



Town and Country planning Act 1990

S78 Appeal against the Refusal of Planning Permission

Evidence: Historic Environment (Archaeology)

Witness: Nicholas Crank BSc MCIfA

Reference:

PINS APP/Y0435/W/20/ 3251121

LPA 19/01818/OUT

Appellant: Appeal by HB (South Caldecotte) Limited

Site: South Caldecotte, Bow Brickhill

Date: 28th July 2020

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1. Summary

1.1 My name is Nicholas Crank. I am employed by Milton Keynes Council (“MKC”) as Senior Archaeological Officer in the Conservation & Archaeology Team and I am MKC’s witness on archaeological matters in this appeal.

1.2 My evidence considers:

- The archaeological background to the Site (section 4), and specifically the relationship of the archaeology in Area 2 to the nearby Scheduled Monument of the Roman Town of Magiovinium and Roman Fort (National Heritage List no. 1006943) highlighting how the archaeology in area 2 should be regarded as a significant and distinctive integral component of the Magiovinium settlement;
- (section 5) the significance of archaeology in Area 2, challenging the assessment put forward by the Appellant and demonstrating how it underestimates the significance and consequently acts to reduce the level of heritage harm. This section includes a summary (5.6.5, page 18) of why these heritage assets are in my view of high regional significance;
- how methodological inconsistencies with the Environmental Statement act to artificially reduce the level of heritage harm (section 6);
- (section 7) how the Appellant does not properly consider alternatives that would avoid or reduce the level of heritage harm and the Proposal is therefore not compliant with good practice or Plan:MK (C.D. E.1) policy HE1 (F) which requires that the assessment of the benefits of the Proposal should only be made once ‘all feasible solutions to avoid and mitigate that harm have been fully implemented’ and Site-specific policy SD14 (9) of Plan:MK (C.D. E.1) which requires significant archaeological constraints to inform the layout of the development.;
- and finally (section 8), I summarise why taking into account the above evidence, the Proposal is not compliant with the conservation objectives of the NPPF and NPPF policy 197 in particular, and also does not comply with the development plan policies set out in Plan:MK (C.D. E.1) HE1 (F), SD1 (A19) and SD14 (C9) and therefore I have objected to the Proposal.

1.3 This proof of evidence should be read in conjunction with that of Senior Planning Officer Mr David Buckley of MKC, who will examine the range of planning benefits and dis-benefits of the Proposal and set out the weight which should be applied to these.

2. Qualifications and Experience

2.1 I hold a BSc honours degree in archaeology from the University of Bradford. I am a full Member of the Chartered Institute for Archaeologists (MCIfA).

2.2 I am employed by MKC as Senior Archaeological Officer in the Conservation & Archaeology Team. I have been employed by MKC since January 2006, first as Archaeological Officer, and since March 2009 as Senior Archaeological Officer. Prior to this, from 1998 I was employed by various commercial archaeological contractors in the south and east of England initially as a field archaeologist and latterly as a Senior Project Officer. I have more than 20 years' professional experience of the historic environment in both the public and private sectors. Most of this work has concerned archaeology within the planning system, involving a broad range of site types and periods in addition to historic buildings and landscapes.

2.3 I am a corporate member of the Association of Local Government Archaeological Officers (ALGAO) and am actively involved with the ALGAO Planning and Legislation sub-committee.

2.4 I am on the Council of the Buckinghamshire Archaeological Society and compiled and edited the summaries of archaeological work in the county for the society's journal 'Records of Buckinghamshire' between 2010 and 2017. I have also been a committee member of the South Midlands regional group of the Council for British Archaeology since 2009 and was Chair of the group between 2013 and 2016. Since 2016 I have edited the group journal 'South Midlands Archaeology' which includes annual summaries of all the archaeological work carried out in Bedfordshire, Buckinghamshire, Northamptonshire and Oxfordshire.

2.5 I confirm that the evidence which I have prepared and provided for this appeal is true to the best of my knowledge and belief and it has been prepared and is given in

accordance with the guidance of the Chartered Institute for Archaeologists, my professional institution. I confirm that the opinions expressed are my true and professional opinions.

3. Main Issues, Policies, and the Scope of this Proof

3.1 This Inquiry is into the refusal of a planning application (planning reference 19/01818/OUT) (“the Proposal”) for land at South Caldecotte in Milton Keynes (“the Site”). The Proposal is for outline planning permission with all matters reserved except access. Details of the Site and the Proposal are already set out in documents before this appeal and will not therefore be repeated here.

3.2 The Proposal was refused for three reasons as set out in the decision notice (C.D. D.1). Two of these refer to highway and transport matters and ecology and so are not relevant to this Proof but Reason for Refusal 1 (“the Archaeology RfR”) concerns archaeology and states:

1. The proposal, by reason of the total loss of non-designated heritage assets of archaeological interest, failure to ensure that consideration is given to the historic environment in informing the site layout and the quantum of development and failure to demonstrate that the benefits of the development clearly outweigh the harm, taking into account the assets significance and importance, would be unacceptable, contrary to NPPF policy 197 and Plan:MK policies HE1 (F), SD1 (A19) and SD14 (C9).

