Rebuttal Statement by John Hanlon on Flooding and Drainage Matters

On Behalf of Obsidian Strategic Asset Management Ltd
Mockbeggars Farm, London Road, Uckfield, TN22 2EA

Planning Inspectorate Ref: APP/C1435/W/23/3330872

Document History

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Qualifications & Experience

My name is John Hanlon. I have been a Director of Glanville Consultants since March 2018, with responsibility for the Civil Engineering Department at the company's Didcot office.

I hold a degree in Engineering from The Dublin Institute of Technology. I am a Chartered Engineer and a Member of the Institution of Civil Engineers.

I have worked for the past 18 years in engineering consultancy, specialising in civil engineering and infrastructure design for residential and commercial development, including flood risk and drainage. I regularly act as project director for Glanville Consultants, and am used to managing, leading, and working with multi-disciplinary teams on challenging projects. My core work involves providing civil engineering, drainage and highways advice and input to masterplans assisting developers and architects when planning new developments.

Glanville Consultants have been involved with this planning proposal since 2021 with the production of the Flood Risk Assessment undertaken by Engineers whom I work closely with. I have not been directly involved in the work that was undertaken for the planning application, which was overseen by my colleague and fellow Director John Birch also based in the Didcot Office who, owing to prior commitments is not available to attend the upcoming hearing in February, as such I was appointed to act for the appellant, Obsidian Strategic Asset Management Ltd, in January 2024.

Below is a list of similar projects where I have considered flood risk and drainage matters.

- Land East of Oxford Road (PR6a)
- Bishops Waltham, Abbey Mill, Hampshire
- Land at Shiplake, Henley-on-Thames, Oxfordshire
- Land at Leicester Road, Uppingham, Leicestershire
- Land at St. Martins Park, Stamford, South Kesteven DC
- Land at Railway Lane, Littlemore, Oxford City
- Land at Fonthill, Reigate, Surrey
- Wood Farm, Oxford Road, Stokenchurch, Buckinghamshire
- Institute of Development and Regenerative Medicine, Old Road Campus, Oxford

The evidence which I have prepared and provide for this appeal is true and I confirm that the opinions expressed are my true and professional opinions.

1.0 Introduction

1.1 This Rebuttal Statement has been prepared by Glanville Consultants with respect to the planning appeal reference APP/C1435/W/23/3330872, which seeks to contest the "refusal" decision given by Wealden District Council (WDC), as Local Planning Authority (LPA), to planning application reference WD/2022/0648/MAO.

1.2 The application was presented by Obsidian Strategic Asset Management, and refers to land adjacent to Mockbeggars Farm, London Road, Budletts Common, Uckfield.

1.3 The description of development was as follows:

'Outline application for the development of 60 no. dwellings, access and internal roads, parking, ancillary structures, landscaping and open space, drainage and other associated works. All matters reserved apart from access.'

1.4 This statement has been prepared with reference to:

- Uckfield TC Statement of Case for Public Hearing – commencing 06.02.24
- Statement of Case by the Mockbeggars Residents' Steering Group (MRSG).
- Evidence on the Water Environment Report (EWER) by Dr Alan Thompson on behalf of the MRSG.
- Flood Risk Assessment Report (FRA) by Glanville on behalf of Obsidian Strategic Asset Management.
- Other reports and documentation included in planning application WD/2022/0648/MAO and Core Documents library.

1.5 Glanville Consultants prepared a Flood Risk Assessment to accompany the outline planning application (report reference 002_8210667_AQ_FRA, Issue 2, dated 17 January 2022)[CD3.9]. It concluded that the proposed development would not be at an unacceptable risk from any potential source of flooding and would not increase flood risk elsewhere, and that the development proposals comply with relevant planning policy concerning flood risk. It also demonstrated that suitable strategies for the disposal of foul and surface water from the proposed development can be provided.

1.6 WDC's Drainage Engineer reviewed the planning application from a flood risk and drainage perspective and confirmed in his consultation response dated 16 May 2022 [CD 9.1] that the information provided was adequate for the application, subject to conditions to secure the approval of details of the surface water scheme.

