



Examination into the Warwick District Local Plan

Matter 7b - Proposed Housing Site Allocations

Site H41 Land East of Warwick Road, Kenilworth

Statement Submitted on Behalf of The Richborough Estates Partnership LLP – Respondent 13988

Introduction

1. The Richborough Estates Partnership LLP has an agreement with the owner of Site H41 to promote the land for residential development both through the emerging Warwick District Local Plan and future planning applications.
2. Richborough Estates has commissioned a range of technical and environmental reports. This work has been refreshed to consider the comments submitted during the consultation on the Warwick District Local Plan Proposed Modifications. These reports include assessments related to transport; sustainability; landscape and visual; heritage; ecology; flooding; drainage and utilities. These site specific assessments supplement the Council's own evidence base.
3. The outcome of the assessment work informed the preparation of a parameters plan which demonstrates how Site H41 could be developed for housing purposes independently from any outdoor sports allocation to the south and east (SP2). There is no interdependence between these allocations coming forward for development. The previously submitted parameters plan is annexed to this Statement together with three summary notes of the assessments.
4. The parameters plan supports the representations of Richborough Estates that Site H41 has a capacity to accommodate about 130 dwellings rather than the 100 dwellings currently suggested. In circumstances where land is released from the Green Belt then it should be used in an efficient manner conducive with good urban design. A minor modification to the capacity of Site H41 for the avoidance of doubt.



What is the current planning status of the site?

5. The site is agricultural land situated on the edge of Kenilworth and is located within the Green Belt.

How does it fit within the overall spatial strategy?

6. Strategic Policy DS4(b) identifies that where greenfield sites are required for housing, they should generally be located on the edge of built-up areas in sustainable locations close to areas of employment or where community facilities such as a shops, bus services, medical facilities and schools are available or can be made available.
7. Paragraph 2.37 of the Local Plan reiterates this strategy by referring to allocating sites in and adjacent to the main urban areas. Kenilworth is one of the main or primary settlements within Warwick District. The allocation of Site H41 squarely fits with the spatial strategy.
8. High level assessments of the land to the south of Kenilworth undertaken on behalf of the Council indicate that large scale schemes would have detrimental effects on matters such as Green Belt and landscape (e.g. Options for Future Urban Expansion in Warwick District Considerations for Sustainable Landscape Planning 2014 Addendum (March 2014) and the Green Belt Study (2009)).
9. However, the site specific assessments undertaken confirm that Site H41 performs positively when assessed against the criteria identified in Strategic Policy DS4:
 - Housing development on Site H41 as illustrated on the parameters plan would not lead to coalescence of settlements and, by reason of the separation distance between the settlements, would physically and visually maintain the separate identities of Kenilworth and Leek Wootton.
 - The site itself represents denuded former medieval and post-medieval farming landscape with very little demonstrable archaeological potential. The Heritage Assessment identifies that there would be no significant or detrimental harm caused either directly to heritage assets or their settings. The parameters plan retains the glimpsed views of St John's Church's spire adjacent to the railway and respects the setting of Wootton Grange Farm which is a Listed Building.



- Site H41's immediate landscape setting is transitional between the urban area of Kenilworth and the wider parkland characteristics associated with the Arden Parklands' Landscape Character Type. The site is not of a high quality of landscape in its own right.
- The Ecological Appraisal of the site identifies only the hedges and mature trees on the boundary as possessing any particular merit and these would be retained save for a need to provide access from Warwick Road. Although the site is adjacent to a Local Wildlife Site (LWS) associated with the railway embankment this is not of such importance to be classified as a highly sensitive features in the natural environment.
- Green Belt matters are addressed later in this Statement. Site H41 does not cause unacceptable harm to the purposes, openness and visual amenity of the Green Belt.

In addition to housing provision, are there any other benefits that the proposed development would bring?

10. As proposed by Richborough Estates, Site H41 would deliver a range of market and affordable housing to reflect the Strategic Housing Market Assessment. Suitable Green Infrastructure to meet the needs of future residents, including open space and sustainable urban drainage, would be provided and would promote biodiversity.
11. Site H41 could financially contribute towards improving St John's Gyratory junction which would deliver wider benefits to the local community.

What are the potential adverse impacts of developing the site? How could they be mitigated?

12. Paragraph 2.37 of the Local Plan notes that the 2015 Strategic Housing Land Availability Assessment (SHLAA) identifies suitable and available sites and this includes Site H41. The SHLAA refers to this site being '*Potentially suitable subject to sensitive design approach to mitigate impact on the landscape and views from the south as well as a commitment to long terms landscape enhancement. Development should seek to minimise impact on the operation of the Cricket Club and impact of noise from railway.*' These matters are echoed in the Sustainability Appraisal Addendum Report 2016.



13. Housing development would not extend further south than Wootton Grange Farm and would be set back from the boundaries. As identified on the parameters plan, the existing western and southern boundaries vegetation would be retained and augmented by new planting to maintain an attractive settlement edge to Kenilworth. There would be green space adjacent to the eastern boundary which would provide a buffer to the LWS, opportunities for biodiversity enhancements and views towards the spire of St John's Church. The future maintenance of the Green Infrastructure within the site would be undertaken by a Management Company funded by future residents.
14. By reason of the railway line being in a cutting adjacent to the site, an appropriate noise environment can be achieved by siting the dwellings away from the railway to the rear of the eastern buffer area and by erecting double glazing.
15. Careful consideration has been given to the relationship of any housing to the existing Cricket Club. The parameters plan identifies that new homes can be sited sufficiently distant from the cricket square to avoid cricket balls being a potential nuisance. This has been achieved by good urban design with the new dwellings facing towards the cricket pitch.
16. As with other greenfield site, there would be a loss of agricultural land but this would be modest.

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

17. The site is a paddock and has no contamination issues. There are no physical or environmental constraints to the development of Site H41 for around 130 dwellings. Access to the site is directly from Warwick Road. As advocated by Richborough Estates, a separate access can be provided to serve the outdoor sport allocation rather than this traffic having to come through a housing site.
18. As would be expected, a development of about 130 dwellings would require some local reinforcement of services and utilities. The utility services are adjacent to the site and no abnormal costs have been identified. As with other housing sites, contributions towards local community facilities can be expected to address any capacity concerns at, for example, local schools.



19. The only additional cost could be a financial contribution towards the improvement of the A452 St John's Gyratory (estimated to cost £300,000 in the Infrastructure Delivery Plan). A contribution has been factored into to the viability assessment undertaken by Richborough Estates.

Is the site realistically viable and developable?

20. The site assessment work undertaken by Richborough Estates has confirmed the development of the site for around 130 dwellings would be deliverable. There are no insurmountable physical or environmental constraints to development. A scheme of the size and type identified on the parameters plan is financially viable.
21. To confirm the deliverability of the site, the assessments undertaken on behalf of can be summarises as:

Sustainable Location - PTB	<p>The Sustainability Appraisal Addendum Report 2016 includes distances to local facilities:</p> <ul style="list-style-type: none">• 1.6km to the town centre• 1.4m to The Oaks shopping centre• 1.4km to the Castle Medical Centre• 1km to Castle 6th From Centre• 1.6km to the new railway station <p>In addition:</p> <ul style="list-style-type: none">• 475m to bus stops• 845m to local 'Jet' shop• 1km to Spar convenience store• 1k to public house• 1.1km to Kenilworth School• 1.2km to St John's Primary School <p>A plan identifying local facilities is included in the annexed Transport Technical Note.</p> <p>The concerns expressed by Stagecoach are unfounded because they ignore the location of this site relative to existing facilities, including bus stops and service already operating along Warwick Road.</p>
Transport And Access Matters - PTB	<p>The Technical Transport Note identifies the new access's location and design based upon existing road and traffic conditions. A separate access to the outdoor sports allocation as proposed.</p>



