EAST HERTS DISTRICT PLAN 2011-2033 EIP – PART 2

SITE ALLOCATIONS: CHAPTER 7: HERTFORD, POLICES HERT1 – HERT7

REPRESENTATIONS PREPARED BY LICHFIELDS ON BEHALF OF ST WILLIAM HOMES

1. What is the basis for planning to accommodate 950 new homes over the plan period in Hertford?

1 St William is, of the view that the basis for planning to accommodate 950 homes is flawed because it is understood that this is based on the identified potential capacity and viability of each site and having regard to potential constraints to growth - the highway network. However, in this exercise, it is considered that there was insufficient regard to seeking to meet the identified OAN.

2 In addition, there is limited evidence and no details as to how the capacity was derived. We note that, in the case of HERT2, the Council is relying on design work which was prepared in 2008 for the Urban Design Framework adopted in 2014 which is not considered to be sufficient evidence as part of this current Local Plan which should reflect guidance in the NPPF and Housing White Paper. This was not reviewed in the light of NPPF guidance and the more recent assessments of need.

3 In line with NPPF paragraphs 17 and 111, greater emphasis should have been given to seeking to make the most efficient and effective use of sustainable and accessible brownfield sites, to help boost the supply of housing, before releasing Green Belt land. The Council maintain that they have prepared the Plan in accord with this guidance, but St William is of the view that there is greater capacity within the urban area, which the Council should have explored.

4 In this regard, St William has considered the potential capacity of the HERT2 site, having regard to its accessible, central location and surrounding development. As confirmed in the Statement of Common Ground (SoCG), the HERT2 site is located within walking distance of Hertford Town Centre the mainline train station (which the Council has confirmed will benefit from improvements such as more frequent day time services and an extension of the station platforms to accommodate additional carriages during the peak hours) the local bus terminal and several frequently served bus stops therefore agreed that HERT2 is a sustainable location for residential development.

5 In order to determine the optimum development potential for the HERT2 site, St William have undertaken a number of technical appraisals which included analysis of existing highway capacity, access considerations (see separate Technical Note at **Appendix 1**), flooding, existing and surrounding uses, heights and character of the locality.

6 Whilst constraints such as a section of the northern site falling within Flood Zone 3 were identified, JNP Consulting Engineers has assisted St William in overcoming this constraint by designing a flood compensation scheme and strategy for addressing the flood risk, with the design principles being agreed by the Environment Agency (Appendix 5 SoCG).

7 If St William were to adopt the same building heights as the recent development to the east (up to 4- 5 storeys), with similar parking ratios and areas of open space, a density of around 110dpha could be achieved, which is below the densities which have been approved on other recent developments within the locality of the site. with a site area of 4.19ha, it has been determined that the HERT2 site could deliver at least 400 new homes and more likely up to 500 dwellings, rather than the allocated 200 dwellings indicated in the Plan. There is no evidence that the Council undertook a similar exercise.

8 The Plan also currently requires 3,000sqm of B1 employment on the site but, at the Part 1 Hearing Sessions, it was clear that there is no evidence as to how or why this quantum was set. EHDC referred to the Mead Lane UDF (initially prepared in 2008 with a draft consulted upon in 2011), but this is not robust up to date evidence and, importantly, was not reviewed in the light of the new evidence on the need for housing and the lack of evidence on the need for the scale of employment on this site.

9 St William understand that the Council has concerns regarding highway capacity in the Hertford area and the local road network, but work undertaken by Vectos confirms that a suitable and safe access arrangement could be provided and that highway capacity matters could be adequately addressed as set out in the statement in **Appendix 1**.

10 St William is aware of potential noise impact on future residential development from the adjacent employment site and the council's aspirations for an 'employment buffer' to address this. However, the Berkeley Group (of which St William is a part) has extensive expertise in re-developing constrained urban sites within close proximity to employment uses, mitigating adverse noise, visual and air quality impacts with enhancements to the building fabric and innovative design. A short Technical Summary Note on Noise is attached at **Appendix 2** and this concludes that at least 400 dwellings could be delivered on the site without causing harm, by way of noise and disturbance, to future residents.

11 Overall, therefore, with all of their experience and expertise of delivering residential development across London and the south east, St William are very confident that they could deliver at least 400 dwellings, with the potential of up to 500 dwellings, on the Hert2 site that would greatly assist in delivering the housing requirement in the early years of the Local Plan.

12 In the context of the above, in order for the Local Plan to be considered sound it must be *"consistent with national policy"* (para. 182) and "*prepared with the objective of contributing to the achievement of sustainable development."* (para. 151). Having regard to development within areas covered by the Green Belt, the NPPF states the following:

- *"When drawing up or reviewing Green Belt boundaries local planning authorities should take account of the need to promote sustainable patterns of development. They should consider the consequences for sustainable development of channelling development towards urban areas inside the Green Belt boundary, towards towns and villages inset within the Green Belt or towards locations beyond the outer Green Belt boundary"* (paragraph 84).