1.7 East Sussex County Council (ESCC), as Lead Local Flood Authority (LLFA) also reviewed the planning application from a flood risk and drainage perspective, and its engineer confirmed in his consultation response dated 23 May 2022 [CD 9.2] that the information provided was satisfactory, subject to conditions.

1.8 WDC Officers recommended the application be approved, subject to conditions and completion of a Section 106 Agreement. Accordingly, at the time of determination, there were no outstanding requests for further information regarding flooding and/or no extant criticisms of the scope, method, assessment, or conclusions of the Flood Risk Assessment. Further, at no stage has the LPA exercised its statutory powers to require that any of the reserved matters, such as the drainage solution, require determination at outline stage, and this remains the case.

1.9 Planning permission was subsequently refused by the Planning Committee for five reasons, none of which relate to flood risk or drainage, and the decision issued on 22 June 2023.

1.10 Obsidian Strategic Asset Management has appealed against the decision by WDC to refuse planning permission and an informal hearing is scheduled for early February 2024 (appeal reference APP/C1435/W/23/3330872).

1.11 There is no Statement of Case provided by Wealden District Council and it is understood that WDC has made the decision not to contest the appeal.

1.12 A Statement of Case has been prepared on behalf of Uckfield Town Council (UTC).

1.13 A Statement of Case has also been prepared on behalf of the Mockbeggars Residents' Steering Group. This Statement of Case was updated in January 2024 [CD14.22] to include additional information relating to flood risk and the water environment which were not previously presented at any earlier stage of the application determination or appeal. That revised Statement is supported by a report with supplementary evidence on the water environment provided by Dr Alan Thompson on behalf of MRSG [CD 14.13].

1.14 The evidence presented in this Rebuttal Statement provides a response to the relevant parts of the two Statements of Case that relate to flood risk and drainage, including a direct response to the relevant supporting report where appropriate.

2.0 Planning Policy & Guidance

National Planning Policy Framework (NPPF)

2.1 The NPPF was updated on 19 and 20 December 2023 and sets out government's planning policies for England and how these are expected to be applied.

2.2 Section 14 of the NPPF covers meeting the challenge of climate change, flooding and coastal change. The key points are summarised below:

- The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk (paragraph 157).
- Plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk (paragraph 158).
- New development should be planned for in ways that avoid increased vulnerability to the range of impacts arising from climate change (paragraph 159).
- Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere (paragraph 165).
- Strategic policies should be informed by a strategic flood risk assessment and should manage flood risk from all sources. They should consider cumulative impacts in, or affecting, local areas susceptible to flooding, and take account of advice from the Environment Agency and other relevant flood risk management authorities, such as lead local flood authorities and internal drainage boards (paragraph 166).
- All plans should apply a sequential, risk-based approach to the location of development – taking into account all sources of flood risk and the current and future impacts of climate change – so as to avoid, where possible, flood risk to people and property (paragraph 167).
- The aim of the sequential test is to steer new development to areas with the lowest risk of flooding from any source. Development should not be allocated or permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower risk of flooding. The strategic flood risk assessment will provide the basis for applying this test. The sequential approach should be used in areas known to be at risk now or in the future from any form of flooding (paragraph 168).
- Paragraph 173 states that when determining any planning applications, local planning authorities should ensure that flood risk is not increased elsewhere. Where appropriate, applications should be supported by a site-specific flood-risk assessment. Development should only be allowed in areas at risk of flooding where, in the light of this assessment (and the sequential and exception tests, as applicable) it can be demonstrated that:

  a) within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location;

b) the development is appropriately flood resistant and resilient such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment;

c) it incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate;

d) any residual risk can be safely managed; and

e) safe access and escape routes are included where appropriate, as part of an agreed emergency plan.

- Paragraph 175 states that major developments should incorporate sustainable drainage systems unless there is clear evidence that this would be inappropriate. The systems used should:

a) take account of advice from the lead local flood authority;

b) have appropriate proposed minimum operational standards;

c) have maintenance arrangements in place to ensure an acceptable standard of operation for the lifetime of the development; and

d) where possible, provide multifunctional benefits.

