REF (For Office Use Only):

Development Plan Document (DPD) Publication Stage Representation Form

Publication Amended Allocations & Development Management Development Plan Document (DPD)

A guidance note has been produced to assist in the completion of this form. Copies have been provided in correspondence and additional copies are available at: Castle House, Libraries in the District and https://www.newark-sherwooddc.gov.uk/aadm-representation/

Newark and Sherwood District Council is seeking your comments on the Publication Amended Allocations & Development Management DPD ('Publication AADMDPD'). Comments received at this stage should be about whether the Plan is legally compliant, sound and whether it has met the duty to cooperate. All representations must be received by the Council by 12 Noon on 9th January 2023.

This form has two parts- Part A- Personal / Agent Details and Part B- Your Representation(s) and further notification requests. (Please fill in a separate sheet (Part B) for each aspect or part of the Local Plan you wish to make representation on). Documents to support your representations (optional) should be referenced.

Privacy Notice

Apart from your comments below, the personal information you have provided will only be used by Newark & Sherwood District Council in accordance with the UK General Data Protection Regulation and the Data Protection Act 2018 and will not be shared with any third party.

The basis under which the Council uses personal data for this purpose is to undertake a public task.

The information that you have provided will be kept in accordance with the Council's retention schedule, which can be found at: https://www.newark-sherwooddc.gov.uk/dataprotection/

Please note the Council cannot accept anonymous responses. All representations received will be made available for public inspection and therefore cannot be treated as confidential. They will also be:

- Published in the public domain;
- Published on the Council's website;
- Shared with other organisations for the purpose of developing/adopting the Publication AADMDPD and forwarded to the Secretary of State for consideration;
- Made available to the Planning Inspector appointed by the Secretary of State to examine the Publication AADMDPD; and
- Used by the Inspector to contact you regarding the Examination of the Plan.

When making representations available on the Council's website the Council will remove all telephone numbers, email addresses and signatures.

By submitting your Response Form/representation, you agree to your personal details being processed in accordance with these Data Protection Terms.

PART A- Personal / Agent Details

In circumstances where individuals/groups share a similar view, it would be helpful to the Inspector to make a single representation, stating how many people the submission is representing and how the representation was authorised.

	1. Personal Details	2. Agents Details
If an agent is appointed, please complete only the Title, Name and Organisation boxes below but complete the full contact details of the agent in 2.		
Title	Mr	Mr
First Name	David	George
Last Name	Robinson	Machin
Job Title (where relevant)		Partner
Organisation (where relevant)		GraceMachin Planning & Property
Address Line 1	The Acre	2 Hollowstone
Line 2	Main Street	The Lace Market
Line 3	Bleasby	Nottingham
Line 4		
Post Code		NG1 1JH
Telephone Number		[redacted]
Email Address		[redacted]

Name or Organisation:	GraceMachin Planning & Property

PART B- Representation(s)

3. To which part of the DPD does this Representation relate?

Part of the Publication AADMDPD:	Mark if Relevant (X)	Specify number/part/document:
Amended AADMDPD Paragraph Number	X	Paragraph Number: Section 3.0 –Southwell Area
Amended AADMDPD Policy Number		Policy Number:
Amended AADMDPD Policies Map Amendments		Part of Policy Map:
Integrated Impact Assessment[1]		Paragraph Number:
Statement of Consultation		Paragraph Number:
Supporting Evidence Base		Document Name: Page/Paragraph:

4. Do you consider the DPD to be LEGALLY COMPLIANT?

Yes X No ☐

5 Do you consider the DPD to comply with the Duty-to-Cooperate?

Yes X No ☐

6. Do you consider the DPD to be SOUND?

Yes ☐ No X

*The considerations in relation to the Legal Compliance, Duty to Cooperate and the DPD being 'Sound' are explained in the Newark & Sherwood Development Plan Document Representation Guidance Notes and in Paragraph 35 of National Planning Policy Framework 2021 (NPPF).

[1] The Integrated Impact Assessment (IIA) integrates Sustainability Appraisal (SA), Strategic Environmental Assessment (SEA), Equalities Impact Assessment (EqIA) and Health Impact Assessment (HIA). Sustainability Appraisals (SA) are a requirement of the Planning and Compulsory Purchase Act 2004 and Strategic Environmental Assessments (SEA) are required by European Directive EC/2001/42, which was transposed into UK law by the Environmental Assessment Regulations for Plans and Programmes (July 2004). The EqIA is a way of demonstrating the District Council is fulfilling the requirements of the Public Sector Equality Duty contained in section 149 of the Equality Act 2010. HIA is a recognised process for considering the health impacts of plans and undertaking this type of assessment is widely seen as best practice.

7. The DPD is not sound because it is <u>not:</u>

(1) Positively Prepared	X
(2) Justified	X
(3) Effective	X
(4) Consistent with national policy	X

8. Please provide precise details of why you believe the DPD is, or is not, legally compliant, sound or in compliance with the duty to cooperate in the box below.

If you wish to provide supplementary information to support your details, please ensure they are clearly referenced.

Please see attached document. (Continue on a separate sheet/expand box if necessary)

9. Please set out what change(s) you consider necessary to make the DPD legally compliant or sound, having regard to the test you have identified at 6 above where this relates to soundness. You will need to say why this change will make the DPD legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible.

Please see attached document. (Continue on a separate sheet/expand box if necessary)

Please note your Representation should cover succinctly all the information, evidence and supporting Information necessary to support/justify the Representation and the suggested change, as there will not normally be a subsequent opportunity to make further Representations based on the original Representations at the Publication stage. After this stage, further submissions will be only at the request of the Inspector, based on the matters and issues he/she identifies for Examination.

10. If your Representation is seeking a change, do you consider it necessary to participate at the oral part of the examination?

No, I do not wish to participate at the oral Examination	**Yes**, I wish to participate at the oral Examination
☐	X YES☐

11. If you wish to participate at the oral part of the Examination, please outline why you consider this to be necessary.

Please see attached document.

(Continue on a separate sheet/expand box if necessary)

Please note the Inspector will determine the most appropriate procedure to adopt to hear those who have indicated that they wish to participate at the oral part of the Examination.

12. Please tick the relevant boxes below to receive notifications (via email) on the following events:

DPD submitted to the Secretary of State for Inspection X

Examination in Public hearing sessions X

Planning Inspector's recommendations for the DPD have been published. X

DPD has been formally adopted. X

Signature: [redacted] **Date:** 6 / 1 / 2023

Please return this form by 12 Noon on 9th January 2023 to one of the addresses below:

Email: planningpolicy@nsdc.info

Post: **Planning Policy & Infrastructure Business Unit**
Newark & Sherwood District Council
Castle House
Great North Road
Newark
NG24 1BY

Information is available at:
https://www.newark-sherwooddc.gov.uk/aadm-representation/

Office Use Only

Date of Receipt:

Representation No:

REPRESENTATIONS TO NEWARK AND SHERWOOD PUBLICATION AMENDED ALLOCATIONS & DEVELOPMENT MANAGEMENT DPD CONSULTATION, NOVEMBER 2022

On Behalf of Mr David Robinson

LAND NORTH OF MANOR CLOSE, BLEASBY

6TH JANUARY 2023

Prepared by GraceMachin Planning & Property

5 Malin Hill
Plumptre Square
Nottingham
NG1 1JK

INTRODUCTION

1. We have been instructed to make the following representations to the Newark and Sherwood Publication Amended Allocations & Development Management DPD Consultation, November 2023. These representations have been prepared having regard to the documents contained within the supporting Evidence Base Library and have assessed the compliance of the Publication Amended Allocations & Development Management DPD Consultation DPD against paragraph 35 of the National Planning Policy Framework (July 2021)(NPPF). Paragraph 35 states that for a plan to be "sound" it should be:

   * Positively prepared

   * Justified

   * Effective

   * Consistent with national policy

2. Our client, Mr David Robinson, has genuine concerns regarding the overall strategy for the delivery of housing growth and specifically in respect of the lack of any proposed housing allocations being advanced within the most sustainable locations, including Bleasby. It is our belief that the land to the north of Manor Close, Bleasby (please see Appendix A) is a realistic site, which should be allocated for residential development, in order to deliver the required housing numbers for Newark and Sherwood District within a sustainable location, immediately adjoining the main built up area of this sustainable settlement.

3. It is proposed that the Site be allocated for a small-scale development of up to 15 no. dwellings, in order to allow an adequate buffer to the adjacent railway line to the west, and in order to deliver strategic planting within the Site and to its boundaries. A development of this scale will also ensure that the landscape character of the area, and the interface between the built form of Bleasby and the surrounding open countryside can be protected and maintained. It is also envisaged that a development of this size and scale can be targeted towards those seeking self-build opportunities.

SITE DESCRIPTION

4. As highlighted above, the Site is located on the northern side of Manor Close, Bleasby, which itself is situated off the north-eastern side of Station Road (the principle road running through the village of Bleasby on a roughly east-west axis). The Site is located on the western side of the settlement, but immediately adjoining the built framework of Bleasby.

5. The Site currently encompasses un-used greenfield grassland. A small number of trees are located along the boundaries of the Site, which have been assessed through the accompanying tree survey. In total, this discreet and well-enclosed landholding measures 2.95 hectares in area.

6. Along its southern boundary, the Site adjoins existing properties along the northern side of Manor Close, which comprise single storey, detached bungalows. These properties enjoy long rear gardens, with a mixture of mature hedgerow and tree planting, along with some 1.8 metre close-boarded fencing separating these dwellings from the proposed development Site to the north.

7. The northern and eastern boundaries to the landholding are similarly defined through mature hedgerow planting, interspersed with tree planting, whilst the western boundary is provided by the East Midlands Nottingham to Lincoln Railway Line, which again, is separated from the Site by a robust hedgerow.

8. As shown on the Google Earth extract below, the Site is clearly defined and is well enclosed, and is entirely contained by the existing built framework of Bleasby. The Site does not extend beyond this established built environment, with the proposed development Site 'infilling' a gap between existing properties to the east and south, and the railway line to the west.

9. According to the Environment Agencies Flood Map for Planning, the Site is located within Flood Zone 2 (as depicted on the image below). As such, the landholding currently has a medium probability of flooding. As detailed further below, investigations into flood risk have already been undertaken, to ensure that the Site is safe for the lifetime of the development being proposed, whilst not increasing flood risk elsewhere.

10. The Site is not subject to any other statutory designations or allocations, and does not fall within or adjoining the Bleasby Conservation Area.

11. Historically, the Site was promoted as a residential land allocation within the Newark and Sherwood Local Plan 1998. At that stage, the Council included this Site as a proposed residential allocation for ca. 35 no. dwellings; however, the Inspector, at Examination, recommended the removal of this Site, owing to concerns relating to traffic generation, and the potential impact of a development of this scale, upon the character of the village (both matters are addressed further below).

12. Subsequently, the Site was again considered through the 2009 Strategic Housing Land Availability Assessment (under Reference 08_0159, land rear of Manor Close, Bleasby). Whilst the landowner proposed a yield of up to 45 no. dwellings, the Council's own assessment at that time envisaged a yield of 23 no. dwellings, owing to highway restrictions and the need to deliver structural landscaping.

