

TOWN AND COUNTRY PLANNING ACT 1990

**WARWICK DISTRICT
LOCAL PLAN EXAMINATION**

**MATTER 7C
PROPOSED HOUSING SITE ALLOCATIONS,
SAFEGUARDED LAND AND DIRECTION FOR
GROWTH ON EDGE OF COVENTRY**

**REPRESENTATIONS
ON BEHALF OF**

CREST STRATEGIC PROJECTS

D2 Planning Ref: 12-093

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7th - 9th November 2016

D2

APPENDICES

1. Vision Statement
2. Technical Note – Transport prepared by SK Transport
3. Utilities Statement prepared by Reuby & Stagg
4. Technical Note – Biodiversity prepared by Aspect
5. Delivery Trajectory

1. What is the current planning status of the site?

- 1.1. The site is situated within the West Midlands Green Belt and is located outside of the settlement limits of Burton Green as identified in the Warwick District Local Plan.

2. How does it fit within the overall spatial strategy for the area?

- 2.1. The spatial strategy is set out in draft Strategic Policy DS4. This policy provides the framework for draft Policy DS10 which sets out the broad locations of allocated sites for housing as follows: -

Urban Brownfield Sites

Greenfield sites on the edge of Kenilworth

Greenfield sites on the edge of Warwick, Leamington and Whitnash

Sites within Growth Villages and the rural area

- 2.2. The majority of the proposed allocations in the emerging Local Plan fall outside the greenbelt albeit there are a number of sites that fall within the Green Belt. These have been included where exceptional circumstances have been demonstrated in line with the guidance in the NPPF.

- 2.3. The additional housing provision (i.e. Coventry's unmet housing need) required the Planning Authority to undertake a reassessment of the proposed strategy as follows:

-

- Is there a housing need that has to be met?
- Are there suitable sites outside the Green Belt to meet this need?
- Is a site in the Green Belt the best option? If so, are there exceptional circumstances to release land from the Green Belt and allocate it for housing etc?

- 2.4. The proposed modifications have focused on how the housing needs of Coventry can be accommodated in the District. The most suitable locations to meet these additional needs are either adjacent to Coventry or where good commuting to Coventry is available. These locations are currently in the Green Belt.

- 2.5. So in view of the above, the proposed spatial strategy and distribution: -

- a) is in line with the Local Plan Spatial Strategy which is the most sustainable approach for meeting future housing needs;

- b) provides for the future housing needs of Coventry adjacent to the City or in areas with good commuting to the City;
- c) ensures that local housing needs are met within the District's main towns and growth villages;
- d) provides an alignment between the location of housing and existing and proposed areas of employment;
- e) provides a good mix of sites and locations across the District;
- f) includes Green Belt sites where exceptional circumstances can be demonstrated; and
- g) recognises important environmental constraints e.g. landscape, cultural heritage, ecology etc.

2.6. Crest are fully supportive of the proposed strategy but believe that the land they control at Westwood Heath Road can accommodate up to 610 dwellings rather than 425 new dwellings as currently proposed. This is demonstrated fully in the Vision Statement for the site attached. (Appendix 1)

3. In addition to housing provision is there other benefits that the proposed development would bring?

- 3.1. There are a range of benefits in addition to housing provision that would be provided by the Westwood Heath Road site which include: -
- i. A local centre with a range of shops to serve the local community;
 - ii. Potential for a new community centre for Burton Green and redevelopment of the existing community centre;
 - iii. A site for a medical practice for which there is an identified need or financial contribution towards improving existing healthcare facilities. The site would be made available as part of the development proposals;
 - iv. Provide net gain in terms of biodiversity;
 - v. New and improved local footpath and crossing facilities to be provided;
 - vi. Opportunity to increase the frequency of local bus services to local destinations including Kenilworth and Warwick; and
 - vii. A range of public open space including sports pitches which would be available for use by the local community.

4. What are the potential adverse impacts of delivering the site? How could they be mitigated?

- 4.1. Crest have produced a Vision Document (Appendix 1) which outlines the proposals for a development using Garden Village principles at Westwood Heath Road. It demonstrates that the site can accommodate more than 425 dwellings without any adverse impact. It is understood that the 425 dwelling limit has been arrived at by infrastructure constraints namely highways. We attach a Technical Note prepared by SK Transport which demonstrates that: - (Appendix 2)
- i. A 425 residential development would not require significant highway mitigation being required; and
 - ii. A development of up to 610 dwellings would not lead to a material change in the highway network performance.
- 4.2. The site is therefore relatively free from constraints and that development can be accommodated without particular problems. It acknowledges that further detailed discussion needs to take place with the Planning Authority and other interested parties including the local community but that there are no issues to prohibit the delivery of the site. Indeed it is Crest's intention to prepare and submit a hybrid planning application in early 2017. The baseline work for that application is well underway.

5. What are the infrastructure requirements/costs and are there physical or other constraints to development? How would these be addressed?

- 5.1. The Vision Document again highlights the infrastructure issues regarding the development of the site. Details of highways have already been included with regards to Question 4. That statement by S K Transport demonstrates that access is available for the Highway Authority's requirements. In addition a Utilities Statement proposed by Reuby & Stagg is attached (Appendix 3). This demonstrates that there is no issue with regards to utility provision and that subject to the usual upgrades etc that all of the required utilities are available for the site at no significant cost. Accordingly, there are no adverse infrastructure costs which would prohibit the delivery of the site in the early part of the Plan period.

6. Is the site realistically viable and deliverable?

- 6.1. The site has one owner and there is one developer. There are no particular constraints to development coming forward as outlined in the answers to questions 4) and 5). Crest has instructed a team of consultants who have already undertaken a significant amount of background work with regards to the preparation and submission of a planning application by early 2017. Technical notes have already been provided on highways and utilities. In addition, all of the biodiversity surveys have been undertaken (Appendix 4) and these have informed the draft Masterplan and potential for biodiversity enhancement. We attach a delivery trajectory as Appendix 5 which indicates the likely submission of a planning application for delivery of the site. Due to the lack of constraints the site would be delivered early within the Plan period and assist the Council in contributing to their 5 year land supply.

7. What is the expected timeframe for development and is this realistic?

7.1. See answer to question 6.

8. What would be the effect of the proposal on the purposes of including land within the Green Belt?

- 8.1. The Council has undertaken a Green Belt assessment as part of its review of the Green Belt to identify suitable sites for the release of the Green Belt.
- 8.2. Firstly, the Joint Coventry Green Belt Study 2009 identified the site as C14. It assessed the site against the 5 Green Belt functions identified at the time in PPG2 Green Belts (now paragraph 80 of the NPPF). The assessment concluded that the site was one of the least constrained parcels south of Coventry and would be released from the Green Belt.
- 8.3. Secondly, the Council's latest Green Belt Assessment 2015 again concludes that the site is worth considering for release. Whilst it is acknowledged that the allocated sites to the south of Coventry play some role in restricting spread, preventing towns from merging etc land can be released for development whilst preserving Green Belt functions and providing a longer term boundary for the Green Belt.
- 8.4. Part of the site controlled by Crest has not been released from the Green Belt and we would request that it also be released for the same reasons as the allocated site.

9. What would be the effect on the openness of the Green Belt?

- 9.1. Clearly given that development would take place on land which is currently in the Green Belt, the openness of the Green Belt would be reduced. However, the proposed development would seek to mitigate any impact through the design of the proposed development with Garden Village principles. This would result in a landscape led approach to development which would provide a variety of public open spaces, informal and formal including parkland.

10. Are there exceptional circumstances which justify altering the Green Belt? If so, what are they?

10.1. Exceptional circumstances exist to alter the Green Belt as follows: -

- i. There is an identified housing need to identify additional land in Warwick District to meet part of Coventry City's future housing provision;
- ii. Coventry has a lack of urban capacity to accommodate its own future housing need;
- iii. There are no brownfield sites available to accommodate the housing provision;
- iv. There are no available sites outside the Green Belt to accommodate the additional housing provision. The only part of the District that falls outside the Green Belt is to the south of Warwick, Whitnash and Leamington Spa. The draft Local Plan already makes significant allocations in that area (4,000 dwellings). In addition 2 appeals have been allowed recently at The Apps and Gallow Hill which increases the provision to 1,350 dwellings. Given the lack of development it would be wrong to further increase the level of housing due to deliverability and other issues. Furthermore, these sites have poor connectivity with Coventry and no less limited to meet the city's needs.
- v. This is a sustainable location with good public transport links which allows the opportunity to expand on the edge of the city and provide opportunities for infrastructure improvement;
- vi. Sites are available which are free from constraints and so can make an immediate contribution to meeting housing needs in the short/medium term; and
- vii. Sites can be released from the Green Belt whilst still providing a long term defensible Green Belt boundary.

For the Direction of Growth**20. Why is a Direction for Growth necessary? What is it intended to achieve?**

- 20.1. Crest have no objection to a Direction of Growth Policy for the south of Coventry being proposed. The policy would enable identification and release of the land to come forward in a clear and coordinated manner. It would also provide certainty to the release of the land. Finally, the policy would ensure that the development would provide the overall benefits that are required.

21. Does Policy DS NEW1 provide sufficient clarity and guidance as to the scale, type and location of future development in the area and the factors to be taken into account?

- 21.1. Crest consider that Policy DS NEW1 does provide sufficient guidance on the quantum of development, the type of development and the location. It further provides a range of issues which should be taken into consideration as part of the preparation of early applications both individually and cumulatively.

22. How will it be implemented in practice?

- 22.1. Crest are already in discussion with the District Council, County Council and various other interested parties with regard the delivery of their site and the various issues that need to be addressed as part of their planning application for the site.

23. In overall terms is the policy justified, effective and consistent with national policy?

- 23.1. The policy is consistent with the NPPF particularly the guidance in paragraph 157 which states that amongst other things Local Plans should: -

- “indicate broad locations for strategic development on a key diagram and land-use designations on a proposals map;

- **allocate sites to promote development and flexible use of land, bringing forward new land where necessary, and provide detail on form, scale, access and quantum of development where appropriate”**



VISIONING DOCUMENT

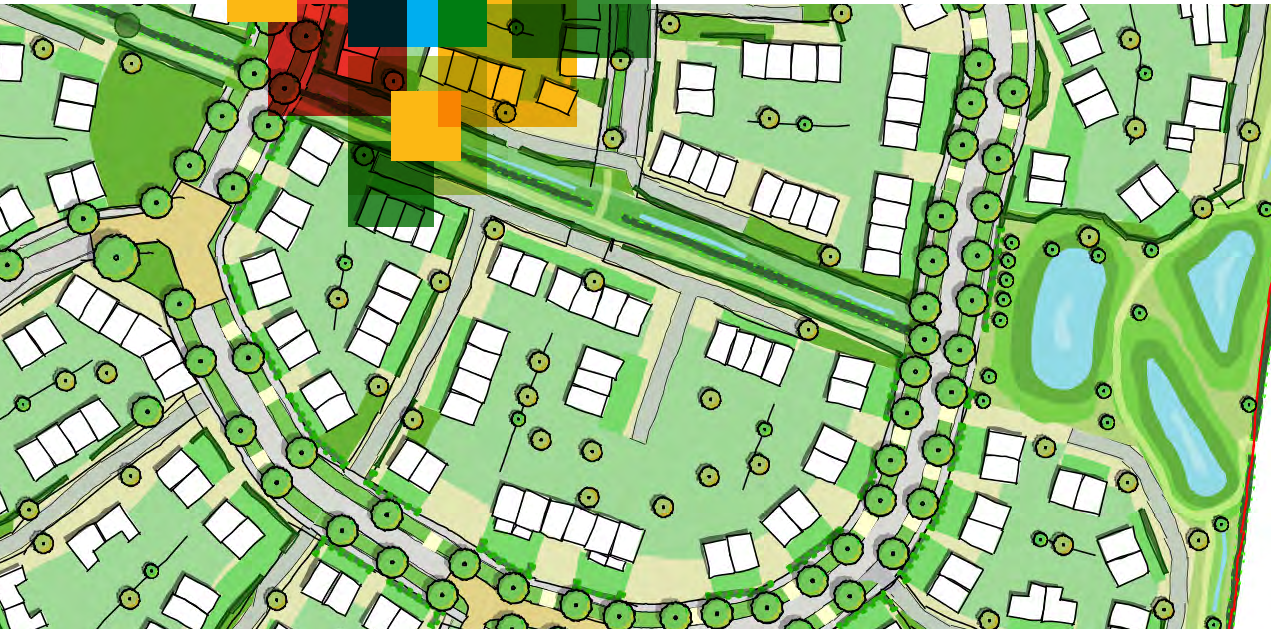
PROPOSALS FOR A GARDEN VILLAGE AT WESTWOOD HEATH ROAD

The aim of Crest Nicholson is to create a Garden Village at Westwood Heath Road inspired by the Garden City ideals of town and country in perfect combination



TERENCE
O'ROURKE

Document prepared by
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- 01 Introduction
- 02 The Vision
- 03 Crest Nicholson & the Garden Village
- 04 Planning context
- 05 The site and constraints
- 06 Landscape and biodiversity
- 07 Transport
- 08 Master plan and capacity
- 09 Summary



01 INTRODUCTION

Tile Hill

Park
Wood

Lodge
Farm

Westwood
Heath

The site

Burton
Green

Black Waste
Wood

Bockendon
Grange

University of
Warwick



This document has been produced in support of Crest Nicholson's proposals for the creation of a Garden Village on land at Westwood Heath Road, south of Coventry.

This document builds upon the earlier submission by Crest Nicholson in December 2015 promoting land at Westwood Heath Road. It consists of an update on the baseline analysis work completed to date, and the proposals for the landscape and master planning principles that will guide the form of the new Garden Village.

The document explains how well located the site is for the proposals, and details how it could deliver a sustainable new community based upon clearly defined place-making principles.

The report is structured as follows:

Section 02 explains the nine Garden Village principles that Crest Nicholson has established to create a place of healthy lifestyle opportunities, characterful designs and legacy.

Sections 03 explains the nine Garden Village principles that Crest Nicholson has established to create a place of healthy lifestyle opportunities, characterful designs and legacy.

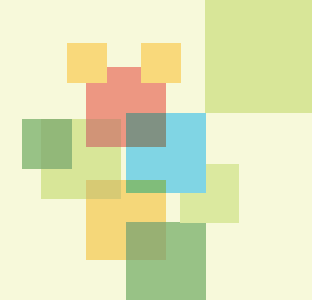
Sections 04-05 provide an analysis of the existing site and its context, detailing the characteristics of the site.

Sections 06-07 provide detailed analysis of the landscape and transport issues affecting the site.

Section 08 illustrates and explains the master, including an indication of the capacity of the site.

Section 09 provides a conclusion, which demonstrates that the site could be developed in a way that not only meets significant local housing need through quality new homes, but also will create an attractive, sustainable, healthy and community focused Garden Village.

Figure 1. Site location



02 THE VISION

A Garden Village at Westwood Heath Road

Distinct new community

- An attractive 21st Century Garden Village with placemaking at its heart
- High quality new homes with front and rear gardens
- Lower density family housing
- Generous streets and spaces
- Integrate well with Coventry

Healthy living

- Opportunities to walk and cycle to local facilities
- Community gardens and allotments
- Play spaces and sports provision

Landscape-led approach

- A landscape framework that responds to and enhances the existing setting
- A variety of public spaces, informal and formal, including parkland

Sensitive to context

- Respond sensitively to existing communities at Burton Green and Westwood Heath
- Enhancing facilities and amenities to local residents including Burton Green

Sustainable connections

- Take advantage of the site's proximity to the University of Warwick and the employment land around it (which makes the site a very sustainable location for development)
- Maximise sustainable transport links to Tile Hill station, which connects with Coventry, Royal Leamington Spa and Warwick, and increase bus frequency

Nature and biodiversity

- Creation of nature park to encourage wildlife and biodiversity





03 CREST NICHOLSON & THE GARDEN VILLAGE

The Garden City concept was the brainchild of 19th century reformer Ebenezer Howard, which was successfully realised in Letchworth Garden City, Welwyn Garden City and Hampstead Garden Suburb.

As Howard saw it, the Garden City should combine the very best of town and country living to create beautiful, well planned, healthy and vibrant communities (figure 3). In many ways, his ideas were the precursors of today's principles of sustainable development and have a more contemporary application as the Garden Village.

The original Garden Cities sought to address the social and environmental challenges of the late 19th and early 20th centuries. Equally the 21st century Garden Village at Westwood Heath Road must respond to current challenges.

Crest Nicholson has been inspired by Howard's Garden City ideals, which have informed the 'Crest Nicholson Garden Village Framework' (see figure 4).

These nine guiding principles all combine to create a place with a range of healthy lifestyle opportunities, characterful designs and a legacy of which to be proud.



Figure 3. Garden Village Three Magnets Diagram



Figure 4. Crest Nicholson Garden Village Framework
(©Crest Nicholson Plc 2014)



Quality design



Street scene



Well connected



Infrastructure



Healthy living



Travel choices



Civic pride



Technology



Long term management

Crest Nicholson have a proven track record and have achieved considerable success with their framework, including Garden Villages at Tadpole Farm (Swindon) and Monksmoor Park (Daventry).

MONKSMOOR PARK, DAVENTRY NORTHAMPTONSHIRE

Monksmoor Park is an outstanding example of Britain's natural beauty carefully combined with artfully designed new homes. This new community, nestled alongside the Grand Union Canal and including a Country Park to the south provides plenty of opportunity to enjoy a rural lifestyle. An inspired 21st century Garden Village, Monksmoor Park incorporates the perfect combination of town and country living.

