

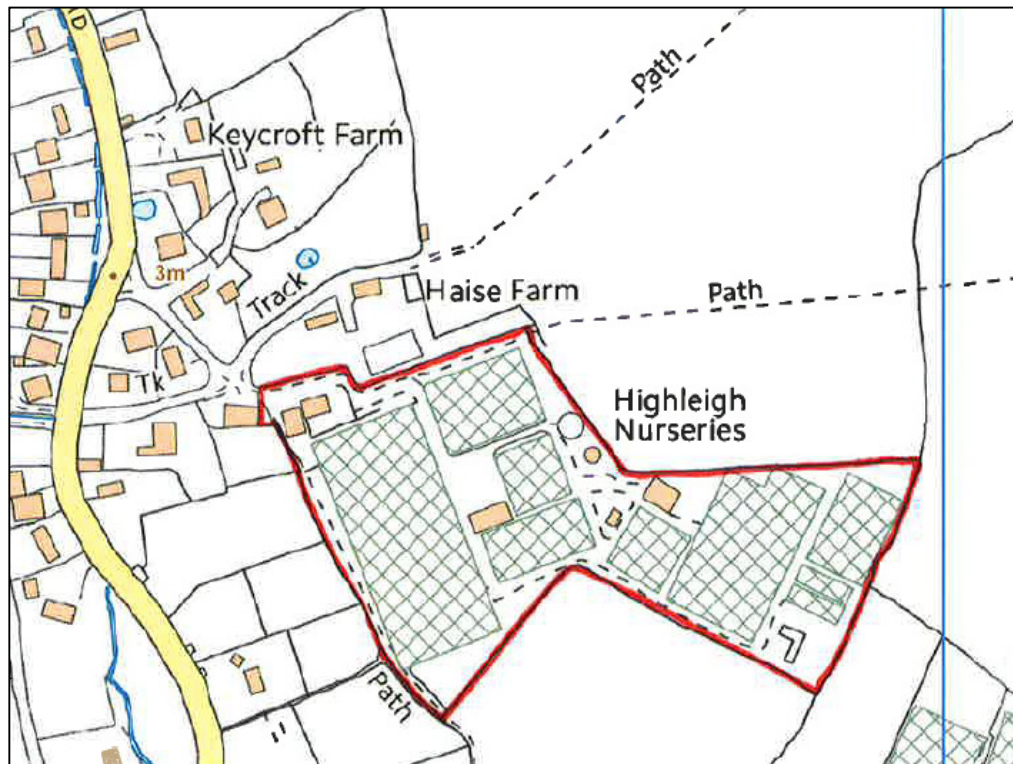
TECHNICAL NOTE

Project No: ITB13688
Project Title: Highleigh Nurseries, Sidlesham
Title: Access and Traffic Appraisal
Ref: MS/SH/ITB13688-001 TN
Date: 22 June 2018

SECTION 1 INTRODUCTION

- 1.1 This note supports a Local Plan promotion for residential development by Greenwood Nursery at their site at Highleigh Nurseries, Sidlesham. A site location plan is provided at Image 1.1 below:

Image 1.1: Site Location Plan



- 1.2 Access to the site is gained via a private access with a priority junction onto Highleigh Road approximately 125m north west of the site boundary.
- 1.3 Greenwood Nursery is seeking to promote the land for a residential development comprising up to 35 homes, served by the existing point of access, through the Local Plan process. Under the proposal, Greenwood Nursery would cease to operate from the site upon commencement of any development.

1.4 This Technical Note demonstrates that the site is suitable for a modest redevelopment making use of the existing access route. It demonstrates that:

- The access operates safely and satisfactorily and accommodates a material volume of traffic (including HGVs);
- Greenwood Nursery are undergoing an expansion of their operation which will materially increase light and heavily vehicular traffic demand through the access;
- A development of 35 homes will generate fewer trips than the expanded Greenwood Nursery site would (and would not generate HGVs); and
- The access (and wider highway network) will satisfactorily serve a modest residential redevelopment.

1.5 The remainder of this report is structured as follows:

- Section 2 sets out the site's current use and access arrangement;
- Section 3 assesses the net traffic generation of a development for 35 dwellings on the site compared with the expanded nursery's traffic generation; and
- Section 4 provides a summary and conclusions of the report.

SECTION 2 SITE USE AND ACCESS ARRANGEMENT

2.1 Introduction

2.1.1 Greenwood Nursery specialises in plant supply for new-build residential developments and operate out of four sites nationwide (including two in the Chichester area) Highleigh Nursery is located some 6km south of Chichester and in between the settlements of Highleigh (to the west) and Sidlesham (to the east).

