

Stage 1 Road Safety Audit

**Proposed Residential Development
Hanging Heaton, Dewsbury**

Vistry Partnerships (Yorkshire)

May 2021

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Document Revision Control

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1 INFORMATION PROVIDED TO UNDERTAKE THE AUDIT

1.0 EXECUTIVE SUMMARY

- 1.1 This report has been prepared in response to a request from the Council to undertake a Stage 1 Road Safety Audit (i.e. carried out prior to construction) for a new access and internal layout to a residential development at Challenge Way, Dewsbury which is being developed by Vistry Partnerships (Yorkshire).
- 1.2 Specifically, the brief considers the access onto the adjacent adopted highway for all road users and the internal layout highway of the proposals .
- 1.3 The items raised in the Road Safety Audit are outlined within Section 2 of this report, together with recommendations for alterations or improvements to the proposals with the aim of improving highway safety and aiding collision prevention.
- 1.4 This Road Safety Audit has been undertaken in line with GG119, the reviewers are independent and not otherwise involved in the site design or promotion.
- 1.5 GG119 allows of further Road Safety Audit updates to be undertaken at the same stage (i.e. Stage 1 and Stage 2 etc) once the relevant information has been provided. It may also be the case that the designer's response addresses the items raised in this road safety audit or that these items will be addressed at Stage 2. It will be decision of the overseeing organisation to determine the most appropriate way forward in this regard, once the information has been submitted.

2.0 INTRODUCTION

General

- 2.1 The Local Planning Authority (LPA) and Local Highway Authority (LHA) is Kirklees Council (KC).
- 2.2 The site is in the village of Hanging Heaton which cojoins both Batley and Dewsbury. The site is bounded on its northern side by further open agricultural land designated as Green Belt, on its eastern side by Challenge Way, on its southern and western sides by High Street and its associated residential dwellings, a working men's club and a Shell garage.
- 2.3 A plan showing the site location can be seen below in Figure 1

Figure 1: Site Location



- 2.4 The audit comprised an examination of documents forming the Audit. This Audit was restricted to the proposed access for the residential development taken from Challenge Way and the proposed internal highway layout.
- 2.5 This report does not seek to draw conclusions but simply highlight observed safety issues in respect of the existing and proposed highway environment when considered against the scheme concept and advise the Principal Designer of safety concerns which may need addressing. These issues are general observations of the proposed layout as provided and it is accepted that at this stage (Stage 1) the scheme may undergo significant reworking. This being the case the issues

raised at Stage 1 are general in nature, though specific issues are included where they are shown on the plans provided. A further Road Safety Audit will need to be undertaken at Stage 2 which will consider both the issues raised at Stage 1 and those presented in the detailed design layouts (normally Section 38 submission stage).

Documents Forming the Brief

2.6 The documents were made available to the Road Safety Auditor by the design team. The total documents forming the Audit Brief are listed in:

- Appendix A
 - Site Plan drawing 301 revision 05
 - Transport Statement (Prepared by SCP – available on request)

