ROAD SAFETY AUDIT- STAGE 1

VIASOLUTIONS

Proposed Residential Development

Chapelgate, Hepworth

April 2022

RSA STAGE 1- AUDIT BRIEF

VIASOLUTIONS

TABLE C.1 PROJECT SUMMARY

Date:	17/03/2022
Document reference:	21093 Chippings RSAB Stage 1
Prepared by:	Via Solutions Ltd
On behalf of:	EcoHolmes CLT
AUTHORISATION SHEET	
Project:	Chippings, Hepworth
Report title:	Road Safety Audit Brief Stage 1
PREPARED BY:	
Name:	Matthew Taylor
Signed:	
Organisation:	VIA Solutions
Date:	17/03/2022
I APPROVE THE RSA BRIEF AND INSTRUCT THE RSA TO TAKE PLACE ON BEHALF OF THE OVERSEEING ORGANISATION:	
Name:	
Signed:	
Organisation:	
Date:	

TABLE C.2 GENERAL DETAILS

General details				
Highway scheme name and number:		21093 Chippings, Hepworth		
Type of scheme:	Proposed Access Junction and Internal Road Layout - associated with a residential development consisting of 10 dwellings with parking and landscaping.			
RSA stage tick as appropriate	1 ✓	2	3	4
	Interim			
Overseeing organisation details		**Design organisation details**		
Kirklees Council		Via Solutions		
Police contact details		**Maintaining agent contact details**		
N/A		Kirklees Council		
RSA team membership				
Martin Whittaker and Liz Green, Optima Highways				
Terms of reference				
GG119 and CIHT Guidance				

TABLE C.3 SCHEME DETAILS

Scheme description/objective
General
Development proposals include 10 houses with associated parking. The site is currently occupied by vacant, vegetated land. The scheme to be audited consists of the proposed new access on to Chapelgate and the internal road layout.
Design standards applied to the scheme design
Manual for Streets and KMC Street Design Guide
Design speeds
Internal layout to 20mph
Speed limits
30 mph
Existing traffic flows/queues
The existing site generates low levels of traffic throughout the day, there will be some minor increase in flows to coincide with a nearby primary school.
Forecast traffic flows
The site will generate no more than approx. 6 vehicle trips per peak hour.
Pedestrian, cyclist and equestrian desire lines
Pedestrians and cyclists will emerge onto Chapelgate and generally route westwards towards the school and other local amenities.
Environmental constraints
None

TABLE C.4 LOCALITY

Description of locality
The site sits on the inside of a bend off Chapelgate in the village of Hepworth where speeds were low, measured at 23mph (westbound) and 26mph (eastbound).
General Description
New vehicular and pedestrian site access to serve a small residential development.
Relevant factors which may affect road safety
None

TABLE C.5 ANALYSIS

Collision data analysis
There were no recorded incidents within the search area which does not indicate a safety concern nor any safety trends on this section on the local highway network.
Departures from standards
None
Previous road safety audit stage reports, road safety audit response reports and evidence of agreed actions
None
Strategic decisions
None
List of included documents and drawings
Documents; Site Plan
Drawings Site Plan

Kirklees Refuse Vehicle Dimensions

Length 10 22m
Width 2 53m
Height 3 21m
Turning Radius 9 45m

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All work to be carried out in accordance with current Building Regulations

Contractors must verify all dimensions at the job before commencing any work or making shop drawings

Written dimensions should be taken. Do not scale off drawing. Do not take digital dimensions from this drawing

Any discrepancies to be reported to the Architect

0 10m 20

Scale 1 500 @A3

Key:

- Retained Trees
- Proposed Trees
- Site Boundary

2b 4p Home	8
2b 4p Home Part M4(3)	1
3b 4p Home	1
Total Dwellings	10

Rev	Date	Comment	Dr	Ch
P05	15 03 22	General update	CT	RT
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BIMcloud DESKTOP H2CIOHA BIMcloud Basic for ARCHICAD 25/Chippings Dump Site (462)2112 GW@P 01 DR A Huddersfield_EcoHomes_P02

GWP Job Reference (462)2112

Job Title Chippings

Client EcoHolmes Community Land Trust
AFFORDABLE LOW ENERGY HOUSING FOR THE HOLME VALLEY

Proposed Site Plan

Name	(462)-GWP-01-01-DR-A-(PA)-0003		
Scale	1:500@A3	Revision	P05
Drawn/Checked	CT / DT	First Issue	11 02 22
Drawing Status	S - Information		

GWPA
CHARTERED ARCHITECTS
INTERIOR DESIGNERS
SPACE PLANNERS
PROJECT MANAGERS
LANDSCAPE ARCHITECTS

Bracken House, Lidgett Lane Leeds LS8 1PQ
+44(0)113 266 6044 (t) | +44(0)113 268 1859 (f)
architecture@gwp arch.com | www.gwp arch.com

RSA STAGE 1- Issue

OPTIMA
Intelligent Highways Solutions

Chippings, Hepworth
Proposed Access & Internal Layout
Stage 1 Road Safety Audit

March 2022 (Initial Issue)

