



Savills

LAND AT LAWNSWOOD ROAD, WORDSLEY

Transport Access Feasibility Study





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TYPE OF DOCUMENT (VERSION) CONFIDENTIAL

PROJECT NO. 70066405

OUR REF. NO. TR001

DATE: DECEMBER 2019

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QUALITY CONTROL

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	Draft Issue	Final Issue		
Date	06/12/2019	12/12/2019		
Prepared by	SJ	SJ		
Signature				
Checked by	MT	MT		
Signature				
Authorised by	RT	RT		
Signature				
Project number	70066405	70066405		
Report number	TR001	TR001		
File reference		70066405 - Land at Ridgehill Woods, Stourbridge\02 WIP\TP Transport Planning\03 Document\Report		

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INTRODUCTION

We understand that the Clowes Development land has a total gross area of approximately 56.5 hectares (140 acres), split across two parcels. One bound by the A449 to the west and surrounded by Lawnswood Road to the north and south. Parcel 2 is located to the south, between Lawnswood Road to the north, a wooded area to the west and south and existing residential development to the east. The site locations and the surrounding highway network is presented in Figure 1, below.

This document provides a high-level transport and access feasibility study to support proposed local plan allocation for residential development at Lawnswood Road, west of Wordsley, in accordance with the guidelines set out in the National Planning Policy Framework (NPPF).

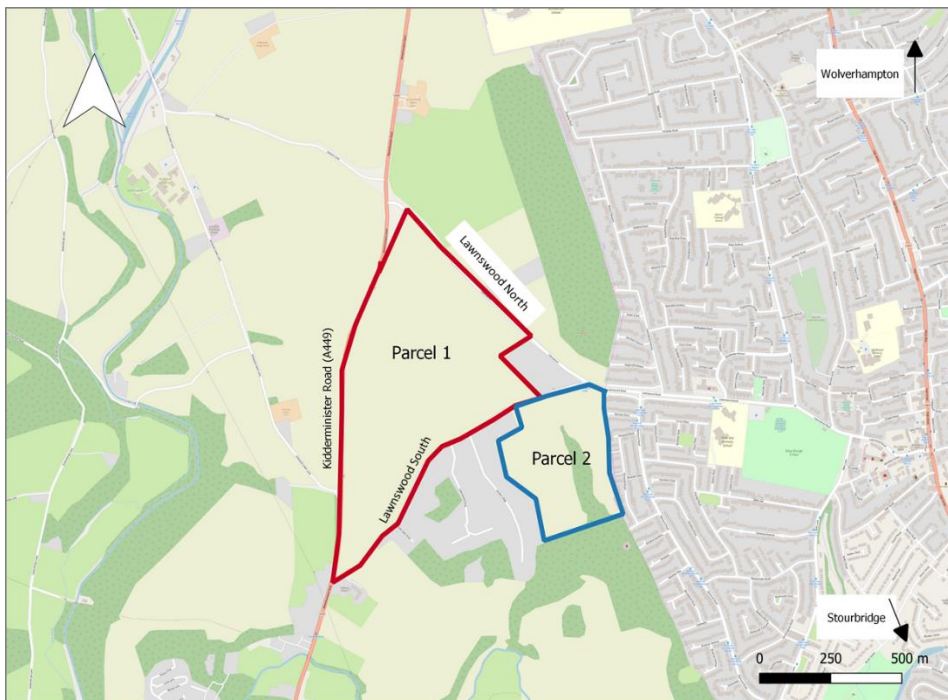
This Technical Note sets out:

- Existing Situation
 - Existing speed limits
 - Existing traffic flow data
 - Accident data
 - Initial observations and photos from site visit
- Identify access options available;
 - Opportunities and Constraints
- Identifies Main Constraints to Access
- Proposes Potential Access Options

LOCATION PLAN

Figure 1 below, shows the indicative location of the land parcels and the surrounding highway network.

Figure 1 - Location Plan of Parcel 1 and 2 and surrounding highway network



CURRENT SITUATION

Parcel 1 is bounded by Lawnswood (north) to the north which has an approximate width of 6m and is subject to a speed limit of 60mph (National Speed Limit). The road is bound by agricultural land and has no footway provision.

Similarly, Lawnswood (south) bounds Parcel 1 to the south and likewise is subject to the National Speed Limit, it is approximately 6.5-7m wide. The road is bound by agricultural land to the north and residential developments to the south. There is footway provision on the southern side of Lawnswood (south), adjacent to the dwellings.

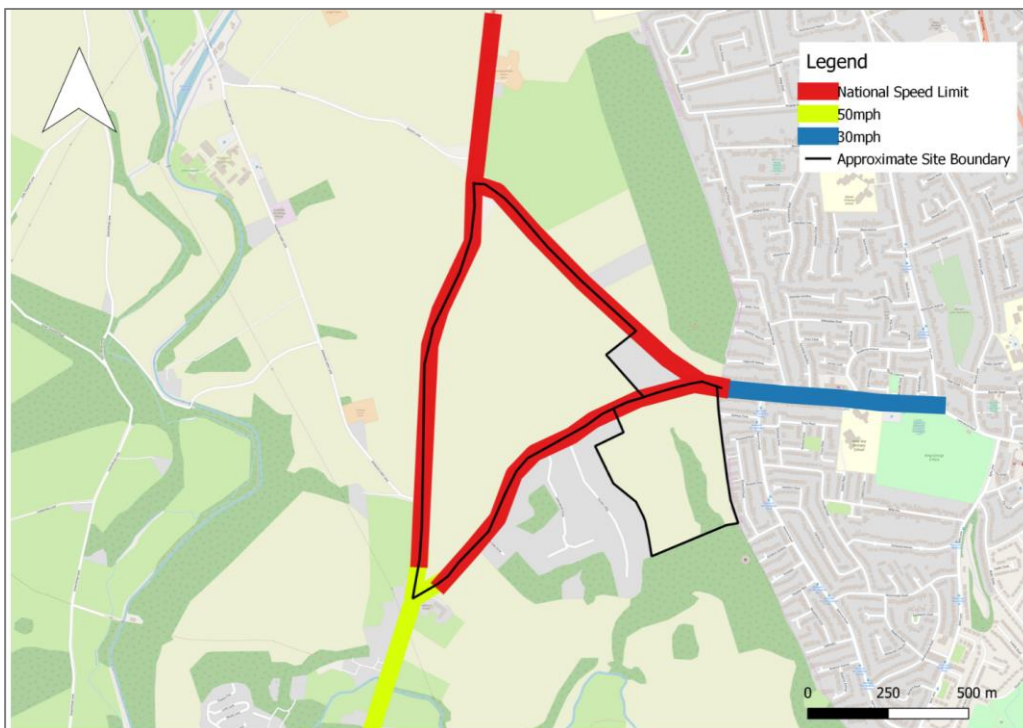
The A449 bounds Parcel 1 to the west and makes up part of the Key Road Network (KRN) between Stourbridge and the North of Wolverhampton. The A449 is subject to the National Speed Limit and has a width of 8.5-9m. There is no footway provision along the A449.