Crest Nicholson are devoted to creating attractive new communities for the benefit of both new and existing residents. At Monksmoor Park, this beautiful landscape has been carefully masterplanned to sensitively incorporate new build homes of high architectural quality whilst simultaneously integrating and enhancing existing wildlife features. Sustainable Urban Drainage features form not only practical drainage solutions but are thoughtfully landscaped to create real places in the heart of the village. Monksmoor Park is a flourishing new community, which exemplifies Crest Nicholson's dedication to creating great places for the enjoyment of all.



Monksmoor Park (Daventry)

TADPOLE GARDEN VILLAGE, A VISIONARY NEW DEVELOPMENT IN NORTH SWINDON

Awarded The Housebuilder Award for Best Community Initiative 2015.

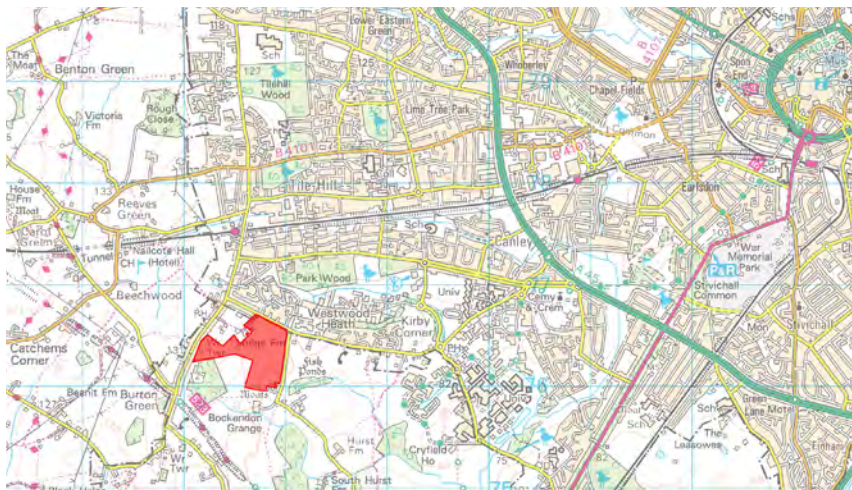
Characterised by open, tree-lined avenues, large front and rear gardens and generous on-plot parking; Tadpole Garden Village exemplifies Crest Nicholson's 21st century Garden Village concept. Having set a new benchmark in design, community life and facilities the village incorporates a harmonious mix of new homes, open space and architectural quality - Tadpole Garden Village is a place that encourages social interaction, at both village and neighbourhood level.

Crest Nicholson are committed to creating beautiful, well planned, healthy and vibrant communities which acknowledge their context and surroundings. Tadpole Garden village provides an excellent example of characterful designs and legacy for which both residents established and new, can be proud. Designed to provide plenty of shared facilities for the local community, the village benefit from over 40 allotments and 40 hectares of nature park whilst also incorporates features to help enhance and support local wildlife - over 27 bat roost boxes and 26km of hedgerow have been introduced to support local wildlife.

Crest Nicholson are dedicated to applying high quality Garden Village principles in the realisation of a new community at Westwood Heath Road. Enhancing existing natural and ecological features, improving sustainable transport systems and incorporating the highest quality architectural design to create a community with a legacy to be proud of. Our vision will ensure that this new sustainable community will create a great place for the enjoyment of all.



04 PLANNING CONTEXT



Site viewed from Westwood Heath Road, looking west

DEVELOPMENT PURPOSE & STRUCTURE

The purpose of this document is to articulate how land to the south of Westwood Heath Road represents an available, suitable and achievable location for growth which can deliver an attractive new community to the south of Coventry.

The site can deliver around 610 new homes, a new local centre with community facilities and significant areas of strategic open space. The design concept is set out in section 08.

The evidence base that has informed the development framework is summarised over the following pages.

The emerging local plan currently supports the allocation of housing at this location.

PLANNING CONTEXT

The emerging Warwick District Local Plan now makes provision for 16,776 dwellings in the period 2011 to 2029. Part of the requirement is to help meet unmet housing needs in Coventry City and the planning authority acknowledges that they will have to allocate land for approximately 5,200 additional dwellings.

The planning authority acknowledges that to meet part of Coventry City's housing requirement that sites in the Green Belt located to the south west of Coventry should be released. Land at Westwood Heath Road has been identified in the emerging Local Plan as one such suitable site for up to 425 dwellings.

This statement demonstrates how the allocation of this site can help meet part of the council's future housing need and can accommodate and deliver future dwellings.

SUMMARY

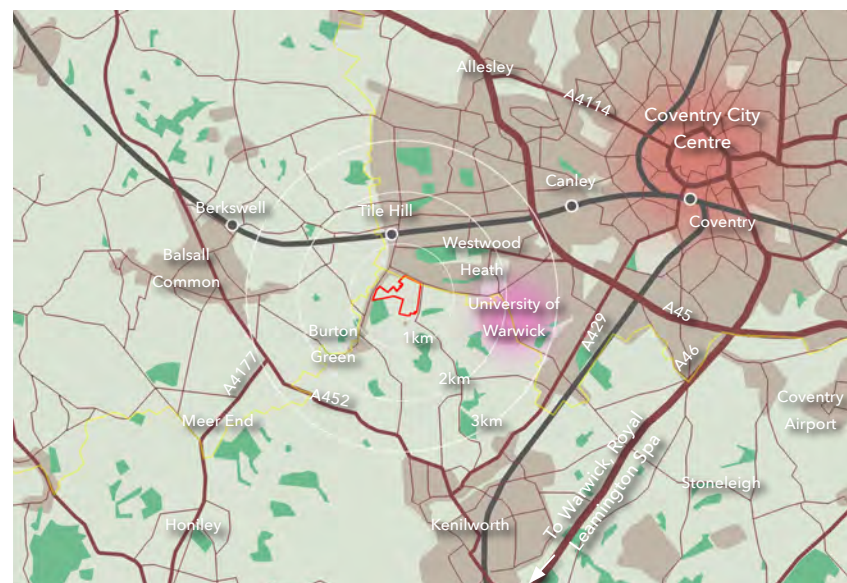
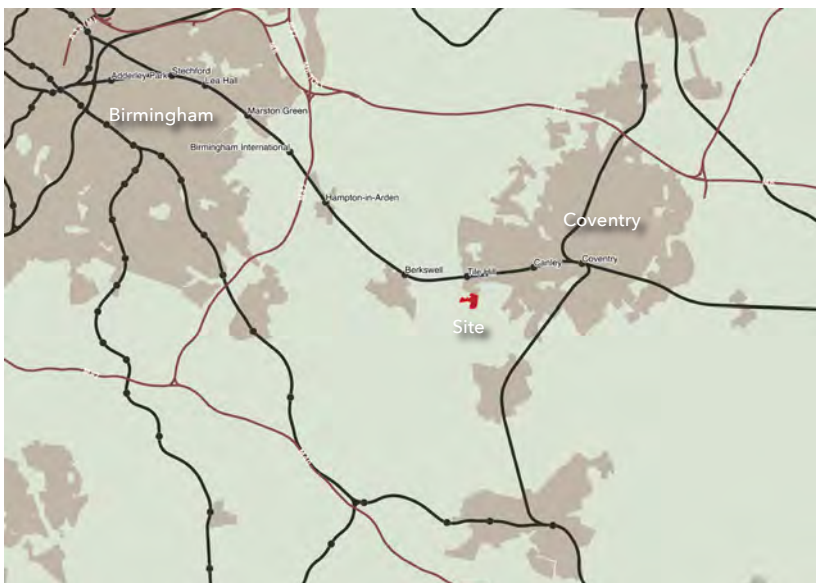
In NPPF terms, the site is available, suitable and developable, and therefore should be considered as an appropriate allocation to meet future housing requirements.

The site offers a unique opportunity to provide a high quality residential development at a scale that is appropriate to its surroundings. It has no physical constraints and is able to accommodate development that reflects the prevailing settlement pattern, protects key views and introduces a range of landscape enhancements, which would greatly increase the ecological and community functions of the land.

The site represents a logical development opportunity that is contiguous with existing settlement boundaries, close to existing services and employment opportunities, and has the potential to be well served by public transport and the surrounding road networks. In particular, access to Tile Hill station, the University of Warwick campus and employment sites to the north strongly underpin the sustainability of the site.

This document seeks to set out how that sustainability is fully capitalized on; working with the grain of the existing landscape and taking account of site features and context. It proposes a development that would form a logical extension to the local community, is outward looking and forms a strong and logical edge to the city.

05 THE SITE & CONSTRAINTS



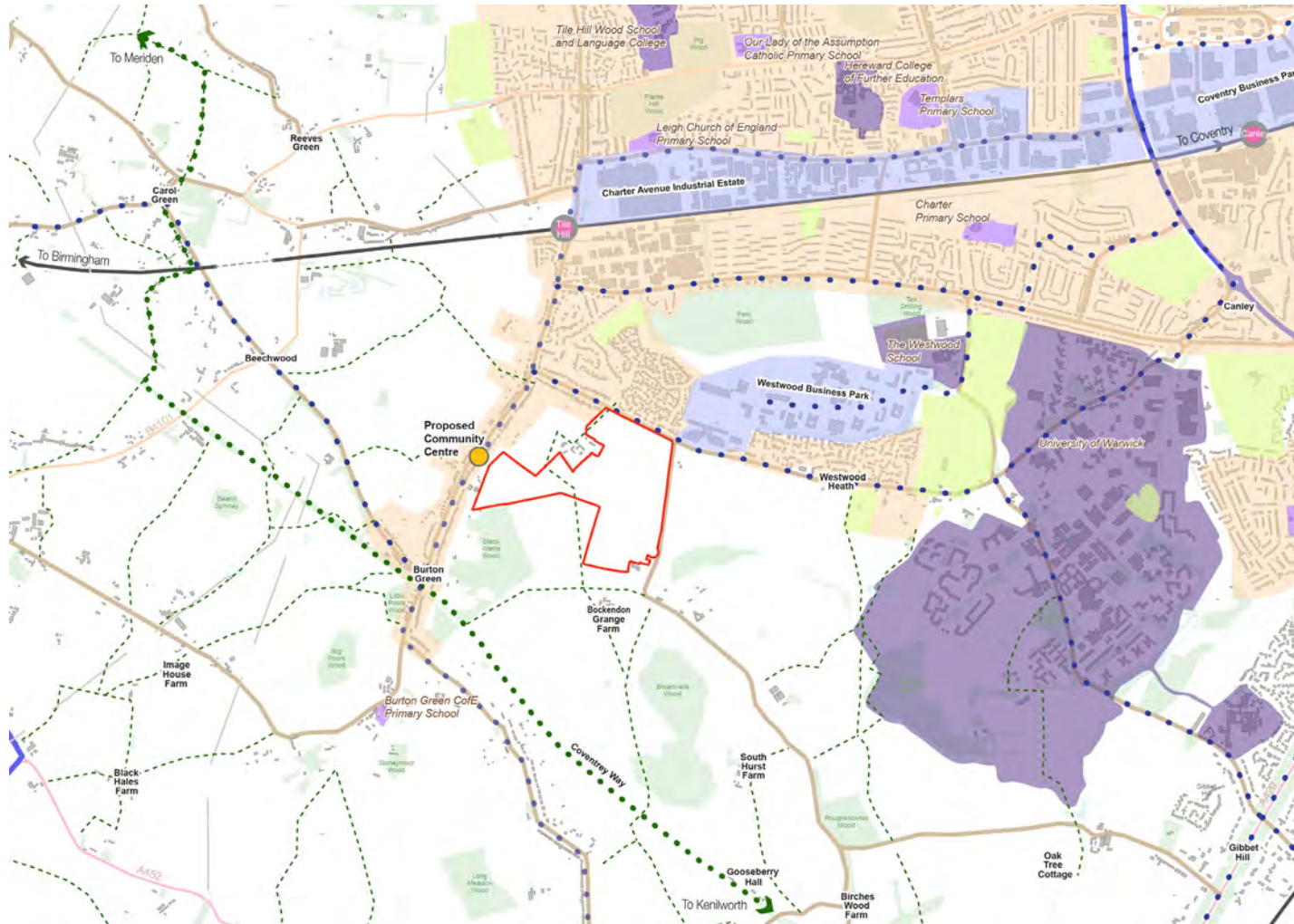
WIDER CONTEXT

The site is exceptionally well located to benefit from its proximity to Birmingham and Coventry.

The site is approximately 5km from the centre of Coventry. It is served by excellent rail links into the city centre, from Tile Hill station which is approximately 1km from the site. Tile Hill station is a short walking distance from the site and also offers a direct service to Birmingham and a service to London via Coventry.

The University of Warwick lies 2km to the east of the site, and large areas of employment land at Westwood Heath and Tile Hill are approximately 1km away.

The major road network consists of the A45 and A46, which connects to Warwick and Royal Leamington Spa



LAND USE AND FACILITIES

The site is exceptionally well located with sustainable walking and travel options to a variety of local schools, employment and amenities.

- The site
- Road network
- Rail network
- Train Station
- Public Rights of Way
- Coventry Way
- Bus Routes
- Residential
- Employment
- Education

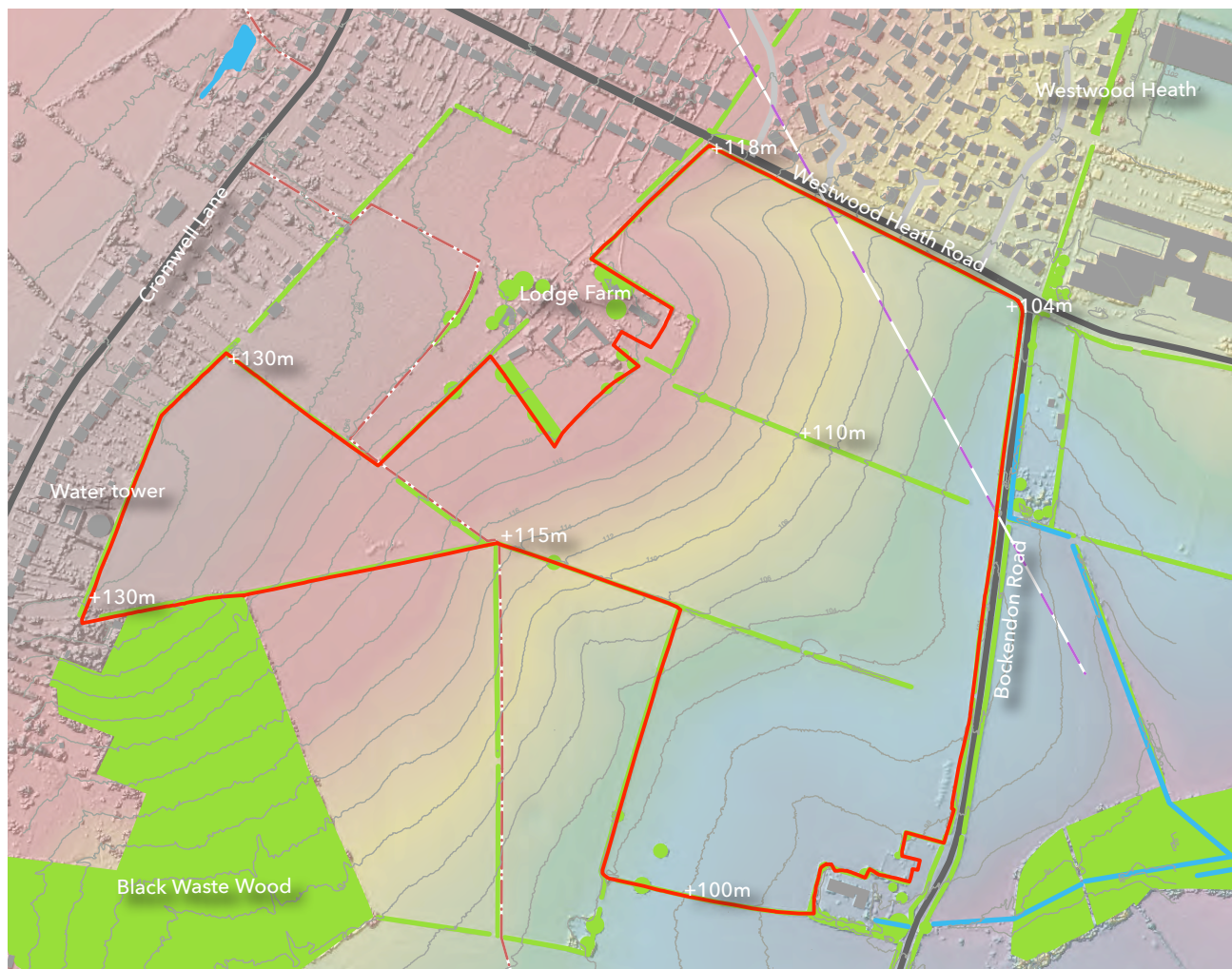


Figure 7. The site

THE SITE

The site is approximately 30 hectares (75 acres) and lies immediately south of Westwood Heath Road, and is bounded by Bockendon Road to the east. The rear gardens of residential properties along Cromwell Lane and Lodge Farm bound the western edge of the site, and the southern edge is defined by the edge of Black Waste Wood and existing mature hedgerows. Figure 7 shows the extent of the site boundary.

The site has panoramic views to the south, including the Kenilworth Greenway, and glimpsed views to the east of the University of Warwick and Kenilworth. Views to the north are of the residential properties along Westwood Heath Road and to the west Tile Hill water tower is visible from the majority of the site, acting as a local landmark.



TOPOGRAPHY & CONSTRAINTS

The site lays on the side of a small hill which plateaus towards Tile Hill Water, Lodge Farm and Cromwell Lane forming a shoulder of land which is visible from the majority of the site. The change in level across the site from east-to-west is approximately 30m. North-to-south the change in level is less significant.

