PROJECT NAME	**The Drift, Harlaxton, Grantham, Lincolnshire**		
DOCUMENT NUMBER	TDH-BWB-GEN-XX-RP-TR-0001	**BWB REF**	255780
AUTHOR	Charlie Cresswell	**STATUS**	S2
CHECKED	Paul Wilson	**REVISION**	P01
APPROVED	Paul Wilson	**DATE**	28/07/2025

1. INTRODUCTION

1.1 BWB Consulting Ltd ("BWB") has been appointed by Phoenix Strategic Land Ltd ("the Client") to review potential vehicular access options that could serve residential development for a maximum of 100 units, into a parcel of land located to the north of the A607 in Harlaxton, Grantham, Lincolnshire (hereafter referenced as "the Site").

1.2 The purpose of this Access Appraisal is to explore access on the A607 and determine whether safe and suitable access arrangements are achievable, in accordance with the relevant local and national design standards and recorded speeds.

1.3 The report also endeavours to establish existing opportunities for sustainable travel modes in the vicinity of the Site and encourage the adoption of active travel modes. This appraisal has been informed by a BWB site visit on Wednesday 23rd July 2025.

2. EXISTING CONDITIONS

Site Location

2.1 The Site comprises a circa 13.5 acre parcel of land located to the north of the A607, West of Grantham. It is bound to the north and west by undeveloped agricultural land, to the east by existing residential development, and to the south by the A607. **Figure 1** illustrates the Site in the context of the local highway network.

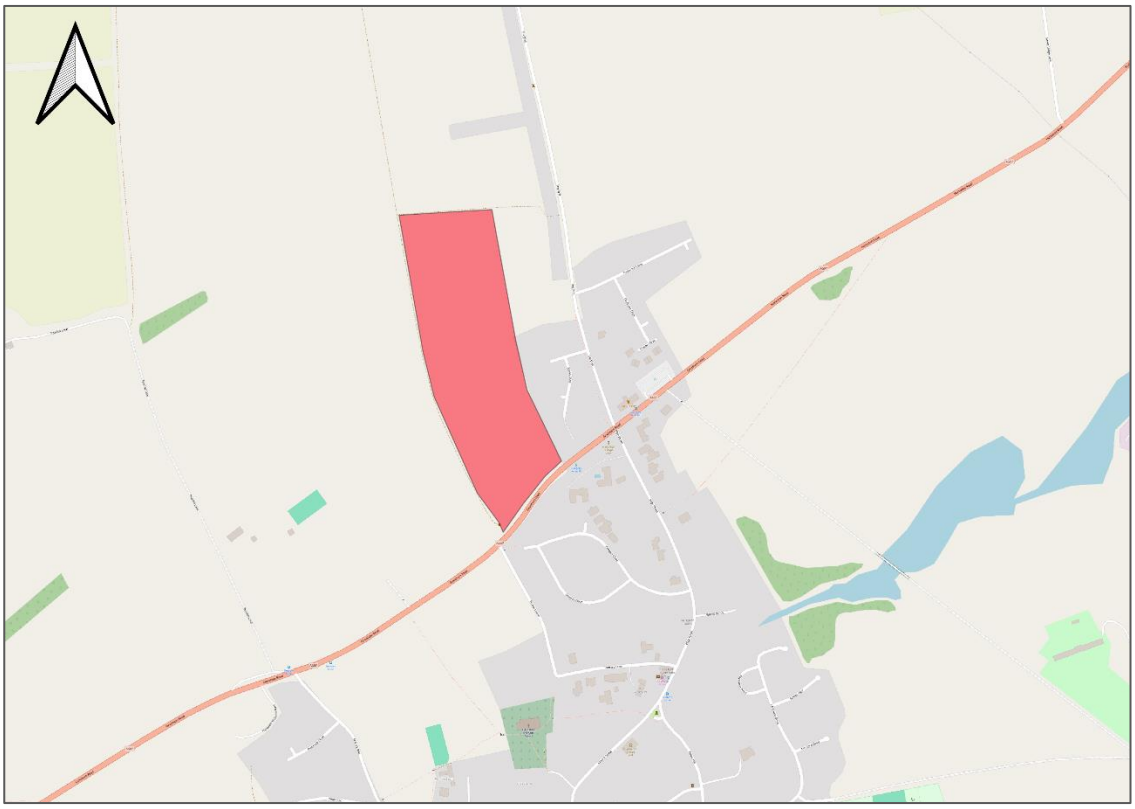


Figure 1: Site Location

Local Highway Network

2.2 The A607 extends across the southern frontage of the Site comprising of a single carriageway road subject to a 50 mph posted speed limit. The width of the carriageway along the A607 across the Site frontage measures circa 7.6 metres wide (based on Ordinance Survey mapping).

2.3 To the east of the Site, the A607 intersects with The Drift via a crossroads, where The Drift is the minor arm to the north and High Street to the south. The A607 features pedestrian footways on both sides of the carriageway, ranging between circa 1.1 and 1.5 metres wide. **Photograph 1** presents an image of The A607 looking along the Site frontage.

Photograph 1: A607 (July 2025)

2.4 The local highway and footpath network is illustrated in **Figure 2**.

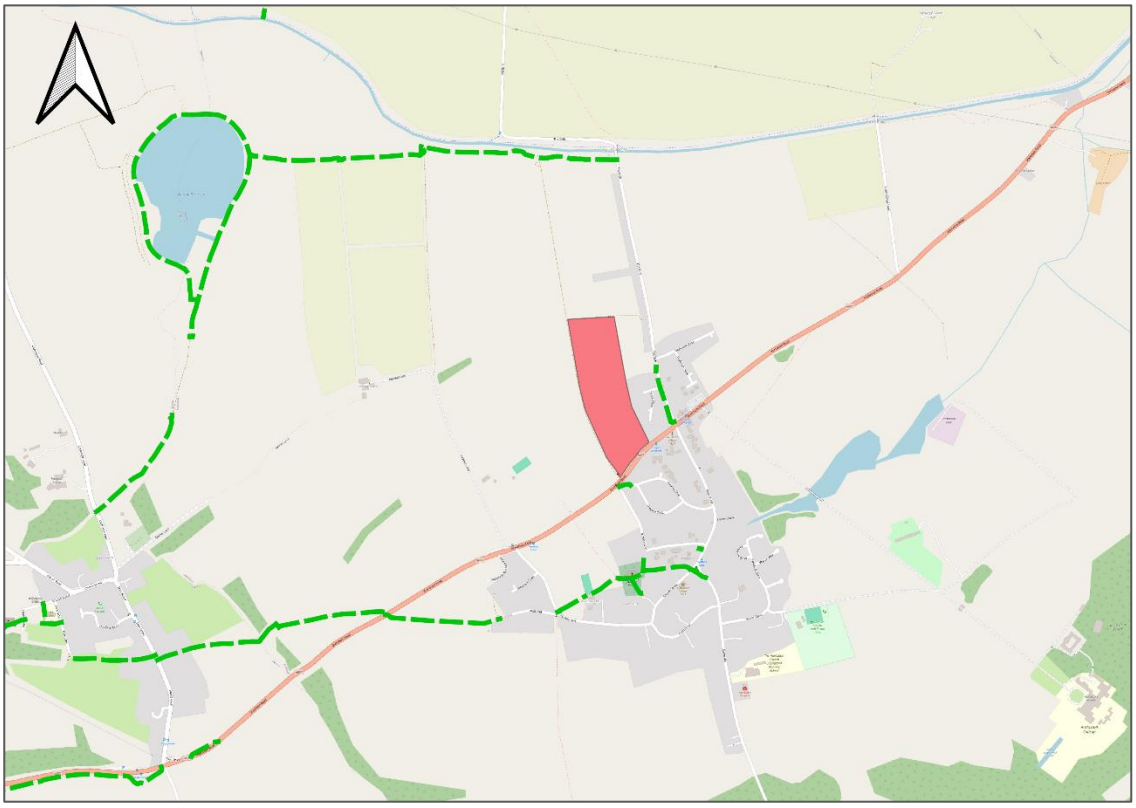


Figure 2: Local Highway and Footpath Network

Highway Safety

2.5 To ascertain whether there are any existing highway safety concerns on the local highway network in the vicinity of the Site, Personal Injury Collision (PIC) data has been reviewed for the most recent 5 year period available, ending 2023, utilising the CrashMap database.

2.6 **Figure 3** displays the location of any recorded PICs identified on the highway network in the vicinity of the site.