13. On this basis, the Council concluded that "the Site may be Suitable" for a development of up to 23 no. dwellings. This assessment also confirmed that the Site was suitable in respect of landscape / biodiversity considerations, had good access to services, and would be achievable within a 5-year period.

SUITABILITY / SUSTAINABILITY OF LOCATION

14. As described above, the Site immediately adjoins the main built up framework of Bleasby, which is identified as an 'Other Village' within the Amended Newark and Sherwood Core Strategy 2019. However, we would stress the highly sustainable nature of this settlement, which, in terms of its level of service and facility provision, and its accessibility and access to public transport provision, is actually 'on a par' with the Principal Village of Lowdham.

15. The Site is within ready walking distance of the facilities and services provided, including:

    The Waggon & Horses public house – 800 metres
    The Church – 880 metres
    Bleasby Church of England Primary School – 200 metres
    Bleasby Railway Station – 230 metres
    Manor Farm Tea Shop – 410 metres
    The Village Hall – 1.7km
    Public open spaces at the Jubilee Ponds / Bleasby Lake – 850 metres

16. The Site is well situated to benefit from a good level of public transport provision. Bleasby train station is located approximately 230m from the site and is situated on the Nottingham to Lincoln line. Trains run frequently between both destinations. There are bus stops located on Station Road which are within 150m of the proposed development and provide access to bus services which link Bleasby to other nearby villages, including Lowdham and Hoveringham, as well as Newark itself.

ACCESS

17. This submission is accompanied by a Transport and Highways Technical Note and Access Appraisal, which describes the site context in relation to the local highway network, and which sets out the accident record / history of the immediate area. This confirms that, since 2016, only one 'slight' accident occurred on Station Road in 2017. This equates to an accident rate of 0.2 'slight' accidents per annum which

is below the one a year threshold. It is therefore considered that the local highway network operates within a safe nature.

18. The Highways Report goes on to consider the proposed residential development of this Site, and provides an access strategy to deliver such a scheme, which includes the demolition of no. 12 Manor Close (which is within the ownership of this same client, Mr David Robinson) and its replacement with an access driveway, which has been designed in accordance with the requirements of Nottinghamshire County Council's Highway Design Guide.

19. As depicted on the Access Design drawing which accompanies the Highway Technical Note, the access driveway has been designed to include:

    Width of 5m carriageway
    2m wide footways
    6m radius
    27m of visibility from proposed access point onto Manor Close
    2.4m x 43 m of visibility from Manor Close onto Station Road.

20. On this basis, the Highways Report concludes that the proposed residential development of this Site (for up to 60 no. dwellings) can be safely accommodated on the local highway network, and can be provided with a suitably designed point of access from Manor Close.

FLOOD RISK

21. In respect of flood risk, it is acknowledged that the Site lies within Flood Zone 2, as identified on the Environment Agencies Flood Map for Planning. A full Flood Risk Assessment and Drainage Strategy has not yet been undertaken; however, a Flood Risk Consultant has undertaken preliminary work, which confirms that the Site does have a surface water flooding issue and is also shown to flood in all modelled events above the 1 in 100-year event.

22. During the 1 in 100-year + 30% climate change event peak flood levels on-site are indicated to be 15.462m AOD across the majority of the Site. We understand that it would be sensible to raise any residential development 300mm above the peak flood level and to provide an evacuation plan. This would ensure the Site is safe during a flood, with site users evacuated prior to a flood event.

23. In due course, it is proposed that a detailed FRA and drainage strategy will be produced to support a Planning Application in respect of the residential development of this Site; however, the initial work undertaken (as summarised

above) indicates that a solution can be delivered to overcome flood risk within the Site, whilst ensuring that the risk of flooding is not increased elsewhere. As such, whilst this is a recognised constraint which must be properly addressed, it is not an impediment to the delivery of this Site.

LANDSCAPE CHARACTER

24. The previous promotion of this landholding as a residential allocation within the earlier 1998 Newark and Sherwood Local Plan highlighted concerns that a larger scale residential development (of ca. 35 no. dwellings) could create harmful impacts upon the character of Bleasby and upon its wider rural setting.

25. In considering this matter in respect of these representations, the content of the Landscape Character Assessment 2020 has been carefully considered, alongside the scale and amount of development being proposed.

26. In these respects, it is the case that the Site lies within the Trent Washlands Regional Character Area, and within Policy Zone TW52 – Thurgarton River Meadowlands. This Zone is identified as having a Moderate Condition and a Low Sensitivity and as such, has the Landscape Actions of 'Create and Reinforce'. With particular reference to built features, the Landscape Character Assessment for this Policy Zone encourages:

    Conserve the existing field pattern by locating new small scale development within the existing field boundaries.

    Promote sensitive design and siting of new agricultural buildings.

    Promote measures for reinforcing the traditional character of farm buildings using vernacular styles.

27. In considering the foregoing, it is clear that the proposed residential allocation of this Site is contained within the existing, clearly defined field boundary and does not seek to extend the built form of the village beyond the natural boundary created by the field hedgerow to the north of the Site. The character assessment for this area indicates a low sensitivity to change, such that a sensitively designed development could be accommodated within the proposed Site, without creating harmful or detrimental impacts to the wider landscape setting or rural backdrop to the village.

28. The low density development envisaged (of up to 15 no. self-build dwellings) can be delivered within this 2.95-hectare Site in a manner which retains the existing hedgerow boundaries, whilst also allowing for substantial new structural planting

both within and on the boundaries to the landholding, whilst also providing for views across the Site to the surrounding area.

SELF-BUILD

29. The Government has made clear that it wants to increase the capacity and diversity of the house building industry and build more quality new homes faster. The self-build and custom sector can play a key role in achieving this through the Government's new 'Right to Build' policy, which also offers greater opportunity for the use of sustainable construction techniques and more innovative eco-friendly design.

30. The commitment by Central Government to the 'Right to Build' was given even greater weight, with (then) Housing Secretary Robert Jenrick announcing a review in October 2020, in order to make it easier for people to build their own home. In addition, the Housing Secretary wrote to councils to ensure that they consider the demand for these homes when providing land for building and making planning decisions in their area. (Then) Housing Secretary Rt Hon Robert Jenrick MP said:

    "We are backing people who want to design and build their own home and today I have launched a review to ensure councils provide enough land and take proper consideration for these homes when making planning decisions in their area.

    This will help more people get a foot on the housing ladder and support our building industry as we deliver the homes that this country needs."

31. Andrew Baddeley-Chappell, CEO of the National Custom & Self Build Association (NaCSBA) said:

    "England has the lowest known rate of self-commissioned homes in the developed world. Our new homes market is crying out for the greener and higher quality build that goes hand-in-hand with more consumer choice. Housing diversification is key to the government's housing strategy.

    This excellent announcement today by the government should help many more people achieve the dream of living in better and more beautiful homes."

32. Richard Bacon MP, Ambassador for the Right to Build Task Force said:

    "For many years I have campaigned to increase real choices for the large number of people who want to build their own home or commission a home to their own

design from a local SME builder. This led to my private member's bill becoming the Self-Build and Custom Housebuilding Act, which the government has subsequently strengthened.

I warmly welcome the government's review of the current law. Some local councils are already doing an excellent job in providing more opportunities but some others are not yet supporting the spirit of the legislation and have some way to go if they are to grasp the huge opportunities for more and better housing which greater customer choice offers. We need to make sure every council is able to deliver on this important agenda which will help provide more high quality homes."

33. More recently, in April 2021, the Government re-confirmed its commitment to self-build development, with the new £150 million 'Help to Build' scheme, to make it easier and more affordable for people to build their own homes. This scheme allows new homes to be made to order or built from scratch, and will benefit small building firms as part of the government's 'Plan for Jobs'. Self and custom build could deliver 30-40,000 new homes a year: a significant contribution to the country's housebuilding ambitions.

34. Housing Secretary Rt Hon Robert Jenrick MP said:

"Building your own home shouldn't be the preserve of a small number of people, but a mainstream, realistic and affordable option for people across the country. That's why we are making it easier and more affordable – backed by over £150 million new funding from the government.
The scheme we have launched today will help the thousands of people who'd like to build their own home but who've not yet considered it or previously ruled it out.

Our plans will help get more people on to the housing ladder, ensure homes suit people's needs like home working or caring for relatives, whilst providing an important boost to small builders and businesses too."

35. It is clear from the foregoing that the Government now places the delivery of land suitable to accommodate self-build homes high on its agenda and there is a strong requirement upon Local Planning Authorities to ensure that the needs of those wishing to build their own homes are addressed. The Site at Bleasby offers an excellent opportunity within Newark and Sherwood District to address this unfulfilled housing need, in a sustainable and accessible location.

CONCLUSION

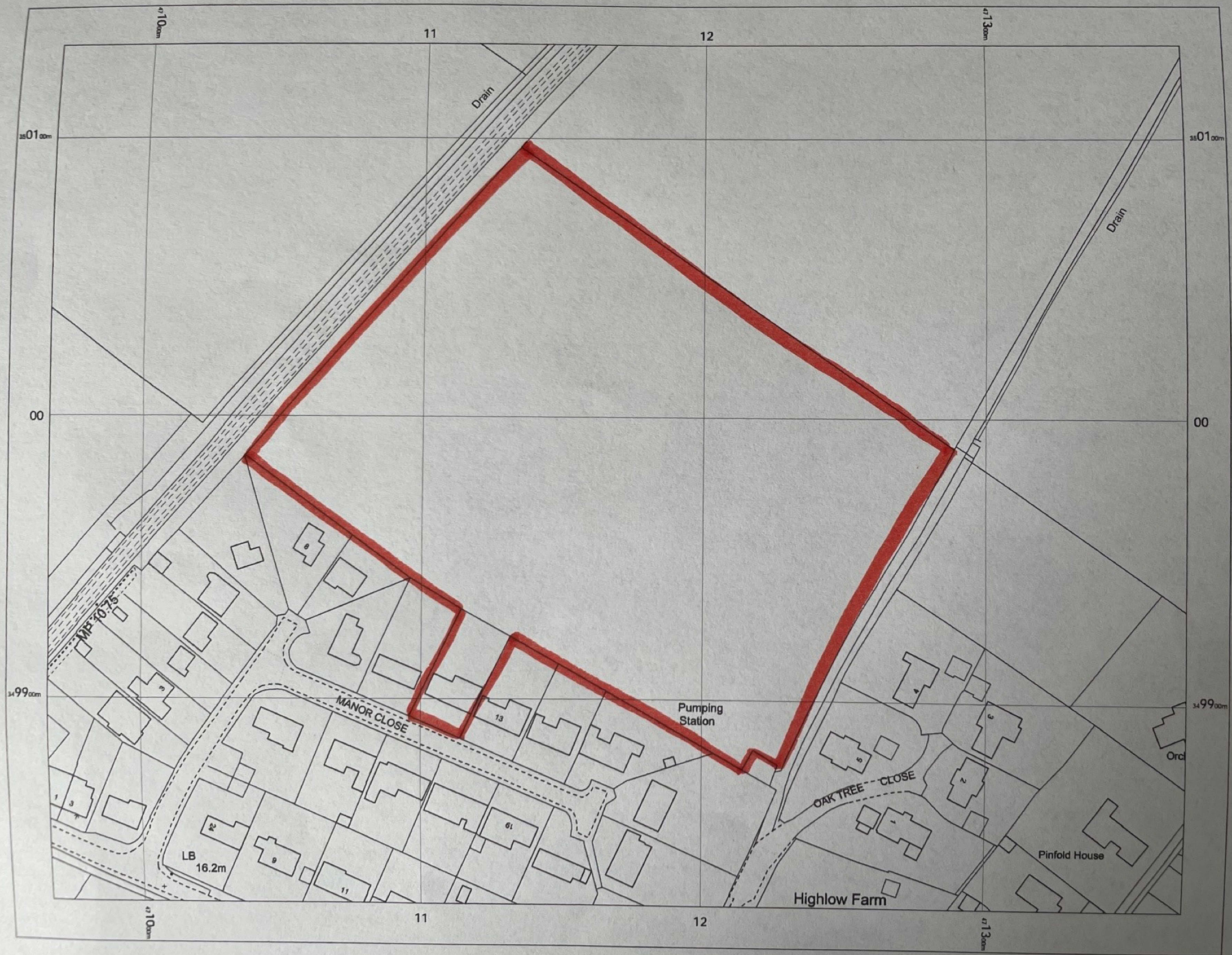
36. This submission is accompanied by a body of supporting work, which seeks to support the proposed residential allocation of this Site for a small-scale development of up to 15 no. self-build dwellings. This supporting work includes:

    Highways Technical Note and Access Appraisal;
    Topographical Survey; and
    Tree Survey

37. These initial assessments indicate that there are no fundamental constraints to the development of this Site and that a range of housing options, including a self-build scheme, could be delivered to meet local needs in the short term.

38. Based upon the above points, we would encourage the allocation of the Site to the north of Manor Close, Bleasby, for residential use, thereby allowing the delivery of much-needed housing in the short term. This Site is well-related to the existing settlement and is sustainably located, immediately adjoining this well-served and accessible village. The Site is well placed to deliver a range of housing options, including self-build plots, and it also offers the opportunity to provide wider infrastructure and community benefits.

Appendix A - Site Location Plan



N

OS MasterMap 1250/2500/10000 scale
Friday, January 6, 2023, ID: JEW-01079565
maps.johnewright.com

1:1250 scale print at A3, Centre: 471168 E, 349981 N

johnewright

[redacted]

the transportation consultancy

EXCEED RESPECT VALUE INNOVATE

Technical Note

Transport and Highways Technical Note –Access Appraisal

Project
J210539: Proposed Residential Development, Bleasby Nottinghamshire

Date: November 2021

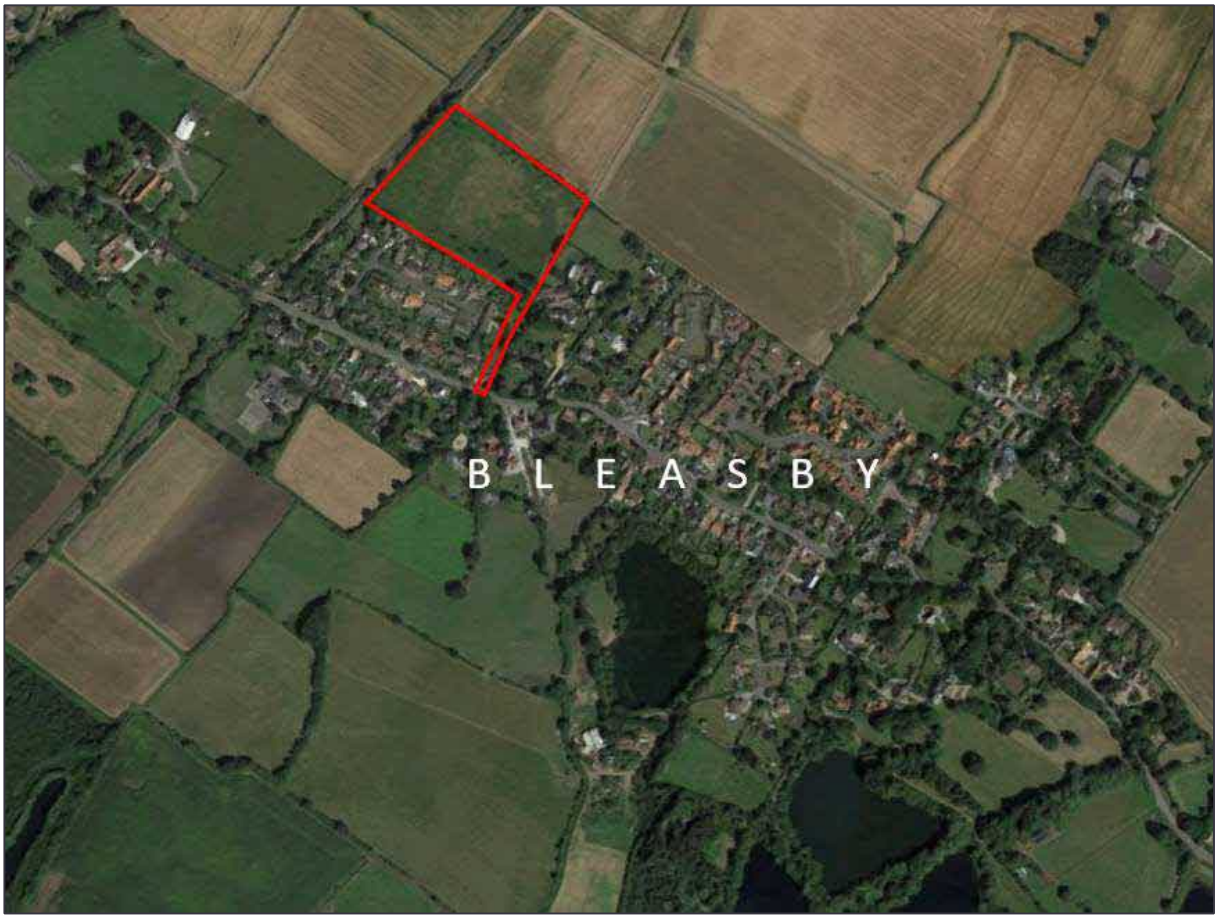
1. Introduction

1.1 Introduction

This Transport and Highways Technical Note has been prepared by The Transportation Consultancy ("ttc") to examine the proposals for a potential residential development on a parcel of land situated to the north of Manor Close in Bleasby, Nottinghamshire

The parcel of land in questions is displayed in **Figure 1.1** below.

Figure 1.1 Site Location



1.2 Purpose of Report

This Transport and Highway Technical Note has been prepared in order to determine if 'safe and suitable access' to the site can be achieved inline with National Planning Policy Guidance. The Technical Note will also identify the potential transport and highways implications of the development.

1.3 Scope of Report

The structure of this Technical Note is as follows:

- **Chapter 2: Site Audit** –provides a description of the site location, the highway network and undertakes a highway safety search of the site.
- **Chapter 3: Development Proposals** –provides a description of the development, site access proposals, servicing arrangements and sets out the expected traffic generation of the proposed development.
- **Chapter 4: Summary and Conclusions** –summarises the findings of the report and provides a conclusion.

2. Site Audit

2.1 Site Location and Description

The proposed development site is situated on a parcel of land directly to the north of residential properties which front Manor Close in the village of Bleasby.

The site in a local context is displayed in **Figure 2.1** below.

Figure 2.1 Development Site in Local Context

The site includes an area of approximately 2.95hectares and is bordered to the north by agricultural fields, by the Lincoln to Nottingham train line to the east. Residential properties which front Manor Close boarder the site to the south and existing residential properties form the boarder to the west. The site benefits from existing vehicle access which is again via Shale Lane.

2.2 Local Highway Network

The local highway network is a combination of privately owned highway and highway managed and maintained by Local Highway Authority (LHA), Nottinghamshire County Council (LCC) and comprises of the following;

Shale Lane

Shale Lane is a private access drive which is unsurfaced and unlit. As displayed in **Figure 2.2** there is a Public Right of Way (PRoW) which runs along the length of Shale Lane and in order to support the PROW there is a pedestrian footpath on the eastern side of Shale Lane. Shale Lane provides access to a number of individual residential properties on Oak Tree Close as well as vehicle access to the proposed development site.

Manor Close

Manor Close is a single carriageway cul-de-sac which provides access to a number of residential properties. It is subject to a speed limit of 30mph and is lit, there are pedestrian footways on either side of the carriageway and it provides access to a number of residential properties. Manor Close forms a junction in the form of a priority junction with Station Road with priority afforded to Station Road.

Station Road

Station Road is a single carriageway road which is subject to a 30mph speed limit, it is lit and there is a pedestrian footpath on the southern side of the carriageway. Station Road is the main through route through the village of Bleasby and provides access to a number of residential properties and residential roads. The daily traffic flow along Station Road was recorded as 2,261 two-way vehicles, which is considered light and to operate with available reserve capacity.

2.3 Sustainability of Site

The site is well situated to benefit from a good level of public transport provision. Bleasby train station is located approximately 230m from the site and is situated on the Nottingham to Lincoln line. Trains run frequently between both destinations.

There are bus stops located on Station Road which are within 150m of the proposed development and provide access to bus services. There is also a Primary School which is located on Station Road which is within 200m of the proposed development site. Figure 2.1 displays the train station and bus stops in relation to the proposed development site.

2.4 Highway Safety

Personal Injury Accident (PIA) data has been extracted from Crashmap (www.crashmap.com) for the latest 5-year period. The data is collected by the police and is approved by the National Statistics Authority and audited by the Department for Transport each year.

The purpose of assessing recorded PIAs is to determine whether there is a history of accidents in proximity to the site and to investigate whether there are any patterns or contributing factors to the accidents recorded. Clusters of accidents could indicate that improvements are required to enable development on the site to come forward.

The impact of casualties differs according to the severity of the injuries sustained. Three groups are usually differentiated as follows:

- **Fatal:** any death that occurs within 30 days from causes arising out of the accident.
- **Serious:** records casualties who require hospital treatment and have lasting injuries, but who do not die within the recording period for a fatality.
- **Slight:** where casualties have injuries that do not require hospital treatment, or, if they do, the effects of the injuries quickly subside.

Only links or clusters which exhibit an accident rate of greater than one accident per annum are considered to be significant within this assessment. The extent of the search area has been selected as within a 250m radius of Manor Close and Shale Lane junctions on Station Road.

Accident records from 2016 were searched and revealed that one 'slight' accident occurred on Station Road in 2017. This equates to an accident rate of 0.2 'slight' accidents per annum which is below the one a year threshold. It is therefore considered that the local highway network operates within a safe nature.

2.5 Conclusions

It has been demonstrated that there no outstanding highway safety issues, which the proposed development is expected to exacerbate and the proposed development site is well situated to benefit from a good level of public transport provision.

3. Development Proposal

3.1 Development Description

At this stage no development proposals have been identified and this Technical Report is required to determine if suitable access into the site can be gained. Due to the size of the site and to provide some context for the purpose of this Technical note, it has been assumed that up to 60 residential dwellings can be contained on site.

It should be noted that should the development proposals progress to the next stage, a formal masterplan along with a refined quantum of development will be provided.