An oil pipeline runs across the north east corner of the site, requiring a 6m easement. Existing hedgerows and trees form the other principal constraint on the site - which in any case would be retained with the proposals.

-  The site
-  Public right of way
-  Existing hedgerows/woods
-  2m contours
-  Oil pipeline (250mm)

Figure 8. Topography and constraints

KEY FEATURES

There are numerous other assets on site that would be positively incorporated into the Garden Village. These include:

- Mature hedgerows retained
- Mature trees retained
- Views of Tile Hill water tower
- Views of Lodge Farm
- Connections to the wider countryside
- Public right of way connection to Burton Green
- Distinctive topography
- Existing ditch/swale network running alongside mature hedgerows
- Relatively few constraints



Views to the south



Existing mature trees and hedgerows on site



Views to Tile Hill water tower



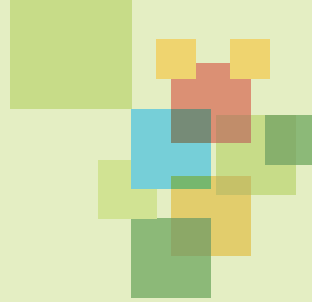
Views to Lodge Farm



Existing ditches running alongside mature hedgerows



Existing public footpath crossing the site



TECHNICAL AND ENVIRONMENTAL CONSIDERATIONS

EXISTING SERVICES

Records obtained from the National Grid show a low pressure gas main running along Westwood Heath Road, adjacent to the site boundary. There is also a second low pressure gas main on the northern side of Westwood Heath Road.

Western Power provides the electricity supply in the area and there is a high voltage main running along the southern side of Westwood Heath Road, and along the eastern side of Bockendon Road (with a substation opposite the junction of the two roads).

BT records show a below ground telecoms service running along the

northern side of Westwood Heath Road, with an overhead service running along the western side of Bockendon Road. There is also cable operated by Vodafone on the northern side of Westwood Heath Road.

There is a multi-product pipeline that cuts across the north eastern corner of the site, the pipeline is owned and operated by The British Pipeline Agency Ltd and will require a 6m easement.

GEO-ENVIRONMENTAL

A desk top study has determined that the site is predominantly underlain by weak mudstone which, subject to further intrusive ground investigation should be suitable to support shallow foundations for low rise residential development. It has been ascertained that the area is not at risk from coal mine workings.



Service corridor along Westwood Heath Road



Substation on Westwood Heath Road

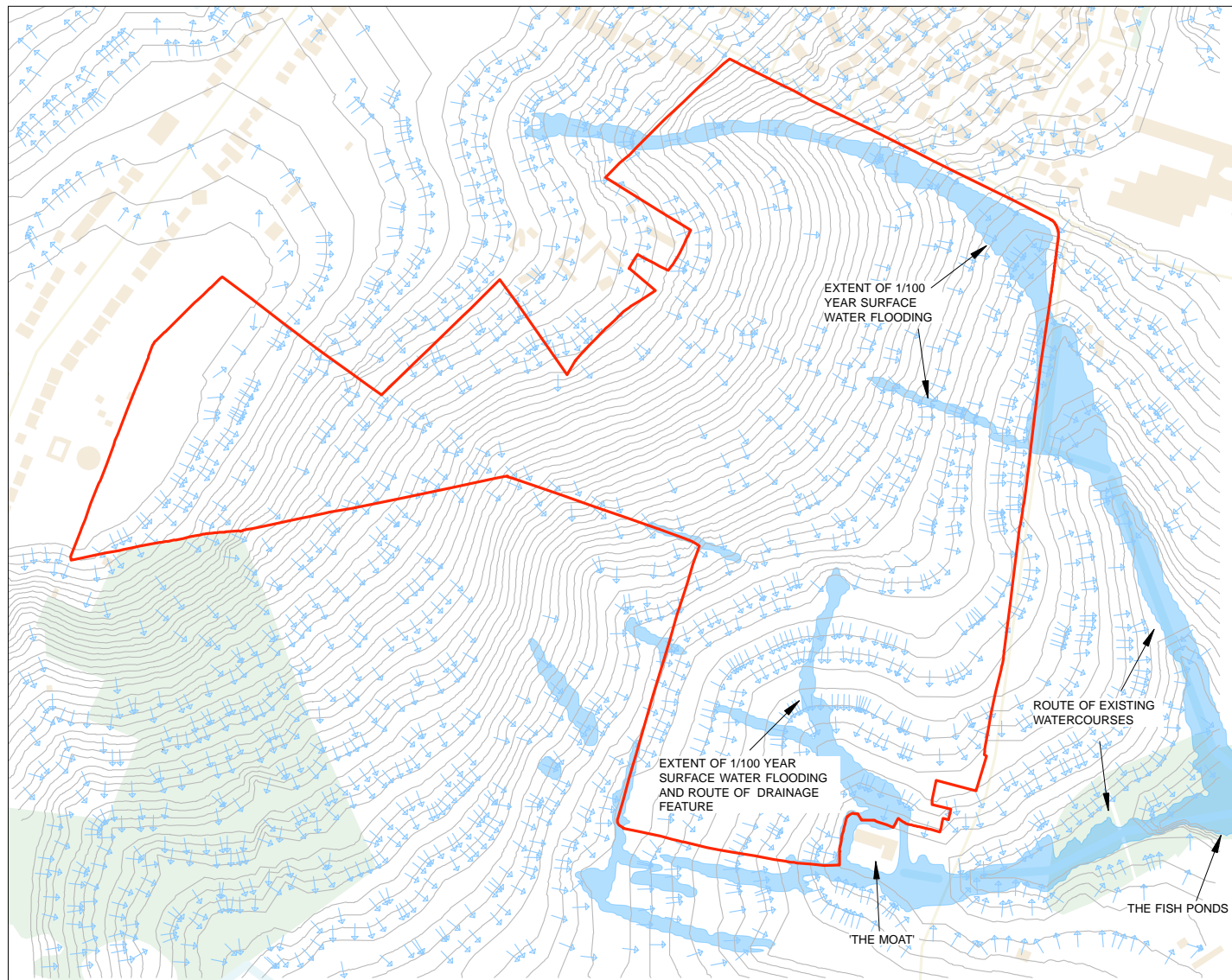


Figure 9. Surface water flood risk

(plan by Reuby & Stagg)

CONTAMINATION RISK

A review of historical mapping and desk top environmental data has not identified any previous activities that could be a potential source of contamination on the site, it is evident that the site has remained farmland since the earliest available mapping (1886), but further intrusive investigation will be required in order to verify this and check for unknown sources, such as made ground etc.

The desk top study has also not identified any significant sources of contamination risk in the immediate locale, and no recorded landfill sites within a 1.0km radius.

FLOOD RISK

The site falls within Flood Zone 1, low risk, according the latest Environment Agency data, and is therefore suitable for residential development, however, there may be localised areas on the land that are subject to periodic surface water flooding due to the impermeable nature of the underlying soils (figure 9).

SURFACE WATER DRAINAGE

A surface water drainage strategy has been proposed that promotes the widespread use of SuDS to ensure that runoff from any new development does not exceed the existing green field rates, open swales and basins are proposed that will contain and control runoff whilst providing the appropriate level of treatment to ensure downstream water quality is not compromised.

WATER & FOUL WATER DRAINAGE

Severn Trent Water provide the potable water supply in the area with a service along the northern side of Westwood Heath Road and a water main running along the western side of Bockendon Road.

There is a foul water service along Westwood Heath Road and a foul sewer running along the rear of properties on the northern part of Cromwell Lane.

NOISE

Noise Ltd have undertaken an Environmental Noise assessment for the site. It has concluded that with appropriate glazing and matched ventilation the site can be developed successfully for residential accommodation. The future impact of HS2 has been considered and indicates that this should not have an adverse impact on the scheme.

SUMMARY

The site has no previous usage that would give rise to significant contamination, and it is not in an area of flood risk.

There are substantial water mains immediately adjacent to the site and, subject to a network assessment, may have sufficient capacity to serve the new development. The site is also in an area benefitting from mains foul sewerage, therefore subject to a network assessment it may be possible to discharge foul sewerage from the new development into the existing system.

From this preliminary engineering assessment it can be concluded that the land at Westwood Heath Road does not present any significant engineering constraints that would render it unsuitable for residential development.

06 LANDSCAPE & BIODIVERSITY

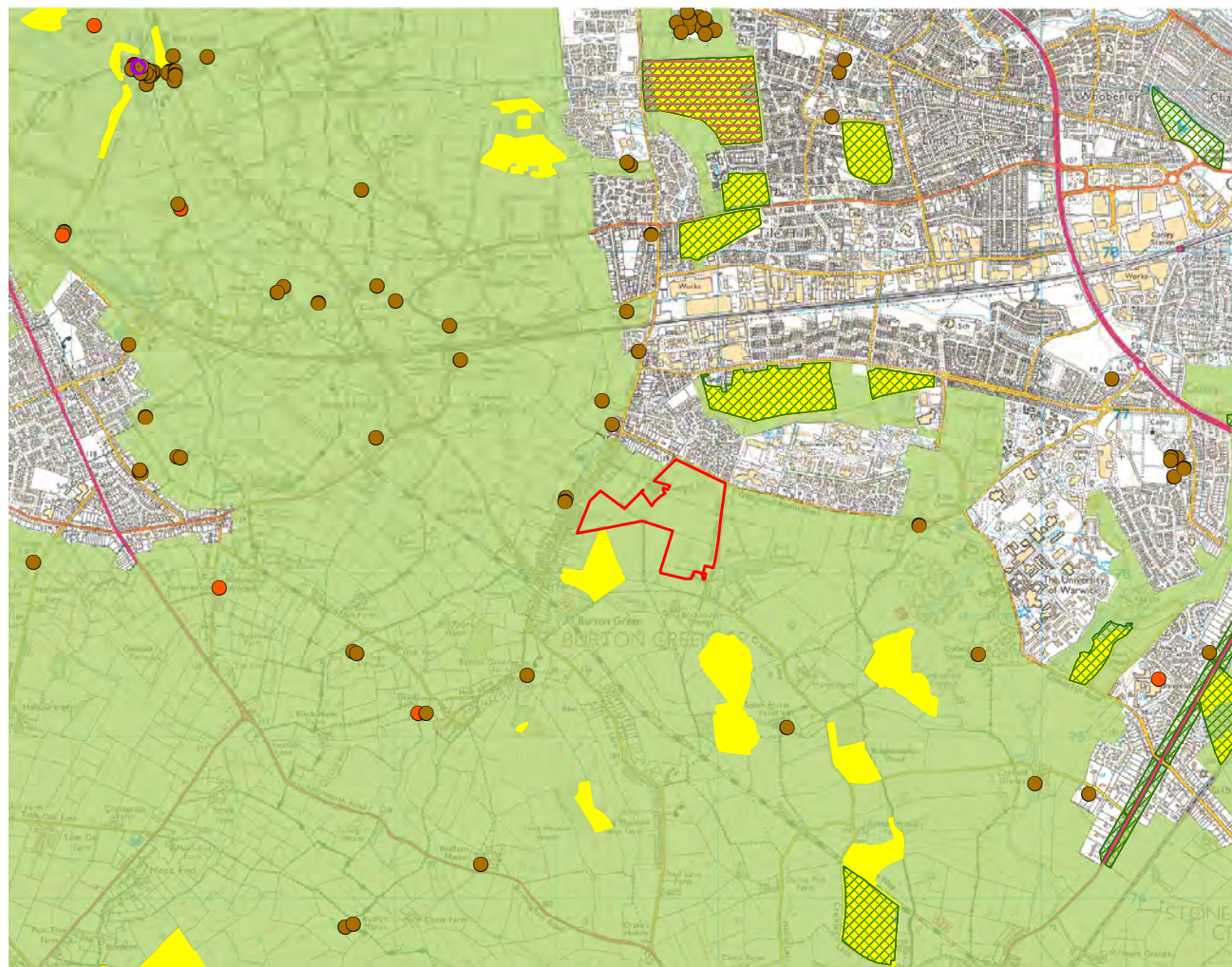


Figure 10. Landscape designations

(plan by DJA)

LANDSCAPE DESIGNATIONS

Figure 10 shows the relevant landscape designations associated with the site and surrounding area. The site is undesignated with the exception of green belt. If the site was to be allocated, the green belt designation would fall away. Black Waste Wood to the south of the site is ancient woodland. The site is classified as Grade 2 Agricultural Land, with the exception of a small area of land to the west of Bockendon Grange, which is Grade 3.

Historic designations (Historic England)

Listed buildings

- Grade I
- Grade II*
- Grade II

■ SAM (Scheduled Ancient Monument)

Ecological designations (Natural England)

▬ SSSI (Site of Special Scientific Interest)

■ Green Belt

■ Ancient woodland

Local designations

■ LNR (Local Nature Reserve)

EXISTING LANDSCAPE CHARACTER AND STRUCTURE

The site lies on the southern edge of Coventry within National Character Area 97 Arden. The landscape of this area is gently rolling with small fragmented semi-natural and ancient woodlands. Mature oaks set in hedgerows, distinctive field boundaries, historic parklands and narrow river corridors are key features, all on the doorstep of a heavily urbanised area. At a smaller scale the area is part of the Arden Parklands landscape character area and defined as an enclosed gently rolling landscape defined by woodland edges, parkland and belts of trees. Characteristic features include belts of mature trees, ancient woodlands, thick roadside hedges and middle distance views enclosed by woodland edges.

The site itself is typical of this description and can be subdivided into four areas:

Area 1. The plateau on the centre west of the site (beside the water tower and Lodge Farm) is a relatively flat area bounded to the west by Barton Green, to the south by Black Waste Wood and to the east and north by mature hedges. The eastern part of this area forms a shoulder of falling land that drops toward Bockendon Road. This shoulder is of visual significance in longer distance views from the east.

Area 2. The edges along Westwood Heath Road and the northern parts of Bockendon Road are associated with the recent development to the north and feel part of the urban area. They are bounded by mature hedges.

Area 3. The central eastern part of the site is gently sloping agricultural land, bounded by mature hedgerows. This area is visually well contained.

Area 4. The south east corner to the north of Bockendon Grange has a rural character and is more associated with the open landscape to the south than with Burton Green or Westwood Heath Road. This area is therefore excluded from proposed development.

Figure 11 shows the pattern of the existing landscape structure, defined by hedges and wooded areas. There is one public right of way running through the site linking southwards to the Kenilworth Greenway (Coventry Way).

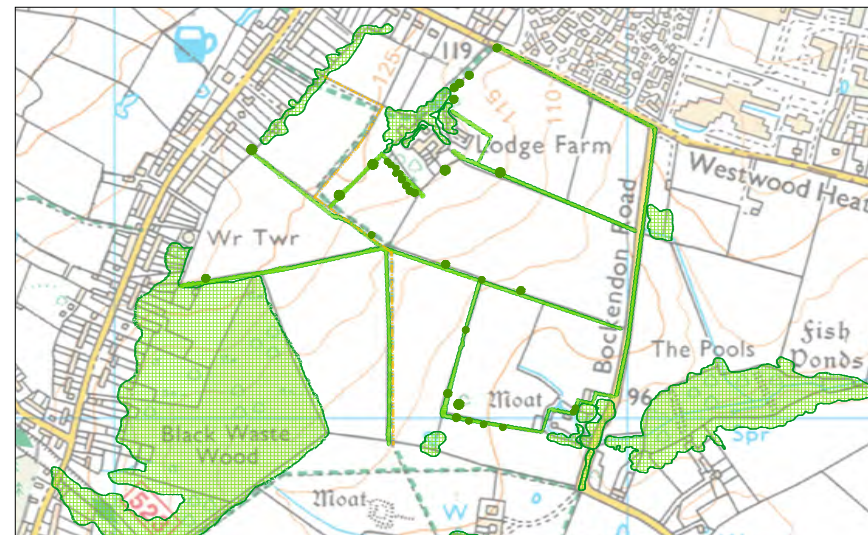


Figure 11. Existing landscape structure

(plan by DJA)

ECOLOGY

The site is largely unconstrained in terms of existing habitats, being dominated by agricultural land under intensive arable cultivation, which is considered to be of no particular elevated ecological value.

Other habitats in the form of hedgerows, trees, rough grassland, ditches, scattered scrub and tall ruderal vegetation were also recorded, in addition to offsite woodland and ponds.

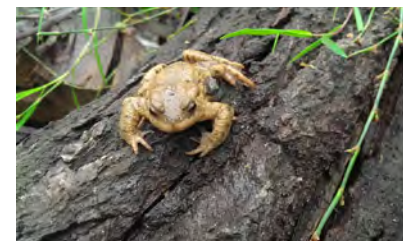
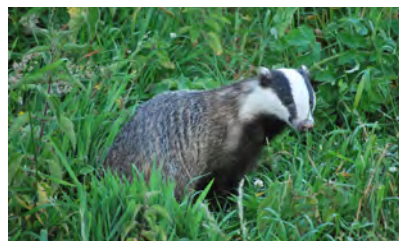
The site itself is not subject to any statutory or non-statutory nature conservation designations. However, the non-statutory designation Black Waste Wood, designated as an Ecosite and Local Wildlife Site (LWS), is located adjacent to the south west of the site. Black Waste Wood Ecosite and LWS is classified as ancient semi-natural woodland and a UK Priority Habitat. It is therefore considered to be of high ecological value at the local level.

In terms of fauna, the survey work undertaken to date has identified relatively few constraints, albeit minor faunal considerations include the presence of Dormouse within hedgerows, two low status Badger setts and a modest assemblage of breeding birds within the site. In addition, Great Crested Newt has been recorded within four offsite ponds

SUMMARY

There are no ecological constraints which would prevent development, the site is deliverable and the opportunity exists to provide a net gain in biodiversity in terms of the NPPF.