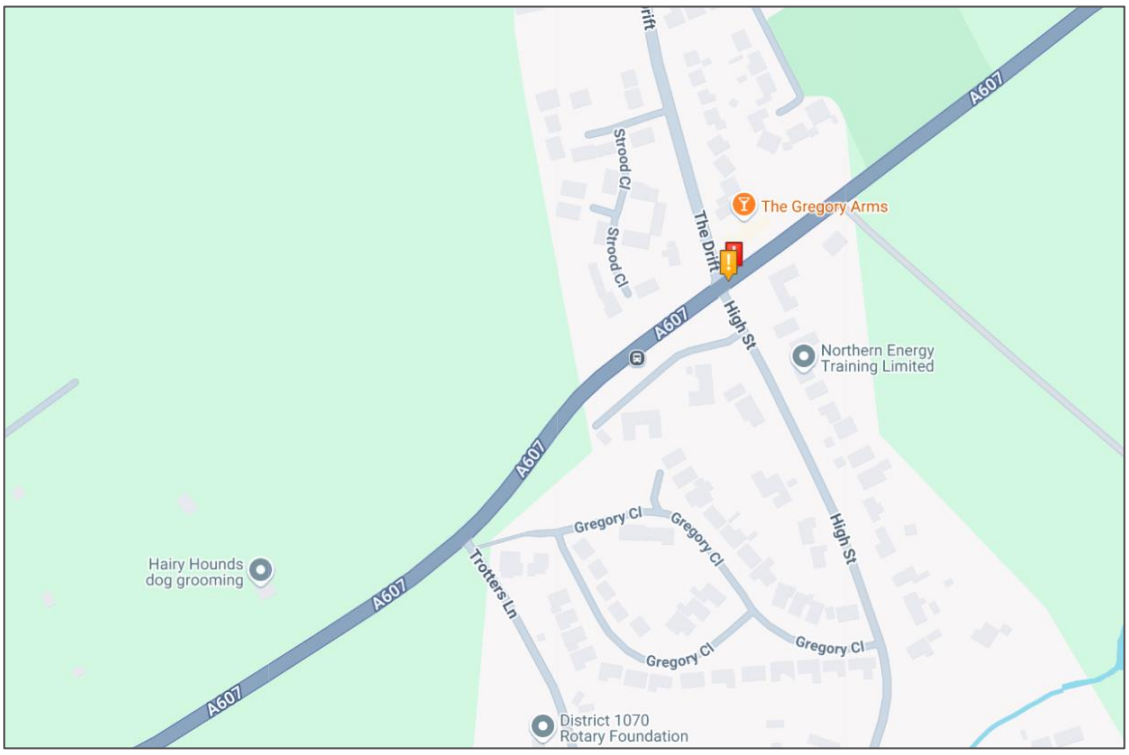


Figure 3: CrashMap PIC Review (2019-2023)

2.7 There are no recorded PICs in the latest available five year period on the CrashMap database along the site frontage.

2.8 Two PICs were recorded at the A607/The Drift/High Street crossroads junction; one classed as a slight in severity, and the other classed as serious. No non-motorised users (NMU) were involved in the PICs, the reports are included in **Appendix 1**.

2.9 The PIC that was classed as slight in severity involved two cars colliding with each other head on. The PIC occurred on a fine, dry day in daylight hours and therefore the collision likely can be largely contributed to driver error rather than highway layout.

2.10 The serious PIC involved a car and an HGV which collided when the driver of the car who pulled out of the junction into the path of the HGV travelling normally on the carriageway, causing the HGV to collide with the offside of the car.

2.11 As a result, it is suggested that there are no present highway safety concerns present on the network that would impede the delivery of an appropriate and safe access to the

Site. That is especially when a crossroads junction would not be formed at the proposed site access.

3. EXISTING SUSTAINABLE TRAVEL INFRASTRUCTURE & OPPORTUNITIES

A607

3.1 As set out above, there are pedestrian footways present on both sides of the carriageway. There are dropped kerb crossings present in the vicinity, at the A607/The Drift/High Street crossroads junction, but tactile paving is absent. There are no dedicated cycle facilities on the A607, however there is a shared footway/cycleway on the southern side of the A607 to the east of the High Street, and National Cycle Route 15 does route along the north side of the Grantham Canal located to the north of Harlaxton.

Existing Public Transport Infrastructure

3.2 There are existing bus stops on the A607 served by the 8, 9 and LC3 services delivered by Centrebus and Traveline, providing a service between Grantham, Melton Mowbray, Woolsthorpe-by-Belvoir and Hickling.

3.3 A summary of the bus services is provided below in **Table 1**.

Table 1: Summary of Bus Service Frequency

Service No.	Route	Frequency	First Bus	Last Bus
8	Melton Mowbray - Grantham	Every 2 hours	08:03	19:44
8	Grantham - Melton Mowbray	Every 2 hours	06:48	18:08
LC3	Melton Mowbray - Grantham	Every 2 hours	07:55	15:17
LC3	Grantham - Melton Mowbray	Every 2 hours	08:57	17:52
9	Grantham - Woolsthorpe-by-Belvoir	Every 2 hours	09:31	14:50
9	Woolsthorpe-by-Belvoir - Grantham	Every 2 hours	09:52	15:12

3.4 For services travelling eastbound, the nearest bus stop to the site is adjacent to The Gregory Arms Pub, circa 150 metres from the proposed access site on the A607, comprising bus flag. The bus flag includes a simple printed timetable as illustrated in **Photograph 2** overleaf.

3.5 For services travelling westbound on the A607, the closest bus stop is directly opposite from the frontage of the proposed development on the A607, comprising of a bus shelter and bus flag with printed timetable information with a layby, as illustrated in **Photograph 2**, also overleaf.

Photograph 2: Eastbound Bus Stop

Photograph 3: Westbound Bus Stop

3.6 In order to reach the westbound bus stop, pedestrians will need to cross the carriageway at some point. There are no marked pedestrian crossings along this route. As part of a future Transport Assessment (TA), a more detailed assessment would need to be undertaken to understand future demand against traffic flows and speeds to determine if it remains appropriate for users to cross at any point, and across the full length of the carriageway.

3.7 In order to reach the eastbound bus stop, pedestrians would only be required to cross a single junction bell mouth at The Drift, where dropped kerbs are provided with a central refuge, but absent of tactiles.

Sustainable Access Opportunities Summary

3.8 In order to prioritise and encourage the uptake of active travel modes, any development scenario of the Site in question should provide a high quality, direct pedestrian and cycle access onto A607 as a minimum. Furthermore, there is the potential to implement a crossing facility on the A607; however, this is be assessed in further detail as a part of any further transport work.

4. VEHICULAR ACCESS OPPORTUNITIES

Introduction

4.1 Further to information provided by the Client, the following section considers potential vehicular access opportunities via the A607. The opportunities have been reviewed to determine the extent of the potential works to deliver an appropriate access in accordance with the relevant design requirements, taking into consideration key constraints.

Design Standards

4.2 The access options described in this Access Appraisal have been considered in accordance with a range of national to local standards and best practice guidance from a high level at this stage of the process, including:

i. Manual for Streets (MfS).
ii. Manual for Streets 2 (MfS2).
iii. LTN 1/20.
iv. Design Manual for Roads and Bridges (DMRB) CD 123.

4.3 A review of the design guidance above outlines the key design criteria for a development quantum up to 100 dwellings and as such is summarised below:

i. Design must follow a hierarchy whereby Active Travel modes are prioritised and encouraged.
ii. 5.5 metres wide carriageways are required for residential roads which serve 100-300 dwellings.
iii. 100 dwellings can be served off one point of access.

4.4 To inform the design of safe and suitable access arrangements, highway boundary data has been obtained from LCC and is included in **Appendix 2**, to ensure that any modifications to the highway and resultant visibility splays can be wholly accommodated with the site boundary or within the adopted public highway.

Proposed General Arrangements

4.5 A primary vehicular and pedestrian access has been considered via the A607 within close proximity to the existing field access in the form of a simple T-junction. Whilst a future TA would be required to quantify traffic flows along this A607 determine whether

a T-junction is sufficient from a capacity perspective. it is noted that all existing junctions along the A607 are in the form of priority T-junctions, including A607/The Drift Crossroads to the east of the Site. Hence there is noting to suggest that this will not be acceptable for the proposed development the subject of this Access Appraisal.

Geometry

4.6 Drawing **TDH-BWB-HML-00-DR-TR-100_S2-P1** therefore illustrates a priority controlled T-junction arrangement via the A607. This access retains the same approximate location as the existing field access. The access comprises a 5.5 metres wide carriageway with 2 metres wide footway either side extending along the side frontage where the existing footway would require widening, connecting with the existing footways along the A607 either side of the site.

4.7 The design of the access is not intended to accommodate buses given that there are existing bus stops and services operating along the A607 within a reasonable walking distance. Indeed, any future TA would need to understand future demands on the bus service and whether any infrastructure or frequency improvements are needed.

Visibility

4.8 The section of A607 where the proposed access is located within a 50 mph posted limit. As such, visibility splays of 160 metres are required for such a posted speed limit in accordance with visibility standards outlined in DMRB CD 109 Table 1.10. The 160 metres visibility splay to the east is deliverable without any obstructions from a 2.4 metres visibility 'x' distance setback.