3.3 National Planning Policy Framework (February 2019) (“the NPPF”) paragraph 197 states that:

“The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.”

3.4 Plan:MK (C.D. E.1) ‘Heritage and Development’ policy HE1 (F) states that:

“Proposals that result in harm to the significance of non-designated heritage assets will be resisted unless the need for, and benefits of the development clearly outweigh the harm, taking into account the asset's significance and importance, and only once all feasible solutions to avoid and mitigate that harm have been fully implemented.”

3.5 Plan:MK (C.D. E.1) ‘Place-Making Principles for Development’ policy SD1 (A19) states, *inter alia* that strategic developments should ‘ensure consideration is given to the historic environment in accordance with policy HE1.’

3.6 Plan:MK (C.D. E.1) policy SD14 is a specific policy for the Site (“the Site Allocation Policy”) and part C9 of it states that:

“A desktop Archaeological Assessment should be undertaken to understand the likely presence of archaeological remains within the site. The recommendations of the Assessment will be implemented prior to each phase of development commencing. It may be necessary to undertake a field investigation to understand the archaeological potential and significance of this site and to inform the layout of development.”

3.4 Historic England have published four ‘Historic Environment Good Practice Advice in Planning’ documents. The second of these (GPA2) ‘Managing Significance in Decision-Taking in the Historic Environment’ (March 2015) is of relevance¹. The document sets out the structured approach required when a proposal is likely to affect the significance of heritage assets.

3.5 A Statement of Common Ground on Archaeology is before this appeal (C.D. K.6). This indicates that the key outstanding area of disagreement between the parties relates to the significance of the principal area of archaeological interest within the Site, namely the remains of a Roman street (c.250m in length) and adjacent areas of settlement, craft and industry associated with, or forming part of, the Roman town of Magiovinium located in the southern part of the Site – referred to by the Appellant as ‘Unwins Land’ (shown on plan in Appendix 1), henceforth referred to as “Area 2”.

3.6 My Proof of Evidence firstly provides an overview of the Roman town of Magiovinium, placing it in its regional and national context and explaining the link between this and

¹ Appendix 2.

the significance of the heritage assets of archaeological interest in Area 2. I then examine the significance of the principal area of archaeological interest within the site, Area 2. My assessment challenges the assessment put forward by the Appellant in its Environmental Statement (“ES”)(C.D. B.10) and Supplementary Heritage Assessment (“SHA”)(C.D. A.38) and in so doing demonstrates that these non-designated heritage assets are at the higher end of the scale of regional significance and also possess a number of attributes in common with and possessing a clear association with the nearby Scheduled Monument of the Roman Town of Magiovinium and Roman Fort (National Heritage List no. 1006943).

- 3.7 I then examine the methodology applied by the Appellant in its ES. In so doing I seek to show that the methodology used to assess the harm caused by the Proposal is inconsistent, does not follow best practice, and consequently acts to underestimate the overall harm caused to the historic environment and specifically the harm caused by the loss of the non-designated heritage assets of archaeological interest in Area 2.
- 3.8 Next, I examine the Appellant’s approach to mitigating this harm, highlighting how this is not constraint-led and fails to consider less harmful alternatives, in particular avoiding harm to the non-designated heritage assets of archaeological interest in Area 2 by seeking to preserve them within a revised layout. As such it fails to meet the objectives set out in Plan:MK (C.D. E.1) policies HE1 (F), SD1 (A19) and SD14 (C9) cited in the Archaeology RfR and also fails to follow good practice as set out in Historic England GPA2 and the DMRB guidance² on Environmental assessment and monitoring.
- 3.9 Finally, I summarise why the Proposal is not considered compliant with the conservation objectives of the NPPF and NPPF paragraph 197 in particular, and also does not comply with the development plan policies set out in Plan:MK (C.D. E.1) HE1 (F), SD1 (A19) and SD14 (C9) and therefore I have objected to the Proposal.

