

TECHNICAL NOTE

Project Title: Land West of Pagham Road

Report Reference: JNY10700-04

Date: 14 February 2022

West Sussex County Council – Highway Response

Introduction

- 1.1 This note has been prepared to address the comments provided by West Sussex County Council Highway Authority (WSCC) in their consultation response dated the 27 January 2022 in relation to the proposed residential development on Land West of Pagham Road.

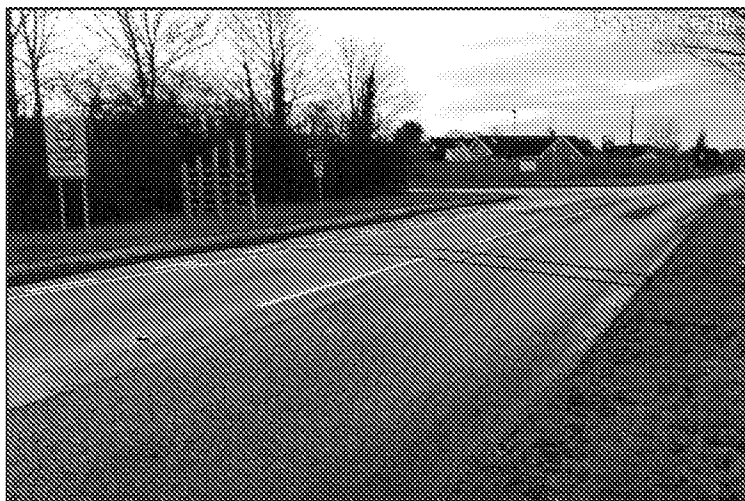
WSCC Comment – Speed Survey Data

- 1.2 The TA refers to the speed surveys being included in Appendix 3. The only data within appendix however relates to traffic counts with there being no speed data. Although it is very unlikely to influence the conclusions reached regarding the access, the applicant would need to provide the speed data. The designer should also confirm the location and weather conditions at the time of the survey was undertaken to ensure that no adjustments are required.

Response:

- 1.3 Please find enclosed a PDF of the speed survey data provided at **Appendix 1**. The ATC was undertaken in the vicinity of the proposed access arrangement on Pagham Road as shown in **Figure 1** below.

Figure 1: ATC Survey Location Photo



- 1.4 The ATC survey was undertaken on 16 December 2020 for a period of 7 days. The World Weather Online website has been reviewed for Pagham for the period in question. The weather was predominately cloudy with some light drizzle and rain. It should be noted that the splay achievable at the access exceeds the MfS visibility standards.

WSCC Comment – Stage 1 RSA

- 1.5 As requested by current WSCC policy, the access has been the subject of a Stage One RSA. The audit raises only a single problem relating to the need to provide a suitable pedestrian crossing point. The scheme designer has accepted the problem, and this is to be resolved as part of the detailed design. The designer should note that they are required to record their comments as per the format within GG119 (the overarching standard for road safety audits) and submit to WSCC Highways to allow further comments and agreed actions to be added. The road safety response form should be submitted and agreed directly with WSCC Highways.

Response:

- 1.6 The format of the Stage 1 Road Safety Audit Designer's Response has been amended in accordance with GG119 and is provided at **Appendix 2**.

WSCC Comment – 2031 Future Year

- 1.7 The matters within the above summary are taken as agreed. There is, however, an issue with the applicant's approach applied for the 2031 future year. 2.33 of the submitted TA refers to the currently proposed development being included within the additional 150 dwellings forming part of the Pagham Local Plan allocation. Whilst the location of the 150 dwellings isn't identified, the current application falls outside the allocation. The proposed dwellings will therefore be in additional to the allocation.
- 1.8 There's also no mention of the West of Bersted allocation either. The Local Plan assumes that this development will be complete by 2031, although it's accepted that this is unlikely to be the

case. A number of dwellings within the allocation will still be complete. This should be factored into the 2031 future year.

- 1.9 Again with the 2031 future year, whilst the majority of traffic growth will be through the permitted developments, there will also be a level of background traffic growth. This is typically included using a growth rate derived from TEMPro, which itself uses the national traffic model to forecast potential changes in traffic flows. No reference is used to TEMPro being used to determine background traffic growth.
- 1.10 The overall approach to determining the future year background traffic should be revisited and the TA updated accordingly.