The proposals seek to retain hedgerows and enhance habitats for local wildlife - including for example provision for dormice and badgers.





07 TRANSPORT

INTRODUCTION

The site is located some 5km to the south west of Coventry city centre, close to Warwick University, and existing residential and strategic employment areas of Westwood Business Park and Tile Hill Industrial Area. The site sits in WDC, but is on the boundary of CCC controlled roads.

Westwood Heath Road on the northern boundary of the site is within CCC and Bockendon Road (on the eastern boundary) is within WDC, with WCC acting as highway authority.

The site is very well located in relation to access to the strategic road network and also to gain access to good quality local radial routes.

SUSTAINABLE TRANSPORT

The site is well located in relation to existing and future pedestrian and cyclist network, including an existing public right of way (PRoW) route through the south-western part of the site. This links to the wider PRoW network and to facilities on Cromwell Lane and Burton Green.

To the north of Westwood Heath Road the existing residential streets provide good quality connections to local amenities, local employment areas, and existing public transport corridors linking the area to Coventry city centre.

The delivery of a Garden Village will encourage future pedestrian and cyclist movements that can connect efficiently with off-site infrastructure. New pedestrian links and crossing facilities from the site onto Westwood Heath Road will further strengthen pedestrian connectivity in this location.



Tile Hill railway station

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EXISTING RAIL ROUTES

The site is exceptionally well located to access Tile Hill station. This rail halt is located some 1.1km from the northern boundary of the site, less than a 14 minute walk or circa 6 minute cycle from the site. The station is served by local stopping trains and provides frequent links to Birmingham, Coventry and London, as well as services to Warwick and Royal Leamington Spa (via Coventry). Existing rail services are illustrated in figure 14.

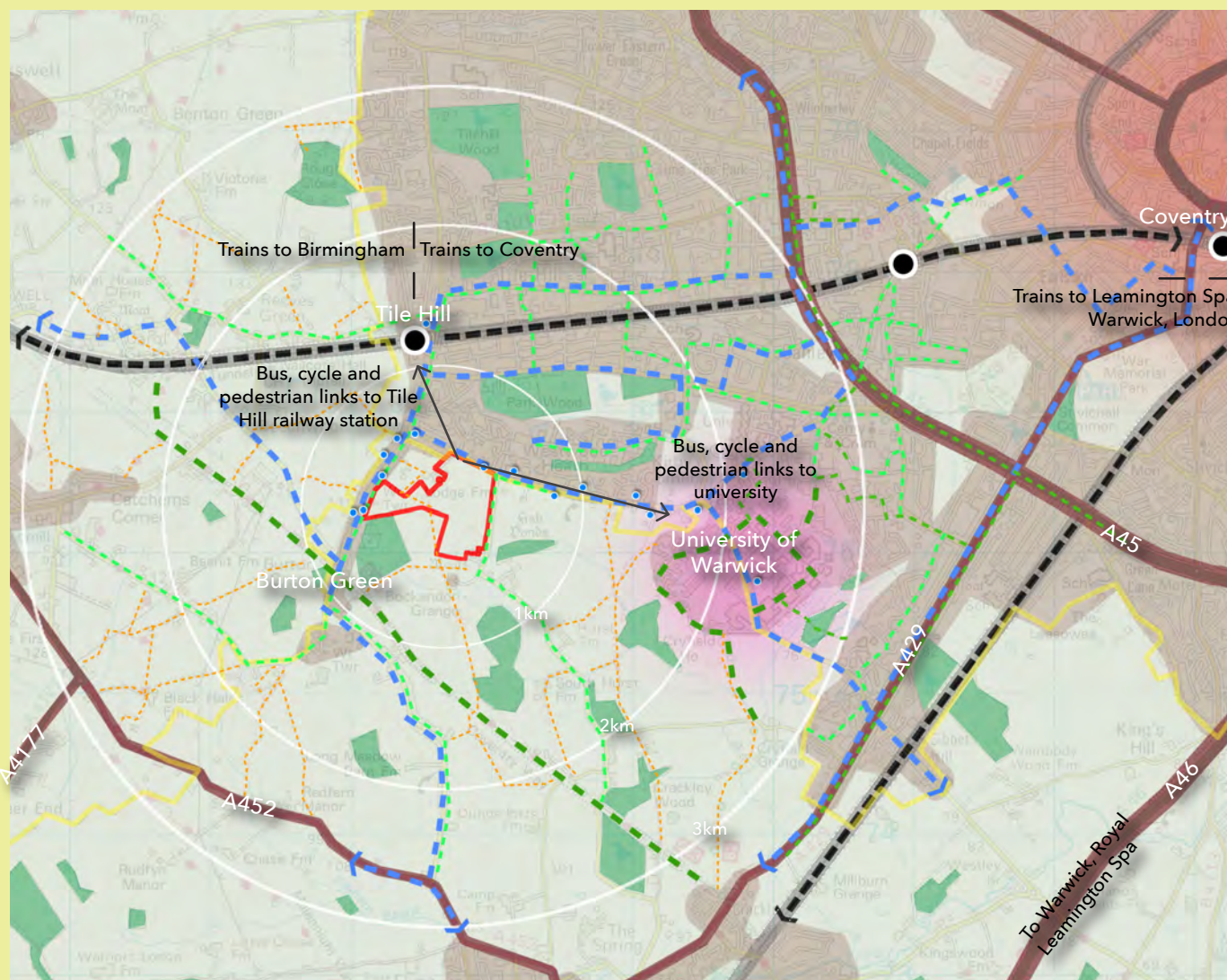


Figure 14. Existing transport routes

Route	First train, daytime	Last train, evening
Northampton Coventry Birmingham Int Birmingham New St Wolverhampton Stafford	05:55 2 trains/hr	23:37 2 trains/hr
Stafford Wolverhampton Birmingham New St Birmingham Int Coventry Northampton	06:22 2 trains/hr	23:08 2 trains/hr

Existing rail service frequency/routes from Tile Hill

Coventry	6 minutes
Birmingham New Street	22 minutes
Royal Leamington Spa	23 minutes
Northampton	41 minutes
Warwick	48 minutes
Wolverhampton	50 minutes
London Euston	80 minutes

Existing rail journey times from Tile Hill

	The site		Bus stop
	Road network		Bus route
	Rail network		PROW
	Train station		Cycle route
	District boundary		Advisory cycle route
			Connect 2 cycle



Existing bus services along Westwood Heath Road

EXISTING BUS ROUTES

Westwood Heath Road, Cromwell Lane, Charter Avenue and Westwood Way are existing bus route corridors. Existing bus stops are located adjacent to the site frontage on Westwood Heath Road

Existing bus routes provide good coverage of major trip destinations and local retail destinations in excess of desirable walking catchments (e.g. Canon Park). There are, however, opportunities to improve existing services to and from Westwood Heath Road as part of a 425 units (or greater) residential unit scheme.

PUBLIC TRANSPORT SUMMARY

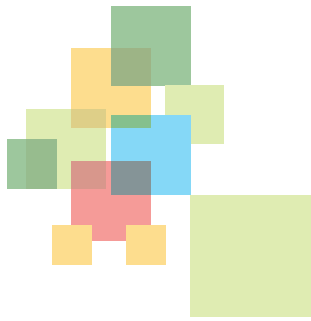
This review demonstrates that the site is well located in relation to existing bus corridors and frequent train services to Coventry and Birmingham. With a development scale of 425 units (or greater) residential units opportunities will exist to increase the bus service frequency to the site, as well as enhancing pedestrian access to Tile Hill rail station.

The existing public transport facilities provide good coverage of areas outside an acceptable walking distances, as well as to areas shown in ONS Journey to Work data to be major trip attractors from the local area.

DEVELOPMENT IMPACT

WCC transport appraisal work has confirmed that this site can accommodate 425 units without significant off-site highway mitigation works, and is also considered to be well located to gain access to the strategic road network (the A45 and A46) to the east.

The site benefits from two active frontages onto the adjacent highway network. The vehicular access strategy to the site delivers two new priority junctions onto Westwood Heath Road. The access options are shown in section 08.



SUMMARY

The site is exceptionally well located to encourage sustainable travel to and from the site. The site also has good access to key employment destinations strengthened by:

- Tile Hill railway station is located less than a 14 minute walk or 6 minute cycle from the site - rail services to Coventry take between 5 and 7 minutes, with journeys to Birmingham International and New Street taking less than 10 and 26 minutes respectively.
- The opportunity to deliver new and improved local footpath and crossing facilities onto Westwood Heath Road and Bockendon Road, to provide improved access by these sustainable modes
- The proximity of the site to the University of Warwick and several employment locations creating excellent opportunities to maximise walking and cycling trips to these key destinations
- The ability of the local highway network to accommodate 610 homes supported by local junction improvements at the Westwood Heath Road/ Cromwell Lane junction.
- The opportunity to increase the frequency of local bus services to local destinations, including Coventry and Warwick.
- A well-established cycling network around the University of Warwick can be enhanced.
- The site's ability to deliver two accesses onto the adjacent highway network, which in turn improves access to the strategic road network to the east.

08 MASTER PLAN & CAPACITY

The master plan for Westwood Heath Road aims to create an attractive 21st century garden village with placemaking at its heart with a focus on sustainable principles. It will be well connected to public transport, form a logical extension to the existing settlement boundary and take advantage of its proximity to local facilities including the University of Warwick and adjacent employment areas. The master plan structure builds upon the landscape framework and visual sensitivities of the site.

As well as providing much needed housing, the proposals will deliver a range of other benefits including:

- A new local centre next to Westwood Heath Road with provide a community heart serving new and existing residents
 - The proposed road network will provide clear street hierarchy accommodating public transport and the existing public right of way across the site has been incorporated into the master plan as part of a comprehensive pedestrian movement framework
 - The master plan retains and strengthens existing mature trees and hedgerows, creating an attractive setting for the new Garden Village
 - The frontage along Westwood Heath Road mirrors the existing housing opposite and formal avenue planting is proposed to create an attractive gateway entrance to the Garden Village.
 - The Garden Village should create a softer edge along the southern part of the built development.
 - A network of greenways, natural green space, linear and pocket parks will provide biodiversity interest and significant new areas of public amenity will create opportunities for walks, running, dog-walking, and trim trail equipment.
 - A kickabout area, allotments and children's play space are proposed.
1. Local centre
 2. Avenue planting along Westwood Heath Road
 3. Tree-lined primary street
 4. Central parkland
 5. Play space
 6. New woodland planting
 7. Primary accesses off Westwood Heath Road
 8. Attenuation network of swales and ponds
 9. Pocket park
 10. Existing mature trees and hedgerows retained
 11. Allotments
 12. Kick about area
 13. Biodiversity rich natural landscape

Figure 15. Masterplan



LANDSCAPE

LANDSCAPE FRAMEWORK

The Garden Village vision includes generous open spaces, wide tree lined streets and gardens. It is proposed to retain and enhance the existing landscape structure through additional planting and reinforcement / recreation of hedgerows. An informal avenue is proposed along Westwood Heath Road to help create an entrance into the site and enhance the existing road frontage. A network of green spaces is proposed throughout the site, following existing hedgelines and rights of way. An area of public open space is proposed in the southern central area of the development and parkland with pitches and allotments located to the west, just north of Black Waste Wood.



Figure 16. Central linear park



Figure 17. Landscape framework plan



Figure 18. Entrance area

PUBLIC OPEN PARKLANDS AND GREEN CORRIDORS

Trees are to be primarily native with some flowering and fruit bearing species and where appropriate trees should line cycleways and footpaths to create attractive vistas. Green corridors should also seek to conserve and enhance existing hedgerows by infilling with native shrubs and minimising the number and size of breaks for pedestrian access.

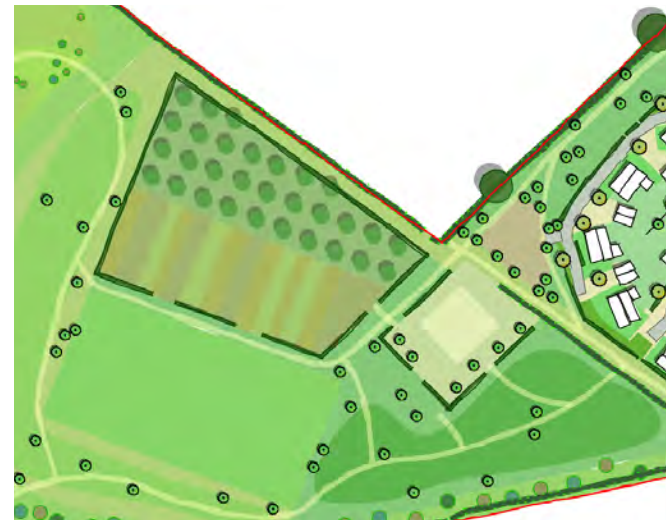


Figure 19. Strategic green space on southern edge





DRAINAGE BASINS

Drainage basins will provide amenity value to the local community as well as providing a wetland habitat for wildlife. Planting will be of local provenance including marginal planting, scrub and long grassland. Ecological recommendations should be incorporated around the basin to create marginal and terrestrial habitats. Opportunities should be sought for outdoor learning to be encouraged such as pond dipping and information boards etc.



PLAY SPACES

Design guidance should be derived from Play England, PLAYLINK and The Forestry Commission among others.

The approach to formal unsupervised play is based on the Fields in Trust guidelines and designations. The basis of any detailed design should include;

- Three Local Equipped Areas of Play (LEAP) located in strategic locations throughout the site.
- A grassed kick about area to the south of the allotments.



The play spaces should be site specific, bespoke and appropriate to their location being easily accessible from adjacent cycleways / shared surfaces. They should be unique and inspiring having an emphasis on natural play and natural features with the potential for more structured play space and equipment, imaginative play will be encouraged by the use of non-prescriptive equipment. The play spaces should be welcoming and inclusive in their design for both disabled and non-disabled users, well overlooked and cater for a range of ages, including adults.



NEIGHBOURHOOD POCKET PARKS

Pocket parks will be distributed across the development; they should incorporate LAPs where appropriate to allow for informal play opportunities. These spaces are to be well structured, with strong simple boundaries and planting, furniture and materials will be simple but legible reinforcing surrounding development character, building density, building heights and street layout.



COMMUNITY AND HEALTHY LIVING FEATURES

Allotment plots, raised beds and community orchard located to the west of the development provide spaces and opportunities for residents and school children to grow local produce. The development will also provide a comprehensive network of linked green spaces with cycleways, sports pitches and play spaces.

STREETSCAPES

PRIMARY STREETS - Large tree species planted in grass verges with bulbs. Trees should be planted in pairs to create an avenue (minimum of 6-8 pairs to be planted per 100m). Due consideration should be given to visibility and lighting at junctions. 1.2m high hedging along residential plot boundaries on primary routes to be planted 0.5m from footpath edge.

SECONDARY AND TERTIARY STREETS - Shorter avenues of trees create a less formal appearance to streets and flowering trees are used to accent streetscapes and create a more ornamental appearance. These shorter avenues and stand-alone trees, together with a wider variety of species indicate the more residential nature of these areas. A mixture of hedging, ground cover and shrub planting will be used to define plot boundaries.

RURAL EDGE - Medium to large sized trees to complement the informal character with at least 30% of trees being flowering species for seasonal interest and to provide ecological benefits.



ECOLOGY

PROPOSALS

It is recommended that where Black Waste Wood LWS and ancient woodland adjoins the site boundary, a minimum 15m undeveloped buffer zone (ideally 30m) be incorporated in order to safeguard this designation. This buffer zone should be left permanently to allow it to grow into semi-natural habitat and could be planted with dense shrubs to discourage public disturbance to the woodland and increase the overall area of the woodland to achieve a net gain in biodiversity.

Provision of an appropriate level of open greenspace under the scheme provides potential scope for creation of further habitats, such as wildflower grassland, new tree and shrub planting and new linear woodland / double hedgerow, which will contribute toward ensuring an overall net gain for biodiversity and meeting the broad objectives of the NPPF.

New ponds, and associated suitable terrestrial habitat, could be created in the south of the site where the land is relatively flat and will provide opportunities for great crested newt.

The ecological value and biodiversity of hedgerows within the site could be enhanced through planting up of gaps in the hedgerows with native shrubs. This will provide benefits for a range of faunal species including bats, badger, dormouse and birds.

SUMMARY

There are no overriding constraints to development present in ecological terms, albeit a number of recommendations are outlined above in order to ensure relevant ecological matters are given due consideration at the design stage.

In particular, consideration should be given to the retention of habitats identified as being of elevated ecological value (particularly trees and hedgerows), in addition to safeguarding of off-site ancient woodland through appropriate buffers.

A number of opportunities to enhance the biodiversity of the site are available, particularly in regard to reinforcement of hedgerows, new landscape/woodland planting and new pond creation.

On this basis, subject to consideration of those recommendations, it can be concluded that the site is deliverable in ecological terms and the opportunity exists to provide benefits for biodiversity in line with the aims of the NPPF.

Figure 20. Ecological strategy plan (opposite)



SUSTAINABLE TRAVEL AND ACCESS

ACCESS

The vehicular access strategy has been developed to provide two points of access to the development. Whilst Manual for Streets no longer requires development to provide multiple vehicular access points for main, secondary and emergency access in this instance the ability to deliver two access points onto Westwood Heath Road will assist with providing easy and direct access for new or extended bus services through the site. A two access strategy also allows easier traffic dispersal onto the adjacent highway network.

The proposed access arrangements are shown opposite, and are described below.