4.9 However, due to the alignment of the A607, there are visibility constraints to the west where a visibility splay of 160m cannot be achieved within carriageway and highway boundary.

4.10 **Photograph 4** below was taken from the proposed site access to the west showing the visibility constraint, as the road bends slightly to the north.

Photograph 4: A607 Proposed Site Access, looking west – Identified western Visibility Constraints

4.11 The achievable visibility splay to the west is 149m which is just below DRMB's desirable minimum of 160m. Therefore, an ATC survey was undertaken on the A607 along the site frontage, approaching the site from the west, to determine if vehicles are travelling slower than the posted 50mph speed limit. The ATC survey recorded the volume and speed of vehicles from the 16th July to the 22nd July 2025 where the 85th speeds for vehicles traveling eastbound was recorded at 49.6mph. The ATC survey is included with **Appendix 3.**

4.12 **Appendix 4** includes for a visibility splay calculator spreadsheet which confirms that for a recorded 85th percentile speed of 49.6mph a visibility 'y' distance of 147 metres is required, which is just less than that achievable. Drawing **TDH-BWB-HML-00-DR-TR-100_S2-P1** therefore sets this out, confirming that, in summary, a priority T-junction utilising the existing field access could be achievable based on the current recorded speeds of vehicles travelling on the A607 passing the site.

5. SUMMARY AND CONCLUSIONS

5.1 BWB Consulting Ltd has been appointed by Phoenix Strategic Land to review potential vehicular access options that could serve residential development for a maximum of 100 units, into a parcel of land located to the north of the A607 in Harlaxton, Grantham, Lincolnshire.

5.2 The purpose of this Access Appraisal is to explore access on the A607 and determine whether safe and suitable access arrangements are achievable, in accordance with the relevant local and national design standards.

5.3 The A607 extends across the southern frontage of the Site comprising of a single carriageway road subject to a 50 mph posted speed limit. The width of the carriageway along the A607 across the Site frontage measures circa 7.6 metres wide and footways measuring between 1.1 and 1.4 metres.

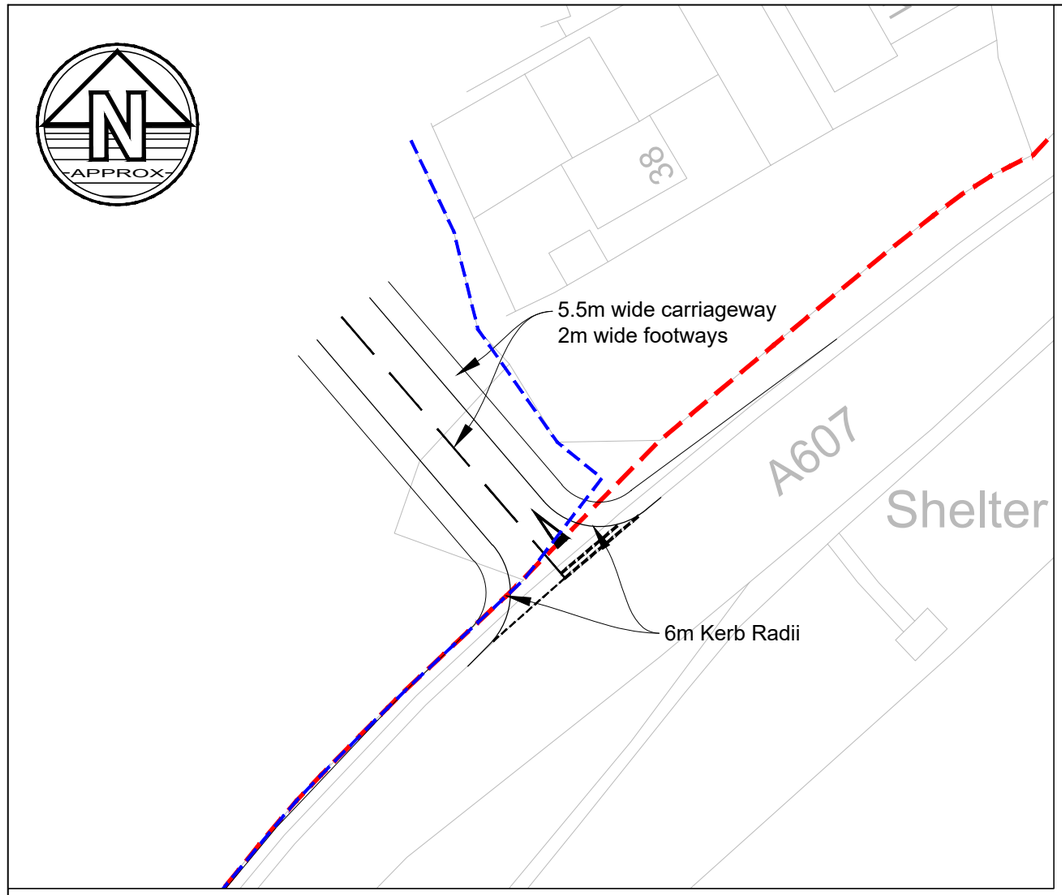
5.4 A primary vehicular and pedestrian access has been considered via the A607 within close proximity to the existing field access in the form of a simple T-junction. The access comprises a 5.5 metres wide carriageway with 2 metres wide footway either side extending along the side frontage where the existing footway would require widening, connecting with the existing footways along the A607 either side of the site.

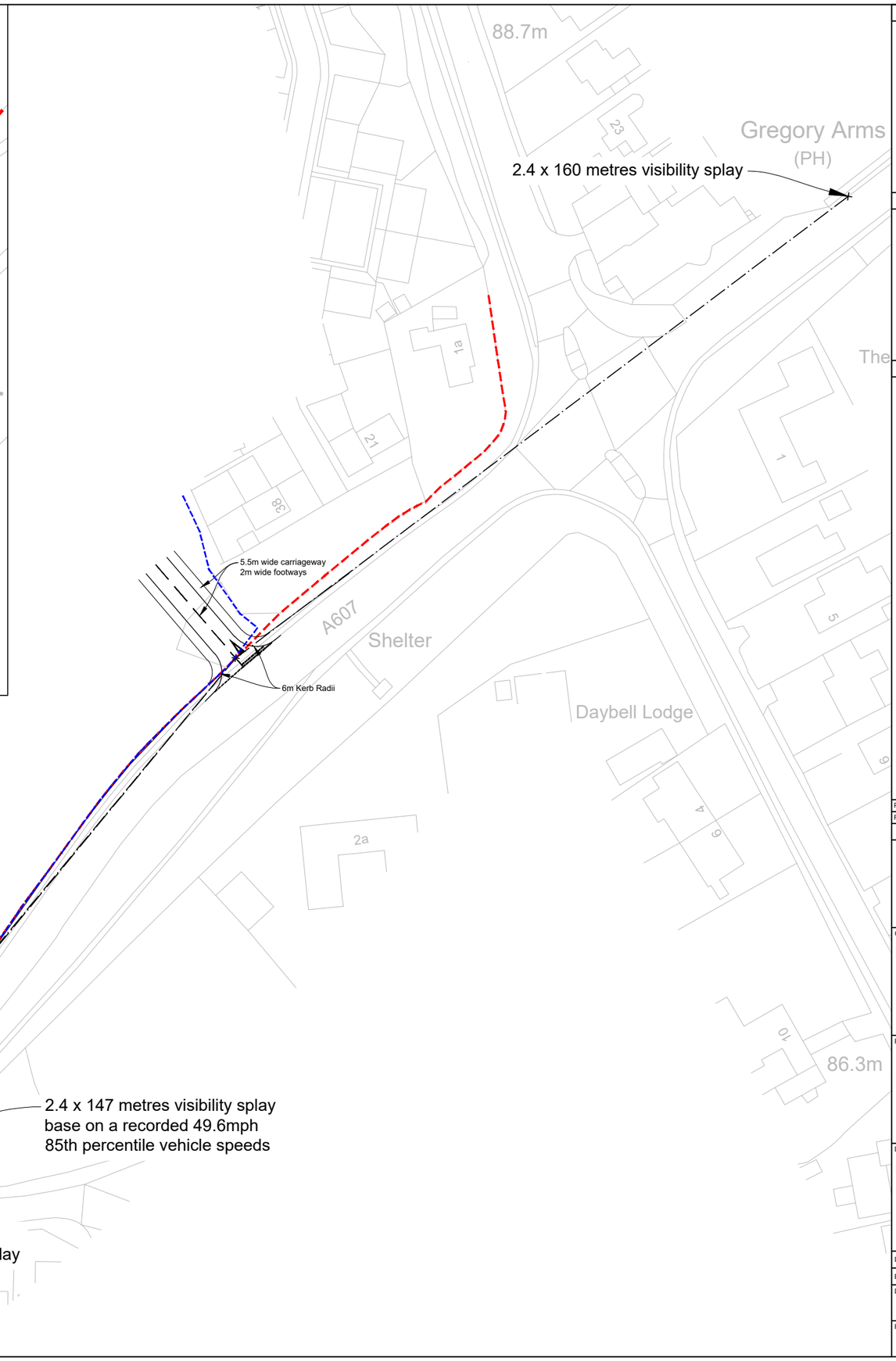
5.5 The section of A607 where the proposed access is located within a 50 mph posted limit. As such, visibility splays of 160 metres are required for such a posted speed limit in accordance with visibility standards outlined in DMRB CD 109 Table 1.10. The 160 metres visibility splay to the east is deliverable without any obstructions from a 2.4 metres visibility 'x' distance setback.

