

# Transport Statement



<b>Ref</b>	TS603
<b>Site Name</b>	6 Hill Road, Great Sampford
<b>Date</b>	April 2023

## Quality Assurance

Site name: 6 Hill Road, Great Sampford  
Client name: Ranger Management and Design Services Ltd  
Type of report: Transport Statement  
Prepared and Reviewed by: Steve Amann BSc (Hons) MSc (Eng)  
Signed: [Redacted]  
Date: April 2023



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# 1 Introduction

- 1.1 Journey Transport Planning Ltd has been instructed by Ranger Management and Design Services Ltd to undertake a Transport Statement in support of a full planning application to Uttlesford District Council for a residential development on land at 6 Hill Road, Great Sampford.
- 1.2 The location of the site is illustrated in Appendix 1.

## Background

- 1.3 This Transport Statement provides a summary of investigations at the site and its proposed access points on Hill Road pursuant to demonstrating the proposal will not have a detrimental impact on highway safety or capacity in the vicinity of the site.
- 1.4 The following matters are considered in this appraisal:
  - Examination of policy and guidance as it pertains to the proposal and the site
  - Consideration of site accessibility
  - Examination of the likely development trip generation
  - Assessment of the traffic impact of the proposal
  - Parking and servicing appraisal
  - Development of proposed access improvements

## 2 National and Local Policy

- 2.1 Relevant policy guidance relating to new development, and transport and land use planning is set out at national and local levels in the following documents:

the National Planning Policy Framework

Essex Local Transport Plan

Parking Standards Design and Good Practice 2009

- 2.2 These documents set the context in which the proposals have been assessed.

### The National Planning Policy Framework (NPPF)

- 2.3 The National Planning Policy Framework (NPPF, 2021) in this document the government sets out its core principles for the planning system in England.

- 2.4 The purpose of the planning system is to contribute to the achievement of sustainable development. At a very high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs.

### Promoting Sustainable Transport

- 2.5 The NPPF in promoting sustainable transport considers that for sites to be allocated for development in plans, or specific applications for development, it should be ensured that:

appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

safe and suitable access to the site can be achieved for all users;

the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code 46; and

any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

- 2.6 The framework goes on to re-iterate that Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

- 2.7 The NPPF sets out in the context of applications for development that they should:

give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use.

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address the needs of people with disabilities and reduced mobility in relation to all modes of transport;

create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;

allow for the efficient delivery of goods, and access by service and emergency vehicles; and

be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.

- 2.8 The chapter concludes that ... All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.

### Essex Local Transport Plan 2011

- 2.9 The 2011 Essex Local Transport Plan sets out the County Council's aims and objectives for transport and infrastructure for the next ten-year period and provides the policy framework to achieve the objectives.

- 2.10 Policy 2 Integrated Development sets out the County's position in relation to integrated planning and states that:

Transport and land-use planning will be used together to secure new development at the most appropriate and sustainable locations by: working closely with district planning authorities to enable a better balance of new homes, jobs and services; locating new developments in areas which are accessible to key services by sustainable forms of transport; ensuring new developments provide for sustainable transport and effective travel planning; requiring new developments to provide appropriate transport infrastructure in line with the Council's current development management policies; and making the most effective use of all available funding sources by co-ordinating the delivery of ECC and development funded works.

### Parking Standards

- 2.11 The proposals have been assessed against the advice contained in the Essex Planning Officers Association publication, Parking Standards Design and Good Practice 2009.

### 3 Site Assessment

#### Existing Information

- 3.1 The site is located directly to the east of Hill Road Great Sampford.
- 3.2 The site abuts Hill Road which is a 5m wide road subject to a 60mph speed limit in the vicinity of the site.
- 3.3 There is no footway or streetlighting provision along Hill Road in the vicinity of the site.

#### Public Transport Information

- 3.1 The provision of bus based public transport in the area has been assessed in terms of access to routes, frequencies of services and levels of reliability. The quality of the bus infrastructure in the area has also been assessed in respect of the provision and quality of shelters, information and seating.
- 3.2 Bus accessibility is measured by reference to the number and frequency of services available within easy walking distance of the proposal site. Easy walking distance is considered to be up to 400 metres in the case of accessing bus based public transport. This equates to a five minute walk time assuming a walk speed of 80 metres per minute.
- 3.3 The site is within 400m of bus stops adjacent to the Red Lion to the north of the site which provides access to two scheduled school services
- 3.4 Table 3.1 summarises the bus services available from the stops in the vicinity of the site.

**Table 3.1 Bus Service Summary**

Bus Number	Route	Frequency
417	Joyce Franklyn Academy – Rayne	AM and PM
419	Joyce Franklyn Academy – Gt Saling	AM and PM

- 3.5 Whilst there are no regular public services available in the vicinity, the availability of school services has the potential to provide sustainable access to schools in the vicinity.
- 3.6 The routes and timetables are held in Appendix 2.

#### Walking and Cycling Assessment

- 3.7 Cycling has the potential to substitute for short car trips, particularly those less than five kilometres. Cycle access to the proposal has been considered in detail. For the purposes of cycle accessibility, a cycling time of 20 minutes, which equates to five kilometres at an average speed of 15kph, has been assumed.
- 3.8 The five kilometre catchment area of the proposal site includes the whole of Great Sampford and a number of nearby villages.

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- 3.9 With respect to pedestrian access, a walk time of ten minutes is generally considered the maximum acceptable to directly access any local facility or amenity and equates to a distance of 800 metres.
- 3.10 The site is within walking distance of the local primary school, a public house and bus stops.
- 3.11 In consideration for the foregoing the site is suitably located for the purposes of a sustainable residential development.

### **Safety Considerations and Accident Analysis**

- 3.12 The accident record in the vicinity of the site has been considered and the Essex Highways Database indicates that no collisions have been in the vicinity in the 3 year period between February 2020 and February 2023.
- 3.13 In consideration of the above, the highway network in the immediate vicinity of the site has an excellent safety record and as such the proposals by virtue of their limited scale will not have a material impact on that record.

