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Mrs Annette Feeney **Ipswich Borough Council** Planning and Development Grafton House Russell Road Ipswich IP1 2DE

BY EMAIL

24013/A3/LN/kf

20 July 2016

Dear Annette

IPSWICH LOCAL PLAN EXAMINATION MATTER 5 – IPSWICH GARDEN SUBURB TRANSPORT SUMMARY NOTE

We write on behalf of our Client, Crest Nicholson, following the Ipswich Local Plan Examination Matter 5 (IGS) Hearing Session, held on 18 July 2016.

As requested by the Inspector, please find enclosed a Transport Summary Note (Vectos, July 2016). This Note contains information regarding modal shift for Henley Gate and changes in the length of queues (number of vehicles) at local junctions with and without the Henley Gate development, and with and without the full IGS development.

The Northern Fringe Protection Group (NFPG) has requested that information is provided on delay times at the relevant off-site junctions. However, the best indicator of how junctions operate is the number of queuing vehicles on each approach. This indicates the impact of traffic associated with the proposed development on the local highway network and provides the best comparison of how junctions are operating when they are close to or at capacity at peak times.

In addition, NFPG requested that a comparison between current and future junction delay times, with and without the development is provided. In line with the National Planning Policy Guidance (NPPG), the Traffic Assessment (Vectos, June 2016) for Henley Gate compares a base 2030 scenario (without development and junction improvements) with a development 2030 scenario (with development, junction improvements and modal shift), rather than a base current day scenario. This is the only way to identify the implications of traffic associated with a development proposal. The future year assessment allows for background traffic growth (based partly on traffic associated with committed developments and other factors such as population growth) and is a direct comparison of the situation with and without the development. A comparison between the existing situation and a future year situation with development does not allow a reasonable comparison to be made as there are also impacts from background traffic growth.





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I trust the enclosed is acceptable however, please do not hesitate to contact me should you require any further information.

Yours sincerely

PP. Incedham

HUW EDWARDS Senior Planning Partner

enc. Transport Summary Note (Vectos, July 2016)

cc.	Duncan Innes	3	Crest Nicholson
	Hollie Stacey	3	Crest Nicholson

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Henley Gate, Ipswich Garden Suburb

Further Submission to Local Plan EiP

131041/N28

July 2016

Introduction

- 1. Vectos is retained by Crest Strategic projects (Crest) to provide traffic and transportation advice in support of an outline planning application for the proposed development of land to the north of the railway line and east of Henley Road in Ipswich, known as Henley Gate. The Henley Gate site forms part of the wider Ipswich Garden Suburb (IGS) strategic urban extension. A planning application has been submitted to Ipswich Borough Council (IBC) and Suffolk Coastal District Council (SCDC), supported by a Transport Assessment (TA) prepared by Vectos.
- The site is identified as part of the IGS in both Ipswich Borough Council (IBC) adopted Core Strategy and Core Strategy Review. Policy CS10 of the Core Strategy Review states:

Land at the northern fringe of Ipswich, which is referred to as Ipswich Garden Suburb, will form a key component of the supply of housing land in Ipswich during the plan period due to the limited availability of previously developed land.

3. The Core Strategy Review is currently undergoing Examination in Public (EiP). This Technical Note provides further information to the Inspector regarding two key points: evidence to support modal shift of development trips, and a summary of the impact of the development on the local highway network. This additional information is set out below.

Modal Shift

- 4. There are two elements in reducing the number of off-site vehicle trips generated by the development. Firstly, providing a mix of land uses reduced the need to travel off-site. This is the case when considering both the Henley Gate site in isolation, and also as part of the wider IGS. Within the Henley Gate site, a primary school, local centre and country park are the key supporting land uses, whilst within the wider IGS, a secondary school and district centre will also be provided.
- 5. Provision of these facilities will mean that residents will not have to travel 'off-site' to access such destinations, with these trips contained within the IGS.
- 6. The second key element in achieving modal shift is a sustainable transport strategy to provide opportunities and encouragement for residents and visitors to travel by non-car modes of travel.