Parcel 2 is bounded by Lawnswood (south) to the north and residential development to the east and west. As stated previously, there is accessible footway provision along the southern side of the Lawnswood (south) which makes up part of the boundary for both Parcel 1 and 2. The surrounding land use for Parcel 2 is both agricultural and residential. A public right of way runs north – south through the site.

Existing speed limits are summarised in Figure 2, below.

Speed Limits Plan

Figure 2 - Speed Limit Plan along the Approximate Site Boundary



Existing Traffic Flow Data

A permanent DfT traffic count is located on the A449, just north of the A449 / Lawnswood (north) / Doctors Lane junction. The two-way AADT vehicle flows and HGV% are presented in Table 1 below, showing the route has high vehicle flows and has a high flow of HGVs in line with its status as part of the Key Road Network (KRN).

Table 1. Traffic flow data on the A449 between the years of 2000-2018

Year	Motor vehicle usage (A449)	% HGV
2018	18814	4%

There were no existing traffic counts on Lawnswood or Lawnswood Road. Traffic survey data would need to be obtained on these routes to undertake further assessment of junction operation.

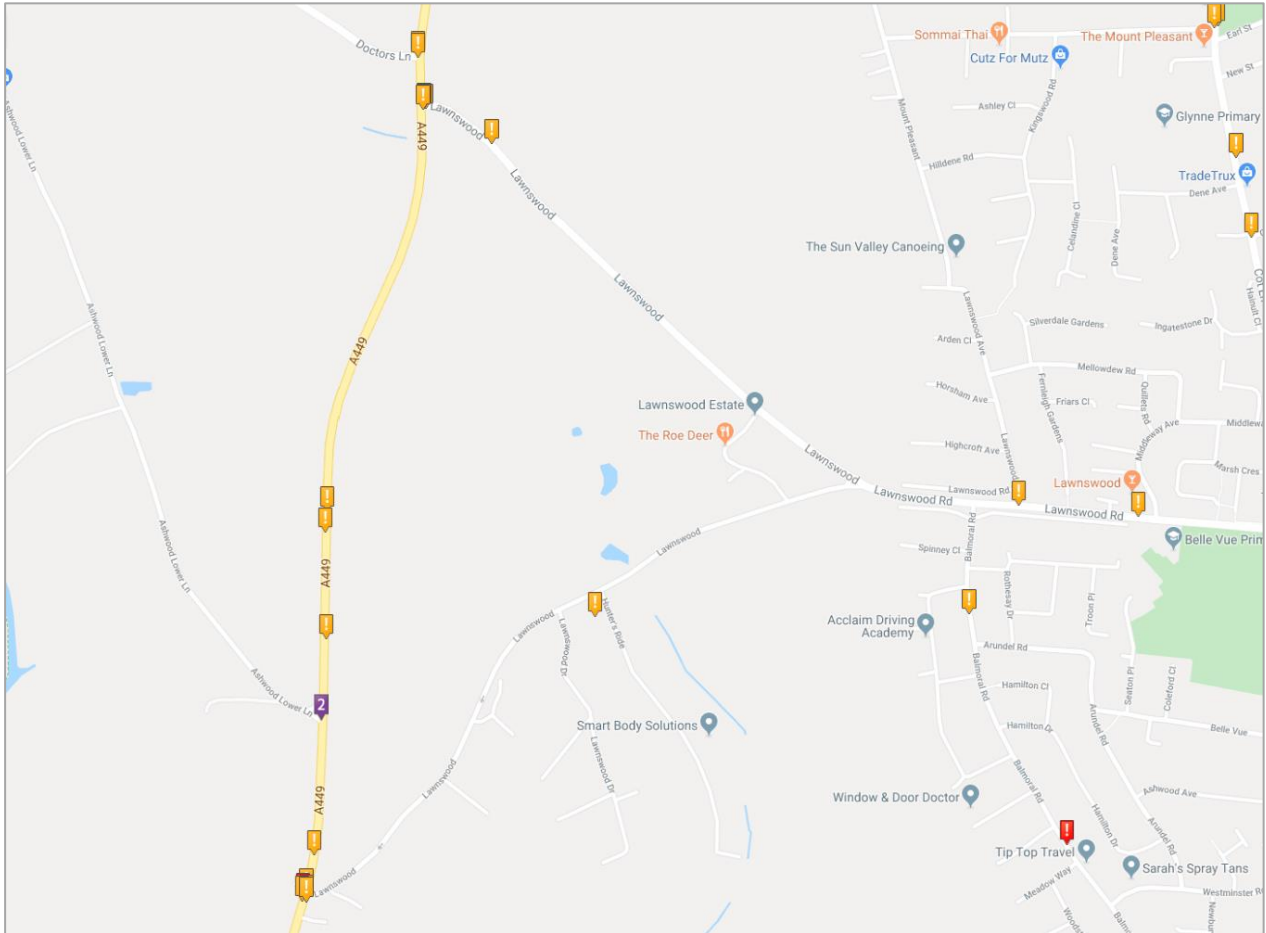
Accident Plan

An initial review of personal injury accident (PIA) data using publicly available STATS19 data presented on www.crashmap.com showed no accidents occurred on Lawnswood (south). One slight accident occurred on Lawnswood (north) in 2017.

A number of collisions occurred on the A449 to the west of Parcel 1.

A cluster of collisions occurred at the junction of A449 / Lawnswood (north) / Doctors Lane, and at the A449 / Lawnswood (south) junction, as shown in Figure 3

Figure 3 - Accident Data Surrounding Parcel 1 and 2



The junction of A449 / Lawnswood (north) had three slight and one serious collisions during the latest 5-year period available.

The junction of A449 / Lawnswood (south) experienced four slight and one serious collisions during the latest 5-year period available.

Consideration of this PIA data was used to inform the Access Options presented in this document.

Site Photos Plan

A site visit was undertaken on Friday 22nd November to understand the existing highways and transport situation. Figure 4 below presents some of the photos of the highway network bordering the site.

These photos were used to produce the existing situation summaries and help inform the Access Feasibility section of this report.

Figure 4 - Site Photos of the Surrounding Roads



Policy Review

A brief summary of the key transport policy documents presented below. These documents have been considered and inform the transport and access options presented in this document.

Manual for Streets 2 (MfS2)

Manual for Street and Manual for Streets 2, published in 2010, provides guidance a best practice for the design of streets and roads. The document has been considered and forms the basis the indicative access options outlined in this document.