2.7 Generally, the Brief comprised:

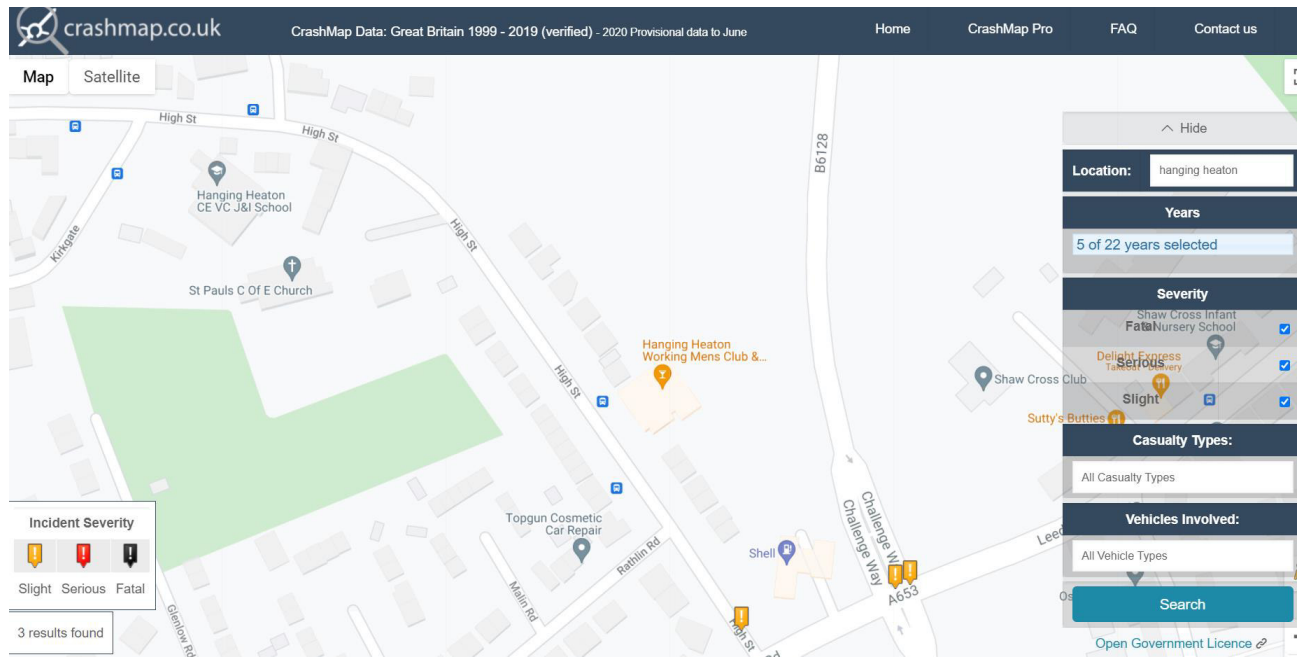
- Brief
- Drawings

Collision, Traffic and Speed Data

2.8 Collision data was not available as part of the brief. Therefore, the Audit Team examined CrashMap to determine if there have been any collisions in the most recent 5 years of data available 2016 – 2020 in the vicinity of the proposed site access. The data held indicates that there has been three personal injury collision which was slight in nature in the most recent data held. These accidents are remote from the site access and not related to similar access points onto Challenge Way.

2.9 This suggests that there are no identifiable trends in collisions and that the highway network is seen to operate reasonably safely at present. Figure 2 below shows the extract from CrashMap

Figure 2: Crashmap



- Traffic data has been provided in the Transport Statement (SCP)
- Speed data was not available.

Details of Site Visit

- 2.10 A site inspection was undertaken on Friday 26th March 2021. Due to the Covid-19 restrictions the requirements of GG119 have been very slightly relaxed. However, the Audit Team travelled to site separately and spent 90 minutes discussing the scale and size of the development and the likely impact the S278 works which form the access would have on the surrounding road network.
- 2.11 The visit was undertaken in daylight, the weather was fine and sunny, and the carriageway was dry.. No incidents were noted during the site visit.
- 2.12 During the site visit the wider highway network surrounding the site was also observed to consider the wider implications of the proposals. For example on queuing to the signal controlled junction to the south of the site.

RSA Team and Format

- 2.13 It was considered that the information provided was sufficient for the purpose of carrying out the safety review requested.
- 2.14 The Road Safety Review was undertaken by:

- Tony Harrigan Associate Director SCP
- Sam Chapman Senior Transport Planner SCP

- 2.15 The Road Safety Audit comprised an examination of the documents and drawings supplied to the Road Safety Auditors (referenced in Appendix at the end of this report). The auditors have not had any previous input to the design of the scheme, neither are they involved in the project team supporting the development.
- 2.16 The Terms of Reference used in this review are as described in the Highways England Design Manual for Roads and Bridges document GG119 'Road Safety Audit '. The scheme has been examined and this report compiled only with regard to safety implications to road users of the scheme as presented. It has not been verified for compliance with any other standards or criteria, although regard has been given to Kirklees Highway Design Guide Supplementary Planning Document (SPD) adopted in November 2019. However, in order to clearly explain a safety problem or the recommendation to resolve a problem, the Audit Team may on occasion have referred to a design standard for information only. However, any audit comments should not be construed as implying that a technical audit has been undertaken in any respect.
- 2.17 Furthermore, any recommendations included within this report should not be regarded as being prescriptive design solution to the problem raised. They are intended only to indicate a proportionate and viable means of eliminating or mitigating the identified problem, as stipulated in GG119, and in no way imply that a formal design process has been undertaken. There may be alternative methods of addressing a problem which should be equally acceptable in achieving the desired elimination or mitigation and these should be considered when responding to this report.
- 2.18 It is the Project Sponsor's responsibility to ensure that all problems raised by the Road Safety Audit Team are given due consideration.
- 2.19 In the event of a collision and any resulting legal action, SCP would have to defend its actions on the basis that it took such care, as in all circumstances was reasonably required, to ensure that the highway was not dangerous to road users. It is important therefore that recommendations contained in the report are acted upon wherever possible.