Planning Practice Guidance – Flood Risk and Coastal Change

2.3 This Planning Practice Guidance (PPG) advises how to take account of and address the risks associated with flooding and coastal change in the planning process.

2.4 The PPG advises that areas at risk of flooding are those at risk of flooding from any source, now or in the future. Sources include rivers and the sea, direct rainfall on the ground surface, rising groundwater, overwhelmed sewers and drainage systems, reservoirs, canals and lakes and other artificial sources.

2.5 Table 1 of the PPG provides definitions of the Flood Zones, from low to high probability of river and sea flooding, as follows:

- Flood Zone 1 Low Probability – Land having a less than 0.1% annual probability of river or sea flooding. (Shown as 'clear' on the Flood Map for Planning – all land outside Zones 2, 3a and 3b)

- Flood Zone 2 Medium Probability – Land having between a 1% and 0.1% annual probability of river flooding; or land having between a 0.5% and 0.1% annual probability of sea flooding. (Land shown in light blue on the Flood Map).

- Flood Zone 3a High Probability – Land having a 1% or greater annual probability of river flooding; or Land having a 0.5% or greater annual probability of sea. (Land shown in dark blue on the Flood Map)

- Flood Zone 3b The Functional Floodplain – This zone comprises land where water from rivers or the sea has to flow or be stored in times of flood. The identification of functional floodplain should take account of local circumstances and not be defined solely on rigid probability parameters. Functional floodplain will normally comprise:

i. Land having a 3.3% or greater annual probability of flooding, with any existing flood risk management infrastructure operating effectively; or

ii. Land that is designed to flood (such as a flood attenuation scheme), even if it would only flood in more extreme events (such as 0.1% annual probability of flooding).

iii. Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency. (Not separately distinguished from Zone 3a on the Flood Map)

2.6 The National Planning Policy Framework sets out strict tests to protect people and property from flooding which all local planning authorities are expected to follow. Where these tests are not met, new development should not be allowed. The main steps to be followed in addressing flood risk are set out below, starting with assessing and then avoiding flood risk. The steps are designed to ensure that if there are lower risk sites available, or a proposed development cannot be made safe throughout its lifetime without increasing flood risk elsewhere, it should not be permitted. Measures to avoid, control, manage and mitigate flood risk should also not increase flood risk elsewhere.

3.0 Response to Case

Flood Risk

3.1 Here, I will provide evidence on how the proposed layout for the appeal scheme, the drainage strategy and mitigation measures have been designed to deal with the points that are in dispute.

3.2 The UTC Statement of Case states (paragraph 3.4) that Uckfield is situated on a floodplain. It indicates that there are a number of minor watercourses in the area which collectively feed the River Uck, the Shortbridge Stream, and ultimately the River Ouse. It states (paragraph 3.5) that the land adjacent provides evidence of wet grassland and natural watercourses. It states (paragraph 3.8) that the streams which feed into the River Uck and the River Ouse historically flood, including a historic event in November 2022.

3.3 I do not consider that the development will increase any of this existing flood risk; it is worth noting that a suitable drainage system at the development site will be required to ensure that the site does not increase downstream flood risk and I consider that the WDC and LLFA drainage officers' suggested condition(s) would ensure the provision of such a system.

3.4 The MRSG Statement of Case [CD 14.22] states (paragraph 4.1, fourth bullet) that evidence shows the risk of surface water flooding directly adjacent to the site is already high and that this is likely to be exacerbated by the development proposals. Having reviewed the "Evidence on the Water Environment Report" (EWER) [CD 14.13] on which this statement has based it is worth noting that the report states (in the Summary) that existing flooding "could well" be exacerbated by the development, and later that it "could be significant" (paragraph 17) but does not anywhere state that it is "likely".

3.5 The EWER states (paragraph 13) that "it is inevitable that, without adequate mitigation, surface runoff from the site will exacerbate the risk of flooding in this area". Implicitly the EWER recognises that if adequate mitigation is provided then surface water run-off from the site will not exacerbate the risk of flooding in the area. It recognises that WDC's drainage officer proposed a pre-commencement planning condition that seeks to ensure that adequate mitigation is provided (paragraph 13), and that this is a normal approach at the outline planning stage (paragraph 21). It is worth noting that the LLFA drainage officer also proposed a list of points to be considered in planning conditions that would ensure adequate provision of mitigation against the risk of flooding increasing downstream.

