



# **Proposed Residential Development: Harras Moor, Whitehaven**

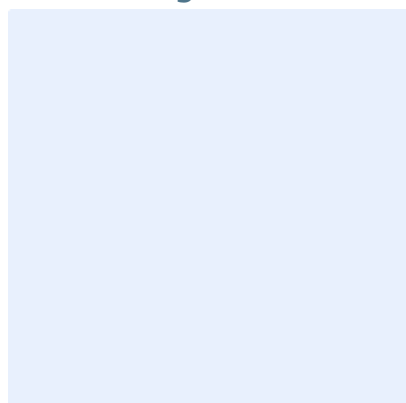
## **Stage 1 Road Safety Audit – Audit Response**

A090070 - 410

1<sup>st</sup> Issue

January 2020

Prepared on behalf of  
Homes England



# Proposed Residential Development: Harras Moor, Whitehaven

## Stage 1 Road Safety Audit – Audit Response



### Document control

Document:	Stage 1 Road Safety Audit – Audit Response		
Project:	Proposed Residential Development: Harras Moor, Whitehaven		
Client:	Homes England		
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Prepared by: M Smith		Checked by: L Baran	Approved By: M Smith
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- Appendix B:** Stage 1 Road Safety Audit
- Appendix C:** Autotracking

## **1.0 Introduction**

### **1.1 Background and Context**

- 1.1.1 This report responds to a Stage 1 Road Safety Audit (RSA) that has been carried out on a proposed site access junction on Harras Road, Harras Moor, Whitehaven, Cumbria. The proposed site access junction is associated with a new proposed residential development of up to 370 dwellings which is proposed to be accessed via two access points, one of which is this audited access junction.
- 1.1.2 The audited proposed site access is a simple priority-controlled junction which has a 6m wide access road leading into the site and 6m radii with the main arm of the junction, Harras Road. 2m wide footways will be provided on both sides of the access road which will connect to the existing footways on Harras Road. The proposed junction which the audit was undertaken on is shown in drawing **A090070-P002** – Proposed Site Access Junction, attached in **Appendix A**.
- 1.1.3 Whilst the RSA reviewed the road safety aspects of the proposed site access junction shown in drawing **A090070-P002**, the RSA also considered the combined impact of the highway improvements proposed for the adjacent committed development on the opposite side of Harras Moor.
- 1.1.4 The RSA site visit was carried out on Friday 13<sup>th</sup> December 2019. A copy of the RSA is included in **Appendix B**.
- 1.1.5 This document together with the associated appendices addresses the items raised in the RSA.
- 1.1.6 The RSA auditors also raised a number of issues outside the scope of the RSA which they wish to draw attention of to the local highway authority, Cumbria County Council. Whilst these are not dealt with in this Audit Response as they are not specifically related to the safety of the proposed site access junction, the issues picked up by the auditors are also attached in **Appendix B**.

## 2.0 Audit Response

### 2.1 PROBLEM 3.1.1

**Location:** Proposed development access junction.

**Summary:** Potential for large vehicles to reverse, possibly leading to a conflict.

- 2.1.1 With the road widths and proposed junction radius, the required swept path of larger vehicles to / from the development is unlikely to be achievable in practice, A driver of an LGV or a refuse vehicle may choose to reverse and / or over-run the footways, possibly leading to a conflict.

**RECOMMENDATION:**

- 2.1.2 It is recommended that junction should be checked for the swept paths of larger vehicles. If this is not achieved, the junction should be amended accordingly.

**AUDIT RESPONSE**

- 2.1.3 We do not agree with the statement above. The site access junction has been designed in accordance with Cumbria County Council junction design standards and is a very similar design to the approved access junction for the adjacent committed development.
- 2.1.4 Nevertheless, as a result of the audit's recommendations, autotracking has been undertaken for a large refuse vehicle (drawing A090070-P010) accessing and exiting the junction. The autotracking drawing is attached in **Appendix C**.
- 2.1.5 The drawing shows that a large refuse vehicle can enter and exit the site safely and without having to reverse. Although the autotracking shows that the vehicle will have to travel on the opposite side of the carriageway for a short distance when turning in and out of the site access, this is considered to be acceptable and safe given the relatively low traffic flows on Harras Road and the likely infrequent large vehicle movements into and out of the site. Furthermore, the proposed junction is of a standard design and Manual for Streets (MfS) in para 6.8.1 acknowledges that *'on streets with low traffic flows and speeds, it may be assumed that [service vehicles] will be able to use the full width of the carriageway to manoeuvre'*.

