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TECHNICAL NOTE

Project No:	**ITB4004**
Project Title:	**Land at Roeshot Hill, Christchurch**
Title:	**Response to Inspector's Comments**
Ref:	**SAW/jw/ITB4004-004A TN**
Date:	**27 August 2013**

1 INTRODUCTION

1.1 This Technical Note has been prepared in response to questions raised by the Inspector in advance of the '*Christchurch and East Dorset Core Strategy - Local Plan'* (as submitted to the Secretary of State on 15 March 2013) Examination in Public.

1.2 The note specifically addresses the following questions raised by the Inspector under Matters and Issues 4, Strategic Allocations – Christchurch (CN1):

- 6 Deliverability: Has funding been secured/ identified to enable transport infrastructure requirements to come forward as required?
- 9. Transportation: has the impact of increased traffic on the roads in the adjacent National Park been taken into account?

2 MATTER 4 – QUESTION 6: DELIVERY

2.1 This section deals with the following question:

> ***Has funding been secured / identified to enable transport infrastructure requirements to come forward as required?***

Background

2.2 An overarching access and mitigation strategy has been developed by the project team for the delivery of 950 dwellings at Land at Roeshot Hill.

2.3 This strategy identified three potential points of vehicular access to the site, as follows:

i) A new signal controlled junction with Lyndhurst Road on the eastern site frontage; and/or

ii) An improved northern arm from the Sainsbury's Roundabout; and/or

iii) An improved Ambury Lane/Hawthorn Road/Salisbury Road junction with associated upgrading of the A35 Staple Cross Junction to provide an 'all moves' signal controlled access.

2.4 The strategy also included a number of pedestrian and cycle improvements to the existing network to improve connectivity and accessibility to the adjacent areas.

2.5 A package of off-site mitigation measures has been identified which could be implemented on a 'stand alone' basis, or form part of a wider route management strategy for the A35.

Dorset County Council (DCC) PARAMICS micro-simulation model

2.6 Dorset County Council (DCC) produced a PARAMICS micro-simulation model of Christchurch in 2009, which was subsequently updated in 2011. The model has a base year of 2009 and forecast years of 2016 and 2026. The forecast years of 2016 and 2026 include development at Roeshot Hill.

2.7 The findings of the modelling were set out in the '*Christchurch PARAMICS Model – Roeshot Hill Development 2016 and 2026 report'* (DC5181_J006_01RevB.doc 05 April 2012).

2.8 The model included the following assumptions:

- No infrastructure changes between the 2016 baseline and 2016 future year models;
- The 2026 Roeshot Hill test model included some highway infrastructure improvements;
- A start date for development of 2014 /15 with 185 dwellings complete in 2016 and full site completion (932 units tested) in 2024/25;
- Trips rates were extracted from the TRICS 2010(b) v6.6.2 database;
- The Roeshot Hill development distribution was based upon existing travel patterns within the model; and
- Access taken from three junctions along the A35 corridor.

2.9 The PARAMICS modelling report concluded that both the morning and evening 2016 Roeshot Hill Test models produced very similar results to the original 2016 models and that the new Roeshot Hill site access signalised junctions performed well and no congestion was apparent in the area. The report identified that the additional trips added to the network in 2016 ***'…caused little or no noticeable effects to the network… '****(para 3.1)* in either the morning or evening peak hour.

2.10 The findings of the PARAMICS modelling, for the future year of 2026 are summarised in the County Councils summary report –'*A35 Christchurch Route Management Study (A35 RMS) Summary'*, June 2012 (reference ED53.1).

2.11 Paragraphs 2.12 and 2.13 of the A35 summary report identify the general results, including that:

- The morning peak hour model (2026) performed relatively well with the additional development related traffic; and
- The evening peak hour model (2026) suffered 'at times' from congestion and capacity issues.

2.12 Importantly, the note concluded that:

> ***'In the case of the Roeshot Hill residential development, DCC are content that there is a package of measures, including significant junction improvements and sustainable transport improvements, which would be acceptable by way of mitigation against the expected impact'*** **(Para 5.5).**

2.13 A number of Key 'hot spots' were identified by DCC as requiring mitigation. These are identified as; the A35 westbound approach to Stony Lane roundabout; the A35 Fountains roundabout; and the Barrack Road/Stour Road signals.