3.6 The EWER later states (paragraph 23) that "In view of the uncertainties, and of their significance in relation to the overall feasibility and 'deliverability' of the proposed development, in my view it would be inappropriate to leave these matters to be dealt with at a later stage".

3.7 It is considered that all parties are in agreement that there is existing surface water flood risk in downstream areas and that adequate mitigation measures will be required within the site to ensure that the development does not increase the flood risk on or off site. This can be adequately dealt with by condition in the normal way.

3.8 The Glanville FRA report [CD 3.9] provides drawings and calculations to illustrate how surface water run-off from the site can be managed and restricted to greenfield run-off rates in order to prevent any increase in flood risk to the downstream areas. I have not seen any evidence in the EWER report or the MRSG Statement of Case [CD 14.22] that seeks to provide justification that these calculations are incorrect or that adequate mitigation against flood risk cannot be provided within the design of the surface water drainage system for the proposed development, the approval of which can be secured by condition.

3.9 The EWER presents information (paragraph 9 onwards) regarding the groundwater conditions at Mockbeggars Farm and then makes the statement (paragraph 11) that groundwater flooding on and offsite is an issue that needs to be taken further into account.

3.10 However, I have not seen anything within the EWER demonstrating that the development could increase the risk of groundwater flooding on or offsite. The only reference to changes in the groundwater conditions caused by the development is in paragraph 19 of the EWER, where the statement is made that the EWER considers that the development could reduce the groundwater levels locally, which would have the effect of lowering groundwater flood risk.

3.11 It is therefore my understanding that no party believes that the proposed development likely to increase the risk of groundwater flooding on or offsite. Consequently, it does not require any further consideration at the outline planning stage.

3.12 I consider therefore with regard to flood risk both on the site and to the neighbouring properties, that there is not the level of uncertainty that the MRSG Statement of Case suggests, and there is no justification to reject the course of action recommended by both the WDC drainage officer and the LLFA to allow the outline application and use pre-commencement planning conditions to ensure the adequate provision of mitigation through the approval of an effective surface water drainage scheme.

Groundwater and Water Environment

3.13 The MRSG Statement of Case (paragraph 4.1 third bullet, based on evidence from the EWER) states the:

"groundwater conditions directly adjacent to the proposed development site are substantially different from those assumed by the Appellant… and that these are such that the proposed infiltration solution for dealing with surface runoff from the site is most unlikely to be feasible."

3.14 The appellant agrees that the January 2024 groundwater measurement from the well at Mockbeggars Farm (EWER paragraph 10), giving groundwater levels at 0.5m below the site, is relevant new information and demonstrates that infiltration devices for the disposal of surface water are unlikely to be feasible across parts of the proposed development site.

3.15 This situation is within the range of possible scenarios considered by the Glanville FRA in the absence of the results of an intrusive site investigation at that time. The FRA presented the two most extreme scenarios, the first in which ground conditions would allow the whole development to drain by infiltration and a second scenario in which no infiltration was possible and the whole development would drain via the restricted discharge to the watercourse downstream.

3.16 It is likely that an intrusive site investigation (to be carried out at the approval of reserved matters stage and controlled by planning condition) will confirm that the actual ground conditions of the site will be such that the drainage solution adopted in practice will fall somewhere between the two, with some infiltration possible – perhaps more likely within the topographically elevated parts of the site but not freely possible throughout – as such the remaining areas would drain via a restricted discharge to the watercourse.

3.17 The additional evidence from Mockbeggars Farm presented in the EWER confirms that conditions at the site lie within the range of scenarios considered by the FRA - and on that basis it will be possible to accommodate the full range of scenarios within the proposed development's drainage strategy at the appropriate stage.

3.18 The final point raised by the MRSG Statement of Case (paragraph 4.1, fifth bullet) relates to potential impacts of the proposed sustainable urban drainage system (SuDS) on Mockbeggars Farm itself, including the prospect of potentially damaging an area of grazing vegetation, which is important to the smallholding and potentially causing subsidence to the buildings by lowering the groundwater table locally.