Departures or Relaxations from Standards

- 2.20 The layout of the site access is not subject to departures from standards that the audit team is aware of.

Issues Raised in Previous Safety Review

2.21 No previous Road Safety Audits have been undertaken.

3.0 ITEMS RAISED AT ROAD SAFETY REVIEW

This section details the findings of this Stage 1 Road Safety Audit. Photos of identified problems are illustrated in the description of the problems and a plan showing the locations is included at each point.

A designer's response must be provided for the next stage in the audit process in order that an appropriate safety review can be undertaken at Stage 2 which will include further detail on the impacts of the proposed development based on detailed construction drawings. However, in order to assist the designer in overcoming safety issues, a general comment has been made, where appropriate, on where there is currently lack of information in the design provided and as such safe assessment of the proposals cannot be provided as part of this report.

Junctions

The submitted information does not include any detail or description of the proposed access junction from Challenge Way as shown on plan drawing 20520 301 rev 05. It has not been possible to undertake an assessment of the proposed access based on the information available. Further detail is included later in this report.

Internal junctions have been assessed and relevant safety issues are included later in this report.

Alignment

No assessment of the alignment or location of the access junction has been undertaken. Further detail is included later in this report.

The alignment of the proposed internal highway network has been considered and further details are included later in this report

Walking, Cycling and Horse Riding

Where applicable, the Non-Motorised (NMU) network has been considered and details are provided later in this report

Traffic Signing, Road Markings & Street-lighting

These are considered separately in this report. However, the proposed access junction and internal highway network does not provide basic detail on lining, signing and street lighting etc.

4.0 RSA PROBLEMS

PROBLEM		1
Location:	Site Access	
Summary:	The form and type of the site access onto Challenge Way is not provided in detail	
Proposed SW & FW sewer easement 0.05ha New highway junction formed on Challenge Way with 2.4 x 43m visibility splays in accordance with Highway Consultant's details and to the approval of the Local Highway Authority.		
Drawing 301 Revision 5 does not provide sufficient detail of the geometry of the proposed site access for an appropriate assessment of its safe operation to be undertaken. The auditors are concerned that an access constructed to incorrect design parameters, taking account of mainline and side road vehicle flows, may lead to collisions and damage to property.		
RECOMMENDATION		
Provide details of the proposed site access in accordance with the appropriate design standards.		

PROBLEM		2
Location:	Site Access Challenge Way	
Summary:	Potential for parked vehicles to obscure visibility from access	
		
Currently there are Traffic Regulation Orders to prohibit car parking in the vicinity of the proposed site access along Challenge Way as it approaches the signalised junction of Challenge Way and Leeds Road. Once the access is operational, the audit team were concerned that there would be no provision to prevent car parking within the visibility splays (TBC – See problem 3) of the site access. This has the potential to result in an unsafe operation of the access due to reduced visibility.		
RECOMMENDATION		
Consider introducing or extending the Traffic Regulation Orders along Challenge Way across the site access and visibility splays, to ensure that clear visibility to oncoming traffic is maintained.		