13 Within this policy context, it is considered that the Council should actively seek to (and encourage developers and landowners) to explore the scope to make efficient use of previously developed land within urban areas to deliver more new homes. Failure to do so would be inconsistent with national policy and result in an unsound plan and would delay early delivery. St William has sought to engage constructively with the Council on this site through a number of meetings, but with little progress on capacity and how to overcome constraints.

14 In addition to current policy, the Housing White Paper, which sets out a clear direction for future policy and should be given due weight, states in paragraph 1.39 that the Government proposes to amend and add to national policy to make clear that authorities should amend Green Belt boundaries only when they can demonstrate that they have examined fully all other reasonable options for meeting their identified development requirements through effective use of brownfield sites and optimising the proposed density of development.

15 It is considered that the Council has failed to adequately assess the potential contribution that residential development at HERT2 could make to meeting the housing requirement and assisting with delivery and that the current approach is inflexible. Accordingly, the basis of the 950 dwellings figure is unsound without modification. HERT2 alone could deliver at least 400 dwellings with the potential of up to 500 dwellings. It is therefore proposed that Policy Hert1 part a) should be amended to state the following to make the plan sound:

> *a)* ***at least 400*** *homes as part of a mixed use development in the Mead Lane area, as set out in policy HERT2 (Mead lane Area)*

Further changes to the 950 figure may also be required following comments from other objectors on other sites.

16 In addition, as explained in representations to Matter 2 (Housing), EHDC cannot demonstrate five years' supply of housing and, therefore, amending the HERT2 allocation to provide at least 400 homes would assist in doing so and help to ensure the plan is sound. Delivery matters are addressed below.

3. How and why was the planned level chosen ahead of other options? Is the site selection methodology robust and transparent?

17 In transport terms the level of development identified on site HERT2 was identified through the modelling work undertaken by HCC as part of the Hertford and Ware Urban Transport Plan (UTP) 2010, which became the evidence base for the Mead Lane Urban Design Framework SPD (eventually adopted in 2014). The outcome of this modelling work is reported in Appendix E of the UTP where paragraph 7.1.7 states the following development options:-

- Either 300 residential flats plus 3000 sqm B1 employment; or
- 500 residential flats; or
- 5000 sqm B1 employment.

(This modelling was undertaken on a larger site than that covered by HERT2 and included the area of land on which Redrow have consent for housing - approximately 100 dwellings).

18 The methodology is not robust or transparent for the reasons outlined in question 5 below. In addition, it is considered that, with regard to Hert 2, this should have been reviewed having regard to NPPF guidance (paragraph 22); more recent evidence on housing need and the lack of any evidence on the need for employment on the site.

19 Using more detailed, up to date modelling undertaken by Vectos this figure could actually be increased to 500 homes on the HERT2 site, without a material impact on the operation of the A414 which is the transport related constraint identified by HCC. Please refer to the Vectos Note in **Appendix 1.**

5. Is the requirement for employment floor space justified in HERT2 and is this necessary to meet the need for employment land in the District?

20 After a review of the evidence prepared to date and following the Part 1 Hearing Session on employment, it is still unclear how the employment figure for HERT2 has been derived. This is no clearer with the updated HJA West Sussex (Essex) and East Hertfordshire Assessment of Employment Needs report dated October 2017, which was issued during the Part 1 Sessions. In the Part 1 Hearing Session on employment, when the Council were questioned on this point, they confirmed that it came from the Hertford and Ware UTP. However the UTP only examines the potential for utilising available capacity within the highway network, with no regard to assessed needs and has not been reviewed during the current Local Plan process.

21 The 3,000sqm figure is very specific, inflexible and is not supported by any evidence. As set out above, the modelling work considered the transport implications of various scenarios of development on the site including residential only, a mixed residential/employment and employment only. This work did not determine the level of development needed on the site, but considered the transport implications of the scenarios to identify whether there are any transport constraints to the development of the site. The transport work did not establish a need for any type of development, only the transport implications of each scenario.

22 It is therefore clear that the employment floorspace requirement has not been derived from a PPG compliant, objective assessment and does not take account of economic viability and market demand. It cannot, therefore, be considered to be justified, as the Plan is not supported by up to date evidence, a clear requirement of the PPG (ID: 2a-016). It does not meet the NPPF 'justification' test of soundness as it is not accompanied by sufficient evidence either from an employment land demand or supply side perspective.

23 For reasons presented at the EiP, it is considered the delivery of this specific quantum for B1 uses is not realistic within the context of local commercial property market conditions and signals in Hertford. Up-to-date property market intelligence provided by Brasier Freeth (included at Appendix A of the Lichfields Employment Land Assessment, submitted in response to Matter 3) indicates that market demand for B1 uses, in particular B1a office uses, is low in Hertford; suppressed by approximately 9 years' worth of available supply currently on the market. Furthermore the town's relatively poor strategic connections mean that more established office centres nearby such as Harlow, Welwyn Garden City and Bishops Stortford are more attractive and viable for business occupiers.

24 In light of this evidence, it is proposed that Policy HERT2 should be modified (as set out in the SOCG) to be more flexible to deal with the uncertainty and viability/deliverability issues in delivering employment generating floorspace, should there be demand. This aligns with the discussions at the Part 1 Employment Hearing that greater flexibility should be incorporated into the more general employment policies of the Plan.

