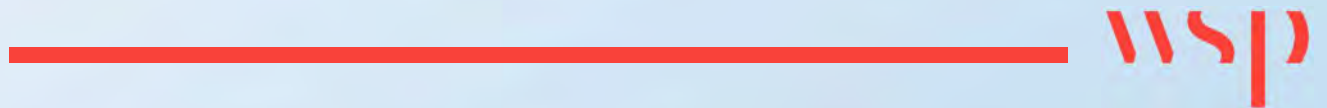


# Appendix 4.1.1

**CES005 HIGHWAYS OBJECTION**



Shropshire Council  
Shirehall  
Abbey Foregate  
Shrewsbury  
SY2 6ND

5<sup>th</sup> February 2021

Reference: J325506/LT01

Dear Sir/ Madam,

### **Land adjoining The Vicarage on A458, Cressage – Highways Objection**

Mode Transport Planning ('Mode') has been instructed by the Raby Estate to review the Shropshire Local Plan proposed Site Allocation (CES005) for the Land adjoining The Vicarage on A458 (hereafter referred to as the 'Site') in Cressage, Shropshire.

The site has been identified by Shropshire Council for residential development in the Local Plan Review for a provision of 60 dwellings.

It is understood the site has been promoted by the landowner for a number of years; however, concerns had been raised previously with the ability of the site to deliver a safe and suitable access on the A458 Harley Road where the road geometry and gradient is not optimal.

Ensuring any development site can be accessed safely is a requirement in both policy and design terms. If a safe access cannot be achieved, the Local Highway and Planning Authority should not support or grant planning permission for a development scheme. The requisite for achieving a safe and suitable access is set out in the National Planning Policy Framework (NPPF) (2019) which states in paragraph 108 that:

*"In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:*

- a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*
- b) safe and suitable access to the site can be achieved for all users; and*
- c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."*

In addition to the above, paragraph 109 states that:

*"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."*

Within the development guidelines for Site Allocation CES005 it states that – “Access from A458 through new highway access to create a gateway feature for village and providing a footway along the frontage to crossing over A458 to existing footway network east linking into village. A secondary pedestrian and cycling access possible on short frontage to Wood Lane. Speed restrictions positioned south of site with traffic calming measures supporting gateway feature at highway access.”

No technical evidence has been made available to confirm the type and location of the access arrangement on the A458 to serve the proposed site allocation and to support the above statement.

The Design Manual for Roads and Bridges (DMRB) states that mini-roundabouts should not be used for new junctions and the A458 has insufficient frontage to provide adequate deflection for a standard roundabout. Furthermore, the likely low trip generation from a residential site of the quantum and the anticipated delays caused to existing through traffic, a signal junction is considered to be inappropriate in this location. On this basis, the only suitable junction type to serve the site is a simple priority junction.

Mode have prepared a number of priority access options based on current highway design standards set out in both Shropshire Council ‘Specification for Industrial and Housing Estate Roads (2000)’ and ‘Manual for Streets’ (MfS). Two potential options are presented in **Drawing No. J32-5506-PS-001** which is enclosed with the letter.

The A458 Harley Road is subject to a 30mph speed limit along the frontage of the site, changing to 40mph approximately 65m to the south of the site boundary. There is a downward gradient running from south of the site through to the north and towards the centre of village. It is known both locally and by Shropshire Council, as the Local Highway Authority, that there are issues with speeding traffic on the A458 through the Cressage Village. This is confirmed by the ‘Kill your Speed’ campaign and speed camera signs posted along the A458.

It is critical for ensuring a safe vehicular access to a development site that visibility splays can be achieved in accordance with the speed of traffic. For 30mph speeds, the required visibility splays are set out in Table 7.1 (see below) of MfS, which are based on stopping site distances (SSDs).

**Table 7.1 Derived SSDs for streets (figures rounded).**

Speed	Kilometres per hour	16	20	24	25	30	32	40	45	48	50	60
	Miles per hour	10	12	15	16	19	20	25	28	30	31	37
SSD (metres)		9	12	15	16	20	22	31	36	40	43	56
SSD adjusted for bonnet length. See 7.6.4		11	14	17	18	23	25	33	39	43	45	59

Additional features will be needed to achieve low speeds

Including the recommended adjustment for bonnet length, and as per the standard practice adopted by transport planning and highway engineering professionals, the required visibility splay at a junction on the 30mph road would be 2.4m x 43m.

Notwithstanding the known local issues with speeding, the minimum visibility splay required to achieve a safe and suitable access for the site would be 2.4m x 43m to the north and south along the A458, based on the posted speed limit.

Visibility splays must be clear of any obstructions which would impede a driver's ability to see other road users when exiting or approaching a junction. The visibility must be kept clear in perpetuity; therefore, the land required to achieve a visibility splay must fall within the adopted highway and/or fall within the land ownership of the site for which the access is serving.

The available site frontage along the A458 is c.60m in length. To the south the site is bound by The Vicarage property (Land Title SL254802) and to the north by No.16 (Land Title SL2537630). The extent of the adopted highway boundary (as confirmed by Shropshire Council in the enclosed plan) is to the edge of carriageway and there is no current footway along the western side of the A548.

**Drawing No. J32-5506-PS-001** presents two possible access locations which show the minimum required visibility splay of 2.4m x 43m being achieved without third-party land to the south or to the north. In both of these scenarios the opposite visibility is constrained by land in the ownership of the adjacent property which limits the achievable visibility splay to 2.4m x c.17.5m. Based on Table 7.1 of MfS, a 17.5m SSD would only be acceptable if vehicle speeds on the A458 travelling in that direction were 15mph.

If the junction were to be located at the centre of the site frontage then inadequate visibility splays would be provided in both directions.

In addition to the required visibility splays for a vehicle access, a pedestrian crossing location would require 40m visibility in each direction, subject to the posted speed limit. Due to the length of the site frontage, there is insufficient space to provide a crossing point with suitable pedestrian visibility; therefore, the site does not provide safe access for pedestrians and the introduction of a pedestrian crossing in this location introduces additional highway safety risks.

As a result of the lack of a continuous footway on the western side of the A458, pedestrians accessing the site would be required to cross the road in order to access local amenities and other sustainable transport options. Without a safe crossing point this site cannot be considered to be a sustainable development.

Due to the land ownership constraints and that the minimum required visibility splays cannot be physically achieved in both directions from an access junction on the A458, it is not possible to achieve a safe and suitable access to Site Allocation CES005. This would therefore result in an unacceptable impact on highways safety.

Based on this evidence Mode, on behalf of the Raby Estate, respectfully raise an objection to Site Allocation CES005 on grounds of highway safety, as the site is contrary to minimum highway design standards and national planning policy, specifically paragraphs 108 and 109 of the NPPF.

Yours faithfully

Mark Edwards FCIHT

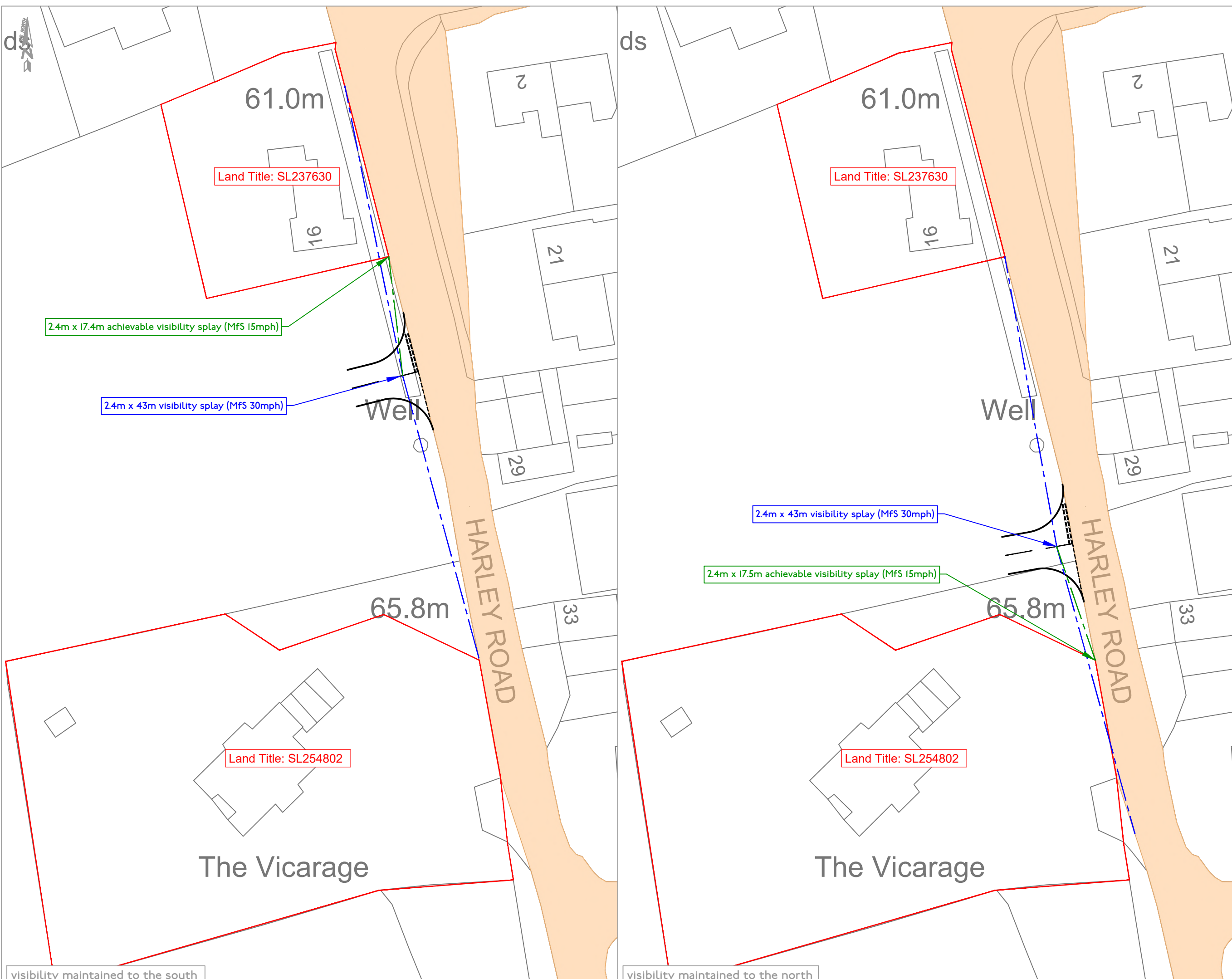
**Director**

Mobile:

Email: [markedwards@modetransport.co.uk](mailto:markedwards@modetransport.co.uk)

Enc. Drawing No. J32-5506-PS-001  
Extent of adopted highway boundary plan – c/o Shropshire Council

ISO A3 297mm x 420mm  
 Approved: ME  
 Checked: MA  
 Designer: LCW  
 Project Management Initials:  
 File name: Y:\DROBROV (HODD)\PROJECT\MANCHESTER\2. PROJECTS\J325506\_HARLEY ROAD, CRESSAGE OBJECTION\5. GRAPHICS\2. CAD\2. SHEETS\J32-5506-PS-001.DWG  
 Last saved by: LUKE WHEELER Last Plotter: 2021-01-26



transport planning

t 0161 464 9495  
 e info@modetransport.co.uk  
 w www.modetransport.co.uk

key:  
 Adopted highway boundary

- notes:
1. this drawing is to be read in conjunction with all other relevant drawings, any discrepancies, errors or omissions to be brought to the attention of overseeing organisation.
  2. all dimensions to be checked before commencement of work on site.
  3. all dimensions in metres unless otherwise stated.
  4. the design is subject to approval of shropshire county council.
  5. drawing based on os mapping.

issue/revision

l/r	date	issued	description
-	26/01/2021		

client: raby estate  
 project: harley road, cressage objection  
 project number: J325506

scale: 1:500@A3  
 drawing title:  
 site access review

drawing number:  
 J32-5506-PS-001

visibility maintained to the south

visibility maintained to the north

Play Area

N



Tel Ex

SEVERN WAY

Woodlands

Bradgate

61.0m

Well

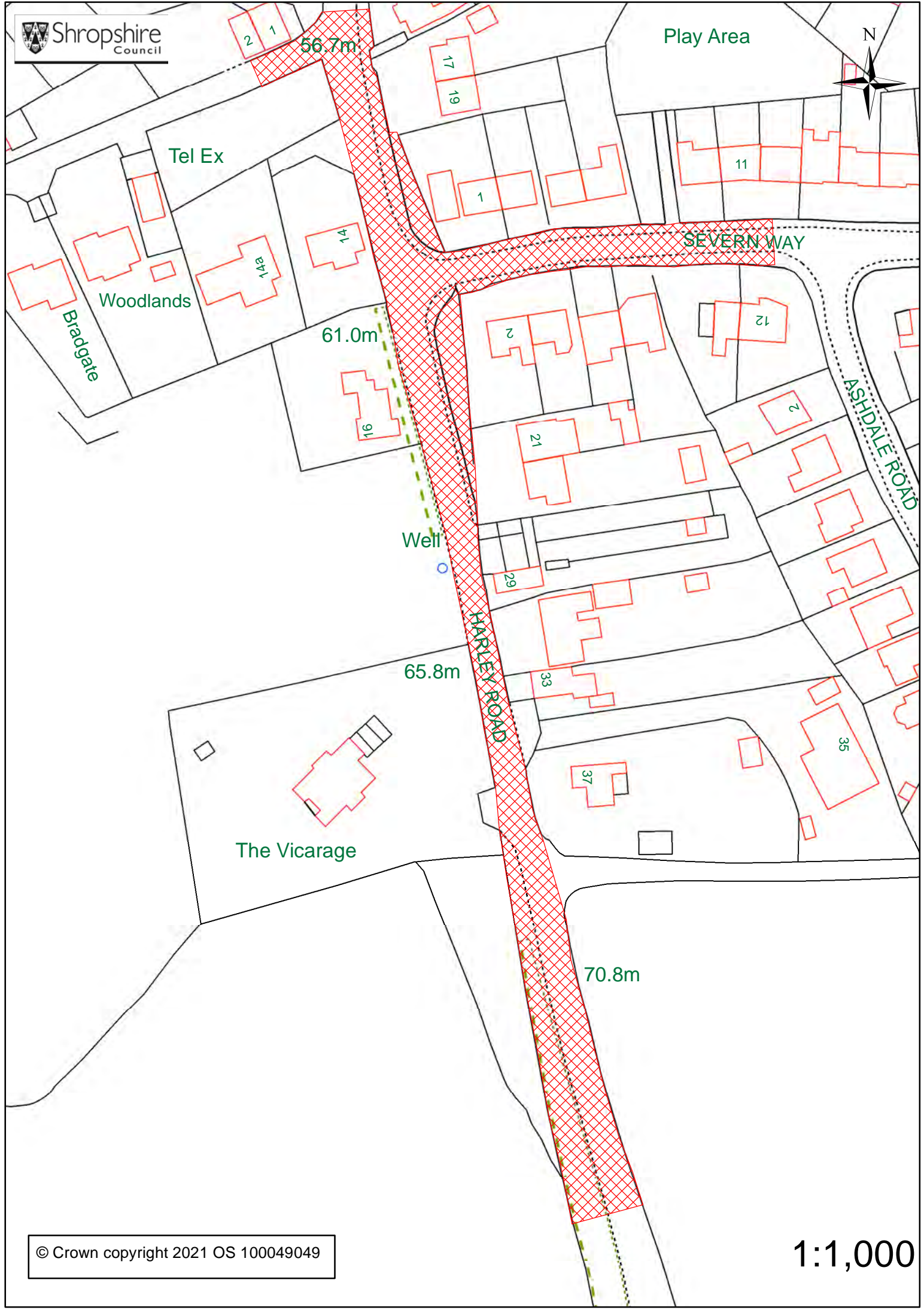
65.8m

The Vicarage

70.8m

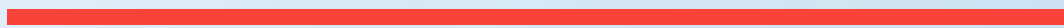
HARLEY ROAD

ASHDALE ROAD



# Appendix 4.1.2

## **PREFERRED SITES REPRESENTATIONS**





Land west of Shore Lane,  
Cressage , Shropshire  
Representations to Shropshire Local Plan  
Review 2016 - 2036

indigo.

**Land west of Shore Lane, Cressage,  
Shropshire**

Representations to Shropshire Local  
Plan Review 2016-2036

January 2019

**Indigo**

In conjunction with

Raby Estates



Colmore Gate  
2-6 Colmore Row  
Birmingham  
B3 2QD

T 0121 667 1220  
E [info@indigoplanning.com](mailto:info@indigoplanning.com)  
W [indigoplanning.com](http://indigoplanning.com)

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# Land west of Shore Lane, Cressage, Shropshire

## Representations to Shropshire Local Plan Review 2016-2036

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**Land west of Shore Lane, Cressage,  
Shropshire**

Representations to Shropshire Local  
Plan Review 2016-2036

Appendices

**Appendix 1**

Site Location Plan (Ref: 07.02.2019)



# 1. Executive Summary

- 1.1. This report has been prepared by Indigo Planning on behalf of Raby Estate to provide evidence to the Shropshire Local Plan review. It is provided to demonstrate Raby Estate's long-term commitment to the vitality of the community of Cressage and the contribution it can make to place making in the village.
- 1.2. Raby Estate controls significant land within Cressage along the main route into the village from Shrewsbury and in the historic core of the village between the Old Crown (once a public house) and Wood Lane.
- 1.3. As part of this vision document Raby Estate puts forward proposals for making improvements to the village that will deliver on the local aspirations<sup>1</sup>:
- Supporting and sustain village services;
  - Positive effects on the character of the village;
  - Calming influence on traffic flows along the A458;
  - High quality, affordable housing across a range of tenures;
- 1.4. The structure of this report is as follows:
- **Chapter 2** introduces Raby Estate and its commitment to enhancing local communities;
  - **Chapter 3** provides an overview of the village of Cressage, its particular needs and the contribution the estate can make to vitality of the local community.
  - **Chapter 4** sets out how Raby Estate can achieve sustainable development through a planned approach that brings about multiple community benefits;
  - **Chapter 5** carries out a high-level technical assessment of the land available for delivering community benefits including a site for housing and appropriate employment off Shore lane;
  - **Chapter 6** assesses the appropriateness of the housing guideline for Cressage and the reliance on windfalls in the local plan;
  - **Chapter 7** assesses the alternative sites listed in the preferred options document and their suitability for delivering sustainable growth for Cressage.

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<sup>1</sup> Cressage Parish Council response to this consultation, Q.32, and Shropshire Local Plan Review Consultation on Preferred Sites, para 16.19

## 2. Raby Estate

### Background

- 2.1. The Shropshire estate has been in the custodianship of the Vane family for hundreds of years. Lord Barnard is the owner of the estate. The estate is a large estate situated between Shrewsbury and Telford consisting of fully equipped let farms from which tenants run farming businesses, cottages where people make their homes and one holiday let where people stay to relax. In all the estate is around 6,500 acres comprising 3,900 acres of let land, 1,800 acres of land farmed in hand by Raby and 800 acres of mixed amenity and commercial woodland.

### The management of Raby Estate

- 2.2. Recently Lord Barnard took over the leadership and custodianship of the estate and has since instilled a new vigour for the stewardship of Raby. The management of the Shropshire Estate has been brought inhouse and is now in direct control with a local team based in Uppington.

### The vision for the Shropshire Estate

- 2.3. The aim for the Shropshire Estate is to develop a sense of place by building new and renovating current property to nurture a community for Shropshire providing new working opportunities, homes, including affordable homes, creating spaces for people to visit, learn and exercise to help with the health and wellbeing of people in the county.
- 2.4. The estate will continue to look after its soils, air and water to enhance the environment that the community interacts with and lives in. Environmental management is important to the estate and it will constantly look for ways to improve it for future generations. The management of the environment will work in harmony with the agricultural operations on the estate that produce food. The woodlands will be improved and continued to be accessed by many people living in Shropshire and Telford - the focus point being the Wrekin Hill. The estate will continue to produce sustainable and certified quality timber products.
- 2.5. The estate will ensure financial stability, and this will be key to build the community and to create a sense of place, this will be achieved through sympathetic development to create those places that will provide opportunity to those living in Shropshire to make homes, places to work and thrive and memories while exploring the wider Raby Estate.
- 2.6. The reputation of the estate is extremely important, and the current custodians of Raby Estate will respect its heritage and leave a positive legacy for any development completed.
- 2.7. Raby Estate is currently in the early stages of preparing a whole estate plan that sets out the long-term management objectives for the estate.

### 3. Adding vitality to Cressage Community

#### Shropshire Council hierarchy assessment

- 3.1. The Shropshire Council settlement hierarchy for Cressage included a formulaic assessment of the of services and facilities, public transport provision and significant employment opportunities within the village. The results of this assessment are provided in the table below:

**Table 3.1 – Cressage village facilities and services, and public transport**

Public Transport Link
Regular Public Transport offered during peak travel times
Nursery/Pre-School
Primary School
NHS GP Surgery
Convenience Store
Post Office
Place of Worship
Library
Children's Playground
Superfast Broadband

- 3.2. The outcome of the assessment was that Cressage had sufficient services and facilities to recommend it for inclusion within the Local Plan as a “*Community Hub*” and therefore an appropriate location for future housing growth.
- 3.3. The hierarchy of settlements assessment carried out by Shropshire Council requires more sophistication as the current method simply assists in directing growth to places with a threshold of existing services, facilities and employment. It fails to take account of the needs of any settlement or its relationship with other settlements in the surrounding rural areas. Importantly it fails to identify whether a settlement would benefit from development that would make it function better and contribute to the vitality of the community.
- 3.4. Without a more in depth understanding of the needs of individual settlements or groups of settlements the approach if carried forward into future plan periods would direct growth away from settlements or groups of settlements that would otherwise make those communities more sustainable.
- 3.5. For a large rural local authority area such as Shropshire a settlement hierarchy approach fails against the National Planning Policy Framework (NPPF) Paragraph 78 because it: (a) fails to consider the inter relationship of groups of settlements and dispersed services between groups of settlements; and (b) brings about the decline of settlements (through lack of growth) which fail to meet the relevant threshold to be identified for future growth.
- 3.6. The failure of the settlement hierarchy approach is apparent from a review of the distribution of settlements classified as community hubs across Shropshire: there is disproportionately more growth in the north of Shropshire where there are more villages with the relevant threshold of services than in the south of Shropshire.
- 3.7. The needs of the village of Cressage are distinct and unique. Its future growth cannot be determined by a metric of the number of services that it has now. Its growth must be informed by an understanding of what would contribute to the future vitality of the community and the effect of severely restricted development in the current and previous plan periods. It

is essential to carry out an assessment of how the village functions now, what its needs are and any infrastructure requirement that can be delivered through future development.

### Community priorities for Cressage

- 3.8. At the time of the preparation of the Core Strategy Shropshire Council placed significant importance on 'Place Plans' that set out the community infrastructure priorities for place plan areas. These priorities could be delivered inter alia through new development. This was therefore an important and fundamental starting point for achieving the objective set out in NPPF para 78: enhancing vitality of rural communities through sustainable development.
- 3.9. For the Cressage Harley and Sheinton parishes the place plan (last updated in 2015/2016) set out the following priorities:

**Table 3.2 - Place plan priorities for Cressage, Sheinton and Harley Parish Councils**

Affordable housing provision
Facilities of ICT/broadband technologies
On-site open space provision and maintenance to meet site design requirements and standards.
Provision and maintenance of facilities and equipment for sport, recreation and leisure. This includes but is not limited to: <ul style="list-style-type: none"> <li>• Outdoor sports facilities.</li> <li>• Recreational facilities for children.</li> <li>• Allotments</li> </ul>
Install a bike jumps course in the parish

- 3.10. Some of these infrastructure priorities were not dependent on development opportunities (such as broadband technologies). Those infrastructure priorities that were dependent on development have not been delivered in Cressage because the Parish Council elected to maintain its status as open countryside. This was carried forward as a policy in the Core Strategy and therefore housing development which would have funded the priority infrastructure was contrary to planning policy.
- 3.11. Further evidence for current priorities for the Parish is found in the Parish Council response to the preferred option consultation. At page 4 the Parish Council states:
- “The village is currently struggling to sustain services such as the shop, church and development would help to support these services and others such as the school, community groups/events. There is no Post Office service ... Development must deliver traffic calming on the A458 ... Development would also generate CIL which could be invested in the community.”*
- 3.12. This is clear evidence of the impact of long-term growth restrictions in the rural community of Cressage and provides a clear case for a bespoke settlement solution for Cressage to ensure that a sufficient quantum of growth is maintained and delivered in a sustainable way that adds to the vitality of the village.

### The contribution of Raby Estate to Cressage

- 3.13. The custodians of Raby Estate are committed to contributing to the vitality of the community of Cressage and the surrounding area. The estate is currently in the early stages of preparing a whole estate plan that would deliver on its vision outlined in the previous section. For Cressage the estate is proposing the following high-level objectives:
- Providing affordable and market housing in Cressage on land off Shore Lane;



- Providing affordable and market housing in other settlements across the estate which would help to support facilities and services in Cressage itself;
- Maintaining a level of stewardship of shared spaces associated with new homes to ensure quality and character is maintained;
- To control the delivery, in conjunction with a trusted development partner, of any new homes on the estate to ensure developments are of the right quality and provide a positive legacy.
- Working with the pre-school and primary school to enhance education including through:  
(a) making land available for forest school activities to further understanding of woodland management and the importance of woodland for flora and fauna; (b) helping with an understanding of sustainable food production and healthy eating choices.
- Making land available for the community to grow its own food through allotments or a community food cooperative;
- Providing open space including a heritage community orchard for village events and activities;
- Improving landscape features and enhancing biodiversity across the whole estate through a comprehensive landscape and ecology management plan;
- Improving the pedestrian footpath links through the village (from east to west) to encourage accessing village facilities on foot rather than reliance on car travel and providing a safer alternative to walking along the A458;
- Improving access to the network of footpaths surrounding the village such as the footpath along the River Severn to the north of Cressage to encourage recreation and healthy lifestyles;
- Improving access to public transport through providing safer waiting areas for pedestrians;
- Working with the local highway authority to explore opportunities for improving the B4380/Sheinton Lane/A458 junction to improve highway safety and delivering options to calm traffic on the western approach into the village as part of a vehicular access into a new housing development site;
- The provision of an appropriate level of employment spaces along side housing within the settlement of Cressage including: incubator workspaces; studios; maker spaces; and co-working spaces; and

- Redevelopment of sites in the surrounding rural area for a range of employment spaces.

### **Material Considerations**

- 3.14. Any allocation of land for housing development in Cressage must take into account the overall contribution that development can make to enhance village vitality<sup>2</sup>. Raby Estate can make a significant contribution to the long term vitality of the settlement. The Raby Estate is committed to working in partnership with the Parish Council and Shropshire Council to deliver a high quality planned enhancement.

---

<sup>2</sup> NPPF, Para 78

## 4. Achieving sustainable development

### Introduction

- 4.1. The estate proposed a site for housing on the western edge of Cressage in the call for sites stage. Since that time the estate is under new management and a local team is based at Uppington which is considering the estate holistically in terms of the contribution the estate makes to the local rural community including Cressage.
- 4.2. The following sections assess the contribution that the estate can make to Cressage as part of a planned development integrated with the settlement that contributes to vitality of the community using land controlled by the Raby Estate.
- 4.3. The Raby Estate proposes to make 5.67 ha of land available for improvements to the village with the following mix of uses:
- 70% for new homes (shown on land shaded brown on **Appendix 1**);
  - 20% for community amenity (shown on land shaded pink on **Appendix 1**); and
  - 10% for appropriate employment uses (shown on land shaded brown on **Appendix 1**).

### A holistic approach

- 4.4. The estate owns land:
- a. to the south of Shrewsbury Road on the western edge of the village;
  - b. adjoining the Shrewsbury Road/Harley Road/Sheinton Road/Station Road junction;
  - c. either side of the Wood Lane junction with Harley Road; and
  - d. land in the historic core of the village between the former Crown public house and Wood Lane.
- 4.5. A plan is provided at **Appendix 1**.

### Housing across a range of tenures

- 4.6. Raby Estates vision for Cressage is to provide housing on land to the west Cressage on land at Shore Lane (indicated by brown shading on the location plan at **Appendix 1**). Housing tenures will include market and affordable sale, market rental and affordable rental.

### Accessibility

- 4.7. The site at Shore Lane would be accessed from Shrewsbury Road where the estate controls 90 metres of road frontage.
- 4.8. A bus stop is situated to the north of the site (bus number 436) with an hourly bus service to Bridgnorth/Shrewsbury including a commuter bus service (ie arriving earlier than 9am and departing after 17.30) to Shrewsbury/Bridgnorth on weekdays. The bus stops would be

improved as part of a development proposal to accommodate safe waiting areas with shelters from weather.

- 4.9. The road frontage would provide pedestrian links from the site to the pavement along the north of Shrewsbury Road to connect to village facilities.
- 4.10. A relocated and improved pedestrian link from Shore Lane would be provided through the historic core of the village along Crown Lane and across the brook to connect with Wood Lane (indicated by pink shading on location plan at **Appendix 1**). The estate owns sufficient land to provide a safe crossing point for pedestrians to connect across Harley Road to Severn Way and the main village facilities.

#### **Highway Safety improvements**

- 4.11. As part of the access arrangement for the housing development the estate would include traffic calming measures to reduce speed of traffic into Cressage along Shrewsbury Road.
- 4.12. As part of this master planned approach the estate would engage with the local highways authority to explore options for improvements to the Shrewsbury Road/Harley Road/Sheinton Road/ Station Road junction subject to an options appraisal and viability assessment.

#### **Public Open Space**

- 4.13. The three paddocks in the historic core of the village (indicated by pink shaded area on location plan at Appendix 1) (approximately 1.07 ha) currently under-utilised for rough grazing would be provided for amenity land including a community orchard for village events and land for allotments and/or a village food cooperative for locally produced fruit and vegetables.

#### **Employment spaces**

- 4.14. The estate owns and manages a broad range of suitable employment spaces across Raby Estate. The estate is currently reviewing its property portfolio. It owns a number of under-used traditional farm buildings which could provide suitable incubator workspaces; studios; maker spaces; and co-working spaces. The estate also proposes to provide employment spaces on the land at Shore Lane (indicated by brown shaded area on location plan at **Appendix 1**) as part of a well-designed mix-use development.

## 5. Technical site assessment and housing capacity

### Headline Messages

- 5.1. The 5.67 ha of land promoted for a range of uses to contribute to the vitality of the development in Cressage by Raby Estate is free from technical constraints and is surrounded by features that will ensure that proposals for the village will add to character and sense of place.
- 5.2. The estate owns sufficient land to accommodate the housing needs of the settlement for the current local plan period.