Response:

- 1.11 Following on from recent discussions with WSCC it is agreed that for the size of development being proposed only the 2026 future assessment is required. The 2026 assessment that has been undertaken includes updated traffic data (2021) and the site allocations within Pagham including;
- App Ref: 3P/30/19/OUT - 300 Dwellings, 80 bed care Home & D1 Uses
 - App Ref: P/134/16/OUT – 280 Dwellings
 - App Ref: P/140/16/OUT – 400 Dwellings, 70 bed Car Home & Primary School.
- 1.12 The above totals 980 Dwellings, although the reserved matters applications for these sites totals 925 dwellings. In addition, the TA submitted as part of this application assesses the impact of 120 dwellings although only 106 dwellings are proposed. The 2026 assessment therefore includes the impact on an additional 69 dwellings.
- 1.13 Whilst the assessment includes for all of the above allocations, it is considered that these developments will not be fully occupied by 2026 which therefore a suitably robust assessment has been undertaken.

WSCC Comment – Development Only Distribution Diagrams

- 1.14 Notwithstanding the above, no development only distribution diagrams are included. As a result, whilst the trips, means of distribution, and route assignment are agreed, without the diagrams it's not immediately apparent what junctions will experience an increase in vehicle trips. The trip distribution diagrams would assist in identifying those junctions that would require further formal capacity assessments through the use of appropriate modelling software. Traffic distribution diagrams showing development only trips should be provided.

Response:

- 1.15 The development only distribution diagrams for the morning and evening peak hours are provided at **Appendix 3**.

WSCC Comment – Bus Stop Infrastructure

- 1.16 The development benefits from the 600-bus service stopping directly outside on Pagham Road. The 600 provides a 20-minute service frequency at peak times, dropping to 30-minute frequency at off-peak times towards Chichester and Bognor Regis. The service frequency and journey times would provide a feasible alternative to the private car. As part of the current development, it's

recommended that further enhancements are secured towards current infrastructure (namely, real time information screens at the north and south bound stops). These would further promote the use of the existing bus service.

Response:

- 1.17 The development will commit to the provision of real time information screen at the north and south bound bus stops. It is suggested that the bus infrastructure improvements would be secured through the Community Infrastructure Levy (CIL) as per the Council Infrastructure Funding Statement.

Conclusion

- 1.18 This note has been prepared to review and respond to the comments raised by WSCC in relation to the proposed residential development on Land West of Pagham Road. If any further clarification is required in relation to highway matters, we would welcome further dialogue with WSCC.

Appendices

Appendix 1 - ATC Speed Survey

Direction: Northeast bound

360 TSJ Lee

360 TSI Ltd

260 TSI Ltd

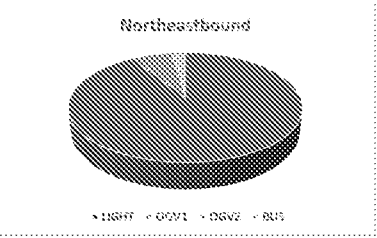
Pagham ATC

Direction: Northeastbound

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 16 Dec	1614	1431	136	14	33
Thu 17 Dec	2090	1883	155	10	42
Fri 18 Dec	2034	1813	166	18	37
Sat 19 Dec	1756	1637	79	3	37
Sun 20 Dec	1335	1274	46	0	15
Mon 21 Dec	510	469	32	2	7
Tue 22 Dec	0	0	0	0	0
5 Day Ave	1250	1119	98	9	24
7 Day Ave	1334	1215	88	7	24

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 16 May	100.0%	88.7%	8.4%	0.9%	2.0%
Thu 17 May	100.0%	90.1%	7.4%	0.5%	2.0%
Fri 18 May	100.0%	89.1%	8.2%	0.9%	1.8%
Sat 19 May	100.0%	93.2%	4.5%	0.2%	2.1%
Sun 20 May	100.0%	95.4%	3.4%	0.0%	1.1%
Mon 21 May	100.0%	92.0%	6.3%	0.4%	1.4%
Tue 22 May	-	-	-	-	-
5 Day Ave	100.0%	89.6%	7.8%	0.7%	1.9%
7 Day Ave	100.0%	91.1%	6.6%	0.5%	1.8%