Network Building, 97 Tottenham Court Road, London W1T 4TP Tel: 020 7580 7373 www.vectos.co.uk

- 7. A comprehensive sustainable transport strategy is proposed as part of the development (and set out in detail in Section Five of the Transport Assessment submitted in support of the planning application), which builds upon its accessible location to seek to encourage both existing and new residents to use non-car modes of transport. As part of this sustainable transport strategy, the following measures are to be delivered as part of the development:
 - Provision of controlled pedestrian and cyclist crossing facilities across Henley Road as part of the two site access junctions;
 - Access to two new bridges over the railway line to link with the land west of Westerfield Road, which will be delivered as part of the wider IGS development;
 - Provision of improved pedestrian and cyclist crossing facilities at the Valley Road / Henley Road junction;
 - Provision of controlled pedestrian and cyclist crossing facilities as part of works at the Valley Road / Westerfield Road and Valley Road / Tuddenham Road junctions;
 - Provision of a pedestrian link with Westerfield Road to provide access to rail services at Westerfield Station;
 - Improvements to the Fonnereau Way Public Right of Way;
 - Improvements to other Public Rights of Way within the wider IGS site;
 - Improvements and signage on the Henley Road / Dale Hall Lane route between the site and Town Centre;
 - Improvements and signage on the route from Picton Avenue to the Town Centre; and
 - Provision of a new Toucan Crossing on Valley Road between the Henley Road and Westerfield Road junctions.
 - A new bus service will be introduced that will create a route between the site and Tower Ramparts Bus Station within the Town Centre. Initially this bus service will operate via Henley Road serving the Henley Gate site independently. Following completion of the vehicle bridge over the railway this bus service would then operate via Westerfield Road and through the land west of Westerfield Road;
 - Subsidised bus travel will be offered to each household for an initial period to encourage use of new bus routes;
 - New bus stops within the site will include the provision of passenger information, shelters and high level kerbs;
 - Bus priority measures at the site access junctions on Henley Road and junctions on Valley Road;
 - Travel Plans will be prepared for the residential and other uses on the site with the objectives of further reducing travel demand and encouraging the use of non-car modes of transport;
 - As part of new residents welcome pack, sustainable travel information will be provided including bus timetables and walking and cycling route maps;
 - Personalised Travel Planning will be undertaken for existing residents within north-west Ipswich. The area bounded by Valley Road, Henley Road and Norwich Road has been identified which includes approximately 6,000 existing households.

- 8. When considering trips generated by the development for assessment purposes, trips have been considered by purpose, with four key trip purposes considered; work, education, retail and other. The following key internalisation judgements and Travel Plan mode shift targets, which have been agreed with Suffolk County Council as the local highway authority, have been included when calculating the number of generated trips (this is set out in more detail in Section Six of the submitted TA). It is important to note that the submitted TA considers AM and PM peak trip generation only for assessment purposes, however internalisation and modal shift measures will also occur throughout the day, when the proportions of trips by purpose will vary.
 - The on-site Primary school will result in all primary education trips being retained internally. It is anticipated that the vehicle bridge over the railway will remain closed to private vehicles during peak periods, as previously requested by SCC. Therefore, car trips to the new secondary school on the Mersea / CBRE site will remain external, whilst trips by sustainable modes will use the bridge and as such, will be classed as internal trips;
 - The retail offer at the new local centre will retain half of the development shopping trips. As such, total development shopping trips are discounted by 50%;
 - The Travel Plan will facilitate a modal shift of 20% away from private car use for Work and Other purposes. These trips are reallocated as an increase in cycle use (5%), bus patronage (10%) and rail patronage (5%);
 - The Travel Plan will also facilitate a modal shift of 30% away from private car use for secondary Education purposes. These trips are reallocated as an increase in cycle use (15%) and walking (15%). These trips are then retained internally; and
 - 10% of the vehicle trips will be to the country park and are therefore internalised trips.
 - Where Personalised Travel Plans have been introduced they have been shown to reduce transport demand and encourage a shift to non-car modes of transport especially for short distances of up to 5km. An allowance of a 5% reduction of traffic on Valley Road and 10% on Henley Road has been made.