Services and Utilities - MEC	<p>Enquiries with utility companies have confirmed no insurmountable constraints associated with providing services (gas, water, foul water and telecommunications). Connection points are either in Warwick Road or Rouncil Lane in the case of electricity.</p>
Flooding and Surface Water Drainage - MEC	<p>Flood Zone 1.</p> <p>Sustainable drainage achievable through either soakways (subject to further testing) or positive drainage to the watercourse across land in the same ownership.</p>
Ecology – Just Ecology	<p>No national designations but the railway embankment is a LWS. An off-set of open space between built development and the LWS should be provided.</p> <p>Hedgerows and mature trees are the most ecologically important habitats on the site. These should be retained/left unmodified and protected during development.</p> <p>Although the main part of the site has low value for foraging of bats, the hedgerows may provide commuting routes and some opportunities for roosting and foraging. Retention would address any potential issues.</p> <p>No badger setts were observed and the limited badger activity associated with the hedgerows. Retention would address any potential issues.</p> <p>No evidence of otter, water vole or hazel dormouse activity.</p> <p>No ponds on the site suitable for Great Crest Newts. The railway provides an effective barrier to the movement of Great Crested Newts for the 5 ponds to the east. Only a limited opportunity for other reptiles within the site adjacent to the northern boundary.</p> <p>The Green Infrastructure provides biodiversity improvement opportunities, including native planting, sustainable drainage features and the erection of bat and bird boxes.</p>



Landscape – Tyler Grange	<p>At national level the site lies within Character Area 97 – Arden and at District level the Warwickshire Landscape Guidelines (1994) consider the site to represent the Arden Landscape Character Area and the Arden Parklands Character Type.</p> <p>The landscape of the site is transitional because of its context, principally the cricket pitch, adjacent housing, the railway and Warwick Road. The site does not contain the distinct parkland or heathland characteristics associated with the local Arden Parklands Character Type.</p> <p>The site is visually contained by the railway, the well treed boundary of the cricket club, residential development to the north and the southern field boundary. Wider views are filtered, including from the south, by layers of vegetation. There are some glimpsed views of the site's southern boundary because of the rising land form.</p> <p>There are no public rights of way crossing the site or within the immediate adjoining landscape. Predicated visual effects are only localised.</p> <p>There are glimpsed views towards the spire of St John's Church from portions of the site.</p> <p>Landscape principles informing the master planning are:</p> <ul style="list-style-type: none">• Retaining of the existing trees and hedgerows. Additional planting could actually improve upon the existing level of enclosure and screening in addition to providing a strong green structure for the development layout and avoiding detriment to the character of the Arden Landscape Character Area.• Utilise Wootton Grange Farm and the strong hedge to define the southern limit of built development.• Rural buffer alongside Warwick Road to assist with maintaining the character of the approach to Kenilworth.• Orientate development to create an active frontage and focus upon the Cricket Club.• Retention of skyline views north towards the spire of St John's Church.
Heritage – IS Heritage	<p>There are no designated heritage assets within the site. On the opposite side of Warwick Road is Wootton Grange Farm which is a Listed Building whose setting will need to be respected. Bullimore Wood survives as ancient woodland but this is to the east of the railway. The site is not</p>



	<p>within the setting of the Kenilworth Conservation Area.</p> <p>The site forms part of a denuded former medieval and post-medieval farming landscape with very little demonstrable archaeological potential. Only crops marks are visible on aerial photographs. There are sites of a former pit and demolished building adjacent to the site's southern boundary which are not of significance.</p>
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22. All the assessments demonstrate that a sustainable form of development could be delivered.

What is the expected timescale for development and is this realistic?

23. Subject to confirmation that the site is to be released from the Green Belt, an outline planning application could be submitted within about 3 months to enable the detailed supporting documentation to be produced. The content of these documents would build upon the assessments already undertaken.
24. Assuming planning permission is forthcoming in about 6 months from the date of submission and allowing for reserved matters approvals, the first dwelling would be available for occupation about 18 months from the submission of the application. From commencement of construction, would take about 2-3 years to complete about 130 dwellings.
25. An important advantage to Site H41 is that, when compared to some of the larger Green Belt allocations, the site is of a scale to quickly deliver new homes. It would be a relatively self-contained scheme which would not be dependent on complex land interests being resolved or needing long-lead times to deliver new services and infrastructure.

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

26. The Joint Green Belt Study (June 2015) undertook an assessment of a significantly larger areas of search (KE4) rather than being focused upon Site H41. This Statement focuses on Site H41. Adopting the five purposes identified in the Framework, the effects of the proposed housing allocation would be:



- The development of the site would not result in unrestricted urban sprawl. The new homes would be contained by the railway, Warwick Road and a strengthened the southern field boundary.
 - There would not be a sense of any neighbouring towns merging. There would remain a significant tract of land between Kenilworth and Leek Wootton. The indivisibility between Site H41 and Leek Wootton is heavily filtered by existing layers of vegetation.
 - It is acknowledged that, as with other Green Belt sites, there would be an encroachment into the countryside adjacent to the Cricket Club. However, by reason of scale and the relationship to existing built forms of development, including Wootton Grange Farm, the degree of encroachment would be both limited in extent and contained.
 - There is no particular special or historic character associated with this part of Kenilworth. Development would not be prejudicial to the setting of Kenilworth, in particular the area around Kenilworth Castle.
 - Previously developed land opportunities have already been considered by the District Council before determining that there would be a need to release Green Belt land to meet the objectively assessed housing need. Within Kenilworth there is a limited amount of land which could be recycled for residential development.
27. The proposal by Richborough Estates for Site H41 utilises existing physical boundaries that are readily recognisable to clearly define the Green Belt boundary. There are no reasons to suggest that these boundaries would be anything other than permanent.

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

28. Built development in the Green Belt would, inevitably, have an effect on openness because there would be the loss of an agricultural field. However, any proposed housing would be viewed against the context of the existing built forms of development and would not encroach any further south than Wootton Grange Farm. Further, because the existing southern boundary would be augmented with new planting, there would be a soft transition between housing and the adjacent Green Belt.



Are there exceptional circumstance which justify altering the Green Belt boundary? If so, what are they?

29. The exceptional circumstances are based upon the need for residential allocations to be identified to meet the objectively assessed housing need. This need cannot be met within the existing built-up areas and the submission version of the Local Plan sought to maximise the allocation of non-Green Belt sites. The position which has been reached is that there is a need for Green Belt releases on the edge of urban areas and Growth Villages to deliver housing. The Framework recognises that, subject to considering their consequences, development can be channelled toward towns and villages inset within the Green Belt such as Kenilworth.

Conclusion

30. Releasing Site H41 from the Green Belt for housing purposes would be consistent with the spatial strategy for accommodating growth at urban areas; would not cause unacceptable harm to the purposes and openness of the Green Belt; would not cause harm to other interests of acknowledged importance and would deliver a viable and sustainable form of development informed by a robust assessment of relevant technical and environmental matters.

29 August 2016

Version Final

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LAND USE BUDGET	
PROPOSED ALLOCATION	5.84 HECTARES
TOTAL NUMBER OF DWELLINGS = 130 (APPROX DENSITY 36 DPH)	

KEY

- | | | | | | | | |
|--|---------------------|--|---------------------|--|----------------------|--|--|
| | PROPOSED ALLOCATION | | PROPOSED BUILT FORM | | PRINCIPAL STREET | | EXISTING TREES AND HEDGEROW (INDICATIVE) |
| | SITE ACCESS | | PUBLIC OPEN SPACE | | PROPOSED ATTENUATION | | PROPOSED PLANTING |

REVISION A : 18.04.2016
AREAS OMITTED, NOTES AND KEY UPDATED.