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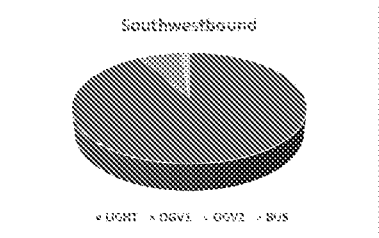


Direction: Southwestbound

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 16 Dec	1809	1639	146	8	16
Thu 17 Dec	2005	1821	149	8	27
Fri 18 Dec	1976	1795	142	9	30
Sat 19 Dec	1696	1595	80	3	18
Sun 20 Dec	1280	1219	51	2	8
Mon 21 Dec	123	94	26	1	2
Tue 22 Dec	0	0	0	0	0
5 Day Ave	1183	1070	93	5	15
7 Day Ave	1270	1166	85	4	14

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 16 May	100.0%	90.6%	8.1%	0.4%	0.9%
Thu 17 May	100.0%	90.8%	7.4%	0.4%	1.3%
Fri 18 May	100.0%	90.8%	7.2%	0.5%	1.5%
Sat 19 May	100.0%	94.0%	4.7%	0.2%	1.1%
Sun 20 May	100.0%	95.2%	4.0%	0.2%	0.6%
Mon 21 May	100.0%	76.4%	21.1%	0.8%	1.6%
Tue 22 May	-	-	-	-	-
5 Day Ave	100.0%	90.5%	7.8%	0.4%	1.3%
7 Day Ave	100.0%	91.8%	6.7%	0.3%	1.1%

360 TSL Ltd

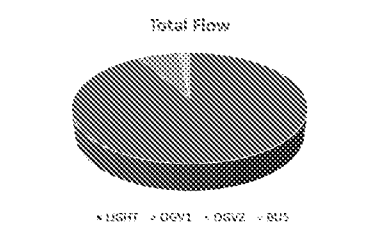


Direction: Total Flow

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 16 Dec	3423	3070	282	22	49
Thu 17 Dec	4095	3704	304	18	69
Fri 18 Dec	4010	3608	308	27	67
Sat 19 Dec	3452	3232	159	6	55
Sun 20 Dec	2615	2493	97	2	23
Mon 21 Dec	633	563	58	3	9
Tue 22 Dec	0	0	0	0	0
5 Day Ave	2432	2189	190	14	39
7 Day Ave	2604	2381	173	11	39

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 16 May	100.0%	89.7%	8.2%	0.6%	1.4%
Thu 17 May	100.0%	90.5%	7.4%	0.4%	1.7%
Fri 18 May	100.0%	90.0%	7.7%	0.7%	1.7%
Sat 19 May	100.0%	93.6%	4.6%	0.2%	1.6%
Sun 20 May	100.0%	95.3%	3.7%	0.1%	0.9%
Mon 21 May	100.0%	88.9%	9.2%	0.5%	1.4%
Tue 22 May	-	-	-	-	-
5 Day Ave	100.0%	90.0%	7.8%	0.6%	1.6%
7 Day Ave	100.0%	91.5%	6.6%	0.4%	1.5%

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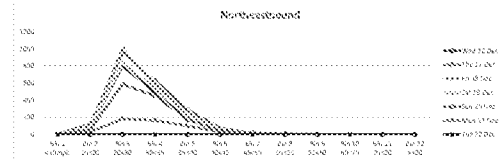


Pagham ATC

Direction: Northeastbound

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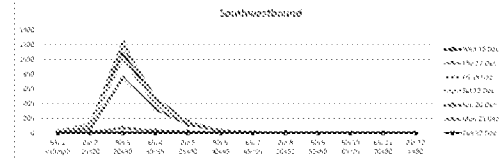
360 TSL Ltd



Direction: Southwestbound

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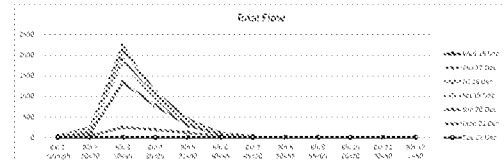
360 TSL Ltd



Direction: Total Flow

[illegible]