7. Would the employment sites in HERT6 be the most suitable sites, would they deliver the right amount of employment land to meet the identified need?

25 The Mead Lane site is not the most suitable site for delivering the right amount of employment land to meet identified needs. There is no evidence that it is and the evidence presented to date by St William would indicate that it is not.

26 In this regard, other sites covered by HERT6 are located either adjacent to the A414 with direct access or situated close by. Such unconstrained land is clearly a significant advantage in terms of quality provision and market demand over a relatively small, constrained, urban site. It is, therefore, requested that the Mead Lane site be deleted from HERT6.

8. Are the allocated sites appropriate and deliverable, having regard to the provision of the necessary infrastructure and facilities, and taking account of environmental constraints?

27 The HERT2 site is appropriate and deliverable, subject to the comments below.

28 Over the past 18 months, St William has undertaken work to assess the site's deliverability. It is considered that the site is appropriate for residential development and could sustainably deliver at least 400 new homes and potentially up to 500. As noted in the SoCG the site has been subject to a range of assessments, which have all confirmed that no barriers to delivery exist. Flooding and transport matters are covered below.

29 The entire Allocation is only within 2 land ownerships, of which the majority has been acquired by St William, a major housebuilder who will see the delivery of the site through to completion. . As no land sale period needs to be factored into the delivery of the site, St William have the ability to promptly commence development upon the grant of planning consent.

30 Given the technical and design analysis which has already been undertaken, St William intend to commence pre application discussions in December 2017 and intend to submit a full planning application in early 2018.

31 As demonstrated in Table 1 below, St William has programmed the delivery of of approximately 300 homes during the five year period from the formal adoption of the plan, which will be an important contribution to EHDC's housing need and a substantial increase on EHDC's current estimate of 100. These delivery rates are informed by St William's experience on similar sites.

Table 1 Anticipated Housing Delivery

Year	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024
Completed Dwellings	0	0	0	150	150	140	25

Source: St. William Homes

32 In preparing the Statement of Common Ground, it was established that the Council are now seeking a masterplan to be prepared and approved in advance of any planning application for development. The Council are also insisting that all of the land comes forward at the same time and are opposed to piecemeal development.

33 Part of the site is owned by Norbury Fencing and St William is working with Norbury Fencing on the delivery of this site and both parties have signed a SoCG with EHDC to this effect. Both parties support the allocation.

34 Both site owners agree the need for the site to be comprehensively 'planned' and this is the approach that St William would follow. However, St William consider that the site could be developed in

independent phases. As such, if Norbury Fencing cannot find alternative premises in the short to medium term this should not preclude St William developing their site, nor Norbury coming forward at a later date.

35 It is entirely possible to bring forward the allocated site in independent phases whilst ensuring that the development of each phase would not prejudice the existing use or development of the other. The note from Vectos demonstrate that independent accesses could be provided and that access does not represent a constraint to phased development. There are no other reasons why the site needs to be brought forward as one as this is a relatively small and straight forward site to bring forward.

36 Accordingly, St William's portion of the site is available now and can be delivered in the short term. The proposed approach by St William is that there is an independent application for part of the site, with an illustrative masterplan submitted with the application to demonstrate how the site could be comprehensively planned. This would meet the Council's aspirations for the site and, importantly, provides the greatest likelihood of early delivery of this sustainable, urban site.

37 In contrast, the Council's approach, which was not stated in the policy, for a masterplan to be prepared and approved in advance of an application, is wholly unnecessary, in this case, to bring this site forward. Significantly, this approach adds an additional burden on developers, is inflexible and would significantly and unnecessarily delay delivery (see section 11 of the SoCG).

38 Policy HERT2 identifies infrastructure requirements to support the development of the site and these are covered in a flexible, criteria based policy. The proposed development can deliver these requirements to ensure that the infrastructure is in place as the development progresses. By way of an example, the widening of Marshgate Drive and improvement to pedestrian routes could be achieved in phases and solely utilising land owned by the Highways Authority and the two owners.

39 In terms of the bigger picture, detailed transport modelling undertaken by Vectos concludes that with a comprehensive Travel Plan in place, 500 homes could be provided on the site without any material impact on the A414 (**Appendix 1**). This means that the site could be developed to this higher level without the need for improvements to the strategic highway network.

40 Allowing development at HERT2 at an early stage in the Plan period and allowing the use of the site to be maximised would provide the flexibility that is needed to ensure housing delivery in the Plan at the earliest opportunity. The development of the site is not reliant on the delivery of significant infrastructure and the identified infrastructure requirements in policy HERT2 can be provided. Therefore, there is certainty on delivery at the Hert2 site of the housing needed in the early years of the Plan period. This would allow more time for the strategic transport schemes to be progressed and implemented to allow the larger identified housing to be brought forward later.

41 In terms of proposed modifications to ensure delivery, requiring the site to deliver 3,000sq.m of B1 floorspace is not justified and there is no evidence that it is deliverable. It would reduce the number of dwellings that could be delivered. This requirement should be deleted or replaced with a more flexible requirement to delivery some employment generating floorspace, subject to market signals at the time of the application. The capacity of the site should be modified to at least 400 dwellings.