The Staffordshire Local Transport Plan

The Staffordshire Local Transport Plan was updated in 2011 and lays out ambitious plans for local transport provision in Staffordshire. The plan identifies how a reduction in the level of funding has affected the ability to deliver the plan in entirety however it still poses to remain ambitious. Ideas to improvements Include, but are not limited to:

- Enabling economic growth without causing congestion;
- Helping businesses access suppliers, market and a workforce;
- Providing opportunities for residents and visitors to access jobs, training and education,
- Keeping the highway safe and serviceable whilst achieving value for money
- Improving the already excellent road safety record; and
- Minimising the negative impacts of transport on the environment

The Staffordshire Residential Design Guide

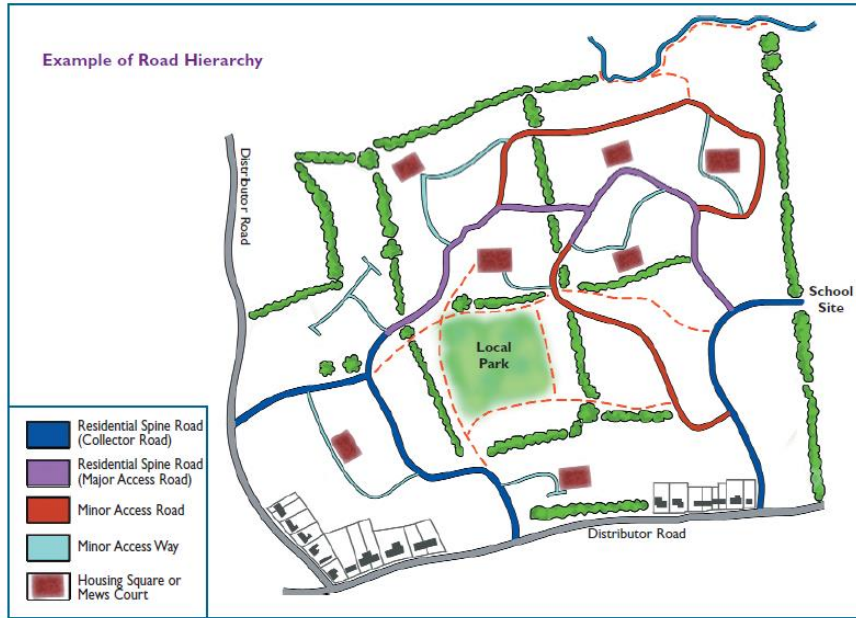
The Staffordshire Residential Design Guide was created by the Staffordshire County and District Councils in 2000. The guide's purpose is to bring together all elements which contribute to creating a cohesive housing layout design by simplifying planning procedure; thus, ensure residential developments remain sustainable and integrated. The guide discusses:

- Design Process;
- Sustainable Design;
- Design Character;
- Design and Detail; and,
- Access Layout

Road type in accordance to the road hierarchy is simultaneously linked to dwellings and access points. The road hierarchy categorises roads according to their functions and capacities. Therefore, a roads position on the hierarchy effects characteristics within new residential development such as, the number of access points required.

The Staffordshire Residential Design Guide (2000), provides an example of road hierarchy (presented in Figure 5). This has informed the road type and junction options considered in this report.

Figure 5 - Staffordshire Residential Design Guide - Road Hierarchy



Road type	Description	Dwelling and access	Other
Residential Spine Road- (Collector Road)	Collects traffic within a residential estate.	Up to 500 dwellings, 2 access point	Increased by 250 dwellings if another access point is provided
Residential Spine Road- (Major Residential Access Road)	Loop road or connected street	Serves up to 300 dwellings	Can form part of the same Residential Spine Road serving beyond 300 dwellings although to emphasise the transition a well-defined entrance feature will be required where it meets the Collector Road.
Minor Residential Access Road	Loop road or connecting street	Serving up to 200 dwellings, or cul-de-sac serving up to 100 dwellings	Gains access directly to either a Major Residential Access Road or a Higher Order Road.
Minor Access Ways		Serving up to 25 dwellings in the form of a cul-de-sac or up to 50 dwellings as a connecting street	

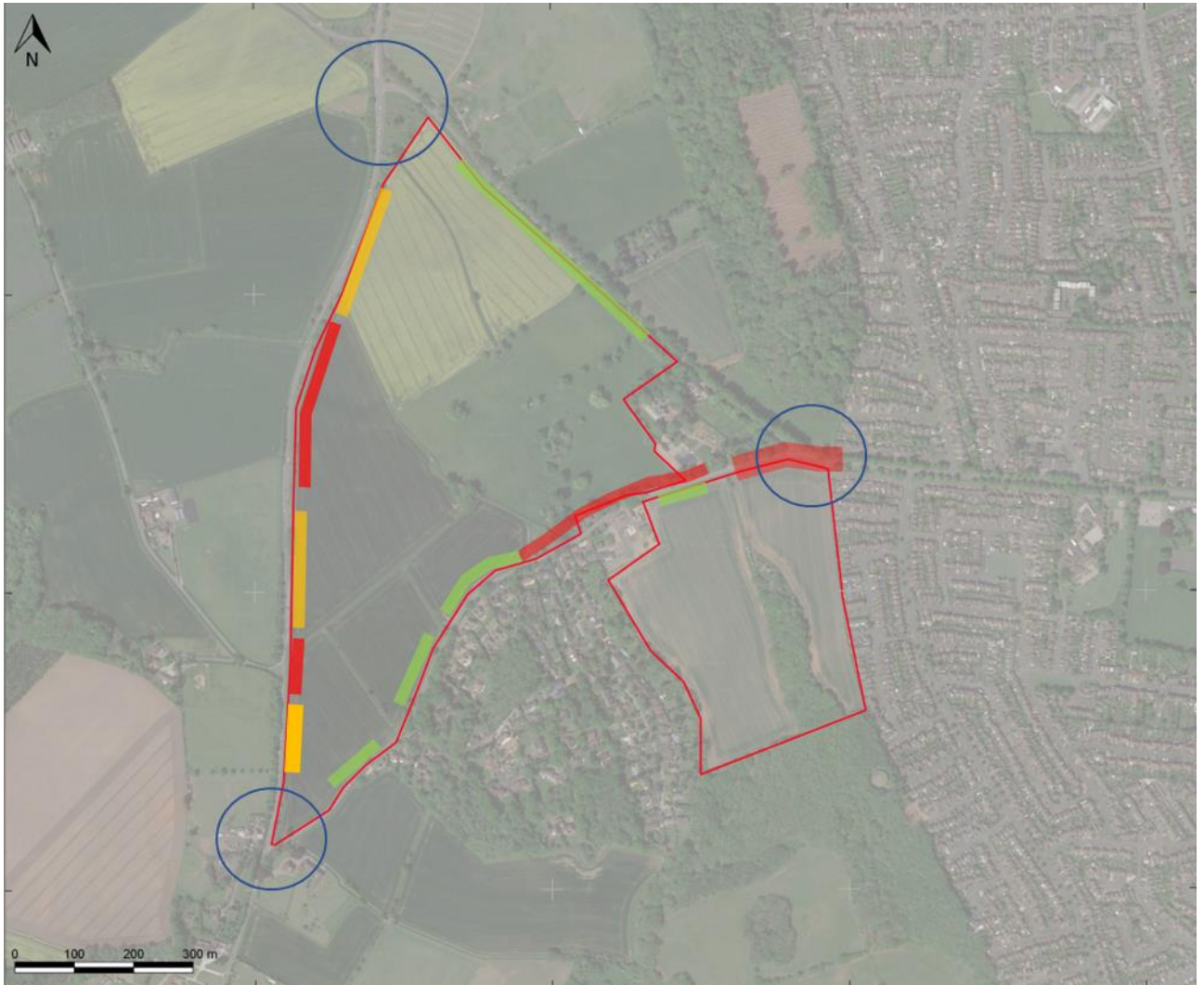
These design principles along with more recent residential design guidance included in Manual for Streets have been used to inform potential access design options contained in this report.