360 TSL Ltd



Appendix 2 – Stage 1 RSA Designer’s Response

LAND WEST OF PAGHAM ROAD, PAGHAM, WEST SUSSEX, STAGE 1 ROAD SAFETY AUDIT

Designers Response



Reference JNY10830-05
Designers Response
Version 03b
02 February 2022

Document Status

Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
03b	Information	Matthew Brown	Melanie A'Lee	Melanie A'Lee	02 February 2022

Approval for issue

[Name]	[Signature]	Date.
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Prepared by:

Prepared for:

RPS Consulting Services Ltd

Hallam Land Management

Matthew Brown
Associate

20 Farringdon Street, London EC4A 4AB

1 INTRODUCTION

- 1.1 This Road Safety Audit Designer's Response relates to the Stage 1 Road Safety Audit carried out on the proposed site access arrangements for a development located on land to the west of Pagham Road, Pagham, West Sussex. The Stage 1 Road Safety Audit was undertaken by Taylor Bowie Ltd Road Safety & Transportation Consultancy on 10 December 2021 in accordance with GG119 'Road Safety Audit'.
- 1.2 The Design Team have considered the problems and recommendations in the Stage 1 Road Safety Audit. This Road Safety Audit Team, as well as the Design Team's response to these issues.
- 1.3 The Stage 1 Road Safety Audit and covering letter is provided at **Appendix 1**.

Audit	Problem Summary and Recommendation	Designers Response	WSCC Comments
3.4	Location Proposed development access (Drwg No. JNY10700-01 Rev D) Summary Lack of pedestrian provision may result in pedestrian to vehicle type collisions. The drawing indicates that a new development access junction is proposed on the western side of Pagham Road. Dropped kerbs and tactile paving are not shown on either the northern or southern side of the junction. This may increase the risk of pedestrian trip hazards and / or vehicle to pedestrian type collisions. Recommendation The Audit Team recommend that appropriate dropped kerbs and tactile paving are provided.	The above recommendation is accepted. The provision of dropped kerbs and tactile paving will be investigated at the detailed design stage and reviewed as part of the Stage 2 Road Safety Audit once the detailed design has been completed.	

Design Organisation Statement

On behalf of the design organisation, I certify that:	
1) The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the Overseeing Organisation	
Name	Matthew Brown
Signed	
Position	Associate
Organisation	RPS
Date	02/02/2022

Overseeing Organisation statement

On behalf of the Overseeing Organisation, I certify that:	
1) The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the design organisation; and	
2) The agreed RSA actions will be progressed	
Name	
Signed	
Position	
Organisation	West Sussex County Council
Date	

Appendices

Appendix 1 – Stage 1 Road Safety Audit

**LAND WEST OF HOOK LANE,
PAGHAM, WEST SUSSEX**

Proposed Access Arrangement

Road Safety Audit - Stage 1

Final Report

December 2021

TBL19/256

Taylor Bowie Ltd
ROAD SAFETY & TRANSPORTATION CONSULTANCY

REPORT APPROVAL

Project Details

Project Title	Land West of Hook Lane, Pagham, West Sussex		
Project Subtitle	Proposed Access Arrangement		
Road Safety Audit	Stage 1		
Document Reference	TBL19/256 Rev 0	Audit Brief Date	8 th December 2021
Overseeing Organisation	West Sussex County Council		
Design Organisation	Matthew Brown	RPS	
Client	-	Hallam Land Management	
Maintaining Agent Details	-	-	

Approvals

This document requires the following approvals:

Name	Title
Sarah Bowie	Audit Team Leader
Mario Gatti	Audit Team Member

Distribution

This document has also been distributed to:

Name	Title & Organisation
Matthew Brown	Associate (Transport) - RPS

1 INTRODUCTION

1.1 The Scheme and its Purpose

This report results from a Stage 1 Road Safety Audit (RSA) carried out on the proposals associated with the development of a site situated on the western side of Pagham Road, Pagham, West Sussex.

The proposed residential development for 106 dwellings is to be access via a new priority junction onto the western side of Pagham Road located approximately 40m north of the junction with Hook Lane and approximately 70m south of the proposed access to the new development site as part of Land North of Hook Lane (Application Ref: P/30/19/OUT).

The key features of the development are:

- 6.0m wide minor access road priority junction on the western side of Pagham Road reducing to 5.5m as it enters the site;
- 2.4m x 104m and 2.4m x 62m visibility splays;
- Footway tie-ins to proposals associated with Application Ref: P/30/19/OUT.

