

FLOOD RISK ASSESSMENT and DRAINAGE STRATEGY

RESPONSE (2) to MSDC Flood Risk and Drainage Team Further Comments

Class Q Barn Conversions Prior Approval Application

Hammonds Mill Farm Estate Hassocks West Sussex

16 July 2025

DJH

Architectural and Planning Consultants

Hammonds Mill Farm Estate Hassocks West Sussex BN6 9NB

Class Q Barn Conversions Prior Approval Application (transitional provisions)

Flood Risk Assessment and Drainage Strategy

RESPONSE (2) to MSDC Flood Risk and Drainage Team Requirement for Additional Information

16 July 2025

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FLOOR CONVERSION PLANS and ELEVATIONS showing LEVELS and FLOOD RESILIENCE

BARNs 1 and 2	DWELLING 1 PLAN	drwg	2025/0211/510 FRA
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The MSDC Flood Risk and Drainage Team issued a second Prior Approval application consultation response, dated 4 July 2025, which set out further requirements for specific additional information and details to support the submitted fluvial and surface water flood risk assessment and drainage strategy.

The MSDC additional information requirements are shown in '*green italic*', for clarification, with the response in 'plain text'.

1. ***Fluvial Flood Risk***

Revised Finished Floor Level (Barn 3)

- 1.1 The MSDC FRD Team assert that EA node 365 with a 1:100 + 35% CC flood level of 27.86m AOD should be used in flood risk modelling for Barn 3 (Dwelling 3), where EA fluvial flood climate change modelling extent is shown close to the south east external corner of the Barn.
- 1.2 The Updated Flood Risk Assessment used the EA node 364 1:100 + 35% CC flood level of 26.65m AOD, as this is the nearest upstream node, to Barn 3, in line with EA guidance on using 1D node level data, when no 2D data is available. It is noted that node 365 is 270 m upstream from Barn 3 at a tight bend with deeper banks at the Herrings Stream, while node 364 is 5m upstream from Barn 3 with the large lake and lower lying surround basin downstream of node 365.
- 1.3 It is noted that EA 1:100 + 35% CC to 1:100 + 105% CC mapping is consistent with topographical survey levels and consistent with using node 364 to show the AOD flood level at Barn 3 and not node 365 for this location.

- 1.4 In response to a query about the use of 1D nodes, the EA have clarified that, in the absence of 2D flood modelling, which is not available at the Hammonds mill location, the 1:100 + 35% CC flood mapping should be used to establish flood risk at Barns 3/4 (Dwellings 3/4) and that the flood level data at node 364 should be used to establish FFLs at Barns 3/4 (Dwellings 3/4).

See Appendices: Email from EA Jul 2025

- 1.5 Using the 1:100 + 35% CC EXTENT mapping, node 364 flood level data is consistent with the EXTENT mapping at Barn 3, while node 365 flood level data is not consistent and gives an unjustifiably high flood level for the Barn 3/4 location.

- 1.6 The 2025 topographical survey levels, overlaid with the node 364 flood level, at Barn 3 and the surrounding land also show that the EA 1:100 + 35% CC EXTENT mapping is consistent, at this part of the site, with the node 364 flood level.

- 1.7 The topography of the land between nodes 365 and 364 explains the lower flood level node 364, as the Herring Stream banks become lower and the lake and its significant freeboard surrounds create an informal flood plain that lowers flood levels heading downstream towards node 364.

- 1.8 The EA EXTENT mapping with 105 % CC also show that this higher flood extent is mainly to the east of Barn 3, although also a little closer to the south of Barn 3. This is also confirmed from topographical contours and levels.

See Appendices: MAP 1 and MAP 1A, Buildings overlain on EA flood modelled mapping

- 1.9 EA Flood EXTENT levels, both 1:100 + 35% CC and 1:100 + 105% CC levels from node 364 are mapped onto the 2025 topographical survey and confirm that a proposed FFL of 27.75m AOD, (existing floor level 27.55) provides a freeboard of 890mm which is more than EA Standing Advice recommends for dwellings with ground floor sleeping space.

See Appendices: MAP 2, MAP 3

- 1.10 In conclusion, the proposed finished floor levels in Barns 3/4 (Dwellings 3/4) of 27.75m AOD provides a 890mm freeboard above the 1:100 + 35% CC flood level and a freeboard of 690mm above the 1:100 +105% CC flood level, providing further flood resilience than EA Standing Advice.

See Appendices: EA Email Consultation Response to MSDC (jul 2025)

- 1.11 The site sections at Barn 3, included in the updated FRA have been amended to reflect the 27.75m AOD proposed FFL.

See Appendices: Site Section 1, Site Section 2

2. ***Flood Level Mapping***

- 2.1 The 1:100 + 35% CC flood level (26.65m AOD) and the 1:100 + 105% CC flood level (26.89), using node 364 data, has been clearly mapped onto the 2025 topographical survey, as described in 1.9.

See Appendices: MAP 2, MAP 3

- 2.2 The proposed safe pedestrian route to the north, with levels from the topographical survey, at its lowest starting point, from Barns 3/4 (Dwellings 3/4), at 27.55m AOD rising to more than 33.50m AOD is therefore shown to unaffected by 1:100 + 35 % CC EA fluvial flood levels or RoFSW 2040 - 2060 Surface Water levels.

See Appendices: MAP 5, MAP 6

- 2.3 Mapping 1:100 + 35% CC and 1:100 + 105% CC flood levels on the topographical survey also shows that the access road to the farmyard and barns is also a safe and passable vehicle and pedestrian escape route during fluvial flood events.

See Appendices: MAP 2A

3. *Pedestrian Escape Route Plan*

3.1 A safe pedestrian route from all the proposed dwellings, northwards to Jane Murray Way is shown on the RoFSW Map and WSCC PROW map. The start of the route, from the the lowest level at the entrance doors to Dwellings 3/4 (Barns 3/4), 27.55m AOD is via the public footpath and from the higher level entrance door to Dwellings 1/2 (Barns 1/2) 28.90m AOD, via the upper part of the farm yard to the existing farm track, 30.45m AOD which rises further northwards to the public footpath 34.50m AOD, which heads further north over rising ground to Jane Murray Way.

See Appendices: MAP 5, MAP 6

3.2 The first part of the public footpath is also part of a wide farm track which can be used by four wheel drive road cars and farm vehicles.

3.3 The RoFSW mapping also shows no surface water risk along the entire route.

3.4 There is therefore a dry and passable pedestrian escape route to the north.

3.5 It should be noted that the alternative escape route via the private access road to and from the the farmyard, running east to London Road can also be shown to be dry and passable during a 1:100 + CC fluvial flood event and, at worst case with only slight surface running water draining over the road to the lake basin, at one location, during a 2040 - 2060 pluvial flood event.

See Appendices: MAP 2A, MAP 7, MAP 8, SITE SECTION 5

3.6 The owners of Hammonds Mill Farm will also recommend to and facilitate with the purchasers/occupiers of the dwellings that they register with the EA Early Flood Warning Scheme and the local Hassocks Flood Warning Watch.

4. *Confirmation of no Additional Built Footprint or Land Raising*

- 4.1 Class Q Prior Approval, under the transitional provisions, does not allow any increase in built footprint. Proposals, including ramps and 'terraces' are within barn footprints, as shown on the layout plans for the barn conversions.

See Appendices: CONVERSION FLOOR PLANS and ELEVATIONS with LEVELS and FLOOD RESILIENCE

- 4.2 The proposals do not include any land raising and none is shown on the barn conversion plans or site plan.

- 4.3 The footprints of Barns 1/ 2 (Dwellings 1/ 2) are not within the 1:100 + CC fluvial flood extent, nor are the footprints of Barns 3/4 (Dwellings 3/4) as the fluvial flood extent does not actually reach the footprint, although it comes relatively close to the southeast corner of Barn 3 (Dwelling 3)

- 4.4 The footprint of Barns 1/2 (Dwellings 1/2) does fall within 2040 - 2060 surface water (pluvial) medium risk zone but FFLs have been set at 29.80m AOD (existing barn level 29.55m AOD) to give the EA Consultation Condition freeboard of 900mm above existing external ground levels (28.85 -28.90m AOD).

See Appendices: EMAIL EA Consultation Response to MSDC (Jul 2025), SITE SECTION 3, SITE SECTION 4

- 4.5 It should be noted that during the detail design stage, the consultant team propose to introduce a perimeter filter/french drain at the bottom of the banks to the north east and south east elevations of Barns 1/2 (Dwellings 1/2) as sound building and drainage practice, (or replace any existing, defective, land drainage that is discovered at these locations). This will very significantly reduce the risk of 2040 -2060 + CC surface water flooding at Dwellings 1 and 2, although this will not involve any change to proposed FFLs and flood resilience measures (29.80m AOD FFLs and render applied to external walls up to 900mm above existing ground levels)

5. *Assessment of Unmodelled Watercourses*

- 5.1 Early, pre Ordinance Survey mapping, including the Tithe Map and earlier Hammonds Place Estate Maps (not to be confused with the 2024 named Hammonds Mill Place) show the water mill, mill race, mill pond, overflow stream, out race and note sluices.
- 5.2 The part of the overflow stream from the mill pond to where it becomes an open stream, which runs in a brick culvert under the farmyard is not shown, or noted as an open stream on the 1838 Tithe Map, but appears to be shown as an open stream on the 1785 Hammonds Place Estate map. The brick culvert under the farmyard is assumed to have been formed between 1785 and 1838.
- 5.3 The mill pond, mill race, overflow stream and out race are man made water infrastructure features rather than natural watercourses or ditches and have been there for at least 250 years. The two main natural watercourses are to the north and north east of Barns 1 and 2, the former ending with a headwall and underground drain (below Barn 1) while the latter ends in a large natural pond which is continuous with the mill race at about the position the mill race opened out into the mill pond (mill pond infilled in 2002). This natural pond would have been part of a larger mill pond.
- 5.4 The man made water features were altered in 2002, with MSDC planning consent, EA and WSCC approvals, as part of a project to form a new lake to the east of the Mill House, between the mill race and the Herrings Stream, to create an informal 'flood plain' for this part of the Herrings Stream and reduce the flood risk associated with the larger mill pond after the water mill was demolished in 1974.
- 5.5 The alterations to the man made water infrastructure involved:
 - a) forming a new lake, average depth 2 metres, very greatly extending an existing pond to the east of the Mill House,

- b) infilling part of the former mill pond and a short part of the mill race,
- c) installing a 750 dia drain below, connecting a new weir at the end of the mill race to the farmyard overflow stream culvert, at the former sluice position,
- d) forming another new weir in the mill race, further to the east, with an underground drain, below the private access road, to pillway, as the source feed for the new lake,
- e) forming a further new weir and spillway at the south west end of the lake, near the Mill House grounds, to provide a lake return outlet stream to the Herrings Stream,
- f) infilling the out race from the site of the water mill wheel to the Herrings Stream.

5.6 The 2002 EA and WSCC approved water infrastructure and ground modelling works were carried out both to provide a 'fluvial' flood defence to Hammonds Mill Farm and Farmhouse (the former Mill House) and provide an attractive lake setting to the estate when approaching from London Road. Records from that consent are not supported by any meaningful flood modelling as such and even though carried out relatively recently, it's not clear what climate change allowances or flood modelling were used to support the the proposals.

5.7 In the absence of flood modelling associated with the formation of the lake, the 2025 topographical survey however shows that the sloping meadow surrounds to the lake have a 'freeboard' that varies between 1.28 m and 1.75m above the 1:100 + 35% CC flood levels modelled by the EA at four node points along the Herrings Stream relative to the lake. This gives confidence that the 2002 scheme works were hydraulically designed to allow climate change beyond even EA climate change allowances that are applied in 2025.

- 5.8 Levels of weirs, design lake and mill race water levels, stream and mill race bed levels, culvert and drain invert levels and sizes are shown on a site plan to give an overall schematic 'model' of the 'man made' water infrastructure features associated with the water mill, the 2002 lake works and the relationship with the Herrings Stream, the source of the mill race and millpond.

See Appendices: MAP 4, MAP 4A

2025 Flood Risk Assessment for man made (former water mill infrastructure features)

Mill race/pond

- 5.9 The mill race is a historic diversion, of some of the water flow from the Herrings Stream, an associated dammed lake with weirs, beyond the Hammonds Mill Farm boundary in the grounds of New Close Farmhouse, on the other side of London Road. The bed level of the mill race is 28.55m AOD as it 'spills' from the culvert under London road, while the bed level of Herrings Stream is 27.25m AOD as it spills from its culvert under London Road. The top level of the mill race culvert is 29.34m AOD, the top of the mill race banks vary between 30.25m and 30.55m AOD, both sides, the access road level is 30.24m AOD at the entrance from London Road.
- 5.10 The mill race weir level where it discharges into the lake is set at 28.83 AOD, the spill way level into the lake is 26.52, the drain diameter is 750mm, length 25 metres. The lake outlet weir is set at 26.61, the Herrings Stream bed level at lake return is 25.36. The mill race weir level, at the former mill pond end is 28.87, (40mm higher than the discharge to lake weir).