## **2.2 PROBLEM 3.2.1**

**Location:** Development junction and frontage.

**Summary:** Potential for a collision in darkness involving vehicles and/or pedestrians.

- 2.2.1 No new or improved road lighting is indicated on the drawing provided. There will be an increase in vehicular and pedestrian/cyclist activity as a result of the development. There is potential for a collision in darkness involving development traffic and/or vehicle conflicts with pedestrians (or a cyclists) crossing the carriageway.

### **RECOMMENDATION:**

- 2.2.2 It is recommended that the existing lighting along Harras Road in the vicinity of the development is checked for its adequacy and upgraded if needed.

### **AUDIT RESPONSE**

- 2.2.3 Recommendation accepted. This will be reviewed in conjunction with the local highway authority during the detailed design of the junction/Section 278 design stage.



## **Appendices**



## **Appendix A – Audited Site Access Junction Drawing**



FILENAME : J:\2017\A090070 - 270 AND 410 - HARRAS ROAD, WHITEHAVEN CADWYG DRAWINGS\A090070-P002.DWG | PLOTTED BY : JAKUB GORALEWSKI | PLOTTED DATE : 21 March 2018 14:35:05



DO NOT SCALE: CONTRACTOR TO CHECK ALL DIMENSIONS AND REPORT ANY OMISSIONS OR ERRORS

1. This drawing should be read in relation to the subject of the title only. Other information shown on the drawing is to be considered indicative only. Reference should be made to appropriate drawing series/specifications for other information.
2. All dimensions are in metres unless specified otherwise.
3. Visibility splay are based upon MIS requirements.

Key:

2.4m x 63m Visibility splay

PRELIMINARY ISSUE

REV	DESCRIPTION	BY	CHK	APP	DATE
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QUAY WEST at MediaCity UK  
TRAFFORD WHARF ROAD  
TRAFFORD PARK  
MANCHESTER  
M17 1HH  
TEL: +44 (0)161 872 3223  
FAX: +44 (0)161 872 3193  
e-mail: manchester@wyg.com



Project:  
PROPOSED RESIDENTIAL DEVELOPMENT AT  
HARRAS MOOR, WHITEHAVEN

Drawing Title:  
PROPOSED SITE ACCESS JUNCTION  
OPTION 1

Scale @ A1 1:500	Drawn JC	Date MAR 2018	Checked MS	Date MAR 2018	Approved MS	Date MAR 2018
Project No. A090070	Office 27	Type C	Drawing No. A090070-P002	Revision --		



## **Appendix B – Stage 1 Road Safety Audit**



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**HARRAS ROAD, HARRAS MOOR,  
WHITEHAVEN, CUMBRIA  
– PROPOSED ACCESS JUNCTION**

**Stage 1 Road Safety Audit  
Client: Homes England**

**15/12/2019**

# Quality Management

## Issue Record

ISSUE	REVISION	DESCRIPTION	DATE	PREPARED BY	CHECKED
1	-	Final	15 December 2019	<i>M Hedley</i>	<i>A Bawn</i>
Document number - RSI-MH-1219-004 Issue 1.0					

# Harras Road, Harras Moor, Whitehaven, Cumbria – Proposed Access Junction

## Stage 1 Road Safety Audit

15/12/2019

## Overseeing Organisation

Cumbria County Council

## Client

Homes England

## Design Organisation

WYG

## Road Safety Audit Team Organisation

Road Safety Initiatives LLP

[www.roadsafetyinitiatives.co.uk](http://www.roadsafetyinitiatives.co.uk)