Prepared on behalf of

VIA Solutions Ltd

Optima Highways and Transportation Consultancy Ltd
Suite 1, 3rd Floor, Goodbard House, Infirmary Street, Leeds, LS1 2JP
Tel: 0113 245 1679
www.optimahighways.com

Quality Management

Chippings, Hepworth - Stage 1 Road Safety Audit Project No: 22026				
File reference	O:\Chippings Dump, Holmfirth\TEXT\REPORTS\220321 Chippings Dump Stage 1 RSA.docx			
Issue/revision	**Initial Issue**	**Revision 1**	**Revision 2**	**Revision 3**
Remarks	Final			
Date	21st March 2022			
Prepared by	M Whittaker			
Signature				
Checked by	E Green			
Signature				
Authorised by	M Whittaker			
Signature				

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2. Items Raised at Stage 1 Road Safety Audit 3
3. Audit Team Statement 4

APPENDICES

Appendix A Problem Location Plan

1. Introduction and Background

1.1 PROJECT DETAILS

Table 1.1 Project Details

Report title	Stage 1 Road Safety Audit
Date	21st March 2022
Document reference and revision	220321 Initial Issue
Prepared by	Optima Highways
On behalf of	Kirklees Council

1.2 INTRODUCTION

1.2.1 Optima Highways and Transportation Consultancy Ltd (Optima) has been appointed to undertake this Stage 1 Road Safety Audit of the proposed access arrangements and internal road layout of a residential development comprising of 10 dwellings on land to the south of Chapelgate and west of Dean Bridge Lane, Hepworth, known as the Chippings Dump Site.

1.2.2 The Road Safety Audit has been carried out by experienced Road Safety Engineers employed by Optima, who are independent from the design process. The Road Safety Audit Team membership consisted of:

Martin Whittaker FIHE MSoRSA

Road Safety Audit Team Leader (Director, Optima)

Elizabeth Green BEng MSc CEng MICE FCIHT

Road Safety Audit Team Member (Associate Director, Optima)

1.3 PREVIOUS ROAD SAFETY AUDITS

1.3.1 The Road Safety Audit Team has not been made aware of any previous Road Safety Audits of the proposed works.

1.4 SCHEME DETAILS

1.4.1 The proposed works include a new priority controlled T junction on to Chapelgate and the formation of a residential cul-de-sac, laid out as a shared surface providing access to 10 new properties.

1.4.2 The following drawing set out within Table 1.2 has been provided to the Audit Team for the purposes of the Audit:

Table 1.2 Drawing

Drawing Number	Revision	Dated	Title
(462)-GWP-01-01-DR-A-(PA)-0003	P05	11/02/22	Site Plan Option 4

1.4.3 The following additional information has also been supplied to the Road Safety Audit Team.

- Road Safety Audit Brief issued by VIA Solutions dated 17th March 2022.

1.5 TERMS OF REFERENCE AND AUDIT DETAILS

1.5.1 This Road Safety Audit has been undertaken in accordance with GG 119 and a Road Safety Audit brief prepared by the Design Organisation.

1.5.2 The above plans and information have been examined prior to the site visit, analysed in detail on site and at the offices of Optima following the visit.

1.5.3 A Site visit was carried out by the Road Safety Audit Team on Thursday 24th February 2022 between the hours of 10:30 and 11:00. The weather and road surface were wet. Low traffic volumes were observed along Chapelgate and Dean Bridge Lane. No pedestrians or cyclists were observed during the Site visit.

1.5.4 The Road Safety Audit considers and reports only on the safety implications of the proposed scheme as presented and has not examined or verified the compliance of the designs to any other criteria. Comments made in this report relate to points which are considered to be worthy of attention in respect of safety.

1.5.5 Recommendations included within this report are intended to identify proportionate means of eliminating or mitigating the concern raised and should not be regarded as being prescriptive design solutions. There may be alternative methods of addressing a problem that would be equally acceptable and these should be considered in full by the Designer.

1.5.6 The reference and location of problems have been indicated on the plans contained at Appendix A, where appropriate.

2. Items Raised at Stage 1 Road Safety Audit

Table 2.1 Problem 1

PROBLEM	
Location	Proposed turning head
Summary	The proposed turning head may lead to large vehicles reversing over excessive distances.
The proposed development incorporates a cul-de-sac with a turning head to accommodate refuse collection and delivery vehicles. The swept path analysis is particularly tight and relies on parked vehicles being situated wholly within each bay. It is also noted that the analysis utilises a 10.22m long refuse vehicle rather than a 11.85m refuse vehicle set out within the Kirklees Highway Design Guide. As such the vehicle may be less manoeuvrable than the analysis suggests. The proposed turning head as currently designed may lead to larger vehicles reversing out of the development onto Chapelgate into the path of oncoming traffic or users of the footway.	
Recommendation	
It is recommended that the turning head is tested using a standard Kirklees refuse vehicle and increased in size accordingly.	