## 4 Development Proposals

### Description of Proposal

- 4.1 The proposals for the site consider a development of 3 dwellings with associated parking and access on to Hill Road.
- 4.2 The development proposals are illustrated in Appendix 3.



## 5 Proposed Access Arrangements

5.1 In consideration of the fact that Hill Road is subject to the national speed limit in the vicinity of the site, any new access would need to demonstrate visibility in accordance with the requirements set out in the Design Manual for Roads and Bridges for a 60mph road. This level of visibility is not achievable at the proposed access location and as such speed surveys were commissioned on Hill Road to support a reduction in the visibility splay requirements.

5.2 Independent speed surveys on Hill Road were commissioned and undertaken by Advanced Transport Research at the access during the following period:

Survey Start     4<sup>th</sup> January -2023

Survey End        10<sup>th</sup> January -2023

5.3 The speed survey results provided 85<sup>th</sup>ile speeds at the location to inform the visibility requirement at the access.

5.4 The following 85<sup>th</sup>ile speeds were recorded at the access on the approaches to the access locations.

Southbound 85<sup>th</sup>ile speed     45.3 mph

Northbound 85<sup>th</sup>ile speed     44.7mph

5.5 Given the recorded speeds set out above and the location of the access, visibility splays based on the standards set out in the Design Manual for Roads and Bridges (DMRB) provides an appropriate and suitable basis for calculating the visibility requirement at the access.

5.6 The speed survey results are held in Appendix 4.

5.7 Given that north of the proposed access Hill Road is subject to a 30mph speed limit, visibility for this direction is proposed at 2.4m by 90m in accordance with DMRB requirements.

5.8 The visibility splay requirement to the south from the proposed access points has been assessed in the context of the observed 85<sup>th</sup>ile speeds on the northbound approach. DMRB indicates that for a recorded 85<sup>th</sup>ile speed of 44.7mph, visibility at 2.4m by 124.0m to the south from the access points would be required.

5.9 In consideration of the foregoing, visibility to the south from the access points has been assessed on site and is achievable at 2.4m by 124m in both the horizontal and vertical plane and as such accords with the DMRB requirement for the surveyed speeds on that approach.

5.10 The required visibility at each access is shown in Appendix 5. The required visibility can be achieved within land in either client control or control of the Highway Authority.

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### Access Design and Traffic Impact

- 5.11 The southern access which will provide access to two dwellings is designed at 8m wide for the initial 6m into the access and as such accords with the requirements for a shared private drive as set out in the Essex Design Guide.
- 5.12 The northern access is provided with a 3m wide access for the initial 6m and accords with the Essex Design Guide.
- 5.13 The three dwellings will generate in the region of 1 movement each in the AM peak and 1 each in the PM peak and as such will not have a material or significant on the operation of the local road network in terms of either highway safety or capacity and moreover will not have a significant impact in the context of paragraph 111 of the NPPF.
- 5.14 It should be noted that the existing dwelling already generates a level of movement and as such there will only be two additional vehicle trips in each peak associated with the development.

### Parking and Servicing

- 5.15 Vehicle parking is proposed in accordance with the standards set out in the Essex Planning Officers Association Guidance, Parking Standard, Design and Good Practice 2009 with 3 parking spaces per unit and 2 visitor spaces being provided. All spaces will be provided at 2.9m by 5.5m.
- 5.16 A vehicle tracking assessment has been undertaken and demonstrates that there is appropriate turning area provided to enable vehicles to enter and exit the parking spaces in forward gear.
- 5.17 The tracking assessment is held in Appendix 6.
- 5.18 A cycle space will be provided for each dwelling in accordance with current standards.
- 5.19 Refuse and servicing for the development will take place from Hill Road as per the on-going arrangements.

## 6 Summary and Conclusions

### Summary

- 6.1 This Transport Statement has been provided in support of a planning application to Uttlesford District Council for proposals to develop 3 dwellings on land to the east of Hill Road, Great Sampford.
- 6.2 An independent speed survey indicated that speeds at the access were lower than the posted speed limit and as such a lower level of visibility would be appropriate for an access in this instance.
- 6.3 An examination of the visibility achievable at the proposed access location demonstrates that a suitable level of visibility can be achieved in accordance with the recorded speed of traffic on Hill Road the proposed access points.
- 6.4 The proposed access would be designed in accordance with Essex County Council guidance and subject to detailed design requirements.
- 6.5 The proposed access can accommodate the manoeuvring requirements associated with the access.
- 6.6 The proposed parking accords with current design standards in terms of numbers, size and spacing.
- 6.7 The proposal will not lead to a significant increase vehicular traffic on the local road network.
- 6.8 The Statement also demonstrates that the site is suitably located in terms of access by means other than the private car.

### Conclusions

- 6.9 This Transport Statement demonstrates that the proposals have been developed in accordance with the aims and objectives of current national and local policy as it relates to transport and will not have a significant impact on the efficiency or safety of the local transport network.
- 6.10 In view of the foregoing, it is considered that there are no substantive highway or transportation reasons why the proposals as submitted should not be permitted.



Appendix 1  
Site Location

# 6 Hill Road, Great Sampford



This Plan includes the following Licensed Data: OS MasterMap Colour PDF Location Plan by the Ordnance Survey National Geographic Database and incorporating surveyed revision available at the date of production. Reproduction in whole or in part is prohibited without the prior permission of Ordnance Survey. The representation of a road, track or path is no evidence of a right of way. The representation of features, as lines is no evidence of a property boundary. © Crown copyright and database rights, 2023. Ordnance Survey 0100031673

0m 20m 40m 60m 80m 100m

Scale: 1:1250, paper size: A4

Site Location





Appendix 2  
Public Transport Information

## Stephensons of Essex 417 419 Rayne-Joyce Frankland Academy

**Mondays to Fridays** from 6 January 2020

	<b>417</b>	<b>419</b>
	<b>Sch</b>	<b>Sch</b>
Rayne, The Welsh Princess	0705	-
Blake End, The Saling Oak	0709	-
Stebbing, Warehouse Villas	0712	-
Stebbing, The White Hart	0715	-
Stebbing, Bran End	0718	-
Great Bardfield, The Vine	0727	-
Finchingfield, The Hopgrounds	0736	-
Great Saling, Church	-	0713
Shalford, The George	-	0725
Wethersfield, The Green	-	0730
Little Sampford, Flea Hall Road	0741	0743
Great Sampford, The Red Lion	0744	0747
Radwinter, Plough Inn	0751	0754
Sewards End, Tylers	0758	0800
Saffron Walden, High School	0810	0810
Newport, JF Academy	0825	0825