3.2 Access Arrangements

The site currently benefits from vehicle access from Shale Lane, however an assessment into determining an alternative access has been undertaken. In order to ensure the access has been designed with relevant design guidance, the Nottinghamshire County Council (NCC) Highway Design Guide has been consulted.

The access has been designed in accordance with a 'Residential Access Way" which is for typically no more the 200 dwellings and includes for the following geometric design features;

- Width of 5m carriageway
- 2m wide footways
- 6m radius
- 27m of visibility from proposed access point

In order to gain vehicle access to the site, it is proposed that an existing bungalow on Manor Close will be replaced by the access road. The footways on the access road will provide safe access into the site for pedestrians A full design of the proposed access is provided in **Appendix A**.

In order to ensure that the proposed development can be serviced a refuse vehicle has been tracked into the site and this assessment is included in layout drawings provided in **Appendix A.**

Shale Lane also provides access to the site, although the existing nature of Shale Lane is not sufficient to provide access to circa 60 dwellings. It is however suitable to provide emergency access to the site and also to a small level of quantum of development whilst remaining private in the same manner as the nearby Oak Tree Close development which is accessed from Shale Lane.

3.3 Proposed Trip Generation

In order to determine the likely impact of the proposed development on the adjacent highway network, a trip rate assessment has been undertaken using the industry standard TRICS database. TRICS (Trip Rate Information Computer System) is a nationally recognised database of traffic surveys covering a multitude of different development types.

Trip rate data has been extracted from the latest version of the TRICS database for '03 –Residential/A - Houses Privately Owned' to determine the likely traffic generation for the proposed development site. Sites with similar characterises were selected and the full TRICS report is provided in **Appendix B** with the trip rates selected, the likely traffic generation resulting from the proposed development displayed in **Table 3.1.**

Table 3.1 Proposed Vehicle Generation

Time Range	Trip Rate (per dwelling)		Trip Generation (60 dwellings)		
	Arr	Dep	Arr	Dep	Tot
AM Peak (08:00 –09:00)	0.211	0.383	13	23	36
PM Peak (15:00 – 16:00)	0.266	0.266	16	16	32
Daily	2.322	2.515	139	151	290

As outlined in Table 3.1 the proposed development of circa 60 residential dwellings could be expected to generate 36 vehicle trips during the AM peak hour, 32 vehicle trips during the PM peak hour and a total of 290 vehicle movements throughout the day.

When broken down in the peak periods, it can be seen that one vehicle will be generated approximately every 2 minutes. To provide some context, the level of traffic generated by the development proposals will represent an increase of 12% on the daily traffic flows along Station Road.

Given the low base of existing traffic along Station Road, it is anticipated that this level of traffic will not be noticeable compared to the existing daily levels of traffic Station Road.

3.4 Conclusion

It has been demonstrated that “safe and suitable access for all users” can be achieved inline with the design guidance outlined by NCC. The level of traffic associated with the proposals has been identified and it has been concluded that there is sufficient capacity on the local highway network to accommodate the level of traffic without any concerns.

4. Summary and Conclusions

4.1 Summary

This Transport and Highways Technical Note has been prepared by The Transportation Consultancy ("ttc") to determine if safe and suitable access can be achieved to supplement a development proposal for circa 60 residential properties on a parcel of land to the north of Manor Close in the village of Bleasby, Nottinghamshire.

This technical report has demonstrated the following.

- There are no existing highway safety issues on the local highway network in the vicinity of the proposed development site.
- The level of traffic recorded along Station Road is extremely light and there is a lot of reserve capacity.
- The site is situated in a location which benefits from access to Bus and Train services
- Appropriate access can be gained into the site which has been designed in accordance with local highway design guidance.
- The level of anticipated traffic has been determined and it is considered that the existing local highway network has the capacity to accommodate the traffic flow without detriment to the operation of safety of the network.

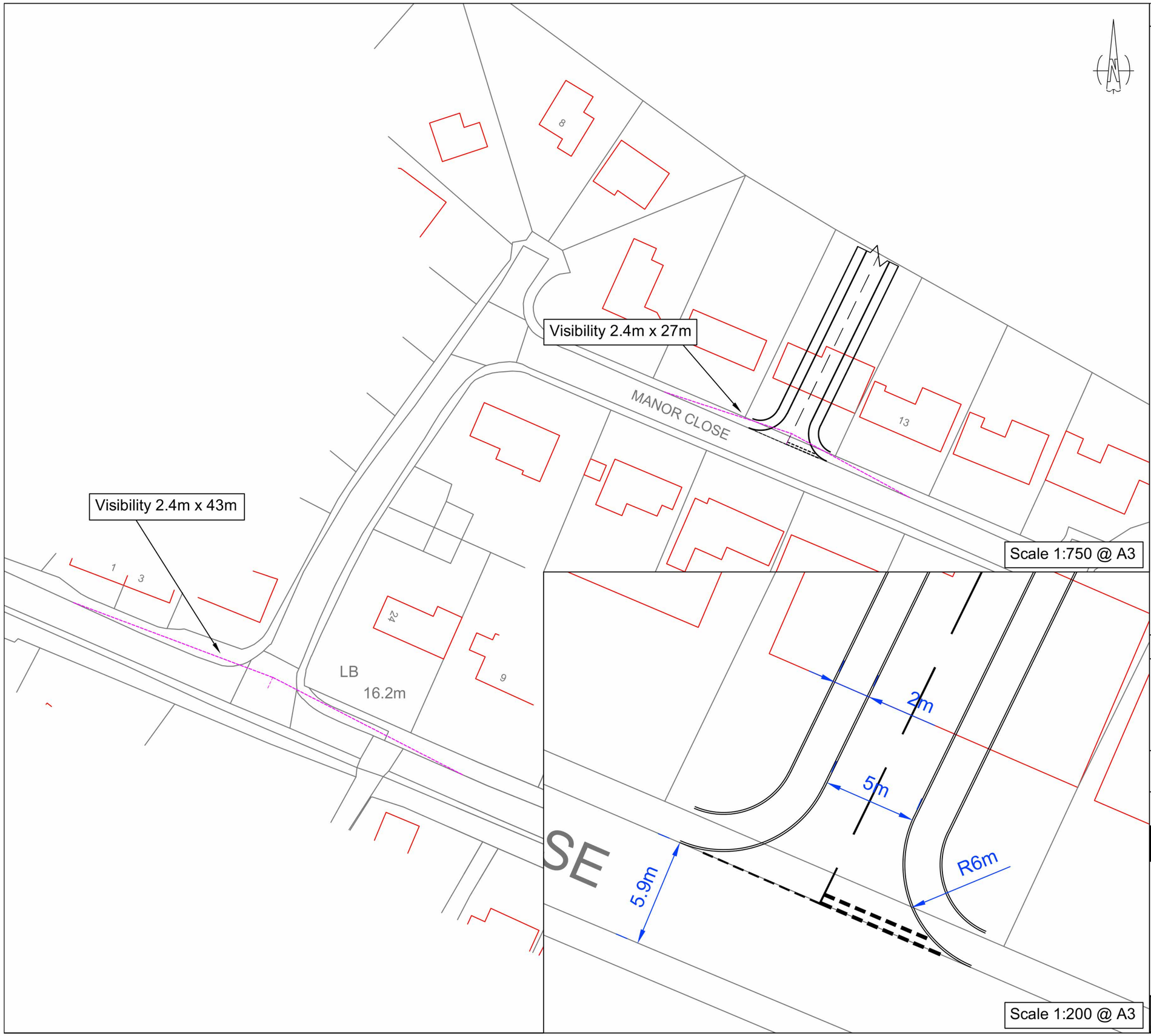
4.2 Conclusions

As a result of the information presented in this Technical Note, that the development proposals are supportive of NPPF whereby it provides '*safe and suitable*' access for all users (**NPPF, Para 110**) and '*does not have an unacceptable impact on highway safety or create a scenario where the residual cumulative impacts on the road network would be severe*' (**NPPF, Para 111**).

As such it is considered that the impact of the proposed development would not present any significant highway issues should it decide to come forward to a planning application stage.

Appendix A
Proposed Access Design

Date of 1st Issue	Description	Drawn by	Checked by
01/11/21	FIRST	SB	JM



Key:

- OS Base
- Proposed Access
- Visibility Splays
- Key Geometries

Notes:

1. Design based on Ordinance Survey
2. Visibility and dimensions based on NCC design guide
3. Visibility on Station Road based on Manual for Streets 30mph speed limit

A3 SCALE
As Shown

Drawing Title
Proposed Access Arrangements
Manor Close
Bleasby
Sheet 1 of 2

Architect

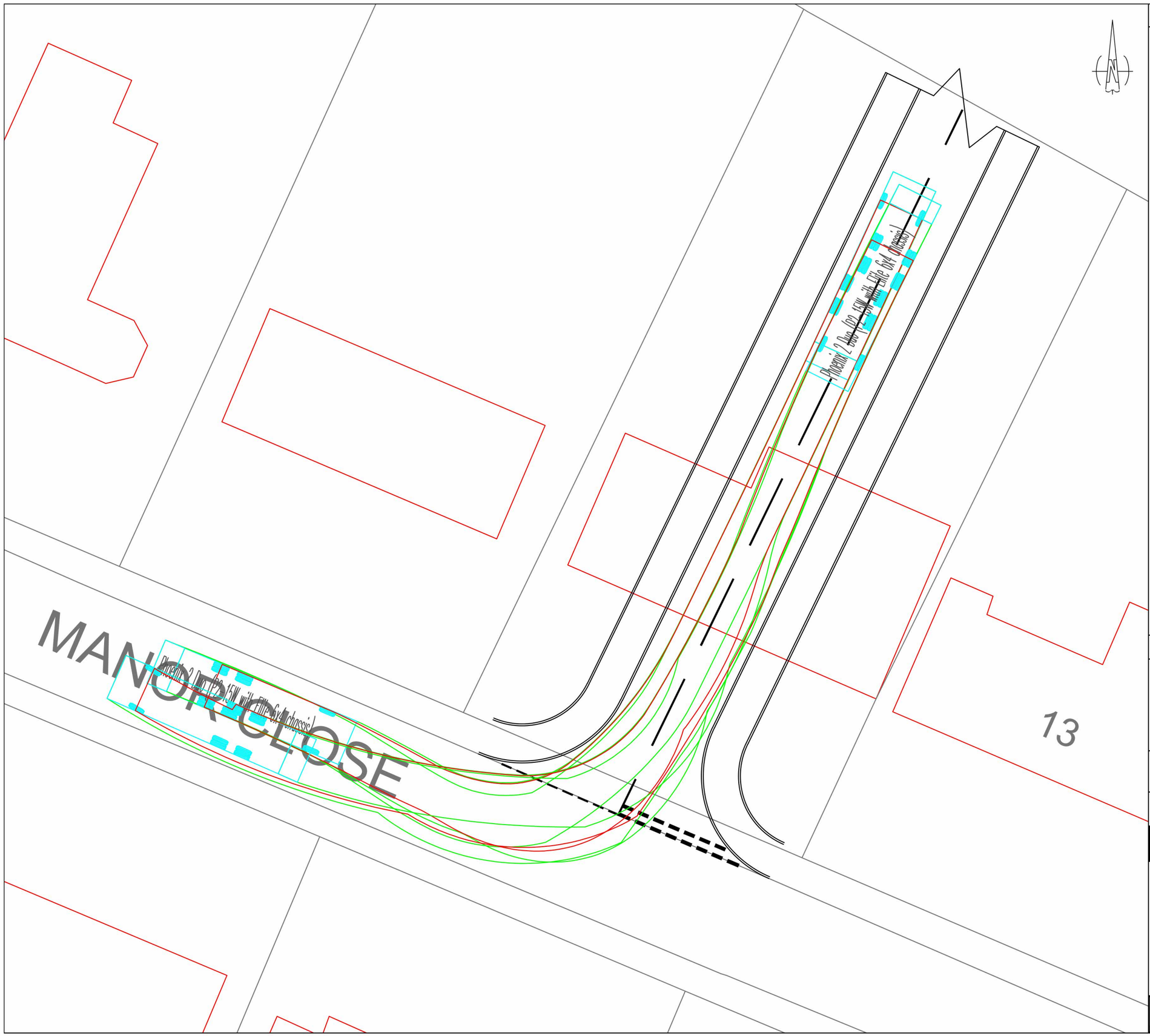
Drawing Status
Planning

168 PARADE
LEAMINGTON SPA
CV32 4AE
[redacted]

ttc the transportation consultancy

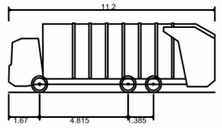
Drawing Number	Revision
210539-01	

Date of 1st Issue	Description	Drawn by	Checked by
01/11/21	FIRST	SB	JM



Key:

- OS Base
- Proposed Access
- Vehicle Wheel Track
- Vehicle Body



Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)

Overall Length	11.200m
Overall Width	2.530m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.500m

Notes:

1. Design based on Ordinance Survey
2. Visibility and dimensions based on NCC design guide
3. Visibility on Station Road based on Manual for Streets 30mph speed limit

A3 SCALE
1:200

Drawing Title
Proposed Access Arrangements
Manor Close
Bleasby
Sheet 2 of 2

Architect

Drawing Status
Planning

168 PARADE
LEAMINGTON SPA
CV32 4AE
[redacted]

ttc the transportation consultancy

Drawing Number	Revision
210539-01	

Appendix B
TRICS Report

E471160.00 E471180.00 E471200.00 E471220.00 E471240.00 E471260.00 E471280.00

N350080.00 N350060.00 N350040.00 N350020.00 N350000.00 N349980.00 N349960.00 N349940.00 N349920.00 N349900.00 N349880.00 N349860.00

DENSE BRAMBLES

DENSE UNKEPT HEDGE (CENTRELINE INDETERMINABLE)

DENSE BRAMBLES

PADDOCK (LARGELY LONG GRASS & SELF-SET VEGETATION)

OVERHEAD ELECTRIC CABLE

POLE

STAY WIRES x2

POLE

POLE

METAL GATES

PIPE SOFFIT 15.00 IL 14.64

DENSE BRAMBLES

STONE TRACK

SEVERN TRENT COMPOUND

METAL GATES

HEDGE

HEDGE (OVER DYKE)

WOODEN PANEL FENCE

DYKE IL 14.49

DYKE IL 14.48

DYKE IL 14.44

BANK TOP

DYKE IL 14.47

HEDGE (OVER DYKE)

DYKE IL 14.43

DYKE WL 14.74 IL 14.61

HEDGE (OVER DYKE)

EAVES 20.62

RIDGE 23.62

DWELLING

EAVES 20.40

RIDGE 23.78

DWELLING

RIDGE 20.91

DWELLING

RIDGE 20.29

NOTES

ABBREVIATIONS & SYMBOLS

AV	AIR VALVE	OHC	OVERHEAD CABLE
BH	BORE HOLE	PB	POST BOX
BOL	BOLLARD	PINV	PIPE INVERT LEVEL
CATV	CABLE TV MH	PM	PARKING METER
CCTV	SECURITY CAM	PO	POST
CL	COVER LEVEL	PT	PIPE TOP LEVEL
CH	CHANNEL	P/R	POST & RAIL FENCE
COL	COLUMN	P/W	POST & WIRE FENCE
DC	CABLE TV LID	RD	EDGE OF ROAD/NO KERB
DP	DOWN PIPE	RE	RODDING EYE/POINT
DR	DRAIN	RL	RIDGE LEVEL
EL	EAVES LEVEL	RP	REFLECTIVE POST
EP	ELECTRIC POLE	RS	ROAD SIGN
ER	EARTH ROD	SLVL	STONE LEVEL
FB	FLOWER BED	SOFF	SOFFIT LEVEL
FH	FIRE HYDRANT	SV	VALVE
FFL	FINISHED FLOOR LEVEL	SW	SURFACE WATER
FP	FLAG POLE	Tac	TACTILE PAVING
FW	FOUL WATER	TH	TRIAL HOLE
GV	GAS VALVE	TL	TRAFFIC LIGHTS
HW	HEADWALL	TLVL	TARMAC LEVEL
IC	INSPECTION COVER	TOW	TOP OF WALL LEVEL
IL	I NVERT LEVEL	TP	TELEGRAPH POLE
KB	KERB BOTTOM	TRK	TRACK
KO	KERB OFFLET	UTL	UNABLE TO LIFT
KT	KERB TOP	VP	VENT PIPE
LP	LAMP POST	WL	WATER LEVEL
LC	LIGHT COLUMN	WLVL	WATER LEVEL
MH	MANHOLE	WM	WATER METER
MP	MARKER POST	WO	WASH OUT POINT

FENCE, HEDGE, ELECTRIC, BANK EDGE, STORM LINE, FOUL LINE, TELECOM LINE, GAS LINE, LARSON PILES, CHANNELS, WATER MAIN

TREE, BOREHOLE, STATION, TBM, MANHOLE, GULLY, BATTER, WATER LVL, GATE

1. THE POSITION OF THIS SURVEY IS BASED ON GPS OSTN15 GRID.
2. ALL LEVELS RELATE TO GPS DATA ACQUIRED WITH TRIMBLE VRS.
3. TREES SPREADS ARE DRAWN TO SCALE AND SHOW THE GENERAL/AVERAGE CANOPY SPREAD.
4. ALL BELOW GROUND LEVEL INFORMATION INCLUDING VOIDS, DRAINAGE & SERVICES HAVE BEEN IDENTIFIED FROM THE SURFACE LEVEL ONLY, THEREFORE PIPE SIZES ETC ARE ESTIMATIONS ONLY. ALL CRITICAL DIMENSIONS SHOULD BE CHECKED PRIOR TO THE COMMENCEMENT OF ANY SITE WORKS.
5. EVERY EFFORT HAS BEEN MADE TO LOCATE AND SURVEY ALL VISIBLE FEATURES. IT SHOULD BE NOTED THAT SOME ITEMS MAY HAVE BEEN OBSCURED AT THE TIME OF THE SURVEY AND THEREFORE NOT SHOWN ON THIS DRAWING.
6. PHYSICAL BOUNDARY FEATURES SHOWN ON THIS DRAWING DO NOT NECESSARILY REPRESENT THE ACTUAL LEGAL BOUNDARIES. THIS INFORMATION SHOULD BE CONFIRMED WITH THE RELEVANT DOCUMENTATION.
7. THE CONTRACTOR MUST CHECK AND VERIFY ALL SITE LEVELS, DIMENSIONS, UTILITIES AND DRAINAGE DETAILS PRIOR TO THE COMMENCEMENT OF ANY SITE WORKS. ANY DISCREPANCIES MUST BE NOTIFIED TO DANIEL CHARLES SURVEYS LTD.
8. ALL SURVEY STATION CONTROL POINTS MUST BE CHECKED BY THE CONTRACTOR PRIOR TO STARTING ANY SITE WORKS.

SURVEY CONTROL POINT INFORMATION

Point	Easting	Northing	Elevation
9000	471227.916	349855.594	15.520
9002	471183.481	349774.800	15.874

SURVEY DATE	09/06/2022	INITIALS	MJW

REV	AMENDMENTS	DRN	DATE

Client:
MR D ROBINSON &
MR A GOODWIN

Project Title:
LAND OFF
SHALE LANE
BLEASBY - NOTTS

Drawing Title:
TOPOGRAPHICAL SURVEY 2 of 2

Scale @ A0: 1:200	Date: 10/06/2022
Drawing No: 22 - 69 - 02	Rev:
C.A.D.Title: M:\DCS\jobs\grace machin shale lane bleasby\master topo (22-69-01+02).mjo	
Drawn By: MJW	Checked By: MJL

Daniel Charles Surveys Ltd
Daniel Charles Surveys Limited
Land Surveying & Engineering Services
Honeywood Barn, Honeyholes lane,
Dunholme, Lincoln, LN2 3SU
[redacted]
Website : www.daniel-charles.co.uk

N

E471040.00 E471060.00 E471080.00 E471100.00 E471120.00 E471140.00 E471160.00 E471180.00

N350080.00 N350060.00 N350040.00 N350020.00 N350000.00 N349980.00 N349960.00 N349940.00 N349920.00 N349900.00 N349880.00 N349860.00

DENSE TREES & HEDGE
POST & WIRE FENCE
DENSE TREES
DENSE TREES & HEDGE
POST & WIRE FENCE
DENSE BRAMBLES
PADDOCK (LARGELY LONG GRASS & SELF-SET VEGETATION)
OVERHEAD ELECTRIC CABLE
POLE
POLE
STAY WIRES x4
BANK TOP
DYKE E 14.76
DYKE E 14.71
DYKE E 14.67
DYKE E 14.62
DYKE E 14.48
DYKE E 14.51
DYKE E 14.49
DYKE E 14.44
HEDGE (OVER DYKE)
WOODEN PANEL FENCE
MH GL 16.15
RIDGE 23.03
EAVES 20.78
DWELLING
RIDGE 23.04
EAVES 20.84
DWELLING
RIDGE 20.68
DWELLING
RIDGE 20.92
DWELLING
RIDGE 20.29
DWELLING
RIDGE 20.91
DWELLING

NOTES

ABBREVIATIONS & SYMBOLS

AV	AIR VALVE	OHC	OVERHEAD CABLE
BH	BORE HOLE	PB	POST BOX
BOL	BOLLARD	PINV	PIPE INVERT LEVEL
CATV	CABLE TV MH	PM	PARKING METER
CCTV	SECURITY CAM	PO	POST
CL	COVER LEVEL	PT	PIPE TOP LEVEL
CH	CHANNEL	P/R	POST & RAIL FENCE
COL	COLUMN	P/W	POST & WIRE FENCE
DC	CABLE TV LID	RD	EDGE OF ROAD/NO KERB
DP	DOWN PIPE	RE	RODDING EYE/POINT
DR	DRAIN	RL	RIDGE LEVEL
EL	EAVES LEVEL	RP	REFLECTIVE POST
EP	ELECTRIC POLE	RS	ROAD SIGN
ER	EARTH ROD	SLVL	STONE LEVEL
FB	FLOWER BED	SOFF	SOFFIT LEVEL
FH	FIRE HYDRANT	SV	VALVE
FFL	FINISHED FLOOR LEVEL	SW	SURFACE WATER
FP	FLAG POLE	Tac	TACTILE PAVING
FW	FOUL WATER	TH	TRIAL HOLE
GV	GAS VALVE	TL	TRAFFIC LIGHTS
HW	HEADWALL	TLVL	TARMAC LEVEL
IC	INSPECTION COVER	TOW	TOP OF WALL LEVEL
IL	I NVERT LEVEL	TP	TELEGRAPH POLE
KB	KERB BOTTOM	TRK	TRACK
KO	KERB OFFLET	UTL	UNABLE TO LIFT
KT	KERB TOP	VP	VENT PIPE
LP	LAMP POST	WL	WATER LEVEL
LC	LIGHT COLUMN	WLVL	WATER LEVEL
MH	MANHOLE	WM	WATER METER
MP	MARKER POST	WO	WASH OUT POINT