2.1.2 This section describes the current site access arrangements and the traffic flows associated with Greenwood Nursery – both at the current time and following an on-going expansion by Greenwood Nursery.

2.2 Existing Access and Junction with Highleigh Road

2.2.1 The site access road itself is a hard-surfaced private road, typically at least 5m in width (i.e. sufficient for a car to pass a large vehicle (*ref: MfS Figure 7.1*)). The access is shared with Tony Partridge Autos (a car repair garage) and several additional homes. The access forms a priority junction with Highleigh Road, located approximately 125m northwest of the site boundary.

2.2.2 Highleigh Road is typically 5m wide, as is the access road in the immediate vicinity of the junction – again, sufficiently wide for two cars to pass one another at the junction (*ref: Manual for Streets (MfS) figure 7.1*). Both Highleigh Road and the access are lightly trafficked and operate with ample spare capacity.

2.2.3 Automatic Traffic Counters (ATC's) were installed on Highleigh Road north and south of the access junction between 23 April and 29 April 2018 to record vehicle speeds.

2.2.4 **Table 2.1** below sets out the observed 85th percentile wet weather speeds in both directions of travel on Highleigh Road. The full survey results are provided at **Appendix A**.

Table 2.1: Highleigh Road – 24 Hour 85th Percentile Observed Wet Weather Speeds

Direction of Travel	Speed (mph)
Northbound	29.4
Southbound	28.6

Source: Traffic Surveys

2.2.5 These speeds are broadly in accordance with the posted speed limit of 30mph on Highleigh Road. They equate to stopping sight distances of 42m northbound and 40m southbound based on MfS stopping sight distance parameters. Drawing ITB13688-GA-001 identifies that the visibility splays set out above are achievable at a setback distance of 2.4m.

2.2.6 Highleigh Road and its junction with the access benefit from an unblemished accident record with no accidents recorded between 2013 and 2017 (*ref: crashmap.co.uk*).

2.2.7 On this basis, a safe and satisfactory access arrangement to the site is achieved.

2.3 Nursery Traffic Flows on Nursery

2.3.1 A further ATC was undertaken at the entrance to Greenwood Nursery recording vehicle movements into / out of the site between 23 April and 29 April 2018. In addition, HGV movements have been provided by Greenwood Nursery. The traffic surveys are summarised in **Table 2.2**.

Table 2.2: Existing Site Vehicular Traffic Generation (HGV's in Brackets)

Time Period	Number of Vehicles (and HGVs) on Weekdays		
	Arrivals	Departures	Two-Way
Morning Peak Hour	5 (0)	1 (0)	6 (0)
Evening Peak Hour	2 (0)	8 (0)	10 (0)
24 Hour	48 (3)	57 (3)	105 (6)

Source: Greenwood Nursery and Consultant's Calculations

2.3.2 The site access thus attracts a material volume of traffic each day. This includes vehicles of all sizes – cars, transit vans and some HGVs. These in turn also use local roads such as Highleigh Road.

2.3.3 It is understood that traffic flow can be significantly higher than set out above during seasonal peak periods.

2.4 Intensification of Nursery

2.4.1 Greenwood have recently taken on the lease of an additional area known as the 'school field' to the south of their current site. This will enable a 92% increase production capacity over the coming year with the additional area becoming fully operational by mid-2019 – resulting in a 70% increase in vehicular traffic movements (as a result of increased staffing and supply / dispatch deliveries)

2.4.2 The resulting increased traffic movements are identified in **Table 2.3** below.

Table 2.3: Site Vehicular Traffic Attraction (HGV's in Brackets) Resulting from Expansion

Time Period	Number of Vehicles (and HGVs) on Weekdays		
	Arrivals	Departures	Two-Way
Morning Peak Hour	8 (0)	2 (0)	10 (0)
Evening Peak Hour	3 (0)	14 (0)	17 (0)
24 Hour	82 (5)	97 (5)	179 (10)

Source: Greenwood Nursery and Consultant's Calculations

2.4.3 The on-going expansion of the site will significantly increase vehicular movements through the access (including adding further HGVs)

2.5 Summary

2.5.1 The site is currently in use by Greenwood Nursery and is accessed via a private access road with a priority junction onto Highleigh Road.

2.5.2 The access junction operates well within capacity, with appropriate visibility achieved at the junction with Highleigh Road. No accidents have been recorded in the latest five-year period. The access therefore safely and satisfactorily serves the site.