This RSA Report relates to the proposals that include the Proposed Access Arrangement only.

1.2 Terms of Reference & Audit Report

The Road Safety Audit Brief was approved and issued by Matthew Brown of the Design Organisation. The RSA team has been approved by Matthew Brown of the Design Organisation.

Table 1 - Audit Team Membership

Membership	Name	Details
Audit Team Leader	Sarah Bowie	IEng, MICE, FIHE, MCIHT, MSoRSA, HE RSA Cert Comp
Audit Team Member	Mario Gatti	BSc Civ Eng, MCIHT, MSoRSA, HE RSA Cert Comp

The Road Safety Audit was undertaken in accordance with the requirements of GG 119. No additional audit requirements were requested. The audit comprised of an examination of the brief and the documents provided to the Audit Team, listed in **Appendix A**.

The audit took place at Taylor Bowie Ltd Letchworth office during December 2021 and both Audit Team Members examined the site together in daylight hours on the afternoon of Friday 10th December 2021 between the times of 1230 and 1330hrs. The weather during the site visit was overcast and cold. The carriageway was dry. Traffic flows at all times within the site extents were light. One pedestrian and no cyclists were observed during the site visit.

The scheme has been examined, and this report compiled only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

No Departures from Standards (DfS) have been provided to the Audit Team. It is important that if there are any DfS, then they are submitted to the Overseeing Organisation (OO) as soon as possible with appropriate mitigating measures for the OO to approve.

The Audit Team were not provided with any information regarding street lighting, signage, carriageway surfacing specifications or drainage for this stage of audit.

All Problems and Recommendations are referenced to the design drawings and the locations have been indicated on the A4 plan supplied for use by the Audit Team in **Appendix B**.

1.3 Audit Administration

Issues identified during the audit and site visit which the Terms of Reference exclude from this report, but which the audit team wishes to draw to the attention of the OO, will be set out in a separate letter. These issues could include maintenance items and operational issues.

In this regard, the Audit Team have made reference to one item as referred to in a covering letter to the Design Organisation, dated 20th December 2021. This covering letter should be supplied to the OO, West Sussex County Council, and be considered in conjunction with this Stage 1 RSA.

2 ITEMS RAISED AT PREVIOUS ROAD SAFETY AUDITS

No previous Road Safety Audits have been undertaken on these proposals.

3 ITEMS RAISED AT THIS STAGE 1 ROAD SAFETY AUDIT

3.1 Local Alignment

No Problems identified in this category at this Stage 1 Road Safety Audit.

3.2 General

No Problems identified in this category at this Stage 1 Road Safety Audit.

3.3 Junctions

No Problems identified in this category at this Stage 1 Road Safety Audit.

3.4 Walking, Cycling and Horse Riding

PROBLEM	1
Location	Proposed development access (Drwg No. JNY10700-01 Rev D)
Summary	Lack of pedestrian provision may result in pedestrian to vehicle type collisions.
The drawing indicates that a new development access junction is proposed on the western side of Pagham Road. Dropped kerbs and tactile paving are not shown on either the northern or southern side of the junction. This may increase the risk of pedestrian trip hazards and/or vehicle to pedestrian type collisions	
RECOMMENDATION	
The Audit Team recommend that appropriate dropped kerbs and tactile paving are provided.	

3.5 Traffic Signs, Carriageway Markings and Lighting

No Problems identified in this category at this Stage 1 Road Safety Audit.

END OF PROBLEMS IDENTIFIED & RECOMMENDATIONS OFFERED IN THIS STAGE 1 ROAD SAFETY AUDIT

4 AUDIT TEAM STATEMENT

We certify that this Road Safety Audit has been carried out in accordance with GG 119.

