PLANNING PERMIOSSION P0425-23-LBC
HARTPURY MILL HAYBARN – DRAINAGE SCHEME

Permission P0424-23-FUL requires a drainage scheme to be agreed in writing. This document sets out the current drainage scheme and concludes this is appropriate to the location.

This permission relates to change of use of a section of building that has been in existence since the 18th century. No external changes are proposed. Drainage arrangements that were updated as part of approved planning permission P0148-20-FUL provide adequate drainage for the building as it exists today. This drainage feeds into Collier's brook, as did the original drains that were installed at some point in the 19th century, replaced with new drains as part of previous developments. The development that relates to this planning permission has no impact on drainage or flood impact over the historic situation. **It will therefore not exacerbate flooding in the locality** and so meets the criteria for the stated Rationale**.**

It may still be worth considering whether an improvement could be achieved, as we did with earlier development of the equestrian facility where a new lake/swale was built that not only intercepted the roof drainage but also the substantial surface runoff from the fields, improving the overall flood impact.

It must be recognised that the current permission relates to a site that is immediately adjacent to the River Leadon flood plain. This extends for several miles upstream and down to the confluence with the River Severn. In flood conditions that occur a few times a year the river floods to inundate our field to the west of the site including Collier's Brook which merges into the flood plain. The only practical place to build a swale would in in the field that is part of the flood plain, and so would have no effect. Likewise an underground buffing system would back flood from the raised water table. Soakaways are not effective because of soil conditions and the high water table.

When in flood the River Leadon has a typical flow of 100m3/sec (peaked at 200m3/sec in 2007) according to the EA. The contribution from the roof of the building to which this permission pertains would be 0.002% of this flow for the peak 10 minute storm rainfall rate. Contribution from the other buildings at the site would not exceed 0.01% of the in-flood flow. This puts in context the impact of any drainage improvement scheme.

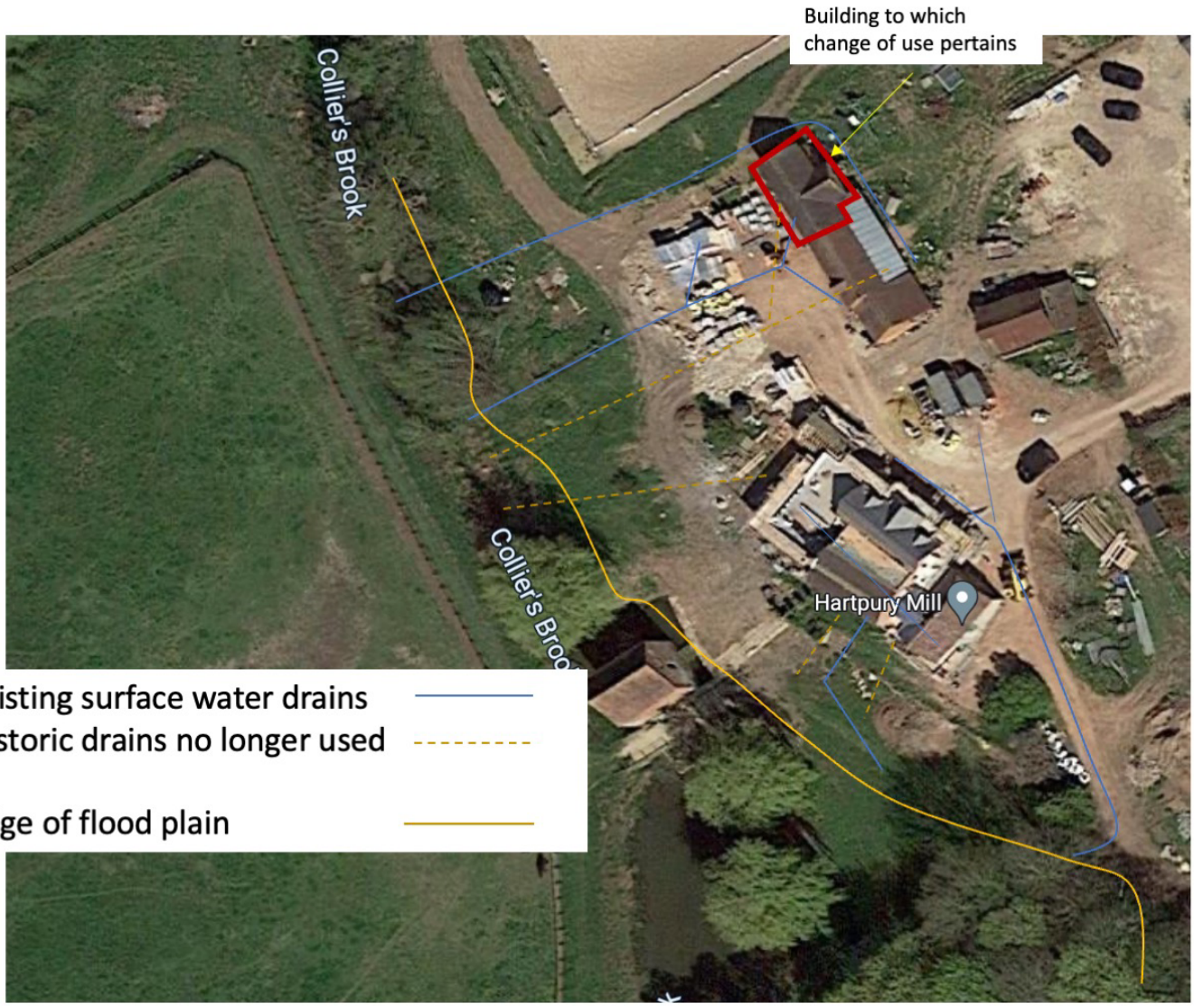
The existing drainage arrangements are shown in the attached diagram, and are proposed to be used without change.

<u>Conclusion</u>

This development has no impact on flooding, with no changes to surface water management being proposed over the status quo, so satisfies the stated Rationale in the

Permission. In addition, the nature of the site immediately adjacent to a large river and flood plain makes improvement schemes infeasible.

Andrew Sleigh
18/11/2923


Building to which change of use pertains
Collier's Brook
Collier's Brook
Hartpury Mill
Existing surface water drains
Historic drains no longer used
Edge of flood plain


Area of flood plain
Margarets
Collier's Brook
River Leadon
Hartpury Mill
Hartpury Church
Park Rd
Park Rd
Park Rd