

Land at Coventry Stadium, Brandon

Designer's Response to Stage 1 RSA
of Proposed Internal Site Layout

1.0 INTRODUCTION

- 1.1 This report sets out the design office response to the results of a Stage 1 Road Safety Audit report of the proposed internal layout associated with the redevelopment of Coventry Stadium to provide up to 137 dwellings. The Stage 1 RSA was undertaken by Mott Macdonald and their audit report is attached as **Appendix A**.

2.0 ITEMS RAISED AT STAGE 1 AUDIT

Problem 1.01

Location: Scheme Wide.

Summary: Lack of links between footways and footpaths may result in pedestrians walking on uneven ground leading to trips and falls.

Recommendation

Provide suitable links between the footways within the development and footpaths that circulate the development.

Designer's Response

- 2.1 The auditor's recommendation is accepted. In addition to connections being provided to the north, south and west, additional links have been shown to the east as set out on the revised site layout plan attached as **Appendix B**. These are located opposite plots 76 and 105.

Problem 1.02

Location: Internal layout dwellings 73-76.

Summary: Lack visibility for dwellings 73-76 may result in conflict.

Recommendation

Confirm visibility splays are appropriate for expected vehicle speeds. Additional speed reducing features may be required to further lower speeds.

Designer's Response

- 2.2 The auditor's recommendation is accepted and the visibility at these plots has been reviewed further.
- 2.3 Importantly, there are two factors regarding visibility one of which is junction visibility and the other is the stopping sight distance (SSD) and whilst both are calculated using the same measurements the purpose of them is different. The junction visibility is provided to ensure that a driver exiting the junction can see an appropriate distance along the carriageway so that they can make an informed decision of whether they consider it is safe to pull out and the distance is based on the time taken for an approaching vehicle to stop. Traditionally this has been measured to the nearside kerb line or as per Manual for Streets 2 (MfS2) to the nearside edge of the vehicle track. Both allow for an overtaking vehicle to be seen.
- 2.4 In terms of the SSD MfS states that "The stopping sight distance (SSD) is the distance within which drivers need to be able to see ahead and stop from a given speed. It is calculated from the speed of the vehicle, the time required for a driver to identify a hazard and then begin to brake (the perception–reaction time), and the vehicle's rate of deceleration. For new streets, the design speed is set by the designer. For existing streets, the 85th percentile wet-weather speed is used".
- 2.5 Clearly, therefore, the importance of this is to ensure an approaching driver can see any vehicle likely to emerge from a driveway into the path of their vehicle. As demonstrated on **Drawing 16115-18** attached as **Appendix C**, the forward visibility splays have been derived based on a 15mph design speed which is considered reasonable on this section given its alignment and its status within the overall development scheme. The drawing demonstrates minor encroachment on the front of some of the development plots and it is proposed that residents of those plots would be prevented from planting anything above 0.6m where the splays are shown. This would be secured through the Section 106 Agreement.

Problem 1.03

Location: Residential roads near all-weather pitch.

Summary: Vehicles may park on-street restricting access and preventing turning movements leading to conflict.

Recommendation

Provide sufficient off-street parking for the all-weather pitch. Parking restrictions may be required, particularly within the turning heads.

Designer's Response

- 2.6 The auditor's recommendation is accepted. The level of parking has been informed by discussions with potential operators and is considered to represent an appropriate level of parking to accommodate expected demand. Consequently, it is considered unlikely that overspill parking onto residential streets would occur in practice. It is proposed however that the demand for car parking associated with the all-weather pitch will be monitored and the need for further restrictions kept under review.

Appendix A

Brandon Stadium Speedway Lane, Coventry

Road Safety Audit
Stage 1

3 May 2022

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Brandon Stadium Speedway Lane, Coventry

Road Safety Audit
Stage 1

3 May 2022

Issue and Revision Record

| Revision | Date | Originator | Checker | Approver | Description |
|----------|------------|---|---|---|-------------|
| A | 03/05/2022 | R J Collins | T J Blaney | J T Pearson | First Issue |
| | |  |  |  | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Document reference: 100414124 | TPN | ITD | 048 | A

Information class: Standard

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1 Introduction

This report describes a Stage 1 Road Safety Audit carried out on the proposed internal arrangements for a development on land previously occupied by Coventry Stadium.

The audit was carried out at the request of David Tucker Associates.

The audit took place at the Bristol office of Mott MacDonald and consisted of a detailed examination of the submitted documentation and drawings listed in **Appendix A**.