AUDIT TEAM LEADER	
Name	Sarah Bowie - IEng, MICE, FIHE, MCIHT, MSoRSA, HE RSA Cert Comp
Signed	
Position	Director
Organisation	Taylor Bowie Ltd
Date	20 th December 2021

AUDIT TEAM MEMBER	
Name	Mario Gatti - BSc Civ Eng, MCIHT, MSoRSA, HE RSA Cert Comp
Signed	
Position	Associate Consultant
Organisation	Taylor Bowie Ltd
Date	20 th December 2021

APPENDIX A

Documents Forming the Audit Brief

Drawings:

DRAWING NO.	TITLE
JNY10700-01 Rev D	Proposed Access Arrangement Pagham Road
JNY10700-03	Swept Path Analysis

Documents/Data:

RPS – Transport Assessment – Land West of Pagham Road, Pagham – JNY10700-02 – 13 December 2021

APPENDIX B

Problem Location Plan

Taylor Bowie Ltd
ROAD SAFETY & TRANSPORTATION CONSULTANCY

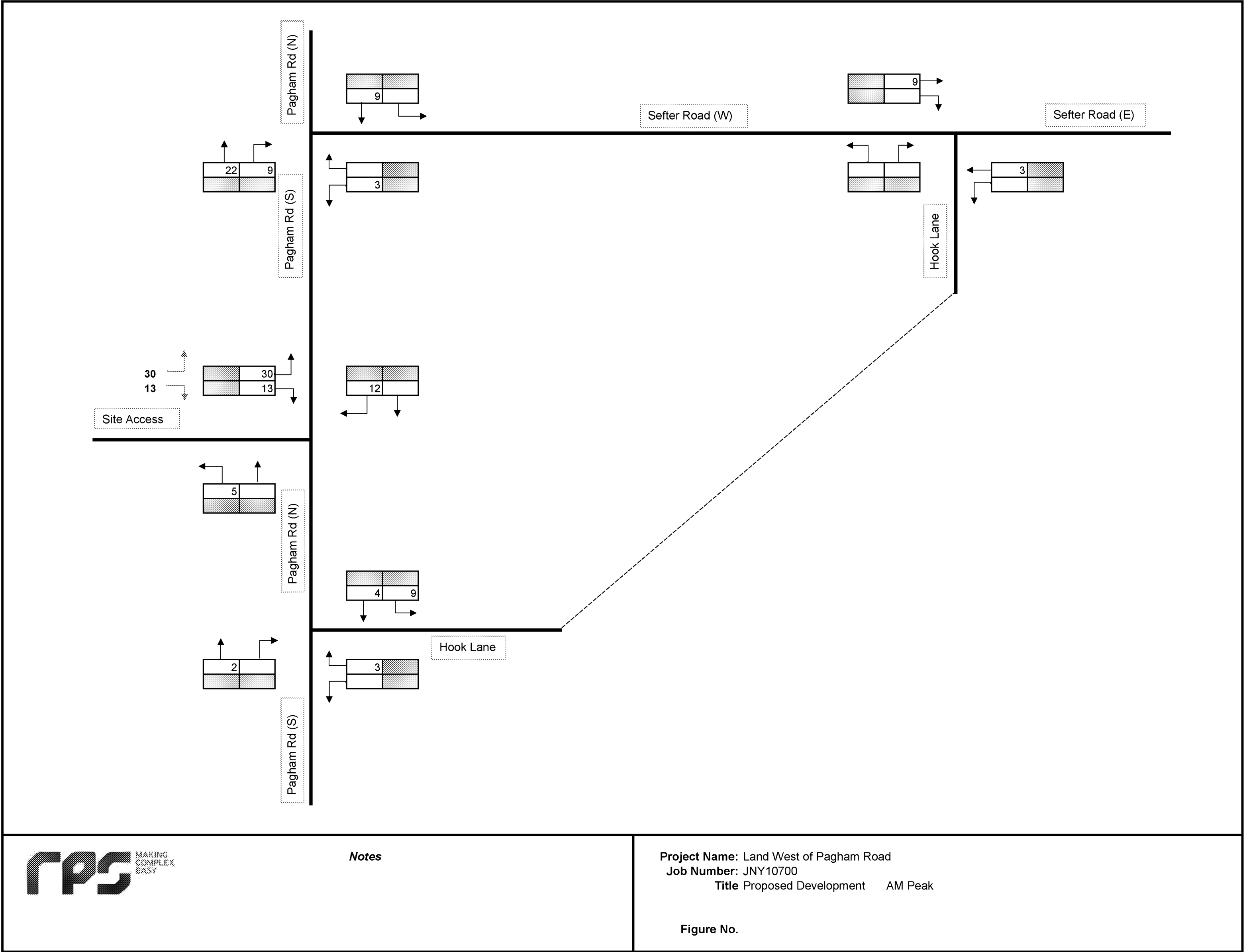
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W: www.taylorbowie.co.uk