5.6 However, due to the alignment of the A607, there are visibility constraints to the west where a visibility splay of 160m cannot be achieved within carriageway and highway boundary. An ATC was commissioned along the site frontage to see if vehicles are travelling slower than the posted speed limit to allow visibility requirements to be reduced. This showed that the recorded 85th percentile vehicle speed was 49.6mph. hence a visibility 'y' distance of 147 metres is therefore required, which is just less than the 149 metres achievable.

5.7 As a result, the introduction of a priority T-junction to serve the proposed residential development, utilising the existing field access, could be achievable based on the recorded speeds of vehicles travelling on the A607 passing the site.

DRAWINGS





Notes

1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
3. All dimensions in millimetres unless noted otherwise. All levels in metres unless noted otherwise.
4. Any discrepancies noted on site are to be reported to the engineer immediately.

Key Plan

Legend

- Highway Boundary
- Proposed Site Boundary

Rev	Date	Details of issue / revision	Drw	Rev
P1	28.07.25	PRELIMINARY ISSUE	CC	PW

Issues & Revisions

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Client

PHOENIX STRATEGIC LAND

Project Title

LAND WEST OF THE DRIFT HARLAXTON

Drawing Title

PROPOSED ACCESS ARRANGEMENT

Drawn:	C. Cresswell		Reviewed:	Paul Wilson	
BWB Ref:	255780	Date:	28.07.25	Scale@A3:	1:500

Drawing Status

PRELIMINARY

Project - Originator - Zone - Level - Type - Role - Number	Status	Rev
TDH-BWB-HML-XX-DR-TR-100	S2	P1

J:\2025\255780-Land West of the Drift, Harlaxton\ProjectDelivery\01-WIP\Drawings\TDH-BWB-HML-XX-RP-TR-100_S2-P1 - Site Access Arrangements.dwg

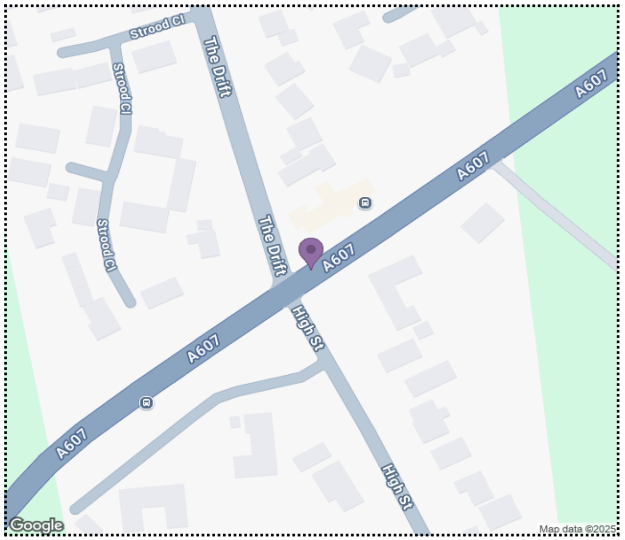
APPENDICE

Appendix 1: Crashmap Reports

crashmap.co.uk

Validated Data

Crash Date:	Thursday, October 15, 2020	**Time of Crash:**	11:00:00	**Crash Reference:**	2020320543596
Highest Injury Severity:	Serious	**Road Number:**	A607	**Casualties:**	1
Highway Authority:	Lincolnshire			**Vehicles:**	2
Local Authority:	South Kesteven			**OS Grid Reference:**	488394 333058
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	50				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Crossroads				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/faq

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powered by agilysis

Crash Date: Thursday, October 15, 2020 **Time of Crash:** 11:00:00 **Crash Reference:** 2020320543596

Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire cars 2005 onwards)	14	Male	Over 75	Vehicle proceeding normally along the carriageway, not on a bend	Offside	Unknown	None	None
2	Goods vehicle 7.5 tonnes mgw and over Â (1999 onwards)	1	Male	66 - 75	Vehicle proceeding normally along the carriageway, not on a bend	Front	Journey as part of work	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Driver or rider	Male	Over 75	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/faq

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Validated Data

Crash Date:	Friday, November 25, 2022	**Time of Crash:**	08:25:00	**Crash Reference:**	2022320690431
Highest Injury Severity:	Slight	**Road Number:**	A607	**Casualties:**	2
Highway Authority:	Lincolnshire			**Vehicles:**	2
Local Authority:	South Kesteven			**OS Grid Reference:**	488391 333055
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	50				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Crossroads				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				

For more information about the data please visit: www.crashmap.co.uk/home/faq

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Crash Date: Friday, November 25, 2022 **Time of Crash:** 08:25:00 **Crash Reference:** 2022320690431

Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire cars 2005 onwards)	16	Male	66 - 75	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	None	None
2	Car (excluding private hire cars 2005 onwards)	0	Male	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Front	Commuting to/from work	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Vehicle or pillion passenger	Female	66 - 75	Unknown or other	Unknown or other
1	2	Slight	Driver or rider	Male	66 - 75	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/faq

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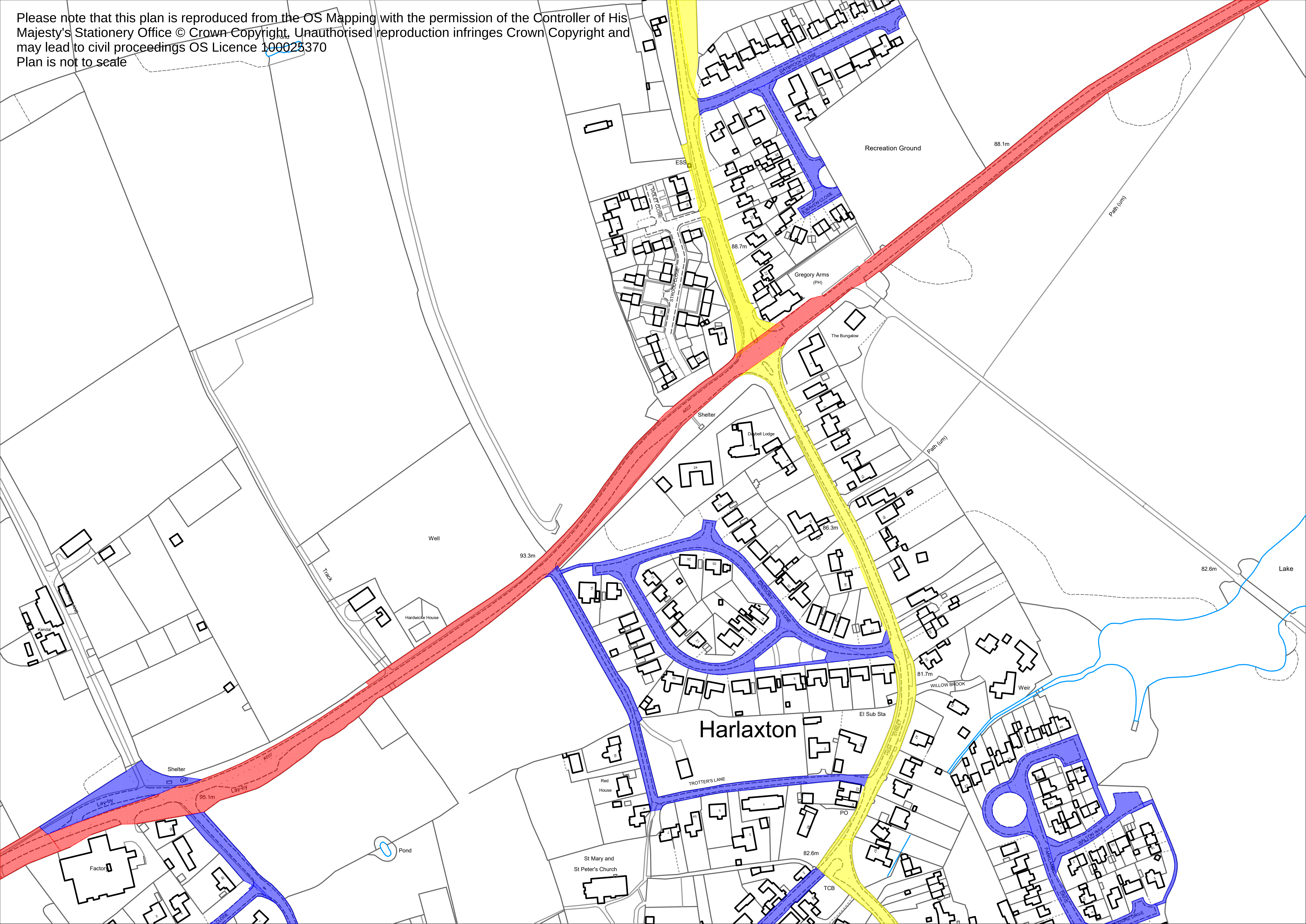
Appendix 2: Highway Boundary Data