2.14 It is therefore evident from the modelling undertaken by DCC that the introduction of 185 dwelling by 2016 has no noticeable impact on the highway network and that the development can be fully mitigated through a package of off site junction improvements, when assessed for a future year of 2026.

2.15 It is noted that the PARAMICS modelling assumed a start date on site of 2014 / 15. It is now apparent that this is unachievable and, as such, this date is likely to be closer to 2016, with occupations in early 2017.

2.16 It is considered that the assumptions on the level of traffic impact as derived from the PARAMICS modelling remains robust, even when allowing for this slight slip in the timetable, as the level of background growth assumed in the modelling between 2016 and 2018 is unlikely to be significant enough to alter the outcomes of the modelling.

2.17 Also, due to the effects of the recession, it is the case that the modelled 2016 flows will exceed those that are likely to occur in practice.

2.18 In-fact a review of link flow data provided by the Department for Transport on the A35 between the B3347 Stony Lane Roundabout and A337 Somerford Roundabout indicates that between 2009 and 2012 there has been a year on year reduction in the Annual Average Daily Flow (AADF) on this link. Therefore the growth anticipated in the model between 2009 and 2016 is unlikely to have materialised. The full output data for the A35 link is included at Appendix A.

Infrastructure Delivery Plan

2.19 The Infrastructure Delivery Plan (IDP) which sits alongside the Core Strategy and provides information on the range of infrastructure which is to be delivered to support the polices within the Core Strategy.

2.20 The Draft Infrastructure Delivery Plan was updated in November 2012 and changes to the IDP are set out in the *'Schedule of Proposed Changes to the Core Strategy Pre-Submission'* (reference SD20)

2.21 In respect to the A35 the IDP sets out the following:

> ***Para 2.18 - The Core Strategy also identifies strategic junction improvements along the A35 to support future development and the proposed Christchurch Urban Extension which includes improvements at Fountains Roundabout, Stony Lane Roundabout, Staple Cross (Salisbury Road) and Somerford Roundabout.***
>
> ***Para 2.20 - Improvements to the A35, B3073 and A338 are scheduled to be delivered in the medium term (2014 - 2019) through developer contributions and major scheme bids for Government funding.***

2.22 Two key projects identified in the IDP schedule, related to Policy CN1 include:

- The 3 Towns Corridor – A package of traffic management measures, cycling and walking facilities, smarter choices, travel planning and bus improvements on Quality Bus Corridor, Bournemouth, Christchurch and Poole; and
- A35 Fountains Roundabout, Stony Lane Roundabout, Staple Cross junction and potentially Somerford Roundabout improvements.

2.23 The A35 RMS Summary, (reference ED53.1) identifies that:

> ***A bid to central government has recently been successful, securing £12 million towards a package of schemes through the Local Sustainable Transport Fund (LSTF). Some of these proposed schemes, scheduled for construction between 2013 and 2015, would have an impact on the A35 in Christchurch including;***
>
> - ***Stour Road/Bargates Junction signalisation***
> - ***Stour Road proposed bus lane***

- ***Somerford Road footway/cycleway***
- ***Stony Lane/Purewell junction improvements***
- ***Barrack Road footway/cycleway***
- ***Stony Lane railway bridge shuttle working.***

2.24 It is evident that significant funding has already been secured which will be of benefit to existing communities, the A35 and the proposed development.

2.25 The junction improvement works at A35 Fountains Roundabout, Stony Lane Roundabout, Staple Cross junction and potentially Somerford Roundabout are identified as costing circa £5.5M and are to be delivered via DCC/Developer contributions in the period 2018-2022.

2.26 As noted above, the modelling undertaken by DCC identified that 185 dwellings could be delivered without any further network modifications, while the full 950 dwellings can be mitigated through targeted junction improvements.

2.27 The 'hot spots' identified in the DCC PARAMICS modelling correspond to the junction improvement works identified in the IDP. Furthermore, the access strategy for the Roeshot Hill site includes an allowance for off-site junction improvement works / contributions however these works will be provided to mitigate the development proposal as part of a comprehensive contributions package which can be delivered by the County Council to both mitigate the urban extension and provide wider benefit to the A35 corridor.