The preferred access strategy for the site looks to deliver two new priority junctions with ghost island right turn facilities on Westwood Heath Road. These accesses require localised widening of Westwood Heath Road in order to accommodate the right turn facilities.

As part of the scheme design new pedestrian refuges have been incorporated into these junction works, to allow pedestrians easy access across Westwood Heath Road. A continuous 2m wide footway is proposed along the southern side of Westwood Heath Road (the site boundary) to connect to existing crossing facilities on Bockendon Road.

SUSTAINABLE TRAVEL

The Westwood Heath Road site will deliver a highly sustainable site in terms of transport and should be brought forward for residential development for the following reasons:

- The site is shown to be exceptionally well located to encourage end occupiers to travel sustainably to and from the site
- The site has good access to several key employment destinations, including the University of Warwick, creating excellent opportunities to maximise walking and cycling trips to these key destinations
- The site is well located to access Tile Hill railway station, being located less than a 14- minute walk or 6 minute cycle from the site, allowing end occupiers of the development to benefit from fast, direct rail services to Coventry, Birmingham International and New Street stations
- The development can deliver new and improved pedestrian and cycle routes and crossing facilities onto Westwood Heath Road, to provide improved access by these sustainable modes
- The site benefits from being accessible by bus, but there is the opportunity to increase the frequency of local bus services to local destinations, including Coventry and Warwick
- Safe, direct access for vehicular traffic can be delivered onto Westwood Heath Road, a route that already provides access for residential development

- WCC and WDC have acknowledged, through the use of their S-Paramics microsimulation model that a development of 425 residential units can be accommodated at the site without “more significant” mitigation being required. Using WCC’s Paramics microsimulation model it has been demonstrated that increasing the development scale of 610 units will not lead to a material change in highway network performance over the accepted 425 residential development.

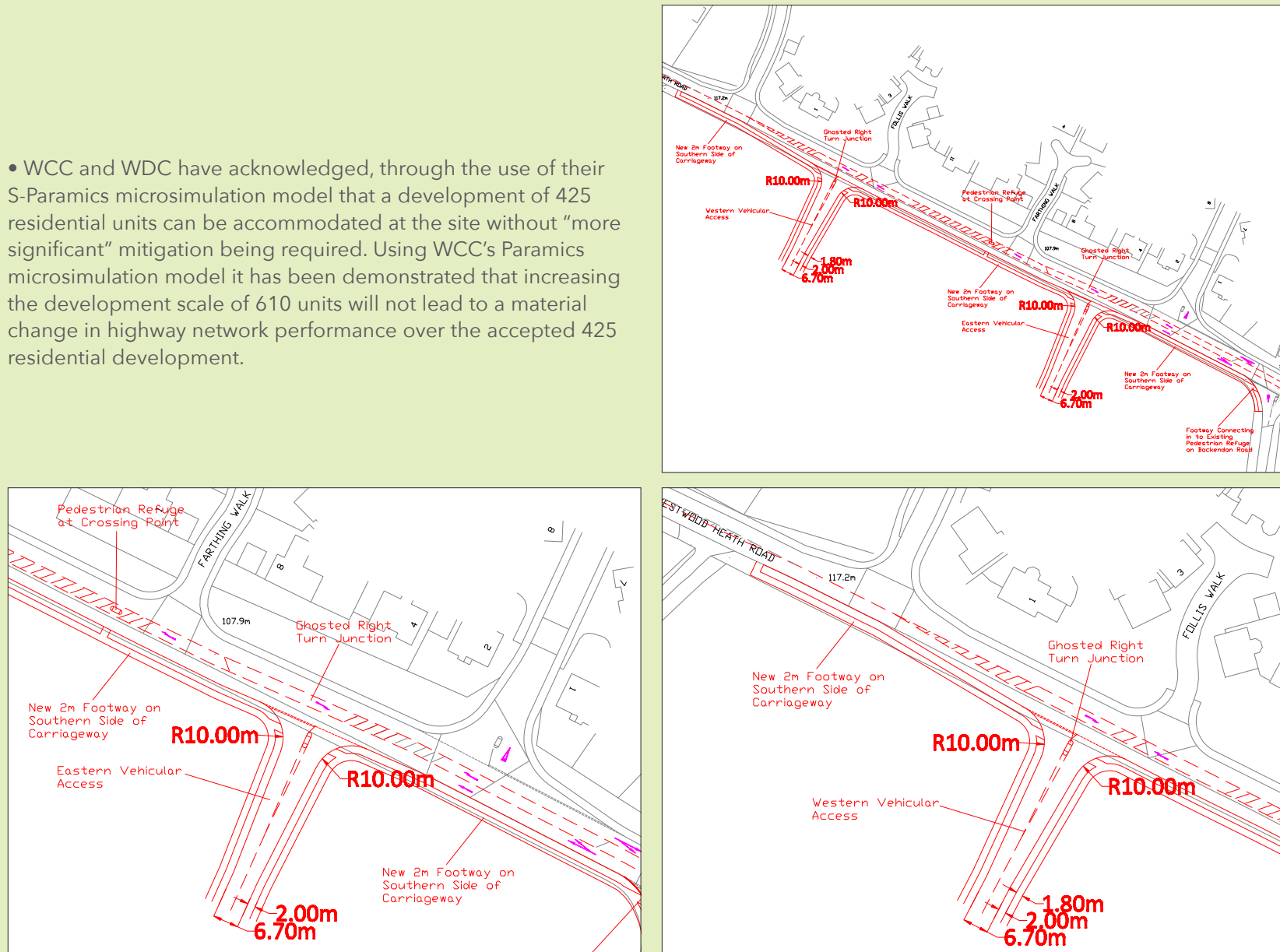


Figure 21. Access junctions of Westwood Heath Road

DENSITY STRATEGY

- Site is located next to Burton Green, with existing settlement along the western and northern edges of the site
- Westwood Heath Road is a key route into Coventry and Kenilworth
- Southern edges of the site are more sensitive in terms of landscape setting
- Therefore density should be highest in the north west corner of the site, gradually feathering out towards the sothern and south west edges to lowest density
- Density range is 30dph rising to 40 dph
- Highest desity area preferred location for local centre, based upon proximity to Burton Green and existing homes



Figure 22. Density strategy plan

LAND USE/CAPACITY

The proposals envisage 610 new homes (based upon 36 dwellings per hectare), with generous provision of informal and formal open space in a Garden Village setting.

	Site boundary	30.312ha/74.902acres
	Residential 45dph	13 units
	Residential 40dph	153 units
	Residential 37.5dph	196 units
	Residential 35dph	30 units
	Residential 32.5 dph	121 units
	Residential 30dph	30 units
	Local centre	0.304ha/0.752acres 20 units

Total units: 610. Total developable area: 16.843ha/ 41.62acres
Average density: 36dph

Open space

	Amenity/informal	2.463ha/6.086acres
	Parks/gardens/formal	3.142ha/7.764acres
	Natural areas	4.255ha/10.514acres
	Allotments	0.618ha/1.527acres
	Outdoor sports	0.464ha/1.146acres
	Children/youth/play	0.512ha/1.265acres
	Allotment parking	0.047ha/0.012acres

Other

	Indicative attenuation*
	Indicative SuDS*
	Primary infrastructure* 18.1m/1.448ha/3.578acres
	400m walking radii from play space
	Public Right Of Way
	Indicative ecological buffer zone*
	250mm oil pipeline shown with 3m offset (6.25m easement zone within net residential area, layout to determine)*

*To be confirmed subject to detailed design/survey information

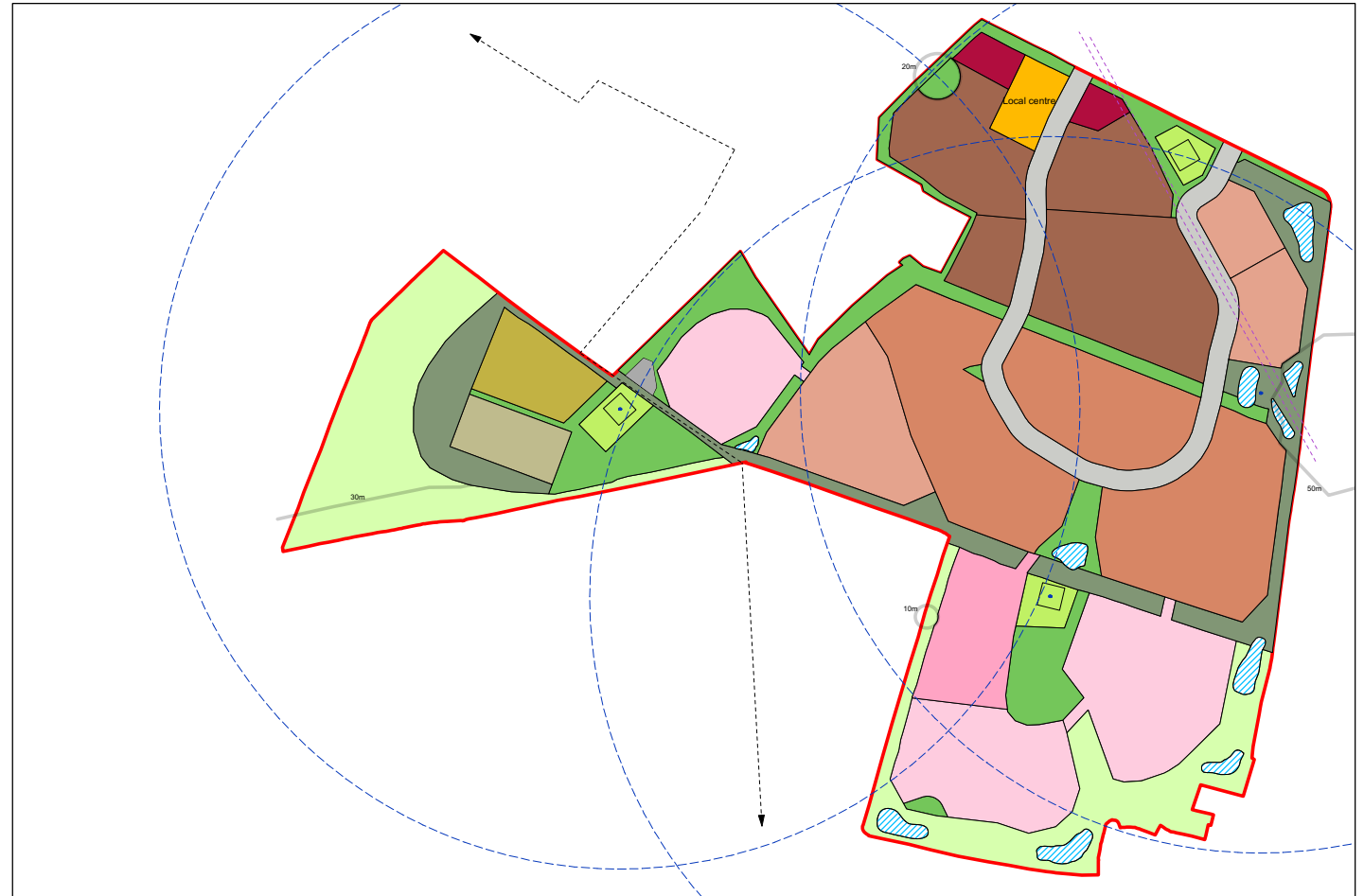


Figure 23. Land-use capacity plan

09 SUMMARY

In the context of the unmet need in Coventry for new homes this document provides technical analysis and sets out a strong vision for the site at Westwood Heath Road, a 30.32 hectare area of land located to the south west of Coventry.

The site is controlled by Crest Nicholson and is currently mainly agricultural land that is available and suitable for development.

The planning context for assessing the development is based upon the emerging Warwick District Local Plan, which makes provision for nearly 17,000 new dwellings in the period 2011 to 2029. Part of that requirement is to meet unmet housing needs in Coventry city, and the planning authority acknowledges that it will have to allocate land for approximately 5,200 new homes.

The planning authority accepts that there are insufficient sites within the existing urban area to meet this requirement, and is therefore looking at the potential of green belt site releases in the vicinity of Coventry.

A Joint Green Belt Review recently undertaken identified land to the south west of Coventry as having potential for release. This site was identified for further detailed consideration and this statement demonstrates how the allocation of this site can help meet part of the council's future housing need.

Key benefits associated with the site include:

- The site has the potential to deliver around 610 new homes at a density of 36dph, including a suitable mix of housing types and a proportion of affordable housing units. This would make a sizable contribution to the unmet housing need through the delivery of a sustainable Garden Village.

- The design approach has the potential to provide a high quality, attractive 21st century Garden Village, appropriate to the character of the local area and responding to the existing landscape structure.
- The proposals will enhance the existing sustainable transport connections, including links to and from Tile Hill railway station and potentially increase the bus route frequency.
- Existing residents of Burton Green and Westwood Heath will benefit from increased and enhanced areas of open space, sports / play areas and improved pedestrian links / transport connections.
- A new local centre is proposed next to Westwood Heath Road that will serve existing and new residents.
- The site is bounded by existing mature hedgerows and road network and therefore has well defined existing boundaries. The site represents a logical development beside existing settlements in spatial terms and a new defensible green belt boundary could be established around it.
- The preliminary development layout for the site includes generous areas for landscaping to provide amenity value, in keeping with the principles of a Garden Village.

The site at Westwood Heath Road is therefore considered to be a suitable, available and deliverable site for future residential development.



Crest
NICHOLSON

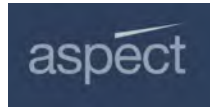
VISIONING DOCUMENT

PROPOSALS FOR A GARDEN VILLAGE AT WESTWOOD HEATH ROAD



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SK TRANSPORT PLANNING

TRAFFIC TRANSPORT HIGHWAYS



LOCAL PLAN EXAMINATION STATEMENT

Date: 28th August 2016

Project: Land at Westwood Heath Road

Representations to Local Plan Examination (September 2016)

1. INTRODUCTION

- 1.1 This Examination Statement (ES) has been prepared to assist the Planning Inspector at the forthcoming Local Plan examination when considering the draft allocation of Land at Westwood Heath Road (the site) for a 425-unit residential development. The site location is shown in **figure 1.1**, and also on plan 1 in **appendix a**.



Figure 1.1: Westwood Heath Road Draft Allocated Site (425 Residential Units)

- 1.2 This ES provides commentary on the following matters:

- the identification of the site as being suitable for residential development
- the sustainable credentials of the site
- the pedestrian, cycle and vehicular access strategy
- development impact and the ability of the site to accommodate additional residential unit numbers
- a summary and conclusions

- 1.3 The ES confirms that in traffic and transport terms both Warwick District Council (WDC) and Warwickshire County Council (WCC) are correct in promoting the site for residential development, and that 425 residential units can be delivered on the site without a 'severe' impact on the surrounding highway network.
- 1.4 The ES goes on to confirm that the site can accommodate a larger scale of development to assist WDC and Coventry City Council (CCC) in meeting its housing targets. An assessment of two larger residential scheme options (529 and 610 unit options) has also been considered in this statement. The ES confirms that a marginal increase in unit numbers can be delivered on the site without a material change in traffic impact over the 425-unit scheme.

2. A SUITABLE SITE FOR RESIDENTIAL DEVELOPMENT

- 2.1 The emerging Warwick District Local Plan makes provision for 16,776 dwellings in the plan period 2011 to 2029. Part of that requirement is to help meet unmet housing needs in Coventry City. The planning authority acknowledges that they will have to allocate land for approximately 5,200 additional dwellings.
- 2.2 The planning authority has accepted that there are insufficient sites within the existing urban area to meet this additional requirement. Accordingly, it has looked at the potential of green belt site releases in the vicinity of Coventry as a way of providing areas of additional land to be allocated. A Joint Green Belt Review (prepared by LUC in June 2015) identified that land to the south-west of Coventry has the potential for release for residential development.
- 2.3 This recommendation is in line with historic reviews of the Westwood Heath Road site being suitable for residential development. The site was previously included in the Council's Strategic Housing Land Availability Assessment (SHLAA) in May 2014 (site reference C13). The site was assessed favourably for development; at the time no traffic or transport constraints were identified if the site was brought forward.
- 2.4 Other relevant appraisals of the site include the 2015 BNP Paribas study for WDC. BNP Paribas undertook an 'additional site options – viability assessment' which included an assessment of the Westwood Heath Road site for 850 residential units. This report concluded that the site, in residual land value terms, could be considered for release for residential development.
- 2.5 In tandem with the above work WDC and WCC have appraised the traffic and transport impacts of the allocation of housing and employment sites across the district. This work is presented in the Warwick District Council Strategic Transport Assessment (February 2016).
- 2.6 The objectives of this technical appraisal were to consider:
 - the likely level of additional impact predicted to occur on the transport network as a result of the inclusion of development sites in addition to those within the RDA
 - to identify what, if any, additional mitigation measures can be delivered alongside the new housing to minimise any impacts identified
- 2.7 Further commentary on the technical appraisal and scale of development (in traffic and transport terms) is provided later in this ES. In summary the report concluded in paragraph 2.12 that with respect to the Westwood Heath Road site:

"425 dwellings could be delivered in the area prior (our emphasis) to more significant mitigation being required"

- 2.8 With this available information the majority of the Westwood Heath Road site (site reference H42) has been included as a proposed housing modification for 425 residential units. The site is shown on the Local Plan policies map in **appendix a**.

3. THE SUSTAINABLE CREDENTIALS OF THE SITE

- 3.1. There is agreement between ourselves, WDC and WCC that the site is appropriately located to deliver a sustainable residential development. This section of the ES summarises the site location and its sustainable credentials.
- 3.2. The site location and relevant crow-fly distances are shown on **plan 1**. It is located some 5km to the south west of Coventry city centre, close to Warwick University and the existing residential and employment areas of Westwood Business Park and Till Hill Industrial Area.