FENCE
HEDGE
ELECTRIC
BANK EDGE
STORM LINE
FOUL LINE
TELECOM LINE
GAS LINE
LARSON PILES
CHANNELS
WATER MAIN

TREE
BOREHOLE
STATION
TBM
MANHOLE
GULLY
BATTER
WATER LVL
GATE

1. THE POSITION OF THIS SURVEY IS BASED ON GPS OSTN15 GRID.
2. ALL LEVELS RELATE TO GPS DATA ACQUIRED WITH TRIMBLE VRS.
3. TREES SPREADS ARE DRAWN TO SCALE AND SHOW THE GENERAL/AVERAGE CANOPY SPREAD.
4. ALL BELOW GROUND LEVEL INFORMATION INCLUDING VOIDS, DRAINAGE & SERVICES HAVE BEEN IDENTIFIED FROM THE SURFACE LEVEL ONLY, THEREFORE PIPE SIZES ETC ARE ESTIMATIONS ONLY. ALL CRITICAL DIMENSIONS SHOULD BE CHECKED PRIOR TO THE COMMENCEMENT OF ANY SITE WORKS.
5. EVERY EFFORT HAS BEEN MADE TO LOCATE AND SURVEY ALL VISIBLE FEATURES. IT SHOULD BE NOTED THAT SOME ITEMS MAY HAVE BEEN OBSCURED AT THE TIME OF THE SURVEY AND THEREFORE NOT SHOWN ON THIS DRAWING.
6. PHYSICAL BOUNDARY FEATURES SHOWN ON THIS DRAWING DO NOT NECESSARILY REPRESENT THE ACTUAL LEGAL BOUNDARIES. THIS INFORMATION SHOULD BE CONFIRMED WITH THE RELEVANT DOCUMENTATION.
7. THE CONTRACTOR MUST CHECK AND VERIFY ALL SITE LEVELS, DIMENSIONS, UTILITIES AND DRAINAGE DETAILS PRIOR TO THE COMMENCEMENT OF ANY SITE WORKS. ANY DISCREPANCIES MUST BE NOTIFIED TO DANIEL CHARLES SURVEYS LTD.
8. ALL SURVEY STATION CONTROL POINTS MUST BE CHECKED BY THE CONTRACTOR PRIOR TO STARTING ANY SITE WORKS.

SURVEY DATE	09/06/2022	INITIALS	MJW

REV	AMENDMENTS	DRN	DATE

Client:
MR D ROBINSON &
MR A GOODWIN

Project Title:
LAND OFF
SHALE LANE
BLEASBY - NOTTS

Drawing Title:
TOPOGRAPHICAL SURVEY 1 of 2

Scale @ A0:	1:200	Date:	10/06/2022
Drawing No:	22 - 69 - 01	Rev:	
C.A.D.Title:	M:\DCS\jobs\grace machin shale lane bleasby\master topo (22-69-01+02).mjo		
Drawn By:	MJW	Checked By:	MJL

Daniel Charles Surveys Ltd
Daniel Charles Surveys Limited
Land Surveying & Engineering Services
Honeywood Barn, Honeyholes lane,
Dunholme, Lincoln, LN2 3SU
[redacted]
Website : www.daniel-charles.co.uk

Tree Survey
for
Land north of Manor Close
Bleasby

13th June 2022

The Stables, 14 King Street, Nether Broughton, Melton Mowbray LE14 3HA

Contents

Introduction

AT2 was instructed by GraceMachin to prepare a tree survey in accordance with BS5837[2] with reference to land to the north of Manor Close in Bleasby, Nottinghamshire.

The tree survey provides an objective catalogue of the species, size and condition of the trees on or adjacent to a site. The results of the tree survey should be used to inform the design options with a view to creating a harmonious and sustainable development between trees and buildings.

The report includes the following sections:

- Context of the report including the following considerations:
    - Tree physiology and potential for damage
    - Protection of trees during construction
    - Trees subject to statutory controls
    - Trees and wildlife
    - Implementation of tree works
    - Design considerations
    - Timing of the tree survey
- Tree survey
    - Methodology & limitations
    - Site description
    - Key to recorded information
    - Tree survey plan
    - Tree survey schedule
    - BS 5837 cascade chart for tree quality assessment
- Appendices
    A. Glossary of arboricultural terms
    B. Bibliography & references

Arboricultural terms that are included in the glossary in appendix A will be appear in **bold** on the first occasion of their use.

Considerations

Damage to Trees[2]

Trees that have good health and stability are well adapted to their surroundings. Any development activity which affects the adaptation of trees to a site could be detrimental to their health, future growth and safety. Tree species differ in their ability to tolerate change but all tend to become less tolerant after they have reached maturity or suffered previous damage or stress. Planning and subsequent site management should aim to minimise the effect of change.

The part of a tree most susceptible to damage is the root system, which, because it is not immediately visible, is frequently ignored. Damage to, or death of the root system affects the health, growth, life expectancy and safety of the entire tree. The effects of such damage may only become evident several years later. Damage may be the result of a number of insignificant but compounding factors that accumulate over time.

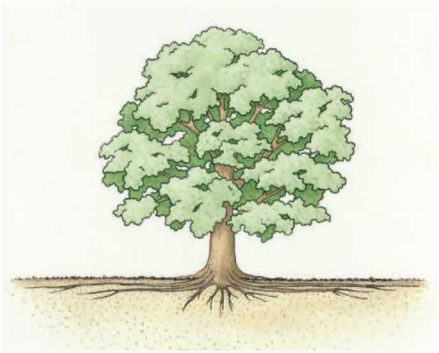
Damage to the stem and branches of a tree is not usually sufficient to kill the tree directly but may make it unsafe by affecting the weight of distribution of the crown or by facilitating decay in the long term. Such damage may also be disfiguring.

Roots perform several functions:

- Anchoring the tree in the ground
- Taking up water and minerals from the soil
- Storing food for times of dormancy

A tree typically has 80-90% of its roots within 60cm of the surface of the ground. Although they may be deeper within the dense mass of roots and soil close to the base of the tree it is rare for roots to penetrate to a depth greater than 2 metres.

Within a short distance of the stem the roots are highly branched so as to form a network of small-diameter woody roots that typically extend radially for a distance much greater than the height of the tree, except where impeded by unfavourable conditions. All parts of this system bear a mass of fine, non-woody absorptive roots.



Trees have relatively shallow but wide spreading roots[4].

The root system does not generally show the symmetry seen in the branch system. The development of all roots is influenced by the availability of water, nutrients, oxygen and soil penetrability. As far as these conditions allow, the root system tends to develop sufficient volume and area to provide physical stability.

The uptake of water and mineral nutrients by the root system takes place via the fine roots, typically less than 0.5 mm diameter. Their survival and functioning - which are essential for the health of the tree as a whole - depend on the maintenance of favourable soil conditions. The fine roots are short-lived with the majority dying each winter and with fresh ones developing in response to the needs of the tree.

All parts of the root system, but especially the fine roots, are vulnerable to damage. Once roots are damaged, water and nutrient uptake is restricted until new ones have grown. Mature and over-mature trees respond slowly, if at all, to damage of their woody roots.

The main risks to tree roots come from physical damage and compaction to the surrounding soil.

- Physical damage:

  During construction damage is often sustained when digging foundations or trenches for services. Surface roots are at risk when laying driveways, hardstanding and landscaping. Damaged roots are an entry point for infection and if a root is cut completely the tree loses a proportion of its capacity to take up water and minerals, store energy for the winter and weakens its anchorage in the ground.

Walnut roots smashed by an excavator.

- Compaction:

  This is often caused by vehicular traffic. Tree roots need oxygen to respire and growth is inhibited or stopped when the airspaces in the soil are lost through compaction.

- Other damage:

  Trees can also be damaged by contamination from fuel and chemical spillages or by fires.

Unless the damage is extremely severe it is unlikely that a tree will show symptoms immediately. More typically there is a steady decline over a few years with smaller leaves, crown dieback and possibly, eventual failure.

Protection of trees during construction

BS5837: 2012 Trees in relation to design, demolition and construction - Recommendations[2] gives guidance on the implementation of protection for trees and roots before and during construction.

Recognising the importance of root health, the British Standard defines the **root protection area (RPA)** as:

> *the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.*

The RPA is calculated as an area equivalent to a circle with a radius 12 times the stem diameter measured at a height of 1.5m above ground level. Any modifications to the shape of the RPA should only be made based on a sound arboricultural assessment of likely root distribution.

The tree survey schedule on page 13 gives the radius of the RPA for each tree. This is the minimum distance at which barriers should be stationed to protect trees and their roots to form a **construction exclusion zone (CEZ)**.

Trees subject to Statutory Control

Local Planning Authorities may assess trees as beneficial to the wider community in terms of their amenity value. They may protect such trees with a Tree Preservation Order (TPO). Work may still be permitted on protected trees but permission for the works must first be obtained from the LPA.

Some areas are designated conservation areas. Before carrying out works on a tree in a conservation area notice must be given to the LPA. The LPA can either allow the works to proceed or impose a TPO.

Where felling would produce more than five cubic metres of timber a felling license may be required from the Forestry Commission. However, this does not apply to trees growing in an orchard, garden, churchyard or public open space.

Trees and Wildlife

Trees are hosts to nesting birds and mammals. Under the Wildlife and Countryside Act it is an offence to disturb any nesting bird or bat. Before carrying out any works it is important to ensure that there are no birds or bats in residence.

Implementation of Tree Works

Tree work is skilled and potentially dangerous. Work should be carried out by trained and certificated contractors working to BS 3998: 2010 *Recommendations for Tree work*[1].

Design considerations

The relationship of buildings to large trees can cause apprehension to occupiers or users of nearby buildings or spaces, resulting in pressure for the removal of the trees. Buildings and other structures should be designed and/or sited with due consideration given to the trees' ultimate height and canopy spread. The design should take into account future growth so as to reduce the need for frequent remedial pruning or other maintenance.

Shading and light penetration should also be considered when positioning windows and indoor and outdoor living spaces to allow sufficient natural light. This survey does not include any shade assessment although it is possible to model the shade cast by tree canopies at different times of the day and year.

Within the RPA, new hard surfacing should be gas and water permeable and should not require excavation into the soil ("**no-dig**"). BS5837 recommends that new hard surfacing should not exceed 20% of any existing unsurfaced ground within the RPA.