Plan is not to scale



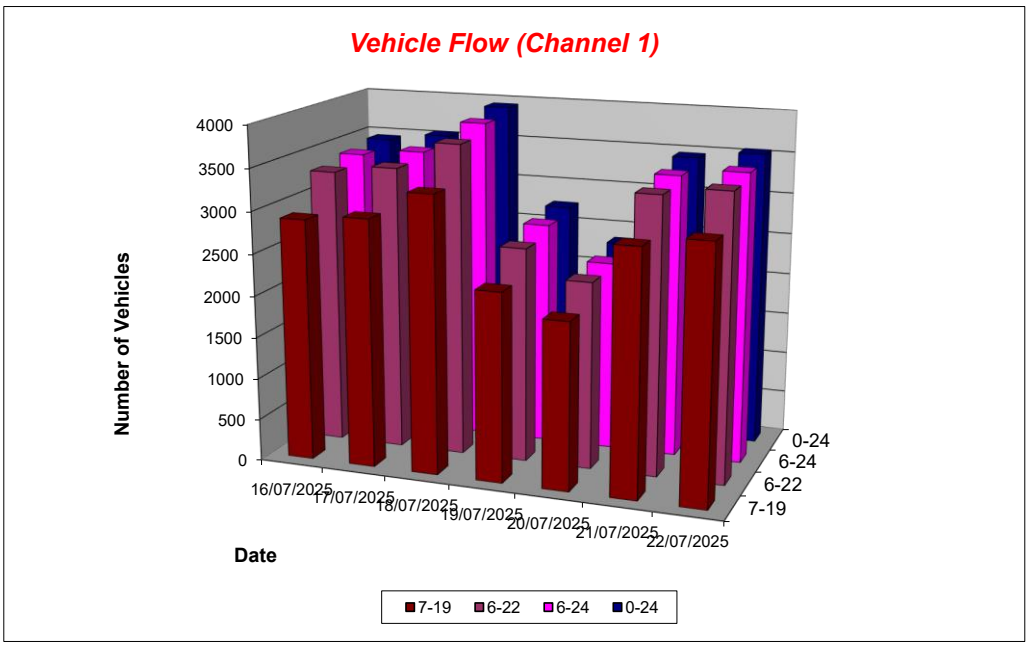
Appendix 3: ATC Results

Harlaxton ATC, A607

Produced by Road Data Services Ltd.

Channel 1 - Northeastbound **Vehicle Flow** **Week 1**

Hr Ending	16/07/2025 Wednesday	17/07/2025 Thursday	18/07/2025 Friday	19/07/2025 Saturday	20/07/2025 Sunday	21/07/2025 Monday	22/07/2025 Tuesday	Weekday Average	Average
1	5	10	14	18	26	6	7	8	12
2	11	7	8	7	10	7	7	8	8
3	4	2	4	7	6	4	3	3	4
4	6	9	8	5	6	8	4	7	7
5	14	11	13	8	8	16	17	14	12
6	23	34	33	17	6	33	40	33	27
7	120	124	98	45	19	121	119	116	92
8	228	208	218	87	39	203	219	215	172
9	290	276	318	167	72	283	271	288	240
10	243	226	235	199	146	238	234	235	217
11	225	215	245	211	199	227	243	231	224
12	210	198	274	226	215	212	276	234	230
13	184	223	283	232	229	217	203	222	224
14	210	219	249	224	208	217	227	224	222
15	237	256	320	196	240	252	240	261	249
16	274	273	328	180	167	294	292	292	258
17	313	343	333	185	181	291	323	321	281
18	299	296	272	182	166	284	308	292	258
19	181	231	228	164	129	181	184	201	185
20	139	135	138	117	90	123	116	130	123
21	97	92	112	82	84	88	92	96	92
22	58	89	83	74	58	80	59	74	72
23	52	38	72	67	25	54	47	53	51
24	26	23	50	41	11	17	16	26	26
7-19	2894	2964	3303	2253	1991	2899	3020	3016	2761
6-22	3308	3404	3734	2571	2242	3311	3406	3433	3139
6-24	3386	3465	3856	2679	2278	3382	3469	3512	3216
0-24	3449	3538	3936	2741	2340	3456	3547	3585	3287



Harlaxton ATC, A607

Produced by Road Data Services Ltd.

Channel 1 - Northeastbound **Average Speed** **Week 1**

Hr Ending	16/07/2025 Wednesday	17/07/2025 Thursday	18/07/2025 Friday	19/07/2025 Saturday	20/07/2025 Sunday	21/07/2025 Monday	22/07/2025 Tuesday
1	43.4	51.8	49.0	45.5	48.8	45.5	47.8
2	50.5	45.2	54.4	48.6	49.0	49.2	51.3
3	49.4	58.0	52.5	49.9	53.7	43.0	58.0
4	44.1	48.7	48.8	46.4	53.3	50.8	60.1
5	48.4	50.1	47.5	47.8	53.5	50.3	51.3
6	49.8	49.1	50.8	50.9	50.0	50.9	51.7
7	47.5	47.7	48.2	48.2	52.1	48.3	47.9
8	47.1	45.3	46.7	50.1	48.5	46.7	47.1
9	44.1	45.1	44.3	45.4	47.4	45.3	46.1
10	43.9	44.3	44.3	44.5	44.9	44.0	43.7
11	44.2	44.8	44.3	43.7	44.3	44.3	44.5
12	44.8	43.8	44.3	44.2	44.2	44.3	43.9
13	42.8	44.0	45.4	45.3	43.4	44.0	45.0
14	44.0	43.7	44.9	43.1	44.3	43.0	43.8
15	44.6	44.0	44.0	43.8	45.4	43.4	44.4
16	44.0	43.9	44.8	44.3	44.7	44.3	45.2
17	45.1	44.9	43.6	44.6	45.2	46.2	45.2
18	46.0	45.5	46.5	44.8	46.3	44.7	45.0
19	46.2	45.4	45.9	46.5	45.0	47.2	47.5
20	48.0	46.7	46.2	46.3	46.5	47.7	47.3
21	46.6	47.3	48.4	48.2	47.4	49.2	45.5
22	46.8	47.3	45.7	46.1	48.2	46.1	45.6
23	46.1	46.9	45.1	47.5	48.5	47.0	48.6
24	49.9	48.9	47.6	46.6	48.3	45.4	47.3
10-12	44.4	44.3	44.3	44.0	44.3	44.3	44.1
14-16	44.3	43.9	44.4	44.0	45.1	43.9	44.8
0-24	45.2	45.1	45.2	45.2	45.4	45.3	45.4

Mean (ALL)	45.3
Weekday Inter-Peak	44.3

Channel 1 - Northeastbound **85th Percentile**

Hr Ending	16/07/2025 Wednesday	17/07/2025 Thursday	18/07/2025 Friday	19/07/2025 Saturday	20/07/2025 Sunday	21/07/2025 Monday	22/07/2025 Tuesday
1	46.5	59.5	56.5	57.6	57.2	56.5	51.3
2	57.7	61.0	60.7	51.3	58.9	54.2	61.3
3	60.2	68.8	64.5	59.6	58.1	47.5	67.3
4	50.0	56.8	61.8	57.7	67.4	65.5	67.7
5	53.7	58.5	53.4	52.3	61.3	56.3	59.5
6	54.1	56.4	56.6	58.8	57.0	58.2	58.8
7	52.5	53.7	53.7	54.1	61.9	53.3	53.9
8	52.5	51.5	52.7	57.7	55.9	54.3	51.8
9	50.3	50.8	50.1	50.8	54.7	50.5	50.7
10	49.0	50.1	50.3	49.3	49.9	50.0	49.3
11	49.5	51.1	49.4	49.3	50.3	49.2	49.4
12	49.9	48.2	50.1	50.2	49.0	49.0	49.1
13	49.1	49.6	50.6	49.9	49.0	50.5	50.4
14	49.9	49.1	51.1	47.8	49.8	49.5	49.6
15	49.4	49.6	49.8	49.7	50.6	49.8	49.2
16	50.0	49.1	50.1	49.3	50.2	49.2	50.4
17	51.0	51.0	50.0	49.5	49.7	51.0	49.9
18	51.6	50.8	51.4	51.1	51.4	51.5	51.9
19	51.4	51.8	51.6	52.3	50.6	53.1	53.0
20	53.4	52.5	51.8	51.8	54.0	53.5	53.2
21	52.4	52.5	57.5	55.2	53.7	56.2	51.5
22	53.8	53.5	53.2	53.5	54.0	51.7	51.0
23	55.5	56.1	51.9	55.4	55.4	56.1	55.9
24	59.7	55.3	56.4	55.8	55.9	50.6	52.7
10-12	49.6	49.8	49.8	49.8	49.7	49.1	49.2
14-16	49.8	49.3	50.0	49.5	50.4	49.6	49.8
0-24	51.1	51.1	51.4	51.3	51.4	51.5	51.1