It is confirmed that this is a Stage 1 Road Safety Audit and that the audit was undertaken upon completion of the preliminary design work.

The Road Safety Audit Team, as approved by the David Tucker Associates' Project Sponsor, Tom Mais, consisted of:

| | |
|------------|--|
| Tim Blaney | BSc (Hons), CMILT, MCIHT, MSoRSA (Certificate of Competency in Road Safety Audit, July 2012) Audit Team Leader, Mott MacDonald |
|------------|--|

| | |
|-----------------|---|
| Rachael Collins | BA (Hons), MSc, MCIHT (Certificate of Competency in Road Safety Audit, July 2016) Audit Team Member, Mott MacDonald |
|-----------------|---|

A visit to the site was completed on Tuesday 26 April 2022 at 13.15 hrs. During this visit the weather was sunny with light winds, and the road surface was dry. Traffic conditions were low and free flowing. No pedestrian activity was observed near Speedwell Lane. No cycle activity was observed.

This Road Safety Audit was carried out in accordance with National Highways' Departmental Standard GG119. The Road Safety Audit Team has examined and reported 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.

The comments and suggestions for road safety improvements made in this report seek to address matters that might have an adverse effect on road safety in the context of the chosen design. No attempt has been made to comment on the justification of the scheme. Consequently, the auditors accept no responsibility for the design or construction of the scheme.

All the issues raised in this report are considered to be required for action. The comments contained in the report are based on safety related concerns and as such the design engineer will need to consider carefully how to respond to each of the issues. The Audit Response Report should be completed by the Design Team and kept on file for future reference.

Two previous Stage 1 Road Safety Audits were undertaken by Mott MacDonald on the access arrangements (*Doc. Ref: 382187-TPN-ITD-048-A*) and a new pedestrian crossing facility (*Doc. Ref: 398911-TPN-ITD-001-A*) for the new development. This Audit examines only the internal layout.

A Key Plan indicating the location of any identified safety related issues is provided in **Appendix B**.

Scheme Description

It is proposed that a new residential development of up to 137 dwellings along with a sports pitch, pavilion and associated car park will be provided with access from Rugby Road.

The internal layout will consist of carriageway widths between 5.0m and 6.0m and footways will continue through the development.

2 Items Raised at this Stage 1 Audit

This section describes road safety related issues identified by the Audit Team during the Stage 1 Road Safety Audit.

2.1 Problem 1.01

Location: Scheme wide

Summary: Lack of links between footways and footpaths may result in pedestrians walking on uneven ground leading to trips and falls.

A footpath is proposed to circulate the development, however there would appear to be only one connection (located on the northern side) which links to the footways within the development. It is likely that a development of this size will generate pedestrian movements between the footways within the development and the footpath outside of the development. A failure to provide appropriate links may result in pedestrians walking on uneven ground which may lead to trips and falls.

Recommendation

Provide suitable links between the footways within the development and footpaths that circulate the development.

2.2 Problem 1.02

Location: Internal layout dwellings 73 to 76.

Summary: Lack of visibility for dwellings 73 to 76 may result in conflict.

Dwellings 73 to 76 are located on a bend in the carriageway which is described as a Green Lane (5.0m in width). Apart from the road width, the Audit Team do not have information on what this Green Lane represents. Although it is noted that traffic flows and vehicle speeds are likely to be low, the Audit Team is concerned that inter-visibility between exiting and approaching vehicles may be insufficient, increasing the risk of conflict between turning and ahead traffic.

Figure 1: Proposed layout of dwellings



Source: Michael Payne Group

Recommendation

Confirm visibility splays are appropriate for expected vehicle speeds. Additional speed reducing features may be required to further lower speeds.

2.3 Problem 1.03

Location: Residential roads near all-weather pitch.

Summary: Vehicles may park on-street restricting access and preventing turning movements leading to conflict.

An all-weather pitch is proposed as part of the development for which the Audit Team do not have the full details in relation to the parking. The Audit Team is concerned that should insufficient parking be provided, vehicles may park on the residential roads and potentially within the turning heads. Parking within the turning heads may restrict access to driveways and prevent road users from being able to turn which may result in inappropriate turning movements increasing the potential for conflict. Significant numbers parking on-street may restrict the free flow of traffic or should vehicles park partly on the footway, pedestrians may be forced into the carriageway, increasing the risk of conflict.