3.19 It is my understanding that comments about the area of grazing vegetation relate to the same piece of land described in the EWER (paragraph 18) as a wetland area. It is further understood that it relates to the area illustrated in Image 1 below:



Image 1: Photograph (from EWER) and map (marked up by Glanville) to identify wetland grazing area in question

3.20 Glanville has used LIDAR terrain data for the area to produce a detailed plan analysing the levels, falls and contours of the local area to demonstrate the catchment for overland run-off falling to this piece of grazing land. This catchment plan is given in Appendix A.

3.21 It can be seen that the contours indicate that the vast majority of the site does drain towards the area of grazing wetland under consideration in the EWER, the sub-catchment draining into this area is almost entirely from the woodland to the north and will remain unchanged regardless of whether the site is developed. This assessment of the sub-catchment provides reassurance that the wetland grazing area is very unlikely to be adversely affected by the proposed development.

3.22 With regard to the ground conditions at Mockbeggars Farm, the EWER states (paragraph 19) that the interception of run-off at the site by the new site drainage system could deplete recharge to the groundwater system, which could lead to drying up of shrinkable soils, which could give rise to subsidence of the building.

3.23 It is worth noting that the EWER does not seek to demonstrate that any step in this chain of possibilities is particularly likely.

3.24 Glanville has produced an indicative cross-section through the ground at the farmhouse and the lower part of the site adjacent, including an illustration of the approximate groundwater level as described in the EWER (paragraph 9) and the indicative basins as described in the FRA report and accompanying drawings provided as part of the outline planning application.

3.25 The cross-section drawing is included in Appendix B. It is important to note that the design of the site layout and the basin are reserved matters for consideration at a later stage, and that therefore this drawing is provided to assist in illustrating general points about the site rather than as a design drawing showing precisely how the attenuation basin would be constructed if the appeal was allowed.

3.26 It can be seen that the indicative levels of the basin and pipework lie above the level of the groundwater described at Mockbeggars Farm. In this basis there would be no significant risk that the proposed drainage system could detrimentally interfere with the groundwater table at the farmhouse by actively drawing down the groundwater level locally.

3.27 The EWER describes (paragraph 9) how the seasonal variation in groundwater at the site changes between just below the ground level to below the cellar level, around 2m variation (and possibly more depending on how far below the cellar level it ultimately drops). The groundwater environment and levels naturally changes over time and is subject to change between seasons and from one year to the next, indeed the effect of climate change is such that increased precipitation and extreme weather events would also have a bearing on ground water recharge and levels.

3.28 The EWER also notes (paragraph 10) that Mockbeggars Farmhouse has running sand beneath the surrounding land including adjacent to the property, which is washed into the cellar when groundwater is high. It is possible, and worth noting, that the movement of sand as 'running sands' into the basement as evidenced in the images provided in the EWER could in itself present a subsidence risk to the property – a potentially pre-existing issue, unrelated to the proposed development.

3.29 There is an absence of evidence presented in the EWER demonstrating that development has any particular likelihood of causing unacceptable changes to the water environment at the neighbouring property which are above and beyond those that could occur naturally or into the future.

3.30 Therefore, I consider that it is suitable to apply the standard response to the outline planning application, as both the WDC Drainage Engineer and the LLFA Drainage Engineer recommended during the original determination, and to allow the appeal with planning conditions applied to ensure that adequate measures are taken during the design of the development to protect both the site and downstream areas.

4.0 Conclusion

4.1 My Rebuttal Statement addresses the matters raised and I consider that the revised MRSG Statement of Case and the EWER do not provide sufficient justification that their concerns cannot be addressed by appropriate design of the proposed development site and the drainage system serving it, the approval of which can be secured by condition.

4.2 The appellant therefore submits that the WDC and LLFA drainage officers' positions, that the outline application was acceptable, and planning conditions should be used to control appropriate design, was a suitable and appropriate response to the application and there are no flood risk or drainage related reasons why the appeal should not be allowed.

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