### Notes

Sch this journey runs on schooldays only

## Stephensons of Essex 417 419 Joyce Frankland Academy-Rayne

**Mondays to Fridays** from 6 January 2020

	<b>417</b>	<b>419</b>
	<b>Sch</b>	<b>Sch</b>
Newport, JF Academy	1520	1520
Saffron Walden, High School	1530	1530
Sewards End, Tylers	1538	1538
Radwinter, Maple Lane	1543	1545
Great Sampford, The Red Lion	1551	1551
Little Sampford, Flea Hall Road	1554	1554
Finchingfield, The Hopgrounds	1558	-
Great Bardfield, Crown Street	1604	-
Stebbing, Bran End	1613	-
Stebbing, The White Hart	1616	-
Stebbing, Warehouse Villas	1619	-
Blake End, The Saling Oak	1622	-
Rayne, The Welsh Princess	1625	-
Finchingfield, The Fox	-	1558
Wethersfield, The Green	-	1603
Shalford, The George	-	1606
Great Saling, Church	-	1619

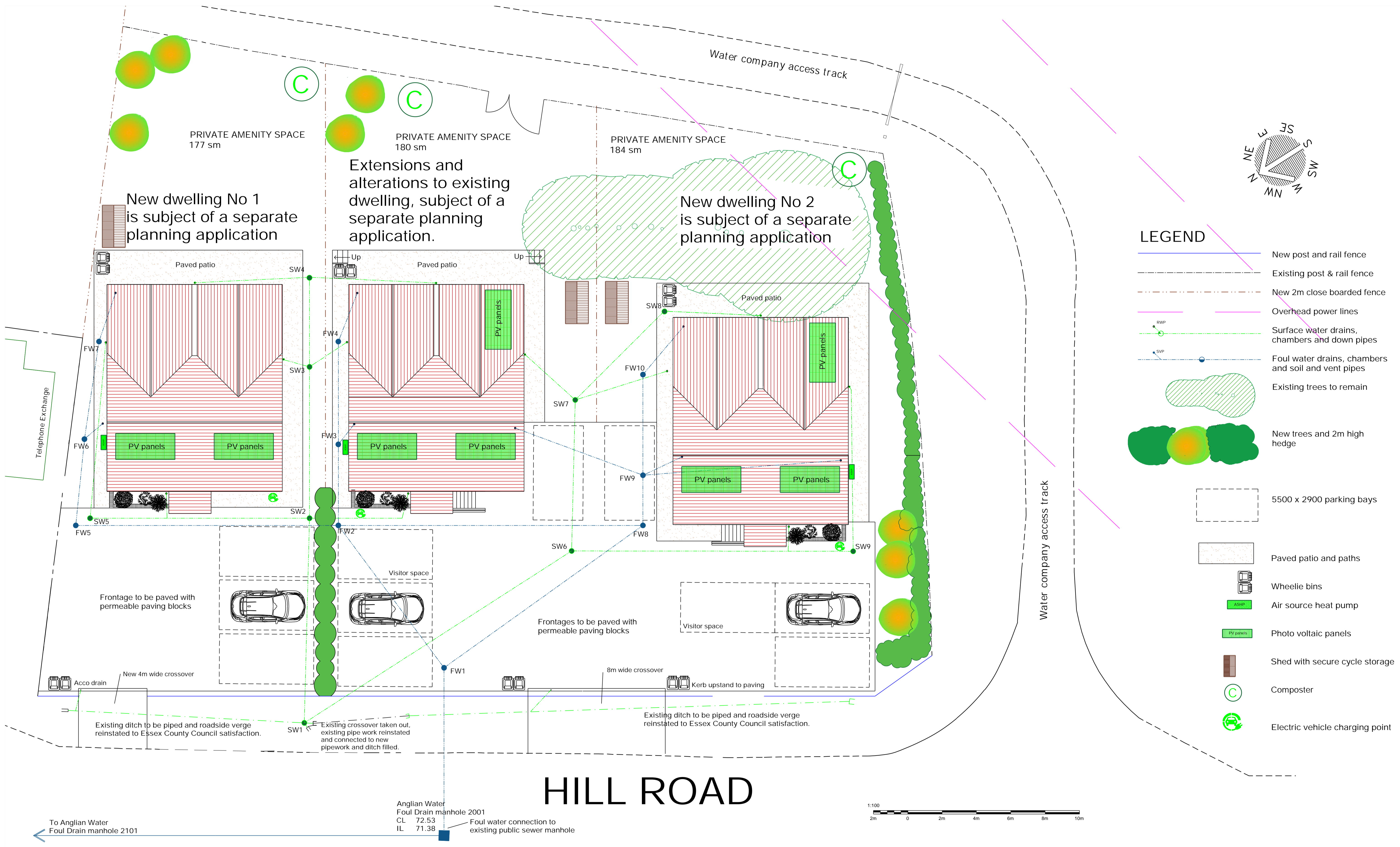
### Notes

Sch this journey runs on schooldays only



Appendix 3  
Proposed Site Layout





Residential development at 6 Hill Road, Gt Sampford CB10 2RT  
 Proposed master site layout  
 Drawing No RMDS/HR/2002 Scale 1:100 @ A1

**RANGER MANAGEMENT & DESIGN SERVICES**  
 13 Berners End, Barnston, Dunmow CM6 1LY  
 t: 01371 874073 m: 07913 289362 e: planrmds@gmail.com



Appendix 4  
Speed Survey



# ATC SUMMARY REPORT

<b>PROJECT</b>	34088 Hill Road, Gt Samford, Saffron Walden
<b>LOCATION</b>	34088-001 - B1051, Hill Road
<b>LOC. DESC.</b>	B1051, Hill Road
<b>START DATE</b>	Wed 04 Jan, 2023
<b>END DATE</b>	Tue 10 Jan, 2023
<b>SPEED LIMIT</b>	60mph
<b>SURVEY TYPE</b>	7-day ATC, 15min periods, 6 veh. classes

## OVERVIEW

A 7-day automatic traffic count on B1051, Hill Road, commencing Wed 04 Jan 2023, recorded a total of 13,042 vehicles. The posted speed limit of 60mph was exceeded by 0.3% of vehicles, and the seasonally adjusted, combined AADT value is 2,168 (see Equipment & Methodology below).

