor the outputs of the assessment.

6.1.17 The extent to which it remains agreed or not is unclear and Medway have consistently failed to set out their position in that regard. All issues raised by Medway during the determination of the application were responded to in the three technical notes (20230-08a Technical Note 1, 20230-09 Technical Note 2 and 20230-10f Technical Note 3,), which, unhelpfully have never been formally commented on.

6.1.18 Most recently, in their letter of 14th December 2020, Medway query the fact that the junction assessments provided in the Transport Assessment have not been updated since to reflect the slightly higher trip rates presented in the subsequent Technical Note 3. The reason for that is clearly set out in Technical Note 3. Medway considered it would be more robust to assess those junctions where their model showed an impact using their flows. That was duly undertaken and the results presented in Technical Note 3 (**CD6.11**).

6.1.19 The assessments have been updated at the request of Medway Council based on the higher trip rates in Technical Note 3. These are reported in Technical Note 4 (**CD12.5**).

6.1.20 These confirm the conclusions of the Transport Assessment. Those assessments show all the junctions tested to be operating within capacity subject to localised improvements which can be secured by planning condition. These are shown on **Drawings 20230-10A** and **20230-09A** as attached at **Appendix ST 5**.

6.2 Medway Alternative Assessment Approach

6.2.1 Notwithstanding this Medway have submitted an alternative approach to assessment based on their Aimsum model. Some limited outputs were provided from this model during the determination of the application on 6th December 2019 as a power point presentation.

6.2.2 The appellants response to that is presented in Technical Note 3 (**CD6.11)**. The modelling presented at the time was incomplete and unclear, but seemingly assesses a future year of 2035. This differs significantly from the agreed future year assessments as set out above of 2029.

6.2.3 Following a request by myself on 7th July 2020 for more detailed to be provided to allow the model to be interrogated in a proper fashion, I (finally) received a model report on the 26th October 2020 (although report itself is dated 5th October 2020). Further data was provided by the council in their letter of 14th December 2020 which I will refer to below.

6.2.4 The version of the model which the Council now seek to rely on is clearly different from that on which the Council originally considered the application, as it now adopts a future year assessment of 2037. The reason for that change is not explained.

6.2.5 There are now four model reports in front of the inquiry (**CD12.1, 12.2, 12.3 and 12.4**). These cover different design years (including 2028) and assess the DTA trip rates. It is not clear at the time of writing which report Medway consider should be used to consider overall development acceptability.

6.2.6 However, there are a number of fundamental issues with the basis of the report which means it has little or no relevance in determining the appeal and the report and findings clearly lack credibility.

6.3 Trip Rate Assumptions

6.3.1 The traffic generation adopted by the Council in their modelling report is based on Trip rates as described in the Pump Lane and Lower Rainham Transport Impact Appraisal 05.10.20 (Tables 6 and 7 of CD12.1)

6.3.2 These are based on person trip assessments which are said to have been derived from the TRICS database. However the detailed TRICS assessment reports which inform the trip rates adopted were only provided on 14th December 2020. Review of those TRICS outputs confirms that they include a number of specific elements (i.e bungalow) sites, which Medway specifically asked us to exclude from our assessment.

6.3.3 On that basis there is clearly inconsistency in terms of Medways approach to their own modelling and what they sought from the applicant. This is unreasonable.

6.3.4 Furthermore the Council's approach makes no allowance for internalisation of trip movements nor indeed the fact that many of the car trips that are generated will be local to site. All trips are distributed on the basis of Journey to Work data and this therefore applies an unreasonable over estimation of traffic generation on the wider network. The capacity conclusions reached should therefore be treated with significant caution.

6.3.5 For clarity the difference in flows adopted by the two methods are set out below and it is clear that the councils approach significantly and unreasonably over-estimates demand.

Table 3 – Vehicle Trip Generation Comparison

	AM Peak			Pm Peak		
	In	Out	Total	In	Out	Total
DTA	187	398	585	365	193	558
Sweco	175	624	799	497	307	803
Difference	-12	+ 226	+ 214	+ 132	+ 114	+ 245

6.3.6 The Select Link Analysis provided with the model report proports to show the distribution

of development generated traffic on the network. It does not and that is confirmed by the clarification note provided by Medway on 18th November 2020 (CD12.6). That confirms the flows all movements form the local zone (554) as shown below.