The 'design' water levels of the mill race/pond and the lake, set by fixed weirs, and the 1 in 100 + 35% CC fluvial flood levels are:

Mill race/pond	28.87m AOD
Lake	26.61m AOD

Flood with CC 27.86m AOD (node 365 mid way along mill race)
26.65m AOD (node 364 at west end of mill race)

- 5.11 A fluvial flood event with CC, from the Herrings Stream overflowing on Hammonds Mill Farm land will therefore have no direct impact on the water level in the mill race, as the flood level (node 365) 27.86m AOD will be a minimum of 1m lower than the water level in the mill race.
- 5.12 The water level in the mill race will rise as the water level in the Herring Stream rises but this is related to:
- a) weir levels on the other side of London Road,
 - b) the capacity/flow rate of the culvert that spills into the mill race (750mm dia, 16m length, 120mm fall, max flow rate 24m³/min),
 - c) the weir level and outlet drain flow rate to the lake (750mm dia, 14m length, 2.1m fall, max flow rate 220 m³/min), and
 - d) the weir level and outlet drain flow rate from the west end of the mill race to the culvert (750mm dia, 92m length, 0.2m fall, max flow rate 30 m³/min)
- 5.13 The high capacity and flow rate into the lake, the high capacity with slower flow rate into the west end culvert and a more or less consistent 'freeboard' provided by the mill race banks are considered to comfortably accommodate any 'fluvial' rise in water level in the mill race and surface water run off into the mill race/pond at their northern banks, the extent of which is mapped on EA RoFSW 2040 - 2060 mapping.
- 5.14 Levels from the topographical survey confirm that there is only one location along the mill race where RoFSW 2040 - 2060 surface water flood levels may overflow the southern bank, but flood water would quickly drain over that part of the access road and down the sloping grass banks to the lake, which has ample freeboard to accept the relatively small volume of water from a short duration, high intensity rainfall event that can cause local surface water flooding in rural areas.

- 5.15 In summary, water levels in the mill race/pond associated with fluvial or (pluvial) surface water flood events will not give rise to any flood risk at the Barns, farmyard and only very slight, road surface water running over the access road at one location.

Mill pond, overflow stream, out race

- 5.16 The mill pond was infilled in 2002. The former pond perimeter wall to the access road remains, top of wall level is 29.308, road level varies at this location between 28.85m and 29.05m AOD. The out race was also infilled in 2002.
- 5.17 Buried in the infilled mill pond, the 750mm dia concrete 'overflow' drain, from the mill race/pond has an invert level of 27.62m AOD at the former sluice position where it discharges into the 1070mm 'dia' brick culvert which runs under the farmyard to the open overflow stream. The stream bed level at the discharge of the culvert is 25.35m AOD. The length of the buried drain is 92 metres, the length of the culvert is 40 metres.
- 5.18 The overflow stream and brick culvert historically provide an overflow to a full mill pond, mill race/pond, either at flood events or during periods when the mill was not working and the penstock/sluice to the overshot water wheel was shut. Roof and surface water from the Barns, the farmyard, Dairy Cottage and land drains, also historically connect to the brick culvert and overflow stream via a series of manholes, yard gullies and catch pits.
- 5.19 The buried drain, installed when the mill pond was infilled provides an overflow for the mill race/pond, but only when the mill race weir/lake feed drain is running full (max flow rate 220 m³/min). Even in a fluvial and pluvial flood event it is unlikely this lake feed drain will run full.

5.20 In the unlikely event that it may, the buried overflow drain (750mm dia, length 92 metres, capacity 40m³) and the brick culvert (1070mm dia, length 40 metres, capacity 36 m³) will comfortably be able to contain surface water flooding from the mill race/pond and roof/surface water from the Barns, farmyard and land drains, when a fluvial flood event may result in fluvial flood water entering about half the length of the brick culvert (1 in 100 + 35% CC level 26.89m AOD).

The invert level of the brick culvert at the sluice is 27.62m AOD, the farmyard level near the sluice is 28.77 and the buried drain is a closed pipe with a direct connection to the brick culvert.

5.21 The mill race/pond, brick culvert, former sluice or drain at the infilled millpond will therefore introduce no additional fluvial or surface water (pluvial) flood risk to the Barns (dwelling conversions) or the farm yard.

Watercourses and ditches

5.22 The watercourse and ditch to the north of Barns 1 and 2 is 3.5metres above the 1:100 + 35% CC fluvial flood event level, draining via underground pipework and the brick culvert into the overflow stream and the Herrings Stream and therefore will introduce no additional pluvial flood risk to the Barns (dwelling conversions) or the farmyard.

Capacity, condition and management (if to be relied upon for site drainage or flood management)

5.23 Barns 1/2 and Barns 3/4 roof drainage discharge via downpipes to underground surface water drains that connect via manholes to the culvert under the farmyard which spills into the overflow stream then flowing into the Herrings Stream to the south, just west of the private bridge. Yard gulleys located at the lower (southern) end of the sloping farmyard also connect to the culvert.

- 5.24 During heavy rain events over the last 4 years, when the new owners of Hammonds Mill Farm have managed the estate, no backing up of yard gullies or overflowing of barn gutters have been observed. No overflowing or flooding associated with the mill race, the pond linked to it to the north, or lying surface water at the bottom the banks to the north and east of Barns 1/2 has been observed, or reported.
- 5.25 As the application is for Class Q Prior Approval, under the transitional provisions, no alterations to the roof arrangement or layout is proposed and although gutters and downpipes will be replaced, downpipes positions and connections to the existing surface water drainage will not be altered.
- 5.26 In line with sound practice, existing surface water drains will be jetted and a CCTV survey undertaken including the brick culvert, the drain under the infilled mill pond and the drain from the surface water outfall to the north of Barns 1/2. The results of the CCTV surveys will be submitted to MSDC FRD Team at the discharge of a drainage condition stage.
- 5.27 No additional reliance on 'unmodelled' surface water infrastructure or watercourses is therefore proposed, with one caveat:

Sound building and surface water design practice would include proposals to check the condition of any existing filter drains /french drains/catchpits at the bottom of the grassed banks to the north and east of Barns 1/2 (built during the 1970s) and either clean out, replace, or if not found, install a new filter/french drain system with catch pits.

Any existing land drainage system can be assumed to connect to the existing culvert below the farmyard that flows south to the overflow stream and as such any cleaning out/replacement would not be an 'additional' reliance on unmodelled surface water infrastructure.

If no existing land drainage is found, the proposal would be to either:

- a) connect a new land drainage arrangement at the bottom of the banks, via catch pits to existing surface water manholes in the farmyard, connected to the brick culvert, or
- b) subject to EA/WSCC/MSDC approvals discharge the new land drainage to a partly restored mill pond, as a SUDS holding pond, with controlled slow release to the brick culvert at the 1:100 + CC event when the culvert may partly back up.

In planning heritage considerations even a partial reforming of the mill pond as a surface water 'holding pond' is very likely to be supported as an enhancement which restores visually the water infrastructure 'story' of this very old water mill location and also introduces a biodiversity gain.

In essence, draining the ground at the bottom of the north and east banks can be considered a surface water flood resilience measure, which would prevent any surface water build up outside the north east and south east elevations of Barns 1/2 (Dwellings 1/2).

The strategy is sound and adds surface water flood resilience and is therefore considered to address MSDC FRD team comments on surface water drainage at the Class Q Prior Approval application stage. A detailed, ground surface water drainage design will be submitted to discharge a Prior Approval Given (consent) applied Condition, at that stage.

See Appendices: MAP 10

6. *Surface Water (Pluvial) Flood Risk*

Overlay of Development Layout on RoFSW Mapping

- 6.1 Proposed dwelling layouts, including covered, 'external terraces and patios' (open to the outside but still within barn footprints) have been overlaid on (RoFSW 2040-2060) mapping and shows no "built development" occurs within the 1:100 + CC surface water EXTENT (treated as Flood Zone 3b equivalent by MSDC) and there is no obstruction of existing flow paths.

See Appendices: MAP 7, MAP 8, MAP 9, CONVERSION FLOOR PLANS and ELEVATIONS

7. *Confirmation of Finished Floor Level Strategy (Barns 1 and 2)*

- 7.1 WSCC, the Lead Local Flood Authority (LLFA) have confirmed that they do have surface water flood level data for Hammonds Mill Farm and recommended that EA (RoFSW) extent mapping should be used to assess surface water flood risk, with the caveat that the EA do not recommend that flood depths linked to the mapping should not be relied on in surface water flood risk assessments.

See Appendices: EMAIL WSCC(LLFA) Information on Surface Water levels for Hammonds Mill Farm

- 7.2 This accords with the requirements set out by the MSDC FRD Team although the Team do refer to EA surface water depths linked to the mapping, unlike the LLFA.
- 7.3 In the absence of bespoke modelling, it is accepted, as MSDC FRD Team recommend, that the EA 1:1000 + CC (2040-2060) surface water extent mapping can be taken as a proxy for the 1:100 + CC design flood for surface water.

- 7.4 For the (2040-2060) epoch, it is accepted that Barns 1 and 2 are shown to be at Medium Risk from surface water flooding while the bottom of the grass banks to the north and east of Barns 1 and 2, where a ground platform was cut into existing sloping ground to site the barns in the 1970s, is shown to be at High Risk from surface water flooding, comparable to a Flood Zone 3b scenario when carrying out a flood risk assessment.
- 7.5 It should be noted however that EA (RoSWF) mapping is based on GIS contours and interpolated 2m grid ground levels and does not always reflect actual site levels or site conditions. There is also no history of surface water flooding at the north and east of Barns 1 and 2, or in Barns 1 and 2, which have been used for hay storage, feed storage and sheltered, cattle milking sheds/parlours for c 50 years. Although in the 'less vulnerable' category, mid 20C hay and food storage barns and sheltered, milking sheds/parlours are unlikely to have been built in locations, known to, or likely to be subject to surface water flooding.
- 7.6 However future climate change impacts are given more weight in the 21C, when carrying out flood risk assessments and in the absence of surface water modelling, the MSDC FRD Team assertion that flood depth indicators from EA (RoSWF) should be used and EA Standing Advice followed, have therefore been checked with 2025 Topographical Survey Levels at and around Barns 1 and 2.
See Appendices: MAP 7, MAP 8
- 7.7 External ground levels to the north and east of the barns are reasonably consistent between 28.78 and 28.85 while the internal concrete slab levels in the barns are 29.52 and 29.42m AOD, already higher than external ground levels.
- 7.8 Following EA Standing Advice, in the absence of surface water flood modelling, or the introduction of surface water flood mitigation measures, new finished floor levels should be 300mm above adjacent ground level, with an additional 600mm for flood risk mitigation.

- 7.9 Proposed finished floor levels are 29.80, as in the updated Flood Risk Assessment, which is confirmed as 905mm above the highest adjacent external ground level. The existing concrete floor levels of the barns are between 570mm and 740mm above the adjacent external ground levels and therefore a flood resilience floor height addition of between 165mm and 335mm is only required, which is broadly consistent with adding insulation and a floor screed to meet current building regulation thermal standards for dwellings. This has been accepted by the EA in their consultation response to MSDC.

See Appendices: EMAIL EA Consultation Response to MSDC (Jul 2025) SITE SECTION 3, SITE SECTION 4

- 7.10 Access to dwelling entrance doors will be via 1 in 12 gradient ramps, in line with current building regulations, within the footprint of the existing barns, as shown on the layout plans.
- 7.11 As noted earlier, It is also sound building practice to provide a filter drain or french drain at the bottom of graded banks. This is achievable and is proposed, with the drain connected either to the existing brick culvert via existing manholes, or to a new 'holding pond' at the former mill pond location, where a controlled release to the culvert can be installed, in the event that further intense rainfall follows a fluvial flood event which has resulted in the culvert being partly backed up. The detail design of this surface water drainage strategy can be subject to a Prior Approval Condition discharge.

8. *Ingress Protection for Open Sided Barns (1 and 2)*

- 8.1 Barns 1/2 (Dwellings 1/2) are only open on the north east and south east elevations, from 900mm above existing ground level and therefore resilient to any potential surface water flood ingress. From existing ground levels, external wall 'plinths' up to 900mm will be rendered. Open, covered terraces within the barn footprints will be at this level with flush thresholds to internal FFLs.