### COMBINED

<b>Total recorded volume</b>	<b>13,042</b>
<b>Avg daily volume (based on 7 days)</b>	1,863.1
<b>Average daily speed (7 days)</b>	38.6mph
<b>Average daily 85%ile (7 days)</b>	45.0mph
<b>AADT (annual average daily traffic)</b>	2,168

<b>Avg weekday volume (Mon-Fri, 24hrs)</b>	2,086.4
<b>Avg weekday speed (Mon-Fri, 24hrs)</b>	38.5mph
<b>Avg 12hr weekday volume (Mon-Fri, 0700-1900)</b>	1,752.0
<b>Avg 12hr weekday speed (Mon-Fri, 0700-1900)</b>	38.0mph

The combined summary on the left shows the total volumes, average speeds, AADT and 85%iles recorded in both directions from all the recorded data. Speeding vehicles are defined as those travelling 61mph and above.

The summaries below provide directionalised details including speeding percentages and weekday daytime details.

### NORTHBOUND ↑

<b>Total recorded volum</b>	<b>6,534</b>
<b>Avg daily volume (based on 7 days)</b>	933.4
<b>Average daily speed (7 days)</b>	38.5mph
<b>Average daily 85%ile (7 days)</b>	44.7mph
<b>% of vehicles exceeding 60mph</b>	0.4%

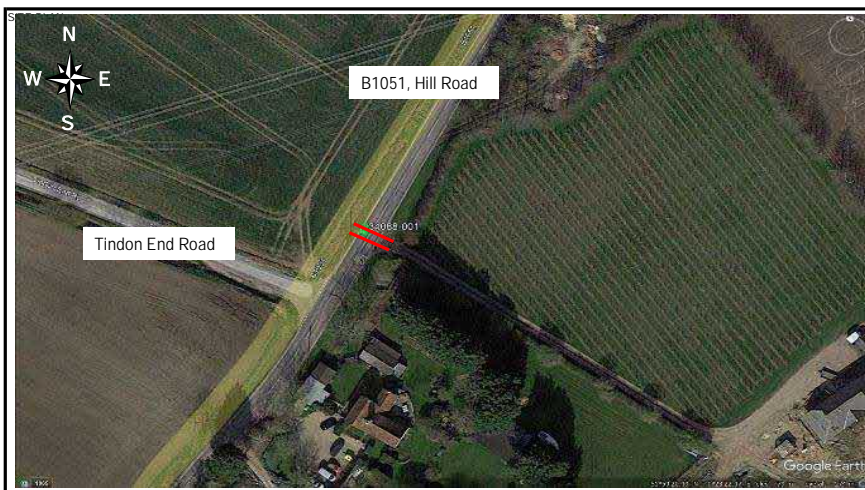
<b>Avg weekday volume (Mon-Fri, 24hrs)</b>	1,050.2
<b>Avg weekday speed (Mon-Fri, 24hrs)</b>	38.3mph
<b>Avg 12hr weekday volume (Mon-Fri, 0700-1900)</b>	907.8
<b>Avg 12hr weekday speed (Mon-Fri, 0700-1900)</b>	37.9mph
<b>Avg 12hr weekday 85%ile (Mon-Fri, 0700-1900)</b>	43.9mph

### SOUTHBOUND ↓

<b>Total recorded volum</b>	<b>6,508</b>
<b>Avg daily volume (based on 7 days)</b>	929.7
<b>Average daily speed (7 days)</b>	38.7mph
<b>Average daily 85%ile (7 days)</b>	45.3mph
<b>% of vehicles exceeding 60mph</b>	0.3%

<b>Avg weekday volume (Mon-Fri, 24hrs)</b>	1,036.2
<b>Avg weekday speed (Mon-Fri, 24hrs)</b>	38.6mph
<b>Avg 12hr weekday volume (Mon-Fri, 0700-1900)</b>	844.2
<b>Avg 12hr weekday speed (Mon-Fri, 0700-1900)</b>	38.0mph
<b>Avg 12hr weekday 85%ile (Mon-Fri, 0700-1900)</b>	44.4mph

## SITE LOCATION

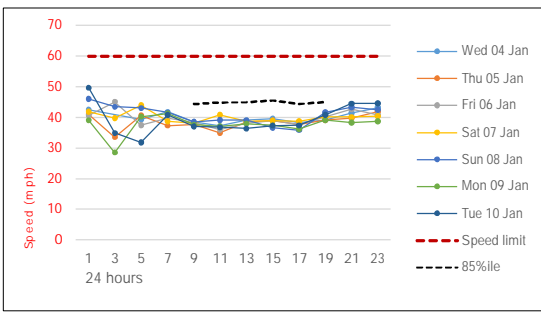


<b>Locator</b>	B1051, Hill Road
<b>Lat, lng.</b>	51°59'20.61"N, 0°23'20.94"E
<b>Project &amp; site</b>	34088-001
<b>PSL</b>	60mph
<b>Bus route</b>	No
<b>Direction 1</b>	Northbound↑
<b>Direction 2</b>	Southbound↓