Richborough Estates

Land off Warwick Road
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1.0 INTRODUCTION

1.1 Background

- 1.1.1** PTB Transport Planning Ltd has been commissioned by Richborough Estates to provide transport advice for a proposed residential development off Warwick Road, Kenilworth.
- 1.1.2** It is intended that the site will provide approximately 130 dwellings and will be accessed from Warwick Road. In addition Kenilworth Rugby Club will be relocated to the site; the site location is shown on Figure 1.1.

1.2 Purpose of the Report

- 1.2.1** The purpose of the report is to confirm the deliverability of the site in terms of access, as well as considering potential off-site impacts and mitigation measures. The report will form part of Richborough Estates representations for the Warwick District Local Plan.

1.3 Limitations of this Report

- 1.3.1** This report has been undertaken at the request of Richborough Estates, thus should not be entrusted to any third party without written permission from PTB Transport Planning Ltd. However, should any information contained within this report be used by any unauthorised third party, it is done so entirely at their own risk and shall not be the responsibility of PTB Transport Planning Ltd.



2.0 PROPOSED DEVELOPMENT

2.1 Site Location

- 2.1.1 The proposed development is located off Warwick Road, to the south of Kenilworth. The site is bounded by residential dwellings and Kenilworth Cricket Club to the north, existing woodland and the A46 to the east, open fields to the south and Warwick Road to the west.
- 2.1.2 Warwick Road, which runs along the western frontage of the site, forms a gyratory with the A452 to the north of the site. To the south it provides a link to Leek Wootton.
- 2.1.3 In the vicinity of the site Warwick Road is subject to 50mph speed limit. Just to the north of the site the speed limit changes to 30mph on approach to Kenilworth.

2.2 Proposed Vehicular Access

- 2.2.1 Vehicular access to the site is proposed from Warwick Road in the form of a ghost island right turn priority junction as demonstrated in drawing T14528-001. In addition, a separate access junction, in the form of a priority T-junction has been proposed to the south in order to serve the relocated Rugby Club which will form part of the site as shown in drawing T14528-002.
- 2.2.2 The visibility splays to/from the proposed main site access junction have been calculated in line with guidance set out in MfS 2, based on vehicle flow and speed data collected via ATC on Warwick Road between 16th May 2014 and 22nd May 2014. The ATC was located at the northern extent of the southbound visibility splay, so approximately at the point where the existing speed limit changes from 50mph to 30mph.
- 2.2.3 The 85th percentile speeds calculated in line with TA22/81 are 39.4mph northbound and 42.7mph southbound. Data from Monday 19th May and Thursday 22nd May was excluded as historical weather data shows it rained during parts of the day and as such it is not possible to determine if the road surface was dry or wet. The remaining three weekdays were dry and therefore a wet weather reduction has been applied to the results of these three days.
- 2.2.4 The required Stopping Sight Distances (SSD) related to visibility splay at the site access junction have been calculated in line with the formulaic approach recommended in MfS 2 ($SSD = vt + v^2/2(d+0.1a)$). As the proposed access junction is located within the 50mph speed limit and the observed speeds are above 60kph a reaction time of 2 seconds and desirable minimum deceleration rate of 0.25g have been used. Both the reaction time and deceleration rate are in line with how DMRB SSDs are derived as set out in TD 9/93 and referenced in Table 10.1 and graph on page 75 of MfS 2.



- 2.2.5** Based on the above calculation, the required visibility splays are 2.4m x 100m to the south and 2.4m x 114m to the north. Drawing T14528-001 shows that these splays can be achieved to/from the proposed site access junction.
- 2.2.6** The proposed development would extend built development southwards along the east side of Warwick Road which would become the edge of the settlement of Kenilworth; therefore, using MfS 2 to calculate the required visibility splays is deemed appropriate and robust. Furthermore, as part of the development it is proposed to move the existing 30mph limit to the south of the site, meaning the site access would be located within a 30mph zone.
- 2.2.7** That said, appropriate visibility splays can be provided without relying on a reduction in speed as a result of relocating the speed limit or on any reduction that is likely as a result of the new access point and development frontage to Warwick Road.
- 2.2.8** In the interests of robustness, visibility splays at the proposed access to the relocated Rugby Club have been shown in line with DMRB standards for the prevailing speed limit (i.e. 50mph, so 2.4m x 160m), given the distance between this access point and the location of the ATC survey.
- 2.2.9** The two access junctions are shown together on drawing T14528-005, which also indicates the alignment of the Rugby Club access road in order to pass across the existing bridge over the railway line; this is the wider of the two bridges that connect to the land on the eastern side of the railway line, at approximately 6.5 to 7.0m in width, compared with approximately 4.0 to 5.0m for the northernmost bridge.
- 2.2.10** As such, it is considered to be the most appropriate bridge to utilise for access to the eastern side of the railway line for the Rugby Club, as it should allow for two-way traffic movements at all times.
- 2.2.11** The enclosed drawings demonstrate that access to the site is feasible from Warwick Road.

2.3 Traffic Impact

- 2.3.1** Based on Warwickshire County Council's (WCC) standard residential trip rates of 0.6 two-way vehicle trips per dwelling in the AM and PM peak hour, as specified in WCC's Strategic Transport Assessment Phase 4; a development consisting of 130 dwellings would generate approximately 78 two-way trips in the AM and PM peak periods, or just over one vehicle every minute.
- 2.3.2** The proposed site access junction will comfortably be able to accommodate this level of traffic in terms of junction capacity. Furthermore, the proposed ghost island right turn will ensure minimal delays to through traffic on the Warwick Road. Appropriate capacity assessments will be carried out at the



planning application stage to demonstrate how the site access is likely to operate.

2.3.3 Existing traffic flows along Warwick Road suggest an approximate 65%/30% split southbound/northbound in the AM peak hour, and northbound/southbound in the evening peak hour.

2.3.4 On the basis that the split of development traffic is likely to be similar, this suggests that a large proportion of development traffic will head south and thus away from Kenilworth.

2.4 Wider Traffic Impacts

2.4.1 WCC's Strategic Transport Assessment Phase 4, published in April 2014, highlights major highway improvements that are required in the vicinity of the site to accommodate development allocations within the Warwick Core Strategy.

2.4.2 Within the vicinity of the site the A452/A46 grade separated junction, A452/Bericote roundabout and the Kenilworth Gyratory have all been identified as requiring highway improvements.

2.4.3 Given the location of the site (and the observed split of traffic flows along Warwick Road) traffic will be able to disburse across the network, particularly to the A46, without necessarily needing to pass through the Kenilworth Gyratory or the A452/A46 roundabout.

2.4.4 Nonetheless, it is anticipated that a proportional contribution towards strategic infrastructure improvements will be sought by WCC.

2.4.5 It should be noted that there is also the potential for the site to provide direct funding, which may help bring forward a particular highway improvement scheme early, rather than relying on development phasing from larger sites within Kenilworth.

2.4.6 The impact of the development on the local highway network will be assessed within the Transport Assessment that accompanies a future planning application.

2.5 Local Facilities and Sustainable Travel

2.5.1 A range of local facilities in the vicinity of the site are shown on Figure 2.1 including (but not limited to):

- Warwick Road Bus Stops = 475m
- Local Shop (at Jet Garage, including cashpoint) = 845m
- Leamington Road Bus Stops = 950m
- Public House/Restaurant = 1.0km



- Local Spar Shop (at Shell Garage, including cashpoint) = 1.0km
- Kenilworth School = 1.1km
- St John's Primary School = 1.2km
- Kenilworth Town Centre with a significant range of facilities incl. retail, post office, financial, employment and medical facilities = 1.6km

2.5.1 MfS states that 'walkable neighbourhoods' are typically characterised by having a range of facilities within 10 minutes (up to about 800m) walking distance of residential areas which residents may access comfortably on foot.