ACCESS FEASIBILITY

The process of identifying access feasibility started with an initial constraints and opportunities plan informed by on site observations and analysis of data presented above.



Figure 6 presents the make constraints (red) and opportunities (green) for vehicle access to the highway network around the site.

Figure 6 - Constraints concerning Parcel 1 and 2

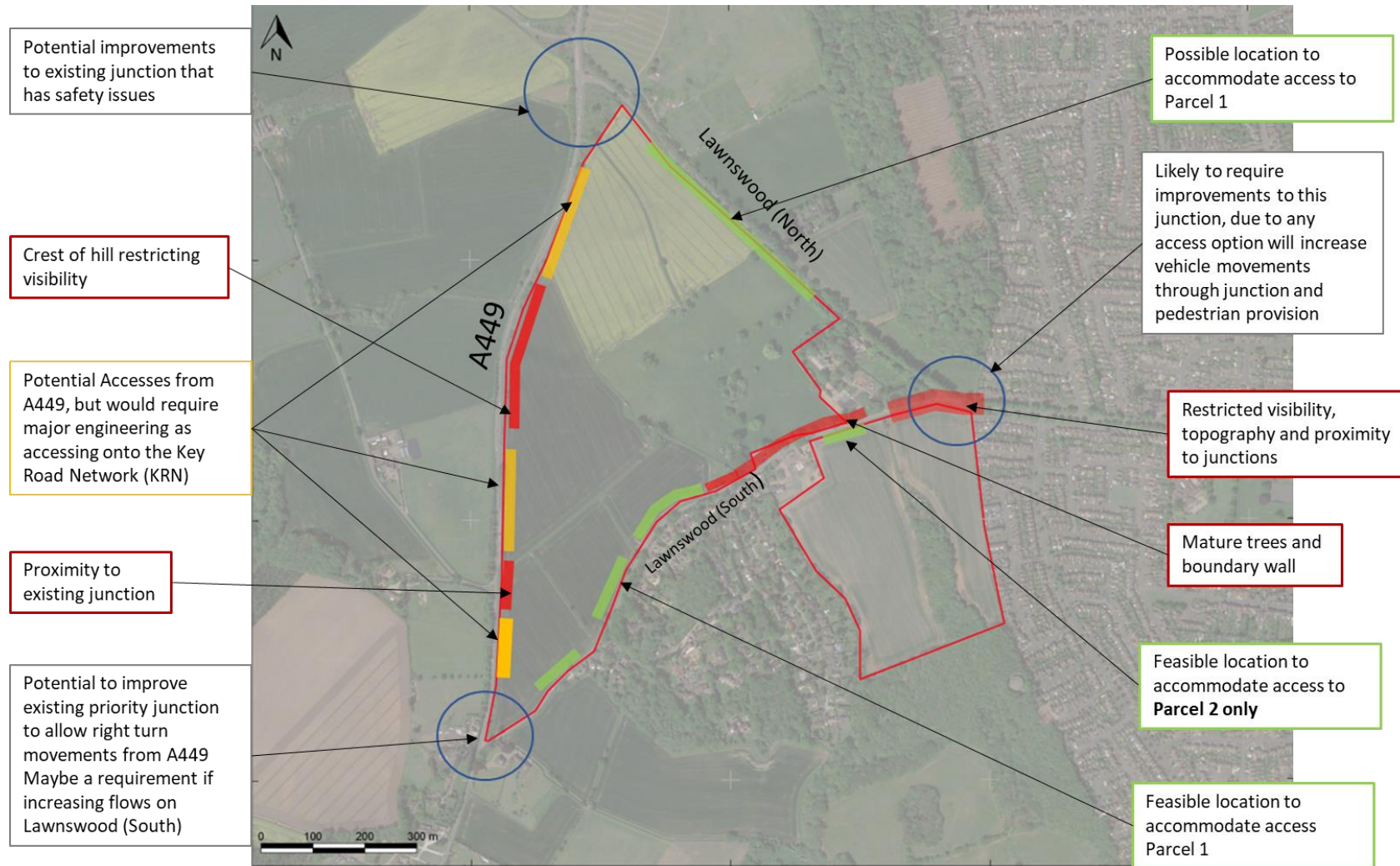


Following this initial sift, further consideration was given to the following aspects detailed in Table 2.