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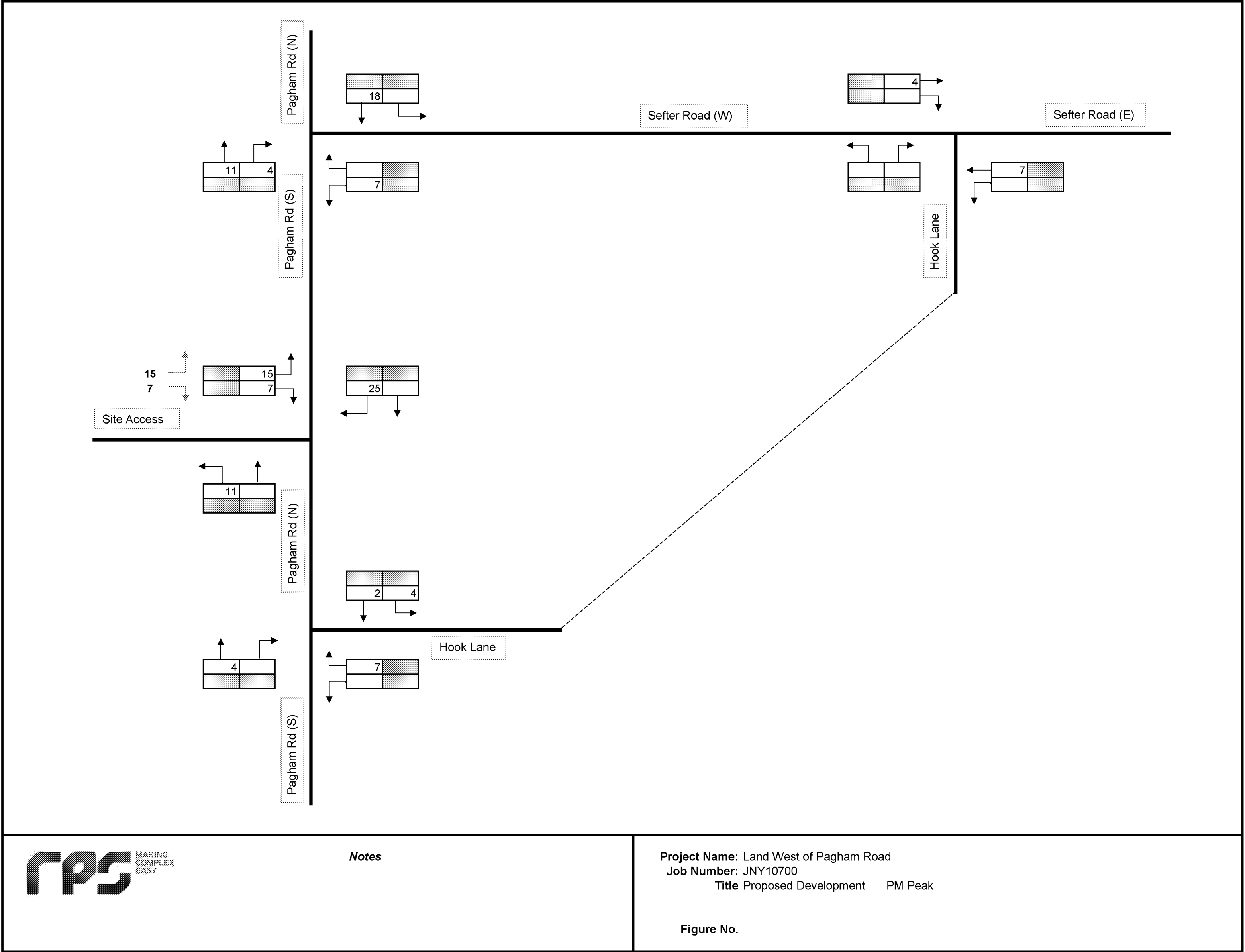
Appendix 3 - Development Only Distribution Diagram



Notes

Project Name: Land West of Pagham Road
Job Number: JNY10700
Title Proposed Development AM Peak

Figure No.



Notes

Project Name: Land West of Pagham Road
Job Number: JNY10700
Title Proposed Development PM Peak

Figure No.

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