- 3.3. The site sits in WDC, but is on the boundary of Coventry City Council (CCC) controlled roads. Westwood Heath Road on the northern boundary of the site is within CCC and Bockendon Road (on the eastern boundary of the site) is within WDC, with WCC acting as highway authority.

Access on Foot and by Cycle

- 3.4. Sustainable access routes to the site are shown on **plan 1 in appendix a**. The site is shown to be well located in relation to existing and future pedestrian and cyclist network. An existing Public Right of Way (PROW) routes through the south-western part of the site. This PROW links to the wider PROW network and to facilities on Cromwell Lane and Burton Green.
- 3.5. DfT states that residential streets provide good environments for pedestrian trips. To the north of Westwood Heath Road existing residential streets provide good quality connections to local amenities, local employment areas, and existing public transport corridors linking the area to Coventry city centre.
- 3.6. DfT best practice guidance goes on to state that cycling and walking have the potential to substitute for car trips under 5km (a 25-minute cycle time) and 2km (a 25-minute walk), respectively. All the major destination areas in Coventry (including the city centre) are within this accepted cycling distance of the site and significant leisure, education and employment land uses are within accepted walking distances (including Warwick University, Westwood Business Park and Tile Hill Industrial Area).
- 3.7. **Plan 1** also shows the existing cycle networks in the vicinity of the site. The existing cycle network in Coventry comprises of a system of on-carriageway marked routes, segregated routes and quiet residential advisory routes. The existing network provides good connections to major trip attractions, as well as connecting to the Connect 2 Kenilworth (C2K) that links Kenilworth and the Warwick campus. This route forms part of Route 52 of the National Cycle Network.
- 3.8. Bockendon Road and a small section of Westwood Heath Road forms part of the advisory cycle network. The advisory network routes through Westwood Business Park and continues to Coventry city centre via residential and low trafficked routes.
- 3.9. To the north of Westwood Heath Road existing residential streets provide good quality connections to local amenities, local employment areas and existing public transport corridors linking the area to Coventry city centre.
- 3.10. ONS Journey to Work data for existing residents confirms that a high proportion of local trips are destined for areas within Westwood Heath. With the development able to deliver safe, segregated links from the site this existing pattern of sustainable travel is expected to continue in the future. Destinations outside the accepted walking distances can either be reached by bus, train or cycle.
- 3.11. The site is well linked to major destinations by existing and proposed cycle infrastructure, and that opportunities exist to promote access to the site by bike. Cycling is already a well-established mode of travel around Warwick University. Through 'hard' and 'soft' travel plan measures the development has the potential for cycling to be a very real alternative to short-distance car trips.
- 3.12. The delivery of a permeable development will encourage future pedestrian and cyclist movements that can connect efficiently with off-site infrastructure. New pedestrian links and crossing facilities from the site onto Westwood Heath Road will further strengthen pedestrian connectivity in this location.
- 3.13. The delivery of a residential scheme at this site will encourage future pedestrian and cyclist movements which can connect efficiently with off-site infrastructure. New pedestrian links and crossing facilities from the site on Westwood Heath Road will further strengthen pedestrian connectivity in this location.

Access by Public Transport

- 3.14. With regard to access to the site by bus Westwood Heath Road, Cromwell Lane, Charter Avenue and Westwood Way are existing bus routes, and the nearest bus stops are located adjacent to the site frontage on Westwood Heath Road.
- 3.15. The IHT document 'Planning for Public Transport in Development' states that 400m is the desirable maximum walking distance to local bus services, equating to a walking time of 5 minutes. Existing bus stops on located on Westwood Heath Road, either side of the junction of Bockendon Road are well within this distance of the site.
- 3.16. A summary of existing bus services within a 400m walk distance of the site is provided in **table 3.1**.

Service	Bus Stop	Route	Average Frequency (per hour)			
			AM Peak	Daytime	Evening	Sunday
87	Westwood Heath Road	Coventry to Berkswell Station via Burton Green	1	1	1	0
87	Westwood Heath Road	Berkswell Station to Coventry via Burton Green	1	1	1	0
19	Westwood Way	Coventry to Westwood Business park	2	0	0	0
19	Westwood Way	Westwood Business Park to Coventry	0	0	2 in PM peak	0
18/18A	Charter Avenue	Coventry to Tile Hill (via Hearsall Common)	2	2	2 in PM peak	2
18/18A	Charter Avenue	Tile Hill to Coventry (via Hearsall Common)	2	2	1	2
180	Cromwell Lane	Tanyard Farm to Balsall Common	1	0	0	0
180	Cromwell Lane	Balsall Common to Tanyard Farm	0	1	0	0
233	Cromwell Lane	Solihull to Kenilworth	0	1	0	0
233	Cromwell Lane	Kenilworth to Solihull	0	1	0	0

Table 3.1: Existing Bus Service Frequencies & Routes

- 3.17. **Table 3.1** confirms that Westwood Heath Road bus stops are served by one bus per hour, in each direction. More frequent services are available from Charter Avenue, a 10-minute walk from the site.
- 3.18. The existing bus routes provide good coverage of major trip destinations and local retail destinations that fall outside of recommended maximum walk distances from the site (e.g Canon Park). A residential development of the scale proposed at Westwood Heath Road creates the opportunity to improve existing services to local employment, retail and educational facilities. Further commentary on this is provided later in this ES.
- 3.19. Turning to rail access the site is exceptionally well located to access Tile Hill station, which is located 1.1km from the northern boundary of the site. This is less than a 14-minute walk or a circa 6-minute cycle from the site, and well within the recommended IHT's 2km preferred maximum commuting distance laid out in the document 'Guidelines for Providing for Journeys on Foot'.
- 3.20. The station is served by local stopping trains and provides frequent links to Birmingham, Coventry and London, as well as services to Warwick and Royal Leamington Spa (via Coventry).
- 3.21. Existing rail services are summarised in **table 3.2**.

Rail Station	Route	First Train	Daytime	Evening	Last Train
Tile Hill	Northampton – Coventry – Birmingham International – Birmingham New St – Wolverhampton – Stafford	0555	2 Trains per Hour	2 Trains per Hour	2337
	Stafford – Wolverhampton – Birmingham New St – Birmingham International – Coventry – Northampton	0622	2 Trains per Hour	2 Trains per Hour	2308

Table 3.2: Existing Rail Service Frequencies & Routes

3.22. Current journey times by rail to key destinations are summarised in **table 3.3**.

Destination	Typical Journey Time
Coventry	6 minutes
Birmingham New Street	22 Minutes
Royal Leamington Spa	23 Minutes
Northampton	41 Minutes
Warwick	48 Minutes
Wolverhampton	50 Minutes
London Euston	80 Minutes

Table 3.3: Existing Rail Service Frequencies & Routes from Tile Hill Station

3.23. This review confirms that the site is well located in terms of walking and cycling connectivity, and also with respect to existing bus corridors and frequent train services to Coventry and Birmingham via Tile Hill rail station. With a residential development of this scale opportunities will exist to:

- increase the bus service frequencies to the site, through the delivery of extended or new bus services
- enhance pedestrian and cycle access to local destinations, including Tile Hill rail station, local employment and education sites (including Warwick University)

3.24. With regard to accessibility to local amenities and services it is important to consider the location of the site in relation to existing local and district services and amenities.

3.25. With two-thirds of all journeys in the UK are under-five miles, it is the short distance trip where the biggest opportunity exists for people to make sustainable travel choices and to make a real difference to their local environment. The DfT document, 'Creating Growth, Cutting Carbon', states that walking offers the greatest potential for replacing short car trips, particularly for journeys under 2km.

3.26. The IHT document, 'Guidelines for Providing for Journeys on Foot', and DfT documents, 'Creating Growth, Cutting Carbon' and 'PPG13 – Best Practice Guidance', provides further details of accepted walking distances. A summary of the best practice advice is shown in **table 3.4**.

	Bus Stop (m)	Commuting (m)	Education (m)	Other Destinations (m)	Cycle Distance (m)
DfT/IHT Guidance	400	2000	2000	1200	5000

Table 3.4: IHT & DfT Maximum Walking Distances

- 3.27. **Table 3.5** summarises DfT/IHT desirable pedestrian and cycling catchments from the centre of the site to local and district destinations.

Type	Name	Location	Distance (m)	Within Walking Guidance	Within Cycling Distance	Linked by Bus
Employment	Westwood Business Park	Westwood Way	697	Yes	Yes	n/a
Employment	Torrington Ave Industrial Estate	Torrington Ave	1349	Yes	Yes	n/a
Employment	University of Warwick Science Park	Kirby Corner Road	2252	No	Yes	n/a
Employment	Tile Hill Employment Area	Charter Avenue	794	Yes	Yes	Yes
Education/Employment	University of Warwick	Gibbett Hill Road	1839	Yes	Yes	n/a
Education	The Westwood Academy	Mitchell Ave	1622	Yes	Yes	n/a
Education	Burton Green Primary School	Hob Lane	1475	Yes	Yes	n/a
Education	Charter Primary School	Mitchell Ave	1622	Yes	Yes	n/a
Leisure	The Xcel Leisure Centre	Mitchell Ave	1622	Yes	Yes	n/a
Leisure	Westwood Heath Sport & Conference Centre	Westwood Heath Road	1534	Yes	Yes	n/a
Retail	Cannon Park Retail Park	Lynchgate Road	2575	No	Yes	Yes

Table 3.5: Walking & Cycling Accessibility Analysis (measured from the centre of the site)

- 3.28. **Table 3.5** demonstrates that the site is well located on foot and by cycle in relation to existing local destinations and major trip attractors. The site is particularly well located in relation to access to local employment and education facilities.

Accessibility by Car

- 3.29. The site benefits from direct highway frontage onto Westwood Heath Road and Bockendon Road. Westwood Heath Road is a good quality, unclassified road that bounds the site to the north. It is a circa 7m wide single carriageway route, and along the site frontage is subject to a 30mph speed limit.
- 3.30. Westwood Heath Road routes east-west providing access to education, employment and residential areas in Westwood Heath, and to the wider strategic road network linking with Coventry and Kenilworth.
- 3.31. To the west of the site Westwood Heath Road meets Cromwell Lane as an irregular priority junction. Cromwell Lane provides access to Burton Green village (to the south) and Tile Hill (to the north). Continuing south on Cromwell Lane provides access to the A452 Birmingham Road. Cromwell Lane is an existing bus corridor with footways present along both carriageway edges.
- 3.32. To the east of the site Westwood Heath Road meets Bockendon Road at a ghost island priority junction. Bockendon Road is a rural character, national speed limit road routing north-south

between Westwood Heath and Kenilworth (A429). Bockendon Road forms the eastern boundary of the site.

- 3.33. Continuing east on Westwood Heath Road provides access to Warwick University, the A429 Kenilworth Road (via Gibbet Hill Road) and the A45 Corridor. From these strategic routes access can be gained to motorway network, including the M6, M42 and M40. The site is well located in relation to access to the strategic road network and also to gain access to good quality local radial routes.
- 3.34. As part of the development of the site access strategy vehicle speed surveys have been undertaken in line with DMRB guidance on Westwood Heath Road. The survey results are provided in **table 3.6**.

Route	Mean Speed (mph)	85th %ile Wet Weather Speeds (MPH)	Speed Limit (MPH)
Westwood Heath Road	35.9	38.8	30

Table 3.6: Adjacent Highway 85th Percentile Vehicle Speeds

- 3.35. **Table 3.6** confirms that the mean speeds on Westwood Heath Road are higher than the existing 30mph speed limit along this route. As part of the final access strategy for the development measures to reinforce the existing 30mph speed limit have been included.

Highway Safety

- 3.36. Personal injury collision (PIC) data for the past five years has been sourced from the Crashmap website. This data has been examined to determine any collision hotspots or prevalent collision trends in the immediate vicinity of the site that may impact on the access strategy for the site.
- 3.37. The links examined include:
- Westwood Heath Road along the site frontage
 - Bockendon Road along the site frontage
 - Westwood Heath Road/Cromwell Road junction
 - Westwood Heath Road/Bockendon Road junction
- 3.38. The PIC data is presented in **appendix b** and also shown in **figure 3.2** below.

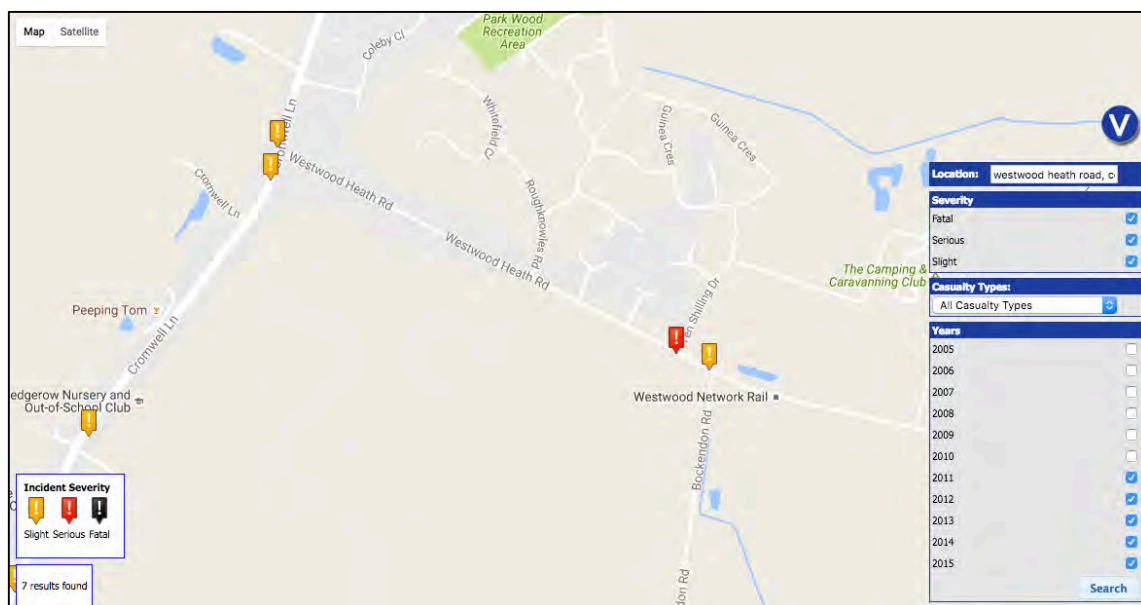


Figure 3.2: PIC Data for Highway Network Adjacent to Development Site

- 3.39. During the five-year period examined only four collisions occurred in the study area: two at (or close to) the Westwood Heath Road/Bockendon Road junction and two at the Cromwell Lane/Westwood Heath Road junction. Three of the collisions were classified as slight and one as serious.
- 3.40. The PIC reports in **appendix b** confirm that all of the four recorded PIC's occurred at existing junctions and involved turning conflicts. The three PIC's recorded as slight all involved two vehicle turning collisions; the PIC recorded as serious involved a pedal cyclist being knocked from their bike when a private car emerged from the side road and turned left into the path of the cyclist.
- 3.41. This ES confirms that there have been no recorded collisions along the northern site boundary where new pedestrian, cycle and vehicular accesses will be delivered to the site. As mentioned earlier in this ES measures to remind motorists that there is a 30mph speed limit in place on Westwood Heath Road have been incorporated into the access proposals presented in this document.

Base Traffic Conditions on Westwood Heath Road

- 3.42. AM and PM peak manual classified turning count surveys, as well as a seven-day automatic traffic count (ATC) have been undertaken to inform the access strategy for the site. The surveys confirmed that the AM network peak is 0800:0900 and the PM peak period is 1700:1800.
- 3.43. To allow an assessment of future forecast traffic conditions in the local area the surveyed data has been growthed to 2028 using Temprow 7.0. 2028 is the model year used by WCC when preparing their evidence base.
- 3.44. The Temprow growth factors used to growth 2016 survey data to 2028 are summarised below.
- 2016 to 2028 AM Peak – 1.1884 growth factor
 - 2016 to 2028 PM Peak – 1.1916 growth factor
- 3.45. Using these flows an assessment of the future year (2028) base traffic conditions at junctions on

Westwood Heath Road has been prepared using the industry standard software package PICADY. A summary of the modelling output is provided in **table 3.7**.

Junction	Turning Movement	AM Peak		PM Peak	
		Max RFC	Queue	Max RFC	Queue
Westwood Heath Road/Bockendon Road	From Bockendon Road	0.249	1	0.072	0
	Right turn into Bockendon Road	0.056	0	0.122	0
Westwood Heath Road/Cromwell Lane NW Node	From Westwood Heath Road	0.380	1	0.509	1
	Right Turn to Westwood Heath Road	0.000	0	0.000	0
Westwood Heath Road/Cromwell Lane SW Node	From Westwood Heath Road	0.171	0	0.440	1
	Right Turn to Westwood Heath Road	0.826	5	0.156	0
Westwood Heath Road/Cromwell Lane E Node	From Link Road to WHR East	0.933	9	0.176	0
	Right Turn into Link Road	0.000	0	0.000	0

Table 3.7: Cromwell Lane/Westwood Heath Road PICADY Junction Modelling

- 3.46. With respect to the performance of the highway network, **table 3.7** shows that the Bockendon Road junction is anticipated to operate within accepted capacity thresholds. In line with discussions with WCC the junction of Cromwell Lane/Westwood Heath Road is anticipated to be operating near to accepted capacity thresholds in the future year assessment.
- 3.47. It is acknowledged that the development at Westwood Heath Road could contribute towards a pedestrian and highway capacity improvement at this location as part of any site allocation. Further discussion on the access strategy for the site and off-site highway improvements on Westwood Heath Road is provided later in this ES.
- 3.48. This section of the ES confirms that the site is well located to deliver a sustainable residential development to meet WDC and CCC's housing needs. The site is located close to key employment areas and in a location with good public transport connections to the city centre.
- 3.49. The site is also well located in relation to local leisure, employment and education destinations. It falls within a 10-minute walk of local primary and secondary school facilities, and walking and cycling distances from the site to local education and employment facilities accord with DFT and IHT accessibility criteria.
- 3.50. Existing pedestrian and cycle routes provide comprehensive links from the site to major destinations and public transport nodes, including Tile Hill rail station. The development can assist with rectifying existing gaps in the network (mainly pedestrian crossing facilities) as part of the develop access proposals.
- 3.51. The site also sits adjacent to existing public transport corridors and within 400m of existing bus stops on Westwood Heath Road. More frequent services are available within 800m of the site, and could be extended to the development site. The proposed development could also contribute to enhancing current bus service frequencies.
- 3.52. An assessment of existing traffic conditions adjacent to the development site confirms Westwood Heath Road is a high quality route which currently provides access to strategic employment areas and existing residential areas. With no adverse PICs recorded on Westwood Heath Road the principle of pedestrian, cycle and vehicular access onto this route is entirely consistent with existing development access strategies on the northern side of this route.