6.3.7 The flows are therefore overstated by around 30%. Flows on the Select Link Analysis also show traffic from the site using Lower Bloors Lane. This is a minor cul-se-sac serving a dozen or so properties and the allotments at the eastern edge of the site. No vehicular access is proposed to that road and therefore on a basic level the model mis-represents the development being tested to the point it can be given no weight.

6.3.8 These flaws are said to be addressed in **CD12.3** (Pump Lane and Lower Rainham Transport Impact Appraisal Addendum – 16/12/20) and **CD12.4** Pump Lane and Lower Rainham Transport Impact Appraisal Addendum 2 (2028 results).

6.3.9 Given the above and if any weight is to be placed on the Medway model, that should be

based on Scenario 3 in CD12.3 and Scenario 6 in CD12.4.

6.4 Model Validation

6.4.1 A model validation report (CD12.5) has been provided (dated 8th June 2017). Medway's response of 14th December 2020 confirms that the model was prepared originally to provide an evidence base for the Local Plan. Whilst it is understood that Medway (and Highways England) agree that the model is appropriately validated for that purpose it is not considered that the model is appropriately validated for development control (planning applications purposes.

6.4.2 This is confirmed at Para 10.3 (bullet 3 of the report) which confirms that:

> "The microsimulation model has been calibrated and validated at a wide-area level and, as such, may not fully reflect all driver behaviour and interactions at a very local level. Further calibration and validation of the microsimulation model may be required when assessing schemes in some areas, particularly on parts of the network that have not been subject to detailed traffic flow and journey time validation. "

6.4.3 The validation and outputs of the model have thus been considered against the requirements of the DfT Tag Unit M3.1 Highway Assignment Modelling – **Appendix ST6**. The assessment of the microscopic model's flow calibration is summarised in the Table 11 on page 60. This confirms that the assessment based on GEH<5 (define) indicates:

- Links achieve 87.6% and 83.5% in the AM and PM peak hour, respectively.
- Turns achieve 86.3% and 84.3% in the AM and PM peak hour, respectively.

6.4.4 In other words, the model does not accurately enough validate turning movements at junctions and therefore any output relating to junction capacity should be treated with extreme caution.

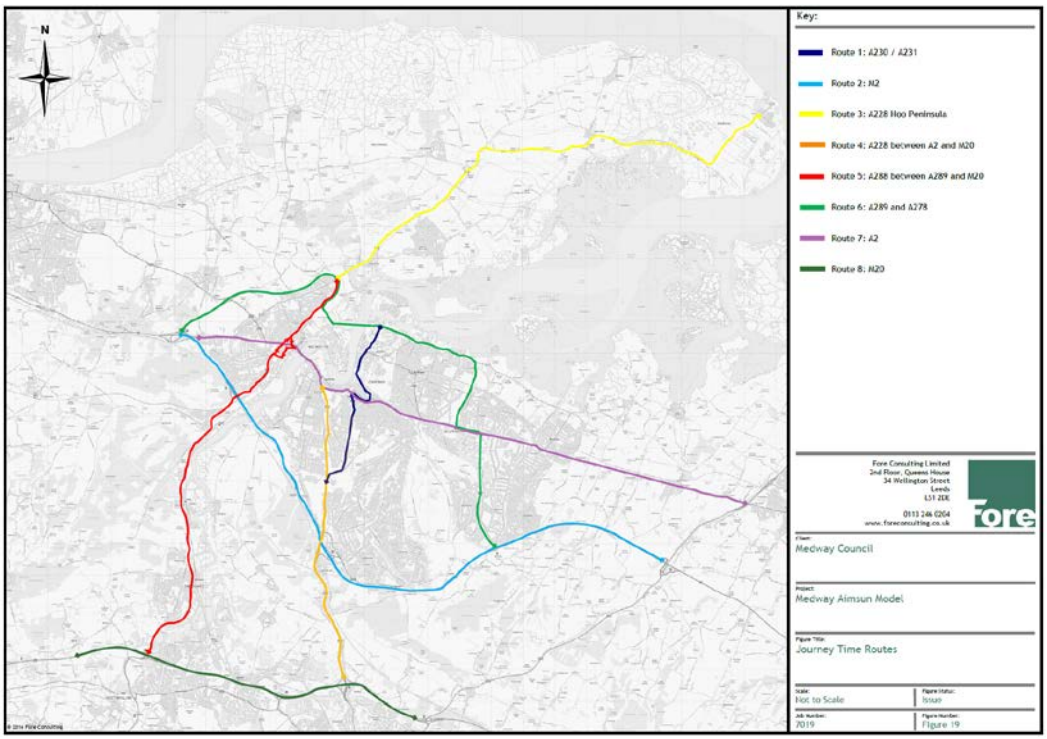
6.4.5 Technically the PM therefore fails based on the GEH<5 criteria (i.e. the pass rate is less