² Appendix 3

4. Magiovinium Roman Town

- 4.1 Magiovinium is one of a class of sites commonly referred to as ‘small towns’ of which Historic England consider that there are 133 recorded in England³. Of these around 48 including Magiovinium may be described as defended⁴. This immediately puts Magiovinium in an important class of settlement of which there are relatively few examples in England, a fact underlined by the status of the nucleus of the town and the associated fort as a Scheduled Monument⁵, a nationally significant designated heritage asset.
- 4.2 Little modern archaeological work has taken place within the scheduled part of the town. The most substantial excavations took place at the south-eastern end of the settlement, with a smaller area of excavation to the north, both outside the scheduled area, in association with different phases of the A5(T) road construction⁶. Recent trial trench evaluations, mitigation excavations (Eaton Leys) and geophysical surveys on both the north (the Site) and south (Eaton Leys) sides of the town have served to clarify its overall extent (see plan, Appendix 6).
- 4.3 The recent archaeological investigations in relation to the Eaton Leys development to the immediate south of the scheduled area of the town revealed late Iron Age and Roman ditches forming drove-ways for livestock and a field system in addition to a number of 1st century AD cremation burials and an early/middle Saxon cremation cemetery⁷. In contrast to the clear evidence for roadside settlement revealed in Area 2 of the Site, the Eaton Leys remains, though of regional significance, did not contain

³ “There are a total of 133 Roman small towns recorded in England. These are mainly concentrated in the Midlands and central southern England. Some examples have survived as undeveloped ‘greenfield’ sites and consequently possess particularly well-preserved archaeological remains.” from ‘Reasons for Designation’, Ashton (Appendix 13) and Baldock (Appendix 14) Roman Small Towns list entries on National Heritage List England (NHLE): <https://historicengland.org.uk/listing/the-list/list-entry/1021454> & <https://historicengland.org.uk/listing/the-list/list-entry/1016305>, accessed 28/07/2020

⁴ Appendix 15: Plan from Defended Small Towns of Roman Britain project 2018 found at https://archaeologydataservice.ac.uk/archives/view/strb_na_2018/index.cfm, accessed 15/07/2020

⁵ Appendix 16: NHLE list entry for Magiovinium, <https://historicengland.org.uk/listing/the-list/list-entry/1006943> accessed 28/07/2020

⁶ Appendix 4: Neal, D, 1987 Excavations at Magiovinium, Buckinghamshire, 1978-80, Records of Bucks 29, 1-124; & Appendix 5: Hunn, A, Lawson, A and Parkhouse, J, 1995, Investigations at Magiovinium 1990–91: The Little Brickhill and Fenny Stratford By-Passes, Records of Bucks 37, 3–66. Appendix 4.

⁷ Appendix 7: Hannah, D & Daniel, P, 2019, *Land at Eaton Leys, Milton Keynes, Buckinghamshire: Post-excavation Assessment and Updated Project Design*, iv

evidence for structures or permanent occupation and are regarded as representing rural hinterland of Magiovinium rather than an integral part of the settlement unlike Area 2. This difference in status and function is also reflected in the range and quantities of artefacts recovered from Eaton Leys, particularly pottery, brick and tile which were substantially lower than in Area 2. This aspect is discussed further in section 5.3 (below).

- 4.4 The plan of the town of Magiovinium (plan, Appendix 6) is dominated by the approximately oval defended enclosure astride the line of Watling Street, and forming the majority of the Scheduled Monument. The defences are, in common with the defences at several other small towns, assigned a late 2nd or early 3rd century date, though as Hunn *et al*⁸ emphasise this is unproven. The combined evidence, particularly that of the southern magnetometer survey⁹ shows that the plan of Magiovinium is considerably more complex than at first appears. In addition to the defences and enclosure systems fronting Watling Street, secondary roads running north (the road/street identified in Area 2) and south from the settlement are associated with further groups of enclosures.
- 4.5 These enclosures are known directly from the excavations on the north-east side of Watling Street at the south-east end of the settlement, while geophysical survey evidence shows that on the south-west side of Watling Street they extended about two-thirds of the way through the defended area before the system appears to fragment (plan, Appendix 6).
- 4.6 A further important element in the settlement plan lay at its northern end. Here a road ran northwards (the road/street identified in Area 2 of the Site), presumably connecting with Watling Street to the south. This was initially encountered in Neal's Site 18¹⁰ some 200m distant from Watling Street on the line of the modern A5(T) where a c.50m stretch of the road was examined by limited trenching in challenging

⁸ Appendix 5: Hunn, A, Lawson, A and Parkhouse, J, 1995, Investigations at Magiovinium 1990–91: The Little Brickhill and Fenny Stratford By-Passes, Records of Bucks 37, 61.

⁹ Appendix 8: Walford, J, 2014

¹⁰ Appendix 4: Neal 1987, 24-29

conditions¹¹. The surviving surface was bounded by ditches beyond which lay rectilinear ditched plots, some identified in geophysical survey. Despite the limited extent of trenching undertaken by Neal, groups of late 1st century to late 2nd century AD cremation burials were encountered at three separate locations within Site 18¹².