- 8.2 The north west and south west elevations are partly open at existing ground levels as this is where new cart shed parking and outside amenity space for Dwellings 1/2 are proposed, within the footprints of Barns 1/2, following consultation with the planning case officer which included the proposed removal of three framed bays of Barns 1/2.
- 8.3 At the south west elevation the farmyard falls on a good gradient towards the Herrings Stream, following the natural ground slope and surface water flow routes, so there is no potential for surface water ingress to proposed conversions to Dwellings 1/2.
- 8.4 At the north west elevation potential flood surface water may flow into the outdoor amenity areas and parking areas, but levels will be set to direct surface water flow to the south west elevation and the farmyard gradient falling to the south west in association with the continuation of the 900mm high external render 'plinth' to the dwellings themselves.

*See Appendices: FLOOR CONVERSION PLANS and ELEVATIONS with LEVELS and FLOOD RESILIENCE MEASURES, MAP 9
SITE PLAN, SITE SECTION 3, SITE SECTION 4*

9. ***Safe Escape Route_Surface Water Event***

- 9.1 The safe pedestrian route to the north is shown to remain safe and passable in the 1:100 + CC surface water flood event by reference to RoFSW (2040 - 2060) mapping.

See Appendices: MAP 5, MAP 6

- 9.2 The owners of Hammonds Mill Farm will also recommend to and facilitate with the purchasers/occupiers of the dwellings that they register with the EA Early Flood Warning Scheme and the local Hassocks Flood Warning Watch.

10. *Foul Water Drainage*

- 10.1 The existing Dairy Cottage and Hammonds Mill Farmhouse (former Mill House) currently use septic tanks and have EA discharge permits and therefore it can be assumed that a permits will be given for new shared Klarjester package treatment plant(s). Until the early 21C trade effluent discharge permits were also in place for farming activities associated with the large covered cow shed barns (Barns 1/2) and although since lapsed, the proposed Biodisc treatment plants for four dwellings result in a significant reduction in discharge effluent, (clean) arising from the change of use.
- 10.2 The Applicant, as owner of Hammonds Mill Farm, which comprises 93 acres, has confirmed, by reference to the Flood Risk Assessment and Drainage Strategy that they will give formal permission to connect the treatment plan(s) (likely to be two packaged plants, one for Barns 1/2 (Dwellings 1/2) and Dairy Cottage, another for Barns 3/4 (Dwellings 3/4) and Hammonds Mill Farmhouse (former Mill House) within the Hammonds Mill Farm land outside the Prior Approval application site curtilages. If required this can be in the form a separate letter to MSDC, a Statutory Declaration, or a s106 Agreement.
- 10.3 The final sizing of the package treatment plants and their locations is considered a matter for detail design/specification at the Prior Approval Given (consent) Condition discharge stage, when full details will be submitted for approval by MSDC and will include EA permits in principle.
- 10.4 As a preliminary estimate, at this stage, two 12 person Klarjester BioDisc treatment plants are likely to be required, gravity fed with gravity effluent (clean) discharge potentially via small holding tanks to the Herrings Stream, to allow continued use during a 1:100 + CC fluvial flood event.

- 10.5 Responsibility for management and maintenance will be with the owners of Hammond Mill Farm, who will retain ownership of the 93 acre estate, granting long leases to owners of the new dwellings and their curtilages (c 2 acres) with rights to drainage connections to the treatment plants, rights of access to the private access road and farm tracks, shared use of the farmyard, and by arrangement short term lease of limited areas of field pasture, if requested.
- 10.6 Service charges applied to the long lease will cover the cost of management and maintenance of the treatment plants and drain connections, as well as shared charges with the Hammonds Mill owners applied to maintenance of the private access road, farmyard, drainage and the water mill water infrastructure.

APPENDICES

From: Flood Risk Management FloodRiskManagement@westsussex.gov.uk

Subject: RE: Hammonds Mill Farm_Surface Water Flood Risk

Date: 30 June 2025 at 12:13

To: David Hutchison david.hutchison@btinternet.com, Flood Risk Management floodriskmanagement@westsussex.gov.uk

FM

Good Morning,

Apologies for the delayed response to your enquiry.

We do not hold any specific data regarding surface water depths to assist in your enquiry, our understanding is that the surface water flood risk mapping that is suitable for planning purposes can be found on the Flood Map for Planning:

[Get flood risk information for planning in England - Flood map for planning - GOV.UK](#)

The Risk of Flooding from Surface Water mapping does include depths, however the Environment Agency have advised that these are a guide only and unsuitable for reliance on in planning applications.

[Surface water: possible flood depths - Check your long term flood risk - GOV.UK](#)

Kind Regards

Natalie Biddulph

Flood Risk Management Officer | Planning Services

West Sussex County Council, Ground Floor, Northleigh, County Hall, Chichester PO19 1RH

Email: FRM@westsussex.gov.uk | Web: www.westsussex.gov.uk

From: David Hutchison <david.hutchison@btinternet.com>

Sent: 03 June 2025 16:24

To: Flood Risk Management <FloodRiskManagement@westsussex.gov.uk>

Subject: Hammonds Mill Farm_Surface Water Flood Risk

****EXTERNAL****

Good afternoon,

We currently have a Class Q Prior Approval application under consideration with Mid Sussex District Council.

The application is at Hammonds Mill Farm, Hassocks, BN6 9NB.

Because the application is for conversion of agricultural buildings (Barns) to form only 4 dwellings and the application site area is under 1 hectare, the MSDC Flood Risk and Drainage Team are the consultee, rather than WSCC.

In their comments on the flood risk they have requested further information on the surface water flood risk that is shown on the latest EA surface water flood risk mapping, in particular the likely depth of water, so we can propose any mitigation features that may be necessary and set the appropriate floor level

referred to.

As far as we are aware the EA do not provide any detailed information on likely surface water flood depths and they have referred us to yourselves as the lead authority for surface water risk. We have the EA Product 4 data but that does not include likely surface water depths.

We would be grateful therefore if you can provide us with any information that you hold so that we can provide this to MSDC and respond to their specific queries on dealing with surface water flood risk (inc CC allowance) associated with Barns 1 and 2 as shown on the attached.

Thank you.

David Hutchison B Arch PG Dip TP

**DJH Architectural and Planning
Consultants**

3 The Old Brewery
21b Warwick Road
Brighton
BN11 3ET

t 07976 287111
e david.hutchison@btinternet.com

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PS



Thank you the Product 4 Data for the project at Hammonds Mill Farm, Hassocks, BN5 9SU which you emailed to us on 18 June 2025.

We have used it, under EA license terms to assist with the Flood Risk Assessment submitted in support of our Class Q Prior Approval planning application for the conversion of redundant agricultural barns to form 4 dwellings, within the footprints of the barns.

The barns and the existing private access road are in Flood Zone 1, but at one corner of one of the barns the Flood Zone 2 and 3 extent reaches that point, which is the reason for the site specific FRA.

The LPA Flood Risk and Drainage Team at Mid Sussex District Council however have queried our use and site mapping based on node 364 and referred us to EA standing guidance on which node should be used, stating that we should use the considerably further upstream. node 365.

Node 364 is just upstream from the 'site' while node 365 is some further 280 metres upstream. The difference in flood depths at the two nodes is 1.2 metres (1 in 100 + 35% CC, as agreed with the LPA).

Between node 365 and node 364 is a lake with an extensive grassed, informal flood basin beyond, which we believe mainly explains the difference in flood depths at the two nodes.

Applying the flood depths from node 364 at this part of the site (the barns and surroundings) is consistent with the EA Flood Extent map, whereas applying the depth from node 365 gives a materially large flood extent than the EA mapping. Our mapping has 'graded' the node 365 and node 364 depths across the area between node 365 and the application site (the barns) and is consistent with the EA extent mapping.

QUERY 1: As node 364 is slightly upstream from the 'site' can the flood depth data at this node be used as the design flood level to establish

proposed new floor levels in the converted barns, rather than the depths at node 365.

QUERY 2: Can the EA provide any 2D modelling for the site of the affected barn and it's immediate surrounding area, if the EA cannot offer further guidance on using the node point data and if so, please confirm the charge to us, presumably as pre application advice on this specific matter.

The Product 4 data is attached with the barn locations marked on the node point map for clarity.

We look forward to receiving your response at the earliest opportunity.

Thank you.

David Hutchison B Arch PG Dip TP

**DJH Architectural and Planning
Consultants**

3 The Old Brewery
21b Warwick Road
Brighton
BN11 3ET

t 07976 287111
e david.hutchison@btinternet.com

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Mid Sussex District Council Development Control Oaklands Oaklands Road Haywards Heath West Sussex RH16 1SS	Our ref: HA/2025/126902/01 Your ref: DM/25/0579 Date: 15 July 2025
--	---

Dear Planning team (FAO: Anna Tidey),

PROPOSED CONVERSION OF FOUR AGRICULTURAL BARNs TO FOUR RESIDENTIAL DWELLINGS.

HAMMONDS MILL FARM, LONDON ROAD, HASSOCKS, WEST SUSSEX, BN6 9NB.

Thank you for consulting the Environment Agency on the above application.

We have reviewed the information as submitted and set out our position and comments below.

Environment Agency position

We have **no objection to the proposal provided that the following condition be attached to any planning permission granted**, and that the details in relation to the condition be submitted and approved by the Local Planning Authority.

Condition – Flood risk

The development shall be carried out in accordance with the submitted Flood Risk Assessment (FRA) (dated 6 May 2025, by DJH Architectural and Planning Consultants) and the following mitigation measures it details:

- Finished floor levels of Barns 1/2 shall be set no lower than 29.80 metres above Ordnance Datum (AOD) (section 2.5 of the FRA).
- Finished floor levels of Barns 3/4 shall be set no lower than 27.30 metres above Ordnance Datum (AOD) (section 2.5 of the FRA).

These mitigation measures shall be fully implemented prior to occupation and subsequently in accordance with the scheme's timing/phasing arrangements.

The measures detailed above shall be retained and maintained thereafter throughout the lifetime of the development.

Reasons

To reduce the risk of flooding to the proposed development and future occupants.

The condition is in line with the Planning Practice Guidance (PPG) to the National Planning Policy Framework (NPPF) for Flood Risk and Coastal Change.

Please notify us immediately if you are unable to apply our suggested condition to allow further consideration and advice.

Advice to the Applicant

Discharge of treated sewage effluent

The discharge of domestic sewage associated with this development will require an environmental permit under the Environmental Permitting (England & Wales) Regulations 2016 from the Environment Agency.

You can find more information online at <https://www.gov.uk/permits-you-need-for-septic-tanks/permits> or contact our National Customer Contact Centre on **03708 506 506** (Monday to Friday 8am to 6pm) or by emailing enquiries@environment-agency.gov.uk for an application form and guidance.

You should be aware that the permit may not be granted. A permit will only be granted where the risk to the environment is acceptable.

Signing up for flood warnings

The applicant/occupants should phone Floodline on 0345 988 1188 to register for a flood warning, or visit <https://www.gov.uk/sign-up-for-flood-warnings>. Our flood warning service is a free service that provides warnings of flooding from rivers, the sea and groundwater, direct by telephone, email or text message. Anyone can sign up.

Flood warnings can give people valuable time to prepare for flooding – time that allows them to move themselves, their families and precious items to safety. Flood warnings can also save lives and enable the emergency services to prepare and help communities.

For practical advice on preparing for a flood, visit <https://www.gov.uk/prepare-for-flooding>.

To get help during a flood, visit <https://www.gov.uk/help-during-flood>.

For advice on what to do after a flood, visit <https://www.gov.uk/after-flood>.

If you have any queries regarding the above information, please do not hesitate to contact the advisor identified below.