2.5.2 MfS also states that the 800m walking distance is not an upper limit and references the former PPG13 guidance in respect of walking replacing short car trips, particularly those under 2km.

2.5.3 Whilst PPG13 has now been superseded by the NPPF, the NPPF does not include any references to distances or thresholds as guidance in respect of walking trips.

2.5.4 The 'Guidelines for Providing Journeys on Foot' published by the Institution of Highway and Transportation (IHT) refers to 800m for the 'Preferred Maximum' walking distance to 'Town centres', with up to 1,200m for 'Elsewhere', and 2,000m considered a preferred maximum for 'Commuting/School trips and Sight-seeing'.

2.5.5 The IHT guidance indicates that the 'Acceptable' walking distances for the above categories are 400m, 800m and 1,000m.

2.5.6 The IHT guidance also refers to the walking environment being important to the attractiveness of walking as a mode of travel, stating in section 3.1 that the most important real or perceived deterrents to walking are:

- Land use patterns that are unsuited to walking
- Unpleasant pedestrian environments
- Danger from vehicular traffic
- Personal security fears
- Inconvenient pedestrian facilities

2.5.7 Further to the above guidance, the National Travel Survey (NTS) from 2014 states that the time taken for the average walking trip is 18 minutes; converting this to distance using 1.33m/s (on the basis that 800m takes 10 minutes, as per MfS above), this equates to an average walking trip distance in the UK of 1,436m.

2.5.8 It should be noted that the NTS distance is for all journey purposes and that subsequent DfT documentation highlights that short walks (those under 1



mile) were under-recorded within the NTS data; this is being corrected for 2016 onwards and is expected to reduce the average walking distance.

2.5.9 In terms of the guidance above, the site has a range of facilities between 845m and 2.0km, including bus stops, local shops, local schools and Kenilworth Town Centre; the routes to these facilities are also predominantly flat, overlooked by existing residential or commercial properties, and with convenient crossing points along the routes.

2.5.10 Therefore, the deterrents to walking are significantly reduced and clearly the internal layout of the site will also be designed to provide a very favourable walking environment.

2.5.11 In terms of public transport, as indicated above the closest bus stops are located on Warwick Road, approximately 445m to the north of the development site.

2.5.12 The X68 bus service is available from these stops and runs between Coventry and Cubbington, via JLR Whitley, Kenilworth, Warwick (including the hospital) and Leamington Spa.

2.5.13 The X68 provides an hourly service throughout the day, Monday to Saturday, including commuter times (with the first bus arriving in Warwick at 08:02, in Leamington at 08:25 and in Coventry at 08:29).

2.5.14 Additional bus stops are available from the A452 Leamington Road to the north of the site, just to the east of Kenilworth Gyratory some 950m from the centre of the site.

2.5.15 These stops provide access to additional bus services with an excellent combined frequency, primarily services 11 (NX Bus) and X17 (U17 on Sundays); the provision is detailed in Table 1 below.

Table 1 – Bus Services from A452 Leamington Road

Service No.	Route	Frequency (buses per hour)			
		Mon-Fri Peaks	Mon-Fri Daytime	Sat	Sun
11	Leamington – Kenilworth – University of Warwick - Coventry	3	3	2	2
X17/U17	Coventry – Kenilworth – Leamington – Warwick – Stratford*	4	4	4	3

* Services to Stratford are hourly only

2.5.16 In terms of cycling, National Cycle Network Route 52 is located to the west of the site and provides access towards the centre of Kenilworth to the north and Warwick to the south.



2.5.17 WCC cycle guidance and maps also indicates that sections of Rouncil Lane, Mortimer Road, Randall Road, Queens Road, Roseland Road, Chestnut Avenue, Farmer Ward Road and Spring Lane are part of the 'Advisory Cycle Route' network within Kenilworth.

2.5.18 These routes provide access to local facilities across Kenilworth, including the town centre.

2.5.19 The entire urban area of Kenilworth is within a comfortable cycling distance of the site for most people (less than 5km).

2.6 Conclusion

2.6.1 In conclusion, suitable access can be achieved from Warwick Road in the form of a ghost island right turn junction.

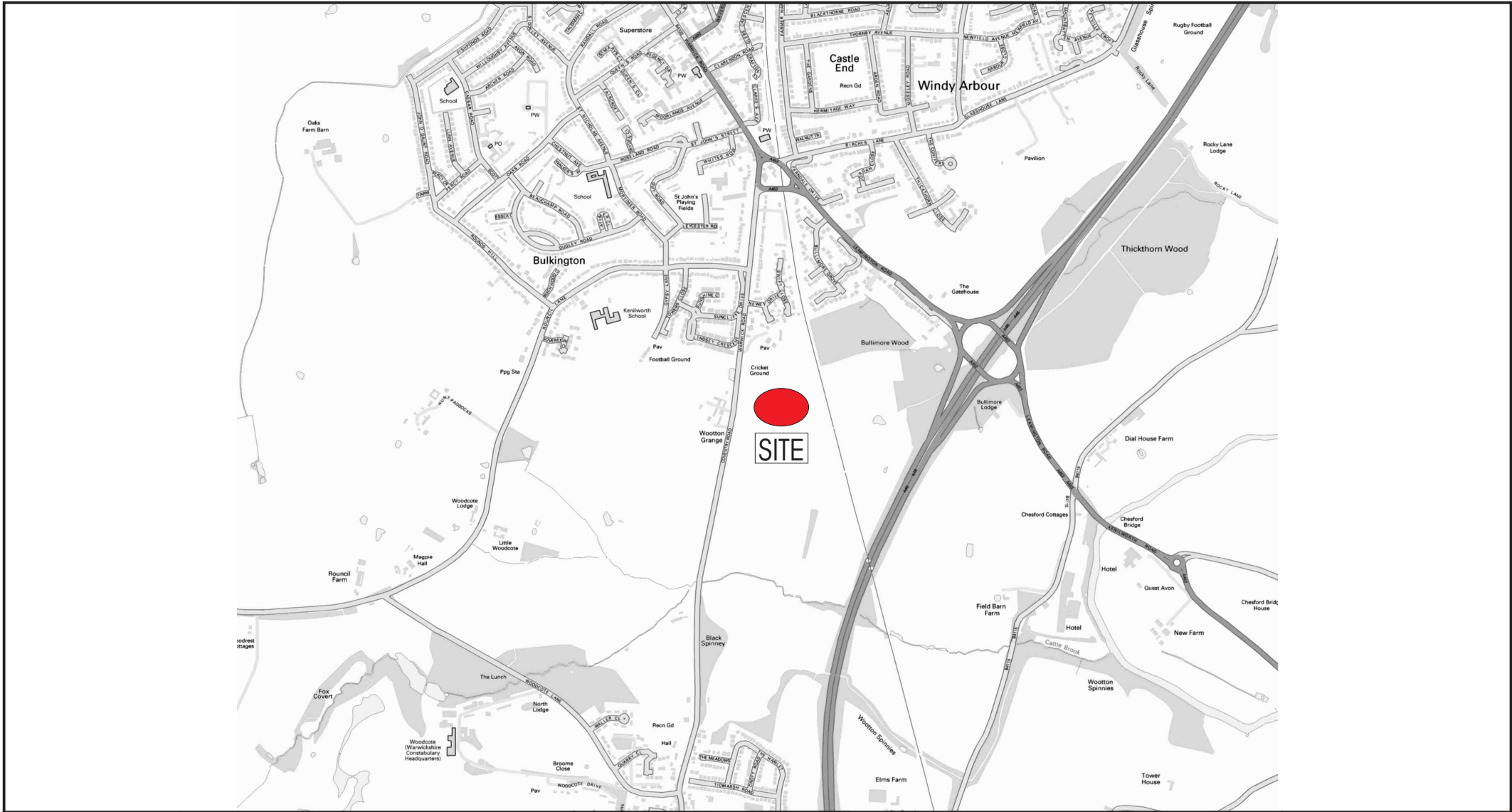
2.6.2 A Transport Assessment will be carried out to support the planning application and will include capacity assessments of the site access and off-site junction in the vicinity of the site.