than 85%).

6.4.6 Furthermore there are more than 20 locations where very large differences in flows between observed and modelling and therefore showing a GEH>10. In the vicinity of the site these include the A2 High Street in Rainham where observed flows were **339** and simulated **626** (Page 275 of PDF) which is one location where the outputs suggest a material impact as a result of the development.

6.4.7 In terms of validation, overall flow validation is poor for traffic flows less than 700vph, particularly in the PM peak. See Table 15, page 68. In terms of meeting TAG criteri(85%) we see that most fail - AM sections(links) 83.7% and Turns 78.8%; PM sections 77.3%, Turns 79.5%.

6.4.8 Figure 19 of the report (extract below) shows the routes adopted in the model for Journey time assessment. It is not clear how these routes directly relate to the results provided in the modelling reports but Routes 6 and 7 appear to have been applied.



6.4.9 Of most significant concern is in the AM Peak which shows the following variations:

- Route 6A: A289 and A278 EB (green line) +319seconds (+25%) *[graph at p447]*
- Route 7A: A2 EB (purple line) +307 (12.5%)

6.4.10 This highlights the areas of most concern but there is a complete lack of lack of detail and localised validation and in general, these results indicate excess delay in the centre of the model (i.e the routes that traverse Chatham).

6.4.11 Furthermore, the route is excessively long (based on TAG definition of >15km – see Para 4.3.3 of Tag Unit M3.1) at 18km long so it is very course and provides no comfort that delay on localised sections are accurate. This is a complaint of all routes. There is no validation of delay on smaller sections and therefore the conclusion have no merit.

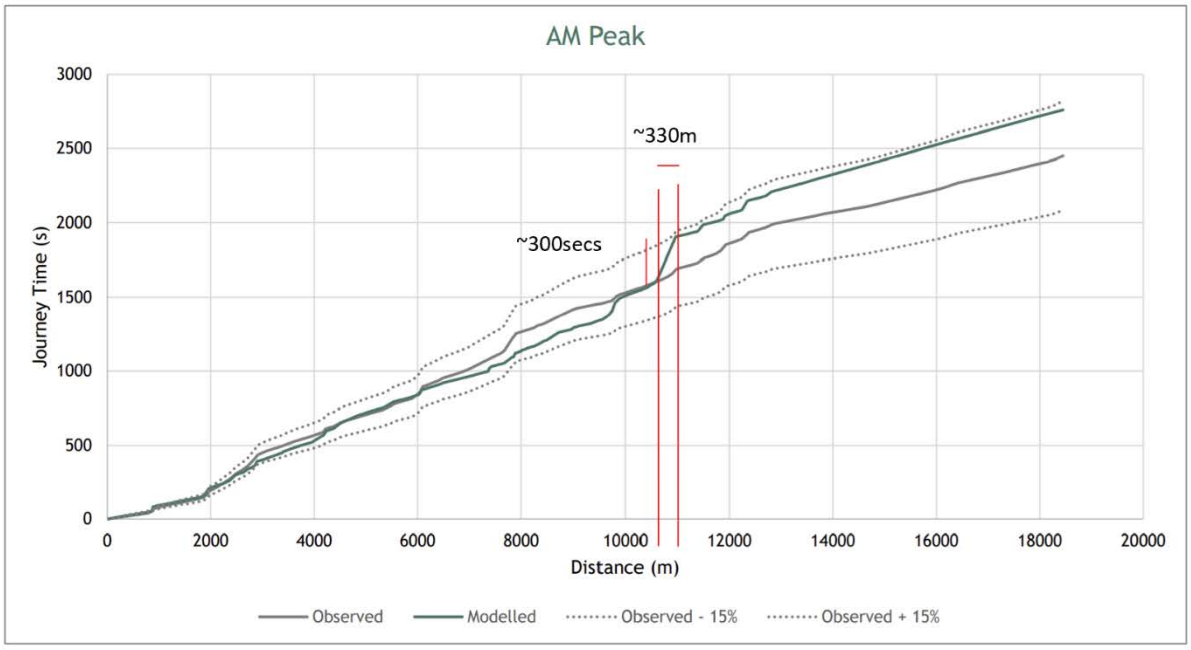
6.4.12 The figure on Page 453 of the validation report (shown below) shows the AM Route 7 across the 18km route. The highlighted section around the 11km mark appears to be where the model records significantly higher delay than observed. It is at this point in the route that all of the excess delay is picked up in the model. We see the model takes 300 seconds longer to traverse this 330m section of the route than the observed data suggests it should.