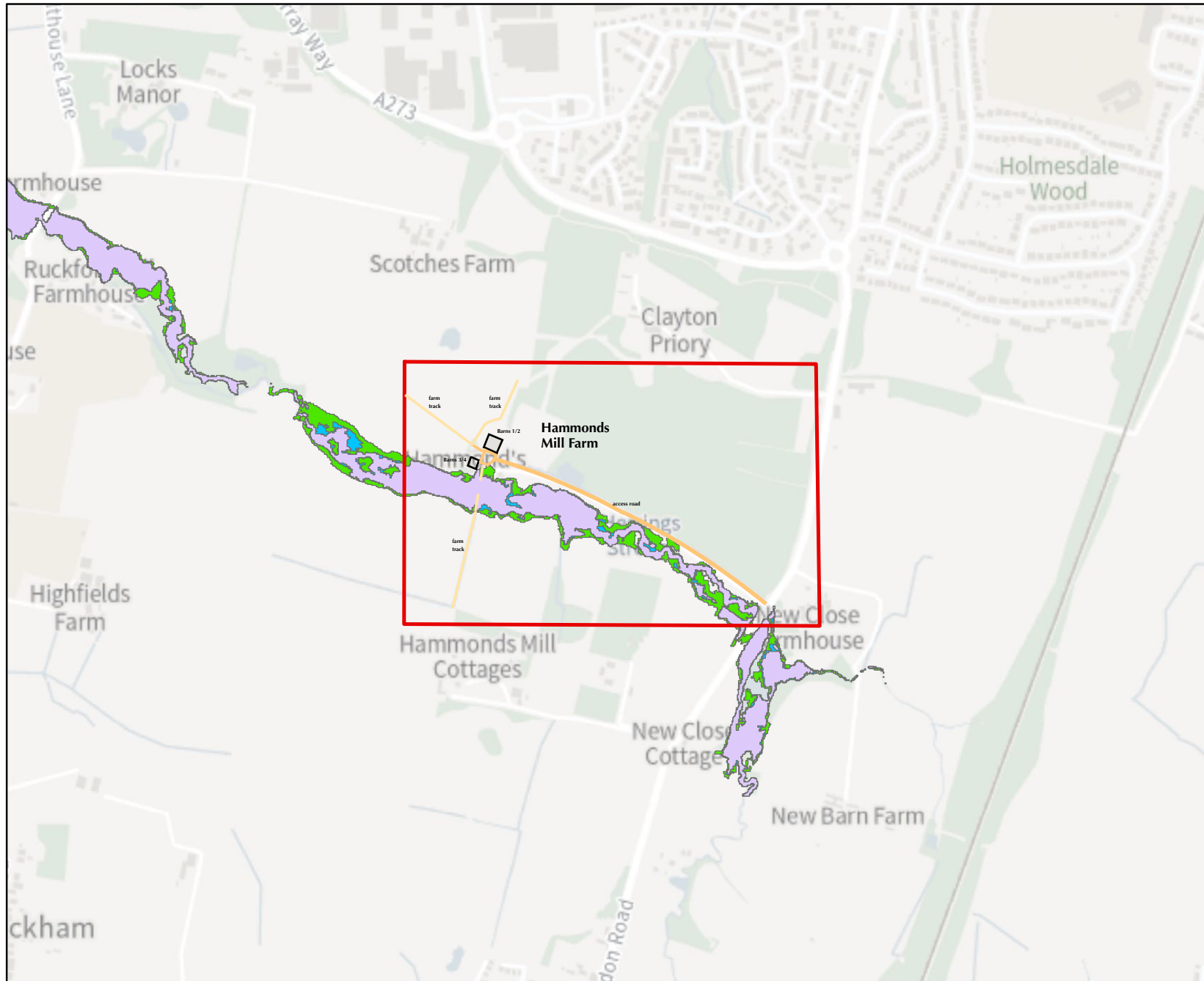
Yours faithfully,

Environment Agency – Solent & South Downs

Sustainable Places Advisor: Anna Rabone

Direct dial: 02077 140525

Direct e-mail: anna.rabone@environment-agency.gov.uk



Legend

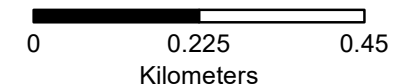
- Site Boundary
- 1% +CC 35% (Undefined Fluvial)
- 1% +CC 45% (Undefined Fluvial)
- 1% +CC 105% (Undefined Fluvial)

Hammonds Mill Farm Class Q Barn Conversions Flood Risk Assessment (Jul 2025)

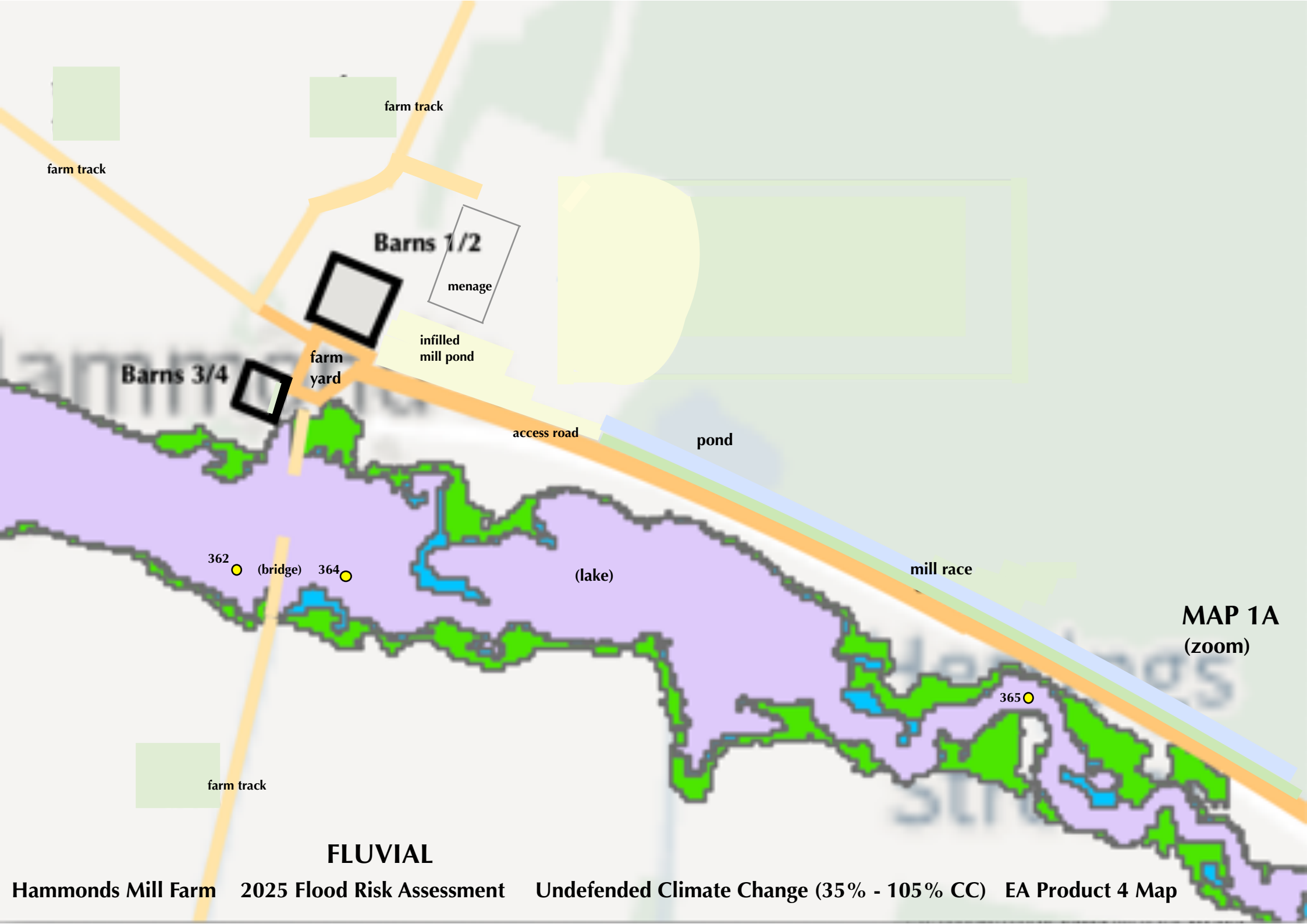
Fluvial with Climate Change

Annual Exceedance Probability (AEP) The probability of a flood of a particular magnitude, or greater occurring in any given year.

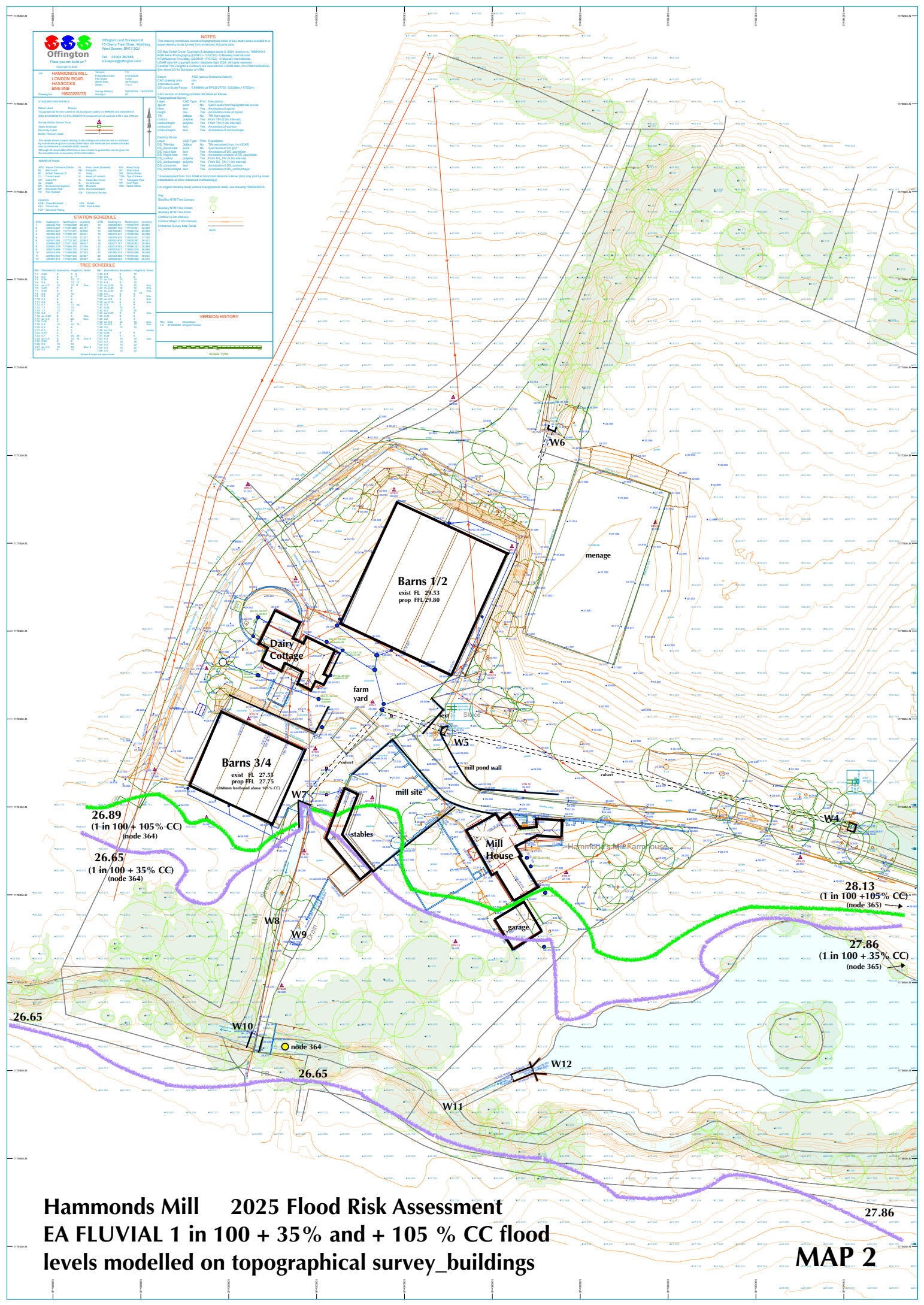
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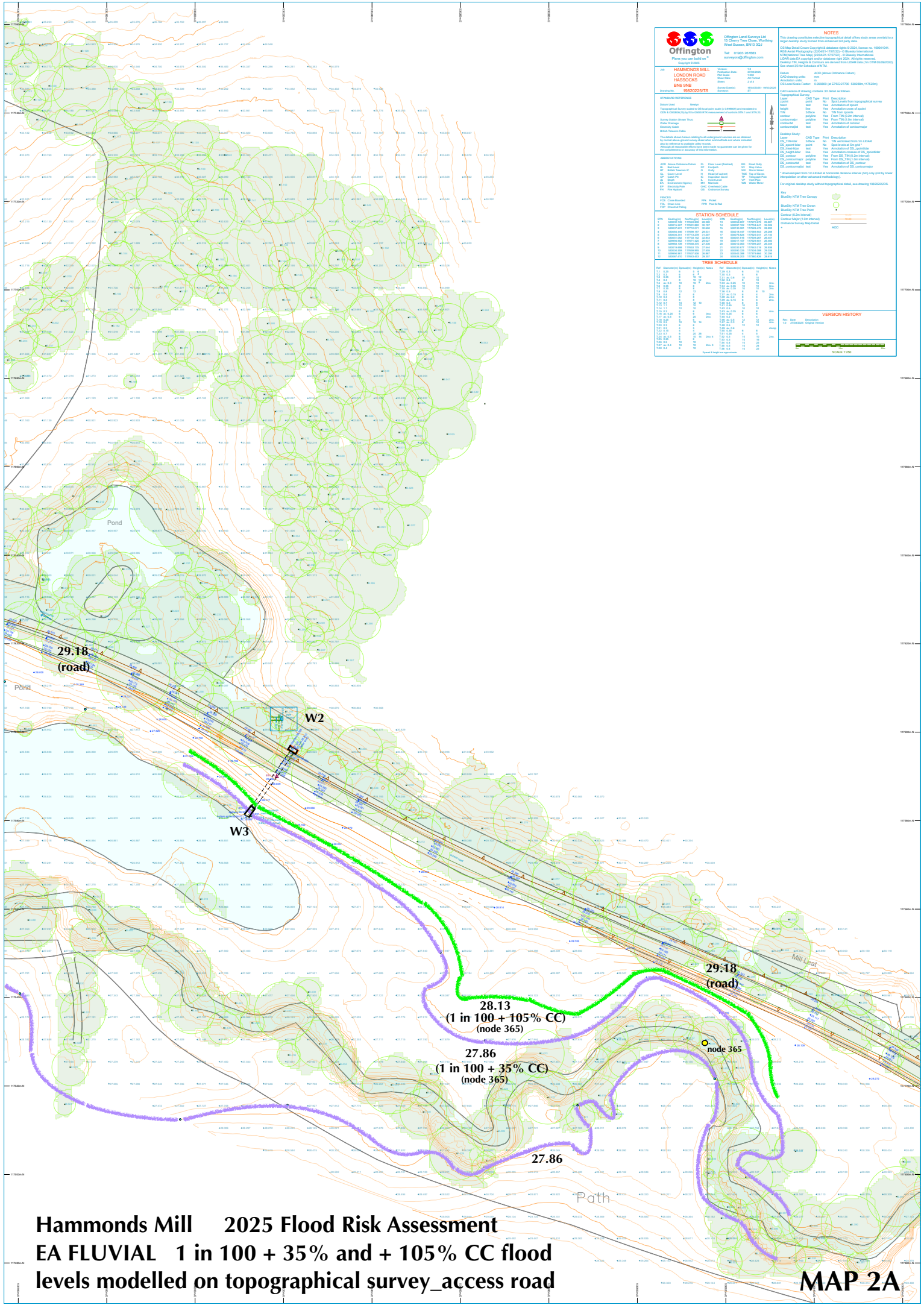