42 On this basis, subject to other more minor changes to policy as set out in the SofCG, it is confirmed that allocation HERT 2 is appropriate and deliverable. The proposed criteria based policy allows flexibility for delivering the site.

APPENDIX 1: VECTOS TRANSPORT NOTE

TECHNICAL NOTE ON HIGHWAYS AND ACCESS;

APPENDIX TO REPRESENTATIONS PREPARED BY VECTOS ON BEHALF OF ST WILLIAM HOMES

EAST HERTS DISTRICT PLAN 2011-2033: EIP – PART 2

SITE ALLOCATIONS: HERTFORD – POLICY HERT2

Executive Summary

This technical appendix has been prepared to detail the transport assessment work that has been undertaken by Vectos on behalf of St William to consider the implications of the development of site HERT2 on the capacity of the surrounding highway network.

It does not consider the sustainability of the site in transport terms in any detail as it is a matter of agreement between EHDC and St William that this site is in a sustainable location within walking distance to the Hertford Town Centre, East Herts mainline train station, the local bus terminal and several well served bus stops along the way.

In transport terms the level of development identified on site HERT2 was identified through the modelling work undertaken by HCC as part of the Hertford and Ware UTP which become the evidence base for the Mead Lane Urban Design Framework SDP. The outcome of this modelling work is reported in Appendix E of the UTP where paragraph 7.1.7 states that there is capacity on the local highway network for the following possible options:-

- Either 300 residential flats plus 3,000 sqm B1 employment; or
- 500 residential flats; or
- 5,000 sqm B1 employment.

This modelling was undertaken on a larger site than that covered by HERT2 and included the area of land on which Redrow have consent for housing. This is why in HERT2 the level of development is 200 dwellings plus 3,000 sq m B1 employment.

If there is no identified need for employment space on the HERT2 site, this would allow at least 400 and potentially up to 500 dwellings to be delivered on the site within the transport constraints identified by the HCC modelling.

Using more detailed, up to date modelling undertaken by Vectos (and set out in detail below) this figure could actually be increased to up to 500 dwellings or circa 450 dwellings with an element of B1 employment floorspace (dependant on market demand) on the site without a material impact on the operation of the A414 which is the transport related constraint identified by HCC.

This level of development can be achieved through a combination of measures to further improve the accessibility of the site (for example planned public transport improvements and other incentives/measures to encourage walking, cycling and public transport use, including subsidised bus and rail tickets for new residents).

The site, from a highways perspective could be brought forward in separate phases.

Introduction

With the delivery of HERT2 will generate additional traffic on the surrounding highway network, this was assessed in 2010 by Hertfordshire County Council were it was determined that with suitable mitigation measures the site could can accommodate up to 200 dwellings plus 3,000 sq m employment or 400 dwellings.

This note sets out the further work that has been undertaken is based on up to date traffic surveys and assessments. Some of the work has been discussed with HCC officers.

The key highway capacity issue identified is the impact of the traffic associated with the development of the site on the A414. This is understood to be the key determinant for the level of development identified in 2010 that has informed the Local Plan.

The starting point for any assessment is that the level of traffic associated with 200 dwellings plus 3,000 sq m employment or 400 dwellings has been accepted. This is the baseline case.

Background

In relation to transport infrastructure as currently drafted Policy HERT2 including the following requirements:-

(g) access arrangements and appropriate local (with contributions towards wider, strategic) highway mitigation measures, which, inter alia, should include a link between Marshgate Drive and the existing spur road to the east of the site to facilitate pedestrian and cycle access which should also complete the circulatory route to allow for the extension of bus routes into the area;

(h) the widening of Marshgate Drive to allow for improved vehicular and pedestrian access and car parking/car share scheme to be delivered within a Green Streets approach;

(i) encouragement of sustainable transport measures, both through improvements to the existing walking and cycling networks in the locality and through new provision, which should include, inter alia, a 3m pedestrian/cycleway to the south side of Mead Lane in addition to improvements to the towpath and links with the adjoining area and the town centre (in particular addressing links to Hartham Common and Kings Mead) and enhanced passenger transport services;

Taking each of these in turn:-

The development of HERT2 would need suitable access to be provided to the site for all modes of transport including pedestrians, cyclists and vehicles. Vehicles including resident's cars and emergency and servicing vehicles. The site would be brought forward using Hertfordshire County Council's Roads in Herts Design Guide.

The development of HERT2 would include the provision of a road between Marshgate Drive and the Spur Road, within the extent of the site, to facilitate the circulatory bus route.

The mini roundabout at the junction of Railway Street with Mill Lane, the traffic signals at the access to Tesco and the traffic signals between Ware Road and Mill Lane will all need to be considered as part of a detailed assessment to support a planning application to assess the implications on the local highway network. The assessment work undertaken to date has not identified any issues that could not be addressed through suitable mitigation, which would be discussed and agreed with HCC in future. These could include minor amendments to the junction or more likely sustainable transport improvements to reduce car trips through the junction.

The more strategic implications of the development of site HERT2 are on the operation of the A414 and in particular at the Bluecoats roundabout. This junction is subject to traffic signal control and experiences some peak period congestion. This junction is discussed in much further detail below.