Highway Network Impact

- 9. The TA submitted in support of the planning application includes detailed junction capacity analysis of key off-site junctions on the Valley Road corridor. These junctions are:
 - Valley Road / Henley Road / Dale Hall Lane;
 - Valley Road / Westerfield Road; and
 - Valley Road / Tuddenham Road.
- 10. Within the submitted TA (Section Seven), a number of assessment scenarios and options for junction improvements are presented. The Henley Gate development is forecast to be completed in 2030. It is therefore considered appropriate to assess the impact of the development on the highway network in this future year so that a direct comparison of how the network will operate at this point, taking into account other changes to traffic flows

including background growth and committed developments (i.e. those with planning permission).

11. The summary below considers how the existing layout of each junction in the future base scenario (i.e. 2030 without any development of the IGS) operates, and compares that with the future development scenario (i.e. 2030 with Henley Gate development traffic, and also the full IGS development traffic on the assumption that the identified junction improvements have been implemented). This also incorporates the internalisation and sustainability elements summarised above. This approach allows the impact of only the Henley Gate and full IGS development on the highway network to be identified.

Valley Road / Henley Road / Dale Hall Lane Junction

- 12. The existing junction is traffic signal controlled, whilst the preferred option for improvements incorporates pedestrian and cyclist enhancements together with the right turn movements from the two Henley Road approaches.
- 13. The results of the junction modelling presented within the TA are summarised below with the maximum queue lengths being compared:-

Henley Road Junction- Impact of Henley Gate Development only

- In the AM and PM peak hours queuing reduces on the Henley Road southbound approach from 23 to 11 vehicles and 20 to 10 vehicles respectively;
- On the Valley Road westbound approach to the junction the queue reduces in the AM peak from 32 to 19, and from 31 to 22 vehicles in the PM peak;
- There is a small reduction in the queue on the Henley Road northbound approach in the AM peak from 8 to 6 vehicles and a reduction in the PM peak from 19 to 17 vehicles; and
- On the Valley Road eastbound approach the AM peak queue increase slightly from 11 to 12 vehicles in the AM peak and from 12 to 14 in the PM peak.

Dale Hall Lane Junction- Impact of Henley Gate Development only

- On the Dale Hall road southbound there is a slight increase in queues from 11 to 13 vehicles whilst in the AM peak the queue remains as 13 vehicles;
- On the Valley Road westbound approach there is an increase in queuing from 6 to 13 vehicles in the AM peak and a decrease from 19 to 6 vehicles in the PM peak;
- On the Valley Road eastbound approach there is a slight reduction in queuing in the AM peak from 15 to 12 vehicles and an increase in the PM peak from 11 to 22 vehicles.

Henley Road Junction- Impact of full IGS

- In the AM and PM peak hours queuing reduces on the Henley Road southbound approach from 23 to 10 vehicles and 20 to 13 vehicles respectively
- On the Valley Road westbound approach to the junction the queue reduces in the AM peak from 32 to 27, but in the PM peak increases from 31 to 64 vehicles;

- There is a small reduction in the queue on the Henley Road northbound approach in the AM peak from 8 to 5 vehicles and an increase in the PM peak from 19 to 36 vehicles.
- On the Valley Road eastbound approach the AM peak queue increase slightly from 11 to 17 vehicles in the AM peak and from 12 to 16 in the PM peak;

Dale Hall Lane Junction- Impact of full IGS

- On the Dale Hall road southbound there is a slight increase in queues from 11 to 17 vehicles in the AM peak and 13 to 17 vehicles in the PM peak;
- On the Valley Road westbound approach there is an increase in queuing from 6 to 22 vehicles in the AM peak and a slight increase from 19 to 21 vehicles in the PM peak;
- On the Valley Road eastbound approach there is a slight reduction in queuing in the AM peak from 15 to 14 vehicles and an increase in the PM peak from 11 to 23 vehicles.
- 14. The results presented above indicate that the proposed junction improvements offer some capacity improvements at the junction such that the impact of both the Henley Gate development and full IGS is satisfactorily mitigated.

