

● **London**  
1– 5 Offord Street  
London N1 1DH  
Telephone 020 7700 6666

**Norwich**  
1 Bank Plain  
Norwich NR2 4SF  
Telephone 01603 628 074

**Cambridge**  
16 Signet Court Swann Road  
Cambridge CB5 8LA  
Telephone 01223 656 058

**Colchester**  
35 Mayfly Way  
Colchester CO7 7WX  
Telephone 01206 581 950

design@conisbee.co.uk  
www.conisbee.co.uk

## Rebuttal Statement

### Paul Hartfree IEng MICE, MCIHT

**Bricket Wood Sports and Country Club, Paintball Site and Bricket Lodge, Lye Lane, St Albans, AL2 3TF**

CD 2.17

Ref: 231436/PTH/CD2.17

Date: 29 May 2024



#### Directors

Tom Beaven BEng (Hons) CEng MStructE  
Allan Dunsmore BEng (Hons) CEng FStructE MICE  
Richard Dobson MEng CEng MStructE  
Paul Hartfree IEng MICE MCIHT FGS  
Ben Heath BEng CEng MStructE  
Kevin Clark BSc (Hons) PhD DIC CEng MICE FRSA,  
Conservation Accredited Engineer (CARE)  
Denis Kealy BEng (Hons) CEng MIEI MStructE

#### Associate Directors

David Richards BEng (Hons) ACGI CEng MStructE  
Tom Lefever BEng (Hons) CEng C.WEM MICE MCIWEM  
Nigel Nicholls IEng AMStructE

#### Associates

Gary Johns  
Christina Kennedy MEng (Hons) CEng MStructE  
Joel Waugh Tech Eng MICE  
Adam Crump BSc (Hons) Civil Engineering  
Beena Doal Head of Finance & Operations  
Andrew Marshall BEng  
Robert Frostick MEng CEng MSc MStructE FRSA  
Gavin McLachlan MEng MStructE  
Jonathan Little MEng MStructE  
Steve Marks BEng (Hons) MStructE  
Pete Boal MEng (Hons) CEng MStructE  
Simon Prior BSc MSc FGS

Tabitha Sudbury MA BA Head of Marketing

Conisbee is a trading name of  
Alan Conisbee and Associates Limited  
Registered in England No. 3958459

## 1.0 INTRODUCTION

- 1.1 I, Paul Hartfree, a director of Alan Conisbee and Associates Limited – Consulting civil and structural engineers trading as 'Conisbee'. The practice was formed in 1982 and we currently employ approximately 90 staff, with teams specialising in Civil and Structural Engineering.
- 1.2 I am a member of the Institution of Civil Engineers and Chartered Institute of Highways and Transportation and registered with the Engineering Council.
- 1.3 I have 28 years experience of highways and drainage design and construction projects in the UK and worked for a developer for 8 years and past 20 years in private practice in London and the southeast of England.
- 1.4 My experience is planning and detailed design / construction, consequently I have completed hundreds of projects over my career to date.
- 1.5 I confirm that I have made clear which facts and matters referred to in this report are within my own knowledge and which are not. Those that are within my own knowledge I confirm to be true. The opinions I have expressed represent my true and complete professional opinions on the matters to which they refer.
- 1.6 This rebuttal statement contains my evidence in response to the transport matters in Mr Nick Ferguson rebuttal statement CD 2.16 and specifically items 2.11 & 2.12 (implementation of footpath)

## 2.0 REBUTTAL OF EVIDENCE

- 2.1 Conisbee have been commissioned by J F Rudkin (Builders) Ltd to prepare planning status drawings to provide details to ascertain how the proposed footpath along Lye Lane could be constructed.
- 2.2 The new footpath width encroaches wholly or partially within the existing ditch profile along Lye Lane but is within land ownership of HCC.
- 2.3 The existing ditch varies in width and depth along Lye Lane and shows little evidence of high surface water flows.
- 2.4 Existing headwalls either end of Lye Lane have been found to exist, which implies the ditch is functional and serves to convey surface water from the highway to a designated outfall.
- 2.5 The existing ditch will require culverting in the form of oversized pipes to allow the construction of the backfill and new footway surfacing material, this will be in conjunction with approvals under the Land Drainage Act 1991 and Lead Local Flood Authority.
- 2.6 The existing trees along the ditch and their impact on any culverting works, have been addressed by Mr David Clarke Proof of Evidence and rebuttal evidence.
- 2.7 The design of the culverts will require hydraulic assessment of the existing catchment and flows into the ditch, to ensure that a 'like for like' capacity is achieved and to prevent overland flooding / downstream flooding along Lye Lane.
- 2.8 The highway will discharge into the culvert via new gullies, the culvert capacity will include the increased impermeable areas from the carriageway and new footpath.
- 2.9 The existing ditch and its outfalls will be fully surveyed to ensure that hydraulic modelling of the catchments correctly quantifies the extents of areas discharging into the ditch, a topographical survey of the adjacent ancient woodland will also be required to interpret any overland flows.
- 2.10 The new footpath would be constructed over the culverts and backfill material, with the use of a retaining structure to the back of the footpath to avoid encroachment on the existing tree roots and retain as much of the existing ditch profile as possible.
- 2.11 The culvert proposal allows for intermediate manholes for access and future maintenance.
- 2.12 It is my view that the culverting of the ditch can be achieved, without detrimental flooding impact to the surrounding areas, with careful and considerate engineering design.