The widening of Marshgate Drive to provide a wider carriageway to accommodate buses and to allow some on-street parking for the existing houses with frontage access onto the road can be achieved within land that is either part of the existing public highway or part of the site.

Site HERT2 is within separate landownerships with Norbury Timber Yard in a different ownership to the remainder of the site. This does not affect the delivery of the site which can be undertaken in phases. This relates both to the development of the site and the provision of appropriate transport infrastructure including accesses and the widening of Marshgate Drive. For example, a suitable scheme for Marshgate Drive can be achieved with the Wood yard access remaining as existing including catering for all modes including providing for buses and on-street parking for existing residents within a safe environment.

There will be improvements to walking and cycling links to the site and these will include connections to the local services and facilities including schools, shops, bus stops, the town centre and railway station. As part of the assessment of what improvements will be needed walking audits have been undertaken of existing walking routes to a number of local facilities, including primary schools. These have identified a number of small improvements which can be funded in association with the development of the site. These small scale improvements will ensure that the accessibility of what is already a highly sustainable site is further improved.

Connections can be made to the towpath, but this will also be a leisure route to the town centre and other locations and there are better alternative routes that can be used at all times.

Enhancements can be made to local bus services either through buses running through the site or improved connections to bus stops and the bus station. It is also proposed through the Travel Plan that incentives to new residents will be provided to encourage the use of bus and train stations.

Methodology

Traffic Surveys

In February 2017, a turning count survey was undertaken at the London Road / Gascoyne Way roundabout junction (Bluecoats roundabout), the Mill Road / Ware Road junction and the Mill Road / Railway Street mini roundabout junction. These turning count surveys were undertaken simultaneously in February 2017 for the morning peak (07:00-10:00) and the evening peak (16:00-19:00). In addition to these turning count surveys, Automatic Traffic Counters (ATCs) were installed on Mill Road (north of Claud Hamilton Way), Mill Road (south of Tesco Site Access), Ware Road (east of Mill Road / Ware Road junction), Gascoyne Way and London Road. These ATC surveys gathered traffic flows and vehicle speeds by direction for a 7 day period in February 2017.

Following pre-application discussions with HCC, further surveys have been undertaken on Marshgate Drive which included a 7 day ATC survey in late September 2017, a turning count survey for the site access to the Norbury Timber Yard in late September 2017 for the morning peak (07:00-10:00) and the evening peak (16:00-19:00).

Trip Generation

To estimate the likely number of trips generated by the proposed site by all modes, the DfT (and HCC) approved TRICS database has been utilised to derive suitable trip rates. The selection criteria to determine suitable sites in the TRICS database for both residential and employment land uses are as follows;

- Town Centre and Edge of Town Centre sites;
- Weekday surveys;
- Multimodal surveys.

For residential sites chosen within the TRICS database, only sites which did not provide a residential travel plan have been selected as these sites represent a 'worst-case scenario' in terms of vehicle trip generation meaning, no sustainable travel options have been promoted amongst residents to discourage car use. This

approach provides a foundation upon which sustainable travel planning measures can be implemented which would reduce the number of car trips generated by the proposed site and encourage greater use of sustainable transport such as walking, cycling, rail and bus.

The use of TRICS trip rates has been accepted by HCC highways officers.

Trip Distribution

The 2011 Census data for "Location of Usual Residence and Place of Work" has been examined to understand where those currently (most recent data available) residing in the area surrounding Marshgate Drive travel for work purposes. The most popular destinations for work are Central London Boroughs – 19%, East Hertfordshire 017 (south of Hertford town centre) – 17%, Welwyn Hatfield – 13%, and Broxbourne – 10%. This Census data represents the most accurate understanding of where residents work and is considered a useful tool when predicting the routes which employees would use when travelling from the site to work.

It is important to note that not all trips to employment destinations take place by private car. This is particularly noteworthy for trips into the Central London Boroughs which represents the largest employment destination for existing residents surrounding the proposed site. The second largest employment destination is East Hertfordshire 017 which is considered to be accessible from the proposed site by sustainable transport modes.

To distribute the remaining trips to work which would be undertaken by car, the Census data has been analysed in conjunction with the most feasible route between the site and the employment destination. Based on this, it has been calculated that 59% of the future residents travelling to work from the site would travel west, making use of the A414 Gascoyne Way / London Road roundabout with the remaining 41% of vehicle trips travelling east from the Ware Road / Mill Road T-junction. Accordingly, not all journeys to work will be undertaken by car and for those trips undertaken by car, not all will travel through the A414 Gascoyne Way / London Road roundabout junction.

A similar exercise has been undertaken for the future employment uses on the proposed site, with 2011 Census data being analysed to understand where future employees will travel from. As the site is well-situated in terms of public transport accessibility, it is envisaged that employees will travel to the site by rail, bus, walking and cycling in addition to some car trips. Based on the home locations of the current employees in the area surrounding Marshgate Drive and the most feasible routes between origin and destination, a vehicle trip distribution exercise has demonstrated that 48% of employees working in the area surrounding Marshgate Drive travel via the A414 Gascoyne Way / London Road roundabout junction with the remaining 52% travelling from the east of the Ware Road / Mill Road T-junction.