## Registered Address

Road Safety Initiatives LLP  
OC380991  
c/o Harlands Accountants  
The Greenhouse, Amos Drive  
Greencroft Industrial Park  
Annfield Plain, Stanley  
County Durham, DH9 7XN

## Enquiries regarding this audit should be made to

**M Hedley**

Partner

Road Safety Initiatives LLP

Tel: +44 (0)7960 798075

<mailto:mark@roadsafetyinitiatives.co.uk>

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**APPENDIX A – Scheme Documents Issued for Road Safety Audit**

**APPENDIX B – Location Plan**



# 1 Introduction

- 1.1.1 This report results from a Stage 1 Road Safety Audit carried out on the proposed access junction on Harras Road, Harras Moor, Whitehaven, Cumbria. This is at the request of Mike Smith, WYG (on behalf of the Developer – Homes England).
- 1.1.2 The terms of reference of the Road Safety Audit are as described in DMRB GG 119<sup>1</sup>. The Road Safety Audit Team has examined and reported only on the road safety implications in the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.
- 1.1.3 The Road Safety Audit Team membership consisted of:
- |                    |  |
|--------------------|--|
| <b>Team Leader</b> | <b>Mark Hedley</b> , IEng, MCIHT, MSoRSA, FIHE, RegRSA(IHE)<br>Certificate of Competency in Road Safety Audit gained in Nov 2013<br>Partner, Road Safety Initiatives LLP |
| <b>Team Member</b> | <b>Alan Bawn</b> , BSc (Hons), CEng, MICE<br>Consultant, Road Safety Initiatives LLP   |
- 1.1.4 The Road Safety Audit was undertaken on the information provided by Mike Smith (Associate, WYG). The Road Safety Audit comprised an examination of the documents provided and listed in **Appendix A**.
- 1.1.5 The Road Safety Audit Team visited the site together on Friday 13 December 2019 between 08:50 and 09:25 hours. It was overcast, and the road surfaces were wet at the time of the site visit. During the site visit, traffic flows were low, and a few pedestrians but no cyclists were observed.
- 1.1.6 Matters which the Terms of Reference exclude from this report, but which the Road Safety Audit Team wishes to draw to the attention of the Overseeing Organisation, will be supplied in a separate document in the covering email to this Road Safety Audit Report.
- 1.1.7 All Road Safety problems are referenced to the design drawings and the locations have been indicated on the plans supplied with the Road Safety Audit Brief in **Appendix B**.
- 1.1.8 This Road Safety Audit will review the road safety aspects of the proposed access junction on Harras Road, Harras Moor, Whitehaven, Cumbria scheme. There are further highway improvements proposed for adjacent committed developments. Whilst these highway works are not part of this Road Safety Audit scope, the combined impact of both schemes will be considered.
- 1.1.9 The objective of the scheme is to provide access arrangements for the proposed development (370 dwellings).
- 1.1.10 The Road Safety Audit Team was not informed of any strategic decisions made and agreed by the Overseeing Organisation.
- 1.1.11 The Road Safety Audit Team was not informed of any Departures from Standards.

<sup>1</sup> At time of preparing this report, there was no Audit Brief, the Highway Authority had not approved the Audit Team and the report was issued directly to WYG (acting on behalf of the developer)

## 2 Items Raised at previous Road Safety Audits

2.1.1 No previous Road Safety Audit has been undertaken on this scheme beforehand.




## 3 Items Raised at this Stage 1 Road Safety Audit

### 3.1 JUNCTIONS

<b>PROBLEM 3.1.1</b>	
<b>Location</b>	Proposed development access junction.
<b>Summary</b>	Potential for large vehicles to reverse, possibly leading to a conflict.
With the road widths and proposed junction radius, the required swept path of larger vehicles to / from the development is unlikely to be achievable in practice. A driver of an LGV or a refuse vehicle may choose to reverse and / or over-run the footways, possibly leading to a conflict.	
<b>RECOMMENDATION</b>	
It is recommended that junction should be checked for the swept paths of larger vehicles. If this is not achieved the junction should be amended accordingly.	