Table 2. Opportunities and Constraints – further considerations

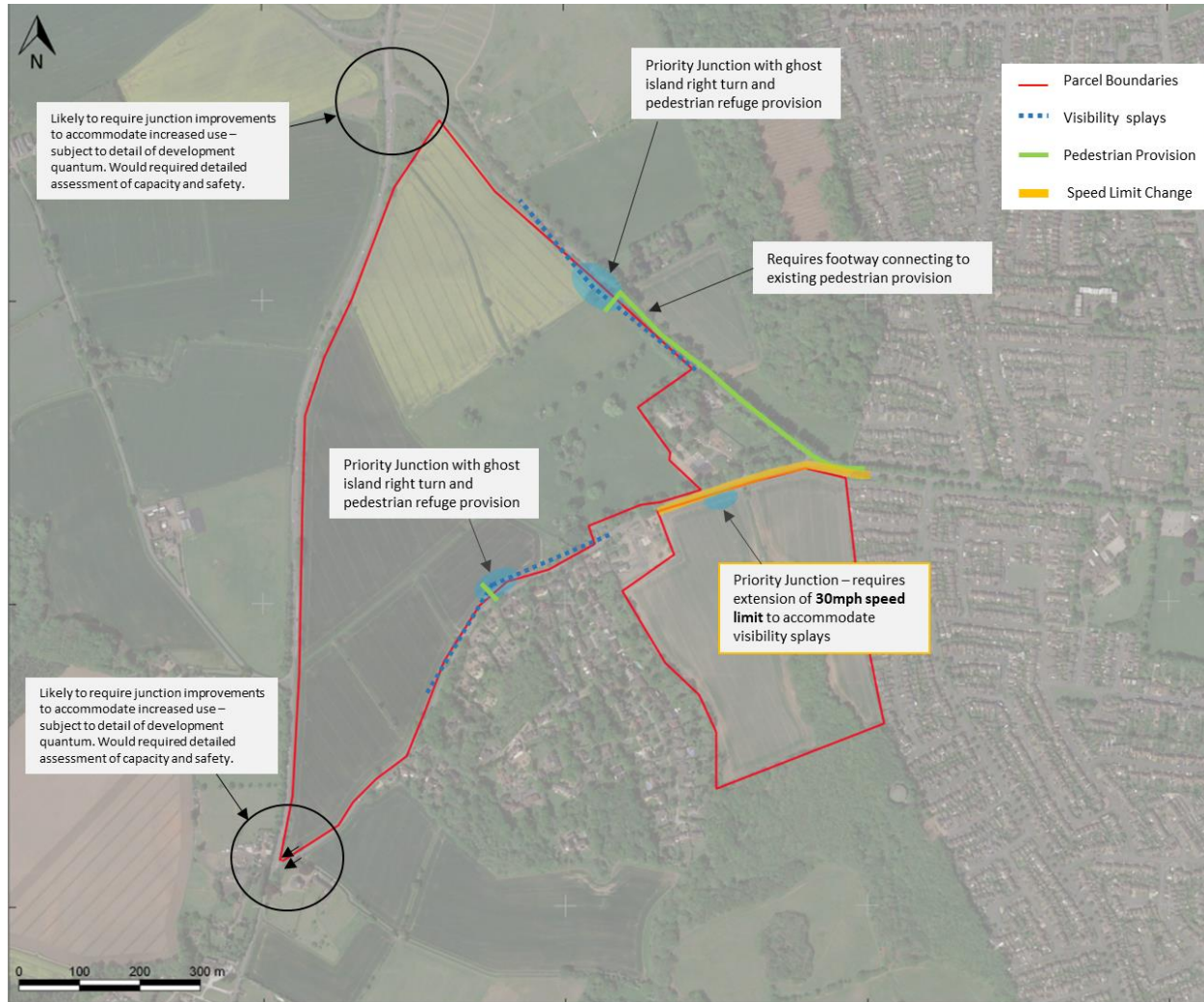
<p>A449 Access Options</p>	<p>As a main route through the region with high traffic speeds and flows, locations for access to Parcel 1 were considered, but given the significant cost and opposing flows, it was considered that any potential junction options would require significant engineering and were therefore, not considered to be a preferred option and not discussed further in this Access Feasibility Report. Discussions with Staffordshire Highway Authority would be required confirm the potential acceptability in principle for new junctions / accesses on this section of the KRN.</p>
<p>Lawnswood (south) – One-way arrangement near junction with A449</p>	<p>The southern most section of Lawnswood is in effect one-way, to access the A449. Consideration was given to extending this to simplify an access junction to Parcel 1 near this location, reducing the visibility requirements to one direction. However, as there is are properties accessed off this section of Lawnswood, extending the one-way section would require a Traffic Regulation Order (TRO) and was not considered feasible at this stage.</p>
<p>Access from the existing Cul-de-sacs to the east of Parcel 2</p>	<p>Access from existing cul-de-sacs of Lawnswood Road and Spinney Close were considered, but it appears from on-site observations that there would be potential land ownership constraints to these options, and therefore they were not considered further in this report for vehicle access.</p> <p>They should still be considered for potential pedestrian connectivity subject to third party land ownership details.</p> <p>Lawnswood Road Cul-de-sac</p>  <p>Spinney Close Cul-de-sac</p> 