Table 2.2 Problem 2

PROBLEM	
Location	Dean Bridge Lane
Summary	The absence of visibility may lead to a pedestrian being struck by oncoming traffic.
A new footway is proposed along the site frontage, which terminates at the southern boundary of the Site along Dean Bridge Lane. A stepped access is proposed, which provides access to land immediately to the south of the site, which is bound by a wall to the south. Full details of the wall are not provided, however based on the site levels this is likely to be of a height that would block visibility to the site. The absence of suitable pedestrian visibility may lead to a pedestrian being struck by traffic travelling northbound along Dean Bridge Lane.	
Recommendation	
It is recommended that suitable visibility is provided to the south to allow pedestrians to discharge into the carriageway.	

3. Audit Team Statement

3.1.1 We certify this Road Safety Audit has been carried out following GG 119 guidance.

Road Safety Audit Team Leader

Name: Martin Whittaker FIHE MSoRSA

Position: Director

Organisation: Optima Highways & Transportation Ltd

Date: 21st March 2022

Signed:……..

Road Safety Audit Team Member

Name: Elizabeth Green BEng MSc CEng MICE FCIHT

Position: Associate Director

Organisation: Optima Highways & Transportation Ltd

Date: 21st March 2022

Signed:……..

Appendices

Appendix A Problem Location Plan

Kirklees Refuse Vehicle Dimensions

Length 10 22m
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Height 3 21m
Turning Radius 9 45m

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Bracken House, Lidgett Lane Leeds LS8 1PQ
+44(0)113 266 6044 (t) | +44(0)113 268 1859 (f)
architecture@gwp arch.com | www.gwp arch.com

RSA STAGE 1- DESIGNER'S RESPONSE

DESIGNERS RESPONSE

Stage 1

VIASOLUTIONS

Chippings, Hepworth

March 2022

Quality Management

Project Number	21093
Filename	Chippings, Hepworth Designers Response RSA Stage 1
Issue No	1
Issue Date	30.03.2022
Author	Matthew Taylor
Reviewer	Chris Yarrow

Signatures:

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2. Items Raised in Stage 1 Road Safety Audit 2

1. Introduction

Via Solutions were appointed to carry out the Transport Statement associated with of a residential development off Chapelgate, Hepworth. The development is at the pre-planning stage and The Highway Authority (Kirklees Council) has asked for a Stage 1 Road Safety Audit to be carried out of the proposed site layout which is to be submitted as part of any future planning application.

The proposals have now been subject to a Stage 1 Road Safety Audit dated March 2022 carried out by Optima Highways and Transportation Consultancy Ltd. The 'Problems' and Recommendations' from that RSA are included in this Designer's Response report for ease of reference. The summary points relating to each issue can be found in the original RSA.

2. Items Raised in Stage 1 Road Safety Audit

1 Problem: Proposed turning head

The proposed turning head may lead to large vehicles reversing over excessive distances.

Recommendation

It is recommended that the turning head is tested using a standard Kirklees refuse vehicle and increased in size accordingly.

Designer's Response

Recommendation accepted – The swept path analysis was undertaken by the 11.85m refuse vehicle however there is a discrepancy in the architect's plan regarding the vehicle dimensions. This is shown on the revised site layout.

2 Problem: Pedestrian visibility issues

The absence of visibility may lead to a pedestrian being struck by oncoming traffic.

Recommendation

It is recommended that suitable visibility is provided to the south to allow pedestrians to discharge into the carriageway.

Designer's Response

Recommendation accepted – The footway routing along the eastern boundary has been re-aligned in order to achieve adequate visibility for cars to see any pedestrians existing the site onto Dean Bridge Lane. This is shown on the revised site layout.

N

KIRKLEES REFUSE VEHICLE 2018

OVERALL LENGTH	11.850m
OVERALL WIDTH	2.500m
OVERALL BODY HEIGHT	3.749m
MIN BODY GROUND CLEARANCE	0.302m
TRACK WIDTH	2.490m
LOCK TO LOCK TIME	6.00s
WALL TO WALL TURNING RADIUS	11.000m

VIASOLUTIONS
THE OLD COACH HOUSE
1 CAMPBELL STREET
PUDSEY
LS28 6DP
tel: 0113 3453957
email: highwaymen@viasolutions.co.uk

PROPOSED RESIDENTIAL DEVELOPMENT

CHAPELGATE, HEPWORTH

SWEPT PATH ANALYSIS

SCALE: 1:200 @A3

MARCH 2022

FIGURE 3

NOTES

1. THIS DRAWING SHOWS THE PRELIMINARY LAYOUT ONLY (NOT TO BE USED FOR CONSTRUCTION) AND IS SUBJECT TO DETAILED DESIGN, FULL CDM COMPLIANCE, STATUTORY UNDERTAKERS SEARCH/DIVERSION REQUIREMENTS, HIGHWAY DRAINAGE PROVISION, LAND OWNERSHIP AND LOCAL AUTHORITY APPROVAL.

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