MAP 1



FLUVIAL

[illegible]





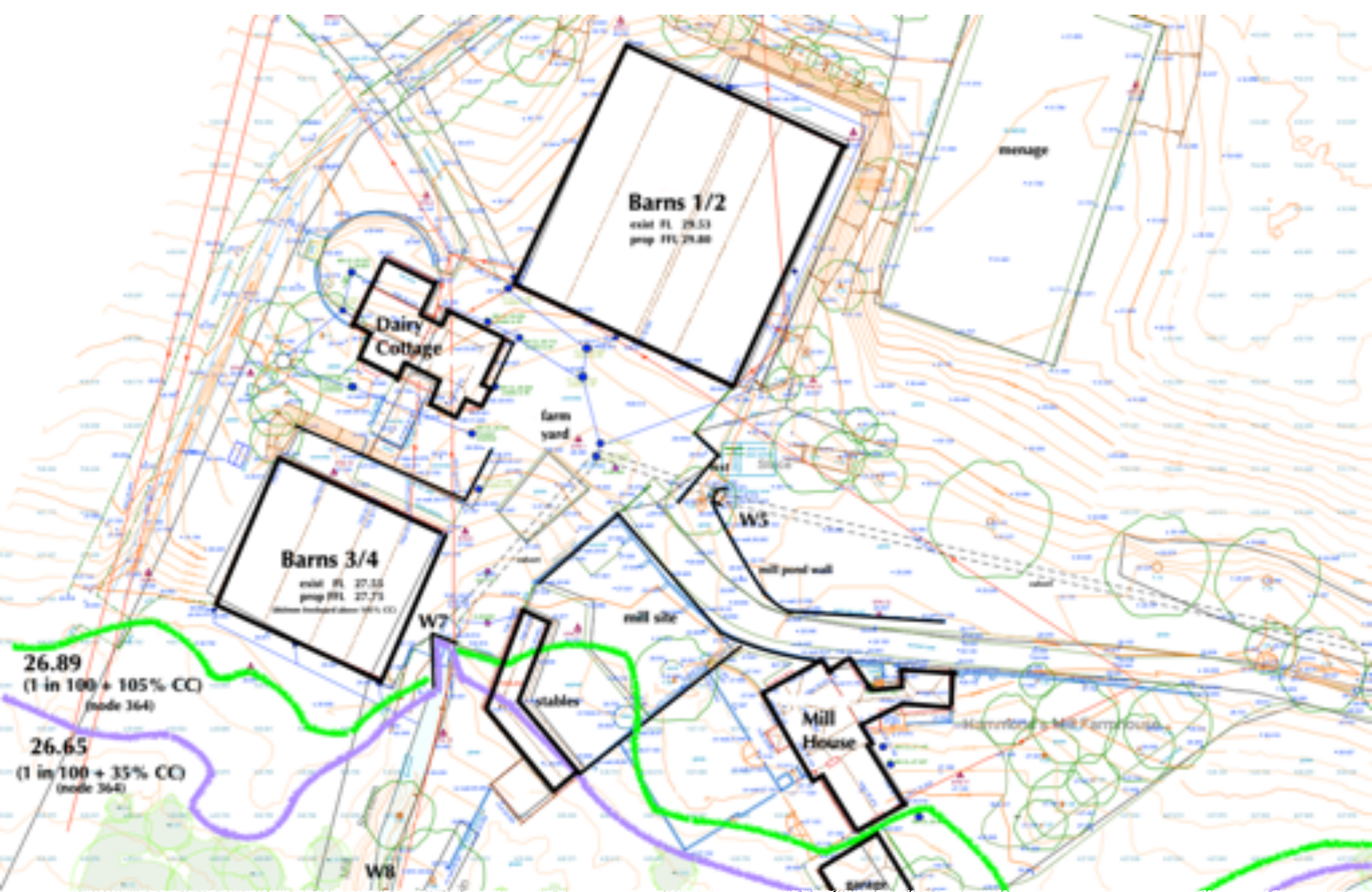
Offington Land Services Ltd
100 Cherry Tree Close, Buntingford, Cambs, CB9 9JQ
Tel: 01955 501999
surveys@offington.com

**HAMMONDS MILL
LONDON ROAD
HAMMONDS
BNE INB**
Drawing No: 1802025/TS

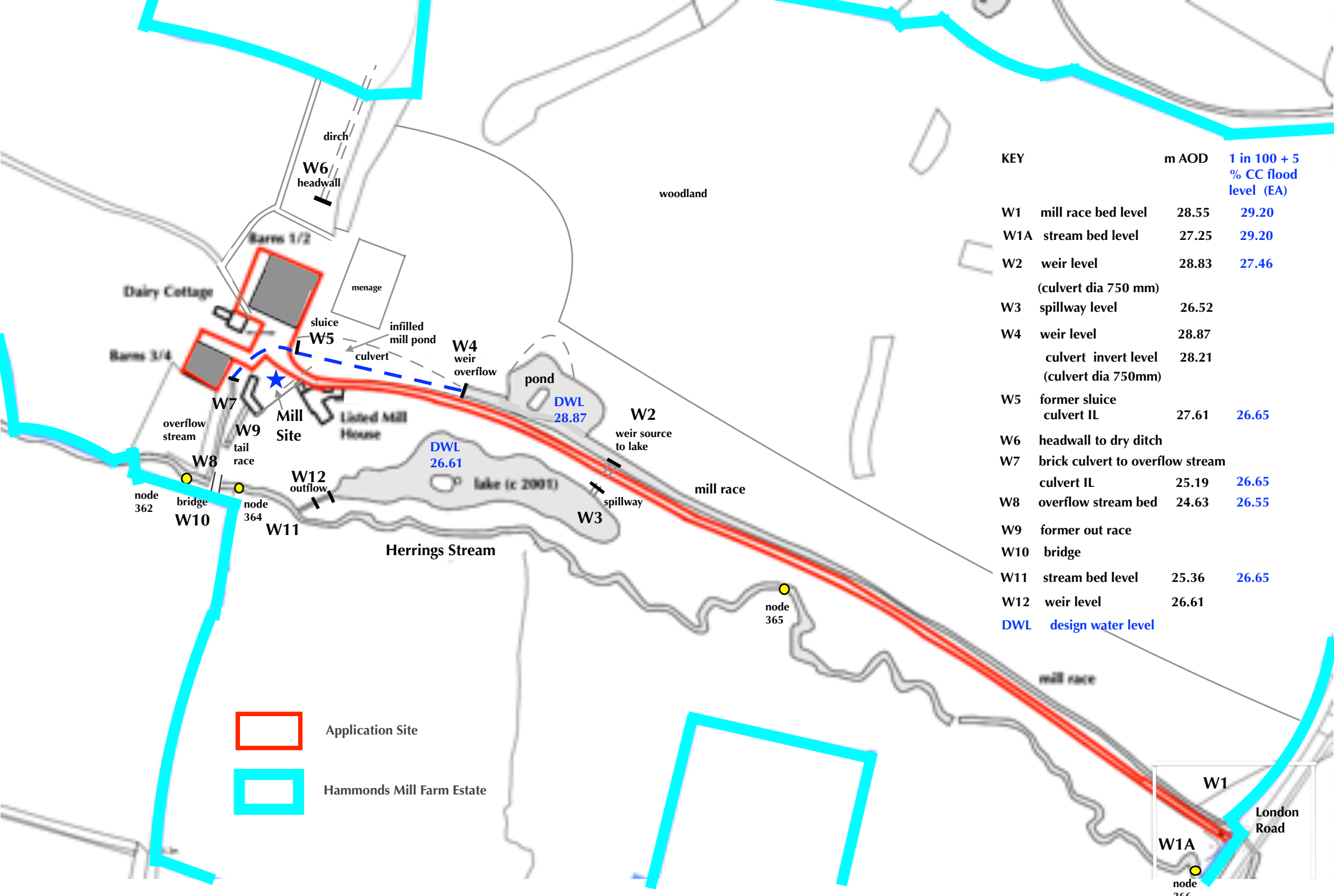
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Project	1000000
Client	1000000
Scale	1:1000
Sheet	1 of 1

STATION SCHEDULE

Station	Chainage	Height	Notes
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2	1000010	100.10	
3	1000020	100.20	
4	1000030	100.30	
5	1000040	100.40	
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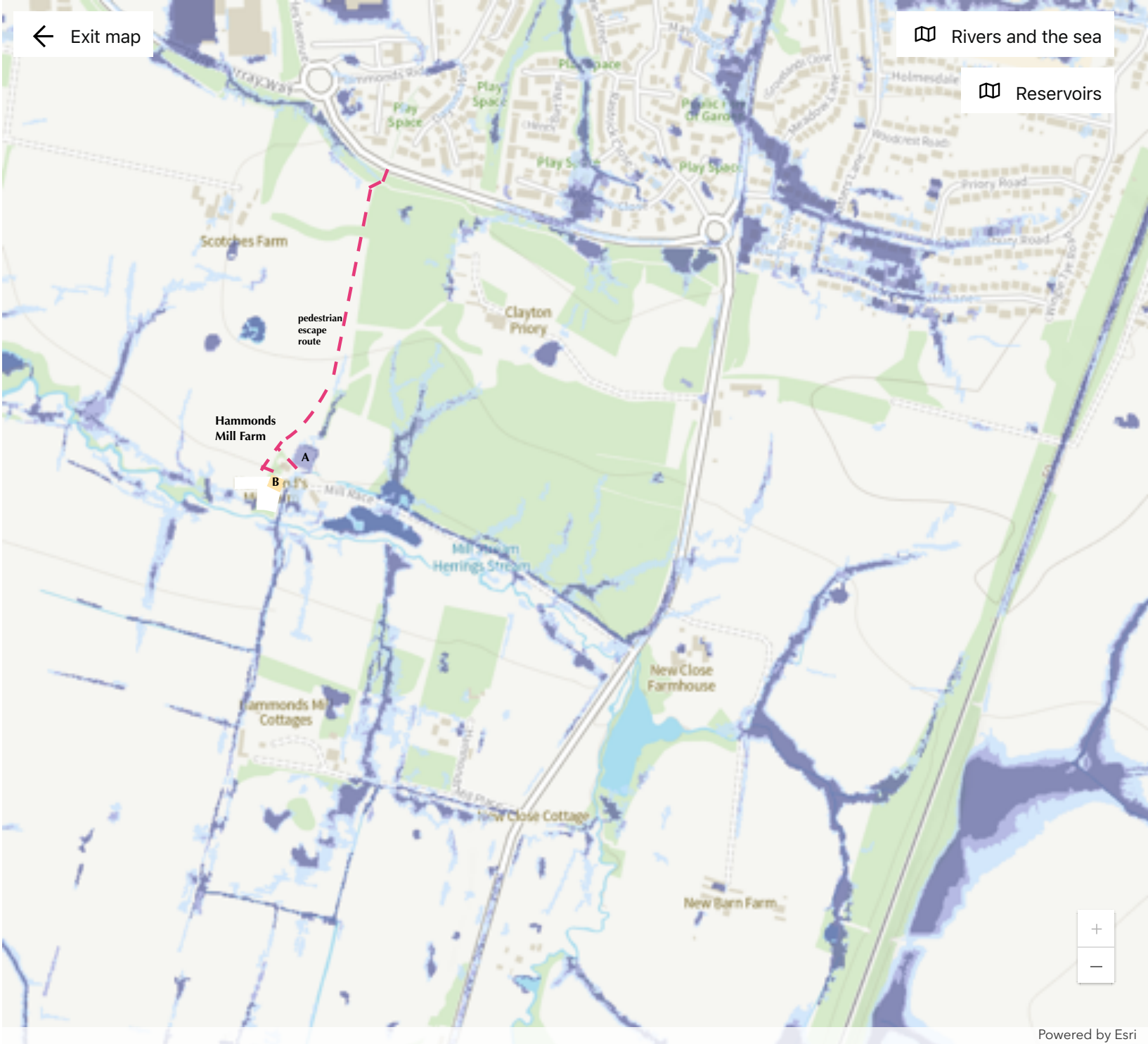