FURTHER OPPORTUNITIES AND CONSTRAINTS CONSIDERATION



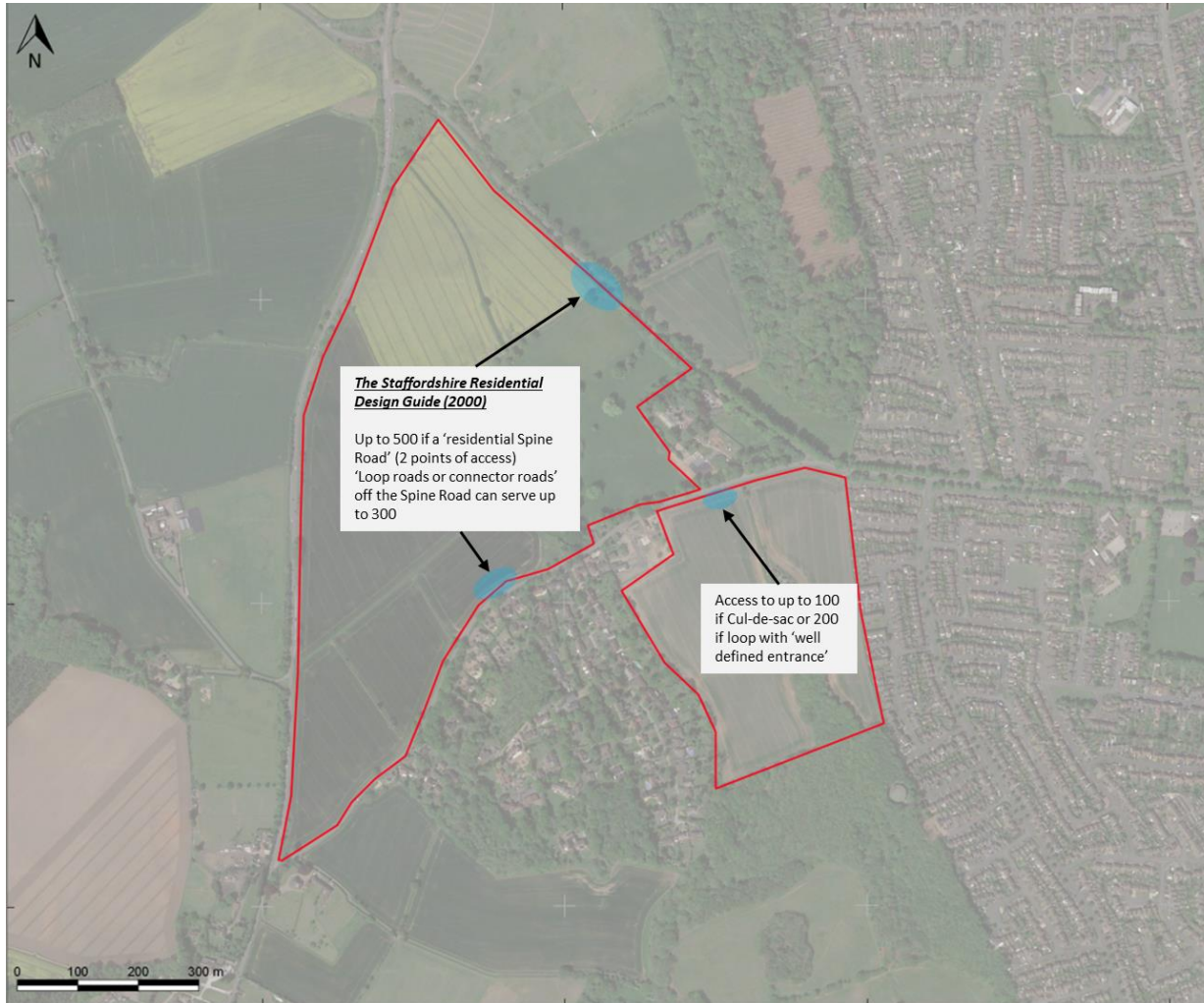


POTENTIAL ACCESS OPTIONS PLAN



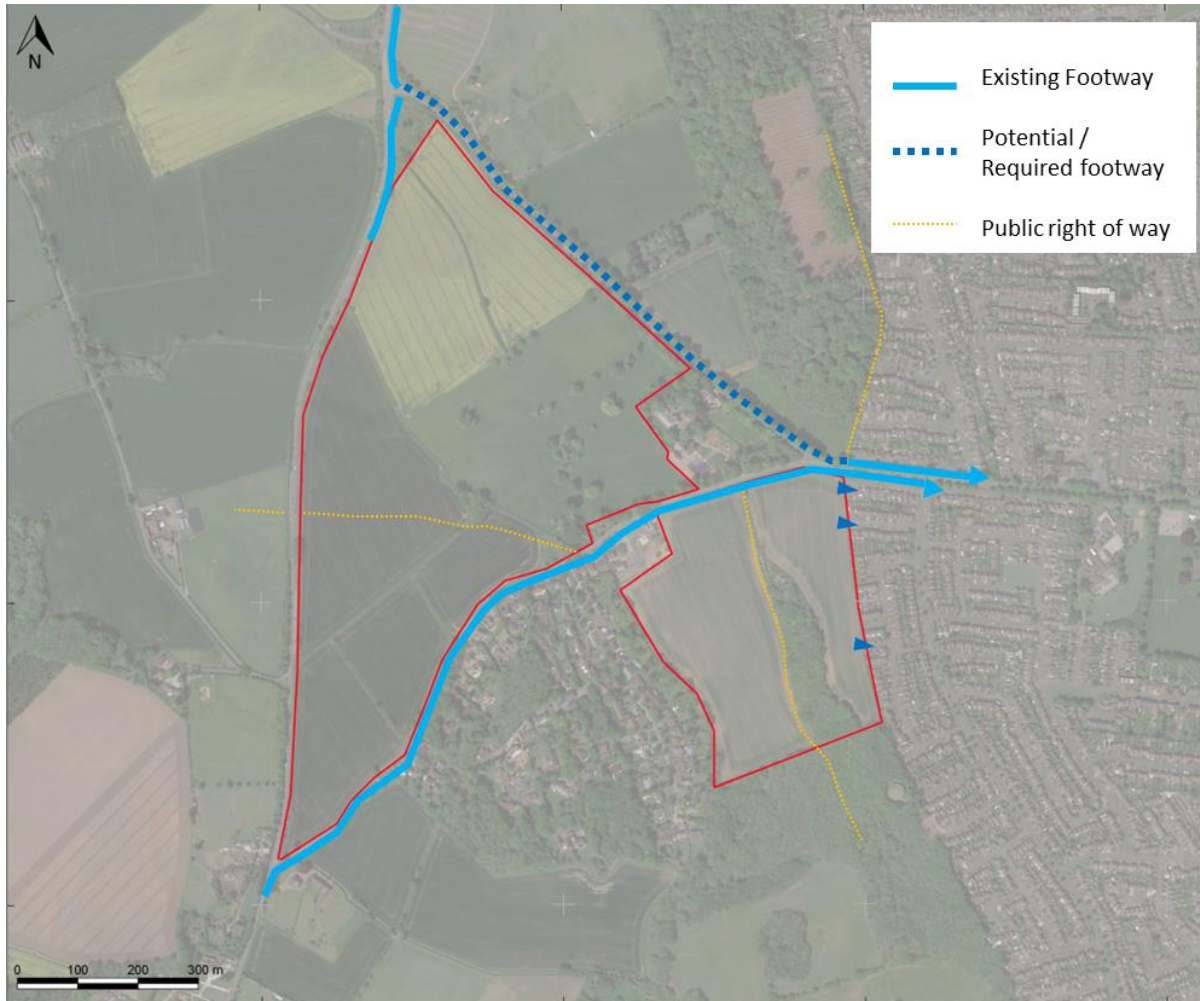
Following a review of the data provided in this report and the identified opportunities and constraints, the following access options are proposed.

POTENTIAL ACCESS OPTIONS PLAN – NUMER OF DWELLINGS



However, MfS guidance should also be considered when developing the residential masterplan and has more up to date guidance on access design.

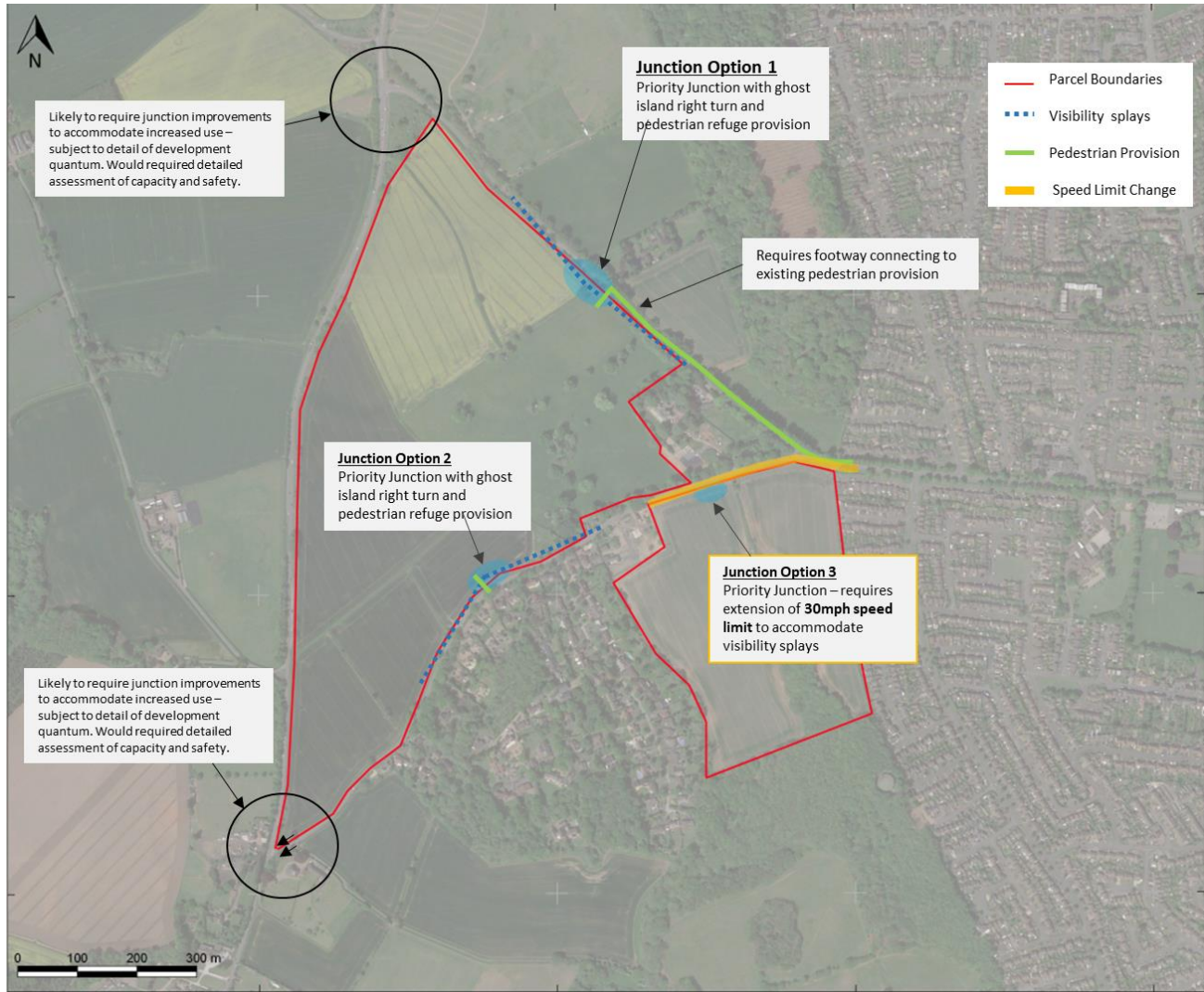
PEDESTRIAN PROVISION PLAN



There is existing footway on the south side of Lawnswood (south) and on both sides of Lawnswood Road. Any proposed development would look to connect into this footway network.