2.6.3 If required, appropriate off-site mitigation measures will be funded either directly or via a proportional contribution.

2.6.4 The site is well served in terms of local bus services and local facilities.



FIGURES



Project	Land off Warwick Road, Kenilworth	Key	 <p>Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright and database right 2016. All rights reserved. Ordnance Survey Licence number 100046404.</p>
Project No	T14528		
Figure	1.1		
Title	Site Location Plan		
Date	5th August 2016		



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Project	Warwick Road, Kenilworth	Key	Public House/Restaurant Education Facility Bus Stop Health Facility Church/Community Facility Retail Unit Recreation Facility m/Km Walking Distance from Centre of Site
Project No	T14528		
Figure	2.1		
Title	Local Facilities Plan		
Date	18th August 2016		

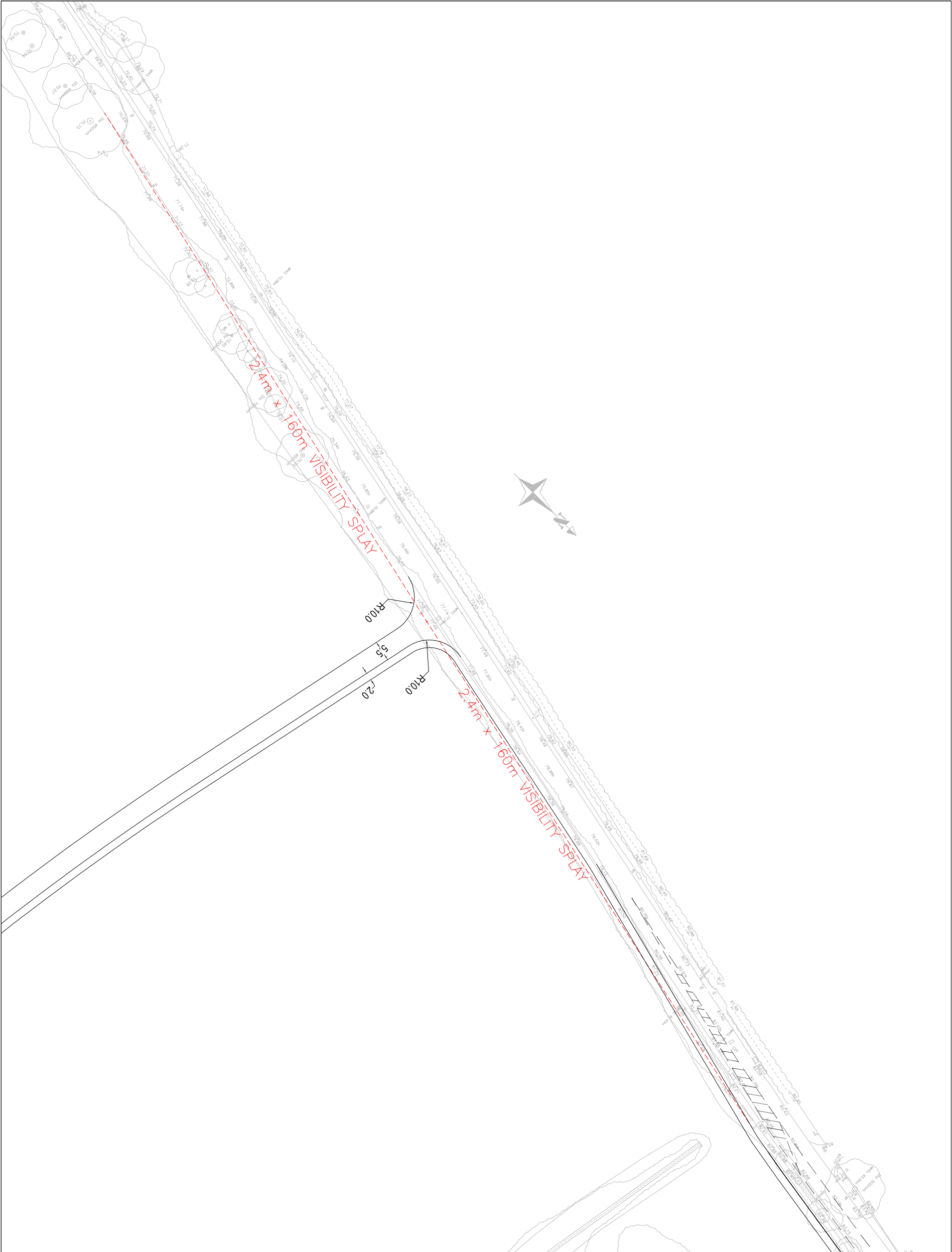


T14528
Land off Warwick Road, Kenilworth

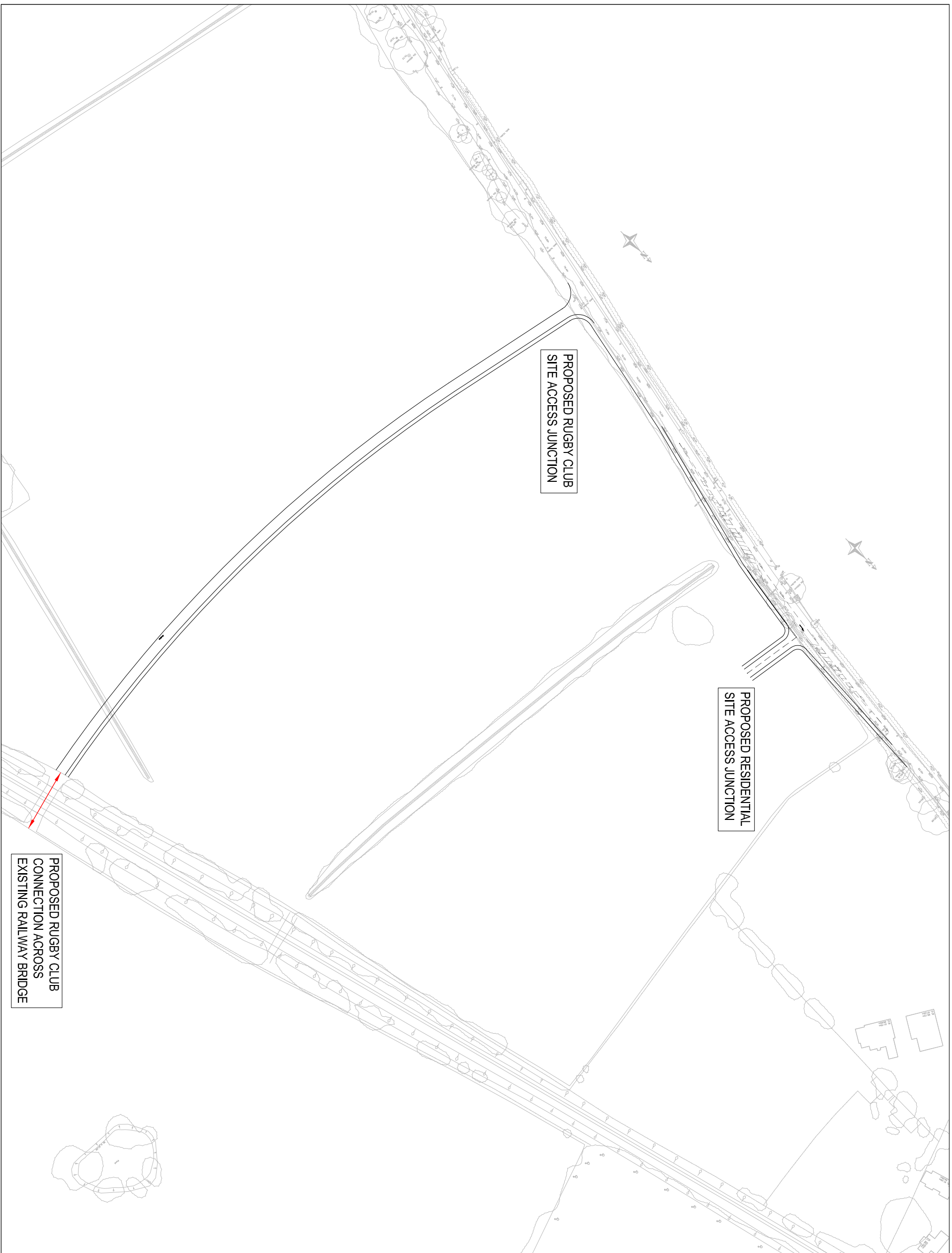


DRAWINGS

1. THIS DRAWING IS NOT TO BE SCALED FOR CONSTRUCTION PURPOSES.
2. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND LEVELS ON SITE.