### Heritage

- 5.3. There are several listed dwellings within Cressage as well as listed agricultural building on the north of Shrewsbury Road along the road frontage.
- 5.4. There are also non-statutory sites located around the site – the remains the church of Saint Samson located to the north of Shrewsbury Road.
- 5.5. The strong historic character of this part of the village has been eroded by the layout, massing and arrangement of more modern development and therefore Raby Estate will maximise the village heritage assets to better reveal the character of the village and enhance significance of the historic landscape and provide an enhanced setting.

### Ecology

- 5.6. There are no Sites of Special Scientific Interest (SSSI), Local Nature Reserves or other designated wildlife sites affected. The agricultural land has limited ecological interest, aside from the hedgerows and the estate will therefore seek opportunities to enhance ecology through strengthening wildlife corridors through the site.

### Flood Risk

- 5.7. The Shore Lane site falls within Flood Zone 1 as identified of the Environment Agency flood map and is therefore not at risk of flooding.
- 5.8. The land through which a footpath link is proposed is partially in flood zone 3 and therefore there would be occasional flooding obstruction for the improved footpath link through the village and residents would have to use the roadside pavements when flooding occurs.

### Trees

- 5.9. There is a group of sycamore trees along the Shrewsbury Road frontage which are protected by tree preservation orders. To accommodate the development these trees would be affected by highways improvement works. The estate is proposing a landscape and ecology management plan and for Cressage this will include planting of trees where they can enhance the character of the village.

### Housing Capacity

- 5.10. The site off Shore Lane is approximately 4.6 ha. At a housing density of 30 dwellings per hectare the site has the capacity to deliver 138 new homes. This site would therefore provide sufficient capacity to meet the housing guideline for Cressage set out in the preferred options consultation document. However, a proportion of the site is proposed for

employment spaces. In addition, as part of the development 1.07ha of additional land would be made available between Crown Lane and Wood Lane for community benefit, footpath link routes through the village and open space.

## 6. Cressage housing guideline

### Introduction

- 6.1. At the beginning of the preparation of the Core Strategy Shropshire Council consulted widely with local parish councils and relied heavily on the inputs of parish councils to determine the distribution of housing growth. Cressage Parish Council opted to remain as open countryside and no land was allocated for housing despite the settlement having community infrastructure at risk of closure due to lack of development. Cressage has not had any planned development for some time.
- 6.2. In light of the Inspector's requirement for a review mechanism to be included in the Local Plan and the ongoing Local Plan Review process, the Council is required to identify additional housing allocations to ensure delivery of its housing requirement by the end of the plan period.
- 6.3. The Council's Hierarchy of Settlements published in November 2018 identified Cressage as one of 41 'Community Hub Settlements'. Cressage scored 51 points in the Council's assessment of villages based on services and facilities – the threshold for being considered a Community Hub was 48 points. Settlements below the threshold are classified as Open Countryside unless they choose to opt-in as part of a Community Cluster.

### Housing guideline

- 6.4. The following table has been extracted from the consultation document and summarises the residential requirements for Cressage over the remainder of the plan period:

*Summary of residential requirements*

	Number of Dwellings
Preferred dwelling guideline 2016-2036	80
Dwellings completed in 2016-17*	0
Dwellings committed as at 31 <sup>st</sup> March 2017*	2
Remaining dwelling requirement to be identified	78
Dwellings to be allocated	65
Balance/Windfall allowance**	13

*\*Analysis of Housing Supply as at 31<sup>st</sup> March 2018 will be provided towards the end of 2018.*

*\*\*Local Plan policies will allow flexibility for appropriate windfall, rural exception and cross-subsidy development.*

**Table 6.1: Extract from Local Plan Review – Preferred Options Consultation Document (2018)**

- 6.5. The two proposed allocations listed in the preferred options consultation document provide capacity for 65 units, however, this falls short of the requirement for at least 78 additional units to be delivered in Cressage over the remainder of the plan period, leaving a remaining windfall allowance of 13 units.
- 6.6. The preferred dwelling guideline value of 80 dwellings to be delivered in Cressage by the end of the plan is low when taking into consideration the historic lack of housing growth permitted in the Much Wenlock Place plan area since the adoption of the Core Strategy and the lack of delivery in the previous plan period.
- 6.7. In order to reverse the decline of the village a housing guideline should be established that ensures that village services and facilities are sustained into the future, that traffic calming measures can be carried out and new improved community facilities to add to village vitality can be delivered. The allocation of land at Shore Lane for mixed use development would be an appropriate scale of development for the village combined with additional land for village

amenities.

### **Much Wenlock Place Plan Area**

- 6.8. Delivery of housing in the Much Wenlock Place Plan Area has been low compared with other place plan areas of Shropshire Council. This is due to restrictive housing policies in the Much Wenlock neighbourhood plan, the designation of Cressage as open countryside and the lack of community clusters in the place plan area (with the exception of Buildwas).
- 6.9. In the period 2016 to 2036 there is likely to be high demand early in the plan period to meet the unmet need of Cressage and the lack of appropriate scale of delivery in Much Wenlock. Raby Estate is committed to bring housing development forward for development early in the plan period to alleviate housing pressures of the Place Plan Area.

### **Overreliance on windfalls**

- 6.10. The Local Plan Review – Consultation on Preferred Sites document confirms that the remaining housing requirement to be delivered in the plan period is 10,250 dwellings.
- 6.11. The capacity of housing allocations identified in the document equates to 7,404 homes. In addition, the table identifies a remaining total windfall allowance of 2,875 homes. This equates to an overall total of 10,279 homes which exceeds the required total by 29 homes.
- 6.12. The Council considers that it has identified sufficient housing sites to meet its needs up to 2036. However, almost 30% of its housing requirement is proposed to be met by windfall sites. This is high proportion.
- 6.13. In the context of the NPPF and PPG, the overreliance on windfalls means there is a lack of clear evidence that the outstanding housing requirement will be met in the short-term.
- 6.14. Whilst the Council can rely on a proportion of windfalls, for the Local Plan Review to be found sound by an Inspector, the windfall allowance should be in the region of 10-15% of its total supply. Consequently, there is substantial 'headroom' for deliverable housing sites in the short-term to deliver approximately 1,000 – 1,800 homes.
- 6.15. The site at Shore Lane, Cressage can meet the needs of Cressage without reliance on windfalls.



## 7. Proposed housing sites in Cressage

### Introduction

- 7.1. The Local Plan Review – Preferred Sites consultation document identifies two proposed housing sites in Cressage. They are:
- Land off Harley Road (allocation ref: CES005); and
  - The Eagles Former Public House (allocation ref: CES006).
- 7.2. The proposed allocations in the Local Plan Review consultation documents are discussed and significant constraints to their delivery are identified below. The merits of the land to the west of Cressage as a far more suitable and deliverable site is then discussed.

### The Eagles Former Public House

- 7.3. Allocation ref: CES006 proposes The Eagles Former Public House as a potential site for the delivery of 5 dwellings by the end of the plan period.
- 7.4. The site guidelines in the Local Plan Review consultation document state the following:

*To satisfy national and local heritage policies through a heritage assessment, delivering good contemporary design with appropriate use of materials, layout, landscaping and open space to enhance the character of the centre of the village and recognise the amenity of adjoining land uses. Relevant supporting studies should be undertaken particularly transport assessments, ecology, tree and hedgerow surveys, flood risk and drainage with their recommendations clearly reflected in the proposed development scheme. This should also ensure safe access and use of the A458 junction to Sheinton Road/Station Road.*

### Constraints

- 7.5. This site has significant highways constraints, namely concerns regarding safety of the junction which would need re-aligning and the need for a pedestrian footpath to make its development feasible. It is unlikely any funding can be provided to address the highways safety issues in advance of development of the site.
- 7.6. The site only has capacity for a very small number of dwellings (5) and the significant cost of the highways improvements to facilitate its development brings its overall viability into serious doubt.
- 7.7. The site is clearly unsuitable for delivering housing before the end of the plan period and as such its proposed allocation is inappropriate. There is no clear evidence that suggests this site will deliver housing completions in the short-term. The site should therefore be removed as a housing allocation in favour of land west of Cressage.
- 7.8. An application for the redevelopment of the site was refused on 29 January 2018. The proposals comprised the erection of 4no. dwellings and conversion of the former public house to form 2no. additional dwellings with associated car parking and landscaping. This application (ref: 18/00483/FUL) was a scaled down re-submission of a previously refused application (ref: 17/02912/FUL).

7.9. Application ref: 18/00483/FUL was refused on the following grounds:

*“1. The Council can demonstrate a 5 year housing land supply and policies relating to residential development in the Core Strategy and SAMDev Plan are considered up to date and given full weight. As the site is not allocated for housing or deemed to be in a sustainable location for housing, it conflicts with the Council's settlement strategy.*

*“2. The permanent loss of the Eagles Public House and its residential conversion would represent an unjustified departure from policy.*

*“3. For reasons of layout, design and scale, the development fails to respect the prominence and significance of the landmark heritage asset, its boundaries, and the local settlement character.*

*“4. It cannot be concluded that the proposal will not cause an offence under The Conservation of Habitats and Species Regulation 2010, which is contrary to policy.”*

- 7.10. The landowner has lodged an appeal against the Council's decision, however given the site is subject of two refused planning applications and numerous complex grounds for refusal, it is highly likely that the appeal will be dismissed by the Planning Inspectorate.
- 7.11. It is accepted that the first reason for refusal is not relevant to these representations or the Local Plan Review, however reasons two and three are critical issues which could be considered insurmountable in terms of developing the site.
- 7.12. Policy CS8 of the adopted Core Strategy provides protection to existing facilities, services and amenities that contribute to the quality of life of residents and visitors at all levels of the settlement hierarchy. The permanent loss of the Eagles Public House is contrary to policy as it would result in the loss of a significant community facility in a proposed Community Hub. Furthermore, given the proposed housing growth in Cressage over the remainder of the plan period, the protection of existing community facilities, such as the Eagles Public House, is critical to ensuring existing and future residents and visitors enjoy a high quality of life and the development of a sustainable Community Hub.
- 7.13. The development of the site cannot be achieved without significant harm to the significance of the landmark heritage asset or the local settlement character, therefore it cannot meet the tests contained in chapter 16 of the NPPF and consequently the requirements of Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- 7.14. In addition, whilst the application was not refused on highways grounds it does not contribute to the objectives set out in the Local Plan Review - Preferred Sites consultation document which, at paragraph 16.23, suggests that *“the existing, secondary access onto Sheinton Road, if closed, would help alleviate current traffic constraints on Sheinton Road and at its junction with the A458.”* The submitted plans confirm that the access onto Sheinton Road will become the only access into the site and therefore only serve to further constrain traffic on Sheinton Road and its junction with the A458.

### **Land of Harley Road**

- 7.15. Allocation ref: CES005 proposes land off Harley Road as a potential site for the delivery of 60 dwellings by the end of the plan period.
- 7.16. The site guidelines contained in the Local Plan Review consultation document state the following:

*To satisfy national and local heritage policies through a heritage assessment, delivering good contemporary design with appropriate use of*

*materials, layout, landscaping and open space to enhance the southern gateway into the village. Relevant supporting studies should be undertaken particularly transport assessments, ecology, tree and hedgerow surveys, flood risk and drainage with their recommendations clearly reflected in the proposed development scheme. This should include a suitable access to the highway network to contribute to traffic calming on A458 with pedestrian and cycling access linking to local networks.*

### Constraints

- 7.17. The site is located off the A458. Access would be on to the A458 where the road geometry and gradient is not optimal for providing a junction solution to achieve traffic calming measures as well as a safe pedestrian crossing point.

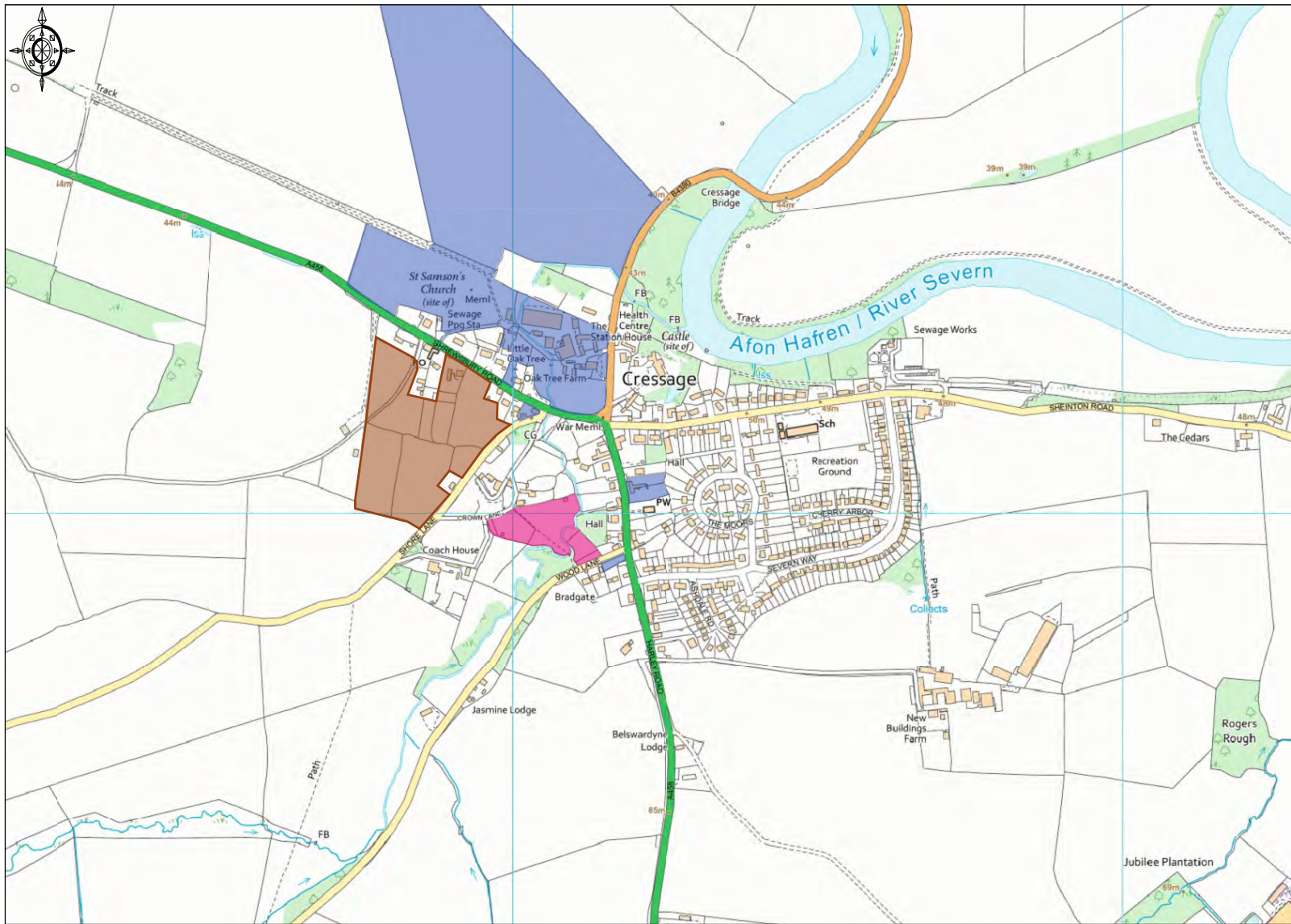
### Lack of place making opportunities

- 7.18. Neither CES006 nor CES005 can provide the benefits that Raby Estate can deliver through a planned holistic approach to new development for the village. The following table provides a summary comparison of the sites in terms of their contribution to the village.

**Table 7.1 - Summary comparison table of contribution to community vitality**

	Raby Estate Land	Eagle Pub	Glebeland
Community facilities and services	Public Amenity Space Community Orchard Allotments/ Community food cooperative Improved footpath links	None. Loss of only public house in village	Open space to meet policy standards
Provision of employment land	On site provision plus within the wider estate area	Loss of employment through loss of public house	None proposed
Highway safety	Improvements to pedestrian safety by providing safe pedestrian connection through village  Providing traffic calming measures on western approach to village  Providing safer bus stops along Shrewsbury Road  Explore options for improving junction  Provide safe crossing point for pedestrians adjoining Wood Lane	Main improvement would be closing off access onto Sheinton Road but this is not shown in recently submitted planning application to Shropshire Council	Steep gradient approach to village – options for improving highway safety limited

# Appendix 1



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**Promap**  
LANDMARK INFORMATION GROUP

**Key**

- Land at Shore Lane
- Raby Estate land ownership relevant to Cressage
- Land for community amenities

<b>Project</b>	Promotion of development land at Cressage
<b>Title</b>	Site location plan
<b>Client</b>	Raby Estates

<b>LPA</b>	Shropshire Council
<b>Date:</b>	07.02.2019
<b>Scale:</b>	1:10,000@A4
<b>Project No:</b>	29900001
<b>Drawing No:</b>	29900001/1
<b>Drawn By:</b>	CM

**Indigo Planning Limited**  
 Lowry House  
 17 Marble Street  
 Manchester  
 M2 3AW  
 T 0161 836 6910  
 F 0161 836 6911  
 info@indigo.planning.com

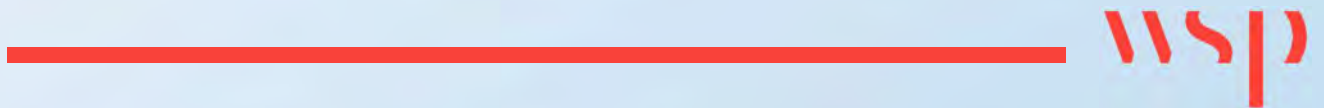


**indigo.**



# Appendix 4.2.1

**REGULATION 18  
REPRESENTATIONS - CRESSAGE**





Raby Estate

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# LAND WEST OF SHORE LANE, CRESSAGE, SHROPSHIRE

Representations to Regulation 18: Pre-  
submission Draft of the Shropshire Local Plan







Raby Estate

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# LAND WEST OF SHORE LANE, CRESSAGE, SHROPSHIRE

Representations to Regulation 18: Pre-submission Draft of  
the Shropshire Local Plan

**REPRESENTATIONS (FINAL VERSION) PUBLIC**

**PROJECT NO. 70077055-CRE**

**OUR REF. NO. 70077055.RPT.001.GM**

**DATE: SEPTEMBER 2020**



Raby Estate

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# LAND WEST OF SHORE LANE, CRESSAGE, SHROPSHIRE

Representations to Regulation 18: Pre-submission Draft of  
the Shropshire Local Plan

WSP

The Mailbox

Level 2

100 Wharfside Street, Birmingham

B1 1RT



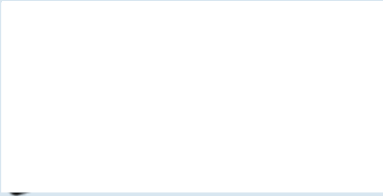
Phone: +44 121 352 4700

[WSP.com](http://WSP.com)



# QUALITY CONTROL

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Issue/revision	Final Issue
Date	30/09/2020
Prepared by	Zac Wade
Signature	
Checked by	Guy Maxfield
Signature	
Authorised by	Doug Hann
Signature	
Project number	70077055-CRE
Report number	70077055.RPT.001.GM

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No table of figures entries found.

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Appendix 1 – Housing Need Assessment

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Appendix 3 – Land off Shore Lane Engagement Document



# EXECUTIVE SUMMARY

These representations are made on behalf of the Raby Estate in relation to the promotion of the land off Shore Lane to the Regulation 18: Pre-submission draft of the Local Plan consultation. The set out changes required to policy **S13.2**. of the draft Local Plan to ensure that the plan is positively prepared, justified, effective and consistent with national policy.

This document outlines the aims and vision of the Raby Estate in relation to growth in Cressage. The proposals for the site are outlined and then compared to the sites that are currently proposed for allocation in the consultation document.

These representations make the compelling case for Shropshire Council amend policy **S13.2** to allocate an alternative site off Shore Lane for development.

The representations show that the Raby Estate, through ongoing collaboration with the local community, can bring forward the best possible outcomes for Cressage taking into account the health, wellbeing and quality of life of the existing and new residents.

---

## Contact name **Guy Maxfield**

Contact details: [guy.maxfield@wsp.com](mailto:guy.maxfield@wsp.com)

# 1

## INTRODUCTION





# 1 INTRODUCTION

---

*“To promote sustainable development in rural areas, housing should be located where it will enhance or maintain the vitality of rural communities. Planning policies should identify opportunities for villages to grow and thrive, especially where this will support local services” (NPPF, paragraph 78)*

1.1.1. The Raby Estate’s proposal for Shore Lane, Cressage responds well to the parish plan and needs of Cressage identified in the draft local plan; it would bring forward a mixed-use development of 80 homes delivered to meet local housing needs together with multiple benefits for the local community in a way that ensures positive placemaking and high quality design, as can be seen by the indicative masterplan in Appendix 2.

1.1.2. The Raby Estate’s proposal for Cressage would bring about a more thriving community, it would help local services to become more viable and would enhance the vitality of the community. We support the allocation of Cressage as a Hub but recommend amendments to **Draft Policy S13.2** to ensure the plan is sound. The local plan should delete the current wording in relation to the allocation of “land adjoining The Vicarage” and “The Eagles public house” and should refer instead to the Raby Estate’s proposals for Shore Lane in preference to the site allocations listed in Schedule S13.2(i) of the Regulation 18: Pre-submission Draft of the Shropshire Local Plan 2016 to 2038 (August 2020) for the following reasons:

### **Ongoing collaboration with the Community**

1.1.3. Raby Estate commits to meaningful and ongoing community participation in the development of the Shore Lane site: this is fundamental to resilient and high quality placemaking. Section 3 of this report sets out the Raby Estate’s current and ongoing strategy for community collaboration and engagement. An example of such engagement can be seen in Appendix 3.

### **Land value captured for benefit of the local community**

1.1.4. Value would be captured for the benefit of the community through the Raby Estate’s commitment to delivery of the development through a long term ‘patient capital’ approach to investment. The estate and its approach to land value capture for the Shore Lane proposal is explored in Section 3 of this report.

### **Long-term stewardship**

1.1.5. Community assets and shared spaces incorporated into the proposal will be managed for the long-term benefit of the Cressage community. The Raby Estate is committed to long-term stewardship of the community assets in partnership with the local community. Section 3 of this report sets out the estate’s approach to stewardship for the Shore Lane proposal.

### **A diverse and sufficient supply of homes**

1.1.6. The right number of homes identified within S13.2. of the draft local plan and the Cressage, Harley and Sheinton Parish Plan (2017) would be delivered with a housing mix established through robust local evidence. Section 4 and Section 5 of this report explore this.



### **A strengthened job offer**

- 1.1.7. Employment space, fully integrated with the residential development, would be delivered to provide a local job offer. New homes would include enough space and the technical capacity for homeworking. Section 4 sets out the Estate's approach to supporting a strong local job offer.

### **High quality homes**

- 1.1.8. Attractive and imaginatively designed homes with gardens would create a healthy community. Section 4 presents Raby Estate's track record in terms of quality design and shows the progress made so far by leading masterplanners for the Shore Lane proposal.

### **A distinctive place resilient to climate change**

- 1.1.9. The natural and historic environment would be enhanced: heritage assets would inform the character of the built environment and contribute to the sense of place; green infrastructure is incorporated into the designs; net biodiversity gains would be delivered within the village itself or within walking distance on Raby Estate land; and climate resilience in terms of carbon, energy technology and water and waste efficiency would be designed into the proposal. Section 4 explores this in detail.

### **Movement and connectivity would be enhanced**

- 1.1.10. Accessibility and connectivity in the village would be improved with new walking routes through the village, improvements to highway safety and safer access to public transport. Section 4 provides detail on these matters.

### **Outcompetes the alternatives**

- 1.1.11. The alternatives are constrained with technical planning issues and cannot demonstrate a commitment to the same level of quality, placemaking or contribution to the vitality of the local community. Section 6 includes a planning assessment of the alternatives.

## **1.2 AMENDMENTS TO THE LOCAL PLAN**

- 1.2.1. The following amendments are recommended to the local plan policy **S13.2** to ensure that the plan is positively prepared, justified, effective and consistent with national policy:

- Deletion of site allocations "Land adjoining The Vicarage on A458, Cressage" (60 dwellings)
- Deletion of site allocations "The Eagles public house on A458, Cressage" (4 dwellings)
- Insertion of site allocation "Land off Shore Lane on A458, Cressage" (80 dwellings)
- Insertion of text in relation to the Development Guidelines for the site allocation of Land off Shore Lane to reference the delivery of: open space, employment land, pedestrian connections, highway access on to the A458 as referred to further in this representation.

- 1.2.2. In the event that the planning inspector finds that an additional housing requirement is necessary for Cressage in order to make the plan sound, while we disagree with the suitability of the allocation of Land adjoining the Vicarage and The Eagles public house the plan should be amended to allow an uplift in the housing guideline to allow for land off Shore Lane to be allocated along with other suitable alternative sites to ensure a sufficient supply of homes.

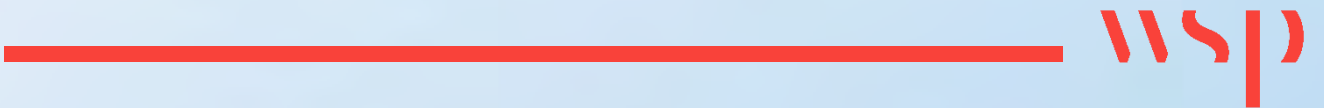
## 1.3 PREVIOUS CONSULTATION RESPONSES

- 1.3.1. This representation should be read in conjunction with previous representations and officer correspondence submitted by the Raby Estate in relation to land at Shore Lane Cressage and in relation to the Estate's its representations on support for a policy allowing Whole Estate Plan approach to the land use planning across the wider Raby Estate for bringing about environmental, social and economic benefit. The following table lists previous representations:

Date	Document	Nature of document
22 May 2020	Development Parameters Document	Additional details requested by officers
22 May 2020	Transport and Highway Strategy	Additional details requested by officers
22 May 2020	Baseline Tree Assessment	Additional details requested by officers
6 September 2019	Representation Letter (ref: let.001.GM.AC.30720001) on Whole Estate Plan policy	Representation as part of Local Plan Review – Strategic Sites Consultation
19 February 2019	Land west of Shore Lane, Cressage, Shropshire - Representations to Shropshire Local Plan Review	Representation to Local Plan Review – Preferred Sites Consultation
February 2017	Consultation response to call for sites	Representation as part of Local Plan partial review – Call for Sites

# 2

## COMMUNITY ENGAGEMENT



## 2 COMMUNITY ENGAGEMENT

---

*“Consultation should reflect local social, economic and geographic diversity and enable key stakeholders to shape design solutions from an early stage.”* West Midlands Design Charter

### 2.1 HEADLINE MESSAGES

- 2.1.1. The key messages relating to Raby Estate’s community engagement strategy are:
- The Raby Estate has engaged at each step of the local plan review consultation;
  - The Raby Estate is committed to meaningful and ongoing community participation in the vision, development and future stewardship of its development plans for Cressage;
  - The estate has encouraged engagement by making use of interactive digital services and tools which has resulted in proactive and positive participation by the local community;
  - The next steps in the community participation include participation in design, use of public places and local housing needs evidence.

### 2.2 INTRODUCTION

- 2.2.1. Meaningful community engagement is fundamental to creating resilient and high-quality places. The West Midlands Design Charter – enshrined in policy SP5 of the draft local plan – has engagement as a principle of good design.
- 2.2.2. The NPPF requires that ‘plans are shaped by early, proportionate and effective engagement between plan-makers and communities, local organisations, businesses, infrastructure providers and operators and statutory consultees.’
- 2.2.3. The Raby Estate would maintain active community participation throughout the development process and its control over public and shared spaces through stewardship would ensure that community participation would continue in perpetuity. This principle is a theme that runs through all of the following sections in this representation.

### 2.3 CURRENT ENGAGEMENT

- 2.3.1. A dedicated page on Raby Estate’s website has been established. This hosts an Information Document which provides an overview of the proposals. The page also includes a link to a survey on Raby Estate’s proposals, as well as information about the Parish Council’s and Shropshire Council’s active consultations. In addition, the page provided a link to the registration page for a webinar which was scheduled for Wednesday 2nd September.
- 2.3.2. Social media adverts advertising the dedicated Cressage page were distributed across the village between Tuesday 25th August and Wednesday 9th September. The adverts reached 2,332 individual Facebook users. This generated 613 clicks through to the dedicated page on the Raby website.
- 2.3.3. A webinar was held at 7pm Wednesday 2nd September. During the webinar, representatives from Raby Estate, WSP and Lexington Communications provided an overview of the proposals and



provided an opportunity for residents to ask questions. In total, 26 individuals attended the webinar, with over a dozen questions submitted.

- 2.3.4. A dedicated project email address was also established to allow residents to ask questions about the plans. A handful of residents used this function to submit their feedback more generally, with several using this function to outline their support for the proposals.
- 2.3.5. The survey was established to gather specific feedback on the plans was completed by 15 individuals. By way of an overview:
- 2.3.6. Family homes and affordable housing were identified as those most needed in the local area;
- 2.3.7. 60% of respondents agreed with Raby Estate's ambitions to deliver community amenities as well as new homes;
- 2.3.8. Several respondents expressed their support for Raby Estate's proposed role in the long-term management of the development;
- 2.3.9. Several residents did not recognise the need for new homes in Cressage as a general rule, suggesting that the existing infrastructure would not cope with additional residents;
- 2.3.10. Of those who provided written comments on the proposals, six were opposed to the principle of housing as a general rule, four supported the delivery of new homes at Raby Estate's site, one did not support the delivery of new homes at Raby Estate's site and one response was neutral.
- 2.3.11. The commitment of the estate to community engagement has been highlighted throughout their efforts to promote the site. Their engagement has been ongoing, and the estate has endeavoured to ensure that the local community can have their say on the proposals and guide any proposals for the site. This commitment has continued throughout the Covid-19 pandemic, with the estate moving their consultation online, most recently in September, allowing the local community to continue to engage with the proposals in a safe way.

## **2.4 ONGOING ENGAGEMENT STRATEGY**

The Raby Estate's strategy is to continue to work with the local authority and the local community to deliver genuine community benefit.