Valley Road / Westerfield Road Junction

15. The results of the junction modelling are summarised below. The existing junction is a roundabout, with the proposed improvements upgrading this to traffic signal control. The implications of banned right turns at Henley Road have also been considered in this analysis, with some existing movements re-assigned to Westerfield Road:-

Impact of Henley Gate Development only

- On the Westerfield Road southbound approach there is an increase from 1 to 5 vehicles and 0 to 2 vehicles in the AM and PM peak respectively;
- There is a significant reduction in queues in the AM Peak on the Valley Road westbound approach from 60 to 8 vehicles and in the PM peak from 35 to 10 vehicles;
- The queues on the Westerfield Road northbound approach increase from 1 to 4 vehicles in the AM peak and 1 to 6 vehicles in the PM peak;
- Queuing on the Valley Road eastbound approach increases in the AM peak from 3 to 7 vehicles and in the PM peak remains at 8 vehicles.

Impact of Full IGS

- On the Westerfield Road southbound approach there is an increase from 1 to 9 vehicles and 0 to 7 vehicles in the AM and PM peak respectively;
- There is a significant reduction in queues in the AM Peak on the Valley Road westbound approach from 60 to 10 vehicles and in the PM peak from 35 to 24 vehicles;
- The queues on the Westerfield Road northbound approach increase from 1 to 5 vehicles in the AM peak and 1 to 13 vehicles in the PM peak;

- Queuing on the Valley Road eastbound approach increases in the AM peak from 3 to 8 vehicles and in the PM peak from 8 to 25 vehicles.
- 16. These results demonstrate that with mitigation, the junction is predicted to operate within theoretical capacity with all development traffic (both Henley Gate only and full IGS), and therefore the impact of the proposals are mitigated.
- 17. It is also important to note that upgrading to traffic signal control also provides improved facilities for pedestrians and cyclists with the introduction of controlled crossing facilities across all arms of the junction.

Valley Road / Tuddenham Road Junction

18. The results of the junction modelling are summarised below. Again, the existing junction is a roundabout, with the proposed improvements upgrading this to traffic signal control:-

Impact of Henley Gate Development only

- There are increases in queuing on the Tuddenham Road southbound approach from 1 to 9 vehicles in the AM peak and 1 to 3 in the PM peak;
- On the Valley Road westbound approach the queue in the AM peak increases from 2 to 7 vehicles and in the PM peak from 2 to 10 vehicles;
- The queues on the Tuddenham Road northbound approach increase marginally from 1 to 3 vehicles in the AM peak and 1 to 3 vehicles in the PM peak;
- On the Valley Road eastbound approach there is an increase in queuing in the AM peak from 6 to 10 vehicles and a small reduction in queuing in the PM peak from 16 to 12 vehicles.

Impact of Full IGS

- There are increases in queuing on the Tuddenham Road southbound approach from 1 to 10 vehicles in the AM peak and 1 to 4 in the PM peak;
- On the Valley Road westbound approach the queue in the AM peak increases from 2 to 8 vehicles and in the PM peak from 2 to 11 vehicles;
- The queues on the Tuddenham Road northbound approach increase marginally from 1 to 4 vehicles in the AM peak and 1 to 3 vehicles in the PM peak;
- On the Valley Road eastbound approach there is an increase in queuing in the AM peak from 6 to 12 vehicles and a small reduction in queuing in the PM peak from 16 to 13 vehicles.
- 19. The results indicate that the proposed junction layout is predicted to operate within capacity with development traffic (both Henley Gate only and full IGS). Again the upgrading of the junction to traffic signal control allows the provision of controlled pedestrian and cycle crossing facilities across all arms of the junction. The proposed improvements therefore adequately mitigate the impact of development.

- 20. As an overview the proposed improvements to the junctions do reduce queuing overall with more benefits for east-west traffic on Valley Road. Where queuing would be increased this is largely on the side roads and would not be significant.
- 21. The proposed improvements include better facilities for pedestrians and cyclists which take some capacity away from vehicles and would also allow for the future possibility of bus priority being introduced through "hurry calls" (when the traffic signals detect the transponder on a bus in the queue and cycle through the stage to release the bus as soon as safely possible).

Summary

- 22. This technical note has been prepared to respond to questions raised by the Inspector at the ongoing Local Plan EIP.
- 23. It firstly explains the strategy proposed as part of the Garden Suburb development to reduce transport demand and then the strategy to encourage the use of non-car modes of transport.
- Finally, the note summarises the assessment work undertaken at the junctions on Valley
 Road to identify improvements to assist pedestrians, cyclists and potentially bus passengers,
 but also to improve capacity as far as possible.