Hammonds Mill 2025 FRA EA FLUVIAL 1 in 100 + 35% and + 105% CC
flood levels modelled on topographical survey_buildings ZOOMED IN



KEY		m AOD	1 in 100 + 5 % CC flood level (EA)
W1	mill race bed level	28.55	29.20
W1A	stream bed level	27.25	29.20
W2	weir level	28.83	27.46
	(culvert dia 750 mm)		
W3	spillway level	26.52	
W4	weir level	28.87	
	culvert invert level (culvert dia 750mm)	28.21	
W5	former sluice culvert IL	27.61	26.65
W6	headwall to dry ditch		
W7	brick culvert to overflow stream		
	culvert IL	25.19	26.65
W8	overflow stream bed	24.63	26.55
W9	former out race		
W10	bridge		
W11	stream bed level	25.36	26.65
W12	weir level	26.61	
DWL	design water level		







Surface water map

Yearly chance of flooding

○ Extent

○ Depth

Yearly chance of flooding between 2040 and 2060

● Extent

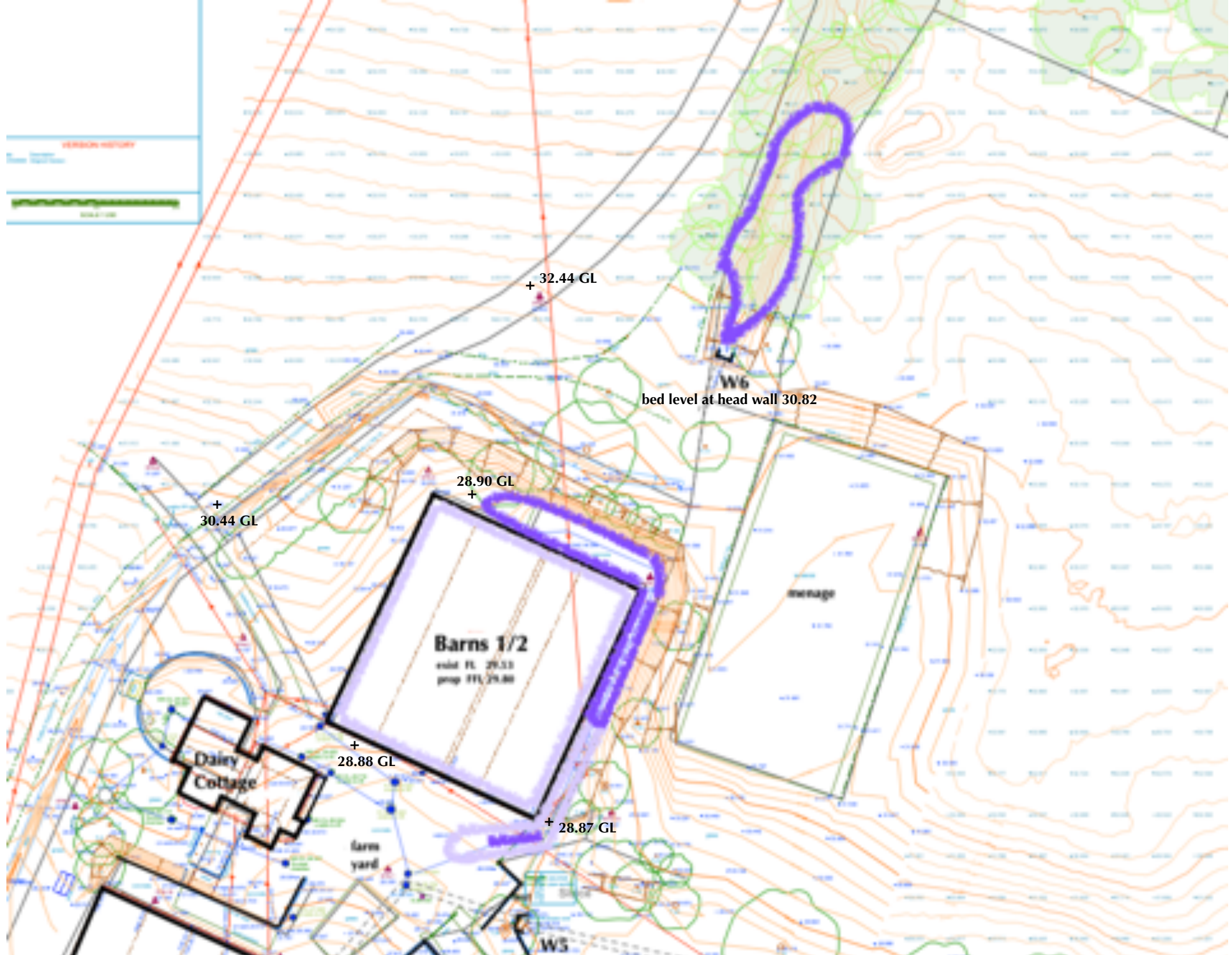
■ High chance
More than 3.3% chance each year

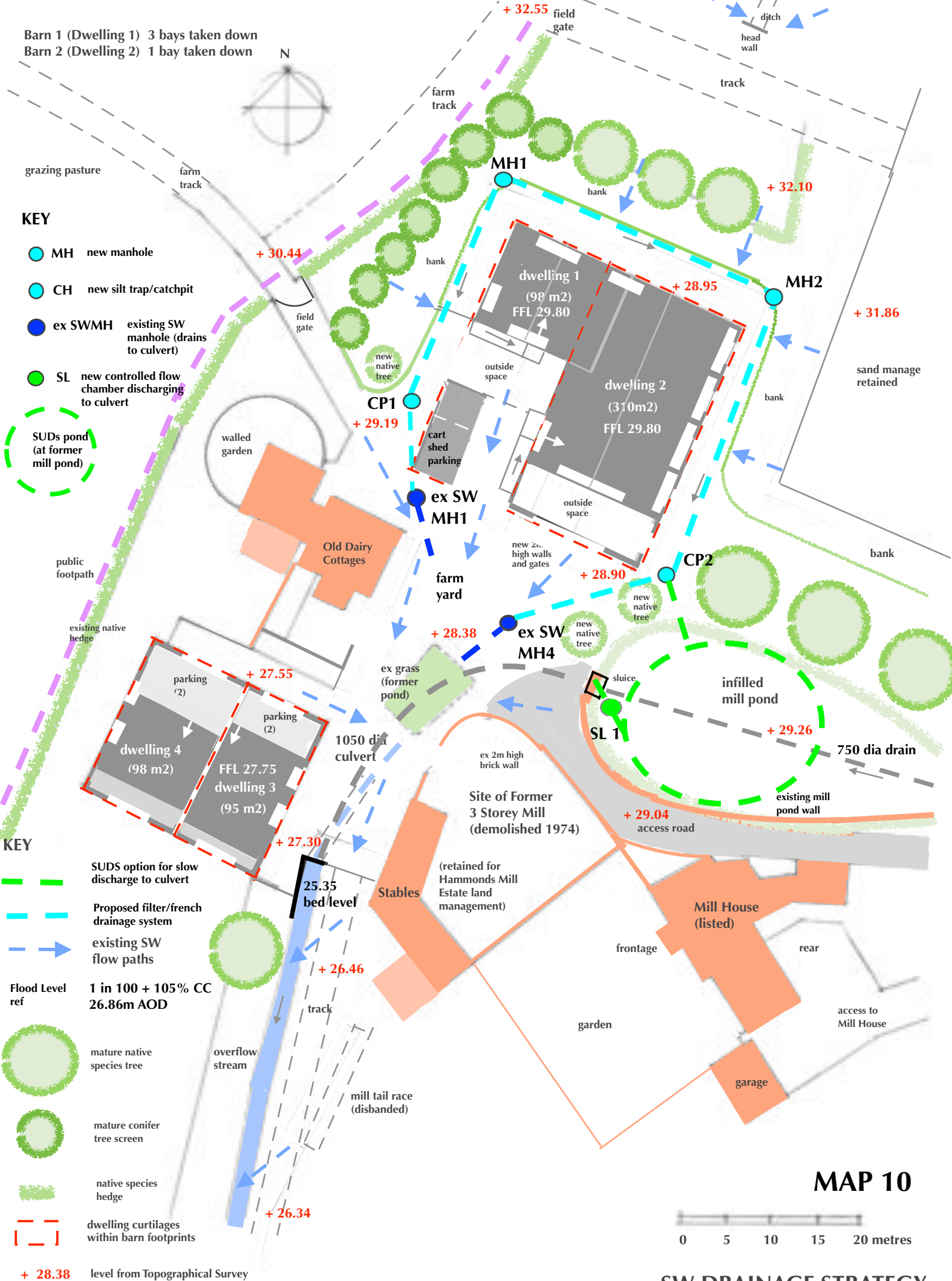
■ Medium chance
Between 1% and 3.3% chance each year