### 3.2 TRAFFIC SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING

<b>PROBLEM 3.2.1</b>	
<b>Location</b>	Development junction and frontage.
<b>Summary</b>	Potential for a collision in darkness involving vehicles and/or pedestrians.
<p>No new or improved road lighting is indicated on the drawing provided. There will be an increase in vehicular and pedestrian/cyclist activity as a result of the development. There is potential for a collision in darkness involving development traffic and/or vehicle conflicts with pedestrians (or a cyclists) crossing the carriageway.</p> 	
<b>RECOMMENDATION</b>	
It is recommended that the existing lighting along Harras Road in the vicinity of the development is checked for its adequacy and upgraded if needed.	

\*\*\*\* END OF IDENTIFIED PROBLEMS AND RECOMMENDATIONS MADE AT 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.

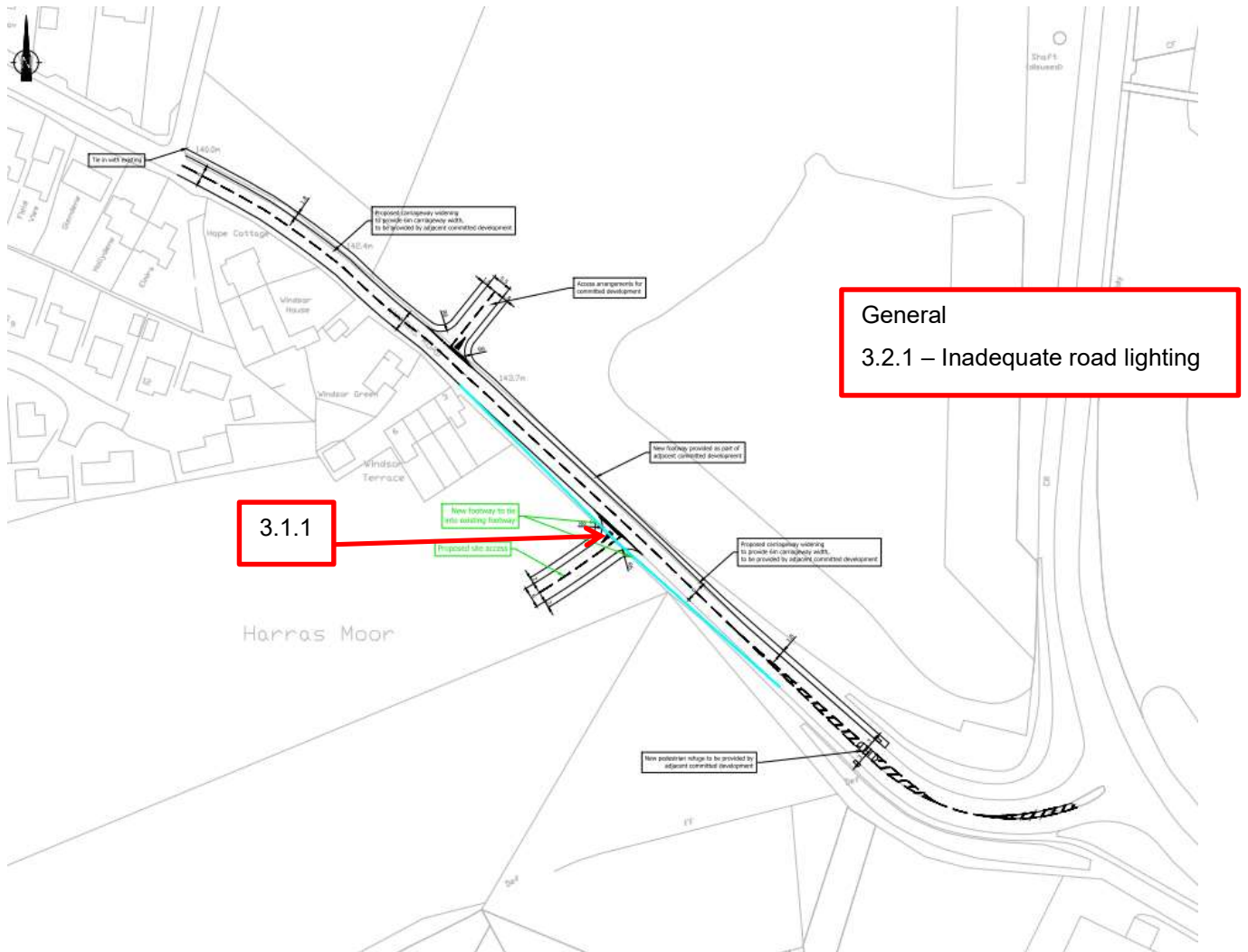
<b>ROAD SAFETY AUDIT TEAM LEADER</b>	
<b>Name:</b>	Mark Hedley
<b>Signed:</b>	
<b>Position:</b>	Partner
<b>Organisation:</b>	Road Safety Initiatives LLP
<b>Date:</b>	15 December 2019
<b>ROAD SAFETY AUDIT TEAM MEMBER</b>	
<b>Name:</b>	Alan Bawn
<b>Signed:</b>	
<b>Position:</b>	Consultant
<b>Organisation:</b>	Road Safety Initiatives LLP
<b>Date:</b>	15 December 2019