Footway provision on the north side of Lawnswood (north) is suggested as there is more available verge on this side of Lawnswood (north) and would create a more simplistic connection to existing footway on Lawnswood Road to the east. Pedestrian crossing points in the form of pedestrian refuges would be proposed as part of the access junctions.

INDICATIVE JUNCTION DRAWINGS

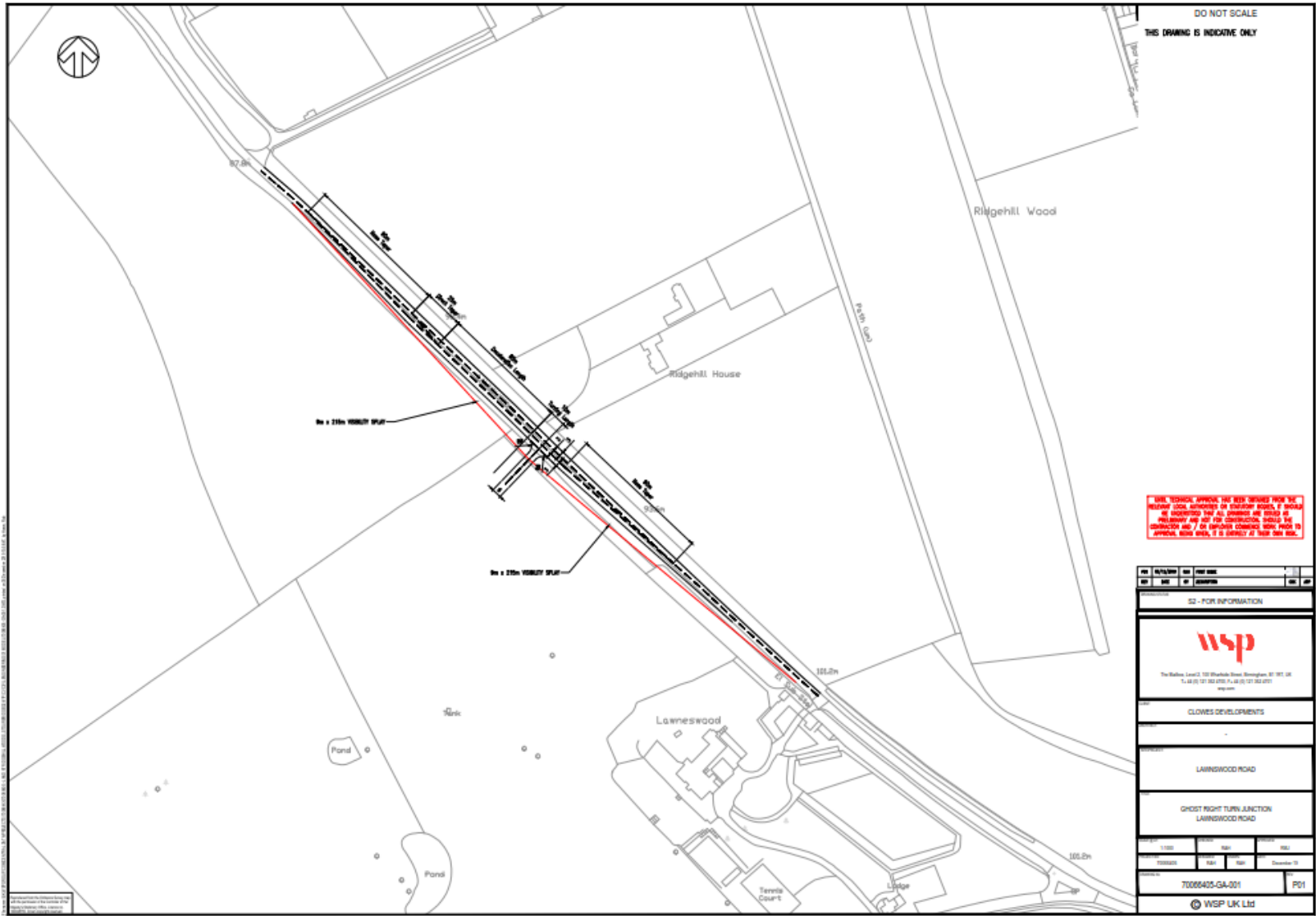


Indicative drawings for 3 potential access options:

- Access Option 1 – Lawnswood (north) to the north of Parcel 1
- Access Option 2 - Lawnswood (south) to the south of Parcel 1
- Access Option 3 – Lawnswood (south) to the north of Parcel 2