■ Low chance
Between 0.1% and 1% chance each year

○ Depth





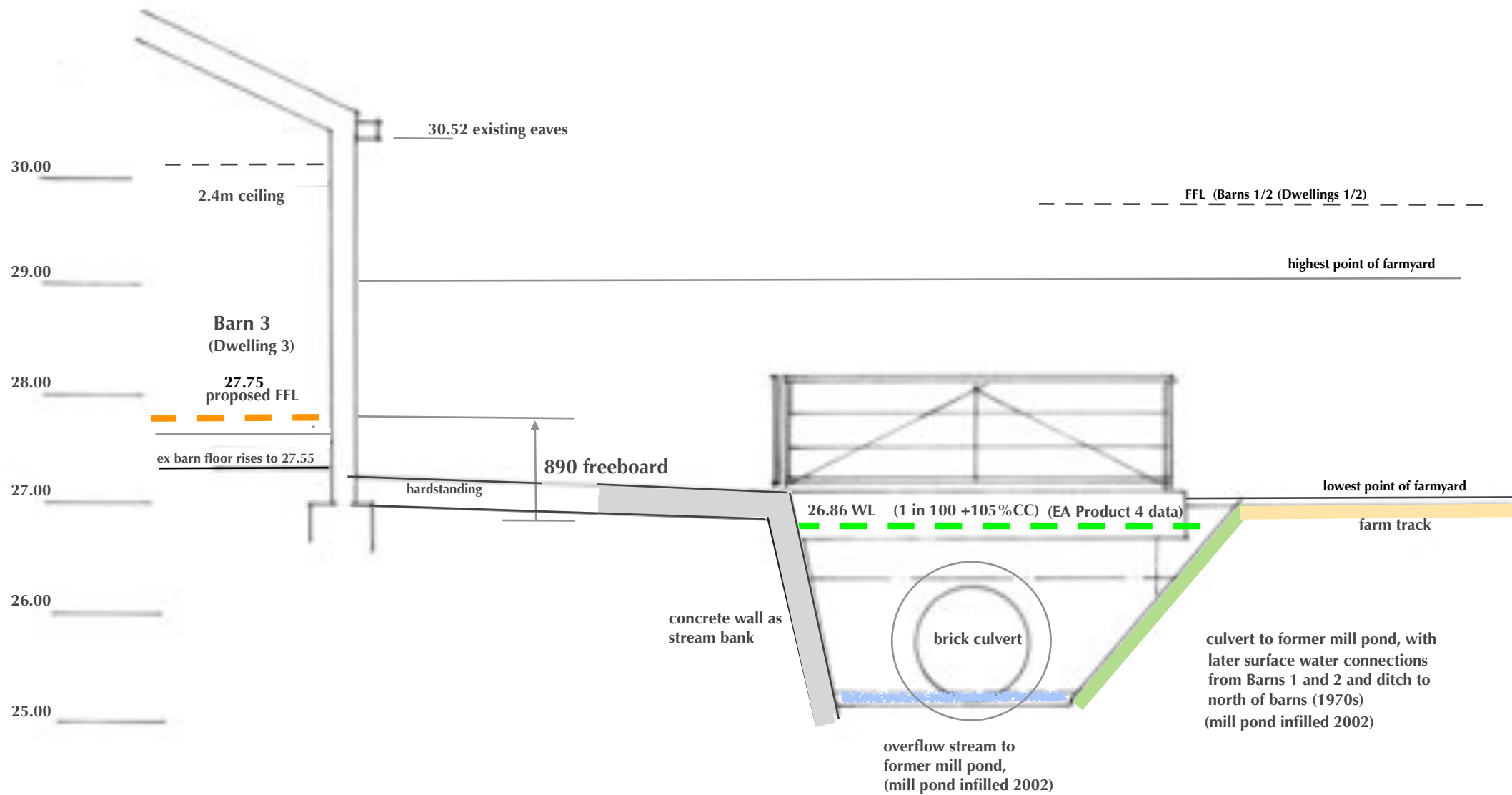


Hammonds Mill

1.5 at A4

Class Q Barn Conversions

Section at culvert entry to overflow stream
drwg 0264_FRA_S1 revA



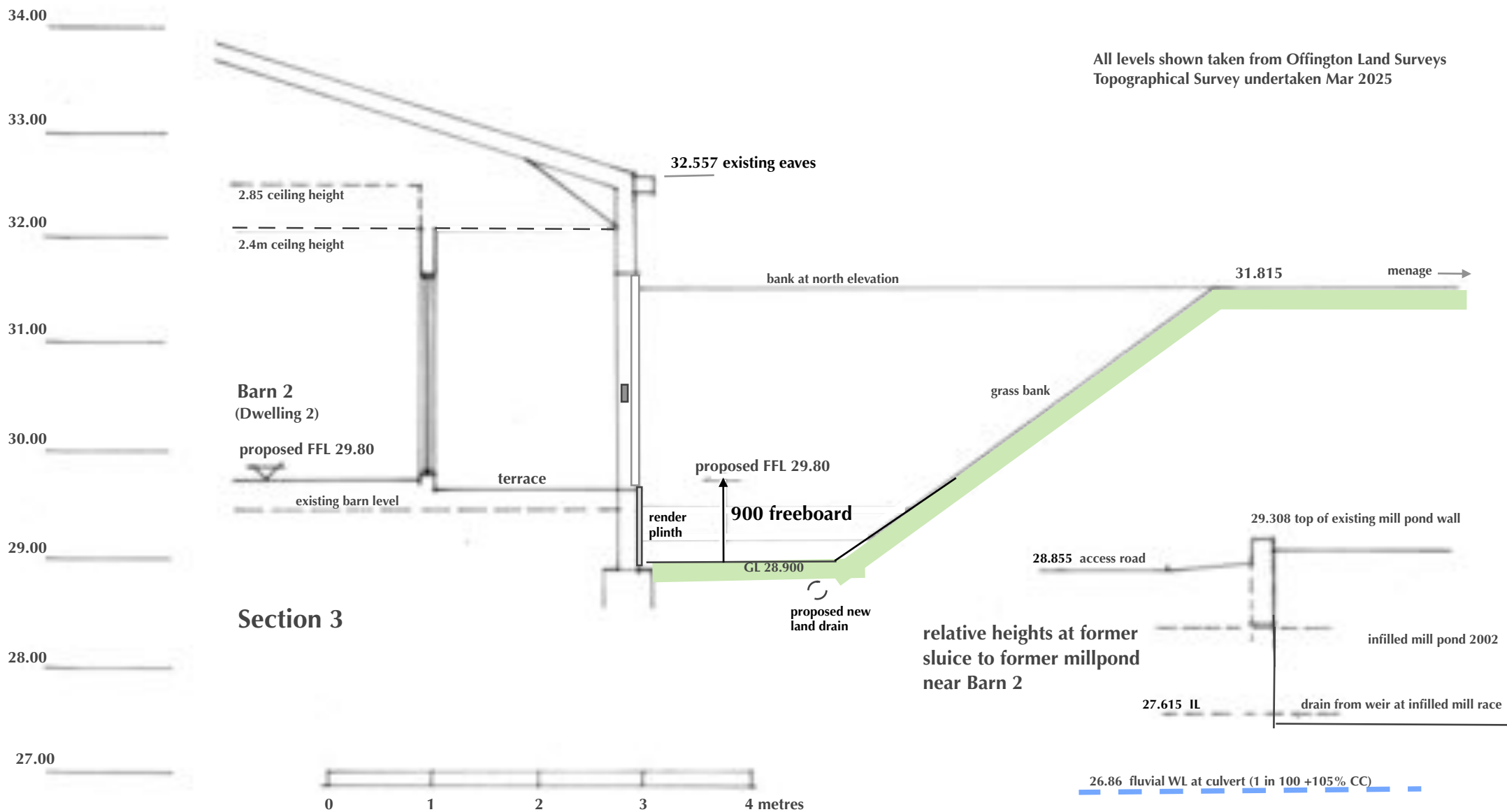
SECTION 2

Hammonds Mill
1.5 at A4

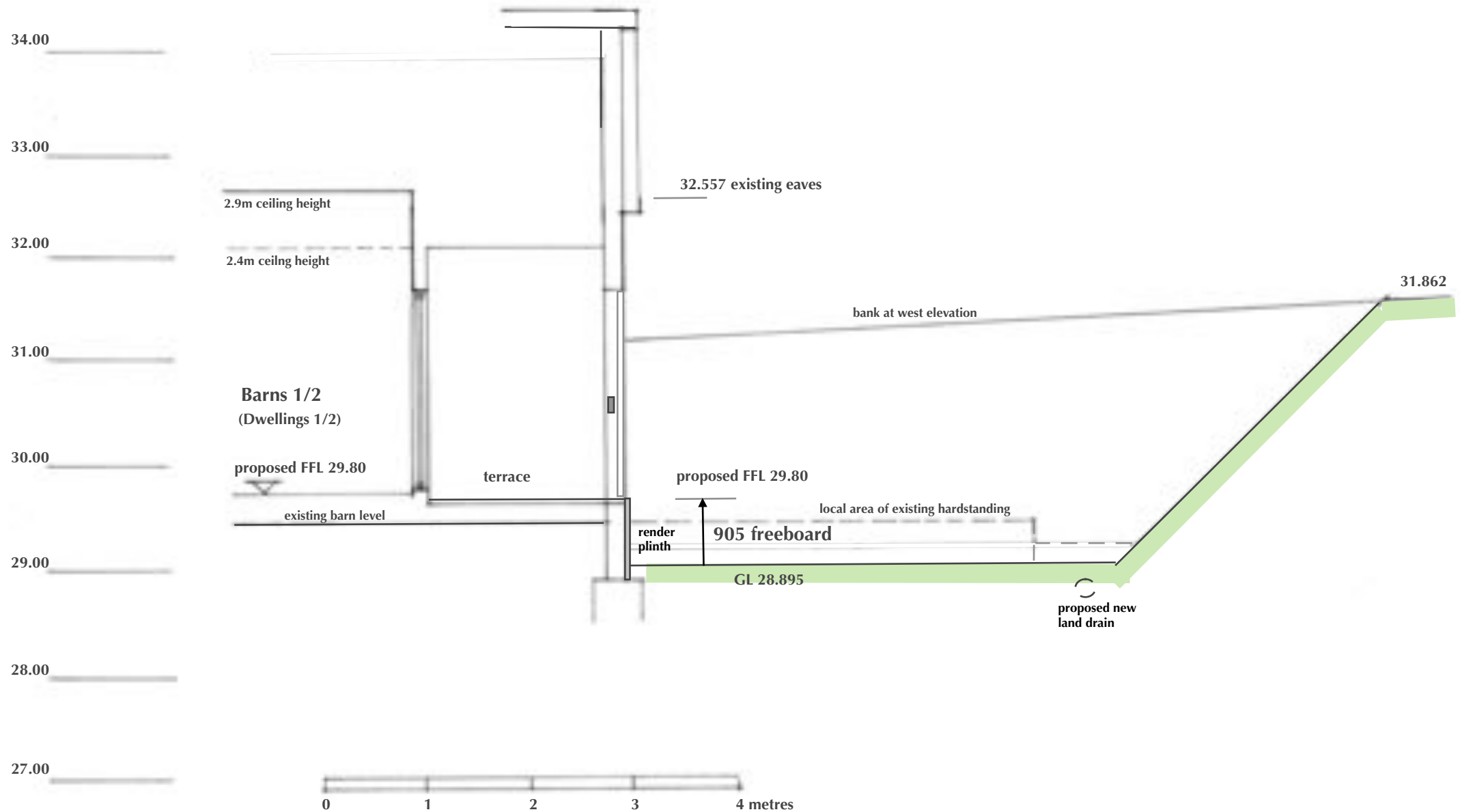
Class Q Barn Conversions

Flood Risk Assessment (river)

Section 2 at overflow stream at culvert
0264/FRA S2 revA



SECTION 3



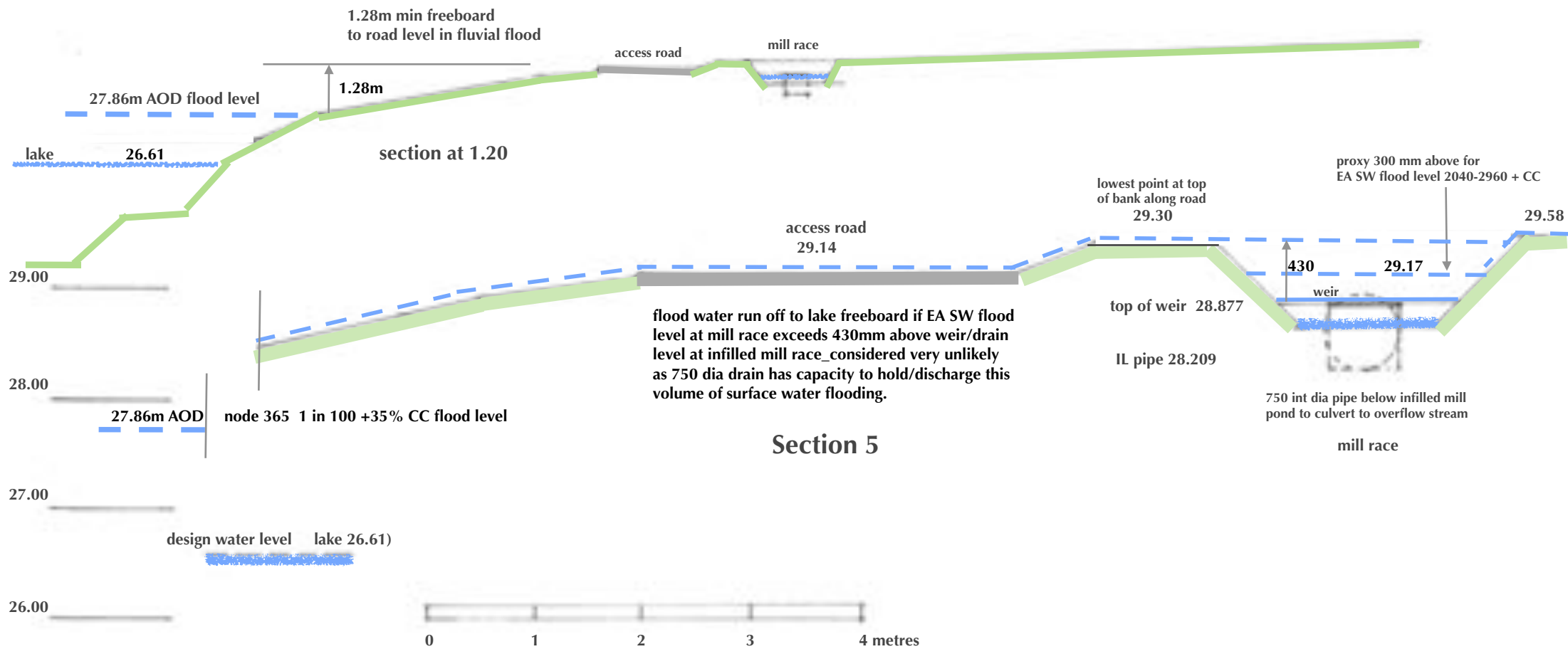
SECTION 4

Hammonds Mill
1.5 at A4

Class Q Barn Conversions

Flood Risk assessment (surface water)

Section 4 at Barns 1_2 at north bank
0264/FRA S4 rev A



SECTION 5

Flood risk assessment data



Location of site: 530282 / 117586 (shown as easting and northing coordinates)

Document created on: 2 June 2025

This information was previously known as a product 4.

Customer reference number: 2984RXKF7A61/ EIR2025/11748

Map showing the location that flood risk assessment data has been requested for.



How to use this information

You can use this information as part of a flood risk assessment for a planning application. To do this, you should include it in the appendix of your flood risk assessment.

We recommend that you work with a flood risk consultant to get your flood risk assessment.