# 3

## STEWARDSHIP



## 3 STEWARDSHIP

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### 3.1 HEADLINE MESSAGES

- 3.1.1. The following headline messages in relation to land value capture and stewardship are as follows:
- The Raby Estate would adopt a patient capital approach to returns
  - The proposal for Shore Lane includes early investment in delivery of amenities and place making quality; and
  - The Raby Estate would maintain long-term involvement in the development plans controlling delivery of the scheme and ongoing stewardship of the common areas.

### 3.2 INTRODUCTION

- 3.2.1. Research for the *Building Better Building Beautiful Commission* highlights that ‘stewardship driven’ patient capital projects not only deliver place quality but also on agreed s106 arrangements (community infrastructure) and also the level of affordable housing. Long term involvement, commitment to placemaking and a patient approach to returns has a positive impact on the quality of development. Examples of this approach include Edinburgh South Side; Dulwich Village; London Urban Estates; Eddington, Cambridge; Poundbury; Tornagrain, Invernesshire. In each of these cases the high-quality development is the product of long-term landowner involvement and patient approach to returns.
- 3.2.2. Where land interest options to a housebuilder or land promoter and trades land onward there arises a loss of control. This often leads to the re-negotiation of placemaking aspects secured at the plan making stage and for developers to concentrate on delivery of the maximum number of homes and the greatest margin.
- 3.2.3. The Raby Estate is a long-established land-owning business: its business plan is legacy-led with patient returns on investment. The delivery vehicle for the Shore Lane development would be structured to ensure the Raby Estate delivered the scheme in partnership with a master developer sharing the same core values through the duration of the project in a stewardship position enabling capital to be spent on placemaking and infrastructure. Enforceable controls on design and build quality would be exerted through the contracts with development contractors that run with the land as well as through the planning system.
- 3.2.4. The Raby Estate approach to development would ensure that development is delivered in a sustainable manner. An allocation of the Shore Lane site would therefore ensure that the plan is consistent with national policy.

### 3.3 RABY ESTATE STEWARDSHIP

- 3.3.1. Raby Estate business operations include in-house farms, let farms and residential property, visitor attractions, holiday lets/hotel and sporting enterprises across three estates in County Durham and Shropshire.





- 3.3.2. The Shropshire Estate has been held by the Vane family since the beginning of the 19th Century. The estate is situated between Shrewsbury and Telford. It includes leasehold farms, residential property and holiday lets. The estate is around 6,500 acres, 3,900 acres of which are let. 1,800 acres of land is contract farmed by the estate. There are also 800 acres of mixed amenity and commercial woodland. The estate is therefore a leader in the local economy and has an interest in investing in the local community: the quality of the natural environment, the vitality and health of local communities and the resilience and strength of the local economy are fundamental to ensuring the viability and successful future of the estate.
- 3.3.3. Rural areas are going through an historic period of change. Agricultural subsidies represented 55% of farm incomes in 2014 and therefore influence local rural economies. The current subsidies are due to be replaced through the Agriculture Bill in favour of a system that makes public money available for public goods such as soil protection, flood risk mitigation and contributions towards reducing greenhouse gases and capturing carbon. A new approach to land use management will be necessary with more emphasis on natural capital and improving access to land to communities. Likewise, Brexit trade deals are likely to have a significant impact on farmgate prices.
- 3.3.4. The Raby Estate, is strongly positioned to adapt to the land use changes necessary and to act as a key player in Shropshire in taking a leading position on environmental land management as it includes land that is already managed for amenity and wildlife, for example part of the Wrekin, a popular destination for walkers falls within the estate ownership. The estate also includes a significant stretch of River Severn corridor from Wroxeter to Cressage a key part of the local nature network. But, the successful future of the local rural economy is dependent on having a highly skilled, diverse and entrepreneurial population making up the workforce that increases economic activity to maintain community cohesion and vitality.
- 3.3.5. It is essential for the Raby Estate to ensure that future growth in Cressage is of a high quality to accommodate a diverse, healthy and happy population. To achieve this the estate is committed to take a patient capital approach, to invest upfront in community infrastructure and to ensure the quality of the built development is maintained into the future through ongoing stewardship.

## **3.4 APPROACH TO SHARING LAND VALUE**

- 3.4.1. As a consequence of the uplift in land value brought about the allocation of the Shore Lane site the Raby Estate approach is to invest this into the community (over and above providing community infrastructure levy and affordable housing) through high quality development; employment space; delivery of community amenities; public green spaces and highways safety improvements.

## **3.5 CONTROL OF QUALITY**

- 3.5.1. The Raby Estate proposes a delivery vehicle for the development of the Shore Lane site that includes a stewardship model to enable the estate to impose quality controls on design and development delivery through contractual agreements.

## **3.6 LONG TERM STEWARDSHIP**

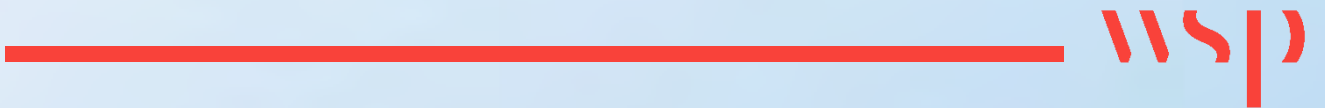
- 3.6.1. Long term community stewardship of local assets benefits councils, developers and communities. A well organised management structure with a consistent revenue stream is necessary to ensure ongoing sustainability. The Raby Estate would work with the local community to ensure that a plan is in place for the management of public space and shared spaces that includes community



involvement. The most appropriate stewardship body would be designed in consultation with the local community. The revenue stream for securing future stewardship would be funded through management charges to new residential occupiers of the Shore Lane site.

# 4

## DESIGN AND PLACEMAKING



## 4 DESIGN AND PLACEMAKING

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### 4.1 HEADLINE MESSAGES

4.1.1. The headline messages in relation to design and placemaking are:

- The Raby Estate would collaborate with the local community to ensure that high-quality outcomes from the community would be delivered;
- The Shore Lane development would include a balanced mix of natural and built space and would enhance landscape features and biodiversity creating connecting corridors through the development to strengthen nature for the benefit of local people;
- The Shore Lane site would incorporate a diverse mix of housing and employment opportunities appropriate to the location and led by the needs of the demographic;
- The designs would encourage healthy active lifestyles with improved walkability through the village and improvements to highway safety;
- The proposals would also bring forward measures to promote resilience to climate change with aspirations for environmental net gain pursued in combination with land use management across the wider Raby Estate;
- The development is envisaged as place where people can both live and work;
- The proposals will ensure that the development provided will be future ready, but embracing sustainable development concepts such as providing the infrastructure for electric vehicles and electric heating;
- The site is well located in terms of local amenity and to the wider county, with a bus stop being located directly outside the site; and
- The design and placemaking would deliver biodiversity net gain either on site or within the vicinity of Cressage for the benefit of local people.

### 4.2 RABY ESTATE APPROACH

4.2.1. The Raby Estate has a track record of promoting high quality design: in Durham County, where the estate is proposing 79 residential dwellings in Gainford, an internal design review rated the proposal of sufficient quality for Building for Life accreditation.

### 4.3 COOPERATING WITH CRESSAGE COMMUNITY

4.3.1. The masterplan for the Shore Lane site is being developed by leading master planners Urbed. Urbed would lead co-operation with the local community and local authority on design and placemaking. As set out in Chapter 2 public collaboration is proposed with the estate encouraging active participation from local people in the design and delivery process. This would be key to ensure the best outcomes for the community. The collaboration with existing residents would help to build social links with the people who would move into the Shore lane development. The Raby Estate would work with the parish council to assist with facilitating this collaboration.

## 4.4 COMBINING VILLAGE AND NATURE

- 4.4.1. A key principle of the characteristic of the Shore Lane development would be the landscape setting of the development planned with open spaces, and homes with spacious gardens.
- 4.4.2. There are strong and valuable landscape features within the site - including two veteran trees which would be enhanced and preserved to create a strong landscaped setting to the Shore Lane Site. The natural spaces on the developed site and the proposed community space off Crown Lane would also provide benefits in terms of climate change resilience.
- 4.4.3. The proposals for the natural green spaces would include supporting biodiversity and would act as areas for accommodating net biodiversity gain close to the development for the benefit of local people. Biodiversity net gain that could not be accommodated within the site itself would be provided on Raby Estate land within walking distance of the Cressage community.
- 4.4.4. The Shore Lane proposal would include highly efficient land use budgets with efficient planning of dwelling footprint with spacious gardens, efficient road and footpaths layout and significant areas of open space both incorporated within the development and providing a walkable natural green space connecting route between Shore Lane and the main village services to encourage walking within a comfortable, stimulating and therapeutic environment.
- 4.4.5. The evolving masterplan includes for the strengthening of wildlife corridors through the site on open space and through the public open space provided to the east between Shore Lane and Wood lane.
- 4.4.6. The land is currently in agricultural use and therefore is of limited ecological interest aside from the hedgerows. The Raby Estate will therefore seek opportunities to enhance the ecology on the site through strengthening wildlife corridors through the site.
- 4.4.7. This balance of natural and built space would make an important contribution to the health and wellbeing of the community.
- 4.4.8. The approach is consistent with national policy, in particular with national policies for protecting and enhancing the natural environment and for promoting healthy and safe communities.

## 4.5 DIVERSE HOUSING MIX

- 4.5.1. The Shore Lane site is of sufficient size to provide for the housing requirements set out in the draft local plan and the parish plan. The full range of housing needs and aspirations would be met through a diversity of housing having regard to the demographic situation. Minimum space standards would be defined by the estate in agreement with the local authority across all tenures.
- 4.5.2. The Estate's indicative proposal for the development includes 80 new dwellings, of which 10% will be starter/retirement homes and 90% family homes, delivered as a mixture of 3-5 bed housing, either semi-detached or detached. This is to be delivered in three phases, as outlined in the public consultation documents.

## 4.6 EMPLOYMENT SPACE

- 4.6.1. The estate would provide approximately 500sqm employment space on the land at Shore Lane well incorporated within the first phase of residential development in order to comply with national policy for supporting a prosperous rural economy (NPPF paragraph 83 and 84).

- 4.6.2. The employment space would respond to the needs of new businesses and provide for a rapidly changing needs for home workers brought about by COVID-19.
- 4.6.3. The proposal is to include sufficient space within homes for flexible working and also to dedicate space within the employment spaces for supporting the home working community of Cressage with facilities not provided within homes such as printing services, specialist video conferencing and client meeting spaces. The meeting spaces would also act as spaces for local businesses to network and train employees.
- 4.6.4. The employment space would also provide small business workspaces including general offices, incubator spaces, maker spaces, studio spaces, co-working spaces. As part of the ongoing engagement with the community there has been expressions of interest to provide an element of retail space. The estimated aggregated employment density taking into account the mix of uses would be one person per 22sqm resulting in providing approximately 23 workers.

## **4.7 MOVEMENT AND CONNECTIVITY**

- 4.7.1. The site at Shore Lane would be accessed from Shrewsbury Road, where the estate controls the road frontage. The road frontage would also provide pedestrian links from the site to the pavement along the north of the Shrewsbury Road, to connect the site to the village facilities.
- 4.7.2. An improved pedestrian link from Shore Lane would be provided. This will provide access to the historic core of the village along Crown Lane and across the brook to connect with Wood Lane. The estate owns sufficient land in this area to provide a safe crossing point for pedestrians to connect across Harley Road to Severn Way and the main village facilities.
- 4.7.3. Further, to reduce reliance on private cars, there is a bus stop situated north of the site, which has an hourly bus service (bus number 436) to Bridgnorth/ Shrewsbury, with this operating at commuter times. As part of the proposal, upgrades are proposed to accommodate safe waiting areas that provide shelter from bad weather.
- 4.7.4. The approach is consistent with national policy for promoting healthy and safe communities and well as promoting sustainable transport.

## **4.8 MULTIFUNCTIONAL GREEN INFRASTRUCTURE**

- 4.8.1. The three paddocks in the historic core of the village (approximately 1.07 ha) between Crown Lane and Wood Lane - currently under-utilised for rough grazing - would be provided for amenity land. The use would be defined through a community engagement exercise. Other successful initiatives include community orchards for village events land for allotments or a village food cooperative for locally produced fruit and vegetables. A Community Orchard in Lustleigh in the South Hams is used a permanent facility for the local preschool which meets within the orchard.
- 4.8.2. The provision of such open space will enhance the vitality of the village in accordance with the aims of national policy. It will increase the provision for the community, providing space that will be able to be utilised for the wellbeing of local people and bring value to the community.

## **4.9 ENHANCING CULTURAL DISTINCTIVENESS**

- 4.9.1. There are several listed buildings within the vicinity of the site including 4 Shrewsbury Road to the west of the site access, a listed barn diagonally opposite the entrance to the north of the Shrewsbury



Road and Shore Cottage to the west of the site. There is also strong local character along the Shrewsbury Road approach into the village with a diverse mix of house types and materiality.

- 4.9.2. The historic records indicate non-statutory sites located around the Shore Lane site, with the remains of the church of St Samson located north of the Shrewsbury Road.
- 4.9.3. The strong historic character within which the Shore Lane site sits is a significant placemaking opportunity. The Raby Estate would ensure that the development would improve the setting of the village's heritage assets and better reveal the character of the village, providing an enhanced setting.

## **4.10 CLIMATE RESILIENCE**

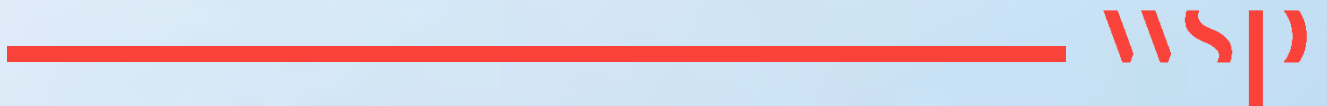
- 4.10.1. Homes would be built to high energy efficient standards with incorporated renewable energy source including air source and ground source heat pumps. Car charging points would also be included within the development.
- 4.10.2. The site is not within a flood zone however sustainable urban drainage systems would be provided within the open space.
- 4.10.3. Measures for water and waste efficiency would also be explored as part of the master planning proposals in collaboration with the community and utility companies.
- 4.10.4. The land use management of the wider Raby Estate includes consideration of carbon offsetting. Part of the design of the Shore Lane development would include exploring the options for offsetting carbon resulting from the development to respond to the Government's legally binding commitment to achieve net-zero greenhouse gas emissions by 2050.
- 4.10.5. Opportunities would be sought to reach towards environmental net gain through integration with land use management across the Raby Estate.
- 4.10.6. This approach is consistent with national policy for meeting the challenge of climate change.

## **4.11 SITE ACCESS AND IMPROVING HIGHWAY SAFETY**

- 4.11.1. As part of the access arrangement for the housing development, Raby Estate would work with the local community to accommodate traffic calming measures to reduce the speed of traffic into Cressage along the Shrewsbury Road.
- 4.11.2. Further, as part of the masterplanning approach for the site off Shore Lane, the Estate would engage with the local highways authority to explore options for improvements to the Shrewsbury Road/ Harley Road/ Sheinton Road junction, subject to an options appraisal and viability assessment.
- 4.11.3. A group of sycamore trees are located along the Shrewsbury Road and are protected by tree preservation orders (TPOs). To accommodate the development, these trees would likely be removed however, as set out above the biodiversity and environmental net gains, the estate is proposing a landscape and ecology management plan. For Cressage, this would include the planting of a number of trees to enhance the character of the village.

# 5

## CRESSAGE HOUSING REQUIREMENTS





## 5 CRESSAGE HOUSING REQUIREMENTS

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### 5.1 HEADLINE MESSAGES

The headline messages in relation to the housing requirements for Cressage are:

- The Government's proposed new Standard Method for calculating housing requirement indicates that the housing need for Shropshire is 729 dwellings higher than that identified in the draft local plan and therefore is justification for the allocation of more sites including additional sites in Cressage;
- Planning policies in the Much Wenlock Place Plan Area have restricted growth and the housing need is acute particularly for those on lower quartile incomes;
- There is an over reliance on windfall development in the draft local plan and in particular in Cressage;
- Allocating Shore Lane for development would provide greater certainty that the housing needs would be met over the local plan period;
- Shropshire's contribution to the meeting the housing needs of the Association of Black Country Authorities should include a proportionate increase in the housing needs for Cressage;
- This chapter of the representations on behalf of the land off Shore Lane should be read in conjunction with the Housing Need Assessment, produced by WSP, which can be found at **Appendix 1** of this document.

### 5.2 INTRODUCTION

- 5.2.1. Draft policy SP2 notes that over the plan period 30,800 dwellings will be delivered at a rate of 1,400 dpa, with 25% (7,000 over the plan period) being affordable homes. The draft policy suggests that development in rural areas will complement growth, with development in these areas directed towards Community Hubs.

### 5.3 HOUSING REQUIREMENT

#### NATIONAL PLANNING POLICY

- 5.3.1. The NPPF seeks to support the Government's objective of boosting the supply of homes (paragraph 59). Therefore, it is important that the
- 5.3.2. In order to promote sustainable development in rural areas, housing should be located where it can enhance the vitality of rural communities (paragraph 78 of the NPPF). Planning policies should identify opportunities for villages to grow and thrive. The allocation of the land off Shore Lane would provide this enhancement of vitality, due to the mix of uses that it could support and therefore the allocation of the site is consistent with national policy.
- 5.3.3. National policy suggests that new homes can be secured through extensions to existing villages and towns, provided they are well located and designed, and supported by the necessary infrastructure and facilities (paragraph 72). Authorities should:
- Consider the opportunities presented by existing or planned investment in infrastructure, the area's economic potential and the scope for net environmental gains;

- Ensure that their size and location will support a sustainable community, with sufficient access to services and employment opportunities within the development itself or in larger towns to which there is good access;
- Set clear expectations for the quality of the development and how this can be maintained (such as by following Garden City principles), and ensure that a variety of homes to meet the needs of different groups in the community will be provided; and
- Make a realistic assessment of the likely rates of delivery, given the lead-in times for large scale sites, and identify opportunities for supporting rapid implementation.

5.3.4. As noted in Appendix 1, the Government intends to introduce a new standard method for calculating housing requirement. This will likely mean that Shropshire will have to provide considerable additional housing to meet new requirements (circa 729 dwellings), when compared to the proposed housing requirement in the draft Local Plan.

5.3.5. A proportion of these dwellings could be directed towards Much Wenlock and Cressage, which has the capacity to take additional housing due to historic undersupply. This could mean that the Shore Lane site is allocated in addition to other appropriate sites in the Regulation 18 pre-submission draft of the local plan.

### **LOCAL PLANNING POLICY**

5.3.6. The settlement hierarchy in draft policy SP2 designates Cressage as a Community Hub. As noted in the Housing Need Assessment (found at Appendix 1) the Raby Estate has inherent issues with the settlement hierarchy proposed in draft Policy SP2, but the inclusion of Cressage as a Community Hub is supported in the current form of the hierarchy, as it removes the village from open countryside classification and means that it can begin to meet the housing needs of the community and Shropshire, as the draft policy states that development will be directed to these areas.

5.3.7. Draft policy S13.2 concerns the two proposed allocations in Cressage listed in the consultation document provide the capacity for 64 dwellings, while the residential guideline for Cressage is 80 dwellings. This therefore leaves a shortfall of 16 dwellings that will come forward via windfall sites. The policy should be amended to remove the existing allocations and allocate land off Shore Lane to ensure that the plan is effective and deliverable over the plan period and meets the tests of soundness.

### **MUCH WENLOCK PLACE PLAN AREA**

5.3.8. Historically, the delivery of housing in the Much Wenlock Place Plan Area has been low when compared to other place plan areas of Shropshire Council. This is due to historically restrictive housing policies in the Much Wenlock Neighbourhood Plan and previous designation of Cressage as open countryside and lack of community clusters in the place plan area.

5.3.9. The council's *Market Signals and Housing Affordability Profile – Part II* indicates that the median household incomes in the Place Plan Area are the highest in the county. The report attributes this to many residents commuting to work in Telford and the West Midlands conurbation, accessing higher paid jobs. If the housing needs are not urgently met the existing population in the lower quartile of household incomes will find that they are repeatedly competing against those moving in to access higher paid employment causing an outmigration.

- 5.3.10. The proposal to recognise Cressage as a Community Hub in the settlement hierarchy is welcomed and supported, as it would allow Cressage to facilitate appropriate growth.
- 5.3.11. The consultation document proposes the allocation of 64 dwellings in Cressage, and states that a total of 80 dwellings will be directed to Cressage, meaning that 16 dwellings will have to be provided via windfall sites. Based on the current settlement boundaries, it is highly unlikely that any such sites could be found to support such a level of windfall development.
- 5.3.12. The proposed development boundary for Cressage in the draft local plan does not allow sufficient land for bringing forward the proposed windfall sites. There is no evidence that any windfall development would be possible within the development boundary for Cressage. This reliance on windfall is contrary to paragraph 70 of the NPPF.
- 5.3.13. Given the historic lack of growth within the Much Wenlock Place Plan Area since the adoption of the Core Strategy and over the previous plan period greater certainty is required in Cressage to ensure delivery of a supply of homes.
- 5.3.14. To ensure the plan is sound policies should ensure the delivery of housing over the plan period. An amendment to the plan is recommended to allocate the Shore Lane site which is of sufficient scale to accommodate the housing needs identified in the local. In this way the plan would be effective in accordance with paragraph 35 of the NPPF .
- 5.3.15. In the plan period, there is likely to be high initial demand for development to meet the unmet demand for housing need of Cressage and the lack of delivery across the place plan area. Development on the site off Shore Lane would be able to alleviate the housing pressures on the area early in the plan period.

### **OVERRELIANCE ON WINDFALLS**

- 5.3.16. The Regulation 18 Pre-submission Local Plan Draft allocates a total of 11,796 dwellings, this therefore leaves 2,551 dwellings to be found on windfall sites over the plan period. Windfall sites are sites that come forward for development unexpectedly, and as such are not allocated in the development plan.
- 5.3.17. The Council considers that it has identified sufficient housing sites to meets its needs throughout the plan period. However, 22% of the housing proposed to be allocated by the consultation document is proposed to be met by windfall sites. This is considered a high proportion.
- 5.3.18. Paragraph 70 of the NPPF suggests that where allowance is made for windfall sites in supply, there should be compelling evidence that the windfalls will provide a reliable source of supply. It states:
- 5.3.19. *'Where an allowance is to be made for windfall sites as part of anticipated supply, there should be compelling evidence that they will provide a reliable source of supply. Any allowance should be realistic having regard to the strategic housing land availability assessment, historic windfall delivery rates and expected future trends.'*
- 5.3.20. In the context of the Planning Practice Guidance (PPG) and National Planning Policy Framework (NPPF), the overreliance on windfalls means that there is a lack of clear evidence that the housing requirement will be met over the short term. While the Council can rely on a proportion of windfalls, to be found sound by an Inspector, the windfall allowance should be in the region of 10-15% of total supply.

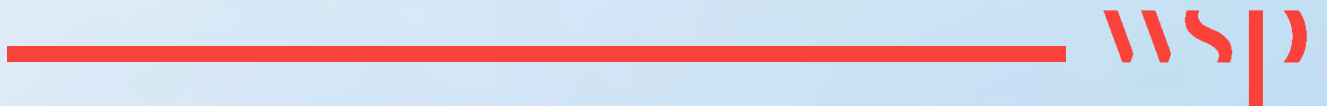
- 5.3.21. Further to the 22% of windfall sites proposed in the Regulation 18: Pre-submission draft of the Local Plan, the SAMDev Local Plan, adopted in 2015, suggests that 35% of the dwellings required over the plan period would come forward as a result of windfall development.
- 5.3.22. Since the adoption of the SAMDev, Shropshire has consistently provided a higher percentage of windfall sites when compared to the levels established in the SAMDev:
- In 2015/16, 83% of all dwellings developed were on windfall sites;
  - In 2016/17, 68% of all dwellings developed were on windfall sites;
  - In 2017/18, 60% of all dwellings developed were on windfall sites; and
  - In 2018/19, 70% of all dwellings developed were on windfall sites.
- 5.3.23. The above therefore suggests that while the SAMDev allocated 35% of dwellings to windfall sites (which is an already high percentage), the reality is that a much higher percentage of dwellings are coming from these sites.
- 5.3.24. It is likely that the ability of windfalls to sustain this level of deliver will diminish over time and such a reliance should not be used as a reason to not allocate sufficient sites it meets the housing needs of the area.
- 5.3.25. With the allocation of the site at Shore Lane, Cressage, the needs of the Place Plan Area can be met as set out in the draft plan, without such a reliance on windfalls and truly adopt a plan-led approach to development in Cressage and the wider County.

### **DUTY TO COOPERATE**

- 5.3.26. An Urban Capacity Study published by the Association of Black Country Authorities (ABCA) in December 2019 identified a shortfall of about 26,920 homes which cannot be accommodated in the region and outlined a need to build houses in neighbouring authorities.
- 5.3.27. Shropshire County Council have agreed to take 1,500 dwellings to help meet need in the Black Country. On 20 July 2020, the Shropshire Council Cabinet agreed to the principle of accepting 1,500 dwellings from the ABCA. It was suggested that these dwellings were to be distributed in accordance with the strategic approach and incorporated into the housing requirement until 2038.
- 5.3.28. This therefore means that the Council should allocate additional sites to reduce the reliance on windfalls and to accommodate a proportion of unmet housing need from the Black Country and the Cressage can contribute towards this.

# 6

## PROPOSED HOUSING SITES IN CRESSAGE



## 6 PROPOSED HOUSING SITES IN CRESSAGE

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### 6.1 INTRODUCTION

6.1.1. The Regulation 18 Pre-submission draft of the Local Plan consultation document identifies two proposed housing sites in Cressage. They are:

- Land off Harley Road (CES005) and
- The Eagles Former Public House (CES006).

6.1.2. The proposed allocations are considered below, each site with its own constraint.

### 6.2 THE EAGLES FORMER PUBLIC HOUSE

6.2.1. The site (allocation ref CES006) is allocated for four dwellings by the end of the plan period. The development of the site would involve the conversion of a designated heritage asset into four dwellings.

#### CONSTRAINTS

6.2.2. The site has significant highways constraints, with concerns regarding the safety of the junction that would need realigning, and the need for a pedestrian footpath, to make any proposal feasible. It would be unlikely that any funding can be provided to address these issues prior to the development of the site.

6.2.3. This is as the site only has capacity for a small number of dwellings and is proposed for the allocation of four, therefore the significant costs of the highways improvements to facilitate the development bring the overall viability of the scheme into doubt.

6.2.4. An application for the redevelopment of the site was refused on 29 January 2018. The proposal comprised the erection of four dwellings and conversion of the public house to form two additional dwellings. This application (LPA ref: 18/00483/FUL) was a scaled down re-submission of a previously refused application (LPA ref: 17/02912/FUL).

6.2.5. The applicant has lodged an appeal against the Council's decision; however, the appeal was dismissed by the Planning Inspectorate.

6.2.6. Application (LPA ref: 18/00483/FUL) was refused for the following reasons:

- The site was not allocated or considered a sustainable location;
- The permanent loss of the Eagles Public House would represent a departure from policy;
- The layout, design and scale of the development fails to respect the prominence and significant landmark heritage asset, its boundaries and the local settlement character.

6.2.7. The latter two reasons for refusal are critical issues, which should be considered when bearing in mind the allocation of the site, and subsequent development that could take place as a result of this.

6.2.8. Policy CS8 (Facilities, Services and Infrastructure Provision) of the adopted Core Strategy and draft policy DP30 of the Regulation 18 Pre-submission draft of the Local Plan suggests that sustainable communities should be created by the retention of existing community infrastructure and local services, such as public houses to ensure the health and well-being of individuals and the

community as a whole. The policies (both draft and adopted) continue and suggest that in rural areas especially, the loss of these valued facilities should be guarded against.

- 6.2.9. The permanent loss of the Eagles Public House is therefore contrary to policy as it would result in the loss of a significant community facility in a proposed Community Hub. Furthermore, given the proposed housing growth in Cressage over the remainder of the plan period, the protection of existing community facilities, such as the Eagles Public House, is critical to ensuring existing and future residents and visitors enjoy a high quality of life and the development of a sustainable Community Hub.
- 6.2.10. Additionally, the development of the site cannot be achieved without significant harm to the significance of the landmark heritage asset (as the Eagle Public House is a Grade II Listed building) or the local character of the area. This therefore means that the proposed allocation is in conflict with policy CS17 of the Core Strategy and draft policy DP24 of the Regulation 18 Pre-submission draft of the Local Plan advocate for the protection and enhancement of heritage assets. Further, development proposed on this site would therefore not pass the tests for harm established in the NPPF.

### **6.3 LAND ADJOINING THE VICARAGE**

- 6.3.1. Allocation ref: CES005 proposes land off Harley Road as a potential site for the delivery of 60 dwellings by the end of the plan period.
- 6.3.2. The site does not meet the needs of the plan. It is constrained in size and cannot deliver the level of housing needed for the settlement (60 homes are identified). It can also not deliver housing along with employment to achieve sustainable development in accordance with national planning policy for a prosperous economy (NPPF paragraphs 83 and 84). It does therefore bring forward housing in a way that would either maintain or enhance the vitality of the rural community (paragraph 79 of the NPPF) and provides no additional opportunities for the village to thrive (NPPF paragraph 78).

#### **CONSTRAINTS**

- 6.3.3. The site has significant highways constraints due to its location off a section of the A458. Where the local community has raised concerns regarding highway safety in the location of the proposed access on the A458 is suboptimal due to the road geometry and the gradient of the road. These constraints will mean that a safe junction will not be able to be created and traffic calming measures will be difficult to implement, meaning that it is unlikely that a safe pedestrian crossing point could be created, potentially leading to an unsafe highway environment. Further question relating to highways safety can be raised, as even if works can be undertaken to improve highways safety, there are concerns if the land required to make such improvements would be available to the applicant.
- 6.3.4. The site is also currently open space with ponds, field trees and hedgerows. The Council's site assessment suggests that these features could offer habitat for protected or priority species, which could require conservation and mitigation, suggesting there will be likely be an environmental impact of development on the site. The site would therefore result in biodiversity losses that would not be offset on site.
- 6.3.5. Additionally, the proposals for the site do not contribute towards to the local objectives that the Parish or County Council hold for area, as it contributes the minimum required in terms of open



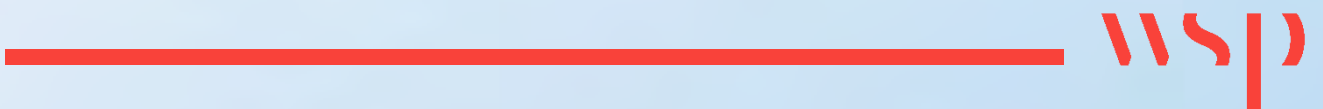
space, provides little for the community in terms of vitality or facilities and provides little for the economy as there is no employment land proposed.