Figure 2: Proposed All-weather pitch



Source: Michael Payne Group

Recommendation

Provide sufficient off-street parking for the all-weather pitch. Parking restrictions may be required, particularly within the turning heads.

3 Audit Team Statement

We certify that this audit has been carried out in accordance with National Highways' Departmental Standard GG119.

Road Safety Audit Team Leader

T J Blaney BSc (Hons), CMILT, MCIHT, MSoRSA
(Certificate of Competency in Road Safety Audit, July 2012)

Signed:



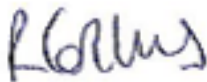
Date: 3rd May 2022

Principal Road Safety Engineer
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Road Safety Audit Team Member

R J Collins BA (Hons), MSc, MCIHT
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Signed:



Date: 3rd May 2022

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Appendices

| | | |
|----|---------------------------------------|---|
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| B. | Location Plan – Coventry Stadium | 9 |

A. List of Drawings & Documents Examined

Table 3.1: Drawings

| Drawing Number | Revision | Drawing Title |
|----------------|----------|---|
| 343A08 - 101 | A | Brandon Stadium, Speedway Lane, Site Layout |
| 343A08 - 102 | A | Brandon Stadium, Speedway Lane, Road Hierarchy Plan |
| 16115-17-1 | B | Visibility Splays 2.4m x 25m |
| 16115-17-2 | B | Forward Visibility Splay @18m |

Source: David Tucker Associates / Michael Payne Group

Table 3.2: Documents

| Document Number | Revision | Document Title |
|--------------------|----------|---|
| 180186c Final | 5/8/2021 | Letter from Warwickshire CC Development Planning to Rugby Borough Council |
| 382187-TPN-ITD-048 | A | Stage 1 Road Safety Audit – Access Arrangements |
| 398911-TPN-ITD-001 | A | Stage 1 Road Safety Audit – Pedestrian Crossing Point |

Source: David Tucker Associates / Michael Payne Group

Scheme wide:
Problem 1.01

| House type | No. | Storey | Bed | Parking Spaces Per Dwelling | Sqft | Total Sqft |
|--------------------------|-----|--------|-----|-----------------------------|------|------------|
| Open Market | | | | | | |
| Montague | 2 | 2 | 2 | 2 | 759 | 1,518 |
| Crawford | 18 | 2 | 2 | 2 | 769 | 13,842 |
| Barwick | 18 | 2.5 | 3 | 2 | 863 | 15,534 |
| Beaufort | 23 | 2 | 3 | 2 | 910 | 20,930 |
| Ravenhurst | 1 | 2 | 3 | 2/3 | 910 | 910 |
| Carlton | 5 | 2 | 3 | 2/3 | 1000 | 5,000 |
| Coston | 7 | 2 | 3 | 3 | 1011 | 7,077 |
| Freemant | 11 | 2 | 4 | 3 | 1270 | 13,970 |
| Tansley | 4 | 2 | 4 | 3 | 1392 | 5,568 |
| Oton | 30 | 2 | 4 | 3 | 1519 | 45,570 |
| Sub Total | 99 | | | | | 99,531 |
| Affordable (Rent) | | | | | | |
| Crawford | 7 | 2 | 2 | 2 | 769 | 5,383 |
| Beaufort | 4 | 2 | 3 | 2 | 910 | 3,640 |
| Ravenhurst | 3 | 2 | 3 | 2/3 | 910 | 2,730 |
| Sub Total | 25 | | | | | 20,778 |
| Affordable (SO) | | | | | | |
| Crawford | 7 | 2 | 2 | 2 | 769 | 5,383 |
| Beaufort | 3 | 2 | 3 | 2 | 910 | 2,730 |
| Ravenhurst | 1 | 2 | 3 | 2/3 | 910 | 910 |
| Sub Total | 25 | | | | | 20,778 |
| Grand Total | 124 | | | 290 Spaces | | 120,307 |

KEY

- Site Boundary
- Rented Housing
- Shared Ownership Housing
- Existing Trees
- Indicative New Planting
- Indicative Location of Alteration Ponds & Basins
- Proposed Railing Boundary Treatment
- Proposed Hedges

| Rev | Amendments | Date |
|-----|--|----------|
| A | Selected House Type Canopies Amended. Paving increased & Ownership Boundaries set back to allow for Vision Splays. | 15.09.21 |