6.4.13 It is difficult to determine exactly where this section lies on the wider route but is very close to the section of A2 south of the appeal site (see figure below highlighting Route 7). I have approximated where 11km along the 18km eastbound route would lie and have highlighted in the figure below.

6.4.14 This clearly indicates that there is excessive delay/congestion on this section that is unrealistic and is clearly causing unsubstantiated issues in the Development scenario that makes the results untrustworthy.

Journey Time Data Analysis: Microscopic Model

Route 7A: A2 Eastbound (Purple)



6.4.15 Overall the main concern is that the model is too strategic and lacks localised validation. It is considered too coarse for detailed assessment of a development. There are a significant number of large deviations between observed and modelled flows.

6.4.16 In conclusion therefore whilst the model validates ok for strategic local plan work it is not accurate at testing local junctions and capacity of them.

6.4.17 For that reason, any judgement on the model outputs must take into account the individual junction modelling, as I have described above. In all case where the model shows a material impact the localised junction modelling show the junctions operating within capacity.

6.5 Future Year / Cumulative Impact Assessment

6.5.1 Guidance on the appropriate test in respect of cumulative impact is set out in Paragraph: 014 Reference ID: 42-014-20140306. This confirms that:

> It is important to give appropriate consideration to the cumulative impacts arising from other committed development (ie development that is consented or allocated where there is a reasonable degree of certainty will proceed within the next 3 years). At the decision-taking stage this may require the developer to carry out an assessment of the impact of those adopted Local Plan allocations which have the potential to impact on the same sections of transport network as well as other relevant local sites benefitting from as yet unimplemented planning approval.

6.5.2 It is clear from the above that the appropriate test in terms future development impacts should take into account know developments which have a reasonable certainty of coming forward. The Transport Assessment did that as set out above.

6.5.3 There is no requirement in the NPPF for the scheme to be considered against yet unallocated local plan sites.

6.5.4 Medway have, on the 14th December confirmed the growth assumptions in the report and that the model growth is constrained to Tempro and on that basis we can agree the overall level of growth assumed for the design year, albeit we do not agree 2037 is the appropriate design year to test. Further assessment has been provided on the basis of a 2028 year but again it is not clear at the time of writing upon which assessment council intend to place reliance.

6.5.5 Medway have suggested in their email of 6th November 2020 that the model need not be compliant with Webtag. This is an erroneous approach. Paragraph: 010 Reference ID: 54-010-20141010 of the NPPG confirms that:

> An assessment should adopt the principles of WebTAG by assessing the potential

impacts of development within the framework of WebTAG objectives. For most Local Plan assessments the full methodology recommended will not be appropriate. The Highways Agency's Project Appraisal Report System may provide some useful guidance on methods more appropriate in these cases. Assessments involving major new transport infrastructure should, however, employ the methods set out in WebTAG.

Although this approach is typically applied when planning for local transport infrastructure, adopting this approach for Local Plan transport assessments will ensure that any proposed land allocation impact is considered in the context of two alternative scenarios – 'with development' and 'without development' – and will enable a comparative analysis of the transport effects of the proposed allocation.