- 6.3.6. The site is promoted by a site promoter with a track record of selling to housebuilders. The site promoters, through their lack of involvement throughout the development and delivery process are unlikely to commit to the same level of high quality and place-making objectives proposed by the Raby Estate.



# 7

## SUMMARY



## 7 SUMMARY

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- 7.1.1. The custodians of the Raby Estate are committed to contributing to the vitality of the community of Cressage and the surrounding area. The Estate is currently in the early stages of developing a Whole Estate Plan that would deliver on its vision for area.
- 7.1.2. For Cressage, the Estate proposes development on the land off Shore Lane. The land is being promoted for 80 dwellings and is envisaged that there is a ratio of 50:50 with regards to build and green space, while promoting veteran trees and creating a strong sense of place, by responding positively to the character of the local area and providing a range of housing, employment and community opportunities.
- 7.1.3. Embracing stewardship principles Raby will control the delivery of the development to ensure a positive legacy is built. This will be done by ensuring that all communal space will be put into a management company taking fees from freehold owners and managed by Raby to ensure the development remains in good condition.
- 7.1.4. When compared to the alternative sites (which are currently proposed in the consultation document), it is clear that these sites cannot provide the community benefits for the residents of Cressage. For example, while the Raby land provides employment and community facilities, the development of the Eagle Public House would represent a loss of such facilities.
- 7.1.5. Further, when compared to the larger site that is proposed for development in the village, the land off Harley Road, the land proposed by Raby off Shore Lane has considerably fewer highways constraints. This is as there are considerable concerns about the safety of the access that would be created in order to make the site accessible, and if the highways improvements required are realistically implementable. The site is also of sufficient size to deliver the housing required nor the employment required to make the housing acceptable.
- 7.1.6. Regardless of the established constraints, when considering the housing need of Shropshire, it is highly likely that could be required to provide significantly more housing, due to the ABCA's unmet need, the overreliance on windfall sites and the proposed changes to the standard method. If this is the case, the land at Shore Lane should be considered for allocation in order to meet the identified increase in requirement, ease the pressure the County to find land and provide much needed housing for Cressage and Shropshire.



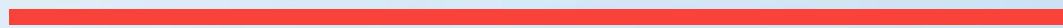
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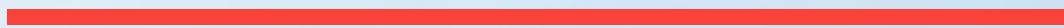
# Appendix 1

## HOUSING NEED ASSESSMENT



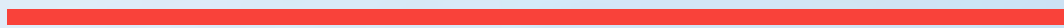
# Appendix 2

## **LAND OFF SHORE LANE MASTERPLAN**



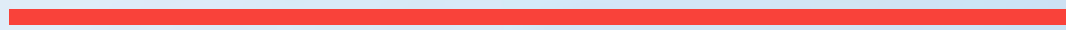
# Appendix 3

## **LAND OFF SHORE LANE ENGAGEMENT DOCUMENT**



# Appendix 4.2.2

## **CRESSAGE MASTERPLAN**





- Key**
- Site boundary
  - Additional land under ownership of Raby Estate
  - Proposed access point
  - Existing PROW
  - Existing route to Cressage village
  - Existing bus stop
  - Proposed residential development
  - Proposed employment development
  - Proposed phase 1 development area
  - Proposed phase 2 development area
  - Proposed phase 3 development area
  - Proposed public open space
  - Proposed community park
  - Retained & enhanced wildlife corridors
  - Retained veteran tree
  - Proposed new pedestrian friendly route between the proposed development and Cressage village



10 Little Lever Street t. +44 (0)161 200 5500 e. info@urbed.coop  
 Manchester M1 1HR w. www.urbed.coop

Scale: 1:2500@A3/1:1250@A1	Date: 09-07-2020	Revision: KW
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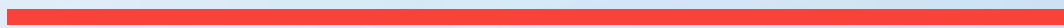
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Drawing Title: <b>Sketch Plan</b>	
Project Title: <b>Promoted land Cressage</b>	
Client: <b>Raby Estate</b>	
Project Number: <b>1145</b>	Issue Status: -
Drawing Number: <b>SK01</b>	Rev: <b>A</b>



# Appendix 4.2.3

## **CRESSAGE COMMUNITY ENGAGEMENT DOCUMENT**



# SHORE LANE, CRESSAGE

## Information Document

RABY

August 2020



# Land at Shore Lane

The Raby Estate is bringing forward plans for a new mixed-use village extension at land at Shore Lane, Cressage. The proposals are being brought forward against the background of Shropshire Council's emerging Local Plan.

The Local Plan process has identified that Cressage is a community hub and is therefore required to deliver approximately 80 new homes and employment space to help meet the County's needs. Against this background, local residents are being asked where they would like these new houses delivered, and who they would like to see them delivered by.

There are three sites currently being promoted, however Raby Estate's site is the only one which includes the delivery of community amenities, including a maintained open space and flexible employment workspaces, in addition to new homes. Furthermore, Raby Estate has extensive and long-lasting relationships within Shropshire having been landowners in the area for centuries. These local roots are something those promoting other sites lack.

This document has been prepared to provide residents and stakeholders with an overview of our plans. It also includes information about how you can share your thoughts about what is proposed, and how to sign up to our forthcoming webinar. More information about this can be found on the back page of this document.

# The Proposals

Our ambitions for land at Shore Lane, Cressage would deliver:

1. **Up to 80 homes in a variety of styles and sizes** delivered with family, elderly living and affordable, energy efficient housing proposed to meet local need;
2. **Flexible attractive employment workspaces** to be integrated within the residential development including small offices, incubator units and co-working spaces with the aim of creating jobs in Cressage and retaining residents;
3. **An area of maintained and landscaped open space** between Shore Lane and Wood Lane for the public which should provide a community orchard / amenity space and connect the integrated development to the present core of Cressage;
4. **A series of traffic calming measures to help enforce the 30mph speed limit** on Shrewsbury Road, for example additional signage and lining with the access delivery. In addition, Raby Estate controls land adjoining the memorial junction and our advisors have explored options to improve the junction if the local authority deemed this offsite improvement necessary then Raby could help to facilitate;
5. **The retention of existing trees and hedgerows** within the site where possible and an area of green open space within the development area. Additionally, whilst access will be taken from the A458 which will require the removal of sycamore trees which are designated TPO; Raby Estate believes this can be mitigated by environmental gain on other parts of the site.
5. **A management company owned and operated by the Raby Estate** to maintain and manage all public space and the street scene during and after the development completes, to ensure the quality of place making would not dissolve over time;
6. **A single point of contact between Raby Estate and the Parish Council**, now and in to the future - this is not a site which will be developed by an anonymous house builder.



# Indicative Masterplan

## Key

-  Site boundary
-  Additional land under ownership of Raby Estate
-  Proposed access point
-  Existing PROW
-  Existing route to Cressage village
-  Existing bus stop
-  Proposed residential development
-  Proposed employment development
-  Proposed phase 1 development area
-  Proposed phase 2 development area
-  Proposed phase 3 development area
-  Proposed public open space
-  Proposed community park
-  Retained & enhanced wildlife corridors
-  Retained veteran tree
-  Proposed new pedestrian friendly route between the proposed development and Cressage village



# What makes our ambitions unique?

Building houses is about more than just bricks and mortar; it's about communities.

Raby Estate's ambitions for this site are to provide a sustainable development which creates not just new homes, but significant benefits for the local community. Our proposals will support the existing fabric of the village by adding new homes, including for young people wishing to stay local, as well as deliver unique flexible working opportunities and green spaces. We want to deliver a settlement for people to live, work, exercise and enjoy.

Our ambitions of delivering more than just homes would help to create a sense of place. The reputation of the Estate is extremely important, and the current custodians of Raby Estate would respect its heritage and leave a positive legacy for any development completed. This is a different offer to that which is being promoted at alternative development locations identified within the village.



This image is of Raby's latest development in County Durham. The development, crafted by award winning architect Ben Pentreath is a unique proposal, designed to respond to its setting; responding to the vernacular is the approach that Raby is committed to following for Cressage.

# FAQs

Raby Estate is committed to engaging with local residents in respect of our proposals for land at Shore Lane. Against this background, we have responded to several Frequently Asked Questions in respect of the plans.

## **What is the Raby Estate and what is its role in the community?**

The Raby Shropshire Estate has been in the custodianship of the Vane family for hundreds of years. The 12th Lord Barnard took over the running of the estate in 2016 and is leading plans for its regeneration. Investment in people and the community is one of the themes of the regeneration of the Estate and this includes a commitment to developing high quality places that enhance communities and add character to villages. The Estate vision is to work with the community to create a shared plan that brings about better places, restored nature and a thriving rural economy.

## **Is Raby Estate bringing forward a planning application now?**

No. This is an initial concept for a development in Cressage to help meet the required need set out in the evolving Shropshire Local Plan Review. The Estate believes strongly in the proposal which is why we have brought it to the attention of the Parish Council, Shropshire Council and local community.

## **Why are you promoting the site now?**

We are promoting this site to seek site allocation within Shropshire Councils Local Plan Review.

## **What does a site allocation mean?**

A site allocation means that a site has been formally identified as a sustainable location for new homes and employment space within the Local Plan process.

## **Hasn't the Council already agreed to deliver an alternative site?**

No. The Council's Local Plan process is ongoing and therefore the conversation around where new homes should be delivered in Cressage is very much still alive. This is why we are bringing forward our proposals at this stage.

Residents and stakeholders, including Cressage, Harley and Sheinton Parish Council have an opportunity to consider the merits each site has to offer in preparing its consultation response to the draft Local Plan in the next two months.

## **Why should this site be allocated over other sites?**

Raby Estate's ambitions deliver a mixed use housing and employment scheme on Raby Estate land within the village. The proposals take a sensitive and considered approach to the challenges around future growth, incorporating first rate design alongside community infrastructure such as a new footpath, green space and allotments. Our proposals are designed with a specific brief to successfully integrate into the village, rather than a bolt-on housing estate, and we would use first-rate designers to achieve this aim.

## **How can I make my voice heard on this subject?**

There are a number of different ways you can provide your thoughts on how new homes should be delivered in Cressage. To find out more about this, please turn overleaf.

# Sharing Your Thoughts

**Thank you for reading this document. We would like to invite you to provide your feedback on our ambitions for Cressage. We have prepared a short survey, on our ambitions, which is available on our website. You can access this survey using the below link.**

<https://www.surveymonkey.co.uk/r/3B527ZZ>

The comments you share with us will help us to understand the thoughts of the local community as we progress our plans for land at Shore Lane. In addition, they will help inform our conversations with local stakeholders such as the Parish Council, councillors and officers at Shropshire Council.

**In addition, we will be holding a public webinar on our proposals on Wednesday 2nd September at 7pm. This meeting will be held via Zoom and will provide an opportunity for local people to meet the development team and ask questions about the proposals.**

To find out more about the webinar, as well as register for the event, please click the link below. A link is also provided on our dedicated Cressage webpage.

[https://us02web.zoom.us/webinar/register/WN\\_Dy1DQhinRqm3qnumhOtQ2g](https://us02web.zoom.us/webinar/register/WN_Dy1DQhinRqm3qnumhOtQ2g)

**You can also provide your thoughts to the Parish Council directly by filling out their questionnaire, which is available at the following link until 9th September:**

<https://www.cressageharleysheinton.co.uk/news/2020/08/15/shropshire-local-plan-review-cressage-community-hub>



# RABY

For more information, please contact:

Tom Birtles  
Raby Estate, Shropshire

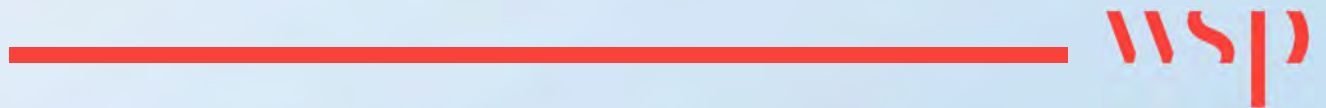
Tel: 01952 740 223

Email: [tom.birtles@raby.co.uk](mailto:tom.birtles@raby.co.uk)

Raby Estate Office, Uppington, Telford, TF6 5HN

# Appendix 4.3.1

## **OFFICER CORRESPONDENCE – DEVELOPMENT PARAMETERS AND BENEFITS**





Ref. 62262071  
Date: May 2020  
Subject: Information to supplement local plan representation in respect of Land West of Shore Lane, Cressage, Shropshire

## Introduction

This briefing note provides supplementary information in support of an allocation of land for mixed use development at the 4.6 hectare site known as Land west of Shore Lane, Cressage. It provides the development parameters and provides an updated planning case following technical assessments setting out the economic, social and environmental benefits arising from of proposed site.

This briefing note should be read alongside representation made to the Local Plan Review of January 2019.

## Development Parameters and Delivery

The site is 4.6 hectares and would be developed in phases along with offsite community infrastructure and highway safety improvements:

### Development Parameters

Description	Latest proposed completion date
30 dwellings (family housing with affordable and homes for elderly to meet identified local need)	2024
25 dwellings (family housing with affordable and homes for elderly to meet identified local need)	2030
25 dwellings (family housing with affordable and homes for elderly to meet identified local need)	2036
500sqm employment space (incubator, maker spaces, studio, co-working, managed workspace)	2030
Community Orchard – Public Open Space	2024
Traffic Calming to help enforce 30mph speed limit	2024
Pedestrian Safety Improvements and cross-village pedestrian links	2024

Buildings would be built to high energy efficiency standards with incorporated renewable energy sources including air source and ground source heat pumps. Car charging points would be included within the development.



## Delivery

The Raby Estate is committed to promoting and developing land on stewardship basis, focusing on the long-term investment required to deliver high quality, sustainable and socially beneficial places. To meet this commitment the Estate delivers its own development projects through partnerships with main contractors and employing highly experienced and award-winning designers.

Examples of the Raby Estate's delivery of sites include a master-planned development in Gainford and Staindrop being delivered with the Brookhouse Group<sup>1</sup>. <https://www.raby.co.uk/about-us/development/>

The dwellings would be available for sale. A management company administered by the Raby Estate and funded through a management agreement with freeholders would manage community space and the street scene to ensure a high-quality development.

The commercial space would be managed to help meet objectives set out in Shropshire Councils Economic Growth Strategy. Examples of this may include 80% of the space being occupied by private SME businesses and 20% would be occupied for use by new start up entrepreneurs living on or around the estate.

## **Constraints and Opportunities**

### **Transport Strategy**

The Raby Estate appointed Mode Transport Planning to review access options and consider the opportunities for pedestrian safety improvements and connections. Mode's findings are attached to this note – *Cressage, Shropshire – Transport and Highway Strategy* (March 2020) (Annex 1)

### Access Strategy

Mode sets out the Proposed Access Strategy at Section 5 of the report. Mode proposes that vehicles access to the site would be best provided off the A458 Shrewsbury Road, on the northern boundary of the site. Drawing JS-32-4463-PS-001 of the report shows the access arrangement.

The Raby Estate controls enough land on each side of the road at the access location proposed to secure the visibility splays.

---

<sup>1</sup> See <https://www.raby.co.uk/about-us/development/>



### Traffic calming

Traffic calming measures to help enforce the 30mph speed limit such as additional signage and lining would be provided with the access delivery.

### Pedestrian Improvements

A new connection from the site via land owned by Raby Estate is proposed to connect the western part of the village to amenities without using the footway along the A458. The connection will allow all abilities to use this newly proposed connection route. This is proposed alongside a Community Orchard.

### Off-Site Highway Improvements

The Raby Estate controls land adjoining the memorial junction. Mode has explored options to improve the junction if the local authority deemed this off-site improvement necessary then Raby could help to facilitate.

## **Landscape Strategy**

### Baseline Tree Survey

A baseline tree survey of the site was carried out by FLAC (Annex 2) and trees were assessed according to the recommendations of BS5837:2012. The baseline survey found that there were five trees of high quality, 41 of moderate quality and 54 of low quality.

Two trees qualify for veteran status within the NPPF definition and one tree qualifies for ancient status. One tree is identified for removal due to decay and collapse.

### Site access

Four trees along the northern boundary of the site would need to be removed to secure the proposed access arrangement. Two of the trees along the roadside are high quality and two are moderate quality. All four are subject to tree preservation orders and therefore their removal would be sought as part of a fully masterplanned scheme with associated compensation and enhancement.

### Veteran and Ancient Tree Strategy

The veteran and ancient trees would be managed through the management company administered by the Raby Estate and no development (including any private gardens) would be proposed within the root protection areas of the trees.



### Public Space and landscaping

The development would be brought forward with a landscape strategy which would include 50:50 built to green space with biodiversity net gain. A community orchard - identified in pink on Drawing no 29900001/1 attached to the representation of January 2019 – would be provided for community amenity land and will be a space for village events and functions as well as general amenity space.

The public open space would be managed by a management company administered by the Raby Estate and funded through management agreements with freeholders.

### **Planning Balance and Benefits**

The development would include the loss of trees protected by tree preservation orders and agricultural land. Against this is weighed the following economic, social and environment benefits

#### **Economic benefits**

The proposed development would deliver local economic benefits during construction and on an on-going basis through the provision of 5000 sq ft / 495 sq m of new business space. It is expected that this would be a mix of small business workspaces (incubator, maker spaces, studio, co-working, managed workspace) and would create around 30 new direct FTE jobs on site. A link between the businesses and surrounding land use would be created with the retention of a proportion of the units for businesses whose enterprises helped evolve the local economic growth policies.

#### **Design**

Working with renowned architects such as Ben Pentreath, the Raby Estate is committed to new development of all types being high-quality places that reflect, and integrate with, existing communities. The Estate has applied this approach with master planned new housing schemes at Gainford and Staindrop where new housing was carefully designed to integrate into the landscape and existing communities. At Cressage all new homes would adopt the same key design high quality design principles and in addition would be built to be sustainable, with high energy efficiency standard, with renewable energy sources utilised for power and heating such as ground or air source heat pumps. Provision of electric vehicle infrastructure would also be provided.

#### **Social benefits**

The proposed development would provide new dwellings across a range of sizes, types and tenures helping Shropshire achieve objectives in their local development plan and draft housing strategy. The proposed development would



provide 80 new dwellings and an appropriate proportion would be affordable homes and homes for retirees to meet local demand.

Some social infrastructure in Cressage is struggling to remain viable (including the Eagles Public House). The additional people living and working in the community would assist with the viability of all social infrastructure in the village: school, shops, public house etc.

### **Highway Improvements**

Transport planners and highway engineers have started to consider options for improvements to the 'War Memorial Junction' (Shrewsbury Road / Harley Road / Sheinton Road / Station Road junction). In collaboration with the local highway authority, the Raby Estate can explore possible options for the delivery of highway improvements as it owns land surrounding the junction, this could be delivered as part of the second phase of the development.

Traffic calming measures to reduce speed of traffic on Shrewsbury Road as it enters Cressage, would be included as part of the creation of a new access point onto Shrewsbury Road.

An improved, car free pedestrian link from Shore Lane would be provided through the historic core of village along Crown Lane and across the brook to connect with Wood Lane. This would be designed to allow access to all abilities.

### **Trees**

Existing veteran and ancient trees within the proposed development site at Shore Lane would be retained and incorporated into the streetscene to help create high quality environment and sense of place.

The trees that would have to be removed to achieve the access junction would be valued in terms of amenity value and biodiversity value. The loss of amenity and biodiversity value would be significantly compensated for through a landscape strategy that delivers community space and biodiversity benefits.

### **Public Open Space**

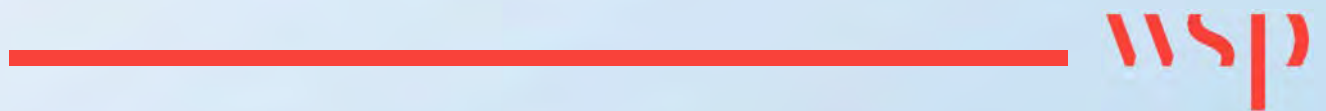
Orchard and public open space would be provided for community use (1.6Ha). The public open space provision directly addresses the priorities identified in the Cressage, Shelton and Harley Parish Council Place Plan.

### **Conclusion**

The proposed development site offers the opportunity for a holistic development that delivers a wide range of community benefits alongside a scheme with a strong sense of place and high-quality built environment designed and delivered by the Raby Estate's experienced development team.

# Appendix 4.3.2

## **OFFICER CORRESPONDENCE – TRANSPORT AND HIGHWAYS STRATEGY**







Raby Estates

# Cressage, Shropshire

## Transport and Highways Strategy

May 2020



Raby Estates

# Cressage, Shropshire

## Transport and Highways Strategy

**OFFICE ADDRESS:**

106 Albert Mill  
10 Hulme Hall Road  
Manchester  
M15 4LY

**PROJECT NO:**

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May 2020

REPORT NO.	PREPARED:	DATE ISSUE:	STATUS:	CHECKED:	AUTHORISED:
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Version 3	05/05/2020	ME	Updated final version for submission

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Raby Estates

## Cressage, Shropshire

Transport and Highways Strategy



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- APPENDIX C – NETWORK DIAGRAMS
- APPENDIX D – PICADY OUTPUT REPORT

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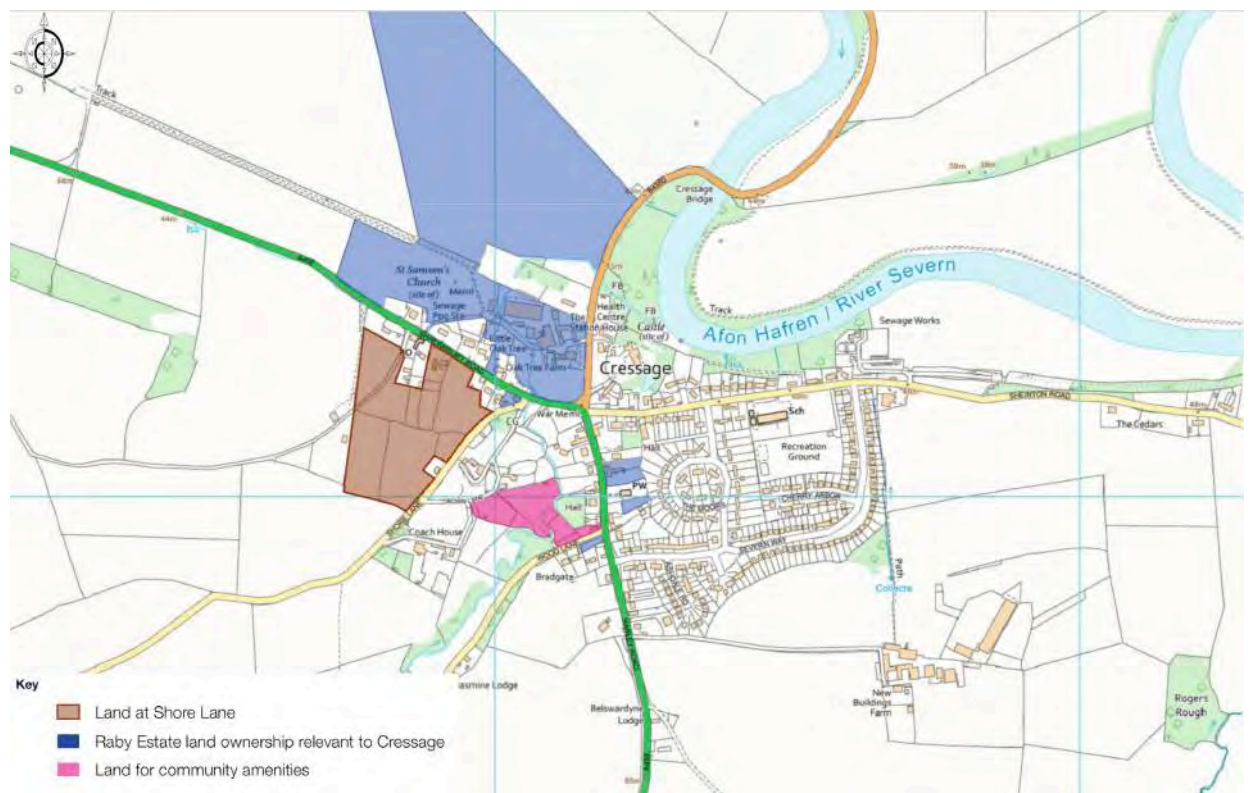
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# 1 Introduction

## 1.1 Background

1.1.1 Mode Transport Planning ('Mode') have been appointed by Raby Estates to provide transport planning and highway advice in relation at a parcel of land, west of Shore Lane, Cressage. The extent of Raby Estates' land ownership in Cressage is shown in [Figure 1.1](#).

**Figure 1.1: Raby Estate Land Ownership**



1.1.2 Raby Estate controls significant land within Cressage along the main route into the village from Shrewsbury and in the historic core of the village between the Eagle Pub (once a public house) and Wood Lane.

1.1.3 As part of this vision document Raby Estate puts forward proposals for making improvements to the village that will deliver on the local aspirations:

- Supporting and sustain village services;
- Positive effects on the character of the village;
- Calming influence on traffic flows along the A458; and
- High quality, affordable housing across a range of tenures;

## 1.2 Report Structure

1.2.1 Following this introduction, the Transport and Highways Strategy has been structured as follows:

- **Chapter 2** sets out the relevant national and local transport policy and guidance context;
- **Chapter 3** describes the site location, local highway network and road safety data;
- **Chapter 4** describes accessibility by non-car modes, including public transport, cycle and on foot;
- **Chapter 5** outlines the development proposals, vehicular access and off-site highways improvements;
- **Chapter 6** details the expected trip generation, distribution and traffic impact assessment;
- **Chapter 7** summarises and concludes the findings of the report.

## 2 Policy Considerations

### 2.1 Introduction

2.1.1 This chapter of the report considers key current national and local transport policy as they relate to the development proposals. The following relevant documents have been reviewed:

- National Planning Policy Framework (2019); and
- Shropshire Local Transport Plan (Provisional LTP Strategy 2011-2026).

### 2.2 National Transport Planning Policy

#### National Planning Policy Framework

2.2.1 The revised National Planning Policy Framework (NPPF) was published on 19 February 2019 and sets out the government's planning policies for England and how these should be applied. It provides a framework within which locally prepared plans for development can be produced. The revised NPPF replaces the previous NPPF published in July 2018.

2.2.2 Paragraph 2 of the NPPF states *"Planning law requires that application for planning permission be determined in accordance with the development plan, unless material considerations indicate otherwise. The National Planning Policy Framework must be taken into account in preparing the development plan and is a material consideration in planning decisions."*

2.2.3 Paragraph 7 of the NPPF states *"The purpose of the planning system is to contribute to the achievement of sustainable development."*

2.2.4 Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives), as detailed in paragraph 8 of the NPPF:

- "an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;
- social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations... and support communities' health, social and cultural well-being; and
- an environmental objective – to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land... and mitigating and adapting to climate change, including moving to a low carbon economy."

2.2.5 Chapter 9 of the NPPF relates to promoting sustainable transport.

2.2.6 Transport issues should be considered from the earliest stages of plan-making and development proposals, so that (see paragraph 102):

- "the potential impacts of development on transport networks can be addressed;

- opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;
- opportunities to promote walking, cycling and public transport use are identified and pursued;
- the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and
- patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places”.

2.2.7 In paragraph 108, the NPPF confirms that in assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

- “appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;
- safe and suitable access to the site can be achieved for all users; and
- any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree”.

2.2.8 Finally, and importantly, paragraph 109 states: *“Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.”*

2.2.9 Within this context, applications for development should (see paragraph 110):

- “give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;
- Address the needs of people with disabilities and reduced mobility in relation to all modes of transport;
- Create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
- Allow for the efficient delivery of goods, and access by service and emergency vehicles; and
- Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.”

Shropshire Local Transport Plan (Provision LTP Strategy 2011-2026)

2.2.10 The Local Transport Plan (LTP) for Shropshire sets out how Shropshire Council and its partners intend to maintain, manage and improve transport provision in the county over the period of 2011-2026.

2.2.11 The core policies relevant to the proposed developed are as follows:

2.2.12 Policy E6: Capacity improvement and new roads states *“Where demand and network management measures have been proven to be insufficient to deal with network problems, we will make best use of our existing roads by increasing capacity before any consideration of building new roads”*. The development will investigate the potential for road improvements in the Village of Cressage.



2.2.13 Policy E11: Location and design of new development specifies that new developments would be located, designed and served by transport in ways that enhances accessibility and reduce car dependency. Policy E11 would be achieved through the following:

- “The objectives, policies and proposals of the Local Development Framework documents including the Core Strategy, Site Allocations and Management of Development DPD and supporting documents including the LDF Implementation Plan and localised Place Plans; and through the implementation of policies and proposals through the Development Management process;
- The identification of new land for development in appropriate and sustainable locations and through the careful planning, design and servicing of new development;
- Requirements for transport assessments and the development of travel plans for significant new developments;
- Producing design guidance to promote best practice in the layout and design of new developments; and
- Requiring promoters of new developments to either provide or financially contribute to the provision of necessary transport infrastructure and services, through site specific agreements or payment of a community infrastructure levy”.

2.2.14 Policy C5: Encouraging more sustainable travel choices states: *“We will use promotional techniques to proactively encourage more sustainable travel habits These will include:*

- Leading by example through the implementation of the Shropshire Council travel plan, with a focus on reducing unnecessary business mileage, reducing the carbon impact of essential business journeys and encouraging and rewarding more sustainable commuting practices;
- Supporting and promoting technologies, initiatives and services which reduce the need to travel e.g. tele-conferencing, homeworking, local and remote provision of services;
- Working with schools and colleges to assist them in implementing and reviewing their School Travel Plans;
- Assisting more workplaces to develop effective travel plans and where appropriate parking policies that encourage sustainable travel;
- Requiring effective travel plans for all significant new development;
- Utilising Personalised Travel Planning techniques to encourage behavioural change in a designated community; this technique will be targeted at people experiencing a period of lifestyle change or linked physical service improvements;
- Promoting and encouraging the development of local Car Clubs;
- Promoting and facilitating car sharing; and
- Undertaking event focused and longer-term travel awareness campaigns”.

2.2.15 With regards to Policy E11 and C5, the proposed development will review the existing sustainable transport of the local area and find areas for potential improvements, as well as improvement the pedestrian environment to promote local journeys by foot.

2.2.16 Policies A9 and A10 support the improvement of cycle infrastructure and encourage cycling as a sustainable mode of transport.