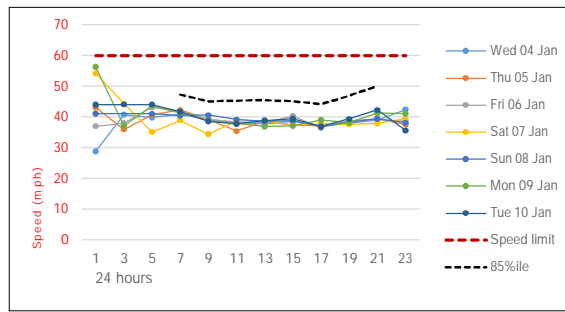


# DAILY SPEEDS

## NORTHBOUND ↑



## SOUTHBOUND ↓

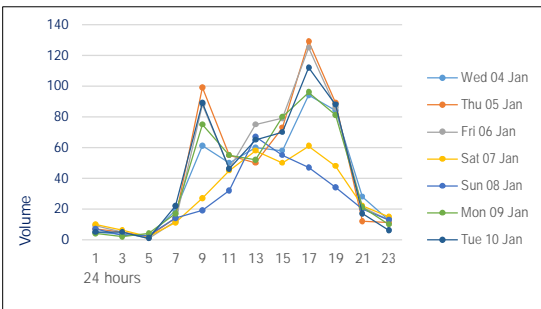


Average daily speeds (solid thin colours) and 85%ile (dashed black) compared against 60mph posted speed limit (dashed red). The 85%ile is the speed at which 85% of all vehicles are observed to travel under free flowing conditions. A minimum of ten vehicles per speed bin is required for this calculation, hence the overnight low-volume 85%ile values may be zero.

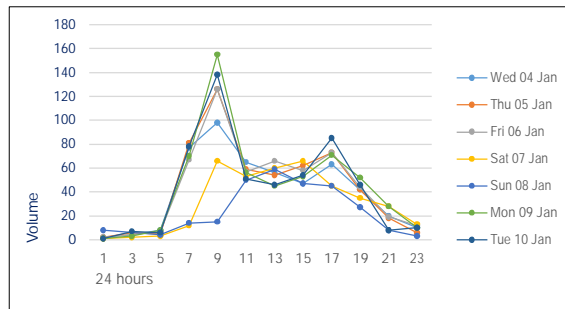
The peak average northbound daytime speed was 51.3mph at 07:00 on Sun 08 Jan, whilst the peak average southbound speed was 48.8mph at 07:30 on Sun 08 Jan (based on 15min averages between 0700 & 1900).

# HOURLY VOLUMES

## NORTHBOUND ↑



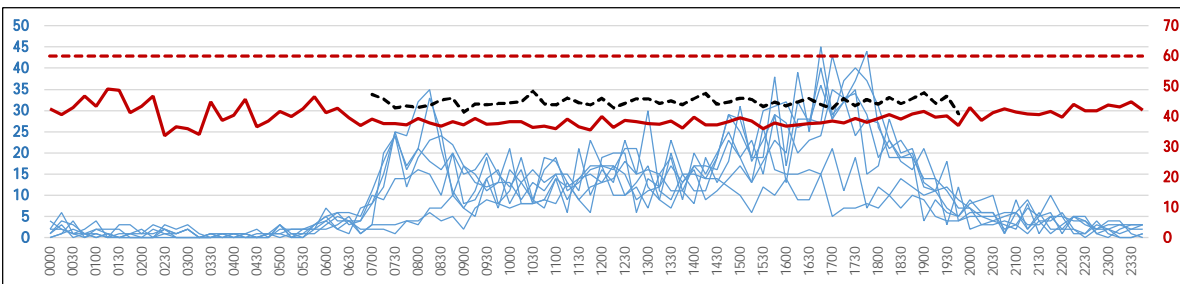
## SOUTHBOUND ↓



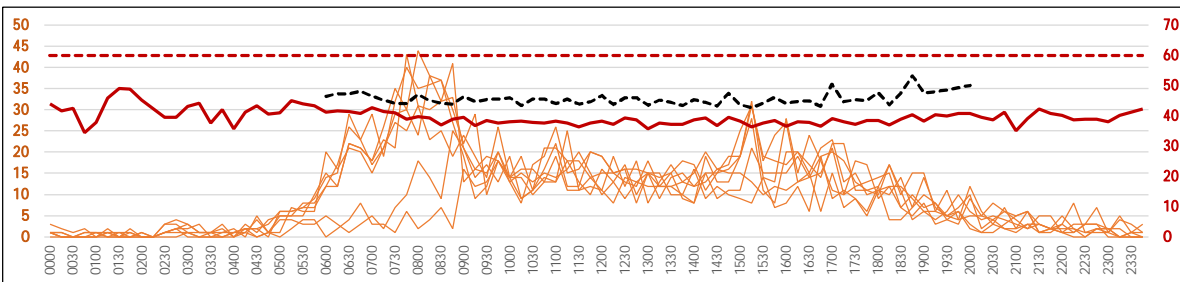
↑ Hourly northbound traffic volumes over each 24hr period for 7 days from all available data.

Hourly southbound traffic volumes over each 24hr period for 7 days from all available data. ↓

# 15min VOL & SPEED



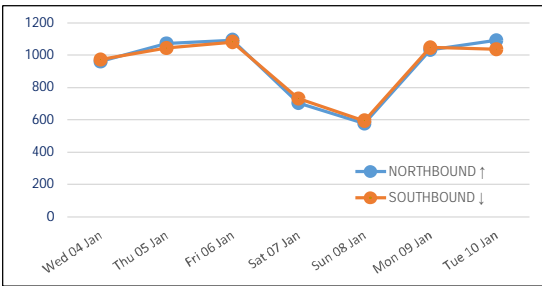
↑ 15min daily northbound flows (blue), against the average speed (red) and 85%ile (dotted black) for each 15min period over the 7-day period.



15min daily southbound flows (orange), against the average weekly speed (red) and 85%ile (dotted black) for each 15min period over the 7-day period. ↓

# DAILY VOLUMES

## NORTH & SOUTHBOUND



Total 24hr northbound (blue) and southbound (orange) traffic volumes over 7 consecutive days from all available data.

As can be expected, the lowest volumes were recorded on the Sunday, whilst the highest was on the Friday.