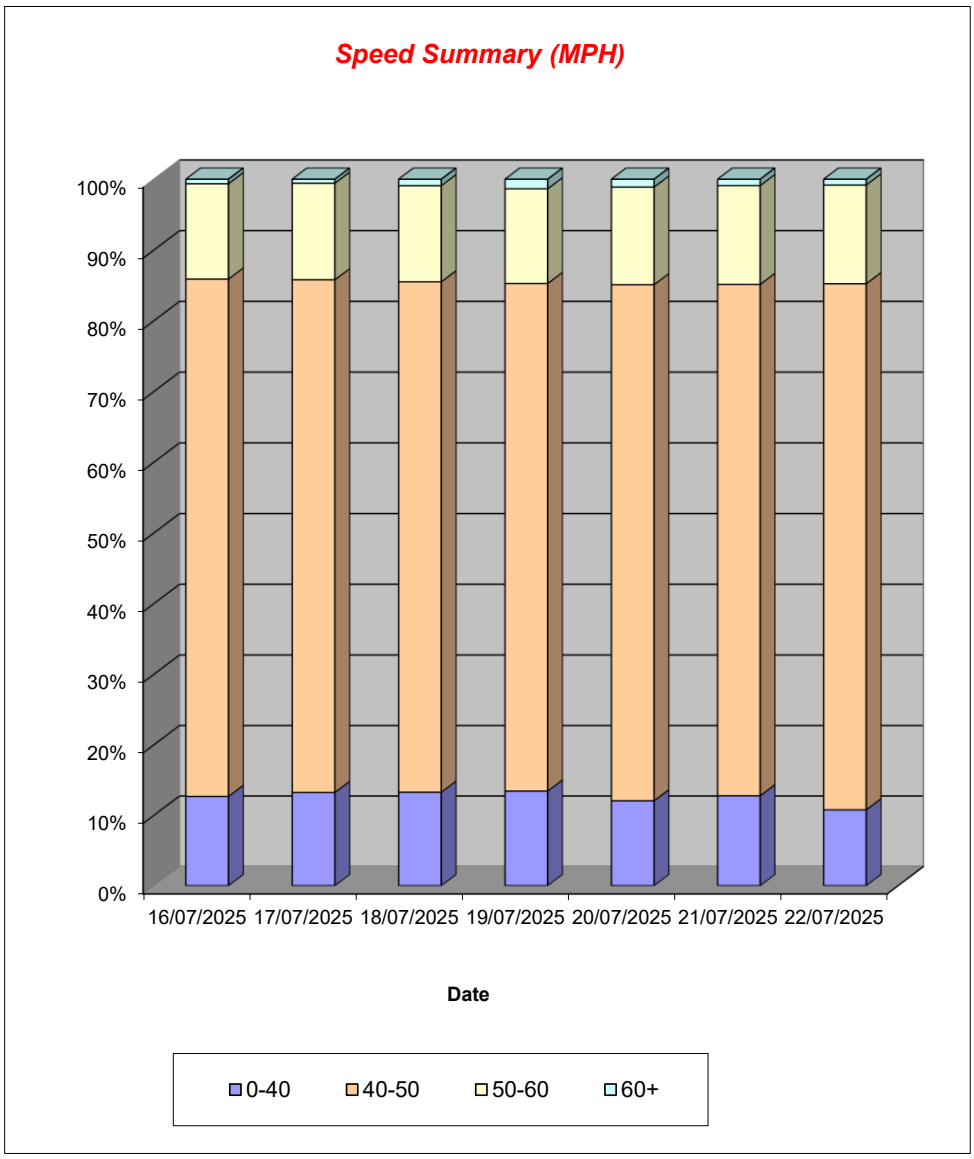
85th %ile (ALL)	51.3
Weekday Inter-Peak	49.6

Harlaxton ATC, A607

Produced by Road Data Services Ltd.

Channel 1 - Northeastbound **Speed Summary** **Week 1**

Speed (MPH)	16/07/2025 Wednesday	17/07/2025 Thursday	18/07/2025 Friday	19/07/2025 Saturday	20/07/2025 Sunday	21/07/2025 Monday	22/07/2025 Tuesday
0-40	437	468	522	368	282	441	382
40-50	2525	2567	2843	1969	1709	2501	2641
50-60	465	483	535	367	323	483	495
60+	22	20	36	37	26	31	29
TOTAL	**3449**	**3538**	**3936**	**2741**	**2340**	**3456**	**3547**



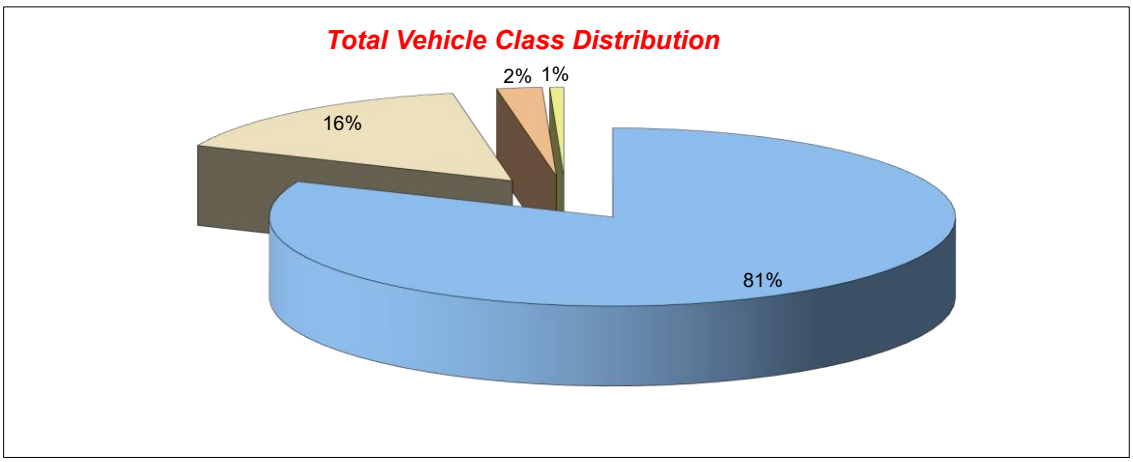
Harlaxton ATC, A607

Produced by Road Data Services Ltd.

Channel 1 - Northeastbound | **Vehicle Class** | **Week 1**

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
16/07/2025					
7-19	2280	481	85	48	**2894**
6-22	2608	551	96	53	**3308**
6-24	2680	556	96	54	**3386**
0-24	2725	566	97	-61	**3327**
17/07/2025					
7-19	2371	484	74	35	**2964**
6-22	2734	551	78	41	**3404**
6-24	2791	555	78	41	**3465**
0-24	2842	568	81	47	**3538**
18/07/2025					
7-19	2635	559	74	35	**3303**
6-22	2994	624	78	38	**3734**
6-24	3099	641	78	38	**3856**
0-24	3160	653	80	43	**3936**
19/07/2025					
7-19	1933	293	22	5	**2253**
6-22	2206	332	25	8	**2571**
6-24	2301	343	25	10	**2679**
0-24	2342	358	27	14	**2741**
20/07/2025					
7-19	1721	244	19	7	**1991**
6-22	1938	273	22	9	**2242**
6-24	1970	277	22	9	**2278**
0-24	2020	287	22	11	**2340**
21/07/2025					
7-19	2294	506	73	26	**2899**
6-22	2634	573	77	27	**3311**
6-24	2694	582	78	28	**3382**
0-24	2740	602	78	36	**3456**
22/07/2025					
7-19	2381	492	95	52	**3020**
6-22	2707	541	102	56	**3406**
6-24	2765	545	103	56	**3469**
0-24	2822	561	103	61	**3547**

Average					
7-19	2231	437	63	30	**2761**
6-22	2546	492	68	33	**3139**
6-24	2614	500	69	34	**3216**
0-24	2664	514	70	22	**3269**