*“We will improve conditions for cycling in ways which will encourage more people to choose to cycle for local journeys. This will be achieved by:*

- Provision of cycle tracks, cycle lanes, junction improvements, toucan crossings and other route enhancements as appropriate to provide safe, convenient and continuous routes for cyclists;
- Working with partners to provide appropriately designed and positioned cycle parking at key destinations including shops, leisure facilities, employment locations, educational establishments, health facilities and public transport interchanges;
- Provision of appropriate storage for cycles in all new residential business and retail developments....
- Ready availability of good information on cycle routes and facilities in the area, including areas maps, online planning tools and on street signage”.

2.2.17 Policies A11 and A12 support and encourage walking as a mode of sustainable transport and is expected to be achieved through the following:

*“This will be achieved by:*

- Prioritising provision of new pavements or footpaths where there is no current provision, a significant demand to walk and where speed limits can't be reduced to 20mph.
- Involving local communities in reviewing existing pedestrian provision, identifying missing links and physical and psychological barriers e.g. poor lighting, narrow points, lack of road crossings; and make improvements on a prioritised basis
- Taking opportunities to provide and upgrade crossing points to give pedestrians' greater priority and convenience, including minimising waiting times and avoiding staggers and indirect routes
- Reviewing and improving maintenance arrangements for footways...
- Encouraging leisure and utility walking through promotion of good quality local routes, providing an indication walking times”.

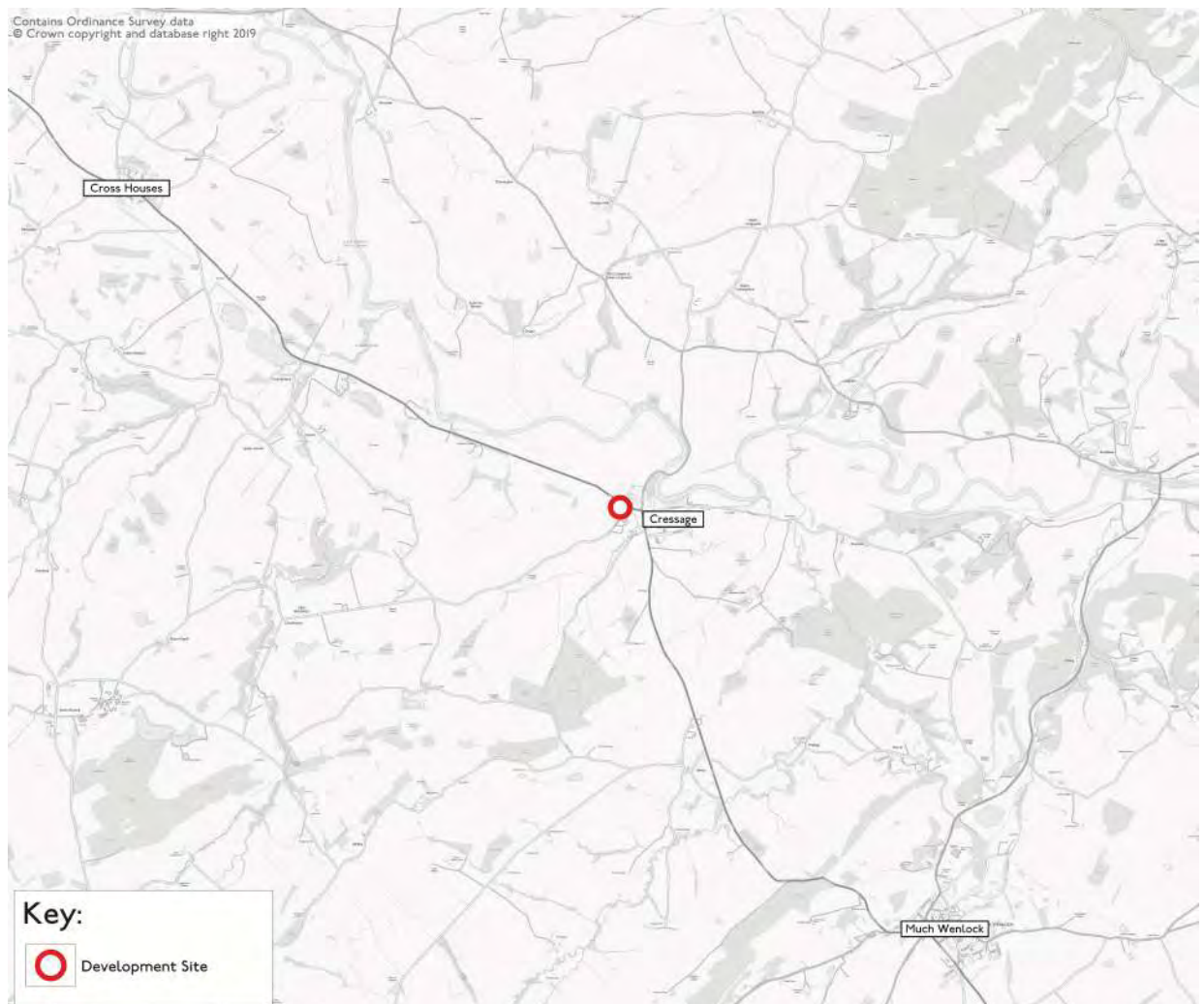
2.2.18 The policy review has shown that the proposed development would support in achieving policies at both a national and local level.

## 3 Existing conditions

### 3.1 Site Location

- 3.1.1 The parcel of land is located south of the A458 Shrewsbury Road in Cressage, Shropshire; located approximately 0.15 miles from Cressage Village Centre and approximately 9 miles from Shrewsbury Town Centre, as shown in [Figure 3.1](#).

Figure 3.1: Site Location

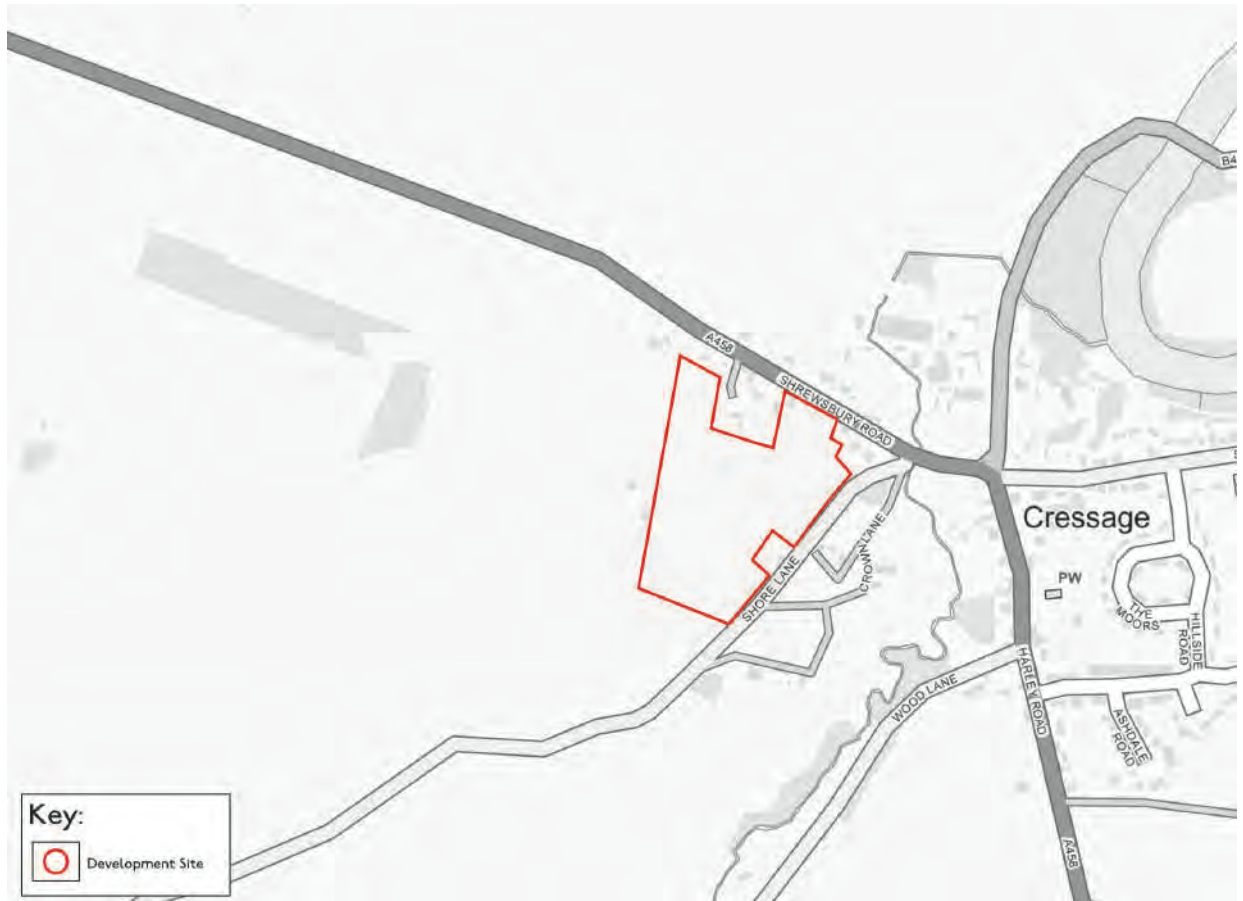


- 3.1.2 The existing site is irregular in shape and the majority of the site consists of unoccupied green land, with a residential property owned by Raby Estates currently located within the site boundary.
- 3.1.3 The site is bounded by Shore Lane to the east, agricultural land to the south and west, residential dwellings to the northwest and the A458 Shrewsbury Road to the northeast.

## 3.2 Local Highway Network

3.2.1 The location of the development site in the context of the local highway network, and the approximate redline boundary, is shown in [Figure 3.2](#).

**Figure 3.2: Local Road Network and Redline Boundary**



A458 Shrewsbury Road

- 3.2.2 The A458 Shrewsbury Road, which forms the northern boundary of the site is a single carriageway road, with one lane provided in each direction.
- 3.2.3 The A458 commences at a four-arm compact roundabout with the B4380 Oteley Road and Wenlock Road south of Shrewsbury Town Centre. From the four-arm roundabout the road travels in a southeast direction, and national speed limit roundels on either side Shrewsbury Road indicate a speed limit of 60mph.
- 3.2.4 Approximately 120m west of the site the speed limit is reduced to 30mph confirmed via 30mph speed roundels and white road markings. The 30mph speed limit continues through Cressage village until it increases to 40mph, approximately 130m south of Severn Way. The A458 then continues to travel in a southeast direction towards Bridgnorth.
- 3.2.5 To the north of the site, the A458 provides access to a number of residential dwellings, where access is taken directly from the carriageway. At this location a footpath with a width of approximately 1.4m is

provided along the northern side of the A458 Shrewsbury Road which continues into Cressage Centre. No footpath is provided on the southern side of the carriageway.

- 3.2.6 South of the A458 carriageway, on the north edge of the site, three mature trees are located within the hedgerow.
- 3.2.7 The extent of the A458 Shrewsbury Road carriageway and the footpath adjacent to the northern boundary of the site is shown in [Photograph 3.1](#).

**Photograph 3.1: A458 Shrewsbury Road adjacent to Site**



Shore Lane

- 3.2.8 Shore Lane is an unclassified road which creates the eastern boundary of the site and runs in a southwest direction. A road width of approximately 4.5m wide is provided. Due to this width vehicles travelling on the unclassified road are unable to pass simultaneously; however, passing points are available along the route.
- 3.2.9 Shore Lane connects with the A458 Shrewsbury Road at a priority junction to the east of the site. Shore Lane provides access to Crown Lane (an unclassified road) at a priority junction approximately 15m back from the priority junction with the A458 Shrewsbury Road. On the approach to the junctions, Shore Lane benefits from an increase road width to approximately 10m allowing vehicles to pass simultaneously.
- 3.2.10 The extent of Shore Lane and the A458 Shrewsbury Road/Shore Lane priority junction are shown in [Photograph 3.2](#) and [Photograph 3.3](#).

Photograph 3.2: Shore Lane Southbound



Photograph 3.3: The A458 Shrewsbury Road/Shore Lane Priority Junction



3.2.11 As observed in [Photograph 3.2](#), Shore Lane is a country lane and does not benefit from pedestrian footpaths or street lighting.

#### A458 Shrewsbury Road/B4380/Sheinton Road Priority Junction

- 3.2.12 The A458 Shrewsbury Road/B4380/Sheinton Road is a priority junction located in the centre of the village of Cressage, approximately 200m east of the site. The junction is a triangular shape with a war memorial and bench located on an island in the centre of the junction.
- 3.2.13 Pedestrian footpaths are provided on the northern side of the A458 Shrewsbury Road, the western side of the B4380 and the northern side of Sheinton Road. The junction does not benefit from pedestrian crossing facilities, with inadequate pedestrian access to the war memorial located in the centre of the junction. A slight drop kerb is provided but no tactile paving in accordance with relevant standards.
- 3.2.14 The A458 Shrewsbury Road creates the major arm of the junction, while the B4380 and Sheinton Road create the minor arms. The junction is shown in [Figure 3.3](#).

**Figure 3.3: A458 Shrewsbury Road/B4380/Sheinton Road Priority Junction (Source Google Earth)**



#### Sheinton Road

- 3.2.15 Sheinton Road is located east of the site and accessed via the A458 Shrewsbury Road at the A458 Shrewsbury Road/B4380/Sheinton Road priority junction. Sheinton Road provides access into a residential area of Cressage and provides the only vehicular access to Christ Church C of E primary School, before continuing in an eastbound direction to provide access into the village on Steinton.
- 3.2.16 Sheinton Road has a road width of approximately 5.2m; however, the road width is narrowed at various locations due to residential on-street parking, resulting in vehicles unable to pass simultaneously. Parking restrictions are applied adjacent to the primary school through the use of yellow zig zag road markings. The speed limit of Sheinton Road is also reduced to 20mph in vicinity of the primary for safety purposes.

3.2.17 From the A458 Shrewsbury Road/ Sheinton Road priority junction, Sheinton Road has a footpath width of approximately 1.5m located on the northern side of the carriageway which terminates 80m from the junction. A footpath on the southern side of the Sheinton Road carriageway commences approximately 30m back from the A458 Shrewsbury Road/B4380/Sheinton Road priority junction and then continues passed the primary school before terminating after Cressage Medical Centre.

3.2.18 Sheinton Road has limited street lighting provided.

### 3.3 Road Safety

3.3.1 Collision data in vicinity of the site has been obtained from the CrashMap database ([crashmap.co.uk](http://crashmap.co.uk)) for the most recent available five-year period between 2014 and 2018. The study area includes the A458 Shrewsbury Road, Shore Lane, B4380 and Sheinton Road.

3.3.2 Figure 3.4 shows the extent of the study area, while Table 3.1 provides a detailed breakdown of the Personal Injury Collisions (PIC) recorded.

Figure 3.4: Road Safety Data (Source: [crashmap.co.uk](http://crashmap.co.uk))

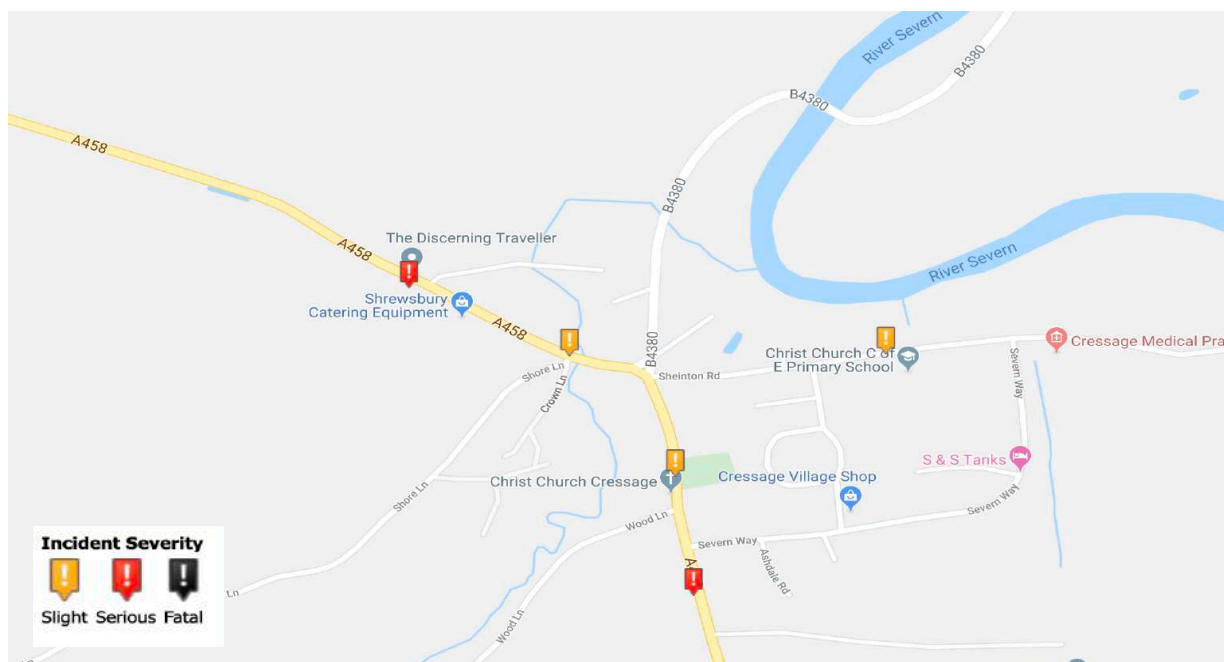


Table 3.1: Detailed Road safety Data

Year	Location	Severity	Vehicles Involved
2014	A458 Shrewsbury Road	Serious	3
2014	A458 Shrewsbury Road	Serious	2
2016	A458 Shrewsbury Road	Slight	2
2017	A458 Shrewsbury Road	Slight	3
2018	Sheinton Road	Slight	2



- 3.3.3 The data in [Table 3.1](#) shows a total of five PICs have been recorded in vicinity of the site, of which four have been recorded on the A458 Shrewsbury Road and one has been recorded on Sheinton Road.
- 3.3.4 The PIC data shows that two slight and two serious injury collisions have been recorded on the A458 Shrewsbury Road in the most recent available five-year period of 2014 to 2018. The slight injury collisions involved a car and one young car driver, while the serious injury collisions involved a motorcyclist and a car vehicle type collision.
- 3.3.5 The PIC recorded on Sheinton Road involved a collision between a child pedal cyclist and a car, which occurred in 2018.
- 3.3.6 In conclusion, although there have been five collisions recorded within the area of interest, the collision data does not indicate any inherent road safety issues with the existing layout of the roads and junctions.
- 3.3.7 Analysis of the PIC data demonstrates that there are no significant collision clusters within the proximity of the site. Based on the frequency of collisions recorded, there is no evidence to suggest that the highway layout, design or condition are significant factors in PIC records on the local highway network.

### 3.4 Public Right of Way

- 3.4.1 A review of the Public Rights of Way (PROW) for the local authority area of Shropshire Council shows that there are no PROWs located within the site boundary.

### 3.5 Local Planning Applications

- 3.5.1 A review of Shropshire Council Planning Portal has been complete for the village of Cressage to identify recent or future developments within the area. The following planning applications have been identified;
- The Eagles Inn (Planning reference number: 19/03059/FUL APPROVED)
    - Demolition of closed public house and clearance of the site.
  - The Eagles Inn (Planning reference number: 18/00483/FUL REFUSED)
    - Erection of four dwellings and conversion of existing former Public house to form two additional dwellings, with associated parking and landscape.)
  - The Eagles Inn (Planning reference number: 17/02912/FUL REFUSED)
    - Erection of eight dwellings and conversion of existing former Public house to form two additional dwellings, with associated parking and landscape.)
  - Land south of Christ Church (Planning reference number: 16/04489/FUL APPROVED)
    - Erection of five dwellings, formative of vehicular access, car parking and associated amenity space together with an element of communal parking for Christ Church.

## 4 Sustainable Accessibility Assessment

### 4.1 Introduction

4.1.1 Current national and local policy on transportation states that new developments should promote more sustainable transport choices for people. Investigation into existing forms of transport in relation to the proposed site can provide important insights into the possible travel patterns in the area. This forms part of a long-term strategy to reduce the reliance on private car trips.

### 4.2 Pedestrian Accessibility

4.2.1 It is widely recognised that walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly under two kilometres.

4.2.2 Guideline walking distances provided in the Chartered Institution of Highways and Transportation (CIHT) document '*Guidelines for Providing for Journeys on Foot (2000)*' are shown in [Table 4.1](#).

**Table 4.1: CIHT Guideline Acceptable Walking Distances**

Criteria	Town Centre	Commuting	Elsewhere
Desirable	200m	500m	400m
Acceptable	400m	1,000m	800m
Preferred Maximum	800m	2,000m	1,200m

4.2.3 The CIHT guidelines shown in [Table 4.1](#) suggest that for 'Commuting' up to 500m is a desirable walking distance, up to 1,000m is considered an acceptable walking distance and 2,000m is the preferred maximum walking distance.

4.2.4 Appropriate walking distances are dependent upon the location of the specific development; more remote locations would see people being prepared to walk further to their end destination. Similarly, appropriate walking distances are also dependent upon the standard of existing pedestrian infrastructure provision, with further walking distances achievable in locations with extensive and high-quality pedestrian footways, crossings and pedestrianised areas.

4.2.5 A description of the pedestrian infrastructure in vicinity of the site is found in [Section 3.2](#); however, an illustration showing the pedestrian footway provision on the A458 Shrewsbury Road, B4380 and Sheinton Road is shown in [Figure 4.1](#).

Figure 4.1: Local Footway Provision (source Google Earth)



4.2.6 Due to the rural location of the site in Cressage pedestrian infrastructure is limited at points and it should be noted that some of the footpaths identified within [Figure 4.1](#) have widths of 1.5m or less.

### 4.3 Public Right of Way

4.3.1 A review of the Public Rights of Way (PROW) for the local authority area of Shropshire Council show that there are no PROWs located within the site boundary.

4.3.2 There are four PROWs within the village of Cressage. The extent of the PROWs is shown in [Figure 4.2](#).

Figure 4.2: Public Right of Ways Surrounding the Site (Source: Shropshire Great Outdoors)



- 4.3.3 As seen in Figure 4.2, there are three PROWs in vicinity of the site which have the potential to be utilised by the site. One PROW commences on Shore Lane (southeast of the site) and provides access onto Wood Lane. The other two PROWs commence on Crown Lane (east of the site), providing access onto A458 Harley Road and Wood Lane.
- 4.3.4 Table 4.2 provides an indication of the distances and approximate walking times to local bus stops and other local amenities. The distances have been measured from the centre of the site, and the times are based on an average walking speed of 1.4 metres per second and do not allow for waiting time to cross junctions.

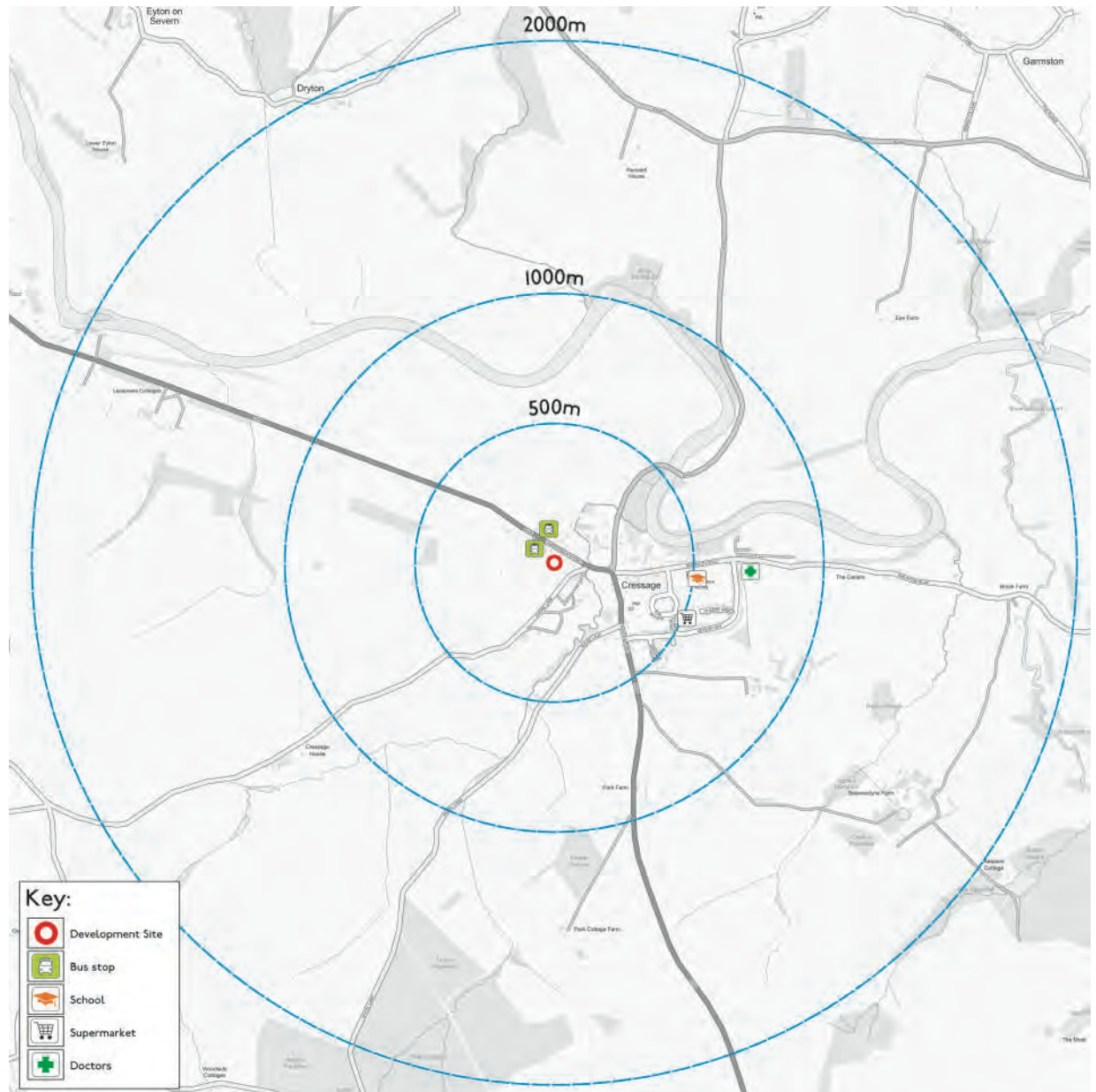
Table 4.2: Distance and walking Times

Amenity	Distance	Walking Time
Bus Stop on A458 Shrewsbury Road (WB)	80m	1 minute
Bus Stop on A458 Shrewsbury Road (EB)	80m	1 minute
Christ Church C of E Primary School	550m	7 minutes
Cressage Village Shop	700m	8 minutes
Cressage Medical Centre	800m	10 minutes

4.3.5 As summarised in Table 4.2, there are two bus stops within 100m of the site which serve the 436-bus service. Other amenities such as the local primary school, medical centre and village shop are all located within 800m (a 10-minute walking distance) and are therefore within CHIT Guidelines for Providing for Journeys on Foot (2000)' acceptable walking distance.

4.3.6 The local amenities and walking catchments are shown in Figure 4.3.

Figure 4.3: Local Amenities

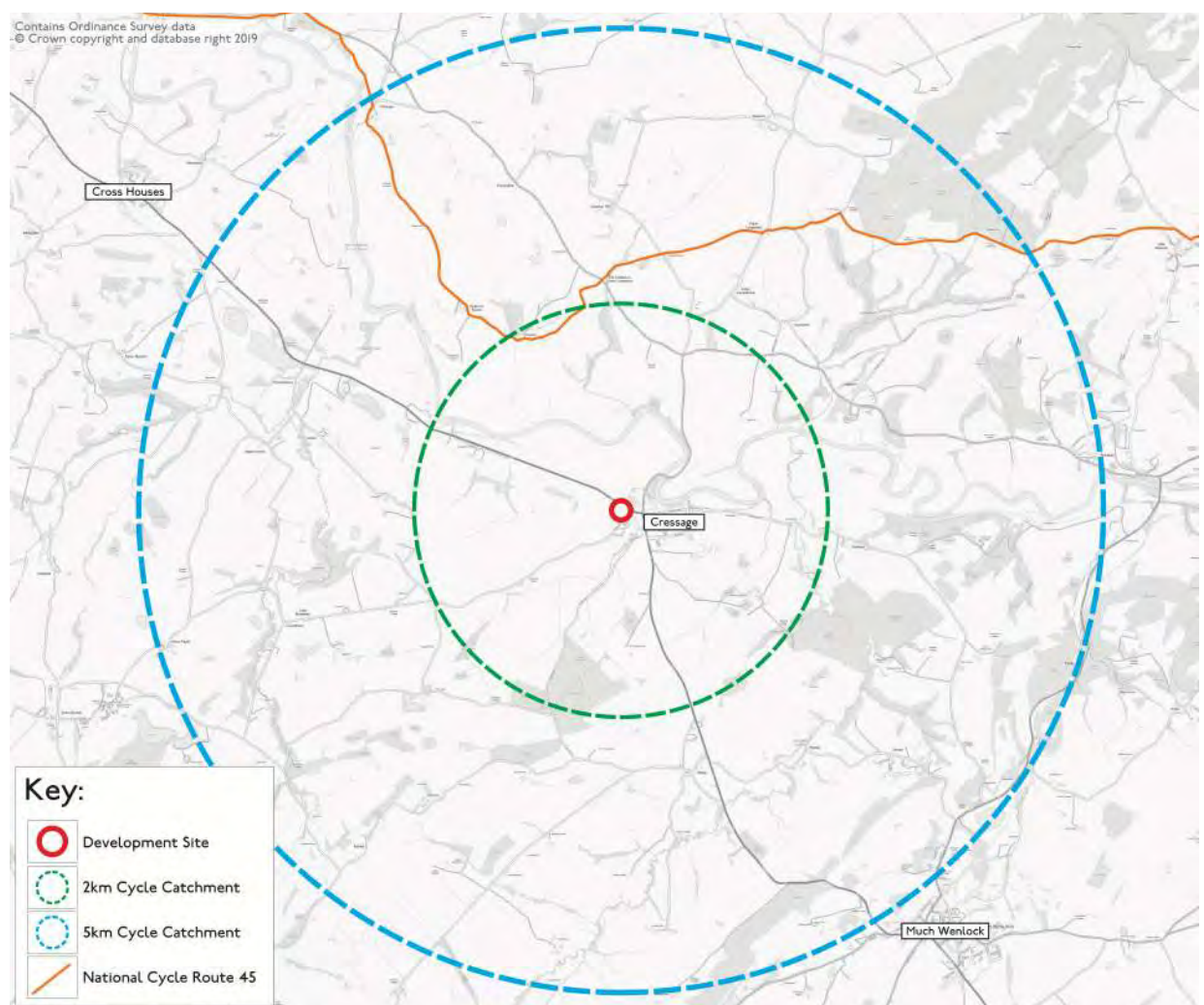


4.3.7 In summary, it has been demonstrated that the site is well-placed in terms of pedestrian connectivity, with walking representing a realistic alternative to car trips. Based on the site's location, proximity to local bus service and connectivity to local footways, walking can be considered to be a realistic method of travel for commuting trips, particularly as an alternative to private car trips.