# 7-DAY AVERAGE CLASSES

## NORTHBOUND 7-DAY AVG ↑

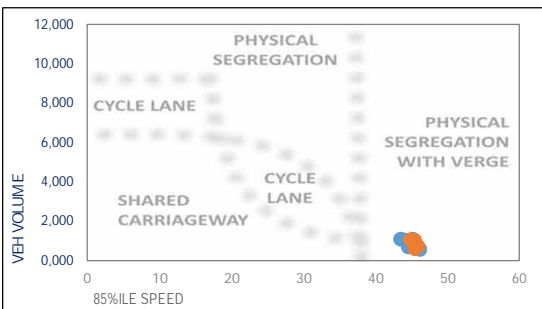
TIME	MOTOR CYCLES	CARS / LGV	OGV1	OGV2	PSV	TOTAL
0000	0.1	6.6	0.0	0.0	0.0	6.7
0100	0.0	3.9	0.0	0.0	0.0	3.9
0200	0.0	2.9	0.0	0.9	0.0	3.7
0300	0.0	1.0	0.1	1.3	0.0	2.4
0400	0.0	1.4	0.1	0.6	0.0	2.1
0500	0.0	6.1	0.0	0.0	0.0	6.1
0600	0.0	15.4	0.0	0.1	0.0	15.6
0700	0.0	45.0	1.4	0.7	0.1	47.3
0800	0.0	62.0	3.0	0.4	0.0	65.4
0900	0.1	43.7	2.6	0.1	0.3	46.9
1000	0.4	44.6	1.4	0.6	0.0	47.0
1100	1.3	48.7	1.7	1.4	0.0	53.1
1200	0.9	58.0	1.6	0.4	0.1	61.0
1300	0.6	51.7	1.9	0.4	0.1	54.7
1400	0.0	64.3	1.0	1.1	0.0	66.4
1500	1.1	79.6	1.7	0.1	0.1	82.7
1600	0.1	93.1	1.0	0.6	0.0	94.9
1700	0.1	104.4	0.9	0.0	0.0	105.4
1800	0.1	72.6	0.0	0.1	0.0	72.9
1900	0.1	37.4	0.3	0.0	0.0	37.9
2000	0.3	19.7	0.1	0.0	0.0	20.1
2100	0.1	18.0	0.1	0.0	0.0	18.3
2200	0.1	11.3	0.0	0.1	0.0	11.6
2300	0.0	7.3	0.0	0.0	0.0	7.3
12hr TTL	4.9	767.7	18.1	6.1	0.9	797.7
24hr TTL	5.7	898.7	19.0	9.1	0.9	933.4
	1%	96%	2%	1%	0%	

## SOUTHBOUND 7-DAY AVG ↓

TIME	MOTOR CYCLES	CARS / LGV	OGV1	OGV2	PSV	TOTAL
0000	0.0	2.4	0.0	0.0	0.0	2.4
0100	0.0	2.0	0.0	0.0	0.0	2.0
0200	0.0	3.1	0.6	0.0	0.0	3.7
0300	0.0	3.9	0.1	0.0	0.0	4.0
0400	0.0	5.9	0.0	0.0	0.0	5.9
0500	0.0	21.1	0.1	0.0	0.0	21.3
0600	0.0	56.0	1.0	0.0	0.0	57.0
0700	0.0	78.1	1.3	0.0	0.0	79.4
0800	0.0	101.0	1.6	0.9	0.0	103.4
0900	0.3	66.3	2.1	0.4	0.0	69.1
1000	0.6	53.4	1.4	0.4	0.0	55.9
1100	0.0	61.9	1.3	0.9	0.1	64.1
1200	1.0	52.6	1.4	0.1	0.0	55.1
1300	0.3	49.9	1.7	0.7	0.0	52.6
1400	0.1	52.9	0.7	1.6	0.0	55.3
1500	0.4	66.6	0.9	0.6	0.0	68.4
1600	0.1	61.7	2.3	0.9	0.0	65.0
1700	0.0	52.1	0.7	0.3	0.0	53.1
1800	0.0	40.7	0.3	0.1	0.0	41.1
1900	0.0	26.7	0.1	0.0	0.0	26.9
2000	0.3	18.0	0.1	0.0	0.0	18.4
2100	0.0	11.7	0.1	0.0	0.0	11.9
2200	0.3	8.9	0.0	0.0	0.0	9.1
2300	0.3	4.1	0.0	0.0	0.0	4.4
12hr TTL	2.9	737.1	15.7	6.9	0.1	762.7
24hr TTL	3.7	901.0	18.0	6.9	0.1	929.7
	0%	97%	2%	1%	0%	

Average daily northbound and southbound volumes by class (condensed to the AQMA scheme), including 12hr totals for 0700-1900 and overall average percentages. Calculated from all available data over 7 days.

# CYCLE PROVISION



The diagram compares total daily traffic flow (vertical axis) against the average daily 85%ile speed (horizontal axis) to demonstrate cyclist and vulnerable user considerations.

The guidelines are based on the Sustrans Design Manual (Apr 2014); Understanding User Needs, part 2.

Valid 85%iles are required to plot the graph.

# METHODOLOGY

## Equipment & methodology

Automatic traffic counts are undertaken using a pair of pneumatic tubes installed securely across the carriageway, one metre apart, recording air pulses to determine vehicle speed, class and volume. The ATC equipment generally remains in place for a consecutive seven day period, and the data analysed post-survey.

In queuing conditions, the accuracy of ATC recording equipment will reduce as follows;

- 20–30mph: potential reduction of 9% accuracy in volume values
- 10–20mph: potential reduction of 26% accuracy in volume values
- 00–10mph: potential reduction of 39% accuracy in volume values

These figures are based on multiple ATC results compared against accepted reference values from resilient manual counts.

AADTs are calculated using the seasonal COBA methodology; DMRB Vol. 13, Pt 4:

## Weather & environmental

Inclement conditions during winter months or outbreaks of unseasonable weather may affect survey data collection. This can result in distorted traffic flows or unusable data and should be considered prior to survey approval. Although forecast checks are made prior to the survey commencing, A-T-R cannot be held responsible for the forecast accuracy.