2.28 In terms of the timing of the infrastructure in the period 2018 / 2022 this is considered to be compatible with the likely delivery of housing at the Roeshot Hill site, with the first dwellings unlikely to be occupied until quarter one of 2017. Therefore, as set out in the DCC modelling, a proportion (circa 185 dwellings – and possibly more if background flows have decreased) of the urban extension can be delivered prior to the works identified in the IDP being required.

Summary

2.29 It is therefore evident that the infrastructure required to mitigate the urban extension has been identified through the DCC PARAMICS modelling and that these improvements are identified in the IDP. Funding for improvements to the A35 have already been secured via LSTF funding and further funding towards these schemes will come forward in the form of developer led contributions.

2.30 There are therefore no impediments to the development of the Roeshot Hill site.

3 MATTER 4 – QUESTION 9: TRANSPORTATION

3.1 This section deals with the following question:

Has the impact of increased traffic on the roads in the adjacent National Park been taken into account?

3.2 Dorset County Council (DCC) has confirmed that they have considered this issue and that traffic flow calculations have been submitted to Hampshire County Council (HCC) and the New Forest National Park Authority (NFNPA).

3.3 These traffic flows have been derived based on turning proportions from the PARAMICS model (as discussed above) and industry standard TRICS trip generation rates.

3.4 The assumptions made by DCC have been reviewed against the project team's own assumptions and it is considered that the DCC assessment provides a robust estimate of the likely traffic increases in the National Park. On the basis of the DCC assessment and the project team's own assessment it is concluded that:

- Circa 15% to 20% of development related traffic has a destination in, or will travel east through the National Park;
- 20% of development generated trips is equal to circa 120 two way trips in a peak hour;
- 120 two way trips is equal to two additional vehicles per minute;
- The 120 additional trips would be spread across the A31, A35 and A337;
- The impact on any of the links identified above is less than 10%; and

- There would be no demonstrable impact from the Christchurch urban extension on the National Forest.

3.5 Furthermore, it should be noted that Meyrick Estate Management Ltd is currently progressing a scheme of enhancement to Hawthorn Road through the preparation of a planning application which includes the removal of highway rights for vehicles from a position just north of the railway to Hill Road. This will allow pedestrians, equestrian users and cyclists a safer and more attractive route. The proposal will also support the Suitable Alternative Natural Greenspace (SANG) for the western part of the urban extension site. This small scheme is a demonstration project for the downgrading of routes to the north of the urban extension to prevent rat running on unsuitable roads, and will help to ensure that car journeys through the National Park are made on suitable routes.

Appendix A – A35 DfT Traffic Flows

Table 1 – A35 AADF Traffic Flows

AADF Year	CP	Road	Start Junction	End Junction	All Motor Vehicles
2000	46377	A35	B3347 Stony Lane Rbt	A337 Somerford Rbt	34278
2001	46377	A35	B3347 Stony Lane Rbt	A337 Somerford Rbt	33708
2002	46377	A35	B3347 Stony Lane Rbt	A337 Somerford Rbt	33645
2003	46377	A35	B3347 Stony Lane Rbt	A337 Somerford Rbt	32577
2004	46377	A35	B3347 Stony Lane Rbt	A337 Somerford Rbt	32988
2005	46377	A35	B3347 Stony Lane Rbt	A337 Somerford Rbt	32176
2006	46377	A35	B3347 Stony Lane Rbt	A337 Somerford Rbt	32296
2007	46377	A35	B3347 Stony Lane Rbt	A337 Somerford Rbt	34609
2008	46377	A35	B3347 Stony Lane Rbt	A337 Somerford Rbt	32661
2009	46377	A35	B3347 Stony Lane Rbt	A337 Somerford Rbt	32486
2010	46377	A35	B3347 Stony Lane Rbt	A337 Somerford Rbt	31857
2011	46377	A35	B3347 Stony Lane Rbt	A337 Somerford Rbt	31845
2012	46377	A35	B3347 Stony Lane Rbt	A337 Somerford Rbt	31524

Source: Department for Transport
(http://www.dft.gov.uk/traffic-counts/cp.php?la=Dorset#46377)