6.5.6 It is assumed however that it is consistent with Section 7.3 of TAG Unit M4 states the following in respect of the Reference Forecast:

> "The Reference Forecast should take into account the impact of both national changes (e.g. population growth and GDP) and local changes (e.g. housing developments) on travel demand. **Overall demand in the forecast should be constrained to the Department's projections to ensure that different schemes are being compared on consistent assumptions about total demands. Local changes influence the spatial distribution.**

6.5.7 It is apparent that Medway have not adopted that approach. Whilst that may be within their own judgement for local plan consideration it means that the cumulative impact test of the appeal scheme is being considered way beyond the scope of the NPPF and NPPF in terms of considering cumulative impacts.

6.5.8 The conclusions therefore can be given no weight in the context of the acceptability of the planning application.

6.5.9 Notwithstanding this, I set out below the conclusions of the Medway modelling work in

terms of both link capacity and junction capacity.

6.6 Link Capacity Impacts

6.6.1 As set out in the presentation of the Sweco Model report that was provided to the appellant in January 2020, there were a number of links where the council say the Level of Service would reduce to a level which they say is severe and hence unacceptable in traffic impact terms. These links are set out below in Tables 4, 5 and 6. The latest model report (CD12.4) shows fewer links with "significant" increases in travel time. The model reports do not attribute Level of Service classifications to these routes so it is not clear if Medway have applied the correct NPPF test to those links.

6.6.2 To review the detail, the following tables provides a summary of the actual Medway modelled flows on each link between the Councils 2037 Reference Case CD12.3 (ie. without the development) and 2037 Sensitivity 1 test (ie. with the development). I have adopted this in preference to the more recent 2028 results reported in CD12.4 because they should, logically show higher traffic flows and is hence robust for the purposes of the following appraisal.

6.6.3 The flows have been extracted from the "Simulated Flows" pdf files. These are not available in a printable format.

Table 4 – Medway Subnetwork 2 Results

Route	2037 AM Peak				PM Peak			
	LOS	RC	Sen1	Dev Change	LOS	RC	Sen1	Dev Change
Lower Rainham Road to Medway Tunnel (WB)	D to F				C to C			
A289 East of Dock Road		2613	2689	76		1369	1326	-43
A289 West of Dock Road		2723	2765	42		2532	2505	-27
A2 Corridor EB (Watling Street to Sovereign Boulevard) West of Barnsole Road	E to F	831	859	28	C to C	1000	1036	36
Medway Tunnel to Gillingham Gate Road (EB)	C to F	1733	1718	-15	C to C	2268	2245	-23
Medway Tunnel to Dock Road (East Bound)	E to F	2645	2591	-54	D to E	2500	2487	-13
Medway Tunnel to Hoath Way (East Bound)	C to F				C to D			0
A289 Gads Hill North of Yokosuka Way		1155	1157	2		1696	1710	14
A2 West of Hoath Way		1558	1726	168		1745	1843	98

6.6.4 It can be seen from the above that most of the links where the Model claims the level of service reduces to F actually experience a reduction in flows. This is presumably a model anomaly but it is not credible to conclude that would result in a degradation of movement of traffic.

6.6.5 For those roads which experience any significant increase (shown in green) the flows will remain within the daily variation and in any event.

6.6.6 The A289 is a dual carriageway. Flows on that road (westbound) are forecast from the

model to be around 2,700 vehicles. The A2 West of Hoath Way is a dual carriageway. Flows on that road (eastbound) are forecast from the model to be around 1,700 vehicles.

6.6.7 The capacity of a dual carriageway urban road is around 3,200 vehicles per hour.

6.6.8 DMRB CD122 para 3.8 confirms that mainline maximum vehicles per hour (vph) per lane shall be taken as: 1) 1,800 for motorways; 2) 1,600 for all-purpose roads. The flows for maximum vph per lane do not represent the maximum hourly throughputs that are possible, but greater flows often results in decreasing levels of service and safety. WebTAG unit M3.1 Appendix D and in particular Table D1 provides a classification for roads and the routes within Medway can broadly be categorised as Type 11. Table D7 sets out the characteristics of such a road as having a significant (up to 75) minor interchanges and speeds at zero flow of between 30 and 40mph.

6.6.9 The equation at Para 6.5 confirms that the maximum realistic flow (QC) is the same for both single and dual carriageways and is calculated by the relationship QC = 1500 (92 - PHV)/80 veh/h/3.65m lane.]. With an assumed percentage HGV of 5% that would give a throughput of 1,631 vehicles per lane or over 3,200 over two lanes.