## Appendices, Figures and Tables

## Appendix A: Scheme Documents Issued for Road Safety Audit

DRAWING/DOCUMENT REFERENCE	REV	TITLE
A090070-P002	March 2018	Proposed Site Access Junction Option 1
Transport Assessment Addendum	November 2018 (Issue 2)	Proposed Residential Development, Harras Moor, Whitehaven

## Appendix B: Location Plan



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Road Safety Initiatives LLP  
c/o Harlands Accountants  
The Greenhouse, Amos Drive  
Greencroft Industrial Park, Annfield Plain, Stanley  
County Durham  
DH9 7XN

[www.roadsafetyinitiatives.co.uk](http://www.roadsafetyinitiatives.co.uk)

**HARRAS ROAD, HARRAS MOOR, WHITEHAVEN, CUMBRIA  
 – PROPOSED ACCESS JUNCTION  
 ITEMS OUTSIDE THE SCOPE OF THE STAGE 1 ROAD SAFETY AUDIT**

Ref	Location	Comment/Observation	Suggestion
1	Harras Road.	<p>The following maintenance issues were identified –</p> <ul style="list-style-type: none"> <li>• Damaged carriageway;</li> <li>• Worn road markings;</li> <li>• Missing 'keep left' sign at the traffic island (junction with Red Lonning);</li> <li>• Channels need clearing of detritus and leaves (eastern extents);</li> <li>• Footway partially cleared of overgrown verge (eastern extents).</li> </ul>	Report to Cumbria County Council.
2	Harras Road.	<p>There were several observations on the proposed highway improvements for the adjacent committed development scheme. Namely –</p> <ul style="list-style-type: none"> <li>• Proposed pedestrian crossing – It would appear that the island is in excess of 3.0m in width;</li> <li>• It would make sense to continue the hatching between the pedestrian refuge and the traffic island;</li> <li>• Western extents – It would be prudent to provide a tapered approach to the proposed carriageway widening (from westside of Harras Road northern spur) and replace the adjacent gully which is not 'cycle' friendly;</li> <li>• Inadequate road lighting; and</li> <li>• Proposed development accesses may not have adequate radiuses.</li> </ul>	Observations.