2.5.3 The site attracts 105 two-way movements (including 6 by HGV) per day. The access and its junction with Highleigh Road therefore accommodate a material volume of traffic associated with the site. This will further increase to nearly 180 two-way movements (including by 10 HGV) as a result of on-going expansion.

SECTION 3 NET TRAFFIC GENERATION

3.1 Introduction

3.1.1 This section of the report compares the traffic impact of the proposal for 35 homes with that of the expanded nursery operation and, on this basis, identifies the 'net' traffic impact of residential development.

3.2 Trip Rates

3.2.1 The TRICS database has been interrogated to obtain trip rates for the following dwelling types:

- Privately owned houses; and
- Houses for rent.

3.2.2 The revised trip rates have been derived using the following selection criteria:

- Great Britain (excluding Greater London);
- Tuesdays to Thursdays (if sufficient sites available – weekdays if not); and
- Edge of Town.

3.3 Residential Traffic Generation

3.3.1 A summary of the trip rates used is presented in **Table 3.1**. The TRICS outputs are included as **Appendix B**.

Table 3.1: Trip Rates for Privately Owned / Affordable Dwellings

Time	Weekday Morning Peak			Weekday Evening Peak			Weekday		
	Hour			Hour					
	In	Out	Total	In	Out	Total	In	Out	Total
Private Houses (per dwelling)	0.17	0.418	0.588	0.368	0.147	0.515	2.432	2.429	4.861
Houses for Rent (per dwelling)	0.151	0.291	0.442	0.267	0.192	0.459	2.219	2.223	4.442

Source: TRICS

3.3.2 Applied to 35 homes, including 24 private houses and 11 affordable house (in line with CDC's affordable housing policy which requires a minimum 30% affordable housing provision), this yields the traffic flows set out below.

Table 3.2: Traffic Generation (Vehicles)

Time	Weekday Morning Peak			Weekday Evening Peak			Weekday		
	Hour			Hour					
	In	Out	Total	In	Out	Total	In	Out	Total
Private Houses (24)	4	10	14	8	4	12	58	58	116
Houses for Rent (11)	2	3	5	3	2	5	24	24	48
Total	6	13	19	11	6	17	82	82	164

Source: TRICS

3.4 Net Traffic Generation

3.4.1 The net traffic impact of the proposal, in comparison with the expanded site (*ref: Table 2.3*), is set out below.

Table 3.3: Net Traffic Impact (Vehicles)

Time	Weekday Morning Peak			Weekday Evening Peak			Weekday		
	Hour			Hour					
	In	Out	Total	In	Out	Total	In	Out	Total
Existing Nursery	8	2	10	3	14	17	82	97	179
Proposed Residential	6	13	19	11	6	17	82	82	164
Net Difference	-2	11	9	8	-8	0	0	-15	-15

Source: Traffic Surveys, Consultant's Calculations and TRICS

3.5 Summary

3.5.1 The proposal will therefore overall result in:

- A small increase in traffic flows during the morning peak (9 vehicles per hour or one vehicle every 7 minutes);
- No overall change during the evening peak; and

- A net reduction in traffic flow across a typical weekday (of 15 vehicles).

3.5.2 It should be noted that as a result of residential development, HGVs will cease to regularly use the site access (and surrounding road network).

SECTION 4 SUMMARY AND CONCLUSIONS

- 4.1 This report sets out the highways transport implications of a Local Plan promotion for residential development at Greenwood Nursery on their site at Highleigh Nurseries Sidlesham.
- 4.2 The site is currently accessed via a shared private access (which also serves Tony Partridge Autos and several residential dwellings). The access forms a priority junction with Highleigh Road approximately 125m north west of the site boundary.
- 4.3 The aspiration is to provide 35 homes at the site, with Greenwood vacating the site upon commencement of development. The proposal will involve the re-use of the existing access and junction onto Highleigh Road.
- 4.4 This Technical Note demonstrates that:
- The access and junction with Highleigh Road operate safely and satisfactorily. The junction with Highleigh Road operates within capacity; has an unblemished safety record and achieves appropriate visibility splays.
 - Greenwood Nursery typically attracts 105 two way movements per weekday (including 6 by HGVs). This can significantly increase during peak seasons and is expected to further increase (to circa 180 vehicles per day and 10 HGVS) as a result of on-going expansion; and
 - A residential development of 35 homes will generate circa 165 dwellings (including typically no HGV movements). Traffic flows along the access road (and local highway network) will thus reduce as a result of residential development.
- 4.5 On this basis, the site is capable of accommodating a modest residential redevelopment served by the existing access road.