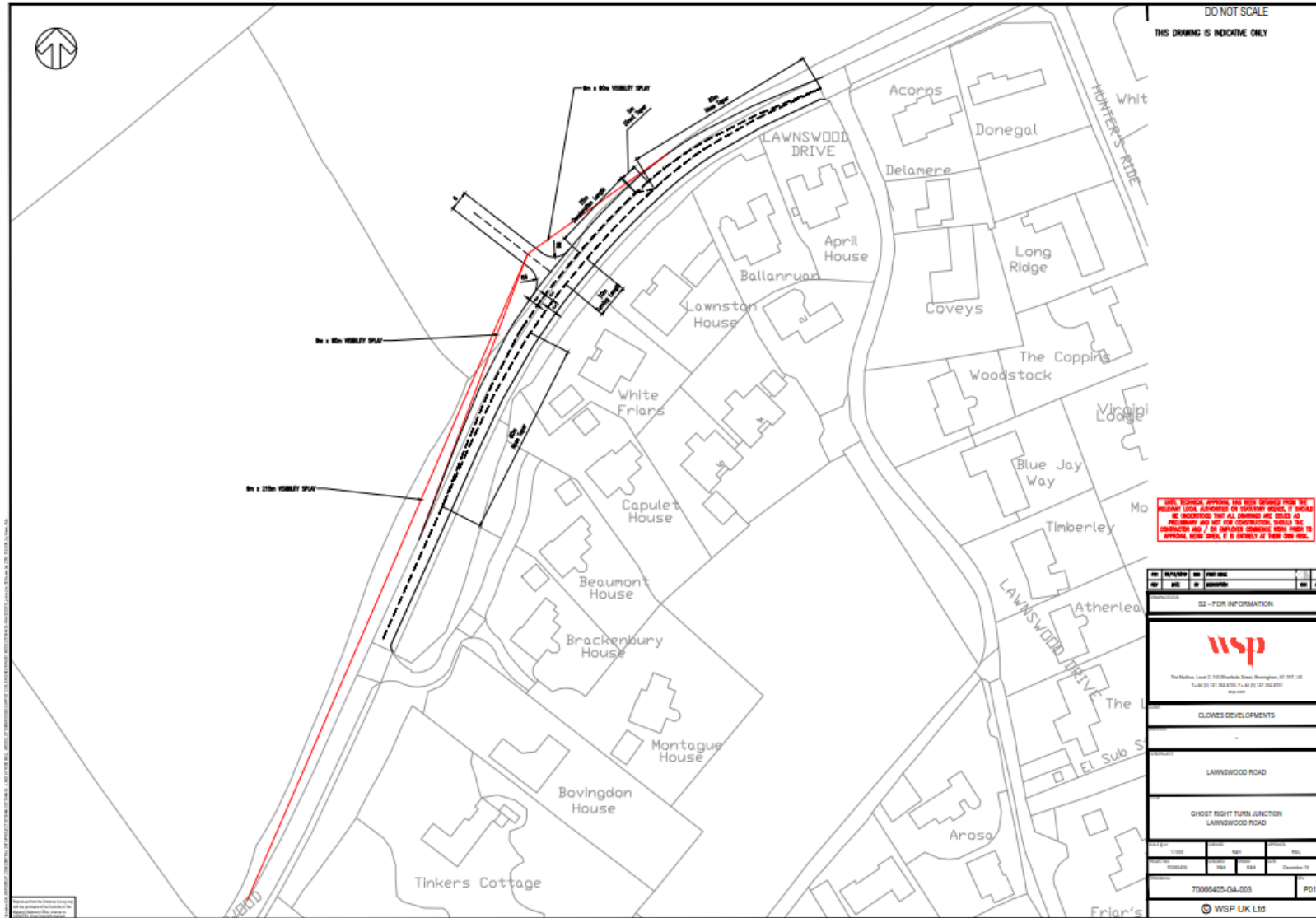


INDICATIVE DRAWING - JUNCTION 1





INDICATIVE DRAWING - JUNCTION 2



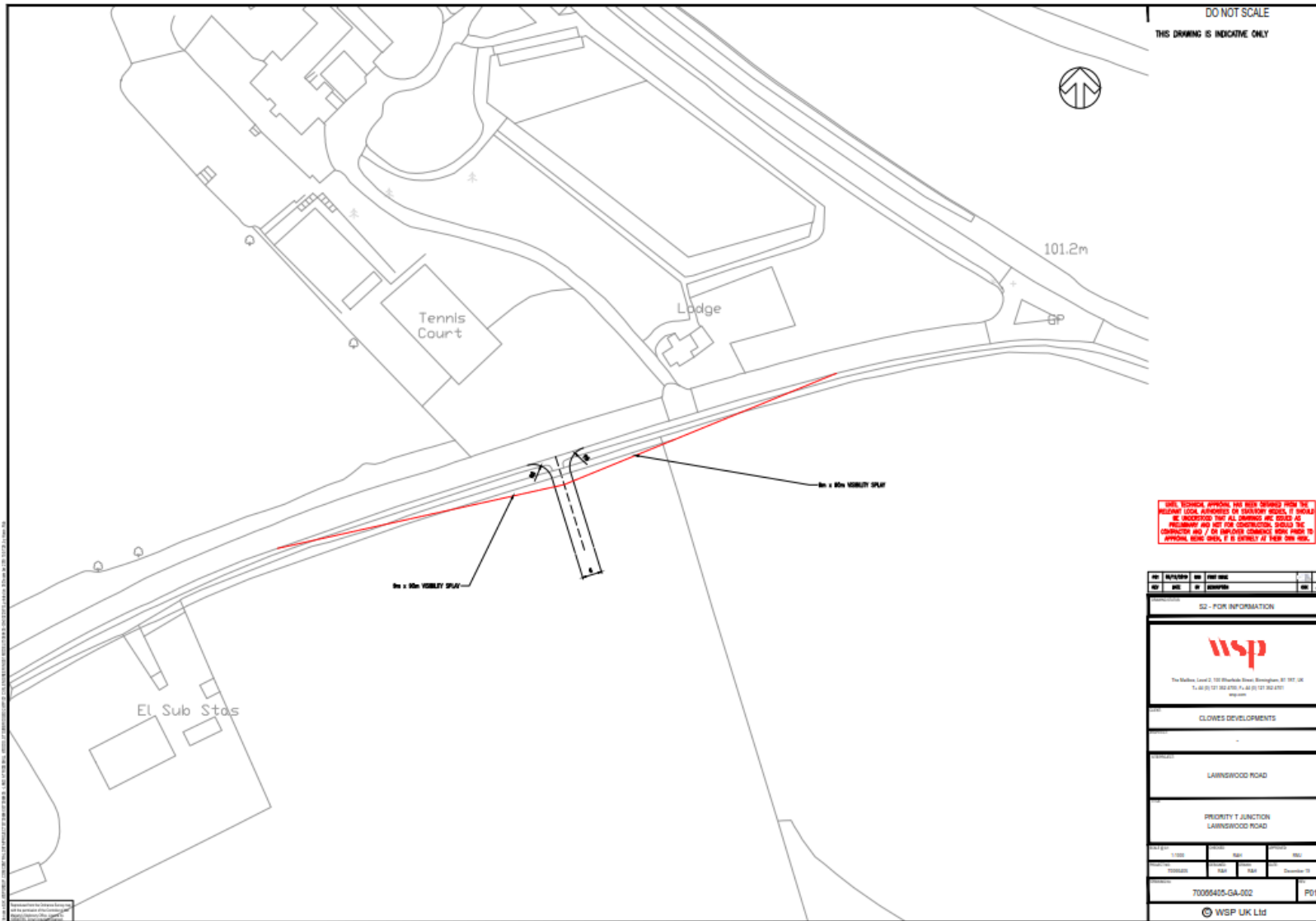
DO NOT SCALE
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INDICATIVE DRAWING - JUNCTION 3



SUMMARY AND CONCLUSION

This access feasibility report has assessed the existing situation and identified the main opportunities and constraints of transport access to the two Clowes Development parcels.

Following a review of the main constraints presented in this document three potentially feasible access points have been identified. Two access junctions to Parcel 1; one from Lawnswood (north) to the north of the site, including a right turn lane and pedestrian crossing provision to new footway on Lawnswood (north). One to the south of Parcel 1 onto Lawnswood (south) again including right turn provision and pedestrian crossing facilities to the existing footway on the south side of Lawnswood (south).

Access to Parcel 2 is potentially feasible from Lawnswood (south) via a simple priority junction, however this would require a reduction to the speed limit to achieve required visibility splays.

More details about the capacity and function of these junctions is likely to develop as a masterplan evolves.

Junction improvements at the Lawnswood / A449 junctions, Lawnswood / Lawnswood Road and wider connections to the highway network are likely, but would need further development of the masterplan to inform these requirements.

It should also be noted that the initial proposed access options identified in this document are based on constraints associated with the highway network. Overlaying criteria from other disciplines, and details of the emerging masterplan would further shape the access feasibility.



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