PROBLEM		3
Location:	Site access & internal highway network multiple locations	
Summary:	Visibility splays have not been clearly provided for the site access or internal highway layout.	
The audit team is concerned that without a plan demonstrating the visibility appropriate to the vehicle speeds along Challenge Way the proposed site access may operate unsafely. Currently the visibility splays are presented as “indicative” but meet the standard for 30mph. It is considered that, given to the proximity of the Challenge Way / Leeds Road signalised junction to the south it is necessary to provide visibility splays based on the 85th percentile vehicle speeds when determining the appropriate visibility splay at the site access. Excessive vehicle speeds require specific measures to be implemented and without further information it is unclear if this is the case here. Internally visibility splays must be provided in accordance with the internal highway design speed for the carriageway geometry. This should also include visibility along the internal carriageway bends to ensure that appropriate forward visibility is maintained. Appropriate visibility splays must be provided from driveways which access the internal network via vehicle crossover to ensure that pedestrians can be clearly seen.		
RECOMMENDATION		
Provide additional information on vehicle speeds and visibility splays at the site access, junctions within the site and forward visibility splays on the internal carriageway radii where appropriate.		

PROBLEM		4
Location:	Site Access and Internal highway network	
Summary:	No swept path assessment has been provided	
The information provided does not include details of vehicle tracking at the site access, nor the internal highway network. It has therefore not been possible to assess the suitability of the highway in terms of vehicles passing safely. The auditors are concerned that without the swept path assessment information. It is not possible to determine whether the site access or internal network has been designed in such a way as to allow for the safe passing of vehicles. Typically, local design guides require carriageway widening on bends to allow two vehicles to pass when vehicle approach certain minimum centre line radii. It is evident that this has not been provided across the development as a whole. However, this does not necessarily mean the carriageway widening is required at all locations on the highway where there are centreline radii. It is also necessary to provide swept paths at turning heads and private drives to ensure that appropriate vehicle crossing measures can be provided.		
RECOMMENDATION		
Provide details of vehicle tracking across the development		

END OF PROBLEMS IDENTIFIED, AND RECOMMENDATIONS PRESENTED FOR PROPOSED ACCESS.

APPENDIX A – SITE PLAN



Type	N°	Area (sqft)	Area (sqm)	Total sqft
Open Market Units				
CARTWRIGHT - 2 BED 3 PERSON	7	769	71.4	5,383
WYATT - 2 BED (plus study) 4 PERSON	10	872	81.0	8,720
ELMSLIE - 3 BED 5 PERSON	14	933	86.8	13,062
BECKET - 3 BED 5 PERSON	9	1025	95.2	9,225
GOODRIDGE - 4 BED 6 PERSON	2	1111	103.2	2,222
MYLNE - 4 BED 5 PERSON	2	1136	105.5	2,272
Total	44			40,884

Affordable Units *				
ATKINS - 2 BED 3 PERSON	5	763	70.9	3,815
WORSLEY - 1 BED (GF) 2 PERSON	2	538	50.0	1,076
WORSLEY - 1 BED (1st) 2 PERSON	2	667	61.9	1,334
ELMSLIE - 3 BED 5 PERSON	2	933	86.8	1,866
Total	11			8,091

Grand Total	55			48,975
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Site Area:		Hectares	Acres
Site Area (gross):		1.72	4.25
Site Area (net):		1.30	3.21
Site Area - POS & attenuation area:		0.20	0.49
Site Area - Other non-developable:		0.22	0.54
Density excluding all non-dev areas (plots/net area):		42.31	17.13
Coverage (ft²/net area):		37,673	15,257

- Site boundary (Based on Information provided by Vistry Partnerships)
- Net Developable Area
- Sewer Easement
- Water Mains Easement

Easements shown are subject to the approval of the statutory undertaker

This layout is based on a Topographical Survey provided by Vistry Partnerships (Yorkshire)

- 1.8m High Close Boarded Fence
- 1.5m High Close Boarded Fencing with 1.8m High Privacy Panel to Party Wall

Scale Bar (Meters)

0 1 2 3 4 5 10 20 30 40

05	20.04.21	Notes added and removed	TS
04	14.04.21	Plots 37 & 38 revised	TS
03	13.04.21	Plots 37 & 38 revised	TS
02	08.04.21	Revised to client sketch 01.04.21	TS
01	26.03.21	Revised to updated engineering proposals	TS

REV	DATE	NOTES	CHK
Client			

VISTRY PARTNERSHIPS (YORKSHIRE)

Project

HANGING HEATON, DEWSBURY

Drawing Title

SITE PLAN

Drawn	Checked	Paper Size	Scale	Date
TS	LL	A1	1:500	MARCH 2021
Project No.	Drawing No.	Revision		
20520	301	05		

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