- 4.7 The northward continuation of this road and related features form a very significant part of the evidence revealed in the archaeological investigations connected with the Proposal. It is suggested by both Neal¹³ and Hunn *et al*¹⁴ that this was more than a local lane, but rather a road of regional status and function potentially leading to the scheduled defended small town of Irchester (near Wellingborough, Northants) via the regionally significant pottery, brick and tile production centre at Harrold, Bedfordshire.
- 4.8 The approach adopted in the ES and SHA is to represent Magiovinium as a typical 'small town' and to emphasise the ordinariness of its archaeology, and particularly the peripheral nature of the archaeology in Area 2. In the following section I will further examine the evidence from Area 2 demonstrating that these non-designated heritage assets of archaeological interest are at the higher end of the scale of regional significance and also possess some attributes in common with and a clear association with the nearby Scheduled Monument of the Roman Town of Magiovinium and Roman Fort, and that therefore the Appellant has underestimated the significance of these assets and consequently the harm to the historic environment caused by their total loss.

¹¹ Appendix 4: Neal 1987, 24 states: *'In 1977 a length of the easement was trial trenched for a distance of about 300 m but, as on Site 17, flooding was a serious problem and it was not possible to bottom features. When an attempt was made to bottom a pit by rapid machining the sides of the pit melted away as quicksand'*.

¹² Appendix 4: Neal 1987, 28

¹³ Appendix 4: Neal 1987, 24 states: *'The Roman road runs on a north-south alignment and led directly south towards Dropshort Farm and presumably the main gate into Magiovinium. Its northern route is uncertain, possibly it linked with Harrold, Beds and eventually, perhaps, Irchester on the River Nene.'*

¹⁴ Appendix 5: Hunn *et al*, 1995, 61

5. Significance of the Archaeology in Area 2

5.1 In summary, the evidence revealed in Area 2 of the Site by the geophysical survey¹⁵ and trial trenching¹⁶ connected with the Proposal indicates a road running for some distance from the settlement nucleus, and of more than local significance if it did run, as plausibly suggested (4.6, above), to Irchester via Harrold. Alongside this road is a regular arrangement of rectilinear plots containing indications of a variety of activities, including domestic activity, metalworking and pottery production in the vicinity. There is some evidence for survival of road surfaces – i.e. there is some surviving stratigraphy¹⁷ above the level of the underlying natural subsoil. Structural traces are limited (but almost certainly underrepresented), but at least one timber building was revealed¹⁸, while the existence of further buildings is also indicated by the recovery of reasonable quantities of building materials comprising brick and tile¹⁹.

5.2 *The road / street / enclosures*

5.2.1 Side roads are a common feature in Roman small towns. However, regular arrangements of enclosures along such roads as seen in Area 2 appear to be less common, and there are relatively few in the region that have been systematically examined, though those that have appear to date from the 2nd century AD. In contrast the Area 2 road and associated enclosures are significant as they originate fairly soon after the Roman conquest in the 1st century AD²⁰. The suggestion that the layout appears to be systematically planned²¹, is of particular significance at this date. It marks out this element of the overall settlement plan as distinct from others, with the

¹⁵ C.D. A.33 - Walford J, Meadow A, 2018 Archaeological Geophysical Survey on Land Alongside V10 Brickhill Street, Caldecotte, Milton Keynes Dec 2017-March 2018, MOLA Rep 18/51

¹⁶ C.D. A.40 - Burke J 2018 Archaeological trial trench evaluation on land at South Caldecotte Milton Keynes Buckinghamshire October 2018

¹⁷ A sequence of archaeological layers / deposits

¹⁸ C.D. A.40 - Burke J, 2018, 75

¹⁹ C.D. A.40 - Atkins, R in Burke J, 2018 states: *'This quantity of Roman tile and brick, found in over 30 separate contexts is significant. This amount of brick and tile is not usual for an evaluation and suggests that there are Romanised building(s) in the vicinity of the evaluation trenches and close to the street constructed with tiles and brick.'*

²⁰ C.D. A.40 - Burke J, 2018, 75

²¹ C.D. A.40 - Burke J, 2018, 75 states: *'The regular layout of the enclosures may indicate an element of formal planning rather than organic growth.'*

closest analogy being the plots fronting Watling Street examined by Neal on the south-eastern side of the town²².

5.2.2 The key point here is not so much the existence of the road itself, but what the road represents – i.e. The axis along which were placed carefully defined plots within which a variety of activities were housed. The road itself is of interest, particularly in view of the evidence for some survival of surfaces, but primarily within the context of its relationship to the adjacent enclosures and its probable regional function.

5.3 *Pottery*

5.3.1 The quantities of late Iron Age and Roman pottery recovered (2,608 sherds of pottery weighing 31.9 kg) from the 89 trial trenches are substantial by evaluation standards and distinguish the site from typical rural settlements²³. It is also clear that most of the material derives from the trenches in Area 2. The quantity of pottery recovered from the 89 trenches on the Site contrasts markedly with the much lower quantities of late Iron Age and Roman pottery from the 111 trial trenches excavated on the Eaton Leys site to the immediate south of the scheduled monument from which only 618 sherds weighing 6.57 kg were recovered²⁴.