## 4.4 Cycle Accessibility

- 4.4.1 It is generally accepted that cycling has the potential to replace short car journeys, particularly those under 5km. “Local Transport Note 2/08: Cycling Infrastructure Design”, published by DfT, states that many utility cycle trips are less than three miles (approximately five kilometres), but for commuter journeys a distance of over five miles (approximately eight kilometres) is not uncommon.
- 4.4.2 As with pedestrian accessibility, the level of a site’s cycle accessibility depends upon a combination of the distance from local amenities and the standard of existing cycle infrastructure. It should, however, be noted that the cycle infrastructure can include facilities shared with vehicles and pedestrians as well as dedicated cycle infrastructure.
- 4.4.3 Vehicle speeds and volumes within the village are suitably low to ensure that on-street cycling within the extents of the village provides a real option for travel.
- 4.4.4 Further afield a review of the National Cycle Network (NCN) and found that National Cycle Route 45 is located within the wider area which connects Chester and Swindon via Whitchurch and Iron Bridge, as shown in Figure 4.4.

Figure 4.4: Cycle Network



## 4.5 Public Transport

- 4.5.1 The recently published CIHT guidance document *'Buses in Urban Development (2018)'* recommends a maximum walking distance in urban areas of up to 300m to bus stops located on *'less frequent routes'* (i.e. service frequency greater than 12-minute). A walking distance of 300m is equivalent to a 4-minute walk based on a 1.4 metres per second walking speed.
- 4.5.2 There are two bus stops providing connections through the village of Cressage, Shrewsbury Town Centre and Bridgnorth are located within 100m of the site on the A458 Shrewsbury Road. These bus stops serve the 436-bus service. The WB stop provides access to Shrewsbury Town Centre, while the EB stop travels through Cressage before continuing to Bridgnorth along the A458 Harley Road.
- 4.5.3 Details of the local bus service and their frequency are shown in [Table 4.3](#).

**Table 4.3: Local Bus Service – Routes and Frequency**

Service Number	Route	Weekday			Weekend	
		AM Peak	PM Peak	Inter Peak	Saturday	Sunday
436	Shrewsbury – Cressage - Bridgnorth	Hourly	Hourly	Hourly	Hourly	-

- 4.5.4 The data shown in [Table 4.3](#) shows that the 436-bus service provides an hourly service Monday to Saturday, with no buses in operation on Sunday.

## 5 Development Proposals and Access Arrangement

### 5.1 Development Quantum

5.1.1 The proposed development includes approximately 80 residential dwellings and approximately 5000sqft of commercial space.

### 5.2 Proposed Access Strategy

5.2.1 Based on the review of the existing highway network surrounding the site, it is proposed that vehicular access into the site would be best provided off the A458 Shrewsbury Road, on the northern boundary of the site.

5.2.2 The constraints of a vehicular access arrangement into the site from the A458 Shrewsbury Road have been considered and identified below;

- Visibility restrictions due to the mature trees and lack of footway provision on the south side of the A458 Shrewsbury Road carriageway;
- Discussions with the Trees Department at Shropshire Council found that the three mature trees have a Tree Protection Order (TPO) attached to them, although there is no information available on the Capital Asset Valuation of Amenity of Tree (CAVAT); and
- Land ownership constraints along the road frontage.

5.2.3 The proposed access will be in the form of a simple priority junction. Based on Manual for Streets a visibility splay with an 'X' distance of 2.4m and a 'Y' distance of 43m would be required for an access from the A458 Shrewsbury Road into the site.

5.2.4 The access carriageway will have a width of 5.5m with a radius of 6m, and footways either side with a width of 2m. The footways will continue either side of the access road into the site.

5.2.5 From the access, footways will continue on the south side of the A458 Shrewsbury Road to the residential dwellings located approximately 24m either side of the proposed access junction. The footways on the A458 Shrewsbury Road are included to help achieve the required visibility (2.4m x 43m).

5.2.6 The proposed access and visibility splays are shown in [Figure 5.1](#), and [Drawing JS-32-4463-PS-001](#) attached in [Appendix A](#).

5.2.7 To accompany the access junction, there is an opportunity to deliver traffic calming measures (such as additional signing and lining) which will help enforce the 30mph speed limit. It is noted that there are concerns by local residents with the current vehicle speeds through the village exceeding the 30mph speed limit.



Figure 5.1: Proposed Access Arrangement and Visibility Splays

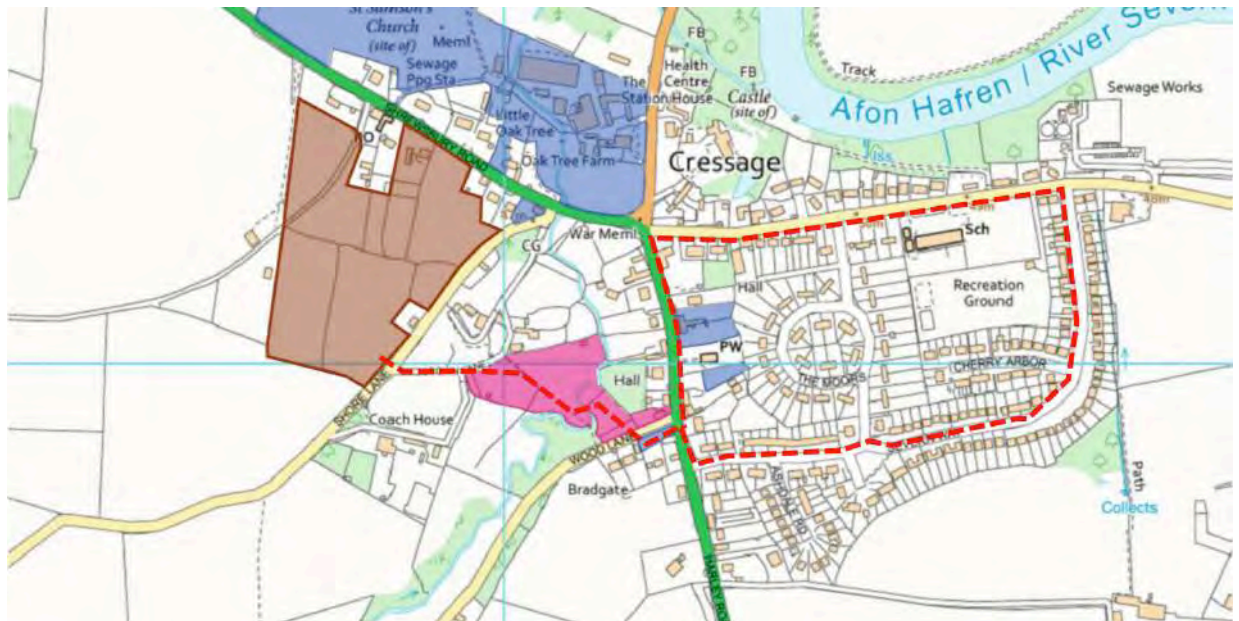


### 5.3 Pedestrian Improvements

5.3.1 Raby Estates land holdings in Cressage enables a number of improvements in pedestrian connectivity through the village. These are as follows:

- Footway widening, where possible, adjacent to the main through route corridor. Footway could be widened to 2m when located adjacent to Raby Estate land; and
- Connections from the site via land owned by Raby Estate to amenities in the village. This route (see [Figure 5.2](#)) would be for the most part of road and through an area which can deliver community amenities.

Figure 5.2: Pedestrian/ Cycle Connection



## 5.4 Off-Site Highways Improvements

- 5.4.1 Based on the review of the local highway network undertaken within [Section 3.2](#) of this report, the A458 Shrewsbury Road/ B4380/ Sheinton Road priority junction has some existing constraints in its current form.
- 5.4.2 It is understood the Local Highway Authority is monitoring the A458 Shrewsbury Road/ B4380/ Sheinton Road priority junction for potential future improvements. Raby Estate controls land adjacent to the junction which could assist in the delivery of future highway improvements.
- 5.4.3 As noted in paragraph 5.2.7, development of this site provides an opportunity to deliver off-site improvements on Shrewsbury Road in the form of traffic calming measures to enforce the 30mph speed limit.

## 6 Trip Generation and Junction Analysis

### 6.1 Introduction

6.1.1 This chapter presents vehicle trip generation of the site, when developed, during a weekday morning and evening peak hour and the resulting assessment traffic flows.

### 6.2 Proposed Trip Generation

6.2.1 The industry-standard Trip Rate Information Computer System (TRICS) database has been interrogated to establish an average trip rate for the proposed 80 residential dwellings and 5,000sqft of commercial space.

6.2.2 Due to the rural nature of the site, person trip rates have been calculated from the TRICS database and then combined with the Census modal split data.

6.2.3 Car drivers and passengers have been combined to ensure that the vehicle trip rate is robust. This results in a modal split for vehicles of 89% for the residential dwellings and 88% for the commercial uses.

6.2.4 The TRICS have been selected in line with the best practice guidelines from the TRICS Good Practice Guide 2016. The methodology used to derive the appropriate trips for the site's land use is as follows:

#### Residential

- The '03 – Residential / A – Houses Privately Owned' land use was selected from the main menu;
- Sites in Greater London, Scotland and Ireland have been omitted;
- Any surveys which have taken place on Saturday and Sunday have been deselected as trip rates are required for the weekday morning and evening peak periods; and
- In location type the proposed development is considered to be 'Neighbourhood Centre' and 'village'.

#### Commercial

- The '02 – Employment / D – Industrial Estate' land use was selected from the main menu;
- Sites in Greater London, Scotland and Ireland have been omitted;
- Any surveys which have taken place on Saturday and Sunday have been deselected as trip rates are required for the weekday morning and evening peak periods; and

6.2.5 The resultant person trip generation is shown in [Table 6.1](#), whilst the full TRICS outputs are provided in [Appendix B](#).

Table 6.1: Proposed Development Person Trip Rates

	AM Peak (08:00-09:00)			PM Peak (17:00 – 18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Residential Dwelling Trip Rate	0.219	0.779	0.998	0.578	0.241	0.819
Commercial Trip Rate	0.853	0.286	1.139	0.277	0.899	1.176

6.2.6 Table 6.2 shows the number of person trips from the site.

Table 6.2: Proposed Development Person Trip Generation

	AM Peak (08:00-09:00)			PM Peak (17:00 – 18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Residential Dwelling Trip Rate	18	62	80	46	19	66
Commercial Trip Rate	4	2	6	2	4	6
<b>Total Trips</b>	<b>22</b>	<b>64</b>	<b>86</b>	<b>48</b>	<b>23</b>	<b>72</b>

6.2.7 Table 6.3 shows the number of vehicle trips from the site based on the modal split data.

Table 6.3: Proposed Development Vehicle Trip Generation

	AM Peak (08:00-09:00)			PM Peak (17:00 – 18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Residential Dwelling Trip Rate	16	55	71	41	17	58
Commercial Trip Rate	3	2	5	2	4	6
<b>Total Trips</b>	<b>19</b>	<b>57</b>	<b>76</b>	<b>43</b>	<b>21</b>	<b>64</b>

## 6.3 Trip Distribution

6.3.1 In order to demonstrate the level of traffic impact that the proposed development would have on the local highway network, a trip distribution exercise has been carried out based on 'Journey to Work' 2011 Census data, where ward data and corresponding residential and employment figures have been extracted.

6.3.2 The total net vehicle trips during the AM (0800hrs to 0900hrs) and PM (1700hrs to 1800hrs) peak hour periods have been distributed within the assessment scope as per the 'Journey to Work' distribution for the Shropshire 028 MSOA. This is summarised in Figure 6.1.

Figure 6.1: Distribution Percentages on Local Highway Network (source: Google Earth)



6.3.3 The percentage distribution and development trip distribution network diagrams are attached in [Appendix C](#).

## 6.4 Traffic Impact Assessment

6.4.1 The site access junction has been assessed to ensure that the proposed development can be accommodated on the highway network.

6.4.2 Junction capacity impact assessments will be undertaken for the 2036 future year with development trips scenario in the weekday AM and PM peak hour:

## 6.5 Future Year Traffic Growth

6.5.1 Future year growth factors will be applied to the 2019 baseline traffic flows to generate a 2036 future year flows in line with the local plan period.

6.5.2 TEMPRO v7.2 calibrated with the National Transport (NTM AF15) dataset has been used to generate traffic growth factors specific to the site's MSOA (Shropshire 28).

6.5.3 A summary of the AM and PM peak period TEMPRO growth factors is shown in [Table 6.4](#).

Table 6.4: TEMPRO Growth Factors

Day / Time Period	2019-2036
Weekday AM Period	1.126
Weekday PM Period	1.126

- 6.5.4 Industry standard traffic software packages have been used to model the junctions within the area of assessment. The Junctions 9, PICADY has been used to model the priority junction.
- 6.5.5 In terms of Junction 9 outputs, a Ratio of Flow to Capacity (RFC) value of 0.85 or less typically demonstrates that a junction arm or turning movement is operating within practical capacity and is therefore unlikely to experience regular queuing.
- 6.5.6 However, junctions that are operating between 0.85 and 1.00 are considered to be operating within theoretical capacity. Any junctions operating over 1.00 are considered to be operating outside of reasonable threshold of capacity. The queue results are measured in Passenger Car Units (PCU) and the delay results are measured in seconds per vehicle.
- 6.5.7 The proposed site access forms a simple priority junction with Shrewsbury Road. The results of capacity assessment are summarised in [Table 6.5](#), with full PICADY outputs included in [Appendix D](#).

Table 6.5: Proposed Access Junction – PICADY Results

Arm	AM Peak			PM Peak		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2036 with Development						
Access Arm	0.2	11.56	0.17	0.1	9.73	0.06
Shrewsbury Road (W)	0.0	4.85	0.03	0.1	4.67	0.06

- 6.5.8 As shown in [Table 6.5](#), the proposed priority access junction is expected to operate comfortably below capacity and with minimal queuing in the 2036 future year scenario.
- 6.5.9 The assessment shows that the development traffic will have a low residual cumulative impact on queuing, delay and capacity on Shrewsbury Road.

## 7 Summary

- 7.1.1 Mode Transport Planning have been appointed by Raby Estates to provide transport planning and highway advice for a Transport and Highway Strategy in relation at a parcel of land, west of Shore Lane, Cressage.
- 7.1.2 The analysis in this report has been carried out in accordance with current policy, guidance and best practice. The results demonstrate that:
- Following a review of the most recent personal injury accident records, there is no evidence to show the proposed development will have a detrimental impact on highway safety;
  - The development proposals can be implemented in accordance with current highway design standards;
  - The site is accessible by a range of sustainable modes of transport, including foot, cycling and local bus services which can be accessed within an acceptable walking distance. The site can therefore be deemed sustainable in transport terms;
  - The proposed access will be in the form of a simple priority junction off the A458 Shrewsbury Road and visibility splays with an 'X' distance of 2.4m and a 'Y' distance of 43m are achievable at the site access;
  - The site presents an opportunity to assist in the delivery of any future improvements identified by the Local Highways Authority at the A458 Shrewsbury Road/ B4380/ Sheinton Road priority junction. This would be through the provision of land owned by the Raby Estate in the vicinity of the junction. In addition to this, the site can deliver off-site improvements on Shrewsbury Road in the form of traffic calming measures to help enforce the 30mph speed limit;
  - The proposed residential development will generate a low number of vehicle trips during the peak hour periods, equivalent to 76 two-way trips during the AM peak hour and 64 two-way trips during the PM peak hour; and
  - The junction capacity analysis results demonstrate that the proposed site access junction will operate comfortably within capacity during the AM and PM peaks in the 2036 'with development' future year scenarios, and the development traffic will have a low residual cumulative impact on queuing, delay and capacity.

# APPENDICES



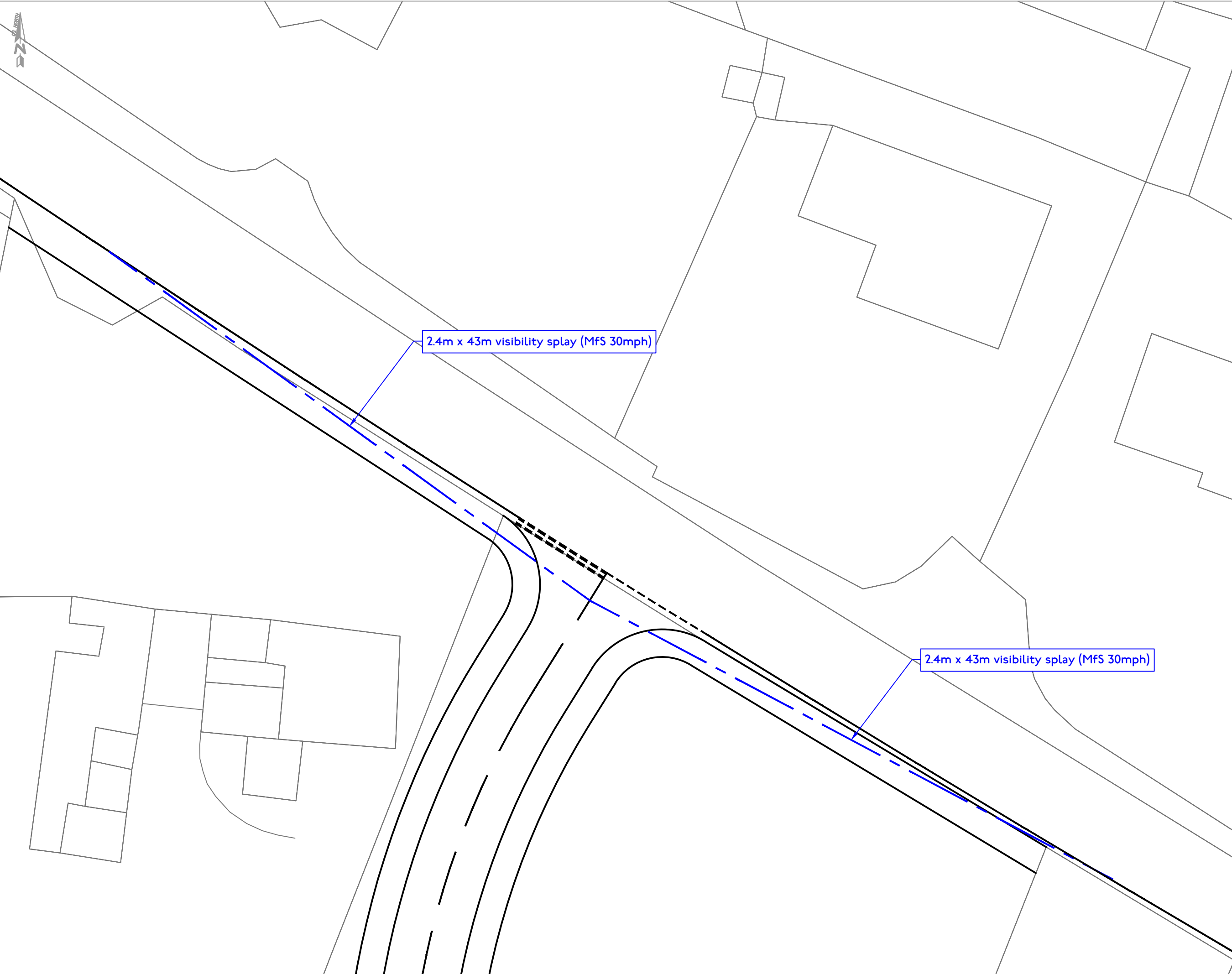
# APPENDIX A – Proposed Access Drawing



transport planning

t 0161 464 9495  
e info@modetransport.co.uk  
w www.modetransport.co.uk

ISO A3 297mm x 420mm  
Approved: ME  
Checked: MA  
Designer: LCW  
Project Management Initials:  
Filename: Y:\DROBROX (MODE)\PROJECT\MANCHESTER\2. PROJECTS\J324463\_LAND AT SHORE LANE, CRESSAGE\1. GRAPHICS\2. CAD\2 SHEETS\J32-4463-PS-001.DWG  
Last saved by: LUKE WHEELER Last Printed: 2020-05-18



- notes:
1. this drawing is to be read in conjunction with all other relevant drawings, any discrepancies, errors or omissions to be brought to the attention of overseeing organisation.
  2. all dimensions to be checked before commencement of work on site.
  3. all dimensions in metres unless otherwise stated.
  4. the design is subject to approval of shropshire county council.
  5. drawing based on os mapping.

issue/revision		
i/r	date	issued description
-	18/03/2020	

client: raby estates  
 project: land at shore lane, cressage  
 project number: J324463  
 scale: 1:250@A3  
 drawing title:  
 preliminary site access  
 drawing number:  
 J32-4463-PS-001

# APPENDIX B – TRICS Output Report

**TRIP RATE CALCULATION SELECTION PARAMETERS:**

Land Use : 03 - RESIDENTIAL  
 Category : A - HOUSES PRIVATELY OWNED

**MULTI-MODAL VEHICLES**Selected regions and areas:

<b>02</b>	<b>SOUTH EAST</b>	
	ES EAST SUSSEX	3 days
	HC HAMPSHIRE	2 days
	HF HERTFORDSHIRE	1 days
	KC KENT	4 days
	SC SURREY	1 days
	WS WEST SUSSEX	6 days
<b>03</b>	<b>SOUTH WEST</b>	
	DC DORSET	1 days
	SM SOMERSET	3 days
<b>04</b>	<b>EAST ANGLIA</b>	
	NF NORFOLK	1 days
	SF SUFFOLK	2 days
<b>05</b>	<b>EAST MIDLANDS</b>	
	DS DERBYSHIRE	1 days
	LE LEICESTERSHIRE	1 days
<b>06</b>	<b>WEST MIDLANDS</b>	
	SH SHROPSHIRE	2 days
	ST STAFFORDSHIRE	1 days
	WK WARWICKSHIRE	1 days
	WM WEST MIDLANDS	1 days
<b>07</b>	<b>YORKSHIRE &amp; NORTH LINCOLNSHIRE</b>	
	NY NORTH YORKSHIRE	1 days
<b>08</b>	<b>NORTH WEST</b>	
	CH CHESHIRE	2 days
	GM GREATER MANCHESTER	1 days
<b>09</b>	<b>NORTH</b>	
	DH DURHAM	2 days
<b>10</b>	<b>WALES</b>	
	VG VALE OF GLAMORGAN	1 days

*This section displays the number of survey days per TRICS® sub-region in the selected set*

**Secondary Filtering selection:**

*This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.*

Parameter: Number of dwellings  
 Actual Range: 8 to 918 (units: )  
 Range Selected by User: 6 to 200 (units: )

Parking Spaces Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/11 to 08/07/19

*This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.*

Selected survey days:

Monday	7 days
Tuesday	7 days
Wednesday	8 days
Thursday	10 days
Friday	6 days

*This data displays the number of selected surveys by day of the week.*

Selected survey types:

Manual count	38 days
Directional ATC Count	0 days

*This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.*

Selected Locations:

Edge of Town

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	31
Village	7

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

**Secondary Filtering selection:**

Use Class:

C3	38 days
----	---------

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,000 or Less	2 days
1,001 to 5,000	8 days
5,001 to 10,000	7 days
10,001 to 15,000	11 days
15,001 to 20,000	6 days
20,001 to 25,000	2 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	4 days
25,001 to 50,000	5 days
50,001 to 75,000	5 days
75,001 to 100,000	9 days
100,001 to 125,000	1 days
125,001 to 250,000	10 days
250,001 to 500,000	3 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	7 days
1.1 to 1.5	28 days
1.6 to 2.0	3 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	10 days
No	28 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	38 days
-----------------	---------

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

<b>1</b>	<b>CH-03-A-09</b>	<b>TERRACED HOUSES</b>	<b>CHESHIRE</b>
	GREYSTOKE ROAD MACCLESFIELD HURDSFIELD Edge of Town Residential Zone Total Number of dwellings: 24 Survey date: MONDAY 24/11/14		Survey Type: MANUAL
<b>2</b>	<b>CH-03-A-10</b>	<b>SEMI-DETACHED &amp; TERRACED</b>	<b>CHESHIRE</b>
	MEADOW DRIVE NORTHWICH BARNTON Edge of Town Residential Zone Total Number of dwellings: 40 Survey date: TUESDAY 04/06/19		Survey Type: MANUAL
<b>3</b>	<b>DC-03-A-08</b>	<b>BUNGALOWS</b>	<b>DORSET</b>
	HURSTDENE ROAD BOURNEMOUTH CASTLE LANE WEST Edge of Town Residential Zone Total Number of dwellings: 28 Survey date: MONDAY 27/03/14		Survey Type: MANUAL
<b>4</b>	<b>DH-03-A-02</b>	<b>MIXED HOUSES</b>	<b>DURHAM</b>
	LEAZES LANE BISHOP AUCKLAND ST HELEN AUCKLAND Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total Number of dwellings: 125 Survey date: MONDAY 27/03/17		Survey Type: MANUAL
<b>5</b>	<b>DH-03-A-03</b>	<b>SEMI-DETACHED &amp; TERRACED</b>	<b>DURHAM</b>
	PILGRIMS WAY DURHAM  Edge of Town Residential Zone Total Number of dwellings: 57 Survey date: FRIDAY 19/10/18		Survey Type: MANUAL
<b>6</b>	<b>DS-03-A-02</b>	<b>MIXED HOUSES</b>	<b>DERBYSHIRE</b>
	RADBOURNE LANE DERBY  Edge of Town Residential Zone Total Number of dwellings: 371 Survey date: TUESDAY 10/07/18		Survey Type: MANUAL
<b>7</b>	<b>ES-03-A-02</b>	<b>PRIVATE HOUSING</b>	<b>EAST SUSSEX</b>
	SOUTH COAST ROAD PEACEHAVEN  Edge of Town Residential Zone Total Number of dwellings: 37 Survey date: FRIDAY 18/11/11		Survey Type: MANUAL
<b>8</b>	<b>ES-03-A-03</b>	<b>MIXED HOUSES &amp; FLATS</b>	<b>EAST SUSSEX</b>
	SHEPHAM LANE POLEGATE  Edge of Town Residential Zone Total Number of dwellings: 212 Survey date: MONDAY 11/07/16		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

<b>9</b>	<b>ES-03-A-04</b> NEW LYDD ROAD CAMBER	<b>MIXED HOUSES &amp; FLATS</b>	<b>EAST SUSSEX</b>
	Edge of Town Residential Zone Total Number of dwellings: 134 Survey date: FRIDAY 15/07/16		Survey Type: MANUAL
<b>10</b>	<b>GM-03-A-10</b> BUTT HILL DRIVE MANCHESTER PRESTWICH	<b>DETACHED/SEMI</b>	<b>GREATER MANCHESTER</b>
	Edge of Town Residential Zone Total Number of dwellings: 29 Survey date: WEDNESDAY 12/10/11		Survey Type: MANUAL
<b>11</b>	<b>HC-03-A-21</b> PRIESTLEY ROAD BASINGSTOKE HOUNDMILLS	<b>TERRACED &amp; SEMI-DETACHED</b>	<b>HAMPSHIRE</b>
	Edge of Town Residential Zone Total Number of dwellings: 39 Survey date: TUESDAY 13/11/18		Survey Type: MANUAL
<b>12</b>	<b>HC-03-A-22</b> BOW LAKE GARDENS NEAR EASTLEIGH BISHOPSTOKE	<b>MIXED HOUSES</b>	<b>HAMPSHIRE</b>
	Edge of Town Residential Zone Total Number of dwellings: 40 Survey date: WEDNESDAY 31/10/18		Survey Type: MANUAL
<b>13</b>	<b>HF-03-A-03</b> HARE STREET ROAD BUNTINGFORD	<b>MIXED HOUSES</b>	<b>HERTFORDSHIRE</b>
	Edge of Town Residential Zone Total Number of dwellings: 160 Survey date: MONDAY 08/07/19		Survey Type: MANUAL
<b>14</b>	<b>KC-03-A-04</b> KILN BARN ROAD AYLESFORD DITTON	<b>SEMI-DETACHED &amp; TERRACED</b>	<b>KENT</b>
	Edge of Town Residential Zone Total Number of dwellings: 110 Survey date: FRIDAY 22/09/17		Survey Type: MANUAL
<b>15</b>	<b>KC-03-A-05</b> ROCHESTER ROAD NEAR CHATHAM BURHAM	<b>DETACHED &amp; SEMI-DETACHED</b>	<b>KENT</b>
	Neighbourhood Centre (PPS6 Local Centre) Village Total Number of dwellings: 8 Survey date: FRIDAY 22/09/17		Survey Type: MANUAL
<b>16</b>	<b>KC-03-A-07</b> RECVLVER ROAD HERNE BAY	<b>MIXED HOUSES</b>	<b>KENT</b>
	Edge of Town Residential Zone Total Number of dwellings: 288 Survey date: WEDNESDAY 27/09/17		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

<b>17</b>	<b>KC-03-A-08</b>	<b>MIXED HOUSES</b>	<b>KENT</b>
	MAIDSTONE ROAD CHARING		
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total Number of dwellings:	159	
	Survey date: <i>TUESDAY</i>	22/05/18	Survey Type: <i>MANUAL</i>
<b>18</b>	<b>LE-03-A-02</b>	<b>DETACHED &amp; OTHERS</b>	<b>LEICESTERSHIRE</b>
	MELBOURNE ROAD IBSTOCK		
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total Number of dwellings:	85	
	Survey date: <i>THURSDAY</i>	28/06/18	Survey Type: <i>MANUAL</i>
<b>19</b>	<b>NF-03-A-03</b>	<b>DETACHED HOUSES</b>	<b>NORFOLK</b>
	HALING WAY THETFORD		
	Edge of Town Residential Zone		
	Total Number of dwellings:	10	
	Survey date: <i>WEDNESDAY</i>	16/09/15	Survey Type: <i>MANUAL</i>
<b>20</b>	<b>NY-03-A-11</b>	<b>PRIVATE HOUSING</b>	<b>NORTH YORKSHIRE</b>
	HORSEFAIR BOROUGHBRIDGE		
	Edge of Town Residential Zone		
	Total Number of dwellings:	23	
	Survey date: <i>WEDNESDAY</i>	18/09/13	Survey Type: <i>MANUAL</i>
<b>21</b>	<b>SC-03-A-04</b>	<b>DETACHED &amp; TERRACED</b>	<b>SURREY</b>
	HIGH ROAD BYFLEET		
	Edge of Town Residential Zone		
	Total Number of dwellings:	71	
	Survey date: <i>THURSDAY</i>	23/01/14	Survey Type: <i>MANUAL</i>
<b>22</b>	<b>SF-03-A-05</b>	<b>DETACHED HOUSES</b>	<b>SUFFOLK</b>
	VALE LANE BURY ST EDMUNDS		
	Edge of Town Residential Zone		
	Total Number of dwellings:	18	
	Survey date: <i>WEDNESDAY</i>	09/09/15	Survey Type: <i>MANUAL</i>
<b>23</b>	<b>SF-03-A-06</b>	<b>DETACHED &amp; SEMI-DETACHED</b>	<b>SUFFOLK</b>
	BURY ROAD KENTFORD		
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total Number of dwellings:	38	
	Survey date: <i>FRIDAY</i>	22/09/17	Survey Type: <i>MANUAL</i>
<b>24</b>	<b>SH-03-A-05</b>	<b>SEMI-DETACHED/TERRACED</b>	<b>SHROPSHIRE</b>
	SANDCROFT TELFORD SUTTON HILL		
	Edge of Town Residential Zone		
	Total Number of dwellings:	54	
	Survey date: <i>THURSDAY</i>	24/10/13	Survey Type: <i>MANUAL</i>
<b>25</b>	<b>SH-03-A-06</b>	<b>BUNGALOWS</b>	<b>SHROPSHIRE</b>
	ELLESMERE ROAD SHREWSBURY		
	Edge of Town Residential Zone		
	Total Number of dwellings:	16	
	Survey date: <i>THURSDAY</i>	22/05/14	Survey Type: <i>MANUAL</i>



LIST OF SITES relevant to selection parameters (Cont.)