Client
Brandon Estates Ltd

Project
Brandon Stadium, Speedway Lane

Drawing
Site Layout

Date
June 2021

Purpose
Planning

Scale
1:500

Drawing Size
@ A1

Project No.
343A08

Drawing No.
101

Revision
A

Malcolm Payne Group

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Not to Scale

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Appendix B



Approximate Position
of All Weather Pitch

| Housetype | No. | Storey | Beds | Parking Spaces Per Dwelling | Sqft | Total Sqft |
|-----------|-----|--------|------|-----------------------------------|------|------------|
|-----------|-----|--------|------|-----------------------------------|------|------------|

| | | | | | | |
|-------------|----|-----|---|-----|------|--------|
| Open Market | | | | | | |
| Montague | 2 | 2 | 2 | 2 | 755 | 1,510 |
| Crawford | 18 | 2 | 2 | 2 | 769 | 13,842 |
| Barwick | 18 | 2.5 | 3 | 2 | 863 | 15,534 |
| Beaufort | 23 | 2 | 3 | 2 | 910 | 20,930 |
| Ravenhurst | 1 | 2 | 3 | 2/3 | 910 | 910 |
| Carlton | 5 | 2 | 3 | 2/3 | 1000 | 5,000 |
| Cofton | 7 | 2 | 3 | 3 | 1011 | 7,077 |
| Freemont | 11 | 2 | 4 | 3 | 1270 | 13,970 |
| Tansley | 4 | 2 | 4 | 3 | 1392 | 5,568 |
| Olton | 10 | 2 | 4 | 3 | 1519 | 15,190 |

| | | | | | | |
|-----------|----|--|--|--|--|--------|
| Sub Total | 99 | | | | | 99,531 |
|-----------|----|--|--|--|--|--------|

| | | | | | | |
|-------------------|---|---|---|-----|-----|-------|
| Affordable (Rent) | | | | | | |
| Crawford | 7 | 2 | 2 | 2 | 769 | 5,383 |
| Beaufort | 4 | 2 | 3 | 2 | 910 | 3,640 |
| Ravenhurst | 3 | 2 | 3 | 2/3 | 910 | 2,730 |

| | | | | | | |
|-----------------|---|---|---|-----|-----|-------|
| Affordable (SO) | | | | | | |
| Crawford | 7 | 2 | 2 | 2 | 769 | 5,383 |
| Beaufort | 3 | 2 | 3 | 2 | 910 | 2,730 |
| Ravenhurst | 1 | 2 | 3 | 2/3 | 910 | 910 |

| | | | | | | |
|-----------|----|--|--|--|--|--------|
| Sub Total | 25 | | | | | 20,776 |
|-----------|----|--|--|--|--|--------|

| | | | | | | |
|--------------|-----|--|--|------------|--|---------|
| Grand Total: | 124 | | | 290 Spaces | | 120,307 |
|--------------|-----|--|--|------------|--|---------|

KEY

- Site Boundary
- Rented Housing
- Shared Ownership Housing
- Existing Trees
- Indicative New Planting
- Indicative Location of Attenuation Ponds & Basins
- Proposed Railing Boundary Treatment
- Proposed Hedgerows

| Rev | Amendments | Date |
|-----|--|----------|
| A | Selected House Type Canopies Amended. Paving increased & Ownership Boundaries set back to allow for Vision Splays. | 15.09.21 |
| B | All Weather Pitch and associated elements moved 10m from edge of existing woodland. Wider landscaping updated. | 20.12.21 |
| C | Footpath connections added. | 23.05.22 |

Client
Brandon Estates Ltd

Project
Brandon Stadium, Speedway Lane

Drawing
Site Layout

Date
June 2021

Purpose
Planning

Scale
1:500

Drawing Size
@ A1

Project No.
343A08

Drawing No.
101

Revision
C



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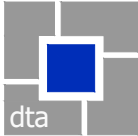
Appendix C



Based upon the ORDNANCE SURVEY MAPS with the permission of THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE
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| REV | DESCRIPTION | DRAWN | INITIALS | DATE | DRAWING STATUS | CHECKED BY | DATE |
|-----|-------------|-------|----------|------|----------------|------------|------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
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| | | | | | | | |



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| JOB TITLE | | CLIENT | |
|---|----------|---------------------|------------|
| Coventry Stadium | | Brandon Estates Ltd | |
| DRAWING TITLE | | | |
| Driveway Visibility Splays @17m (Based on 15mph Vehicle Speeds) | | | |
| SCALE | DRAWN BY | DATE | DRAWING No |
| 1: 500@A3 | TM | 20.09.21 | 16115-18 |
| | | | REVISION |



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