5.3.2 The relative quantity of imported fabrics such as Samian ware is a useful guide to site character, and the figure of 4% (107 sherds, 1.1 kg)²⁵ of the total sherds for Samian ware, while not remarkable, is above a typical regional rural value, and four times the figure from the relatively nearby regionally significant roadside settlement at Berryfields, Fleet Marston²⁶. By further comparison the mere 8 sherds (15g) of Samian²⁷ recovered from the 111 Eaton Leys evaluation trenches emphasises the

²² Appendix 4: Neal 1987, 8-11, Fig. 3

²³ C.D. A.40 - Sutton, A in Burke, J 2019, 44 states: *'The pottery assemblage represents a substantial collection and range of wares. The size of the assemblage is no doubt due to the presence of substantial occupation in the area, including the Roman street; while the character of the assemblage can certainly be seen to have been shaped by proximity to the Roman town of Magiovinium and close connections to this centre and others via the roadway.'*

²⁴ Appendix 9: Banks, P in Brown, R, 2017, *Land at Eaton Leys, Milton Keynes, Archaeological Evaluation Phase 2*, p.30

²⁵ C.D. A.40 – Table 2, p.46

²⁶ Appendix 10: Biddulph, E, Brady, K, Simmonds, A and Foreman, S, 2019, *Berryfields: Iron Age settlement and a Roman bridge, field system and settlement along Akeman Street near Fleet Marston, Buckinghamshire*, Oxford Archaeology Monograph No. 30, Oxford, p.59

²⁷ Appendix 9: Banks, P in Brown, R, 2017, 31

more rural, peripheral to Magiovinium, less intensively occupied, and consequently less significant nature of the non-designated archaeology at Eaton Leys when compared with that in Area 2 of the Site.

5.4 *Burials*

5.4.1 As with Neal's site 18 (above, 4.6), burials are likely to have been in the vicinity of the roadside enclosures in Area 2. Only one (unexcavated cremation) burial, of suggested Roman date was encountered within the evaluation, in trench 52 outside Area 2²⁸. It is notable that this lay 200m east of the road, which might have implications for the presence of further, at present undetected, burials in the intervening area.

5.5 *Plough truncation and survival of surfaces*

5.5.1 Further consideration of the remains in Area 2 is provided in sections 2.42 & 2.47 of the SHA which assesses their survival/condition. This rightly notes that the remains have a higher level of survival than those on adjacent areas of the Site as the area has not been subject to modern ploughing. However, the assessment then goes on to suggest that, other than the intact Roman street surface no other areas of buried floors or surfaces are likely to survive due to truncation from the overlying ridge and furrow (the street itself surviving only because it coincides with a ridge). Whilst the fact of survival of part of the Roman road under a medieval ridge may be uniquely fortuitous, there is no reason to suppose that this must be the case. The fact of this survival at all is notable, and the absence of evidence in the trial trenches for other surfaces does not rule out their survival in the intervening areas.

5.5.2 That this truncation is not mentioned at all in the trial trenching report is noteworthy, particularly as the report does note significant truncation elsewhere on the site e.g. In relation to the D-shaped enclosure in the north of the Site beyond Area 2²⁹. The trial trenching report contains only a single reference to truncation in Area 2³⁰, in relation

²⁸ C.D. A.40 - Burke J, 2018, 40

²⁹ C.D. A.40 - Burke J, 2018, 21: 'Two ditches associated with the enclosure ditch [3304] and [3308] were present though both had been heavily truncated by later furrows and land drains'

³⁰ C.D. A.40 - Burke J, 2018, 24

to one of the roadside ditches (5.2.3), though this is caused by a later recut [8540] of the original ditch [8543] rather than a furrow.

5.5.3 The SHA (2.47) also seeks to draw comparison with the archaeology on Neal's site 18 where it claims no surfaces were recorded, and site 17 which it notes as being affected by ridge and furrow. In relation to this I note the following from Neal's report:

- No mention of truncation to underlying archaeology due to ridge and furrow;
- No mention of absence of surfaces in relation to Site 18;
- Site 18 is described as containing occupation horizons with associated hearths in its later phase³¹ – This indicates probable surfaces as hearths are often associated with floor surfaces;
- Site 17 contained multiple surviving surfaces from the later phases of archaeology³².
- Excavations on other sites adjacent to Magiovinium e.g. the Bathing Station and Galley Lane sites, also recorded multiple floor layers / surfaces³³.

5.5.5 With the above in mind, it seems unlikely that truncation due to ridge and furrow has had a significant negative effect on the significance of the archaeological interest in those parts of the site where ridge and furrow earthworks survive, including Area 2. Additionally, it is worth noting that the ridge and furrow earthworks both in Area 2 and adjacent fields of the Site coincide with an area of MG5 grassland, a Priority Habitat often associated with this ancient land form, the loss of which forms part of the Ecology RfR (reason for refusal 2) which is discussed by my colleague Phillip Snell in section 4 (in particular 4 j to 4 l) of his proof of evidence.