Travel Planning

Following pre-application discussions with HCC regarding the likely achievable reduction to vehicle trips which would be experienced through the encouragement and accommodation of sustainable transport alternatives, HCC have stated that "*the nearby Mill Road / Mead Lane site has a Travel Plan which proposes a 10% shift to sustainable modes after 5 years. This was accepted by our Travel Plan team and seems to be a good benchmark to work from in this case*". It is accepted that a 10% reduction in vehicle trips is achievable however, due to a number of planned sustainable transport improvements in the Hertford area, it is considered that a reduction of up to 25% (an additional 15% above what HCC have considered to be a good benchmark) in vehicle trips can be achieved at the proposed site, subject to agreement with HCC on the measures and strategies put in place to achieve this.

The planned sustainable transport improvements in Hertford include;

- Enhanced pedestrian and cycling connections to the towpath running adjacent the site (funded and delivered by St William);
- Provision of Car Club vehicles on-site. Providing Car Club vehicles on-site reduces the necessity for residents to own a vehicle (funded and delivered by St William prior to full occupation);

- Proposed provision of a bus link through the northern section of the proposed site (funded and delivered by St William);
- Planned increases in the frequency of rail services from Hertford East Station and four-tracking to Broxbourne and increased capacity on the services. These improvements are expected to be brought on-line circa 2020 / 2021.

In relation to HERT2 there is an existing car club that operates on Marshgate Drive with two spaces available for car club vehicles. Vectos has spoken to two separate car clubs who have stated their willingness to make further provision on the site.

In the Part 1 session of the Local Plan EHDC officers have confirmed the programmed improvements to rail services including enhanced frequency of trains (2 to 3 an hour), larger train capacity, new and improved rolling stock and improvements to the station, which as stated previously, are expected to be brought online in 2020 / 2021.

Analysis of the 2011 Journey to Work data for the area surrounding the site and extending to Hertford East station and the centre of Hertford, reveals that the desired walking and cycling modal split percentages are already observed in some areas surrounding the proposed site. Accordingly, the desired walking and cycling modal splits are considered achievable with minimal interventions.

Furthermore, in the 2015 Hertfordshire COMET Patterns of Travel Across Hertfordshire report it is concluded that "*car is the main mode of travel for trips in Hertfordshire, the one exception is for trips from Hertfordshire into Central London which is predominantly undertaken by rail*".

In conclusion, it is considered reasonable that a 25% reduction (15% further reduction above the agreed 10% reduction with HCC) in vehicle trips generated by the site is achievable, based on the planned public transport improvements brought forward by the proposed site and rail services by Network Rail and the established principle that the main mode for travel into Central London is undertaken predominantly by rail.

Traffic Growth

To consider future traffic growth on the A414 analysis has been undertaken of traffic flows on the A414 using a permanent DfT traffic survey site at the western end of the town. **Table 1** below show the traffic flows on the road.

Table 1: Daily Traffic Flows

Year	Two Way Flow	Variation
2001	34286	
2004	42128	22.87%
2006	33887	-1.16%
2008	36110	5.32%
2009	32945	-3.91%
2010	32616	-4.87%
2012	34820	1.56%
2014	23140	-32.51%

These traffic flows cover the period from 2001 to 2014 (the most recent survey available at the time of writing this note) which include the period of the last economic recession.

As it can be seen with the exception of the large increase in 2004 and the large decrease in 2014 which are considered to be anomalies that the overall level of traffic on the A414 has not varied considerably from 2001 to now fluctuating by up to around 5%.

A comparison has also been undertaken of traffic at the Bluecoats roundabout on the A414 between a junction turning count in 2013 undertaken by HCC and that commissioned by Vectos in 2017. This has shown that in the morning peak hour the total traffic at the junction fell from 13,066 to 12,388, a 5% fall. In the evening peak hour the fall was 1.8%.

On the basis of the above no general traffic growth has been assumed.

The traffic data at the roundabout also shows that there is evidence of peak hour spreading. The hours either side of both the morning and evening peak hours are between 96 and 98% of the peak hour flows and in 2017 traffic in the hour either side of the existing peak have actually grown as oppose to the fall of traffic in the peak hour.

A further traffic consideration is the directional flows of traffic to/from the site with the different land uses. For employment uses the predominant traffic flow will be into the site during the morning peak hour.

Traffic Modelling

Vectos has built of model of the Bluecoats roundabout on the A414 using the DfT approved Linsig software. This model has been validated to ensure that it reflects the current peak period operation of the junction using information on queues and delays and through observations of how the roundabout operates including how traffic queues at the internal stoplines on the circulating carriageway of the roundabout.

This model shows that the roundabout is operating close to capacity and that there is peak period queuing and delays.

To reflect the accepted baseline position of EHDC and HCC the level of traffic that would be associated with the development of 200 residential dwellings and 3,000 sq m of employment has been added to the roundabout and this has been re-modelled.

This has shown that the existing issues at the roundabout would not be materially affected ie the roundabout would continue to operate close to capacity with slightly longer queues and delays as there would be more traffic passing through the roundabout.