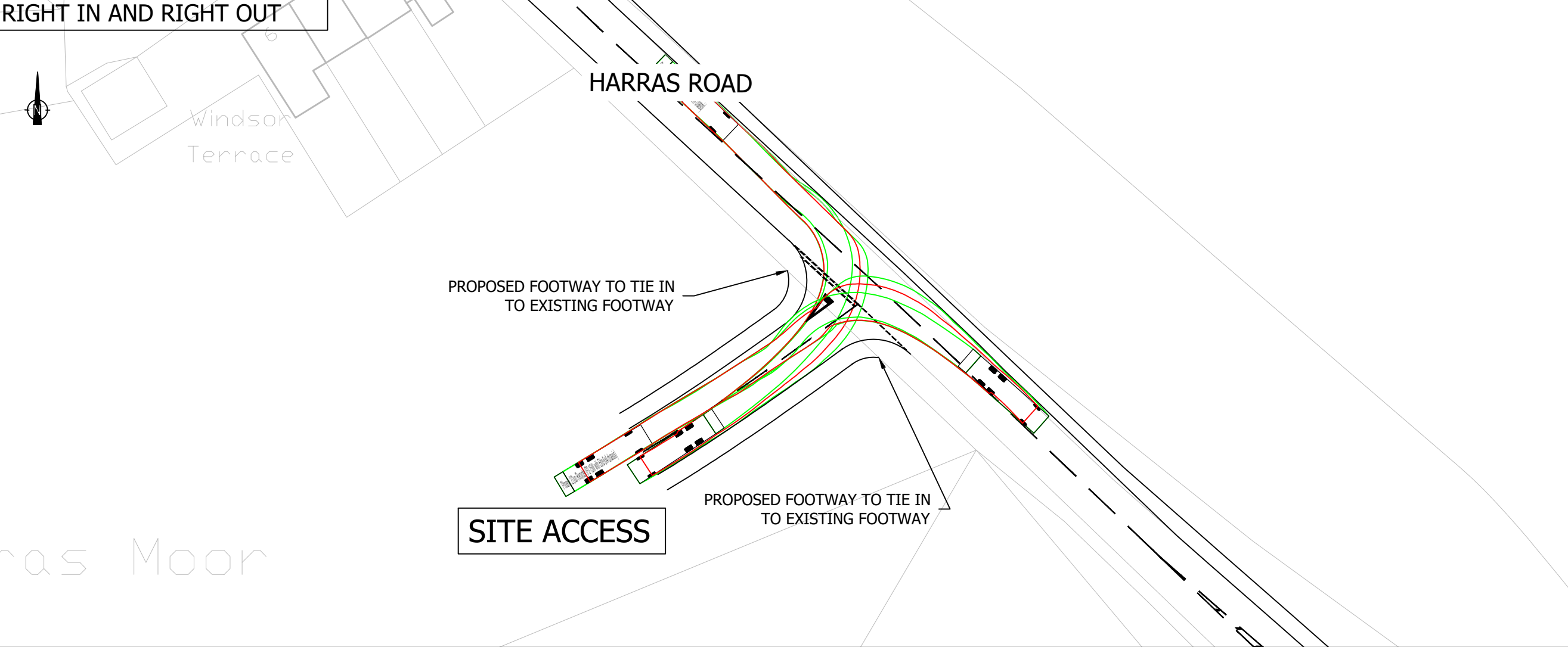
**Mark Hedley**  
**Road Safety Audit Team Leader**  
**15 December 2019**