5.6 *Assessment of Significance*

5.6.1 The part of the substantial Roman settlement of *Magiovinium* seen in Area 2 comprises a distinct area of systematically laid out roadside plots. As a potential through-route this south-north road probably had considerable significance for the

³¹ Appendix 4: Neal 1987, 24

³²E.g. Appendix 4: Neal 1987, 11: 'Following the filling of the road ditches, huts with rough metalled floors and associated with industrial hearths were constructed along the north side of Watling Street.'

³³ Appendix 4: Neal 1987, 4

wider settlement, significance which appears to be reflected in the presence of a more formal arrangement of roadside enclosures than seen elsewhere, apparently established at an unusually early date. The roadside plots contain evidence for a variety of activities and the quantities of associated finds indicate the presence of domestic settlement as well.

- 5.6.2 ES 5.13.20 states that *'the evidence recovered so far suggests that it will confirm, rather than question, existing interpretations.'* This is highly questionable. Firstly, the 'existing interpretation' as set out by Neal in 1987 is ripe for reconsideration. Second, the roadside complex has the potential, because of its extent, to contain archaeological evidence which would significantly refine questions of both the chronology, origins and development of Magiovinium as well as illuminate questions relating to its social, political, economic, strategic and political significance, industry, agricultural practices, trade, commerce, communications, domestic arrangements, decline and overall landscape context.
- 5.6.3 Despite the ES 5.13.21 conclusion that *'the archaeology at (1) Unwin's [Area 2], (2) Woburn and (4) Norman's represents an unexceptional area on the periphery of the small Roman town of Magiovinium'*, where 'periphery' is clearly intended to carry connotations of marginal importance, it is both reasonable and logical to see the roadside settlement in Area 2 as a significant and distinctive integral component of the Magiovinium settlement. As such its regional importance is clear. Moreover, as a substantial part of Magiovinium (including comparable roadside settlement/enclosures) is designated as a Scheduled Monument, the present site could be accorded equivalent significance.
- 5.6.4 With this in mind it is clear that the loss of the heritage assets of archaeological interest and high regional significance in Area 2 will result in considerable heritage harm, and that in line with Plan:MK (C.D. E.1) policy HE1(F) and the Archaeology RfR this loss should be resisted *'unless the need for, and benefits of the development clearly outweigh the harm, taking into account the asset's significance and importance, and only once all feasible solutions to avoid and mitigate that harm have been fully implemented'*. This conservation led approach is also reinforced in the Site-specific Plan:MK (C.D. E.1) policy SD14 which states that the results of archaeological

field investigations should inform the layout of the development. It is my view that this approach to avoiding or mitigating heritage harm has not been followed by the Appellant and this will be further examined in section 7 below.

5.6.5 To conclude, the archaeological interest in Area 2 displays the following characteristics that underline its high regional significance:

- A clear and integral relationship with the scheduled nucleus of the town of Magiovinium;
- A substantial, well preserved, and early road with a probable regional function;
- A formal, regular arrangement of roadside enclosures containing evidence for buildings, domestic and craft activity;
- Artefactual evidence that distinguishes it both quantitatively and qualitatively from a typical Roman rural settlement.
- Potential for burials to the rear of the roadside enclosures as seen on Neal’s adjacent Site 18.
- The *‘capacity to inform the research frameworks of the region, to contribute to the archaeology of the Roman small town and the wider study of Roman urbanism’*³⁴.

6. Environmental Statement Methodology

6.1 In this section I examine the methodology used in the Appellant’s Environmental Statement (“ES”). In so doing I seek to show that the methodology relied on by the Appellant to assess the harm caused by the Proposal is inconsistent and consequently acts to underestimate the overall harm caused to the historic environment and specifically the loss of the non-designated heritage assets of archaeological interest in Area 2.

6.2 The ES does not define what constitutes a ‘significant environmental impact’, though its conclusions rule out such an impact in relation to archaeology. However, the Design Manual for Roads and Bridges Environmental Assessment methodology (DMRB)³⁵

³⁴ C.D. A.38: SHA 2.50

³⁵ Appendix 3: DMRB 2019 (Revision 1) LA 104 Environmental assessment and monitoring

employed by the Appellant defines a significant effect as follows: '*Significant effects typically comprise residual effects that are within the moderate, large or very large categories*'³⁶. In determining the significance of effects arising from the development the ES first introduces table 1.1³⁷ which it states (1.3.6) is to be generally used within the ES. In chapter 5 (archaeology) a similar, yet significantly different table, table 5.3³⁸ is introduced during the discussion of impacts on archaeology. A further table, 5.6³⁹ is introduced to summarise the effects on archaeology showing that in relation to buried archaeology a 'moderate minor' effect is predicted as a result of a major/high impact on a medium (regionally significant) receptor.