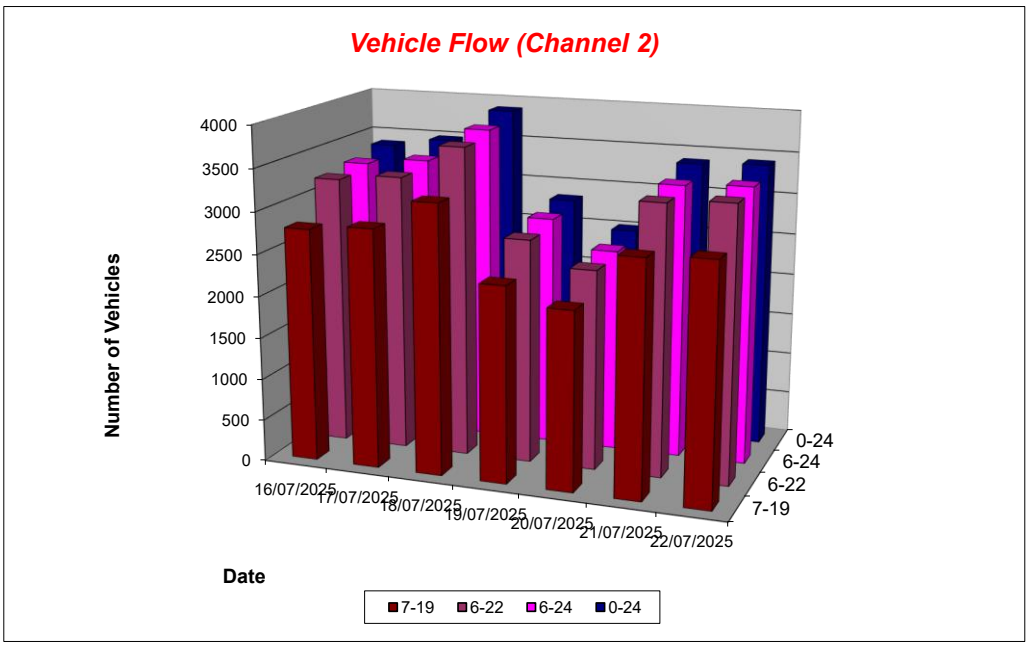


Harlaxton ATC, A607

Produced by Road Data Services Ltd.

Channel 2 - Southwestbound **Vehicle Flow** **Week 1**

Hr Ending	16/07/2025 Wednesday	17/07/2025 Thursday	18/07/2025 Friday	19/07/2025 Saturday	20/07/2025 Sunday	21/07/2025 Monday	22/07/2025 Tuesday	Weekday Average	Average
1	11	16	11	16	17	6	5	10	12
2	6	5	5	7	13	6	3	5	6
3	7	5	6	5	9	5	4	5	6
4	3	4	9	8	9	8	15	8	8
5	8	11	16	7	11	22	17	15	13
6	63	77	64	28	18	63	64	66	54
7	142	136	159	68	49	152	180	154	127
8	288	305	239	105	124	264	293	278	231
9	257	275	254	120	124	256	304	269	227
10	227	226	231	198	145	228	230	228	212
11	213	213	238	231	180	194	203	212	210
12	225	177	288	231	236	230	210	226	228
13	212	229	261	244	227	227	192	224	227
14	178	198	260	260	208	237	203	215	221
15	227	207	291	191	218	187	229	228	221
16	266	246	348	197	208	245	258	273	253
17	258	311	311	178	164	245	237	272	243
18	247	283	269	211	162	262	282	269	245
19	189	183	216	166	129	206	185	196	182
20	127	137	159	128	95	133	123	136	129
21	100	101	97	81	70	92	80	94	89
22	67	72	81	68	48	64	65	70	66
23	37	40	54	52	29	30	23	37	38
24	19	23	23	30	14	19	11	19	20
7-19	2787	2853	3206	2332	2125	2781	2826	2891	2701
6-22	3223	3299	3702	2677	2387	3222	3274	3344	3112
6-24	3279	3362	3779	2759	2430	3271	3308	3400	3170
0-24	3377	3480	3890	2830	2507	3381	3416	3509	3269



Harlaxton ATC, A607

Produced by Road Data Services Ltd.

Channel 2 - Southwestbound **Average Speed** **Week 1**

Hr Ending	16/07/2025 Wednesday	17/07/2025 Thursday	18/07/2025 Friday	19/07/2025 Saturday	20/07/2025 Sunday	21/07/2025 Monday	22/07/2025 Tuesday
1	44.8	47.9	43.7	46.4	45.8	45.1	46.0
2	48.7	41.7	44.8	43.0	46.7	48.0	34.5
3	49.0	47.2	45.0	44.2	44.8	48.1	47.4
4	45.0	48.8	46.6	41.5	44.8	45.3	46.1
5	46.7	52.5	44.7	47.0	46.1	45.5	46.6
6	46.0	47.2	46.6	47.4	43.9	49.1	47.7
7	44.9	47.1	45.7	44.8	45.2	46.3	45.3
8	43.1	44.1	43.9	44.9	42.4	45.0	44.5
9	43.2	43.1	43.4	43.1	44.1	43.3	42.4
10	42.2	41.7	42.2	42.7	42.5	42.3	41.5
11	41.7	42.6	42.6	42.3	42.6	43.1	42.0
12	42.2	42.3	42.9	42.3	41.1	42.3	42.2
13	42.8	41.7	42.2	42.4	41.2	41.7	42.3
14	43.8	42.8	42.6	42.2	43.4	42.3	43.0
15	42.3	42.6	41.9	43.1	42.8	41.0	42.2
16	43.3	43.3	42.0	42.8	43.6	41.4	43.3
17	44.1	42.9	42.7	42.4	44.3	43.6	43.4
18	44.4	43.7	45.1	42.2	44.9	44.4	43.5
19	44.7	45.3	43.9	45.1	42.9	44.4	43.8
20	44.5	44.7	43.2	43.9	44.3	44.4	45.1
21	43.9	44.4	46.2	44.3	45.3	44.9	45.2
22	44.6	44.8	44.1	41.1	45.7	44.2	44.1
23	45.7	43.9	43.7	44.6	45.2	42.5	41.5
24	43.5	44.4	42.8	42.6	44.2	42.1	49.4
10-12	42.0	42.5	42.8	42.3	41.8	42.7	42.1
14-16	42.9	43.0	41.9	43.0	43.2	41.2	42.8
0-24	43.4	43.5	43.2	43.0	43.2	43.4	43.3

Average (ALL)	43.3
Weekday Inter-Peak	42.4

Channel 2 - Southwestbound **85th Percentile**

Hr Ending	16/07/2025 Wednesday	17/07/2025 Thursday	18/07/2025 Friday	19/07/2025 Saturday	20/07/2025 Sunday	21/07/2025 Monday	22/07/2025 Tuesday
1	49.5	54.6	49.8	58.1	53.6	48.8	48.7
2	54.6	47.0	49.1	51.2	50.4	55.0	44.5
3	52.1	52.4	48.9	53.2	50.1	50.9	52.1
4	51.5	54.0	51.8	45.8	49.9	51.6	52.4
5	51.9	59.8	51.2	53.7	53.5	51.0	54.0
6	52.4	53.1	53.3	54.7	48.6	55.0	55.4
7	52.2	52.8	51.9	50.2	51.6	51.9	51.4
8	49.4	48.4	50.3	49.6	49.2	49.9	49.2
9	48.6	48.3	48.0	49.3	49.6	48.4	47.3
10	47.6	47.6	47.5	47.8	48.1	47.6	46.4
11	46.6	47.0	47.7	47.0	47.6	47.8	47.5
12	46.6	48.2	47.5	47.4	46.3	47.2	47.7
13	47.4	46.7	47.0	47.3	45.6	47.2	47.7
14	49.0	48.0	47.9	46.7	48.1	48.9	47.4
15	48.3	48.0	48.6	47.8	47.7	48.1	47.9
16	47.9	48.3	48.2	47.3	48.3	48.0	49.0
17	49.3	48.2	47.6	49.3	49.0	48.8	47.8
18	49.7	49.2	49.9	49.1	49.7	49.3	49.2
19	49.7	50.2	50.1	51.1	49.2	49.4	48.7
20	50.2	51.7	49.3	48.9	50.4	49.6	50.7
21	49.0	49.8	53.6	51.2	50.7	52.6	53.5
22	50.5	51.2	49.6	48.1	52.2	50.9	50.8
23	51.9	51.8	50.8	52.9	51.6	48.9	48.4
24	48.5	50.5	50.2	48.0	51.6	48.6	57.8
10-12	46.6	47.7	47.6	47.2	47.0	47.5	47.6
14-16	48.2	48.2	48.3	47.6	48.0	48.0	48.5
0-24	48.9	49.1	49.0	48.7	48.7	49.3	48.9