PTB				
PTB Transport Planning Ltd Radcliffe House 66/68 Hadley Road Edgbaston Birmingham West Midlands B16 8PF T/F : 0121 454 5530				
CLIENT RICHBOROUGH ESTATES				
PROJECT LAND OFF WARWICK ROAD KENILWORTH				
TITLE INDICATIVE SITE ACCESS LAYOUT RUGBY CLUB				
DRAWN JC	AUTHORISED JP	SCALE 1:1000@A3	DATE 08.03.16	REV -
PROJECT NO. T14528		DRAWING NO. 002		



1. THIS DRAWING IS NOT TO BE SCALED FOR CONSTRUCTION PURPOSES.
2. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND LEVELS ON SITE.

REV	DESCRIPTION	DATE	BY	AUTH
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PTB
PTB Transport Planning Ltd
Raddlyffe House
66/68 Hagley Road
Edgbaston
Birmingham
West Midlands
B16 8PF
T/F : 0121 454 5530

CLIENT
RICHBOROUGH ESTATES

PROJECT

LAND OFF WARWICK ROAD
KENILWORTH

TITLE
INDICATIVE SITE ACCESS LAYOUTS
RESIDENTIAL AND RUGBY CLUB

DRAWN	AUTHORISED	SCALE	DATE
JP	GM	1:2000@A3	19.08.16

PROJECT NO. T14528	DRAWING NO. 005	REV -
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WARWICK ROAD, KENILWORTH
TECHNICAL NOTE: FLOOD RISK, DRAINAGE AND UTILITIES
AUGUST 2016
REF. AB/21088/4498

This Technical Note has been prepared to consider flood risk, drainage and utility matters pertinent to a proposed mixed use development (residential dwellings and rugby club) off Warwick Road, Kenilworth.

For the purpose of this appraisal the residential development comprises up to 150 dwellings and the site area is shown in Figure 1 below (note the red area indicates the residential development area). A proposed site layout plan can be found attached.

Figure 1: Site location plan



To provide a more robust assessment the potential open sports use is taken into account as necessary

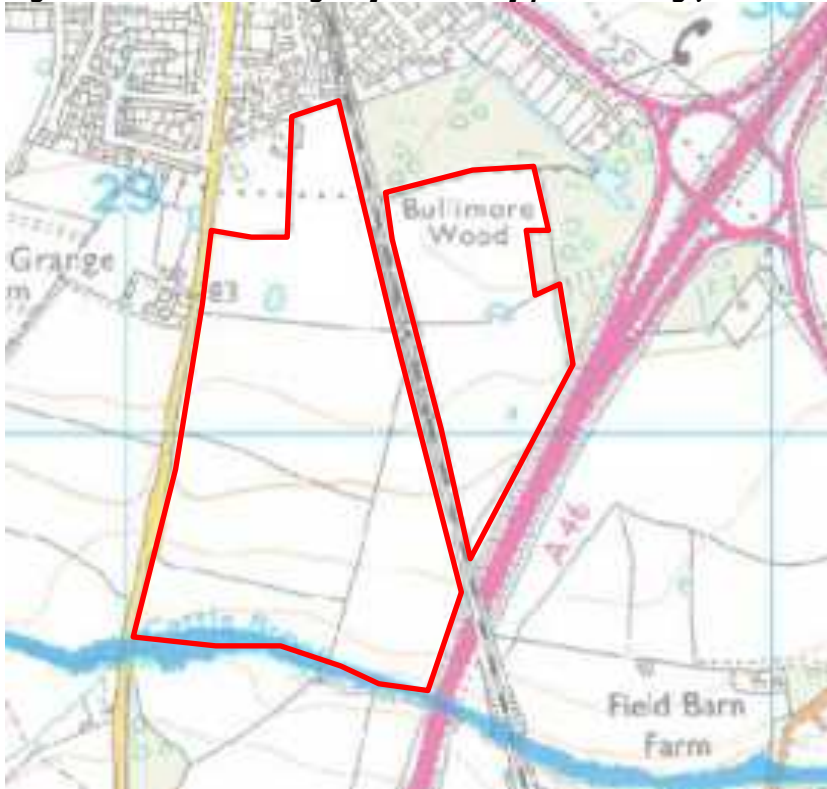
Flood Risk and Drainage

The Environment Agency flood maps are shown in Figure 2 below. The maps show the residential part of the site (red in Figure 1) is wholly within Flood Zone 1 and is therefore sequentially acceptable for development.

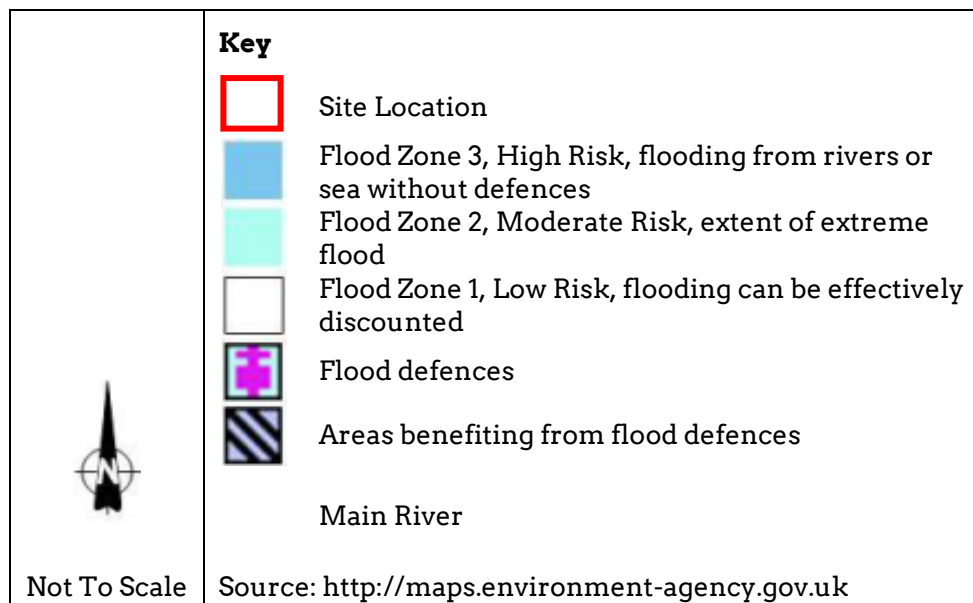
The southern boundary of the blue land (west of the railway line) abuts the Cattle Brook and out of bank flooding is noted adjacent to this boundary with Flood Zones 2 and 3 identified. The topography of this area is such that any out of bank flooding will be contained close to the watercourse as a 23m level difference is noted between the red land and the watercourse.

All development proposed for the rugby club will be contained to areas of Flood Zone 1 only.