6.3 However, if this result were based on the matrix in table 1.1 the result would lead to a 'Moderate to Major' impact. If table 5.3 were used the result would be a 'Moderate' impact. Neither matrix would result in the stated and less significant 'moderate minor' impact. It should also be noted that neither of these tables align fully with the matrix recommended in the DMRB⁴⁰, though table 1.1 comes closest. In comparison table 5.3 appears to work well to *reduce* the significance of environmental effects. It should be again noted that DMRB defines significant effects as residual effects within the moderate, large or very large categories.

6.4 The above leads to the conclusion that, if the Appellant's archaeological assessment is accepted, the proposed development would lead to a Moderate to Major impact, constituting a significant environmental effect. If, however, the assessment is rejected and the archaeological remains in Area 2 are considered to be of high sensitivity/significance, the impact of the proposed development would lead to a Major impact (Large or Very Large on DMRB scale). Either way, it is clear that, contrary to the conclusions of the ES, the proposal in its current form will, by the loss of the heritage assets of archaeological interest in Area 2 lead to a significant adverse environmental effect.

³⁶ Appendix 3: DMRB 2019, 3.7, Note 3, p.15

³⁷ ES p.9, Appendix 11 this document

³⁸ ES p.38, Appendix 11 this document

³⁹ ES p.70 Appendix 11 this document

⁴⁰ DMRB 2019, table 3.8.1, p.15; Appendix 12 this document

6.5 Overall, it is my view that as the heritage assets of archaeological interest in Area 2 are of high regional significance (medium to high sensitivity on the DMRB scale) and the Proposal will lead to their total loss (major impact on the DMRB scale), the scale of residual environmental impact should correctly be viewed as ‘large’ on the DMRB scale, or ‘major’ on the scale employed by the Appellant. In relation to this it is also worth noting that though the ES and SHA⁴¹ both describe the heritage assets of archaeological interest in Area 2 as being of ‘medium’ (i.e. regional) significance, the Appellant in its Statement of Case now asserts that *‘the sub-surface remains are likely to be of no more than local importance’*⁴². This apparent change in position regarding the significance of the heritage assets of archaeological interest in Area 2 attempts to further devalue their significance and as it is not supported by either the evidence revealed by the archaeological investigations or the assessment presented in the Appellant’s ES and SHA or my own assessment in sections 4 and 5 above, I strongly refute it.

6.6 In NPPF and development plan policy terms it is my view that though the heritage assets affected by the Proposal are non-designated they are at the higher end of the scale of significance of non-designated heritage assets (high regional significance) and because the Proposal will result in the total loss of significance of these assets, the resulting harm to heritage is considerable and should be resisted in line with Policy HE1 (F) of Plan:MK (C.D. E.1) *‘unless the need for, and benefits of the development clearly outweigh the harm, taking into account the asset’s significance and importance, and only once all feasible solutions to avoid and mitigate that harm have been fully implemented’*. This is further reinforced by Site-specific policy SD14 (9) of Plan:MK (C.D. E.1) which requires significant archaeological constraints to inform the layout of the development. It is the Appellant’s approach to avoiding, reducing, or mitigating this heritage harm that I turn to in the following section.

7. Proposed Mitigation

⁴¹ C.D. A.38: SHA 2.55: *‘In relation to the DMRB criteria it is clear that the Iron Age and Roman archaeology at South Caldecotte falls into the **Medium** category’*.

⁴² C.D. K.1, 20, section 5.23

- 7.1 The Proposal will lead to the total loss of heritage assets within the site, including those of archaeological interest within Area 2⁴³. In this section I will examine the Appellant’s approach to avoiding, minimising, or mitigating this loss and the resulting harm, highlighting how the approach is not constraint-led and fails to fully consider less harmful alternatives, in particular avoiding harm to the non-designated heritage assets of archaeological interest in Area 2 by seeking to preserve them within a revised layout. And how, as such it fails to meet the objectives set out in Plan:MK (C.D. E.1) policies HE1 (F), SD1 (A19) and SD14 (C9) cited in the Archaeology RfR and also fails to follow good practice as set out in Historic England GPA2 and the DMRB guidance on Environmental assessment and monitoring.
- 7.2 The DMRB guidance set outs a clear hierarchy to be followed when considering mitigation of significant adverse environmental effects as follows⁴⁴:
1. avoidance and prevention: design and mitigation measures to prevent the effect (e.g. alternative design options or avoidance of environmentally sensitive sites);
 2. reduction: where avoidance is not possible, then mitigation is used to lessen the magnitude or significance of effects;
 3. remediation: where it is not possible to avoid or reduce a significant adverse effect, these are measures to offset the effect.
- 7.3 This approach is echoed in the Historic England guidance (GPA2) ‘Managing Significance in Decision-Taking in the Historic Environment’⁴⁵ which states that proposals should seek to: *‘Avoid, minimise and mitigate impact in a way that meets the objectives of the NPPF’*. This is further reinforced by policy HE1 (F) of Plan:MK (C.D. E.1) which states that proposals resulting *‘in harm to the significance of non-designated heritage assets will be resisted unless the need for, and benefits of the development clearly outweigh the harm, taking into account the asset’s significance and importance, and only once all feasible solutions to avoid and mitigate that harm have been fully implemented’* and Site-specific policy SD14 (9) of Plan:MK (C.D. E.1)

