

**LAND TO THE EAST OF EAST HANNEY
TECHNICAL SUMMARY NOTE
DECEMBER 2014
REF. AB/21371**

This note provides a summary of key technical matters pertaining to a proposed residential development on Land to the East of East Hanney. For the purpose of this appraisal the development quantum has been assumed to be 200 dwellings.

Highways and Transportation

The site currently benefits from frontage access onto the A338 (west) and Steventon Road (north). The A338 is clearly a key route for the local area and conveys traffic along the eastern boundary of the village. On that basis any interaction from the proposed development along this route will require careful consideration. It is however felt there are a number of potential options that will be assessed on how access could be facilitated into the proposed development along with the delivery of improved sustainable (pedestrian and cycle) linkages into the village centre.

For the purpose of this appraisal, one option to serve the proposed development could be to provide a new roundabout junction along the A338 to serve the proposed development and incorporate Steventon Road. Access into the development could then be served from the roundabout and possibly from Steventon Road further west if 2 points of access are required by the Local Highway Authority. It is felt a roundabout would aid in slowing vehicles speeds through the village and would provide the opportunity to create pedestrian crossing points which would be incorporated as part of roundabout junction.

As part of the highway improvement works, footways would be provided along the A338 linking to Main Street and consideration will also be given to the provision of linkages along Blenheim Orchard and The Paddocks. In addition junction improvements will be provided to ensure highway capacity and safety is maintained and such measures could include the provision of traffic signals at the Main Street/A338 junction.

The development area lies close to existing amenities and facilities situated predominately to the west of the proposed development. These amenities include a restaurant, public houses, shop and primary school.

Current bus services including the X30 and 31 travel through East Hanney and close to the proposed development. The X30 travels closest to the proposed development along the A338 and therefore to ensure sustainable access can be achieved and modal shift is encouraged, new bus stops will be provided an incorporated into the proposed access arrangements and works to the A338. It is not envisaged public transport services will be diverted into the development however provision can be made if required.

In summary the development is considered to be accessible and located in a sustainable location meeting the aims of the NPPF. Enhancements to sustainable transport provision will be considered as the development proposals progress along with improvements to the local highway network as required to provide betterment over existing conditions.

Flood Risk

According to the Environment Agency flood maps, the site area is wholly contained within Flood Zone 1 and therefore in accordance with the NPPF residential development is sequentially acceptable.

The Environment Agency surface water maps show some areas of flooding within the development area and principally to the north and east where existing ditches/watercourses are present. Hydraulic assessment of these ditches/watercourses may be required in due course and as part of any future Flood Risk Assessment. As required suitable mitigation measures will be considered and these may take the form of suitable standoff areas, control and management of overland flow routes, raised finished flood levels and cut off ditches/channels around the periphery of the site.

Flood Risk is not considered to be constraint to development and measures will be provided to ensure flooding to and from the development is managed in an effective way. As required the development will take a sequential approach to flood risk ensuring residential areas are contained in the areas of least risk.

Surface Water Drainage

Geology maps show superficial deposits of sand and gravel on the site with an underlying geology of mudstone. Soakage testing will be completed as part of a detailed Flood Risk Assessment and this will assess whether the ground is suitable for soakaways and the presence of groundwater.

Detention features such as ponds and swales will also be utilised to provide attenuation up to the 1 in 100 year storm event plus 30% for climate change. Due to the shallow topography of the site, swales are likely to be the predominate SuDS feature with integration into the land use framework of the site. Discharge rates will be limited to below current Greenfield runoff providing significant betterment to nearby watercourse systems.

The land use framework will allow for the consideration of various drainage features and other techniques including permeable paving will be included as part of the proposed development to meet the water quality aims within CIRIA C697.

Foul Drainage

Thames Water provides foul drainage services within the local area and a connection for any proposed development would be sought to the nearest foul sewer.

Thames Water is obligated, under the Water Industry Act, to provide foul drainage capacity and enable communication with the nearest sewer. If it was determined improvements are required to the foul drainage network these would be funded by Thames Water as part of their wider capital works programme.

The developer can also bring forward improvement measures through a requisition, which can be facilitated under Section 98 of the Water Industry Act, and this would be fully funded by the developer. Thames Water's Capital Works Programme should therefore not be seen as a constraint to development or something that will delay delivery until later in the Plan period.

Noise

The proposed development area is located adjacent to road traffic noise sources which include the A338 and Steventon Road. A noise assessment will be prepared to establish the existing noise environment at the site and consider the assessment of noise impact upon existing local receptors and future receptors. This work will be undertaken with reference to BS8233:2014 'Guidance on sound insulation and noise reduction for buildings', World Health Organisation 'Guidelines for Community Noise' 1999 (WHO Guidelines) and

Department for Transport 'Calculation of Road Traffic Noise 1988 (CRTN), Design Manual for Roads and Bridges Volume 11, Section 3, Part 7 (November 2011).

Noise levels at the site will be established using a combination of noise survey and if required CadnaA (Computer Aided Noise Abatement) noise modelling software. As required and based on the results of the noise assessment work mitigation measures will be determined and incorporated into the development framework. Development near to noise sources such as major roads is not uncommon and measures are likely to include:

- Sufficient standoff from the noise sources
- Consideration of building and garden orientation to ensure rear garden amenity is protected.
- Installation of acoustically treated glazing and passive ventilation systems as required to reduce internal noise levels.

It is not considered large scale noise mitigation measures such as fencing or bunding would be required as part of this development. With the implementation of these varied mitigation measures and others recommended external and internal noise levels for dwellings can be achieved meeting.

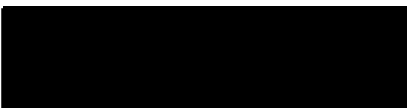
Land Contamination

As part of any future planning application a Phase I Environmental Risk Assessment would be completed across the proposed development area. Whilst only limited assessment work has been undertaken at this stage, it is our opinion the site is unlikely to be designated as statutory contaminated land by the local authority under the provision of Part IIA of the Environmental Protection Act 1990 (inserted by Section 57 of the Environmental Act 1995). A proven "pollution linkage" within the definition of causing "significant possibility of significant harm" to people, controlled waters or the environment as defined in the statutory guidance, Edition 2, May 2006 is unlikely to be identified at the site.

Conclusions

From the information contained within this note there are no significant constraints to development in this location. The development proposals can be delivered with enhancements and improvements to existing infrastructure and will present opportunities to provide benefits and betterment to the village through improvements to highway and drainage infrastructure as well as improvement pedestrian and cycle connectivity.

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