Arboricultural constraints related to BS5837 grading

The survey schedule on page 13 includes a tree quality assessment grading in accordance with BS5837. Trees are graded as A, B, C or U in accordance with the assessment cascade chart on page 15.

- Trees identified as category A are those of high quality with an estimated remaining life expectancy of at least 40 years. These trees are particularly good examples of their species or of particular visual importance as arboricultural and/or landscape features. They pose a significant constraint to development and should be retained, protected and incorporated within the design where possible. Category A trees are shaded green on the tree plan.

- Trees identified as category B are those of moderate quality with an estimated remaining life expectancy of at least 20 years. These are 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). They also pose a significant constraint to development and should be retained, protected and incorporated within the design where possible. Category B trees are shaded blue on the tree plan.

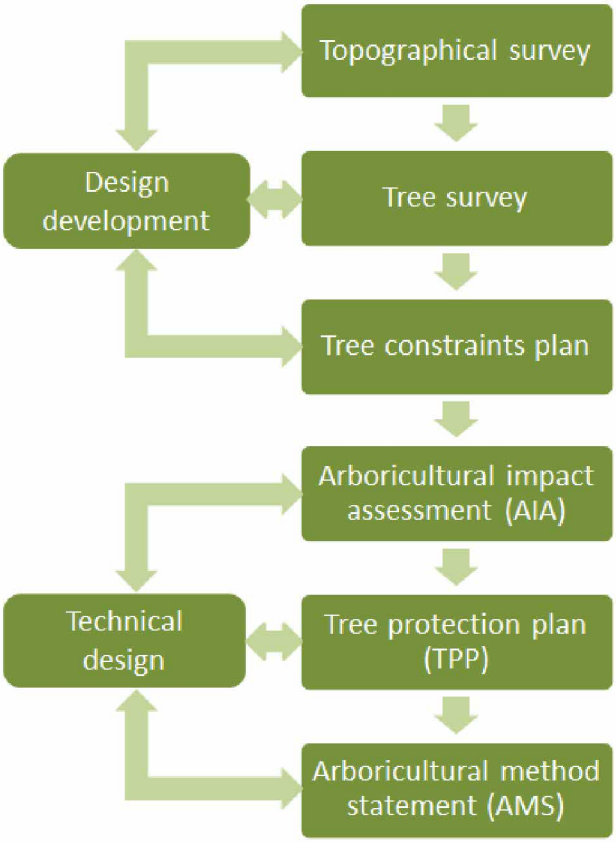
- Trees identified as category C are those of low quality with an estimated remaining life expectancy of at least 10 years. These are unremarkable trees offering low or only temporary/transient landscape benefits. They are in an adequate condition to be retained but could be replaced by new planting. Category C includes young trees with a stem diameter below 150mm which are not yet of a size to make a significant contribution to the landscape. These trees should not be considered to pose a significant constraint to development but should be retained and protected where possible. Category C trees are shaded grey on the tree plan.

- Trees identified as category U are 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. This includes trees that have a serious structural defect, trees that are dead or are showing signs of significant overall decline and very low-quality trees suppressing adjacent trees of better quality. These trees are unsuitable for retention and should not be a constraint to development. Category U trees are shaded red on the tree plan.

Timing of the tree survey

The British Standard BS5837[2] recommends that:

> *A tree survey should be undertaken by an arboriculturist to record information about the trees on or adjacent to a site. The results of the tree survey, including material constraints arising from existing trees that merit retention, should be used (along with any other relevant baseline data) to inform feasibility studies and design options. For this reason, the tree survey should be completed and made available to designers prior to and/or independently of any specific proposals for development.*



The tree survey provides an objective catalogue of the species, size and condition of the trees including the size of the root protection area (RPA) which needs to be "no-dig" regarding development. The RPA is nominally a circle but roots are influenced by a range of underground factors so it is often useful to carefully excavate a trial trench either by hand or, ideally, using an air-spade to determine the actual root morphology. This information will be the basis of the **tree constraints plan** which will inform the design of nearby structures. **Pile and beam** is a common solution for foundations within the RPA where piles are placed in-between the roots and bridged with ground beams.

Depending on the design proposals it is possible that the local planning authority may require an **arboricultural method statement** and **tree protection plan** to detail how trees will be protected from damage during development.

Tree Survey

Methodology & limitations

The trees were inspected from ground level to produce a catalogue of species, size and general condition and their longer-term value. The soil was not examined and no samples were taken for analysis. There has been no attempt to assess potential root damage or subsidence potential.

The content of the tree survey should be used to inform the design options. It is not intended to be used as a detailed tree risk management survey. Trees are living organisms whose health and condition can change rapidly and no guarantee can be given as to the absolute safety or otherwise of any tree. The report may include some recommendations to reduce the likelihood of tree failure but absolute safety is not a realistic goal; even apparently sound trees can fail, particularly during extreme weather – best practice recommends that trees are inspected every 18 months when they are alternately in and out of leaf[3].

The position of the trees on the plan on page 12 is not intended to infer ownership which should be clarified before any tree work is carried out.

Site description

Panoramic view of the field looking north from Shale Lane.

The site is an uncultivated field that is overgrown with grasses, nettles, brambles, willow herb and bindweed. The vegetation is 1 to 3 metres high making the access around the field difficult. There are hawthorn hedges to the northeast and southeast and a series of mainly conifer hedges to the southwest along the boundary with the properties on Manor Close. Around the perimeter there are semi-mature, self-set ash and sycamores and, in the northern corner, there are some older crack willows along the boundary with the railway line.

The site is outside of the Bleasby conservation area and there are no tree preservation orders. A tree plan is included on page 12 showing canopies shaded in accordance with their BS5837 categories and their root protection areas coloured magenta. At the time of the visit the weather was fine but overcast.

View looking southeast across the field.

Poorly crown lifted ash trees (6).

Ash dieback is a highly destructive disease of ash trees that is present in most parts of the United Kingdom. It is caused by a fungus named *Hymenoscyphus fraxineus (H. fraxineus),* which is also known as chalara ash dieback. No symptoms of chalara ash dieback were observed in the ash trees which have been graded accordingly. If a future inspection were to find evidence of chalara ash dieback the tree gradings would need to be reassessed.

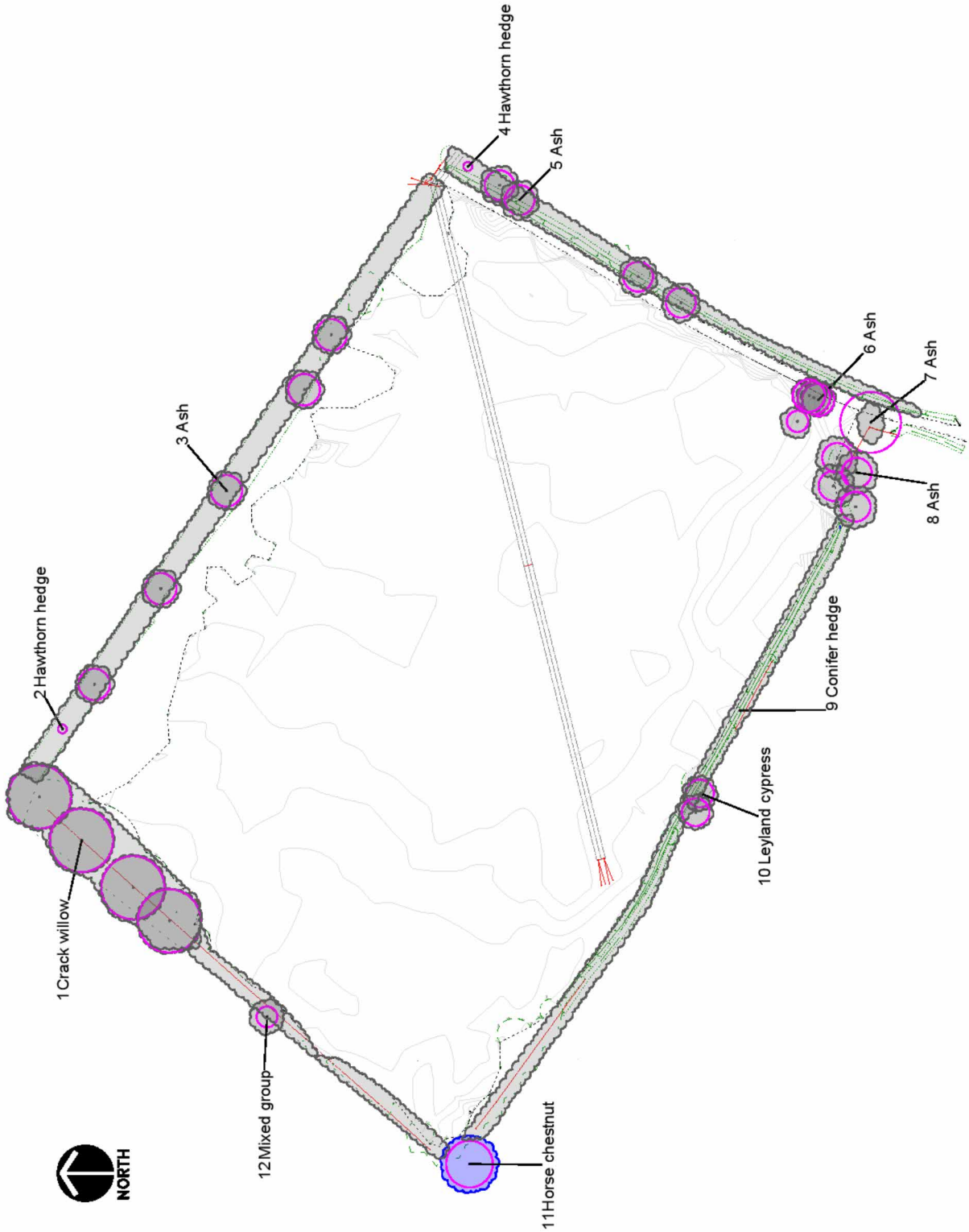
Recorded information

The following details were recorded for each tree and tabulated in the survey schedule:

- Species; Common name and *botanical name*
- Height in metres measured using a Nikon 550 Forestry Pro hypsometer
- Girth and diameter measured at 1.5 metres above ground level (# denotes estimated measurement where trunk is inaccessible; typ. ⇒ typical value).
- Whether the tree has a single or multiple stems
- The calculated radius in metres for the **root protection area** (shown in magenta in the tree survey plan on page 12).
- The cardinal spread of the crown in metres.
- Canopy height in metres (ground clearance)
- The height in metres to the crown break (height of the lowest branches on the main trunk)
- The life stage
    - Young: establishing, usually with good vitality but as yet of limited significance in the landscape.
    - Semi-mature: established, normally vigorous, increasing in height and of increasing landscape significance.
    - Early-mature: established; approaching mature height with crown spreading.
    - Mature: fully established trees around the middle of their typical life expectancy; generally retaining good vitality and achieving full height but their crowns still spreading.
    - Over-mature: fully established trees toward the end of their typical life expectancy with declining vitality.
    - Ancient: surviving beyond the typical age range for the species. Very old with low vitality and liable to decline. May include important Veteran Trees.
- Physiological and structural condition including the presence of physical defects and decay
- Estimated remaining contribution in years
- Tree quality assessment grading in accordance with BS5837:2012 (see page 15)

For expediency some trees may have less detail recorded and, in some cases, similar trees may be grouped for the purposes of this survey.