Figure 2: Environment Agency Flood Map for Planning (Rivers and Seas)



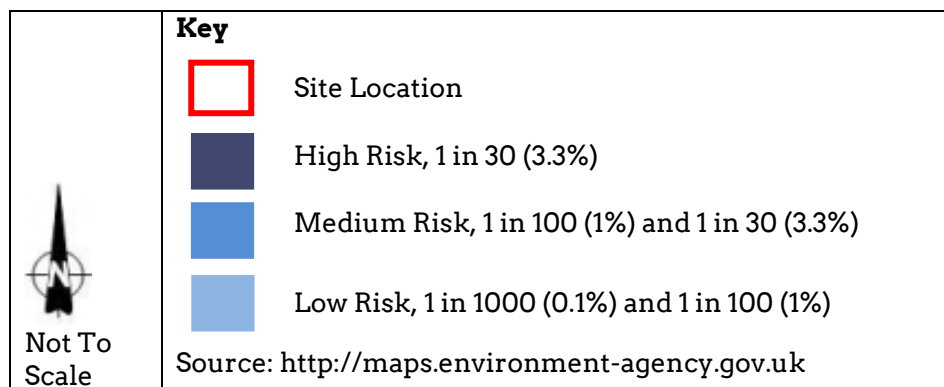
Note: Environment Agency flood maps give guidance on fluvial flood risk only for watercourses with a catchment of greater than 3km². Other information sources should be consulted for flood risk posed by ordinary watercourses with catchments less than 3km².



The surface water flooding maps (see Figure 3 below) show the majority of any surface water accumulations occur along the Cattle Brook and so are contained to the southern boundary. A low spot is noted within the residential area and next to the railway line and surface water

accumulations are noted in this area. However the introduction of drainage systems associated with the proposed development is likely to remove this area of ponding. The identified accumulations have no discernible impact on the proposed development area.

Figure 3: Environment Agency Surface Water Flooding Map



The site lies adjacent to Network Rail land and therefore the proposals will need to ensure flood risk is not increased as a result of the development area. To ensure this does not occur, the drainage designs will incorporate the following flood mitigation measures as well as any other determined at the detailed Flood Risk Assessment stage:

- Finished site levels designed to retain and direct all overland and surface water flows away from the railway line.
- Additional protection measures including swales/cut off ditches next to the railway line to intercept overland flows.

- 300mm freeboard above the maximum design water level achieved during the 1 in 100 year (+40% climate change) critical rain storm event incorporated into any detention basin designs.

Existing ponds located on the eastern side of the railway line will be incorporated into the development proposals and retained. The hydraulic regime for these ponds will require further investigation although no flood risk is identified.

The existing geology is identified as sandstone (with mudstone in areas). At the planning application stage soakage testing will be completed to confirm whether soakage into the ground is feasible and whether any groundwater is present. Soakage into the ground should be considered first ahead of any connections to watercourse or sewers.

The site naturally slopes to the south with levels falling approximately 24m on the west and 8m on the east.

Surface water drainage requirements for the rugby pitches and any proposed car parking and club house are likely to be minimal with land drainage provided for the pitches, porous paving for the car parking areas and a soakaway for the club house based on available geology maps. If positive drainage systems are required due to limited soakage, discharge to the existing pond areas (east) or watercourse (west) will be considered and interrogated further.

In respect of the residential development and again based on good soakage rates being available, individual house soakaways can be provided along with a soakage pond for the highways to ensure adoption. If soakage is not feasible an attenuation basin could be provided to the south of the residential development area with discharge into the Cattle Brook and this is illustrated on drawing 21088_230_01_003 attached. Based on an assumed impermeable area of 3.4ha an estimated storage volume of approximately 2085m³ for a 1 in 100 year storm event plus 40% for climate change would be required. This calculation is based on a discharge rate of 14.3 litres per second. These calculations will be refined as designs progress.

It is noted surface water sewers are also present to west in Warwick Road to provide alternative connection points if needed.

It is envisage foul drainage from the residential development will need to be pumped from the proposed development and as a result hydraulic modelling has been completed by Severn Trent Water and the results can be found attached. In summary the response provided requests the development connect to MH1605 in Warwick Road. To achieve this connection a pumping station will be located on site and a new length of rising main will be laid through the development area and north along Warwick Road.

Utilities

Discussions have taken place with all principal Statutory Undertakers for the area and there are no restrictions in capacity to serve the proposed development subject to suitable upgrades being implemented at the developers cost. All relevant information received can be found attached for information.

Service apparatus plans show no significant constraints to development and no apparatus is located within the development area as shown on drawing 21088_07_06_200 attached. Some

diversions of apparatus may be required to facilitate access points (vehicular and pedestrian) onto Warwick Road however none of the identified services pose restrictions to the provision of these access points. Discussions with all service providers over capacity and diversions will continue to take place as the development proposals evolve.

A summary of responses received is outlined in Table 1 below:

Table 1: Utilities Summary

Service	Undertaker	Sufficient Capacity?	Potential Diversions?	Connection Response
Gas	National Grid	Yes	Yes	Connection point in Warwick Road
Electricity	Western Power Distribution	Yes	Yes	Budget cost provided to extend HV network from Rouncil Lane and provide 2 new substations on site.
Clean Water	Severn Trent Water	Yes	Yes	Budget cost provided. Connection point in Warwick Road.
Telecoms	BT	N/A	Yes	N/A

Summary

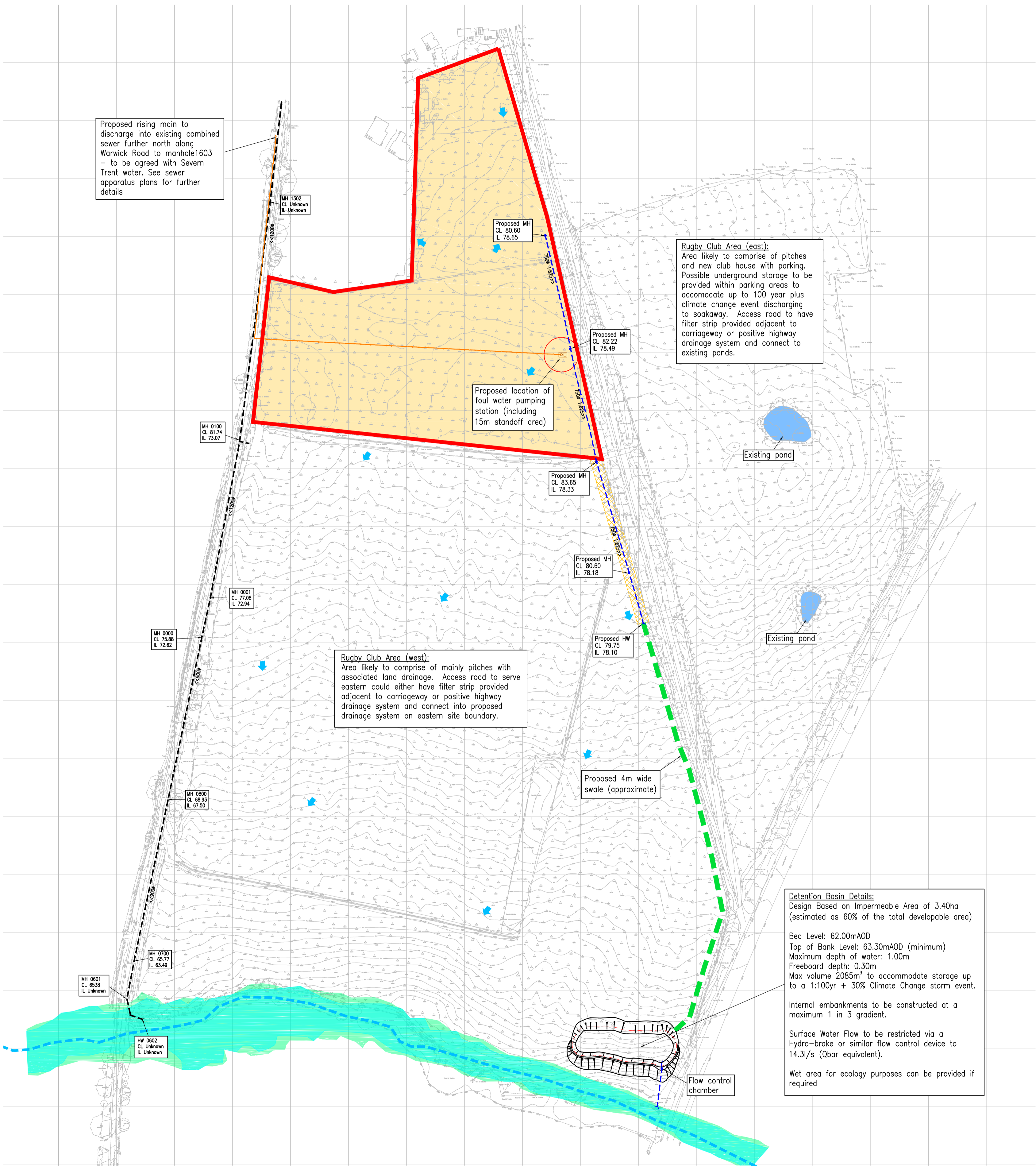
To summarise the key points outlined above:

- All development will be contained in Flood Zone 1. Some flooding (Flood Zone 2 and 3) from Cattle Brook is noted along the southern boundary however this is contained close to the watercourse and development will be avoided. .
- Soakage testing will be undertaken in due course, however, positive drainage connections to an adjacent watercourse or surface water sewer can be achieved with suitable surface water storage provided within land under the control of Richborough Estates
- Foul drainage can be achieved through the pumping of flows into sewers located in Warwick Road.
- No utility capacity constraints are identified subject to the payment of identified costs and diversions can be facilitated as required to provide access etc.

Report Prepared By:



.....
 Alexander Bennett Bsc (Hons) MCIHT



- GENERAL NOTES:
- DO NOT SCALE THIS DRAWING.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ENGINEERS, ARCHITECTS AND SPECIALIST DESIGN DRAWINGS AND DETAILS.
 - ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE. ALL LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.
 - THIS DRAWING IS FOR STRATEGY PURPOSES ONLY AND IS NOT TO BE USED FOR CONSTRUCTION PURPOSES.
 - FLOOD EXTENTS ARE TAKEN FROM ENVIRONMENT AGENCY FLOOD ZONE MAPS, AND ARE ONLY TO BE USED AS A GUIDE.

- KEY:
- RESIDENTIAL SITE BOUNDARY
 - PROPOSED FOUL WATER RISING MAIN
 - PROPOSED SURFACE WATER NETWORK
 - PROPOSED SWALE (APPROX. 4m WIDE)
 - INDICATIVE OVERLAND FLOW DIRECTION
 - WATERCOURSE CENTRELINE (CATTLE BROOK)
 - ENVIRONMENT AGENCY 1 IN 100YRS FLOOD EXTENTS (FLOOD ZONE 3)
 - ENVIRONMENT AGENCY 1 IN 1000YRS FLOOD EXTENTS (FLOOD ZONE 2)
 - SEWER EASEMENT TO BE 5m EITHER SIDE
 - PROPOSED FOUL WATER PUMPING STATION WITH 15m STAND-OFF

REV:	AMENDMENTS:	DRN:	CHK:	DATE:
PROJECT:				
WARWICK ROAD, KENILWORTH, WARWICKSHIRE				
DRAWING TITLE:				
PRELIMINARY DRAINAGE STRATEGY				
CLIENT:				
RICHBOROUGH ESTATES LTD				
DRAWING NUMBER:				
21088-230-01-003				
REVISION:	SHEET SIZE:	SCALE:		
—	A1	1:2000		
DRAWN BY:	CHECKED BY:	DATE:		
GP	NO	04.06.2014		
STATUS:				
PRELIMINARY				
<div><div>M-EC</div><div>Wellington House Leicester Road Ibstock Leicestershire LE67 6HP T: 01530 264 753 F: 01530 268 115 ibstock@m-ec.co.uk www.m-ec.co.uk</div></div>				
ORDNANCE SURVEY © CROWN COPYRIGHT 2014. ALL RIGHTS RESERVED. LICENCE NUMBER 100022432.				

Severn Trent Water

M-EC
Wellington House
Leicester Road
Ibstock
Leicestershire
LE67 6HP

Mewies Engineering Cons.	
Received:	10/7/14
Project No:	21088
Circulate To:	AR
Copied To:	
Action:	

Severn Trent Water Ltd
Leicester Water Centre
Gorse Hill
Anstey
Leicester
LE7 7GU

F.A.O: Mr Andrew Roberts

Tel: 0116 234 3834
Fax: 0116 234 3035

www.stwater.co.uk
net.dev.enq@severntrent.co.uk

7th July 2014

Contact: Keith Baker
Direct line: 0116 234 3786
Mobile no: 07889 831417

Dear Sirs,

Your ref:
Our ref: WT30223 / 8146780

Land off Warwick Road, Kenilworth, Warwickshire
Proposed 150 dwellings (429277, 270134)

I refer to your recent Development Enquiry Request in respect of the above site. Please find a copy of the sewer records and 'Additional Guidance Notes' enclosed for your information.

Sewer Crossing

A very short length of 900mm dia public surface water sewer outfall pipe to the river crosses through the extreme south west corner of the site. This sewer requires a 10m easement.

Foul Water Drainage

Due to there being no public foul sewer shown on the records near to the site it is likely that an off site foul sewer will be required through a requisition.

The nearest public foul sewers are likely to be the former private sewers transferred to Severn Trent under the 2011 PDaS legislation, these sewers are not shown on the sewer records and therefore we have no knowledge of condition, pipe size or gradients. These sewers will be located in Lindsey Crescent and as the foul were not originally adopted (surface water sewers are public) it is likely they are located in the gardens of the properties and not the highway.

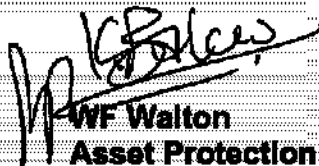
that this was laid in the past to accommodate future development. Sewer records indicate that it was laid in December 2006 and at a gradient of 1:39 with the end manhole depth being 4.29m. However the branch pipe connects into a 1200mm dia sewer in Coventry Road which reduces to a 900mm dia pipe further downstream where it outfalls to the watercourse along the site's boundary. This public sw sewer serves a large upstream catchment area and I would suggest the 1200mm dia section of the sewer is for storage therefore a new discharge into this sewer may have an impact on the existing system. Any surface water discharge to the public sewer will require modelling to determine what existing spare capacity is in the system and any restricted flow required along with the likely on site storage required.

Any flows generated by the site in excess of the permitted discharge rate will have to be attenuated within the development site.

For any new connection(s) into the public sewer network or the reuse of an existing sewer connection(s), you will need to apply under Section 106 Water Industry Act 1991 as amended by the Water Act 2003. Our New Connections Team currently processes Section 106 applications, please contact them on 0800 707 6600 for an application pack and guidance notes (or visit www.stwater.co.uk). For the avoidance of doubt, it is suggested that you quote the reference number above. Applications to make such connections should be made separately from any application for adoption of the related sewers under Section 104 Water Industry Act 1991 as amended by the Water Act 2003.

I must inform you that this evaluation is only valid for 6 months from the date of this letter. Please quote the reference number above, in all future correspondence.

Yours faithfully,



WF Walton
Asset Protection Manager - East
Waste Water