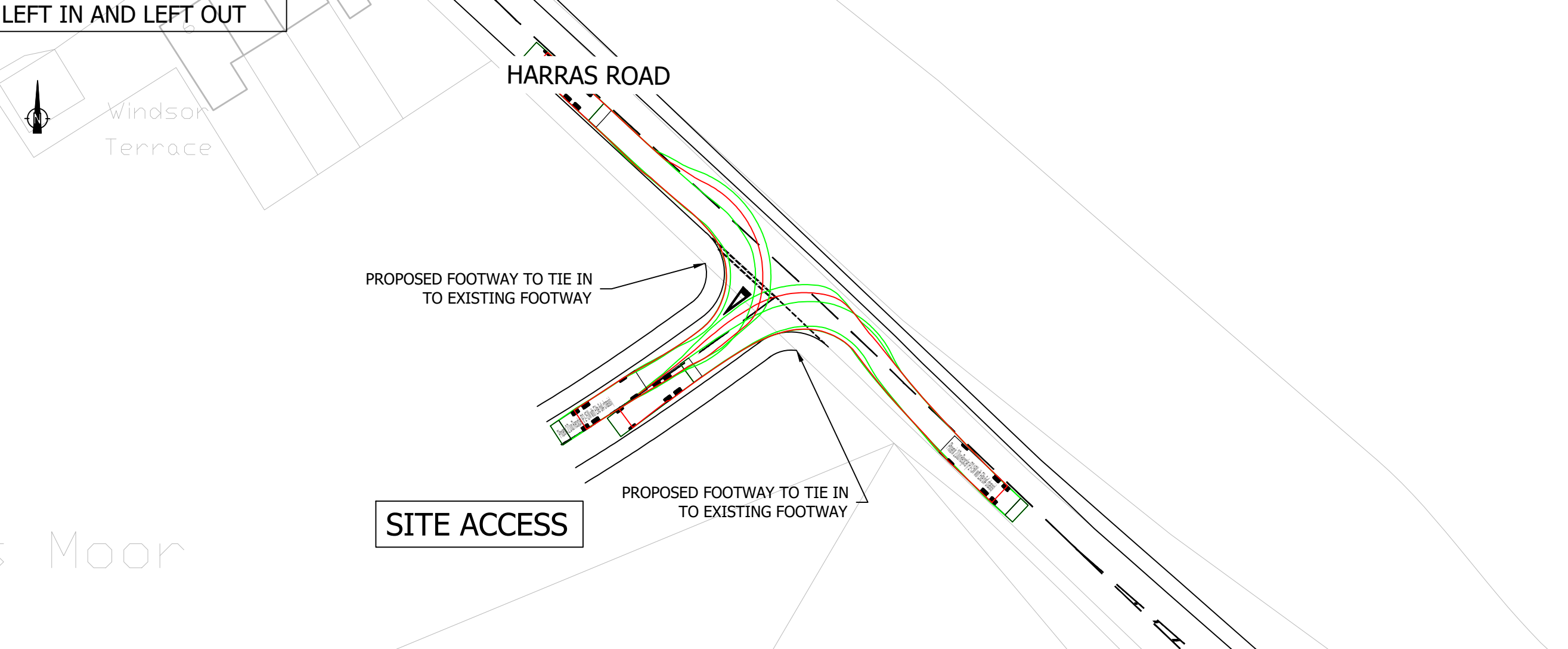
## **Appendix C – Autotracking**



RIGHT IN AND RIGHT OUT

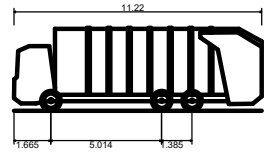


LEFT IN AND LEFT OUT



DO NOT SCALE: CONTRACTOR TO CHECK ALL DIMENSIONS AND REPORT ANY OMISSIONS OR ERRORS

1. This drawing should be read in relation to the subject of the title only. Other information shown on the drawing is to be considered indicative only. Reference should be made to appropriate drawing series/specifications for other information.
2. All dimensions are in metres unless specified otherwise.



Phoenix 2 Duo Recycler (P2-15W with Elite 6x4 chassis)  
Overall Length 11.220m  
Overall Width 2.530m  
Overall Body Height 3.756m  
Min Body Ground Clearance 0.309m  
Track Width 2.530m  
Lock to lock time 4.00s  
Kerb to Kerb Turning Radius 11.550m

FOR INFORMATION ONLY

REV	DESCRIPTION	BY	CHK	APP	DATE
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Client:  
HOMES ENGLAND

QUAY WEST at MediaCity UK  
TRAFFORD WHARF ROAD  
TRAFFORD PARK  
MANCHESTER  
M17 1HH  
TEL: +44 (0)161 872 3223  
FAX: +44 (0)161 872 3193  
e-mail: manchester@wyg.com



Project:  
PROPOSED RESIDENTIAL DEVELOPMENT AT  
HARRAS MOOR, WHITEHEAVEN

Drawing Title:  
PROPOSED SITE ACCESS JUNCTION  
REFUSE VEHICLE SWEEP PATH ANALYSIS

Scale @	A3	Drawn	Date	Checked	Date	Approved	Date
1:500	PT	DEC 2019	MS	DEC 2019	MS	DEC 2019	MS
Project No.	Office	Type	Drawing No.	Revision			
A090070	27	C	P010	--			