6.6.10 As shown above, the validation of journey times on this link is poor particularly in the AM Peak and therefore the findings of the model are clearly erroneous.

6.6.11 Subnetwork 3 is summarised below.

Table 5 – Medway Subnetwork 3 Results

Route	2037 AM Peak				PM Peak			
	LOS	RC	Sen1	Dev Change	LOS	RC	Sen1	Dev Change
Otterham Quary Lane to Meresborough Road	E to F				F to F			
North of Moor Street		355	370	15		345	371	26
South of Moor Street		11	24	13		13	31	18
Moor Street to High Dewar Road	D to F				F to F			
East of Otterham Quay Lane		774	804	30		586	728	142
West of Otterham Quay Lane		694	663	-31		547	457	-90
Moor Street to Sovereign Boulevard	E to F				No change			
East of Station Road		463	456	-7		421	419	-2
West of Station Road		758	734	-24		728	684	-44
Sovereign Boulevard to Maidstone road	F to F			0	D to E			0
East of Bloors Lane		911	1299	388		1012	1505	493
West of Bloors Lane		636	1180	544		743	1328	585
Orchard Road to Station Road	D to D				F to F			
Orchard Street		448	325	-123		406	319	-87
Station Road		241	147	-94		249	202	-47
Maidstone road to Sovereign Boulevard	E to E				F to F			

East of Bloors Lane		1303	1166	-137		1145	1040	-105
West of Bloors Lane		1026	893	-133		982	892	-90
High Dewar Road to Moor Street	C to C				F to F			
East of Otterham Quay Lane		1008	1093	85		1068	1157	89
West of Otterham Quay Lane		761	812	51		836	841	5
High Dewar Road to Mierscourt Road	D to D	707	692	-15	F to F	575	562	-13

6.6.12 Again the same conclusions can be reached. The only links where there is any significant change in flows are on the High Dewar Road to Moor Street link (where the LOS does not change as a result of the scheme) and Sovereign Boulevard where the links remain within capacity. There can thus be no material adverse impact.

6.6.13 Subnetwork 7 is summarised below.

Table 6 – Medway Subnetwork 7 Results

Route	2037 AM Peak				PM Peak			
	LOS	RC	Sen1	Dev Change	LOS	RC	Sen1	Dev Change
Lower Rainham Road WB	B to F				B to B			
East of Pump Lane		710	805	95		411	360	-51
West of Pump Lane		603	785	182		367	355	-12

6.6.14 Although in this case flows on Lower Rainham Road will increase (as expected in both assessments) the degradation in Level of Service forecast by the model is clearly out of

proportion with the impact.

6.7 Junction Capacity

6.7.1 The above section specifically considered links in the model. To ensure that junction capacity at terminating nodes is not affecting capacity on the link, assessment of each junction was undertaken using industry standard software (TRL Junctions in respect of priority Junctions and LINSIG in respect of signal junctions).

6.7.2 Assessments have been provided by DTA for the Five junctions identified in the model report as having a significant impact. These are

1. Bowaters roundabout;
2. High Street/Station Road;
3. A2/ Bloors Lane;
4. A2/ Woodlands Road/ Rotary Gardens; and
5. Piers Road/ Maritime Way

6.7.3 All of this modelling, as presented in Technical Note 3 confirms that these junctions will all operate within acceptable parameters and the development will have no material or adverse impact.

6.7.4 As has been shown above, the model validation report confirms a lack of accuracy at junction capacity level for the basic model validation and therefore the results should be treated with significant caution.

6.7.5 No further assessment is necessary. The scheme of mitigation, as proposed, is demonstrably sufficient. Indeed, it will exceed what is required in so far as it will clearly give rise to net improvement.

6.7.6 A model report (CD12.3) was provided by Medway on 6th January 2021. This provides an update to the previous work also assessing the impact of the development using the DTA derived trips rates as described above. A further report was sent without warning on the

14th January 2021 (CD12.2) which updated the future year assessment to 2028. The reasons for this additional work have not been explained.