CLASS	ABBREV.	DESCRIPTION	LENGTH	COBA
1	MC	Motorcycle	SHORT Up to 5.5m	N/A
2	SV	Cars, taxis, 4WD, vans		CAR & LGV
3	SVT	Class 2 plus trailer	MEDIUM 5.5m to 14.5m	OGV1 & PSV
4	TB2	2 axle truck / bus		OGV1
5	TB3	3 axle truck / bus		OGV2
6	T4	4 axle truck		
7	ART3	3 axle articulated		
8	ART4	4 axle articulated		
9	ART5	5 axle articulated		
10	ART6	6+ axle articulated	LONG 11.5m to 19.0m	

## Equipment damage & failure

Although checked intermittently the equipment remains unmanned for much of the duration of the survey, and can potentially be interfered with, vandalised, damaged or stolen and A-T-R cannot be held responsible for any periods where data has not been captured.

The equipment is located in accordance with the details provided by the client and A-T-R cannot be held responsible for the accuracy of the data or loss of equipment due to theft and vandalism.

## Roadworks & events

Where possible, roadworks checks are made 7 days before the survey commences. Additionally, influencing major local events are also monitored, covering the immediate vicinity of the surveys and any routes likely to affect the outcome of the survey.

## Vehicle classifications

Vehicles recorded by the ATC are placed into one of ten classes based on axle spacing and pattern. This scheme is based on the AustRoad 94 algorithm and modified for UK traffic, referred to as ARX. The table on the left aligns the ARX classifications with the COBA Chapter 8 (Vol 13, Sec 1) classifications.

Under adverse conditions the accuracy of ATC classifications will deteriorate and an appropriate link count should be used for validation.

## Disclaimer

Although every attempt is made to achieve accuracy, A-T-R may not be held liable for errors of fact or interpretation.