<b>26</b>	<b>SM-03-A-01</b>	<b>DETACHED &amp; SEMI</b>	<b>SOMERSET</b>
	WEMBDON ROAD		
	BRIDGWATER		
	NORTHFIELD		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	33	
	Survey date: THURSDAY	24/09/15	Survey Type: MANUAL
<b>27</b>	<b>SM-03-A-02</b>	<b>MIXED HOUSES</b>	<b>SOMERSET</b>
	HYDE LANE		
	NEAR TAUNTON		
	CREECH SAINT MICHAEL		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total Number of dwellings:	42	
	Survey date: TUESDAY	25/09/18	Survey Type: MANUAL
<b>28</b>	<b>SM-03-A-03</b>	<b>MIXED HOUSES</b>	<b>SOMERSET</b>
	HYDE LANE		
	NEAR TAUNTON		
	CREECH ST MICHAEL		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total Number of dwellings:	41	
	Survey date: TUESDAY	25/09/18	Survey Type: MANUAL
<b>29</b>	<b>ST-03-A-07</b>	<b>DETACHED &amp; SEMI-DETACHED</b>	<b>STAFFORDSHIRE</b>
	BEACONSIDE		
	STAFFORD		
	MARSTON GATE		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	248	
	Survey date: WEDNESDAY	22/11/17	Survey Type: MANUAL
<b>30</b>	<b>VG-03-A-01</b>	<b>SEMI-DETACHED &amp; TERRACED</b>	<b>VALE OF GLAMORGAN</b>
	ARTHUR STREET		
	BARRY		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	12	
	Survey date: MONDAY	08/05/17	Survey Type: MANUAL
<b>31</b>	<b>WK-03-A-02</b>	<b>BUNGALOWS</b>	<b>WARWICKSHIRE</b>
	NARBERTH WAY		
	COVENTRY		
	POTTERS GREEN		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	17	
	Survey date: THURSDAY	17/10/13	Survey Type: MANUAL
<b>32</b>	<b>WM-03-A-04</b>	<b>TERRACED HOUSES</b>	<b>WEST MIDLANDS</b>
	OSBORNE ROAD		
	COVENTRY		
	EARLSDON		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Number of dwellings:	39	
	Survey date: MONDAY	21/11/16	Survey Type: MANUAL
<b>33</b>	<b>WS-03-A-04</b>	<b>MIXED HOUSES</b>	<b>WEST SUSSEX</b>
	HILLS FARM LANE		
	HORSHAM		
	BROADBRIDGE HEATH		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	151	
	Survey date: THURSDAY	11/12/14	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

<b>34</b>	<b>WS-03-A-07</b>	<b>BUNGALOWS</b>	<b>WEST SUSSEX</b>
	EMMS LANE NEAR HORSHAM BROOKS GREEN Neighbourhood Centre (PPS6 Local Centre) Village		
	Total Number of dwellings:	57	
	Survey date: THURSDAY	19/10/17	Survey Type: MANUAL
<b>35</b>	<b>WS-03-A-08</b>	<b>MIXED HOUSES</b>	<b>WEST SUSSEX</b>
	ROUNDSTONE LANE ANGMERING		
	Edge of Town Residential Zone		
	Total Number of dwellings:	180	
	Survey date: THURSDAY	19/04/18	Survey Type: MANUAL
<b>36</b>	<b>WS-03-A-09</b>	<b>MIXED HOUSES &amp; FLATS</b>	<b>WEST SUSSEX</b>
	LITTLEHAMPTON ROAD WORTHING WEST DURRINGTON		
	Edge of Town Residential Zone		
	Total Number of dwellings:	197	
	Survey date: THURSDAY	05/07/18	Survey Type: MANUAL
<b>37</b>	<b>WS-03-A-10</b>	<b>MIXED HOUSES</b>	<b>WEST SUSSEX</b>
	TODDINGTON LANE LITTLEHAMPTON WICK		
	Edge of Town Residential Zone		
	Total Number of dwellings:	79	
	Survey date: WEDNESDAY	07/11/18	Survey Type: MANUAL
<b>38</b>	<b>WS-03-A-11</b>	<b>MIXED HOUSES</b>	<b>WEST SUSSEX</b>
	ELLIS ROAD WEST HORSHAM S BROADBRIDGE HEATH		
	Edge of Town Residential Zone		
	Total Number of dwellings:	918	
	Survey date: TUESDAY	02/04/19	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

**MULTI-MODAL VEHICLES**

Calculation factor: 1 DWELLS

**BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	38	110	0.072	38	110	0.302	38	110	0.374
08:00 - 09:00	38	110	0.134	<b>38</b>	<b>110</b>	<b>0.363</b>	<b>38</b>	<b>110</b>	<b>0.497</b>
09:00 - 10:00	38	110	0.135	38	110	0.163	38	110	0.298
10:00 - 11:00	38	110	0.118	38	110	0.147	38	110	0.265
11:00 - 12:00	38	110	0.124	38	110	0.145	38	110	0.269
12:00 - 13:00	38	110	0.139	38	110	0.134	38	110	0.273
13:00 - 14:00	38	110	0.152	38	110	0.144	38	110	0.296
14:00 - 15:00	38	110	0.160	38	110	0.173	38	110	0.333
15:00 - 16:00	38	110	0.245	38	110	0.162	38	110	0.407
16:00 - 17:00	38	110	0.254	38	110	0.155	38	110	0.409
17:00 - 18:00	<b>38</b>	<b>110</b>	<b>0.334</b>	38	110	0.137	38	110	0.471
18:00 - 19:00	38	110	0.285	38	110	0.150	38	110	0.435
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.152			2.175			4.327

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

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The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

**Parameter summary**

Trip rate parameter range selected: 8 - 918 (units: )  
Survey date range: 01/01/11 - 08/07/19  
Number of weekdays (Monday-Friday): 38  
Number of Saturdays: 0  
Number of Sundays: 0  
Surveys automatically removed from selection: 1  
Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

**MULTI-MODAL TOTAL PEOPLE**

Calculation factor: 1 DWELLS

**BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	38	110	0.110	38	110	0.486	38	110	0.596
08:00 - 09:00	38	110	0.219	<b>38</b>	<b>110</b>	<b>0.779</b>	<b>38</b>	<b>110</b>	<b>0.998</b>
09:00 - 10:00	38	110	0.214	38	110	0.275	38	110	0.489
10:00 - 11:00	38	110	0.190	38	110	0.248	38	110	0.438
11:00 - 12:00	38	110	0.201	38	110	0.237	38	110	0.438
12:00 - 13:00	38	110	0.230	38	110	0.218	38	110	0.448
13:00 - 14:00	38	110	0.244	38	110	0.222	38	110	0.466
14:00 - 15:00	38	110	0.257	38	110	0.269	38	110	0.526
15:00 - 16:00	38	110	0.554	38	110	0.292	38	110	0.846
16:00 - 17:00	38	110	0.484	38	110	0.270	38	110	0.754
17:00 - 18:00	<b>38</b>	<b>110</b>	<b>0.578</b>	38	110	0.241	38	110	0.819
18:00 - 19:00	38	110	0.504	38	110	0.284	38	110	0.788
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			3.785			3.821			7.606

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP\*FACT. Trip rates are then rounded to 3 decimal places.

**TRIP RATE CALCULATION SELECTION PARAMETERS:**

Land Use : 02 - EMPLOYMENT  
 Category : D - INDUSTRIAL ESTATE

**MULTI-MODAL VEHICLES**Selected regions and areas:

<b>02</b>	<b>SOUTH EAST</b>	
	ES EAST SUSSEX	1 days
	KC KENT	1 days
<b>03</b>	<b>SOUTH WEST</b>	
	CW CORNWALL	1 days
<b>06</b>	<b>WEST MIDLANDS</b>	
	WM WEST MIDLANDS	1 days
	WO WORCESTERSHIRE	1 days
<b>07</b>	<b>YORKSHIRE &amp; NORTH LINCOLNSHIRE</b>	
	NY NORTH YORKSHIRE	1 days
	WY WEST YORKSHIRE	3 days
<b>10</b>	<b>WALES</b>	
	VG VALE OF GLAMORGAN	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

**Secondary Filtering selection:**

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area  
 Actual Range: 1776 to 84575 (units: sqm)  
 Range Selected by User: 1138 to 974258 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/11 to 12/03/19

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	5 days
Tuesday	2 days
Wednesday	3 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	10 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Edge of Town	9
Neighbourhood Centre (PPS6 Local Centre)	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Development Zone	1
Residential Zone	3
Village	1
Out of Town	2
No Sub Category	3

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

**Secondary Filtering selection:**Use Class:

n/a	1 days
Not Known	2 days
B1	1 days
B2	4 days
B8	2 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,000 or Less	1 days
5,001 to 10,000	1 days
10,001 to 15,000	2 days
20,001 to 25,000	1 days
25,001 to 50,000	5 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

25,001 to 50,000	4 days
100,001 to 125,000	1 days
125,001 to 250,000	5 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	4 days
1.1 to 1.5	6 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	10 days
----	---------

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	10 days
-----------------	---------

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

<b>1</b>	<b>CW-02-D-03</b>	<b>IND. ESTATE</b>	<b>CORNWALL</b>
	LONG ROCK ROAD		
	NEAR PENZANCE		
	LONG ROCK		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total Gross floor area:	36500 sqm	
	Survey date: MONDAY	03/10/11	Survey Type: MANUAL
<b>2</b>	<b>ES-02-D-06</b>	<b>INDUSTRIAL ESTATE</b>	<b>EAST SUSSEX</b>
	COURTLANDS ROAD		
	EASTBOURNE		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	7525 sqm	
	Survey date: MONDAY	21/10/13	Survey Type: MANUAL
<b>3</b>	<b>KC-02-D-02</b>	<b>INDUSTRIAL ESTATE</b>	<b>KENT</b>
	SOUTHWELL ROAD		
	DEAL		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	10715 sqm	
	Survey date: WEDNESDAY	28/11/12	Survey Type: MANUAL
<b>4</b>	<b>NY-02-D-02</b>	<b>INDUSTRIAL ESTATE</b>	<b>NORTH YORKSHIRE</b>
	RACECOURSE ROAD		
	RICHMOND		
	Edge of Town		
	Out of Town		
	Total Gross floor area:	35183 sqm	
	Survey date: TUESDAY	12/03/19	Survey Type: MANUAL
<b>5</b>	<b>VG-02-D-01</b>	<b>INDUSTRIAL ESTATE</b>	<b>VALE OF GLAMORGAN</b>
	ARTHUR STREET		
	BARRY		
	Edge of Town		
	No Sub Category		
	Total Gross floor area:	13091 sqm	
	Survey date: MONDAY	08/05/17	Survey Type: MANUAL
<b>6</b>	<b>WM-02-D-02</b>	<b>INDUSTRIAL ESTATE</b>	<b>WEST MIDLANDS</b>
	DUNLOP WAY		
	BIRMINGHAM		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	23480 sqm	
	Survey date: WEDNESDAY	07/11/12	Survey Type: MANUAL
<b>7</b>	<b>WO-02-D-03</b>	<b>INDUSTRIAL ESTATE</b>	<b>WORCESTERSHIRE</b>
	MILLENNIUM WAY		
	EVESHAM		
	Edge of Town		
	Out of Town		
	Total Gross floor area:	84575 sqm	
	Survey date: TUESDAY	26/06/18	Survey Type: MANUAL
<b>8</b>	<b>WY-02-D-05</b>	<b>INDUSTRIAL ESTATE</b>	<b>WEST YORKSHIRE</b>
	CARR WOOD ROAD		
	CASTLEFORD		
	Edge of Town		
	Development Zone		
	Total Gross floor area:	1776 sqm	
	Survey date: MONDAY	22/05/17	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

<b>9</b>	<b>WY-02-D-07</b>	<b>INDUSTRIAL ESTATE</b>	<b>WEST YORKSHIRE</b>
	THUNDERHEAD RIDGE RD CASTLEFORD GLASSHOUGHTON Edge of Town No Sub Category Total Gross floor area: 3191 sqm Survey date: MONDAY 15/05/17		Survey Type: MANUAL
<b>10</b>	<b>WY-02-D-08</b>	<b>INDUSTRIAL ESTATE</b>	<b>WEST YORKSHIRE</b>
	MILL LANE HALIFAX  Edge of Town No Sub Category Total Gross floor area: 11305 sqm Survey date: WEDNESDAY 17/10/18		Survey Type: MANUAL

*This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.*



TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE

**MULTI-MODAL VEHICLES**

Calculation factor: 100 sqm

**BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	10	22734	0.142	10	22734	0.041	10	22734	0.183
07:30 - 08:00	10	22734	0.303	10	22734	0.080	10	22734	0.383
08:00 - 08:30	<b>10</b>	<b>22734</b>	<b>0.361</b>	10	22734	0.117	<b>10</b>	<b>22734</b>	<b>0.478</b>
08:30 - 09:00	10	22734	0.243	10	22734	0.125	10	22734	0.368
09:00 - 09:30	10	22734	0.234	10	22734	0.139	10	22734	0.373
09:30 - 10:00	10	22734	0.188	10	22734	0.143	10	22734	0.331
10:00 - 10:30	10	22734	0.193	10	22734	0.154	10	22734	0.347
10:30 - 11:00	10	22734	0.164	10	22734	0.138	10	22734	0.302
11:00 - 11:30	10	22734	0.179	10	22734	0.150	10	22734	0.329
11:30 - 12:00	10	22734	0.189	10	22734	0.175	10	22734	0.364
12:00 - 12:30	10	22734	0.181	10	22734	0.203	10	22734	0.384
12:30 - 13:00	10	22734	0.162	10	22734	0.195	10	22734	0.357
13:00 - 13:30	10	22734	0.189	10	22734	0.209	10	22734	0.398
13:30 - 14:00	10	22734	0.205	10	22734	0.172	10	22734	0.377
14:00 - 14:30	10	22734	0.175	10	22734	0.200	10	22734	0.375
14:30 - 15:00	10	22734	0.150	10	22734	0.165	10	22734	0.315
15:00 - 15:30	10	22734	0.147	10	22734	0.204	10	22734	0.351
15:30 - 16:00	10	22734	0.146	10	22734	0.199	10	22734	0.345
16:00 - 16:30	10	22734	0.156	10	22734	0.219	10	22734	0.375
16:30 - 17:00	10	22734	0.156	10	22734	0.246	10	22734	0.402
17:00 - 17:30	10	22734	0.099	<b>10</b>	<b>22734</b>	<b>0.372</b>	10	22734	0.471
17:30 - 18:00	10	22734	0.085	10	22734	0.243	10	22734	0.328
18:00 - 18:30	10	22734	0.052	10	22734	0.127	10	22734	0.179
18:30 - 19:00	10	22734	0.048	10	22734	0.076	10	22734	0.124
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
<b>Total Rates:</b>			<b>4.147</b>			<b>4.092</b>			<b>8.239</b>

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP\*FACT. Trip rates are then rounded to 3 decimal places.

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#### Parameter summary

Trip rate parameter range selected:	1776 - 84575 (units: sqm)
Survey date date range:	01/01/11 - 12/03/19
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

*This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.*

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE

**MULTI-MODAL TOTAL PEOPLE**

Calculation factor: 100 sqm

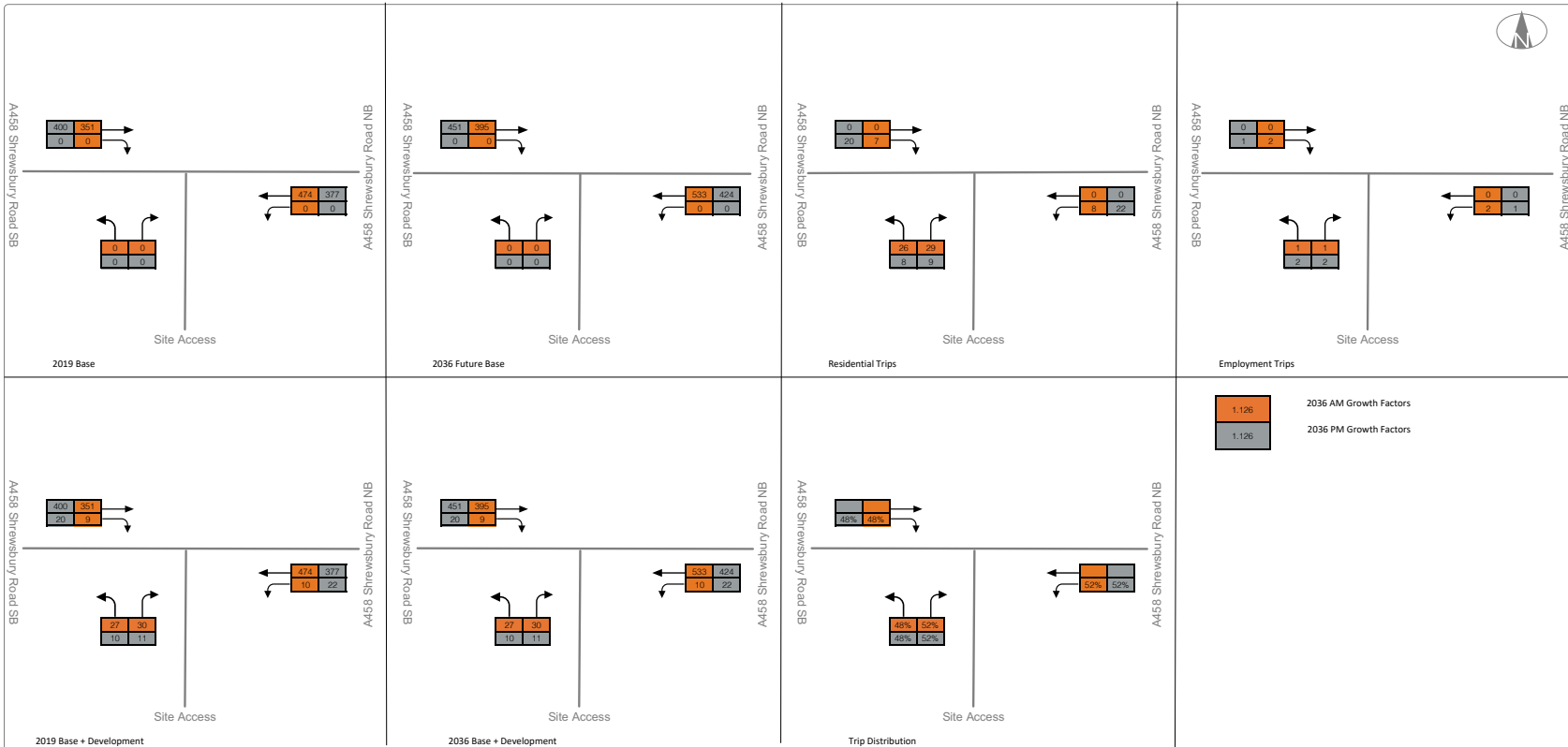
**BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	10	22734	0.217	10	22734	0.044	10	22734	0.261
07:30 - 08:00	10	22734	0.445	10	22734	0.095	10	22734	0.540
08:00 - 08:30	<b>10</b>	<b>22734</b>	<b>0.502</b>	10	22734	0.135	10	22734	0.637
08:30 - 09:00	10	22734	0.351	10	22734	0.151	10	22734	0.502
09:00 - 09:30	10	22734	0.317	10	22734	0.152	10	22734	0.469
09:30 - 10:00	10	22734	0.258	10	22734	0.177	10	22734	0.435
10:00 - 10:30	10	22734	0.268	10	22734	0.192	10	22734	0.460
10:30 - 11:00	10	22734	0.223	10	22734	0.183	10	22734	0.406
11:00 - 11:30	10	22734	0.234	10	22734	0.190	10	22734	0.424
11:30 - 12:00	10	22734	0.239	10	22734	0.237	10	22734	0.476
12:00 - 12:30	10	22734	0.233	10	22734	0.262	10	22734	0.495
12:30 - 13:00	10	22734	0.205	10	22734	0.263	10	22734	0.468
13:00 - 13:30	10	22734	0.243	10	22734	0.275	10	22734	0.518
13:30 - 14:00	10	22734	0.278	10	22734	0.238	10	22734	0.516
14:00 - 14:30	10	22734	0.241	10	22734	0.287	10	22734	0.528
14:30 - 15:00	10	22734	0.209	10	22734	0.246	10	22734	0.455
15:00 - 15:30	10	22734	0.201	10	22734	0.342	10	22734	0.543
15:30 - 16:00	10	22734	0.198	10	22734	0.290	10	22734	0.488
16:00 - 16:30	10	22734	0.235	10	22734	0.317	10	22734	0.552
16:30 - 17:00	10	22734	0.232	10	22734	0.327	10	22734	0.559
17:00 - 17:30	10	22734	0.146	<b>10</b>	<b>22734</b>	<b>0.523</b>	<b>10</b>	<b>22734</b>	<b>0.669</b>
17:30 - 18:00	10	22734	0.131	10	22734	0.376	10	22734	0.507
18:00 - 18:30	10	22734	0.077	10	22734	0.197	10	22734	0.274
18:30 - 19:00	10	22734	0.062	10	22734	0.128	10	22734	0.190
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
<b>Total Rates:</b>			<b>5.745</b>			<b>5.627</b>			<b>11.372</b>

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP\*FACT. Trip rates are then rounded to 3 decimal places.

# APPENDIX C – Network Diagrams



**NOTES**

AM Peak Hour (08:00-09:00)  
 PM Peak Hour (17:00-18:00)  
 All Flows are in PCUs

**LEGEND**

AM  
 PM

2036 AM Growth Factors  
 2036 PM Growth Factors

Raby Estate  
 Land of Shore Lane, cressage  
 Proposed Site Access  
 March 2020

PREPARED KK  
 CHECKED LW

**mode**  
 transport planning

# APPENDIX D – PICADY Output Report

<h1>Junctions 9</h1>
<h2>PICADY 9 - Priority Intersection Module</h2>
Version: 9.0.2.5947 © Copyright TRL Limited, 2017
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk
<b>The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution</b>

**Filename:** Site Access Model.j9

**Path:** C:\Users\manch\Dropbox (mode)\Project\Manchester\2. Projects\J324463\_Land at Shore Lane, Cressage\4. Data

**Report generation date:** 15/11/2019 18:49:42

»2036 Base + Dev, AM

»2036 Base + Dev, PM

### Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	Network Residual Capacity
<b>2036 Base + Dev</b>								
Stream B-AC	0.2	11.56	0.17	75 %	0.1	9.73	0.06	115 %
Stream C-AB	0.0	4.85	0.03	[Stream B-AC]	0.1	4.67	0.06	[Stream B-AC]

*There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.*

*Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.*

### File summary

#### File Description

<b>Title</b>	Raby Estate
<b>Location</b>	Cressage
<b>Site number</b>	
<b>Date</b>	13/11/2019
<b>Version</b>	
<b>Status</b>	
<b>Identifier</b>	
<b>Client</b>	Indigo WSP
<b>Jobnumber</b>	J324463
<b>Enumerator</b>	DESKTOP-J595SBC\Manchester Mode
<b>Description</b>	

### Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

### Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual	Residual capacity criteria	RFC Threshold	Average Delay threshold (s)	Queue threshold
--------------------	-----------------------------	-----------------------------------	--------------------	----------------------------	---------------	-----------------------------	-----------------

			<b>capacity</b>	<b>type</b>			<b>(PCU)</b>
5.75			✓	Delay	0.85	36.00	20.00

### Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1-11	2036 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D2	2036 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

### Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000



# 2036 Base + Dev, AM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Site Access	T-Junction	Two-way	0.74	A

### Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	75	Stream B-AC

## Arms

### Arms

Arm	Name	Description	Arm type
A	A458 Shrewsbury Road NB		Major
B	Site Access		Minor
C	A458 Shrewsbury Road SB		Major

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00			130.0	✓	0.00

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

### Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.75	80	52

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	516	0.094	0.238	0.150	0.339
1	B-C	640	0.098	0.248	-	-
1	C-B	649	0.252	0.252	-	-

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1-11	2036 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	543	100.000
B		ONE HOUR	✓	57	100.000
C		ONE HOUR	✓	404	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	10	533
	B	30	0	27
	C	395	9	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	0
	B	0	0	0
	C	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.17	11.56	0.2	B	52	78
C-AB	0.03	4.85	0.0	A	16	24
C-A					355	532
A-B					9	14
A-C					489	734

### Main Results for each time segment

## 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	43	11	437	0.098	42	0.0	0.1	9.108	A
C-AB	11	3	754	0.015	11	0.0	0.0	4.849	A
C-A	293	73			293				
A-B	8	2			8				
A-C	401	100			401				

## 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	51	13	411	0.125	51	0.1	0.1	9.999	A
C-AB	15	4	778	0.019	15	0.0	0.0	4.719	A
C-A	348	87			348				
A-B	9	2			9				
A-C	479	120			479				

## 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	63	16	374	0.168	63	0.1	0.2	11.542	B
C-AB	21	5	813	0.026	21	0.0	0.0	4.545	A
C-A	423	106			423				
A-B	11	3			11				
A-C	587	147			587				

## 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	63	16	374	0.168	63	0.2	0.2	11.558	B
C-AB	21	5	813	0.026	21	0.0	0.0	4.545	A
C-A	423	106			423				
A-B	11	3			11				
A-C	587	147			587				

## 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	51	13	411	0.125	51	0.2	0.1	10.017	B
C-AB	15	4	778	0.019	15	0.0	0.0	4.721	A
C-A	348	87			348				
A-B	9	2			9				
A-C	479	120			479				

## 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	43	11	437	0.098	43	0.1	0.1	9.136	A
C-AB	11	3	754	0.015	11	0.0	0.0	4.849	A
C-A	293	73			293				
A-B	8	2			8				
A-C	401	100			401				

# 2036 Base + Dev, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Site Access	T-Junction	Two-way	0.42	A

### Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	115	Stream B-AC

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2036 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	446	100.000
B		ONE HOUR	✓	21	100.000
C		ONE HOUR	✓	471	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	22	424
	B	11	0	10
	C	451	20	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C

From	A	0	0	0
	B	0	0	0
	C	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.06	9.73	0.1	A	19	29
C-AB	0.06	4.67	0.1	A	37	56
C-A					395	592
A-B					20	30
A-C					389	584

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	16	4	451	0.035	16	0.0	0.0	8.274	A
C-AB	26	7	798	0.033	26	0.0	0.0	4.665	A
C-A	328	82			328				
A-B	17	4			17				
A-C	319	80			319				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	19	5	427	0.044	19	0.0	0.0	8.823	A
C-AB	35	9	830	0.042	35	0.0	0.1	4.527	A
C-A	388	97			388				
A-B	20	5			20				
A-C	381	95			381				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	23	6	393	0.059	23	0.0	0.1	9.723	A
C-AB	51	13	877	0.058	51	0.1	0.1	4.355	A
C-A	468	117			468				
A-B	24	6			24				
A-C	467	117			467				

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	23	6	393	0.059	23	0.1	0.1	9.726	A
C-AB	51	13	877	0.058	51	0.1	0.1	4.358	A
C-A	468	117			468				

A-B	24	6			24				
A-C	467	117			467				

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	19	5	427	0.044	19	0.1	0.0	8.830	A
C-AB	35	9	830	0.043	35	0.1	0.1	4.530	A
C-A	388	97			388				
A-B	20	5			20				
A-C	381	95			381				

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	16	4	451	0.035	16	0.0	0.0	8.281	A
C-AB	26	7	798	0.033	26	0.1	0.0	4.666	A
C-A	328	82			328				
A-B	17	4			17				
A-C	319	80			319				



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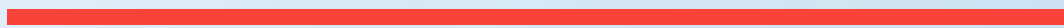
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# Appendix 4.3.3

## **OFFICER CORRESPONDENCE – BASELINE TREE SURVEY**







*Principal Consultant:*  
Julian Forbes-Laird  
BA(Hons), MICFor, MRICS, MEWI, Dip.Arb.(RFS)



## SHORE LANE, CRESSAGE



## - BASELINE TREE SURVEY TO BS5837:2012



*Prepared for:* Raby Estates

*FLAC Instruction ref:* CC39-1045

*Issued:* December 2019

*Operations Director, Planning & Development*  
Patrick Ieman  
BSc(Hons), MICFor, MRICS, RC.Arbor.A, CUEW, Dip.Arb.(RFS)

*Executive Consultant:*  
Richard Nicholson  
B.Ed, F.Arbor.A, Dip.Arb.(RFS).

Dendron House  
Barford Road • Blunham  
Bedford • MK44 3ND  
T 44 (0)1767 641648  
F 44 (0)1767 660330  
E enquire ac.uk.com  
www .uk.com

TREE STOCK OVERVIEW - KEY POINTS

Trees on the site have been assessed by FLAC according to the recommendations of BS5837:2012 *Trees in relation to design, demolition and construction - Recommendations*. As its title indicates, this document is specifically designed to inform and be used within the planning process.