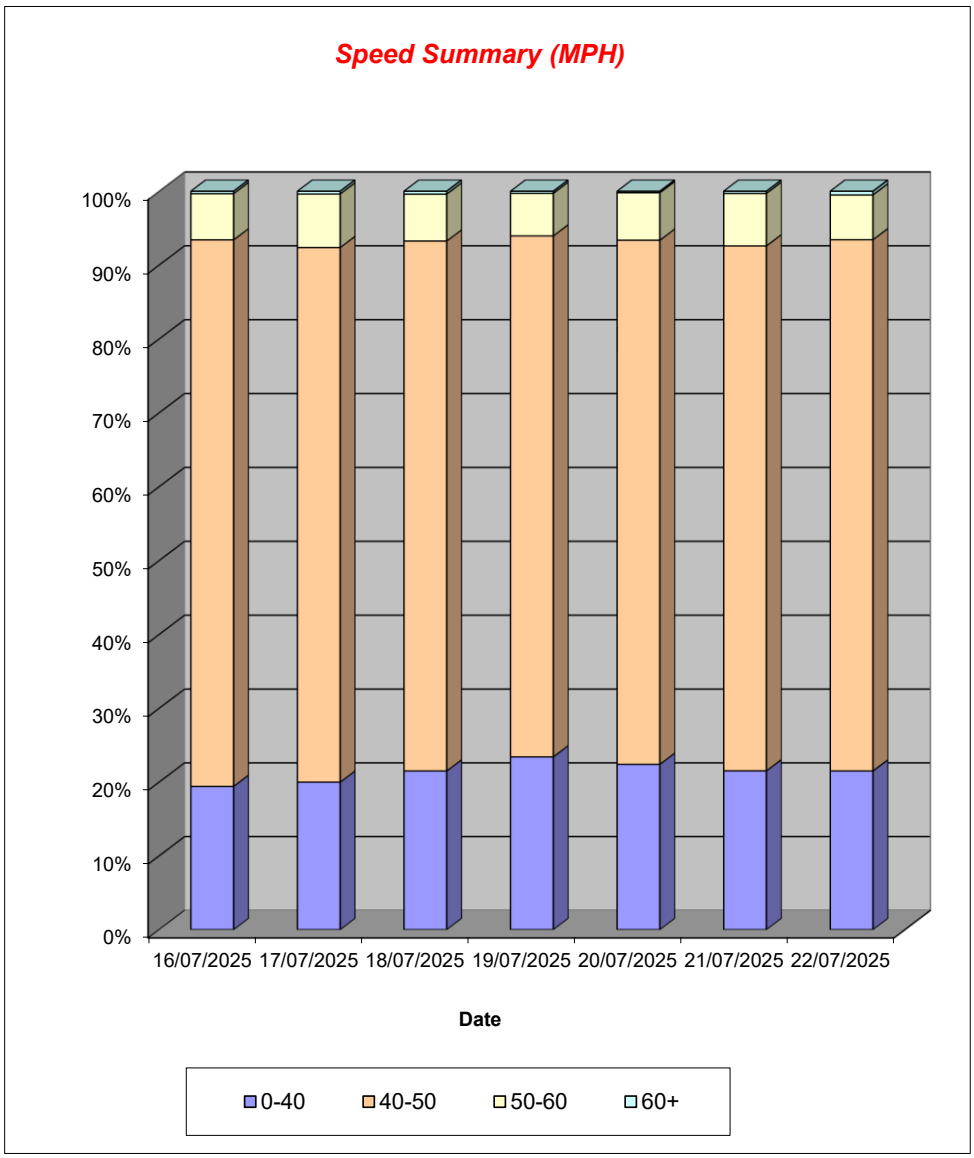
85th %ile (ALL)	49.0
Weekday Inter-Peak	47.9

Harlaxton ATC, A607

Produced by Road Data Services Ltd.

Channel 2 - Southwestbound | **Speed Summary** | **Week 1**

Speed (MPH)	16/07/2025 Wednesday	17/07/2025 Thursday	18/07/2025 Friday	19/07/2025 Saturday	20/07/2025 Sunday	21/07/2025 Monday	22/07/2025 Tuesday
0-40	656	696	837	663	562	728	735
40-50	2499	2519	2791	1996	1779	2403	2457
50-60	211	252	247	163	161	240	207
60+	11	13	15	8	5	10	17
TOTAL	**3377**	**3480**	**3890**	**2830**	**2507**	**3381**	**3416**



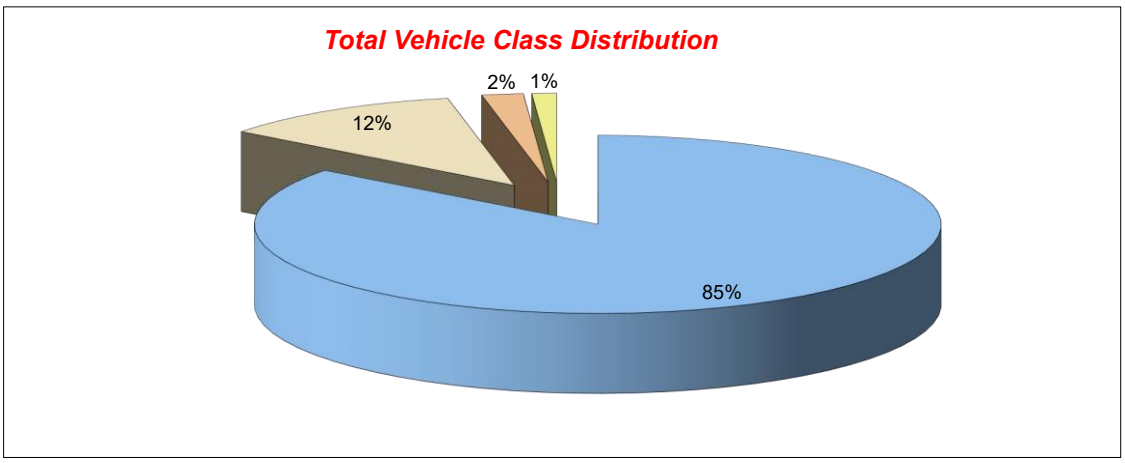
Harlaxton ATC, A607

Produced by Road Data Services Ltd.

Channel 2 - Southwestbound | **Vehicle Class** | **Week 1**

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
16/07/2025					
7-19	2336	347	69	35	**2787**
6-22	2712	395	79	37	**3223**
6-24	2762	400	79	38	**3279**
0-24	2846	408	80	43	**3377**
17/07/2025					
7-19	2387	361	67	38	**2853**
6-22	2771	415	71	42	**3299**
6-24	2825	420	72	45	**3362**
0-24	2921	434	75	50	**3480**
18/07/2025					
7-19	2654	428	74	50	**3206**
6-22	3076	487	82	57	**3702**
6-24	3147	493	82	57	**3779**
0-24	3244	501	84	61	**3890**
19/07/2025					
7-19	2115	189	23	5	**2332**
6-22	2417	224	28	8	**2677**
6-24	2495	227	28	9	**2759**
0-24	2561	232	28	9	**2830**
20/07/2025					
7-19	1945	161	16	3	**2125**
6-22	2176	186	19	6	**2387**
6-24	2213	192	19	6	**2430**
0-24	2284	194	20	9	**2507**
21/07/2025					
7-19	2286	388	66	41	**2781**
6-22	2659	442	75	46	**3222**
6-24	2704	446	75	46	**3271**
0-24	2800	459	75	47	**3381**
22/07/2025					
7-19	2364	350	75	37	**2826**
6-22	2753	397	83	41	**3274**
6-24	2785	399	83	41	**3308**
0-24	2872	412	85	47	**3416**

Average					
7-19	2298	318	56	30	**2701**
6-22	2652	364	62	34	**3112**
6-24	2704	368	63	35	**3170**
0-24	2790	377	64	38	**3269**



Appendix 4: Visibility Calculator

GENERAL

Stopping sight distance (SSD) = $Vt + V^2/2(d+0.1a)$

where

V = speed (m/s)

t = reaction time (seconds)

d = deceleration (m/s^2)

a = longitudinal gradient (%) (+ for upgrades and - for downgrades)

SITE SPECIFIC

recorded speed (V) =	49.6	mph
	79.8	kph
	22.2	m/s
longitudinal gradient (a)	0	*

Select from dropdown	t	d	SSD (m)	+2.4m bonnet length
DMRB desirable minimum	2.00	2.45	144.58	147

Notes.

use engineering judgement and refer to MfS p73, but some guidance:

~ use MfS on streets where 85th percentile speeds are up to 60kph (37mph)

~ generally achieved within 30mph limits and may be achieved in some 40mph limits

~ if HGV and bus traffic combined is <5% of traffic flow, should not need to differentiate

~ generally, buses travel at 90% of the average speed of all vehicles

*default zero if gradient unknown