Dear Susan Halliwell

Application Oxfordshire MW.0028/18: Construction of two-stage channel etc from North of Botley Road to Kennington

Thank you for your invitation to comment on the applicant’s further information.

I address below six issues that have been shared with the applicant over the development of the Oxford scheme, including several raised with yourselves in mine of 14 June 2018. Some have recently been clarified in a meeting called by the Environment Agency on 10 December 2018 to examine the science of flood compensation, when a distinguished audience including the Oxford Flood Alliance (OFA) was introduced to the Agency’s thinking behind this innovative design.

In updating SOFAG’s planning comment, I note that points raised in mine of 14 June were not included in the LPA’s letter to the applicant of 21 August. I was however grateful for Mary Thompson’s assurance (25/09/2018 16:05) that they would be raised in the authority’s report to Planning Committee, so I have tried below to indicate instances where the 10 December meeting updated them. I include others like the single oblique bridge discussed with the applicant from 2012 onward, tabulated in my previous comments. The issues are ordered by local relevance:

- SOFAG comment 01: Permanent flood barrier at New Hinksey Vicarage Neighbourhood.
- SOFAG comment 02: Re-alignment of permanent barrier along Abingdon Road
- SOFAG comment 03: Single oblique bridge at Old Abingdon Road/ Kennington Road
- SOFAG comment 04: Reasoning behind flood plain excavation
- SOFAG comment 05: Protection against sewage flooding at Manor Road South Hinksey
- SOFAG comment 06: Flood wall at Kennington

Your expert consultee (Lincs and Northants EA) refers on 24 July to a previous response to the applicant’s clarification of 19 June, which I have yet to find on line and would welcome a link? I assume it includes draft conditions re- flooding - my own comments below are aimed at ‘protecting the flood security and amenity of the people of Oxfordshire and their visitors’, a formula used over twenty-five years by Oxford City Council re- archaeology.

You will find highlighted yellow below updated questions to the applicant which I hope are reasonable and helpful in achieving a compliant and permissable flood scheme.

Yours sincerely

Brian Durham
South Oxford Flood Action Group
Application Oxfordshire MW.0028/18: Construction of two-stage channel etc from North of Botley Road to Kennington

‘Protecting the flood security and amenity of the people of Oxfordshire and their visitors’

SOFAG comments January 2019

South Oxford with 2075 homes is the largest community on the Oxford flood plain, lying between the western flood plain and the Thames-Cherwell confluence. In West Oxford 90% of homes can be protected to the 100-year standard by barriers on the upstream side only, but by this accident of geography in South Oxford that figure drops to around 10%, underlining my present comments.

SOFAG Comment 01: Harmonising flood protection standard in South Oxford

My letter of 14 June noted the proposed 100-year protection standard for the Weirs Lane Estate (no homes flooded ever), while three-times flooded homes in the Vicarage Neighbourhood will make do with temporary barriers. Although the issue is confirmed by the applicant to be a planning matter (Sally White, 23 November 2018), I am not seeing it resolved in the current consultation.

For background, the reason this neighbourhood did not get a permanent flood wall along the cycle path in 2009 (see image with thrice-flooded residents) was the requirement for level for level compensatory storage. The 10 December 2018 meeting explained that the present design proposed by the applicant does not require this, therefore posing the following question.

LPA question to the applicant? In the light of comparative domestic floor levels presented 14 June 2018, can the applicant clarify why the Vicarage Neighbourhood is not to receive a permanent flood defence?

SOFAG comment 02: Alignment of permanent barrier along Abingdon Road

SOFAG’s letter of 14 June 2018 questioned the logic behind the proposed embanking that embraces the Four Pillars Hotel through to Cowmead Allotments, because the alignment breaches Oxford City Council’s SFRA on safeguarding the flood plain. It thereby gives 100-year protection to 10 hectares of agricultural land and a sports ground, while the adjacent Vicarage Neighbourhood will continue to rely on a temporary barrier (Comment 01 above).
The stated justification for the proposed alignment is `avoidance of direct visual impacts’, but this is not assessed against the alternative of a masonry wall along the Abingdon Road back-of-footway (image below). This invites speculation that the proposal is *de facto* an `Area benefiting from flood defences’ (ABFFD), in which case it could be a precursor to future development, which would negate the applicant’s aim to protect views.

![Figure 2: Looking north along Abingdon Road with impression of masonry flood wall.](image)

The 10 December meeting saw printouts of the Environment Agency Flood Map showing ABFFDs identified with blue oblique stripes within the Banbury Flood Scheme, the Jubilee River Scheme, and flanking the Thames tideway. At New Hinksey the area in question is Green Belt and safeguarded for future flood storage (SOFAG 14 June). While the applicant’s updated Planning Statement (November 2018) cites precedent for Green Belt elsewhere used for flood alleviation, at New Hinksey there is no local channel and its functional relationship to the proposed western channel is not explained. If intended to protect the Abingdon Road area, it will be frustrated above a 100-year level by flow via Step Ground Bridge, where no control is proposed.