Tree Survey Plan



Shaded outline shows tree canopy graded in accordance with BS5837; RPA shown in magenta. The position of the trees is not intended to infer ownership which should be clarified before any tree work is carried out. This tree plan is also supplied as an AutoCAD dwg file, XREFerenced to the topographical model. The tree geometry including the canopy and RPA are stored as layers that can be easily imported and overlaid onto a design layout to produce a tree constraints plan. Note: the CAD drawing units are metres.

Tree Survey Schedule

Plan ID	Species	Height (m)	Girth (cm)	Diameter (m)	No. of Stems	RPA radius (m) (Area m^2)	Spread (m)	Canopy height (m)	1st sig. branch hght/dir	Life stage Physiol. cond. Structural cond.	Observations, notes & recommendations	Remaining contribution (years)	BS5837 Grading
1	Crack willow *Salix fragilis*	15	213 typ.	0.68	1	8.1 (208)	N 8 E 8 S 8 W 8	1	1.5	Mature Good Fair		10+	C2
2	Hawthorn hedge *Crataegus monogyna*	4-6	30 typ.	0.10	1	1.1 (4)	N E S W	0	0	Mature Good Good		10+	C2
3	Ash *Fraxinus excelsior*	9	106 typ. 145 max.	0.34 0.46	1	4.0 (52)	N 4.5 E 4.5 S 4.5 W 4.5			Semi-mature Good Good		10+	C2
4	Hawthorn hedge *Crataegus monogyna*	4-6	30 typ.	0.10	1	1.1 (4)	N E S W	0	0	Mature Good Good		10+	C2
5	Ash *Fraxinus excelsior*	9	100 typ.	0.32	1	3.8 (46)	N 4.5 E 4.5 S 4.5 W 4.5			Semi-mature Good Good		10+	C2
6	Ash *Fraxinus excelsior*	14	138 max. 68 min.	0.44 0.22	1	4.2 (54)	N 4 E 4 S 4 W 4	7	7	Semi-mature Good Poor	Poorly crown lifted	10+	C2
7	Ash *Fraxinus excelsior*	12	156 95 90	0.50 0.30 0.29	3	7.8 (190)	N 3 E 4.5 S 3 W 5	7	7	Semi-mature Fair Fair	Poorly crown lifted	10+	C2
8	Ash *Fraxinus excelsior*	14	100 typ.	0.32	1	3.8 (46)	N 5 E 5 S 5 W 5	3	4	Semi-mature Fair Fair		10+	C2
9	Conifer hedge *Cupressocyparis*	2-6					N E S W	0	0	Mature Fair Fair		10+	C2

Tree Survey Schedule

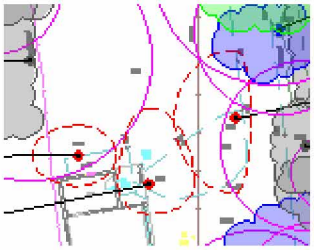
Plan ID	Species	Height (m)	Girth (cm)	Diameter (m)	No. of Stems	RPA radius (m) (Area m^2)	Spread (m)	Canopy height (m)	1st sig. branch hght/dir	Life stage Physiol. cond. Structural cond.	Observations, notes & recommendations	Remaining contribution (years)	BS5837 Grading
10	Leyland cypress *Cupressocyparis leylandii*	12	94 #	0.30 #	1	3.6 (41)	N 4 E 4 S 4 W 4	5	5	Mature Good Good		10+	C2
11	Horse chestnut *Aesculus hipposcastanum*	11	157 #	0.50 #	1	6.0 (113)	N 7 E 7 S 7 W 7	2	2	Early-mature Good Good		20+	B2
12	Mixed group	8	70 typ.	0.22	1	2.7 (22)	N 4 E 4 S 4 W 4			Semi-mature Good Good	Self-set ash and sycamore along railway boundary.	10+	C2

BS 5837:2012 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
	Trees unsuitable for retention (see Note)			
Category U 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	• 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) • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline • 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 *NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve*			Red
	1 – Mainly arboricultural qualities	**2 – Mainly landscape qualities**	**3 – Mainly cultural values, including conservation**	
Trees to be considered for retention				
Category A **Trees of high quality** 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)	Green
Category B **Trees of moderate quality** 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	Blue
Category C **Trees of low quality** 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	Grey

Appendix A – Glossary of arboricultural terms

Access facilitation pruning	One-off tree pruning, without significant adverse impact on tree physiology or amenity value, which is directly necessary to provide access for operations on site.
Arboricultural impact assessment (AIA)	Study to identify and evaluate the direct and indirect impacts on existing trees that may arise as a result of the implementation of a site layout proposal.



Arboricultural method statement (AMS)	Details of methodologies to be implemented in order to protect the retained trees **(see also tree protection plan (TPP)**).
Codominant stems	Codominant stems occur when a tree grows with two or more main stems or 'leaders' that are about the same diameter and emerge from the same location on the main trunk. The bark for each stem is trapped inside the fork preventing them from fusing together. This may also be referred to as a compression fork. The presence of codominant stems with included bark reduces the strength of the union and therefore increases the risk of failure under loading during strong winds[12]. However, the presence of included bark does not mean the tree <u>will</u> fail. Codominant stems are a common feature of many trees and most will live to the end of their natural life without a problem. The decision whether to take remedial action should take a range of factors into consideration including the size, position and condition of the tree and the proximity of 'targets' close to the tree.

Construction exclusion zone (CEZ)	An area based on the **RPA** to be protected during development by the use of barriers and/or ground protection to ensure the long-term retention of a tree.

Crown lifting

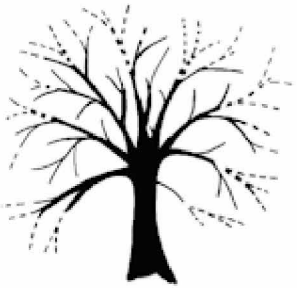
The removal of lower branches and/or parts of pendulous upper branches to provide clearance over roads and paths and allow more light under a tree or into nearby property.

Work specified as a clearance height above ground level.

Crown reduction

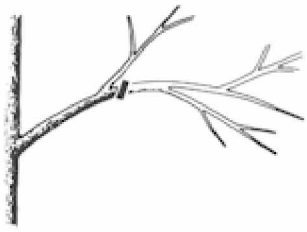
The cutting back of branches to reduce the overall size of a tree's canopy. Crown reduction should seek to retain the tree's natural form and a flowing branch line without leaving stumps.

Work specified as a reduction in height and radial width and/or annotated photographs.



Drop crotch pruning

Removing a portion of a branch or stem by cutting back to a lateral branch which is at least 1/3 of the diameter of the section that is being removed.



Epicormic growth

Bushy shoots growing directly from the trunk arising from adventitious or dormant buds.

Formative pruning

Pruning of young trees to produce a good shape and prevent future management problems.

Hanger

A broken branch lodged or hanging in the canopy.

No-dig construction

With reference to foundations, hard surfacing and utilities, the design should not require excavation into the soil, including through lowering of levels and/or scraping, other than the removal, using hand tools or an air-spade, of any turf layer or other surface vegetation.

Pile and beam foundation

Type of foundation where mini-piles or screw piles are bridged with concrete and/or steel beams and the floor suspended using block and beam construction with a vented void below. The underside of the beams is at or just above ground level. Often used where conventional strip foundations would cause unacceptable root damage.

Pollarding and Coppicing

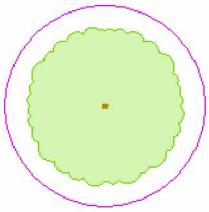
The removal of all or nearly all of a tree's branches and foliage. Pollarding is generally only appropriate on trees where the practice has been long established and carried out regularly such as willow, lime and plane.

A framework pollard removes all the smaller branches but leaves a framework of major limbs.

With coppicing trees or shrubs are cut close to ground level and allowed to regenerate.

Root protection area (RPA)

The minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority (shown in magenta in the tree survey plan on page 12).



Ruderals

A ruderal species is a plant species that is first to colonize disturbed lands such as construction sites.

Sucker growth

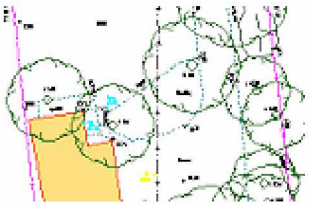
Similar to epicormic growth but suckers shoot from the roots of the parent tree.

Target pruning

Pruning to create or maintain clearance from buildings, street lights, guttering, aerials, etc.

Topographical survey

An accurate depiction of an area of land which is scaled and detailed to show all the natural and manmade features and their levels.

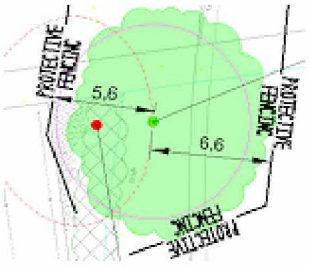


Tree constraints plan (TCP)

Scale drawing showing the canopy and RPA of the trees overlaid onto the layout scheme to highlight potential conflict. The TCP may include shading modelling.

Tree protection plan (TPP)

Scale drawing showing finalised layout, tree retention and tree protection measures detailed in the **arboricultural method statement (AMS)**.



Appendix B – Bibliography & References

1 British Standards Institution, (2010). *BS 3998: 2010 – Recommendations for tree work*. Milton Keynes: BSI

2 British Standards Institution, (2012). *BS 5837: 2012 – Trees in relation to design, demolition and construction – Recommendations*. Milton Keynes: BSI

3 Cavanagh v Witley Parish Council (1) and D Kevin Shepherd (t/a Shepherd Tree Surgeons & Forestry Contractors) (2) [2017]

4 Crow, P. (2005). *The Influence of Soils and Species on Tree Root Depth*, Forestry Commission Information Note, Forestry Commission, Edinburgh.

5 Guy Watson & Ted Green. *Fungi on Trees – An Arborists Field Guide* (2011) Arboricultural Association

6 Lonsdale, D. (2021). *Principles of Tree Hazard Assessment and Management*. Arboricultural Association.

7 Mattheck, C. & Breloer, H. (2006). *The Body Language of Trees, A Handbook for Failure Analysis.* The Stationery Office.

8 NHBC Standards Part 4 (2021). *Chapter 4.2 Building near trees.* National House Building Council.

9 NJUG Volume 4: *Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees*, (Issue 2: 16th November 2007). National Joint Utility Group.

10 Rose, B. (2020). *The Use of Cellular Confinement Systems Near Trees: A Guide to Good Practice*. Guidance Note 12. Arboricultural Association.

11 Shigo, A. L. (1991). 3rd ed. Modern Arboriculture. Shigo & Trees, Associates.

12 Smiley, E. T. Does Included Bark Reduce the Strength of Codominant Stems?, *Journal of Arboriculture 29(2),* March 2003, pages 104-106

13 Strouts, R. G. & Winter, T. G. (2000). 2nd ed. *Diagnosis of Ill Health in Trees.* The Stationery Office.