⁴³ C.D. B.10: ES, 69, section 5.20.1

⁴⁴ Appendix 3: DMRB 2019, 18, section 3.23

⁴⁵ Appendix 2: p. 2.

which requires significant archaeological constraints to inform the layout of the development. It is my view that the above hierarchy, good practice and policy has not been complied with the Appellant in their ES.

7.4 Area 2 at c.3.5ha comprises approximately 6% of the allocated site area, yet the examination of options for preservation *in situ* in the SHA (4.36) rules out this option on the basis that all the archaeological assets within the site (including those of least significance) comprise 20% of the allocated site. The option of just preserving this area of most significant and well-preserved archaeology in Area 2 is not considered⁴⁶ contrary to the above good practice guidance and policy objectives and despite the Proposal delivering approximately 46,000 sq. m (4.6ha) in excess of the policy requirement minimum.

7.5 The above leads me to conclude that the Appellant has failed to adequately consider why the heritage assets of archaeological interest in Area 2 may not be conserved and retained within an amended development layout. Consequently, as stated in the Archaeology RfR the Proposal is not compliant with Plan:MK (C.D. E.1) Policy SD14 (9) as the significant archaeological constraints have not informed the layout of the development. The lack of consideration of alternative approaches to the development that would avoid and mitigate harm to the heritage assets is also contrary to Plan:MK (C.D. E.1) Policy HE1 (F).

8. Conclusions

8.1 I have sought to demonstrate that the assessment provided by the Appellant underestimates the significance of the heritage assets of archaeological interest in Area 2. The Appellant's assessment does not properly highlight the complexity, rarity, research potential, and good state of preservation of these remains or their clear

⁴⁶ C.D. A.38: SHA 4.36 states: *'The proposed development design footprint provides some 241,548m² of B2/B8 employment space. Archaeological deposits in (1) (3) Unwin's, (4) Normans and (2) Woburn extend over some 10.748ha which constitutes approximately 20% of the development area. This indicates that preservation in situ in an area untouched by development on this scale renders the development unable to achieve the minimum employment floorspace. This suggested at the outset that it is not possible to produce a scheme with an amended layout which avoids any development within the area of archaeological interest.'*

association with the nationally significant designated (scheduled) site of Magiovinium. But instead seeks to diminish this significance by exaggerating the truncation to the underlying archaeology caused by ridge and furrow and seeking to characterise the archaeology in Area 2 as peripheral, marginal, and rural rather than integral to the nearby town of Magiovinium. In my view these remains should be considered to be at the higher end of regional significance as the evidence indicates that they possess a number of distinct attributes in common with and a clear association with the nearby Scheduled Monument of the Roman Town of Magiovinium and Roman Fort.

- 8.2 The Proposal will lead to the total loss of the heritage assets of archaeological interest and high regional significance in Area 2 resulting in considerable heritage harm and amounting to a significant adverse environmental effect.
- 8.2 The Environmental Statement does not define what constitutes a significant environmental effect with regard to archaeology and the methodology used is inconsistent, acting to reduce the magnitude of impact of the Proposal and the resulting heritage harm. Despite these shortcomings it is clear the Proposal will lead to a significant environmental impact due to the total loss of buried archaeological remains within the site, and specifically the loss of the heritage assets of archaeological interest and high regional significance in Area 2.
- 8.3 When considering the impacts of the Proposal on buried archaeology and how this may be mitigated, good practice including the mitigation hierarchy is not followed. Consequently, insufficient consideration is given to the conservation of the heritage assets of archaeological interest in Area 2 within an amended development layout. Consequently, as stated in the Archaeology RfR the Proposal is not compliant with Plan:MK (C.D. E.1) Policy SD14 (9) as the significant archaeological constraints have not informed the layout of the development. The lack of consideration of alternative approaches to the development that would avoid and mitigate harm to the heritage assets is also contrary to Plan:MK (C.D. E.1) Policy HE1 (F).
- 8.4 Taking into account the above evidence I conclude that the Proposal is not compliant with the conservation objectives of the NPPF and NPPF paragraph 197 in particular, and also does not comply with the development plan policies set out in Plan:MK (C.D.

E.1) HE1 (F), SD1 (A19) and SD14 (C9) and that consequently the Archaeology RfR is reinforced and I therefore respectfully suggest that the appeal should be refused.

Appendices bound separately