6.7.7 The overall results of the model now provides statistics of overall impacts on the network and these are described as follows:

Subnetwork 2

6.7.8 The conclusions in this regard are consistent with the previous modelling work.

Subnetwork 3

6.7.9 This is discussed in summary at Paragraph 3.2 which reconfirms that the impact of this subnetwork is generally modest and within the stated 'accuracy' of the model thus:

> Initially, the Subnetwork 3 statistics for AM and PM peak times are presented in Table 9 and Table 10 accordingly. It is observed that even though there is not a big increase between reference case and Sensitivity 1 scenario, an more substantial increase in average travel time, delay and queue is observed between the 2037 Reference case/Sensitivity 1 and the three new additional LRR scenarios including the development (LRR Scenarios 1,2 and 3). Consequently, a decrease in average speed is observed between the reference case and the development scenarios. It needs to be underlined that the difference in travel time, delay, speed and mean queue between the three new LRR scenarios is small and can be attributed to the stochasticity of the microsimulation. For example, the difference in travel time between LRR Scenario 1 and 3 is 5 seconds per kilometer in the AM peak scenario which can be considered negligible. The percent change for each statistic is presented graphically in Figure 8 and Figure 9 for the AM and PM peak times accordingly.

6.7.10 However the outcome of this assessment highlights the fact that the model has no credibility in assessing junction impact. With reference to Tables 11 and 12 for example, there is apparently a step change in level of service between Sensitivity Test 1 and the other development scenarios. The difference between those scenarios as described in Table 2 is the number of accesses onto Lower Rainham Road, the method of zoning the site and in the case of LRR3 the DTA trip rates.

6.7.11 With the exception of LRR3 where one would expect lower impacts, the scheme impacts on the wider network should be the same. The number of access points onto Lower Rainham Road can make no strategic difference to impacts on the A2.

Subnetwork 7

6.7.12 The modelling reconfirms that there are no material or severe impacts on this section of the network. That is agreed.

7.0 Highways England (HEs) Position

7.1 The impact of the development has been subject to ongoing discussions with Highways England. The forecast traffic generation from the site has been reviewed by HE and their consultants. The overall traffic generation assumptions as set out in the Transport Assessment (**CD CH5.25**) are agreed.

7.2 Table 30 of the TA sets out the traffic generation forecasts of the site by trip purpose. It is agreed that for the purpose of considering Trunk Road impacts, only those trips which related to Commuting and Business would be likely to use to the trunk road in peak hours. The other purposes (education, retail and leisure) would be predominantly localised trips within the Medway area.

7.3 The principle of the derivation of those assumptions as set out in the TA is agreed. The TA presented two peak hours (0800-0900 and 1700-1800). At the request of HE this was updated for Trunk Road impacts to an earlier AM Peak Period (0700-0800).

7.4 The results trip rates from the site as follows:

Table 7 Summary of Commuting and Business generated vehicle trips

Commuting	In	Out	Total
AM peak (0700-0900)	58	219	277
PM peak (1700-1800)	180	82	262

7.5 The above traffic movements were distributed onto the wider network using the journey to work distribution based on the 2011 census distribution. Following various sensitivity tests undertaken and reported in Appendix C of the Addendum TA (**CD8.1 Appendix 1**), the overall agreed level of traffic at each of the M2 junctions is summarised below:

Table 8 – Summary of flows change at Motorway Network

			AM Peak		PM Peak	
M2	%		Arrivals	Deps	Arrivals	Deps
J1	16.9%	Eastbound off slip	10		30	
		Westbound on slip		37		14
J2	0.0%	All slip roads/approaches				
J3	15.1%	Northbound off slip		33		12
		Southbound on slip	9		27	
J4	16.1%	Eastbound on slip		2		1
		Westbound off slip	1		2	
		Westbound on slip		33		12
		Eastbound off slip	9		29	
		Agreed Commuting and Business Trips	**58**	**219**	**180**	**82**

7.6 Highways England have confirmed that based on the above they consider the following:

7.7 Improvements are required to M2 Junction J4 to accommodate local plan growth and the appeal site. A scheme of the proposed works is shown on Drawing 18-015-027-E as extracted at **Appendix ST7**. They consider the mitigations for M2 J4 would also accommodate the Pump Lane Development

7.8 Works required that junction are currently secured by the existing consent on Gibraltar Farm MC/18/0556 at a trigger point of 200 occupations. The overall scale of that development is upto 450 units. A revised application for Gibraltar Farm (MC/19/0036) has recently been refused but that included the same works. The transport assessment for that scheme confirmed total two way trips through the junction of around 80 vehicle trips in the peak hours. On that basis the trigger for the work would relate to around 35 trips.