The next step has then been to add the traffic associated with 500 dwellings or 450 dwellings and an element of B1 employment floorspace to the roundabout in place of the traffic associated with 200 dwellings and 3,000 sq m of employment.

The outcome of this modelling has again been that the existing issues at the roundabout would not be materially affected. The roundabout would again continue to operate close to capacity and there would be peak period congestion and queuing. However, this would not be materially different to the situation that has been accepted for the proposed allocation on site HERT2.

The conclusion of the modelling is that with the appropriate mitigation package that the following levels of development could be brought forward on site HERT2 without the need for strategic infrastructure improvements:-

- 500 residential dwellings or
- 450 dwellings with an element of B1 employment floorspace

In addition to the transport infrastructure requirements set out in HERT2 and the programmed improvements to the train services at East Herts Station the following mitigation measures would be needed:-

- A robust Travel Plan that includes subsidised travel for new residents on buses and/or trains – this can be achieved through smartcards under current ticketing arrangements.
- Improvements to local pedestrian and cycle routes to local facilities including schools, shops, the town centre, bus stops and the bus station and the railway station.

- The provision of a car club including subsidised membership for new residents.

Summary

The allocation of development in HERT2 as proposed is 200 dwellings with 3,000 sq m employment uses. This level of development being that stated in the Mead Lane Urban Design Framework where the highway capacity constraint was taken from modelling undertaken by HCC in 2010. The same modelling also allowed for the development of up to 400 residential dwellings on the site. As this level of development on the site has been determined to not have a material impact and certainly not a severe residual impact on the surrounding highway network by both EHDC and HCC it provides the baseline for any future assessment work.

Vectos, working on behalf of St William, has undertaken an up to date assessment of the highway capacity implications of the development of site HERT2. This has concentrated on the impact of the development on the site on the A414 and in particular, the Bluecoats Roundabout, as this is the strategic constraint that HCC identified to the level of development on the site.

The outcomes of the updated assessment are that with a suitable mitigation package in place that up to 500 dwellings or around 450 dwellings with an element of B1 employment floorspace, depending on the amount of employment space required following market analysis, could be developed on HERT2 without having a material impact on the operation of the A414 and certainly not a severe residual impact. The mitigation package would include measures to further encourage the use of non-car modes of transport to what is a highly accessible site and would include the transport infrastructure requirements set out in policy HERT2 with the exception of the need to improve the canal towpath as this would always remain a leisure route.

Based on the work undertaken site HERT2 could therefore accommodate 500 residential dwellings or around 450 dwellings with an element of B1 employment floorspace (subject to market demand). This could be at an early stage in the Local Plan period as there are no significant elements of infrastructure to be provided. It is also concluded that the site could be brought forward in separate phases, in highways terms.

This has the benefits of making the best use of a sustainable and highway accessible site and ensuring housing delivery also gives more flexibility within the Local Plan period for the delivery of more strategic transport infrastructure which is needed to facilitate the larger identified allocations.

APPENDIX 2: NOISE TECHNICAL NOTE

Cole Jarman

TECHNICAL NOTE

Project:	Marshgate Drive, Hertford				
Subject:	Noise Summary				
Prepared:	Johnny Berrill				
Date:	18 October 2017				
Reference:	17/0333/M01	Revision:	0	Approved:	RM

Cole Jarman have been appointed by St William Homes LLP "St William" to review the HERT2 site (as allocated within the emerging East Herts District Council Local Plan 2011-2033) in order to determine its suitability for residential end use.

Due to the HERT2 site being inclusive of the existing timber yard, which bisects the land in the ownership of St William, Cole Jarman were instructed by St William to undertake the following testing scenarios

1) Timber yard ceases trading and is developed for residential end use

2) Timber yard remains in operation

In order to quantify existing noise levels incident upon the site, a noise survey was undertaken from 21st-30th June 2017.Due to the size of the site, the survey covered a number of locations over two periods- 21st-26th June and 26th-30th June. An additional visit was undertaken from the 25th-30th August in order to establish more clearly the noise impact from the adjacent commercial and industrial site.

This technical note provides details on all surveys and outlines the levels of mitigation required to ensure that the site is suitable for residential use.

1 Proposed Layout

1.1 The HERT2 site will be predominantly residential (up to 4-5 storeys) with an element of B1 floorspace.

2 Assessment

2.1 Based on the measured noise levels during the detailed noise survey, free-field noise levels were calculated, at the most exposed sensitive areas of the site in order to establish the required performance from the various elements.

2.2 Two scenarios were developed: one with the timber yard retained under its current use, and one with the timber yard being replaced with residential flatted development.

2.3 The required performance of the façade elements, and the suitability of the site for the development, was assessed with reference to local requirements and national standards including BS8233:2014[1], and BS4142:2014[2].