- 3.53. This section of the ES confirms that the development is appropriately located to meet the requirements of the National Planning Policy Framework, where the 'golden thread' is to promote sustainable development without delay.

4. DEVELOPMENT IMPACT & ADDITIONAL HOUSING NUMBERS

- 4.1. This section of the ES considers WDC and WCC's position in terms of the residential development scale at Westwood Heath Road. It also provides commentary on the access strategy for the site, and the potential for the site to accommodate additional unit numbers as part of any residential allocation.

A 425 Residential Development Allocation

- 4.2. In terms of scene setting the Westwood Heath Road site was originally identified by WDC as a LDF Core Strategy option in 2012 to deliver either 400 or 800 units. No access issues were identified by WDC at this stage in the process.
- 4.3. As part of the Core Strategy evidence base JMP (acting for WCC/WDC) included the site in the Warwickshire Transport Model (VISUM). The Transport Model considered four different growth options: the site was included in option 1 (as 400 units) and option 4 (as 800 units). JMP concluded that all four modelled options would not cause any undue pressure on the network, when coupled with identified improvement schemes.
- 4.4. More recent technical appraisal work has been undertaken to inform the development of the Local Plan. Since 2011 Strategic Transport Assessments have been undertaken by WCC and WDC to consider housing and employment allocation options. The culmination of this work is presented in the February 2016 Warwick District Council Strategic Transport Assessment: Final Phase Assessment of Additional Housing Allocations, published in February 2016.
- 4.5. For ease of reference this document is referred to as the FEB16STA report in this ES.
- 4.6. This document included an assessment of the implications of the allocation of residential development at the Westwood Heath Road site, by comparing the relative capacities of routes between Westwood Heath and Kenilworth, Warwick, Leamington and the A46. The minimum scale of development assessed at the site was 425 residential units, with three additional scenario tests considering 850, 1,175 and 1,500 units on the site.
- 4.7. The report confirms that:

*'The purpose of this assessment was to determine what an appropriate level of housing may (our emphasis) be deliverable before the links in the area are likely to become 'over capacity'.*¹

- 4.8. The findings of this work concluded that:

*"425 dwellings could be delivered in the area prior (our emphasis) to more significant mitigation being required"*²

- 4.9. The principle of 425 residential units at the Westwood Heath Road has been established through WCC's technical appraisal work. The access strategy for the scheme has been developed on this basis.

¹ Warwick District Council – Final Phase STA, February 2016, Para 2.11

² Warwick District Council – Final Phase STA, February 2016, Para 2.12

The Development Access Strategy

- 4.10. Work has been undertaken on both the site access strategy onto the adjacent highway network, as well as the internal site layout. With regard to the internal site layout the masterplanning for the site has been mindful of the advice contained in Manual for Streets 1 and 2, to create a permeable network of overlooked pedestrian and cycle routes, as well as the opportunity to accommodate bus services through the site, as part of the sustainable access strategy.
- 4.11. The final scheme layout will deliver the following sustainable design requirements:
- a street and place design that gives pedestrians and cyclists priority
 - delivery of internal traffic routes which encourage walking pace speeds, which in turn will allow pedestrians and cyclists inclusive use of local streets
 - the use of the European model of filtered permeability, providing numerous segregated pedestrian/cyclist access locations to give journey time advantages to non-car modes
 - efficient connections to existing sustainable routes to local education, community and employment facilities, including town centre locations
 - deliver a vehicular access strategy that effectively disperses traffic onto the most appropriate routes
 - vehicular access designs that provide safe access onto the adjacent public highway, safe crossing facilities and measures to reduce local traffic speeds
- 4.12. The emerging development layouts are presented in the Terence O'Rourke (TOR) Visioning Document submitted as part of the supporting information for the Examination. Copies of the development layout options are provided in **appendix c**.

Vehicular Access to the Public Highway

- 4.13. With regard to the vehicular access strategy this has been developed to provide two points of access to the development. Whilst Manual for Streets no longer requires development to provide multiple vehicular access points for main, secondary and emergency access in this instance the ability to deliver two access points onto Westwood Heath Road will assist with providing easy and direct access for new or extended bus services through the site. A two access strategy also allows easier traffic dispersal onto the adjacent highway network.
- 4.14. The proposed access arrangements are shown in **appendix d**, and are described below.
- 4.15. The preferred access strategy for the site looks to deliver two new priority junctions with ghost island right turn facilities on Westwood Heath Road. These accesses require localised widening of Westwood Heath Road in order to accommodate the right turn facilities.
- 4.16. As part of the scheme design new pedestrian refuges have been incorporated into these junction works, to allow pedestrians easy access across Westwood Heath Road. A continuous 2m wide footway is proposed along the southern side of Westwood Heath Road (the site boundary) to connect to existing crossing facilities on Bockendon Road.
- 4.17. Note that on the drawings 30mph carriageway speed limit markings and changes in road surfacing are proposed to remind motorists they are travelling in a 30mph speed limit.
- 4.18. Individual access point designs are shown in more detail in **appendix e**.

Sustainable Access & Road Safety Measures

- 4.19. The access strategy for the development is presented in **appendices d and e**, and has been prepared to provide safe and sustainable access by all modes. The measures include:

- a) speed reduction measures on Westwood Heath Road
 - b) pedestrian crossing facilities on Westwood Heath Road
 - c) improved cycle facilities on Westwood Heath Road, linking to Westwood Way routes
 - d) pedestrian crossing facilities on Cromwell Lane, on the route to Tile Hill rail station
 - e) increased bus access provision, either through bus service frequency improvements or existing service extensions into the site
- 4.20. The final sustainable access strategy will be tailored to the final scale of development on the site. **Measures a to d** listed above are seen as committed measures whatever the final scale of development proposed.
- 4.21. The following section of this ES considers the opportunity to provide a marginal increase in housing numbers on the site, over the 425 residential units identified by WDC and WCC as appropriate for the site.

Additional Housing Numbers on the Site

- 4.22. In assessing the Westwood Heath Road 425-unit development threshold a series of modelling scenarios were undertaken by WCC, using their current S-Paramics microsimulation model and supplementary analysis within GIS. The modelled scenarios are shown in **table 4.1**.

Site	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Westwood Heath	425	850	1175	1500
Kings Hill	1050	2100	3050	4000

Table 4.1: Westwood Heath and Kings Hill Total Dwelling Scenarios

- 4.23. The assessment then used standard WCC standard vehicle trip generation factors. These factors exclude a 15% mode share adjustment to reflect switching to sustainable modes targeted by all new developments coming forward. The standard residential trip rates are presented in **table 4.2** and the development demands by scenario in **table 4.3**.

Time Period	In	Out	Total
0700 to 0800	0.08	0.33	0.41
0800 to 0900	0.12	0.48	0.60
0900 to 1000	0.12	0.22	0.34
1600 to 1700	0.35	0.12	0.46
1700 to 1800	0.48	0.12	0.60
1800 to 1900	0.36	0.12	0.48

Table 4.2: WCC Standard Residential Trip Rates

		Scenario 1			Scenario 2			Scenario 3			Scenario 4		
		In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
AM	Westwood Heath	43	173	217	87	347	434	120	479	599	153	612	765
	Kings Hill	107	428	536	214	857	1071	311	1244	1556	408	1632	2040
	Total	150	602	752	301	1204	1505	431	1724	2155	561	2244	2805
PM	Westwood Heath	173	43	217	347	87	434	479	120	599	612	153	765
	Kings Hill	428	107	536	857	214	1071	1244	311	1556	1632	408	2040
	Total	602	150	752	1204	301	1505	1724	431	2155	2244	561	2805

Table 4.3: Development Demands by Scenario

- 4.24. Whilst the modelling outputs for all four scenarios are presented in the FEB16STA only the modelling outputs for scenarios 1 and 2 are considered relevant for any capacity testing for the Westwood Heath Road site. This is because the development site will only accommodate a maximum of 610 residential units on the site.
- 4.25. In addition, the Kings Hill site is identified to deliver circa 1,800 dwellings during the Local Plan period (up to 2029), as stated in February 2016 proposed modifications. Whilst it is accepted that the total capacity of the site is circa 4,000 units, any additional unit numbers over the 1,800 dwellings are not expected to come forward in this plan period.

Scenario 1 Results

- 4.26. WCC's link capacity analysis concludes that in Scenario 1 (425 units at Westwood Heath Road and 1,050 units at Kings Hill) in the AM peak period:

"Crackley Lane route (between Westwood Heath and Kenilworth) are forecast, within scenario 01 to (be) over capacity, whilst the links through the university are also approaching capacity"

- 4.27. In the PM peak period the report states:

"Within the PM, links 6 and 7 (Crackley Lane) are again overcapacity"

- 4.28. We note that the report does not identify any other links modelled within the scenario 1 assessment as operating over-capacity.

Scenario 2 Results

- 4.29. The Scenario 2 model outputs for 850 units at Westwood Heath Road and 2,100 units at Kings Hill confirm:

"Analysis of the link capacities, when assessing the housing levels identified within Scenario 2 reveals the following:

- Within the AM and PM, sites 6 and 7 (Crackley Lane) remain over capacity indicating severe issues are likely in these areas, the routes through the university are still approaching capacity in the AM."*

- 4.30. As with Scenario 1 the report does not identify any other links modelled within this scenario assessment as operating over-capacity.

4.31. We draw the Inspector's attention to the matter that WCC's Scenario 2 test has assessed a development scale that is:

- neither physically achievable at Westwood Heath Road (with 610 units being an upper development limit, as opposed to 850 units)
- not identified at Kings Hill (an assessed 2,100 units compared to the 1,800 units identified for the plan period).

4.32. Adjusting the WCC cumulative development trip rates presented in **table 4.2** to reflect this Local Plan scenario (referenced as Scenario 1.5 in this TN) would generate the two-way vehicle movements in **table 4.4**.

		610 Units at Westwood Heath Road & 1,800 Units at Kings Hill (Scenario 1.5)		
		In	Out	Total
AM	Westwood Heath	62	249	311
	Kings Hill	184	734	918
	Total	246	983	1229
PM	Westwood Heath	249	62	311
	Kings Hill	734	184	918
	Total	983	246	1229

Table 4.4: Development Demands by Scenario

4.33. **Table 4.4** confirms that a 610-unit scheme at Westwood Heath Road and a 1,800 unit scheme at Kings Hill will generate a reduction of 275 two way vehicle movements across the highway network when compared to the scenario 2 modelled flows. This is a significant 23% decrease in traffic flows across the network when compared to the scenario 2 assessment.

Capacity Thresholds, Development Scale and Additional Development Trips

4.34. With regard to WCC's assessment work it is clear that the upper development threshold at Westwood Heath Road set by WCC is dictated by reaching capacity thresholds on Crackley Lane, which routes immediately to the east of the site.

4.35. With Crackley Lane being an unlit rural lane, subject to the national speed limit with sections narrowing to constrain two-way vehicle movements, and having been identified as a known 'rat-run' between Coventry and Kenilworth, the findings from the FEB16STA report are in line with our site observations. The FEB16STA report concludes:

"During the AM, the most congested links are located adjacent to Westwood Heath Road at Crackley Lane or Gibbett Hill Road which is largely attributed to the small rural road classification of the former."

4.36. The report goes on to conclude:

“The evidence presented suggests that by the addition of approximately 425 dwellings, the Crackley Lane route is likely to be nearly over capacity as are the links which comprise Gibbett Hill Road. Both of these routes will serve traffic wishing to travel between the proposed sites and Kenilworth, Warwick and Leamington towns as well as the A46 south.”

- 4.37. Whilst WCC has advised that 425 units should be an upper threshold for the Westwood Heath Road, the actual development capacity (in terms of physical site area) is 610 units on the site, an increase of 185 residential units over the suggested 425-unit draft allocation.
- 4.38. Applying WCC’s standard residential trip rates (presented in **table 4.2**) confirms that an additional 185 units in this location would generate an additional 94 two-way movements on the highway network in the AM and PM peak periods.
- 4.39. To understand the impact of these additional vehicle movements on the surrounding highway network Vectos (WCC’s term consultants for micro-simulation modelling) have been appointed to model the development traffic for three Westwood Heath Road development scenarios on the surrounding highway network using WCC’s current S-Paramics microsimulation model. The modelled scenarios are:
- scenario A - 425 residential units (the draft allocation)
 - scenario B - 529 residential units (an interim development scale)
 - scenario C - 610 residential units (the upper development limit)
- 4.40. The development trip rates for each scenario are presented in **table 4.5**.

		Scenario A - 425 Units			Scenario B - 529 Units			Scenario C - 610 Units		
		In	Out	Total	In	Out	Total	In	Out	Total
AM	Westwood Heath	43	173	217	54	216	270	62	249	311
PM	Westwood Heath	173	43	217	216	54	270	249	62	311

Table 4.5: Westwood Heath Road Scenario Vehicle Trip Rates

- 4.41. **Table 4.5** confirms that a 529 development scheme will generate an additional 53 two-way vehicle movements over the 425-unit draft allocation, and an additional 94 two-way movements in the 610-unit scenario in both the AM and PM peak periods.
- 4.42. For the three scenarios the development traffic has been distributed using 2011 Census Travel to Work data. Using the same S-Paramics model used in the WBC/WCC FEB16STA study the change in development traffic for each of the scenarios presented in **table 4.5** has been assessed across 37 junctions within the model.
- 4.43. A comparison of the change in flows at each of the 37 junctions has been prepared, and compared against WCC’s 425 residential development ceiling. For reference the location of the assessed junctions is provided in **appendix f**, along with the full scenario assessment outputs. A summary of the key junction assessment is provided in **table 4.6**.

Total Throughput	2028 Reference	+425 Dwellings	%age Change	+529 Dwellings	Traffic Flow Change	%age Change	+610 Dwellings	Traffic Flow Change	%age Change
Junction 1 - A45/A429									
AM Peak (0800 - 0900)	4631	117	2.5%	141	24	3.0%	164	47	3.5%
PM Peak (1700 - 1800)	5091	116	2.3%	147	31	2.9%	169	53	3.3%
Junction 2 - A45/B4113									
AM Peak (0800 - 0900)	5239	67	1.3%	80	13	1.5%	93	26	1.8%
PM Peak (1700 - 1800)	5450	47	0.9%	58	11	1.1%	66	19	1.2%
Junction 3 - Stivichall Interchange									
AM Peak (0800 - 0900)	5291	22	0.4%	26	4	0.5%	30	8	0.6%
PM Peak (1700 - 1800)	5215	49	0.9%	58	9	1.1%	64	15	1.2%
Junction 5 - A429/Stoneleigh Rd/Gibbet Hill Road									
AM Peak (0800 - 0900)	2770	113	4.1%	139	26	5.0%	160	47	5.8%
PM Peak (1700 - 1800)	2585	122	4.7%	136	14	5.3%	175	53	6.8%
Junction 6 - A46/Stoneleigh Road									
AM Peak (0800 - 0900)	2620	51	1.9%	60	9	2.3%	69	18	2.6%
PM Peak (1700 - 1800)	2739	90	3.3%	106	16	3.9%	118	28	4.3%
Junction 7 - A429 Coventry Road/Common Lane									
AM Peak (0800 - 0900)	1155	7	0.6%	13	6	1.1%	15	8	1.3%
PM Peak (1700 - 1800)	916	5	0.5%	9	4	1.0%	10	5	1.1%
Junction 9 - Coventry Rd/Tainters Hill/Upper Spring Lane									
AM Peak (0800 - 0900)	1230	31	2.5%	39	8	3.2%	44	13	3.6%
PM Peak (1700 - 1800)	1192	12	1.0%	66	14	5.5%	17	5	1.4%
Junction 10 - Dalehouse Lane/Knowle Hill									
AM Peak (0800 - 0900)	998	4	0.4%	7	3	0.7%	7	3	0.7%
PM Peak (1700 - 1800)	2585	122	4.7%	136	14	5.3%	175	53	6.8%
Junction 11 - A429 New St/A452 Bridge St/High St									
AM Peak (0800 - 0900)	952	36	3.8%	45	9	4.7%	51	15	5.4%
PM Peak (1700 - 1800)	891	39	4.4%	48	9	5.4%	55	16	6.2%
Junction 28 - Stoneleigh Road/Dalehouse Lane									
AM Peak (0800 - 0900)	2287	53	2.3%	61	8	2.7%	70	17	3.1%
PM Peak (1700 - 1800)	2263	92	4.1%	110	18	4.9%	122	30	5.4%