7.9 In addition Medway have recently published a Local Development Order (LDO) for a site

called Innovation Park Medway (MC/19/1556). Table 1 of the LDO (Appendix ST8) sets out the highway improvement works required at confirms that the J4 works are required when Innovation Park Medway generates a total of 188 two way trips through the junction (with the caveat that it is not required of already provided by Gibraltar Farm).

7.10 The appeal site adds two way flows of 45 trips in the AM Peak and 44 trips in the PM peak at full development. This is above the trigger for the Gibraltar Farm development (35 trips).

7.11 On that basis the appellant proposes two options for securing the works as follows:

1) A Grampian condition requiring the appeal site to deliver the scheme at a proportionate level of traffic to Gibraltar Farm. That would therefore be prior to the occupation of 972 houses (i.e 35/45 x 1,250), or

2) A proportional contribution towards the scheme. It is understood that Medway have a cost estimate of £1.6m - £2.5m for the scheme – although this has not been provided to me). The trigger point for total flows at the development from Gibraltar Farm are 35 trips and the trigger for the Innovation Park works is 188 trips. Assuming the same trigger point for the appeal site as Gibraltar Farm (35), would put cumulative flows at 258. A fair proportional contribution would thus be 13.% or £352,000 (of £2.6m).

8.0 Response to Third Party Objections

8.1 The officers report (**CD7.2**) (at Paragraph 2.5 and 2.6 sets out the issues raised by members of the public in response to the application. It confirms that a significant number of objections were received and therefore does not provide a detailed breakdown of individual concerns.

8.2 It does however note that

> "2.5 The capacity of the existing transport infrastructure and the potential impacts arising from the application was identified most frequently in the comments analysed. It was the most frequently identified theme in single theme comments and frequently overlapped with around 2/3 of all other themes identified in multi-theme comments.
>
> "2.6 While there was variability in the specific concerns raised by commenters regarding the number of vehicle movements, capacity of the local or strategic route networks during peak times, or general access to the site through physically restricted local roads; the principle concern related to the ability of existing transport infrastructure to accommodate increased levels of use. "

8.3 Clearly the ability of the local road network to accommodate traffic flows is a key issue raised (and indeed is the only outstanding issue between the LPA and the appellant in the context of the appeal.

8.4 The policy tests against which the appeal should be considered are clearly set out in Section 3 of my evidence above. From a transport perspective those tests explicitly require an application to demonstrate to that site is acceptable in terms of accessibility (i.e. it is an appropriate location for development) and that there are no significant highway safety issues arising. These issues are covered in Section 4 and 5 above in detail.

8.5 The issues relating to Highway Impact are covered in detail in Section 6. In conclusion, the scheme has been subject to extensive testing in terms of traffic generation and impact. The impact of the development on all key links has been subject to specific and detailed testing and found to be acceptable. Mitigation is proposed at junctions were genuine capacity constraints have been identified.

9.0 Summary and Conclusions

9.1 This proof of evidence has been prepared on behalf of the Appellant to review the Highway and Transportation implications of the proposed development. This evidence demonstrates that the appeal scheme is wholly acceptable in relation to highway matters.

9.2 It is further demonstrated that in the context of the Council Area as a whole, the site can be considered an accessible and wholly sustainable location for development, and residential development in particular.

9.3 This conclusion is agreed by the LHA who have confirmed no objection on such matters.

9.4 This evidence concludes that the appeal scheme is fully consistent with the requirements of Paragraphs 108 / 109 of the NPPF and Policy T1 of the adopted Local Plan in that it provides safe and secure access by all modes, direct access to public transport and local public realm improvements to reduce conflict between vehicles and other road users.

9.5 The highway safety and traffic impact issues have been fully tested through a comprehensive Transport Assessment, Addendum and Road Safety Audits. There is no credible competing technical evidence in front of the inspector that refutes this in any credible way and nor was there at the time of the determination of the original application.

9.6 On this basis, it is clear that there are no highway or transportation reasons why planning consent should be withheld.