2.4 The conclusions of the assessment are summarised below for both site options.

Option 1 – Timber Yard Ceases Operation

2.5 It was found that suitable internal levels could be provided using the following glazing performance types:

Glazing Type	Sound Reduction Index, Octave Band Centre Frequency (Hz)					
	125	250	500	1k	2k	4k
Glazing Type G1	26	27	34	40	38	38
Glazing Type G2	20	21	30	35	32	32
Glazing Type G3	Standard Thermal Double Glazing (R_w 30)					

T1 Required sound reduction performance of glazed elements

2.6 In order to achieve suitable background ventilation rates while windows are closed, it will be necessary to provide trickle as part of any BS8233 assessment:

"Any room should have adequate ventilation (e.g. trickle ventilators should be open) during assessment"

2.7 Across the majority of the site adequate levels of ventilation can be achieved with the installation of standard non-acoustic through frame trickle vents, the method is cost effective and requires minimal design requirements, therefore tends to be the standard approach in the construction of residential dwellings.

2.8 In the areas which have been identified as being subject to higher levels of noise (habitable rooms fronting onto the neighbouring industrial space) the installation of non-acoustic through frame trickle vents will not be feasible, however this can be easily mitigated by substituting the vents with attenuated openings.

2.9 In order to provide sufficient levels of ventilation and comply with "Approved Document F - Ventilation (2010 edition incorporating 2010 and 2013 amendments)" two vents will be provided to all bedrooms and three vents to all living rooms , the following ventilation specification will be provided to ensure that internal noise levels are adequately controlled

[1] BS 8233:2014 Guidance on sound insulation and noise reduction for buildings
[2] Methods for rating and assessing industrial and commercial sound

Ventilator Type	$D_{n,e,w}$	Required $D_{n,e}$ Band Centre Frequency (Hz) 125	250	500	1k	Octave 2k
V1	*49*	48	39	44	52	52
V2	*43*	40	38	39	41	41
V3 – Standard direct path trickle vent	*35*	No octave band data required				

T2 Required attenuation from attenuated openings / passive ventilators.

In order to ensure that all areas of the site will be unaffected by noise from the adjoining land uses, four different facade specifications have been produced.

Façade Specifications	Glazing Type		Ventilator Type	
	Bedroom	Living Room	Bedroom	Living Room
Façade Specification A	G1	G2	V1	V1
Façade Specification B	G2	G2	V2	V2
Façade Specification C	G2	G3	V2	V3
Façade Specification D	G3	G3	V3	V3

T3 Proposed Facade Specifications

2.10 Based on the noise levels measured across the site, it is expected that daytime levels will be at or below 55 dB $L_{Aeq,16h}$ without the timber yard in operation. Therefore, the site is considered suitable from an external amenity perspective.

2.11 Whilst it has been demonstrated that adequate levels of noise and ventilation can be achieved across the HERT2 site using a "fabric first" approach, as an additional method of mitigation a 2.1m high acoustic screen will be installed along all boundaries adjacent to the existing industrial uses.

Option 2 –Retention of Timber Yard

2.12 The noise assessments have concluded that should the timber yard remain in operation, a higher performing facade specification will be required to all apartments/houses with habitable rooms facing the timber yard.

2.13 To allow for residential end use, suitable internal noise levels can be achieved by substituting the glazing types specified in Table 4 "proposed facade specifications" with the glazing type below.

Noise Summary

Glazing Type	Sound Reduction Index, Octave Band Centre Frequency (Hz)					
	125	250	500	1k	2k	4k
Glazing Type G0	28	32	43	46	48	48

T4 Required sound reduction performance of enhanced glazed element

2.1.1 In compliance with both "Approved Document F - Ventilation (2010 edition incorporating 2010 and 2013 amendments)" and "Approved Document L1A: Conservation of fuel and power in new dwellings (2013 edition incorporating 2016 amendments) for all apartments/homes with habitable rooms fronting on to the timber yard, the use of purge ventilation to control overheating during day time hours will not be feasible, therefore mechanical ventilation will be introduced to these dwellings to allow for residential end use.

2.14 In order to provide suitable garden noise levels to the houses which are proposed, a 2.1m high acoustic screen be installed around the perimeter of the gardens, which is a cost effective and standard measure in reducing noise levels by between 10dB- 16dB (A).

3 Conclusion

3.1 This Technical Note has been prepared to review the HERT2 site in order to determine its suitability for residential use. Both the general environmental noise and the impact of industrial noise on the residential uses proposed have been assessed. It can be confirmed that suitable internal noise levels can be achieved across all parts of the site using a mixture of typical thermal double glazing and medium performance sound insulating double glazing, with trickle vents to provide sufficient ventilation without the need to open windows.

3.2 Noise levels within gardens have been assessed and it has been shown that suitable noise levels can be achieved through suitable layout of the scheme.

3.3 In the event that the timber yard remains trading, the testing scenario concludes that the noise arising from the timber yard can be mitigated by providing an enhanced glazing specification and mechanical ventilation to the apartments fronting on to the timber yard.

3.2 It should be noted that the recommended mitigation tends to be standard practice on sites such as HERT2 which are adjacent to industrial uses, whilst the measures are relatively simplistic in design, they're highly effective in reducing noise levels.

3.3 This technical note concludes that on the basis that St William adopt the recommended specification and mitigation outlined above, noise from both the adjoining industrial units and timber yard would not harm the living conditions of future occupiers and vice versa.