ABFFD status appears to permit land to be developed without separate compliance with national and local flood guidance. At New Hinksey I have consistently championed vulnerable Victorian homes and the Health Centre before a sports ground, grazing and allotments. To this end, the LPA can use the new understanding from 10 December to ask questions about the effect of the proposed embanking, including as follows:

**LPA questions for the applicant?**

1. Does the proposed embanking create an ABFFD?
2. Does it affect the Green Belt and Local Plan status?
3. Does it confer development privileges on the landowner?
4. Does it respond to any unstated `Very Special Circumstance’? (Planning Statement November 2018, Section 6)
5. If a masonry wall at back-of-footway (photo above) achieves the same flood protection to the Abingdon Road to the point where it becomes redundant owing to flow via Step Ground Bridge, does this make the `circumstance’ less `special’ in relation to the Green Belt?
6. If so, does the loss of ten hectares from the Oxford flood plain constitute an unacceptable departure from the local authority’s SFRA? (SOFAG comment of 14 June 2018).

**SOFAG Comment 03: Traffic disruption at Old Abingdon Road-Kennington junction**

The supplemental Transport Assessment notes 15 months disruption at this busy junction, including 8 months for archaeological mitigation alone. Drivers and bus users will be affected, and clearly Highways England share the concern. Given that more than half this disruption arises from archaeological mitigation, it should be noted that in July 2012 the scheme was presented with an alternative layout (see illustration below) that saves those eight months by removing the archaeology from the critical path of construction. It is also possible that the bridge deck could be
built above the existing live service runs of Kennington Road, saving most of the remaining seven months traffic disruption.

![Image: Figure 3: Old Abingdon Road - Kennington Road junction with traffic-calming layout and single oblique bridge deck (red). N at top (Bing Maps)](image)

**LPA question to the applicant?** In the interest of minimising traffic disruption can the applicant provide an economic comparison between the proposed 2-bridge design and a single oblique bridge alternative?

**SOFAG Comment 04: Disruption of public access and amenity to west flood plain by proposed excavation**

My comment of 14 June 2018 on this big environmental issue was addressed by the Agency’s meeting of 10 December with distinguished attendees. It appeared that the ‘direct’ or ‘level for level’ compensatory regime preferred by construction industry best practice (CIRIA C 624, Appendix 3.10) is not applied by the EA in circumstances like the Oxford Scheme where compensation can be achieved by managing river flow. The meeting heard that industry guidance offers an alternative ‘indirect’ compensation that is ‘usually more expensive’ because of ‘requirement for control structures and devices’ with ‘moving parts’ (CIRIA C624, p168). For the effectiveness of storage without control devices see the applicant’s comparative hydrograph (Fig. 4 below, blue trace).

![Image: Figure 4: OFAS ES Appendix Q, showing (circled blue) the effect of proposed channel on water arriving at Sandford](image)
The west flood plain is accessible to South Oxford residents, and loss of amenity during excavation, with disruption of footpaths and boundaries permanently, may be sensitive and deserving of robust analysis as follows:

**LPA question to the applicant?:** Given that the Environment Agency as consultee (Lincs and Northants Area) requested in their `holding’ response of 14 June a `revised FRA’, can the applicant:
- Explain why ‘control structures with moving parts’ are not proposed;
- Provide a calculation to show what proportion of the proposed 352,575 cubic metres displacement is to be compensated by flow management as against that compensated by channel storage?

**SOFAG Comment 05: Sewer bypass at South Hinksey village: (not previously raised with LPA)**

Presently the foul sewer from Botley runs along Manor Road, South Hinksey, and in the recent five floods the sewage has mixed with flood water. Logically the flood water will have suppressed the sewage escape, but the proposed Scheme excludes flood water from the village. The prospect of unsuppressed and undiluted sewage was raised on 25 April 2013 at Oxford Area Flood Partnership (quarterly professional forum) and repeated recently. The issue was not seen as a negative impact of the present application, instead passed to Thames Water who described it as ‘such a rare event’. The LPA should note however that it has occurred in each of five floods this century, and was the subject of a public meeting in the village with two MPs in 2013.

![Figure 5: Principle of sewer diversion at South Hinksey raised at OAFP 2013 and subsequently (base map Thames Water)](image)

**LPA question to the applicant?:** Will the applicant accept a Grampian condition / Section 106 agreement that requires the existing trunk sewer to bypass South Hinksey village via a siphon at Manor Road, with a pumping station for the village foul system?

**SOFAG Comment 06: Continuous flood defence from A423 to Mundays Bridge, Kennington (not previously raised with LPA)**

In meetings of 25 May and 10 December the Scheme’s attention was drawn to the absence on FRA Figure 1 of the symbol for a permanent flood barrier between the A423 and Mundays Bridge.
It might therefore have been corrected in the FRA amended Drawing Appendix A, but not so. It is important to the Scheme because the Hydraulic Modelling Report shows that the design actually raises flood levels at all return periods in this location.

Figure 6: FRA Fig. 1, lacking flood barrier protecting Kennington Road properties (OFAS image)

The LPA will be aware that UK National Planning Policy Framework demands ‘no worse elsewhere’, and should therefore ask the following:

**LPA question to the applicant?:** Is there an explanation for the absence on FRA Fig 1 of a continuous flood barrier symbol between the A423 and Mundays Bridge?

BD 22 January 2019