Generated 04 Apr 2023 v6.0

34088-001 Hill Road^J Gt Samford^J Saffron Walden. B1051^J †

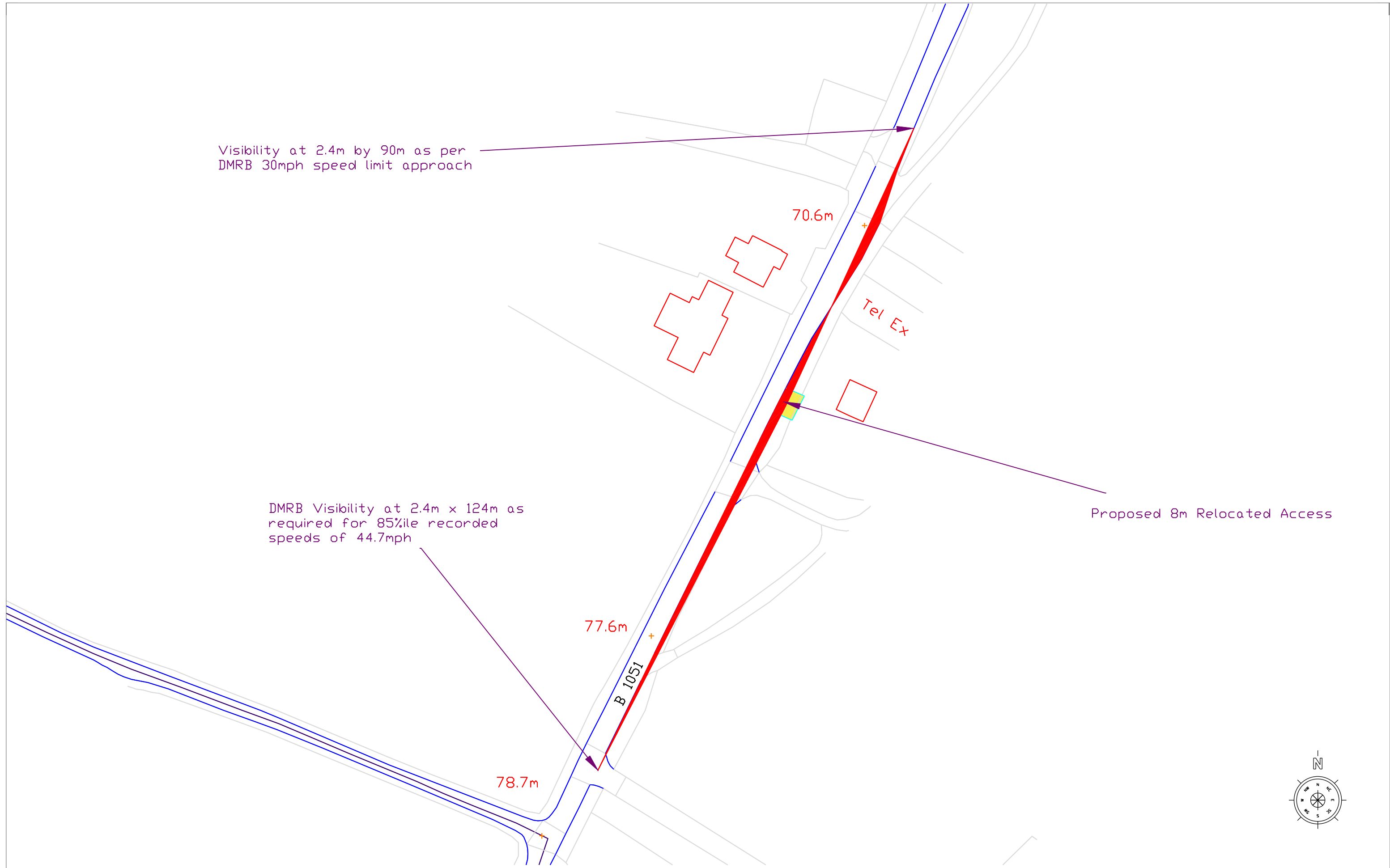


Appendix 5  
Access Visibility

Visibility at 2.4m by 90m as per DMRB 30mph speed limit approach

DMRB Visibility at 2.4m x 124m as required for 85%ile recorded speeds of 44.7mph

Proposed 8m Relocated Access



client: Ranger Management and Design Services

title: Southern Access Visibility

date: 09/02/23

scale @ A3  
1:1000

project: 6 hill Road, Great Sampford

status: Planning

drawn

Revision

discipline  
Transport Planning

project no.  
JTP 603

ch'k'd  
SAA

dwg no.  
DR1



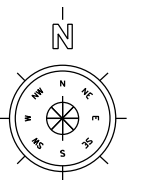
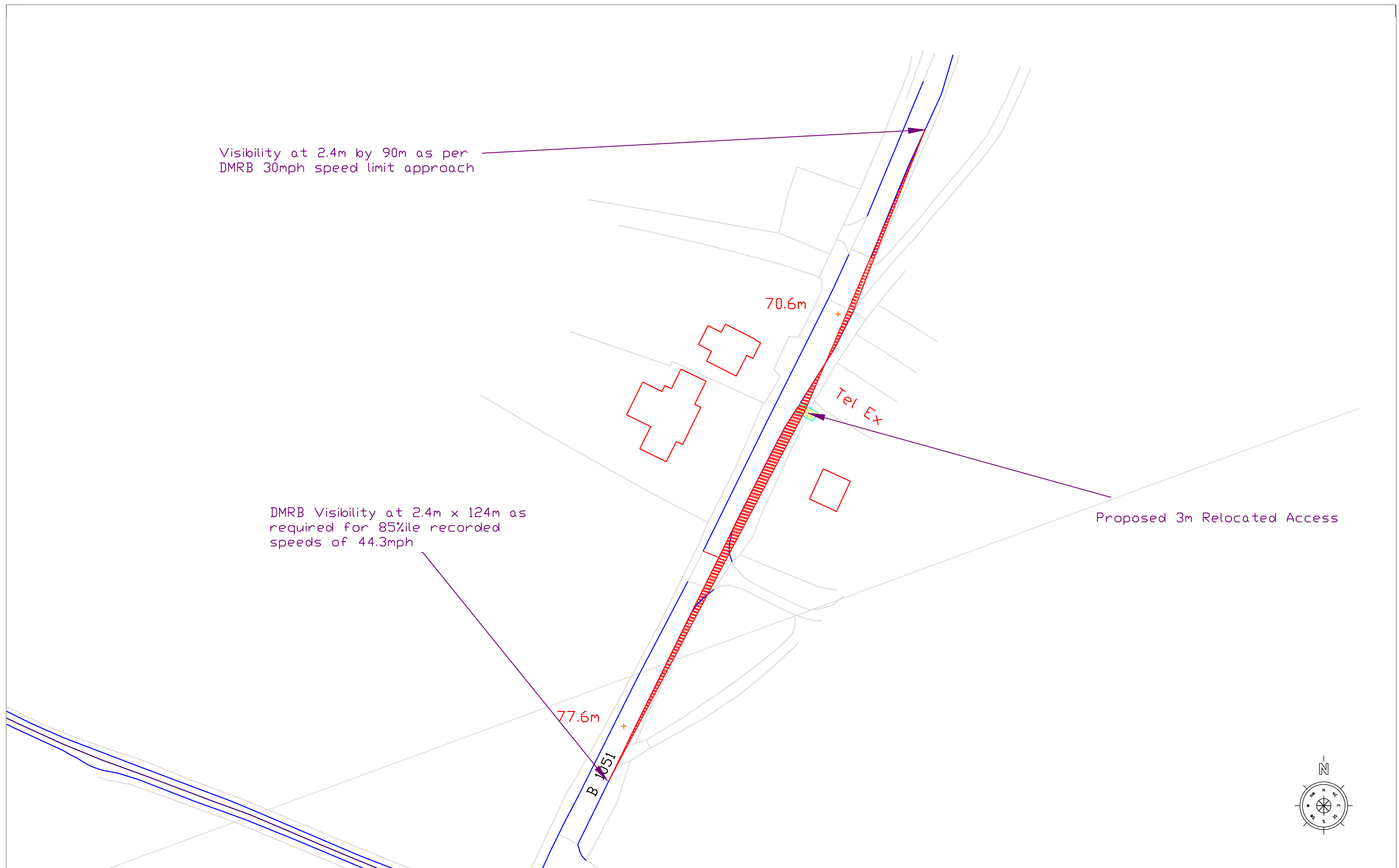
**Journey**  
transport planning



Visibility at 2.4m by 90m as per DMRB 30mph speed limit approach

DMRB Visibility at 2.4m x 124m as required for 85%ile recorded speeds of 44.3mph

Proposed 3m Relocated Access



client: Ranger Management and Design Services

title: Northern Access Visibility

date: 09/02/23

scale @ A3  
1:1000

project: 6 hill Road, Great Sampford

status: Planning

drawn

Revision

discipline  
Transport Planning

project no.  
JTP 603

ch'k'd  
SAA

dwg no.  
DR2

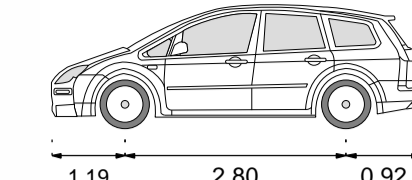




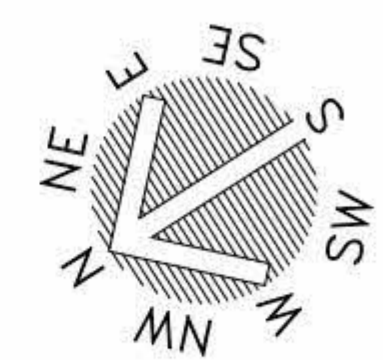
Appendix 6  
Vehicle Tracking



Vehicle dimensions



Passenger car (compact) - Custom  
Length: 4.86 m  
Max width: 1.87 m  
Lock to lock time: 4.0 s  
Max steering angle: 33.73°  
Turn radius (curb to curb): 5.80 m  
Turn radius (wall to wall): 6.50 m



LEGEND

- New post and rail fence
- Existing post & rail fence
- New 2m close boarded fence
- Overhead power lines
- Surface water drains, chambers and down pipes
- Foul water drains, chambers and soil and vent pipes
- Existing trees to remain
- New trees and 2m high hedge
- 5500 x 2900 parking bays
- Paved patio and paths
- Wheelie bins
- Air source heat pump
- Photo voltaic panels
- Shed with secure cycle storage
- Composter
- Electric vehicle charging point



Residential development at 6 Hill Road, Gt Sampford CB10 2RT  
Proposed master site layout  
Drawing No RMDS/HR/2002 Scale 1:100 @ A1

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