Table 4.6: Comparison of Vehicle Flows for 529 and 610 Development Scenarios against 425 Draft Allocation

4.44. Table 4.6 confirms:

- that at the junctions closest to the to the development the maximum change in vehicle flows is +47 in the AM peak and +53 in the PM peak

- the actual percentage change in vehicle flows through these key junctions ranges from a 0.6% to 5.8% increase over the accepted 425 unit development flows in the AM peak
 - in the PM peak the percentage change in vehicle flows over the accepted 425-unit development flows is between 1.2% and 6.8%
 - these flows and percentage changes are well within accepted day-to-day variations of flow on the network
 - That an adjustment from 425 units to 610 units can be delivered without a 'severe' impact
- 4.45. **Table 4.6** confirms that the actual percentage increase in flows on the network will be small when compared to the accepted 425 residential unit threshold identified by WCC. This means the development site could be expected to accommodate additional housing over that stipulated by WCC, without a material change in highway performance on these routes, and without requiring 'significant' off-site highway improvements for a larger allocation to proceed.
- 4.46. Table 4.6 confirms that a larger scale development certainly could be delivered without creating a 'severe' impact on the highway network.
- 4.47. It is acknowledged that the FEB16STA report identifies a number of off-site highway mitigation measures that schemes identified in the Local Plan could contribute towards the delivery of. The FEB16STA report identifies potential capacity improvements at:
- Europa Way/Gallows Hill Link – a segregated left slip from the Gallows Hill eastbound approach to the Europa Way/Gallows Hill roundabout
 - A4177/A425/A46 – signalling and widening proposals at the junction (now a committed improvement, funded by Growth Deal, County funding and S106 contributions which will in part be secured against sites promoted through the Local Plan)
 - Warwick Technical Park/Gallows Hill roundabout (introduction of a fourth junction arm to serve adjacent allocation, as well as opportunities for widening Gallows Hill)
 - Princes Drive/Old Warwick Road and Princes Drive/Park Drive – alterations to signal timings, and the potential for an alternative, higher capacity junction at this location
 - Myton Road/Europa Way/Old Warwick Road – either adjustment to signal timings or delivery of a widened roundabout
 - Sydenham Drive/Radford Road – junction capacity improvement
 - A445/Sandy Lane – widening of junction approaches, and where possible introduction of two lane exit capacity along A445
 - A445/Westhill Road – junction widening and introduction of two lane exit capacity
 - A445/Lillington Avenue/Lillington Road – integration of segregated left turn from A445
 - A45/Kenilworth Road – widening of southern approach
 - A429 Kenilworth Road/Stoneleigh Road/Gibbett Hill Road – widening and capacity improvements
 - A452/Birches Lane – widening to south and western section of the gyratory
- 4.48. As part of any detailed Transport Assessment (TA) work prepared in support of residential development at the Westwood Heath Road site an assessment of the development impact at the above-mentioned junctions will be prepared. If the development impact is considered to be material at these locations a contribution could be made to mitigate the development impact at relevant points on the highway network.

Site Access Performance on Westwood Heath Road

- 4.49. To assist the Inspector when considering the site allocation the proposed access strategy to the development from Westwood Heath Road has been tested for a development scale of 425, 529 and 610 units. The industry standard priority junction software PICADY has been used, using the following modelling parameters:
- background surveyed traffic growthed from 2016 to 2028 using TEMPRO 7.0
 - traffic assignment to/from the development being based on existing traffic flow proportions
 - a worse case assessment has been modelled with all development traffic using a single priority junction access onto Westward Heath Road
- 4.50. A summary of the modelling outputs is provided in **tables 4.8 to 4.10**. The full PICADY model outputs are provided in **appendix g**.

425 Residential Units				
Turning Movement	AM Peak		PM Peak	
	Max RFC	Queue	Max RFC	Queue
Traffic exiting Development Site	0.566	1.27	0.156	0.18
Right turn into Site/Ahead Movement	0.023	0.02	0.299	0.43

Table 4.8: 425 Residential Unit PICADY Modelling

529 Residential Units				
Turning Movement	AM Peak		PM Peak	
	Max RFC	Queue	Max RFC	Queue
Traffic exiting Development Site	0.706	2.28	0.202	0.25
Right turn into Site/Ahead Movement	0.028	0.03	0.373	0.60

Table 4.9: 529 Residential Unit PICADY Modelling

610 Residential Units				
Turning Movement	AM Peak		PM Peak	
	Max RFC	Queue	Max RFC	Queue
Traffic exiting Development Site	0.817	3.61	0.242	0.32
Right turn into Site/Ahead Movement	0.031	0.03	0.299	0.78

Table 4.10: 610 Residential Unit PICADY Modelling

- 4.51. The PICADY summary tables confirm that the development access arrangements shown in **appendix e** can accommodate all traffic flows within accepted modelling thresholds, even when modelling all development traffic through a single priority junction onto Westward Heath Road. In

reality traffic will disperse through both proposed vehicular accesses onto the aforementioned route.

- 4.52. The PICADY modelling confirms that both the draft allocation of 425 units and a 610 residential development can safely access onto Westwood Heath Road.

5. SUMMARY AND CONCLUSIONS

- 5.1. This ES provides a detailed review of the suitability of allocating the the Westwood Heath Road site for residential development. The site has been identified as a draft allocation in the Local Plan, due for examination in the autumn of 2016.
- 5.2. This document confirms that in traffic and transport terms both Warwick District Council (WDC) and Warwickshire County Council (WCC) are correct in identifying the site for residential development.
- 5.3. The site has been demonstrated to be well placed to encourage sustainable accessibility, reduce the dependence on the private car and promote efficient movement of traffic onto the surrounding highway network. The statement has also identified where improvements can be made on Westwood Heath Road to enhance local highway operation, improve the existing road safety and promote better community connectivity.
- 5.4. This statement confirms that there are no traffic or transport barriers for the site to come forward for residential development in the emerging Local Plan.
- 5.5. It is anticipated that all future developments will be expected to reasonably contribute to wider infrastructure and sustainable improvement strategies identified by WDC and WCC to unlock growth potential across the area. The strategic modelling work undertaken to date by WCC has confirmed that a 425 residential unit development at the Westwood Heath Road site can be delivered prior to move 'significant' highway mitigation requirements being required.
- 5.6. Using WCC's Paramics microsimulation model it has been demonstrated that increasing the development scale to either 529 or 610 units will not lead to a material change in highway network performance over the accepted 425 residential development. This technical appraisal confirms that the delivery of the site will not be dependent upon the timescale of strategic infrastructure for the quantum of development presented in this statement.
- 5.7. PICADY junction assessments of the development access strategy onto Westwood Heath Road confirm that the development can come forward without a material impact on this route, and that the proposed ghosted right turn junctions will operate within accepted capacity thresholds.
- 5.8. To conclude the Westwood Heath Road site can be brought forward for residential development for the following reasons:
- the site is shown to be exceptionally well located to encourage end occupiers to travel sustainably to and from the site
 - the site has good access to several key employment destinations, including the University of Warwick, creating excellent opportunities to maximise walking and cycling trips to these key destinations
 - the site is well located to access Tile Hill railway station, being located less than a 14-minute walk or 6-minute cycle from the site, allowing end occupiers of the development to benefit from fast, direct rail services to Coventry, Birmingham International and New Street stations
 - the development can deliver new and improved pedestrian and cycle routes and crossing facilities onto Westwood Heath Road, to provide improved access by these sustainable modes
 - the site benefits from being accessible by bus, but there is the opportunity to increase the frequency of local bus services to local destinations, including Coventry and Warwick

- safe, direct access for vehicular traffic can be delivered onto Westwood Heath Road, a route that already provides access for residential development
 - WCC and WDC have acknowledged, through the use of their S-Paramics microsimulation model that a development of 425 residential units can be accommodated at the site without “more significant” mitigation being required
- 5.9. The FEB16STA study confirms that 425 residential units can be delivered at the Westwood Heath Road site without a ‘severe’ impact on the surrounding highway network.
- 5.10. This document also confirms that the site can accommodate a larger scale of development to assist WDC and Coventry City Council (CCC) in meeting its housing targets. An assessment of two larger residential scheme options (529 and 610 unit options) confirms that a marginal increase in unit numbers can be delivered on the site without a material change in impact over the 425-unit scheme.
- 5.11. Any financial contributions towards relevant improvements would have to meet the regulations 122 and 123 in CIL, in terms of being necessary to make the development acceptable, directly related to the development, and fairly and reasonably related in scale and kind to the development.
- 5.12. To conclude, this statement confirms that a sustainable, deliverable residential scheme can be delivered at the Westwood Heath Road site. WCC’s own modelling appraisal confirms that 425 residential dwellings can be delivered on the site, and using the same trip rates a larger development of 610 units can be accommodated without a material change in traffic flows on the network.
- 5.13. In providing a larger quantum of residential development at the Westwood Heath Road site this will assist both WDC and CCC in meeting their housing needs within the Local Plan period.

SK TRANSPORT PLANNING

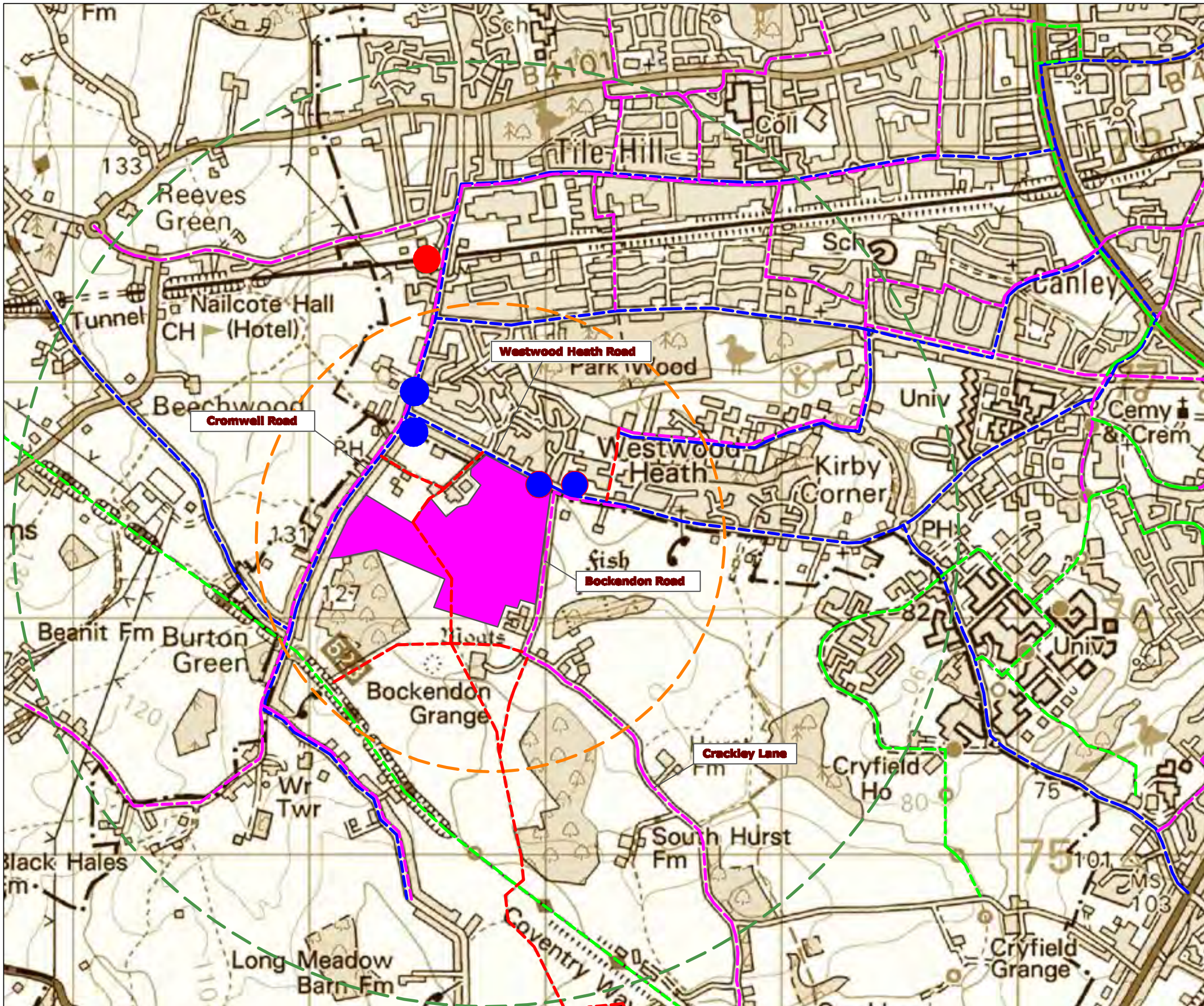
TRAFFIC TRANSPORT HIGHWAYS



APPENDIX A

Plot Date :29 August 2016 02:55:10

AutoCAD File Name :\\Mac\\Home\\Dropbox\\Project Work\\Westwood Heath Road\\SK21222-01 180816.dwg



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THE PURPOSE INTENDED AND ONLY
WRITTEN DIMENSIONS SHALL BE USED

NOTES

-  1 KM Walk Catchment
-  2 KM Walk Catchment

Revision Details

By	Date	Suffix
Check		

Drawing Number

SK21222-04

Westwood Heath Road

Drawing Title

Plan 1 - Local Highway
Network and Existing
Transport Nodes

Scale at A3

NTS

Drawn

KAT

Approved

MAK

Check

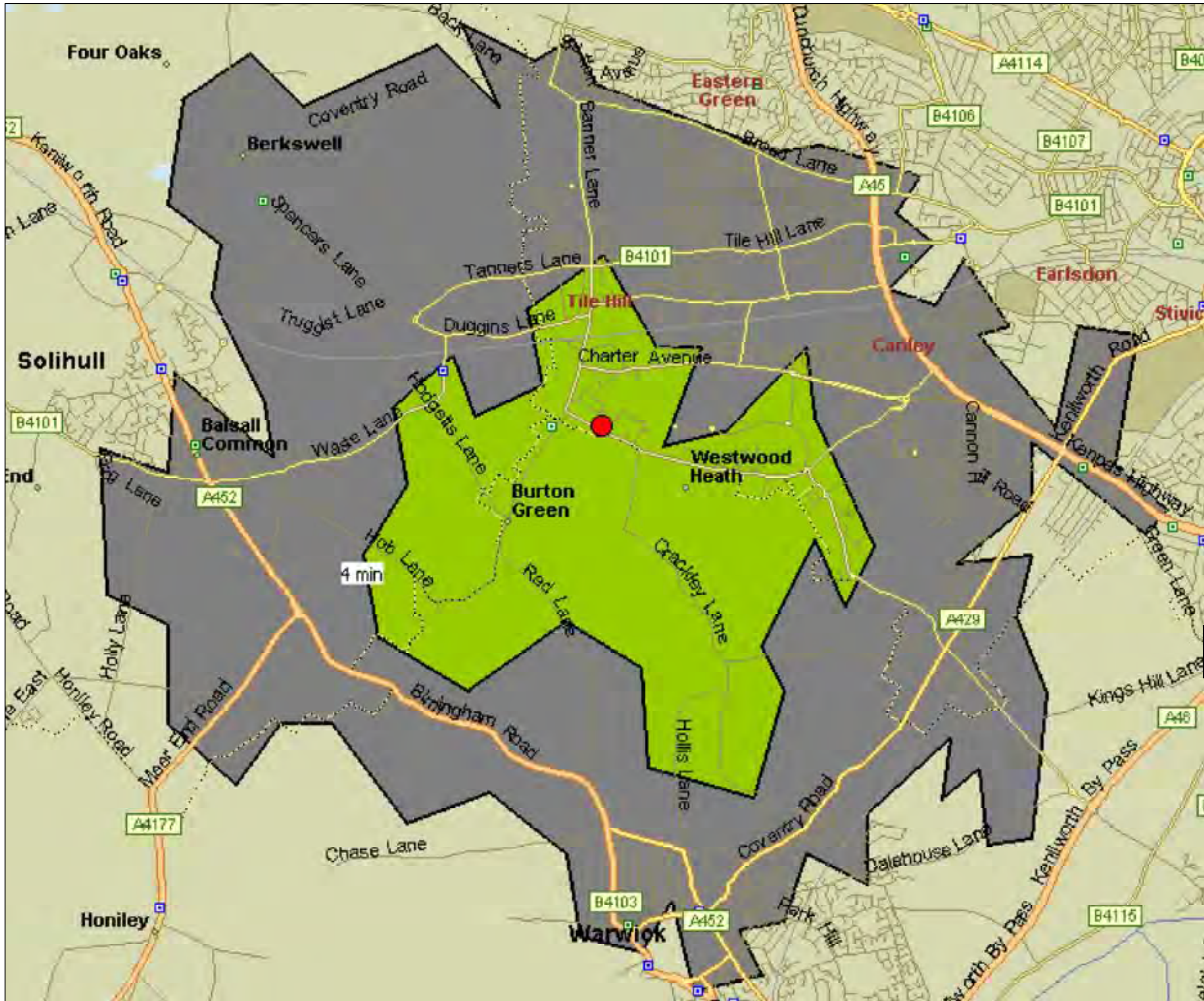
KAT

Date

08/08/16

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NOTES

- 2KM Walking Catchment
- 5KM Cycling Catchment

Revision Details	By	Date	Suffix

Drawing Number

SK21222-07

Drawing Title

Westwood Heath Road

Plan 2 - 2KM & 5KM Walking & Cycling Catchments

Scale at A3

NTS

Drawn	KAT	Approved	MAK
Check	KAT	Date	08/08/16

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APPENDIX B