A BS5837-compliant assessment includes differentiation of the quality of the trees according to that Standard's Table 1, which provides for trees to be placed into one of four quality categories:

- A High quality
- B Moderate quality
- C Low quality
- U Trees which are unretainable in viable condition, regardless of development

Following categorisation, the impact of any given set of proposals on a tree population can be assessed in terms of the retention or removal of trees within each quality category. A summary of the tree survey qualitative findings for existing trees (comprising both individual trees and trees within tree groups) upon land within and immediately adjacent to the site is set out below.

*Figure 1. Tree numbers by BS5837 quality and value categories*

Grade	Trees	Percentage
U	1	1
A	5	5
B	41	41
C	54	53

In addition to the above we find the following:

2no. trees qualifying for veteran status within the NPPF definition (FLAC refs. 3001 and 3002)

1no. tree qualifying for ancient status within the NPPF definition (FLAC ref. 3004)

1no. tree we consider to be at risk of collapse due to decay. We advise this should be felled due to a plausible risk to the existing building to the west (FLAC ref. 3003) This specimen is not suitable for retention if layout increases occupancy within the tree's fall radius.

Identification of veteran trees has been undertaken with close regard to the NPPF definition by application of the method known as RAVEN (for Recognition of Ancient, Veteran & Notable Trees). RAVEN is a systematized, transparent, repeatable, evidence-based methodology, and is based four-square on a) the governing criteria within the NPPF Annex 2 definition; and b) on the necessary presence (or absence) of specific habitat features on the trees concerned.

*Figure 2. Veteran tree FLAC ident. 3001*



FLAC will be providing advice to the project team on the matter of appropriate measures to retain and protect the veteran and ancient trees.

## KEY TO TREE SURVEY DATA SCHEDULE

### Note

This survey has been undertaken in compliance with BS5837:2012; it is not intended to be a tree safety survey. Any notes offered on structural integrity of trees are incidental, though where trees are considered to be in immediately hazardous condition (identified by red font in the *Structural condition & Notes* column, see below), our recommendations given for immediate intervention should be put in hand by the owner / site manager as soon as can be arranged.

Trees are dynamic living organisms capable of achieving considerable size and structural complexity. They are exposed to and can become damaged by the elements and by human activity, and have co-evolved with decay-causing organisms that can degrade and sometimes destroy their structural integrity. Due to genetic characteristics and local microenvironmental factors this integrity can be innately uncertain. The laws and forces of nature dictate a natural failure rate even among trees that are healthy and structurally sound. By their very nature, therefore, trees cannot be considered entirely hazard-free.

Tree surveys and / or tree inspections are, inherently, only a snapshot in time of the physiological and structural condition of the trees concerned.

Unless otherwise stated in our reporting material, all such surveys and inspections are undertaken from ground level and no internal inspections or tests have been undertaken. Any structural defects present might not be visible, for example being masked by vegetation, whether the tree's foliage, plants growing round the base of the tree, or climbing plants growing on the stem and into the crown.

Unless otherwise stated, the survey data should be considered time-limited **for planning purposes** to a maximum of three years (absent revisions of BS5837, which render pre-existing data obsolete).

### FLAC Ref. No.

Tree numbers per relevant FLAC dwg

In line with the advice of BS5837:2012, where trees occur as a cohesive group feature (prefixed TG for tree group or WG for woodland group), they are assessed as such

Size data for TG or WG are given as mean figures for trees at roughly the 80 percentile of the population concerned. Trees in the 90-100 percentile range for the group are identified on the TSP

Trees within TG / WG boundaries that have more than one stem and which are sub-dominant within the TG / WG (i.e. <80 percentile) are subsumed within the TG / WG data; dominant multi-stemmed trees (i.e. >80 percentile) within TG / WG boundaries are listed as individual trees

TG / WG outlines follow the mapping base (typically either topographical survey or geo-rectified aerial imagery)

Hedges (domestic) are recorded prefixed H and are always excluded from the provisions of the Hedgerows Regulations 1997

Hedgerows (rural) are recorded prefixed HR and possibly fall within the provisions of the Hedgerows Regulations 1997

All numbering starts from x001 **for each type of vegetation**, where x identifies the surveyor (3000 series = AJC). Thus:

3000	Individual tree
TG3000	Tree group
WG3000	Woodland group
H3000	Domestic hedge
HR3000	Rural hedgerow

The addition of the FLAC instruction ref. ahead of the tree number provides a unique, non-repeated reference number for the particular tree in question

Any trees omitted from the topo survey are listed on the referenced plan, though their positions are only shown indicatively. Off-site trees are included where deemed relevant, though their positions are also shown indicatively if omitted from the topo base

**TPO Ref.**

Statutory protection listing for individual trees, TG and WG

**ATTENTION: SEE NOTE IMMEDIATELY BELOW**

**Note**

This column is only completed in cases where FLAC has been instructed to undertake a TPO search and correlation to FLAC reference numbers. The absence of data in this column **must not** be taken to indicate that the trees concerned are not under TPO protection. Statutory protection may also arise from the trees' location within a Conservation Area. Further statutory control over tree removal may be conferred by the Forestry Act 1967

**Species**

Tree species as listed in the schedule by common name. Species present are:

<i>Common name</i>	<i>Botanical name</i>	<i>Provenance</i>	<i>Notes</i>
Ash	Fraxinus excelsior	Native	
Atlas cedar	Cedrus atlantica	Exotic	
Beech	Fagus sylvatica	Native	
Blackthorn	Prunus spinosa	Native	
Cherry laurel	Prunus laurocerasus	Exotic	
Dog rose	Rosa canina	Native	
Elder	Sambucus nigra	Native	
Elm	Ulmus procera	Native	
Field maple	Acer campestre	Native	
Flowering cherry	Prunus sp.	Exotic	Generic term for Japanese cherries
Hawthorn	Crataegus monogyna	Native	
Hazel	Corylus avellana	Native	
Holly	Ilex aquifolium	Native	
Leyland cypress	x Cupressocyparis leylandii	Exotic	
Lombardy poplar	Populus nigra 'Italica'	Exotic	
Norway maple	Acer platanoides	Exotic	
Pedunculate oak	Quercus robur	Native	
Privet	Ligustrum vulgare	Native	
Purple plum	Prunus cerasifera 'Pissardii'	Exotic	
Silver birch	Betula pendula	Native	
Sweet chestnut	Castanea sativa	Naturalised	
Sycamore	Acer pseudoplatanus	Naturalised	
Weeping willow	Salix x sepulcralis 'Chrysocoma'	Exotic	
Whitebeam	Sorbus aria	Native	
Wych elm	Ulmus glabra	Native	
Yew	Taxus baccata	Native	Present as 'Fastigiata'

### **Tree Count**

For trees assessed as groups (ident. prefix TG), number of trees present, according to:

2-10 trees	Accurate count
11-50 trees	Close estimate
51-100 trees	Estimate

### **Area m<sup>2</sup>**

For trees assessed as woodland (ident. prefix WG), existing area in square metres within survey envelope, derived from CAD interrogation of the completed tree survey plan

### **Ht. (m)**

Tree height in metres

*Either:*

### **Crown Spread**

For individual trees, measured radial crown spread in metres, listed for each of the four cardinal points

*Or:*

### **MRCS**

For trees assessed as groups or woodland, an estimated mean radial crown spread in metres for trees at the 80 percentile size

### **Note**

For trees assessed as woodland, sample measurements for canopy overhang beyond woodland boundary (i.e. hedgerow, fence, ditch etc.) are given on the tree survey plan

*Or:*

### **Mean Width**

Mean width in metres of hedge or hedgerow

### **Length**

Approximate length in metres of hedge or hedgerow

**Ht. 1<sup>st</sup> Br.**

For individual trees and trees assessed as groups or woodland, height in metres above ground of attachment point of first significant branch (cardinal point may be given indicating growing direction)

**Ht. Can.**

For individual trees and trees assessed as groups or woodland, mean height in metres of lower extent of tree canopy above ground

**Stem Count**

For individual trees, number of stems present below 1.5m AGL. Stem count affects diameter entry as follows:

Where the stem count is 1 the diameter should be entered into the 1 column under Stem Dia.

Where the stem count is up to 5 each stem dia. should be listed

Where the stem count exceeds 5, the mean stem diameter should be entered in the 1 column

*Either:*

**Stem Dia. (mm)**

Stem diameter(s) at 1.5m above ground level (see measurement system in BS5837:2012 Annex C), given in millimetres

*Where entered 1:*

Single measured stem diameter

*Where entered 2-5:*

Multiple measured stem diameters, listed per stem

*Where entered >5:*

For trees with more than five stems, diameter is listed as an estimated mean

Where the diameter entry for trees with 1 or 2-5 stems appears in italics, this indicates that it was estimated by the surveyor (for example, due to the presence of ivy on the stem)

It is our practice to round up when estimating stem diameters

*Or:*

**Specimen Stem Dia.**

For trees assessed as groups or woodland, stem diameter in millimetres at 1.5m above ground level for 80 percentile member of TG or WG. Trees with larger diameters are identified on the TSP

*Or:*

**Mean Stem Dia.**

Mean stem diameter in millimetres above the basal flare of hedge or hedgerow component plants

*Either:*

**RPA Rad.**

Radius in metres of the notionally circular Root Protection Area, based on 12x stem diameter (example for single stemmed trees), capped to 15m radial to stem centre

**Note**

Where trees are identified as being *notable* (i.e. very large trees that have yet to attain veteran status), FLAC removes the cap such that the RPA is simply 12x stem diameter

*Or:*

**Specimen RPA Rad.**

For trees assessed as groups or woodland, radius in metres of the notionally circular Root Protection Area based on specimen diameter for TG or WG 80 percentile tree

*Either:*

Conversion of RPA radius to an area, given in m<sup>2</sup>, capped to a maximum of 707m<sup>2</sup> (in line with BS5837:2012), except for *notable* trees

*Or:*

**Specimen RPA Area**

For trees assessed as groups or woodland, conversion of specimen RPA radius to an area, given in m<sup>2</sup>, capped to a maximum of 707m<sup>2</sup>

**Note**

RPA for hedges or hedgerows is to be taken as 3m from the centreline, half the height or 2m beyond existing width, whichever is the greater

**Life Stage**

Life stage assessment according into:

Y	Young
SM	Semi-mature
EM	Early mature
M	Mature
OM	Over-mature

**Phys. Condition**

An assessment of the **physiological** condition (i.e. health/vitality) status of the tree summarised according to:

<b>GOOD</b>	Generally in healthy condition
<b>FAIR</b>	Condition satisfactory though below mean species performance
<b>POOR</b>	Tree in decline/retrenching
<b>DEAD</b>	Self explanatory



## Structural condition & Notes

Notes on the apparent structural integrity of the tree based on visual tree assessment, including notes on form, taper, forking habit, storm damage, decay fungi, pests, etc. plus other pertinent observations

## Management recommendations

Preliminary recommendations for intervention (e.g. tree surgery, felling, etc) in relation to existing context

Trees assessed as being in apparently immediately hazardous condition will be notified to the client separately as soon as practical. Where the recommendation is for further investigation, including removal of ivy and reinspection, the given retention span and quality/value grade (see below) should be treated as provisional

## **Notes**

This is **not** intended to comprise a specification for tree work: further advice should be sought prior to implementation

Change in land use (target value) requires further assessment

## Ret. Span

Estimated remaining retention span based on species, condition & context divided into the following bands (relates to quality and value grade achievable as stated):

*Years      Best QV grade*

<10	U
10+	C
20+	B
>40	A

## QV Grade

Quality & Value grade classification according to BS5837:2012 (see attached extract from BS5837:2012 'Table 1 - Cascade Chart for Tree Quality Assessment') –

<i>Grade</i>	<i>Summary meaning</i>	<i>Ident. colour spot on TSP</i>
<b>U</b>	Trees that are unretainable in viable condition	Dark red
<b>A</b>	High quality & value and consequent high retention priority	Light green
<b>B</b>	Moderate quality and value (moderate priority for retention)	Mid-blue
<b>C</b>	Low quality and value (generally considered to be sacrificial)	Grey

## **Note**

Trees present which we consider to be **exceptional** specimens are identified by the suffix \* after the A grade, e.g. A1\*

## **Proposal**

This column identifies:

1. Pre-planning (Arboricultural Stages 1, Tree Survey, & 2, Design):  
Our initial view of a defensible tree retention / removal balance
2. Planning submission (Arboricultural Stage 3):  
The actual tree retention / removal balance as proposed

The following codes are used:

RET	1. Trees preferably retained 2. Trees that would be retained
PRET	<i>For tree groups (TG), woodlands (WG) &amp; hedgerows (HR) – signifies partial retention (see below)</i>
REM	1. Trees defensibly removed to facilitate development 2. Trees that would be removed
U	Trees identified to be unsuitable for retention

## **No. of trees retained**

*For tree groups only*

Number of trees retained out of the total recorded for the group. Outcomes are as follows:

Survey grade U	Number of trees for retention defaults to 0 (can be amended by manual override)
Proposal code RET	Number of trees for retention defaults to total from <i>Tree Count</i> data field
Proposal code PRET	No. of trees for retention requires manual input following interrogation of relevant plans
Proposal code REM	Number of trees for retention defaults to 0

## **Trees retained %**

*For tree groups only*

Percentage of pre-existing TG tree count that would be retained, based on an auto-sum derived from inputs into the preceding column

## **Area retained m<sup>2</sup>**

*For woodlands only*

Area, in square metres, of woodland (WG) proposed for retention. Outcomes are as follows:

Survey grade U	Area for retention defaults to 0 (can be amended by manual override)
Proposal code RET	Area for retention defaults to existing area
Proposal code PRET	Area for retention requires manual input following interrogation of relevant plans
Proposal code REM	Area for retention defaults to 0

## **Area retained %**

*For woodlands only*

Percentage of pre-existing WG area that would be retained, based on an auto-sum derived from inputs into the preceding column

**Length retained m**

*For hedgerows only*

Length, in metres, of hedgerow (HR) proposed for retention. Outcomes are as follows:





Survey grade U	Length for retention defaults to 0 (can be amended by manual override)
Proposal code RET	Length for retention defaults to existing length
Proposal code PRET	Length for retention requires manual input following interrogation of relevant plans
Proposal code REM	Length for retention defaults to 0

**Length retained %**

*For hedgerows only*

Percentage of pre-existing HR length that would be retained, based on an auto-sum derived from inputs into the preceding column

**BS5837:2012 Table 1 – Cascade chart for tree quality assessment**

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
<b>Trees unsuitable for retention</b> (see Note)				
<b>Category U</b> Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	<ul style="list-style-type: none"> <li>Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning)</li> <li>Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline</li> <li>Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality</li> </ul> <p><i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see [BS5837:2012] 4.5.7.</i></p>			
	<b>1 Mainly arboricultural qualities</b>	<b>2 Mainly landscape qualities</b>	<b>3 Mainly cultural values, including conservation</b>	
<b>Trees to be considered for retention</b>				
<b>Category A</b> <b>Trees of high quality</b> with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	
<b>Category B</b> <b>Trees of moderate quality</b> with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	
<b>Category C</b> <b>Trees of low quality</b> with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	

**FLAC Note**

The original contents of the column *Identification on plan* have been replaced by FLAC in the version above; spot colours to RGB codes given in BS5837:2012 Table 2



## Recognition of Ancient, Veteran & Notable Trees –

# R A V E N

### Step One—Size Assessment

#### **Tree has very large girth for species**

*Note—pollarding & senescence reduce stem increment: girth may be deceptive – assess stem girth relationship with life-stage accordingly*

Refer to *Ancient and other veteran trees: further guidance on management* (Lonsdale, ATF 2013) at Fig. 1.3: *Chart of girth in relation to age and developmental classification of trees*

IF GIRTH NOT VERY LARGE FOR SPECIES, STOP HERE!

### Step Two—Additional Primary Features

#### **At least one of the following should be present, or refer to Step Three**

- Extensive decay, especially brown rot or exposed stem heartwood in relevant species
- Extensive hollowing
- Crown senescence
- Retrenchment

### Step Three—Secondary Features

#### **If no additional Primary Feature is present, tree should have at least four Secondary Features**

- Large quantity of dead wood in crown, especially where large-sized
- Major storm damage/ breakout wounds
- Habitat spaces: decay holes and/ or crevices/ branch splits sheltered from direct rainfall
- Aerial rooting
- Sap run/ slime flux
- Water pool
- Bark loss inc. due to lightning strike
- Fungi
- Other epiphytic plants, including significant presence of lichens

### Step Four – Identification Guide

- ANCIENT**  
Veteran tree with extremely large girth: age likely > 50% of estimated species maximum  
*E.g. pedunculate oak, 2m stem dia, average site: ca. 460 years old, ca. 50% of species max*
- VETERAN**  
Very large girth for species and qualifies under either Step Two or Step Three
- NOTABLE**  
Very large girth for species but does not qualify under either Step Two or Step Three

IF A TARGET IS PRESENT, ASSESS RISK USING *THREATS*



FLAC Ref. No.	TPO Ref	Species	Ht. (m)	Crown Spread (m)				Ht. 1 <sup>st</sup> Br. (m)	Ht. Can. (m)	Stem Count	Stem Dia. (mm)					RPA Rad. (m)	RPA Area (m2)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <10, 10+ 20+, >40	QV Grade U-A-B-C
				N	S	W	E				1 / mean	2	3	4	5								
3022		Sycamore	14	8	10	4	10	4 S	3	1	1000					12.00	452	M	F	Very dense ivy and brambles impedes access for inspection and assessment. Dense ivy extends into branch structure. Asymmetrical crown form due to companion shelter. Some impairment of physiological condition but not resulting in widespread dieback and decline, buds mostly present throughout crown periphery but density appears less than neighbour. Some small to medium sized dead branches scattered through crown including hung-up branches, potential threat to highway to north. A prominent mature tree within the street scene. Condition might be related to fungal infection but currently impossible to make a detailed assessment, advised that clearance is undertaken to enable inspection in the interests of safety due to proximity to the busy highway.	Clear brambles and ivy from ground level to 2 metres to enable detailed inspection of lower stem and basal area. Prune out dead wood with potential to affect highway and remove hung-up branches.	20+	B1
3023		Sycamore	20	11	12	9	11	4 S	2.5	1	1050					12.60	499	M	F	Upright stem. Dense ivy impedes access for inspection and assessment. Occasional small to medium sized dead wood. Central tree of three on roadside boundary. A prominent mature tree within the street scene. In light of busy highway it is advised the ivy and brambles impeding access to the lower stem are cleared to enable detailed basal assessment.	Clear brambles and ivy from ground level to 2 metres to enable detailed inspection of lower stem and basal area. Prune out dead wood with potential to affect highway.	>40	A1
3024		Sycamore	17	8.5	8.5	7.5	6	4 S	4	1	880					10.56	350	M	F	Upright stem. Dense ivy impedes access for inspection and assessment. Occasional small to medium sized dead wood. Central tree of three on roadside boundary. A prominent mature tree within the street scene. In light of busy highway it is advised the ivy and brambles impeding access to the lower stem are cleared to enable detailed basal assessment.	Clear brambles and ivy from ground level to 2 metres to enable detailed inspection of lower stem and basal area. Prune out dead wood with potential to affect highway.	>40	A1
3025		Purple plum	7	3	3	3	3	2 E	2	5	130					1.56	8	EM	G	Off site tree in domestic garden. Remote inspection only. Hedge impedes inspection. No apparent significant defects observed.	No action required at time of survey.	20+	B1
3026		Weeping willow	10	6	8	7	7	3 E	2	1	400					4.80	72	EM	G	Off site tree in domestic garden. Remote inspection only. Hedge impedes inspection. No apparent significant defects observed.	No action required at time of survey.	>40	B1
3027		Sweet chestnut	12	5.5	5.5	5.5	5.5	2 W	2	1	430					5.16	84	EM	G	Off site tree in domestic garden. Remote inspection only. Upright stem. Symmetrical crown form. No apparent significant defects observed.	No action required at time of survey.	>40	B1
3028		Holly	11	4	4	4	4	0	0	2	300	250				4.69	69	EM	G	Off site tree in domestic garden. Remote inspection only. Dense crown impedes structural assessment. Small hawthorn stands in front of holly but is assumed to be accounted for by constraints of the holly.	No action required at time of survey.	>40	B1
3029		Hawthorn	8	5	5	5	5	2 N	1.5	5	320	240	230	220	200	6.59	136	M	F	Multi-stemmed from ground level. Shares companion shelter with adjacent holly tree group Satisfactory overall condition.	No action required at time of survey.	>40	B1

Data for trees assessed as groups (TG)

FLAC Ref. No.	TPO Ref	Species	Tree Count	Ht. (m)	MRC5 (m)	Ht. 1 <sup>st</sup> Br. (m)	Ht. Can. (m)	Specimen Stem Dia. (mm)	Specimen RPA Rad. (m)	Specimen RPA Area (m <sup>2</sup> )	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <10, 10+ 20+, >40	QV Grade U-A-B-C
TG3001		Hawthorn x6, holly x2	8	11	3	3.5 N	4	500	6.00	113	M	F	Probably grown-out from past hedgerow management. Specimens share companion shelter. Dense ivy present into crowns. Holly inboard of north end dying back with dead stems. Provides some screen function.	Fell dying holly near north end.	20+	C2
TG3002		Field maple	3	11	5	4 E	4	400	4.80	72	M	G	Cluster of twin-stemmed specimens with dense ivy on stems. Slender upright stems. Specimens share companion shelter and common crown profile. Provides some screen function.	No action required at time of survey.	>40	B2
TG3003		Hawthorn x7, hazel x1, wych elm x2	10	8	3	4 E	4	350	4.20	55	M	F	Dispersed linear tree group of mostly multi-stemmed specimens. Provides some screen function.	No action required at time of survey.	20+	C2
TG3004		Field maple x2, hazel x7, blackthorn x1, hawthorn x6	14	10	3	3.5 E	4	350	4.20	55	M	F	Dispersed linear tree group of mostly multi-stemmed specimens. Provides some screen function.	No action required at time of survey.	20+	C2
TG3005		Field maple	2	14	7	2 W	2.5	690	8.28	215	M	G	Off site tree group in domestic garden. Remote inspection. Dense ivy impedes inspection. Specimens share close companion shelter and common crown profile. No apparent significant defects observed.	No action required at time of survey.	>40	B2
TG3006		Norway maple 'Crimson King' x4, hawthorn x1, holly x2	7	12	3.7	4 W	4	260	3.12	31	EM	F	Off site tree group in domestic garden. Remote inspection. Dispersed linear tree group. Upright specimens with crowns raised to ca. 2.5 metres. No apparent significant defects observed.	No action required at time of survey.	>40	B2
TG3007		Hawthorn	5	6	5	2 S	3	550	6.60	137	M	F	Scrubby specimens, probably grown-out after past hedgerow management. Occasional elder and Prunus understorey. Unremarkable both individually and collectively.	No action required at time of survey.	>40	C2
TG3008		Hawthorn	5	10	4	2 N	2	400	4.80	72	M	F	Off site tree group in domestic garden. Remote inspection. Scrubby multi-stemmed specimens most with dense ivy. No apparent significant defects observed.	No action required at time of survey.	>40	C2
TG3009		Blackthorn	8	8	4	2 W	2	160	1.92	12	EM	F	Cluster of scrubby stems with thickening saplings. Low arboricultural merit.	No action required at time of survey.	>40	C2
TG3010		Leyland cypress	6	13	3	0	0	260	3.12	31	EM	G	Off site tree group in domestic garden. Remote inspection. Close-set specimens with typical form and structure. No apparent significant defects observed.	No action required at time of survey.	>40	B2
TG3011		Holly	4	10	3	0	0	400	4.80	72	EM	G	Close-set cluster of multi-stemmed specimens. Possibly originating from a grown-out hedgerow. Satisfactory overall condition. Tree group of relatively low significance.	No action required at time of survey.	>40	B2



## Data for hedgerows (HR)

FLAC Ref. No.	Species	Ht. (m)	Mean Width (m)	Length (m)	Mean Stem Dia. (mm)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <10, 10+ 20+, >40	QV Grade U-A-B-C
HR3001	Ash, hazel, hawthorn, field maple	2	1.5	107	10	EM	F	Field boundary hedgerow. Compact dimensions, flailed at 1 metre. Consistent density. Good overall condition.	No action required at time of survey.	>40	B2
HR3002	Hawthorn, elder, holly, field maple	3	1.5	81	80	EM	F	Evidence of past laying, latterly flailed at 1.5 to 1.9 metres. Satisfactory overall condition.	No action required at time of survey.	>40	B2
HR3003	Hazel, hawthorn, elder, dog rose, holly	2.5	1.5	22	50	EM	F	A short run of internal hedgerow. Evidence of past laying, latterly flailed at 1.7 metres. Satisfactory overall condition.	No action required at time of survey.	>40	C2
HR3004	Hawthorn, elder, holly, field maple	2	1.5	9	10	EM	F	A short run of internal hedgerow. Evidence of past laying, latterly flailed at 1 metre. Satisfactory overall condition.	No action required at time of survey.	>40	C2
HR3005	Hawthorn, elder, blackthorn	2	1.5	21	10	EM	F	A short run of internal hedgerow. Evidence of past laying, latterly flailed at 1 metre. Satisfactory overall condition.	No action required at time of survey.	>40	C2
HR3006	Hawthorn, elder, blackthorn, hazel, field maple	2.5	1.5	64	10	EM	F	Evidence of past laying, latterly flailed at 1 metres. Satisfactory overall condition. Some dieback of specimens at northern end.	No action required at time of survey.	>40	B2
HR3007	Hawthorn, hazel	2.5	1.5	10	10	EM	F	A short run of internal hedgerow. Evidence of past laying, latterly flailed at 1 metre. Satisfactory overall condition.	No action required at time of survey.	>40	C2
HR3008	Hazel, blackthorn	4.5	2	11	80	EM	F	Short, scrubby remnant probably after decline or grubbing out of wider hedgerow.	No action required at time of survey.	20+	C2
HR3009	Ash, hazel, elder	2.5	1.5	30	20	EM	F	Flailed at 1 metre excepting around electricity pole where stems reach to 4 metres. Hedge of relatively low significance.	No action required at time of survey.	>40	C2
HR3010	Ash, holly, pedunculate oak, blackthorn, elder, hazel, sycamore, elm	2	2	73	20	EM	G	Field/road boundary hedgerow. Previously flailed at 1 metre. Consistent density. Good overall condition.	No action required at time of survey.	>40	B2
HR3011	Hawthorn	3	3	13	150	M	F	Flailed beneath overhead cables. Scrubby with dense brambles. Hedge of relatively low significance.	No action required at time of survey.	>40	C2
HR3012	Hawthorn, blackthorn, ash	5	3	45	120	M	G	previously flailed at 1.8 metres but latterly only managed at road side face east.	No action required at time of survey.	>40	B2
HR3013	Holly, hawthorn, elder	4	2	45	80	EM	F	Roadside field boundary hedgerow flailed at 1 metre. Some variation of density beneath principal trees within hedgerow.	No action required at time of survey.	>40	B2
HR3014	Hawthorn, ash, dog rose, holly	3	2	63	120	EM	F	Past flailing but now very dense brambles obscures most of hedgerow.	No action required at time of survey.	>40	B2
HR3015	Elder, blackthorn, hazel, dog rose, hawthorn	3	2	41	100	EM	F	Past flailing but now very dense brambles obscures most of hedgerow.	No action required at time of survey.	>40	B2

FLAC Ref. No.	Species	Ht. (m)	Mean Width (m)	Length (m)	Mean Stem Dia. (mm)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <10, 10+ 20+, >40	QV Grade U-A-B-C
HR3016	Blackthorn, hawthorn, sycamore, ash, hazel, field maple	2.5	1.5	114	60	EM	G	A short run of internal hedgerow. Evidence of past laying, latterly flailed at 1.2 metres. Satisfactory overall condition.	No action required at time of survey.	>40	B2

Data for hedges (H)

FLAC Ref. No.	Species	Ht. (m)	Mean Width (m)	Length (m)	Mean Stem Dia. (mm)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <10, 10+ 20+, >40	QV Grade U-A-B-C
H3001	Beech, hawthorn	1-1.8	1	53	80	EM	G	Regularly clipped domestic boundary hedge. Good overall condition.	No action required at time of survey.	>40	B2
H3002	Blackthorn, hawthorn, privet	4	1.5	16	80	EM	F	Domestic boundary hedge. Obscured by very dense and well-established brambles.	No action required at time of survey.	20+	C2
H3003	Privet, hawthorn	4	2	33	80	EM	F	Domestic boundary hedgerow. Past management at 2.2 metres. Performs effective screen function.	No action required at time of survey.	>40	B2
H3004	holly, hawthorn, cherry laurel, sycamore, ash, privet, blackthorn	5	3	64	100	EM	G	Domestic boundary hedge. Obscured by very dense and well-established brambles.	No action required at time of survey.	>40	B2
H3005	Beech, hazel, hawthorn, holly	3	1.5	87	80	SM	G	Regularly clipped domestic boundary hedge. Good overall condition.	No action required at time of survey.	>40	B2



Client  
Raby Estates

Instruction  
Shore Lane, Cressage

Instruction ref.  
CC39-1045

Dwg title  
Tree Survey Plan

Dwg no.  
39-1045-01

Date  
20.12.19

Scale  
Plot sheets 1:500 @ A0

Quality & value grades:

Category A ● High

Category B ● Moderate

Category C ● Low

Category U ● Unretainable

○ Trees for retention  
(crowns shown yellow on  
aerial photo imagery)

○ Notional tree root  
protection area - RPA

○ Veteran tree buffer per  
Natural England Standing  
Advice

○ Veteran tree crown hatch

Drawn by:  
Brendan O'Connell  
20.12.19 16:00  
T: 4601707 ext 1444 / F: 4601707 ext 1445  
info@flac.ie  
www.flac.ie

Notes

Do not scale off dwg - refer to tree survey data schedule for crown spreads etc.

Tree / woodland group outlines follow the topo survey or aerial imagery, as applicable

All tree positions are indicative unless a topo survey has been provided to FLAC

Any trees omitted from topo survey are located indicatively. These trees are marked with a \*

RPA for hedges or hedgerows to be taken as 3m from the centreline, half the height or width + 2m each side, whichever is the greater

Notes on potential habitat features are for guidance only: ecological assessment is recommended

Drawn to N unless otherwise indicated