Included in this document

In this document you'll find:

- how to find information about surface water and other sources of flooding
- information on the models used
- definitions for the terminology used throughout
- flood map for planning (rivers and the sea)
- modelled data
- information about strategic flood risk assessments
- information about this data
- information about flood risk activity permits
- help and advice

Information that's unavailable

This document **does not** contain:

- past floods
- flood defences and attributes

We do not have past flooding data for this location.

Please note that:

- flooding may have occurred that we do not have records for
- flooding can come from a range of different sources
- we can only supply flood risk data relating to flooding from rivers or the sea

You can contact your Lead Local Flood Authority or Internal Drainage Board to see if they have other relevant local flood information. Please note that some areas do not have an Internal Drainage Board.

We aren't able to display flood defence locations and attributes as there are no formal flood defences in the area of interest.

Surface water and other sources of flooding

When using the surface water map on the [check your long term flood risk service](#) the following considerations apply:

- surface water extents are suitable for use in planning
- surface water climate change scenarios may help to inform risk assessments, but the available data fall short of what is required to assess planned development
- surface water depth information should not be used for planning purposes

To find out about other factors that might affect the flood risk of this location, you should also check:

- [reservoir flood risk](#)
- groundwater flood risk - you could use the [British Geological Survey groundwater flooding data](#), [groundwater: current status and flood risk](#) and the guide on [mining and groundwater constraints for development](#) - further information may be available from the lead local flood authority (LLFA)
- your local planning authority's SFRA, which includes future flood risk

Your Lead Local Flood Authority is West Sussex County.

For information about sewer flooding, contact the relevant water company for the area.

About the models used

Model name: Adur Eastern Branch Update, 2011

Scenario(s): No defences exist fluvial, no defences exist climate change fluvial

Date: 4 July 2011

Model name: Adur Climate Change Runs 2016

Scenario(s): Defended fluvial, defended climate change fluvial

Date: 2016

These models contain the most relevant data for your area of interest.

Terminology used

Annual exceedance probability (AEP)

This refers to the probability of a flood event occurring in any year. The probability is expressed as a percentage. For example, a large flood which is calculated to have a 1% chance of occurring in any one year, is described as 1% AEP.

Metres above ordnance datum (mAOD)

All flood levels are given in metres above ordnance datum which is defined as the mean sea level at Newlyn, Cornwall.

Flood map for planning (rivers and the sea)

Your selected location is in flood zone 3.

Flood zone 3 shows the area at risk of flooding for an undefended flood event with a:

- 0.5% or greater probability of occurring in any year for flooding from the sea
- 1% or greater probability of occurring in any year for fluvial (river) flooding

Flood zone 2 shows the area at risk of flooding for an undefended flood event with:

- between a 0.1% and 0.5% probability of occurring in any year for flooding from the sea
- between a 0.1% and 1% probability of occurring in any year for fluvial (river) flooding

It's important to remember that the flood zones on this map:

- refer to the land at risk of flooding and do not refer to individual properties
- refer to the probability of river and sea flooding, ignoring the presence of defences
- do not take into account potential impacts of climate change



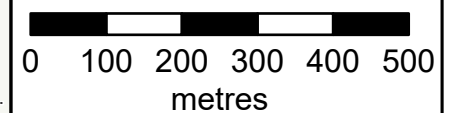
Flood map for planning

Location (easting/northing)
530282/117586

Scale
1:10,000

Created
2 Jun 2025

-  Selected area
-  Main river
-  Flood Zone 3
-  Flood Zone 2



Modelled data

This section provides details of different scenarios we have modelled and includes the following (where available):

- outline maps showing the area at risk from flooding in different modelled scenarios
- modelled node point map(s) showing the points used to get the data to model the scenarios and table(s) providing details of the flood risk for different return periods
- map(s) showing the approximate water levels for the return period with the largest flood extent for a scenario and table(s) of sample points providing details of the flood risk for different return periods

Climate change

The climate change data included in the models may not include the latest [flood risk assessment climate change allowances](#). Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding.

The Environment Agency will incorporate the new allowances into future modelling studies. For now, it's your responsibility to demonstrate that new developments will be safe in flood risk terms for their lifetime.

Modelled scenarios

The following scenarios are included:

- Defended modelled fluvial: risk of flooding from rivers where there are flood defences
- No defences exist modelled fluvial: risk of flooding from rivers where there are no flood defences
- Defended climate change modelled fluvial: risk of flooding from rivers where there are flood defences, including estimated impact of climate change
- No defences exist climate change modelled fluvial: risk of flooding from rivers where there are no flood defences, including estimated impact of climate change

Modelled Flood Outlines (Undefended Fluvial). Centred on BN6 9NB. Created 17/06/2025.

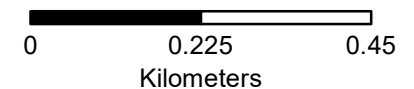


Legend

-  Site Boundary
-  5% AEP (Undefended Fluvial)
-  1% AEP (Undefended Fluvial)
-  0.1% AEP (Undefended Fluvial)

Annual Exceedance Probability (AEP) The probability of a flood of a particular magnitude, or greater occurring in any given year.

Scale: 1:10,000



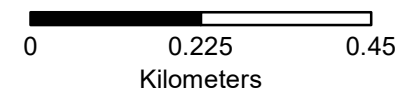


Legend

-  Site Boundary
-  1% +CC 35% (Undefined Fluvial)
-  1% +CC 45% (Undefined Fluvial)
-  1% +CC 105% (Undefined Fluvial)

Annual Exceedance Probability (AEP) The probability of a flood of a particular magnitude, or greater occurring in any given year.

Scale: 1:10,000



FRA Site Boundary and Node Points. Centred on BN6 9NB. Created 17/06/2025.

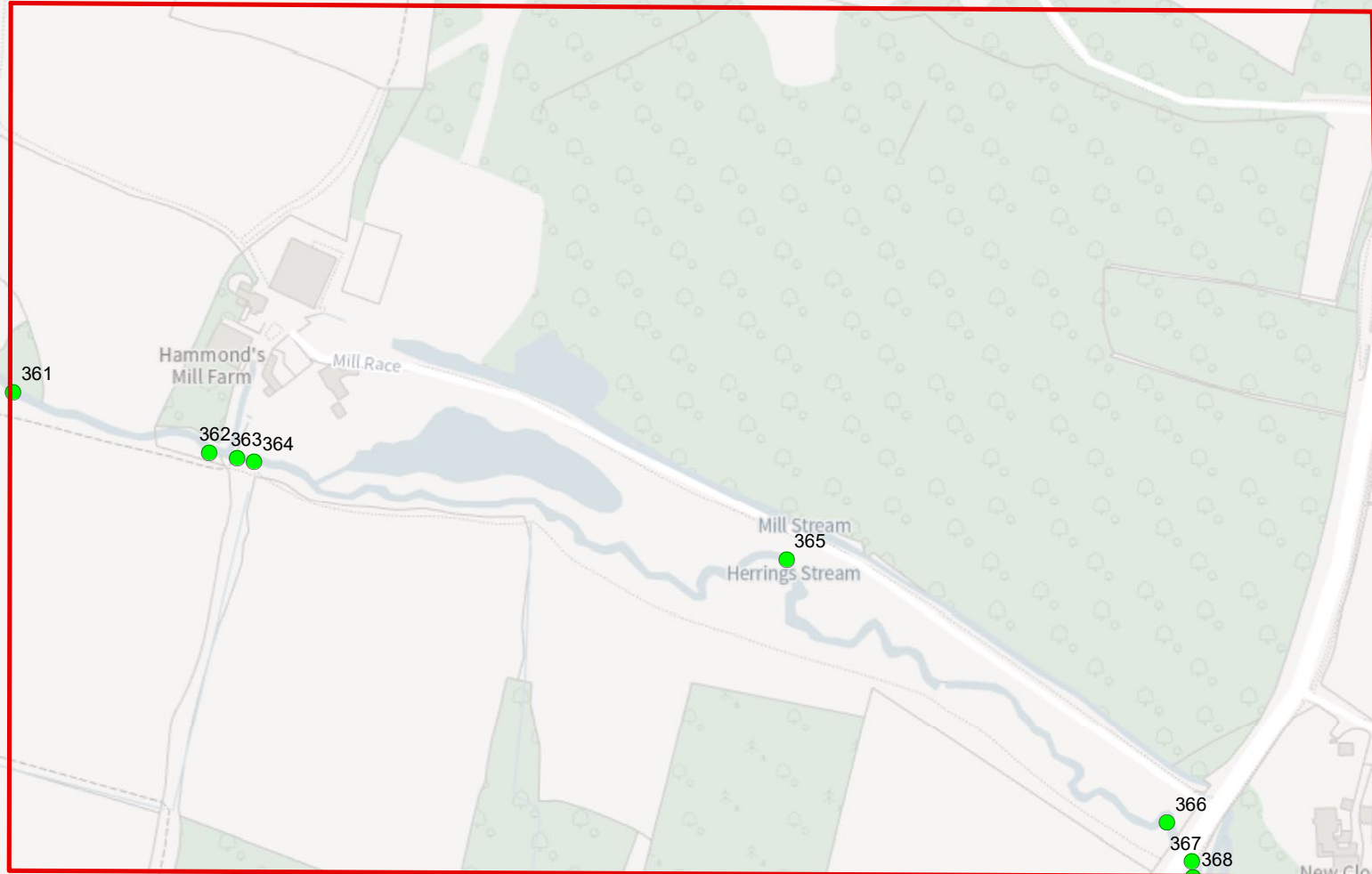
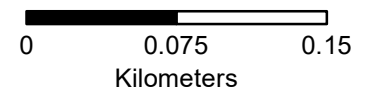


Legend

-  Site Boundary
-  Upper Adur Eastern Branch 2011

Annual Exceedance Probability (AEP) The probability of a flood of a particular magnitude, or greater occurring in any given year.

Scale: 1:3,778



Product 4 Flood Risk Data Requested by: David Hutchison

Site: 530280,117581

Table 1: Water Levels: Fluvial Undefended

Node Ref	NGR		Modelled Flood Levels in Metres AOD					
			Undefended Annual Exceedance Probability					
	Eastings	Northings	5%	1%	1% +CC (35%)	1% +CC (45%)	1% +CC (105%)	0.1%
361	529885	117624	25.83	26.10	26.32	26.32	26.47	26.32
362	529991	117590	26.18	26.40	26.55	26.58	26.74	26.60
363	530006	117585	26.30	26.50	26.63	26.67	26.86	26.72
364	530016	117585	26.29	26.48	26.65	26.69	26.89	26.70
365	530315	117529	27.48	27.67	27.86	27.91	28.13	27.92
366	530532	117380	28.82	29.01	29.20	29.23	29.39	29.24
367	530543	117360	28.99	29.49	-	-	-	29.88
368	530543	117352	29.02	29.53	29.75	29.80	29.98	29.96

Table 5: Water Depths: Fluvial Undefended

Node Ref	NGR		Modelled Flood Levels in Metres AOD					
			Undefended Annual Exceedance Probability					
	Eastings	Northings	5%	1%	1% +CC (35%)	1% +CC (45%)	1% +CC (105%)	0.1%
361	529885	117624	-	-	1.58	1.58	1.73	-
362	529991	117590	-	-	1.30	1.33	1.49	-
363	530006	117585	-	-	0.41	0.45	0.63	-
364	530016	117585	-	-	1.40	1.44	1.65	-
365	530315	117529	-	-	1.40	1.45	1.67	-
366	530532	117380	-	-	0.53	0.56	0.72	-
367	530543	117360	-	-	-	-	-	-
368	530543	117352	-	-	1.28	1.33	1.51	-

All levels taken from: Upper Adur (Eastern Branch) Update 2011 and Adur Climate Change Runs 2016

Produced on: 18/06/2025

*** Climate Change allowances for this model only show the superseded 20% increase in flows. The current allowances should be checked here:**

<https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>.

**** The flood risk data provided is based on existing EA hydraulic models for existing 0.5% annual probability events with an allowance for climate change. Please note the climate change allowances provided are not up to date. These were updated on 17 December 2019.**

You should refer to 'Flood risk assessments: climate change allowances' for the most up to date allowances. You will need to undertake further assessment of future flood risk using different allowances to ensure your assessment of future flood risk is based on best available evidence.

There is no additional information or health warnings for these levels/depths or the model from which they have been produced.

Strategic flood risk assessments

We recommend that you check the relevant local authority's strategic flood risk assessment (SFRA) as part of your work to prepare a site specific flood risk assessment.

This should give you information about:

- the potential impacts of climate change in this catchment
- areas defined as functional floodplain
- flooding from other sources, such as surface water, ground water and reservoirs

Your Lead Local Flood Authority is West Sussex County.

About this data

This data has been generated by strategic scale flood models and is not intended for use at the individual property scale. If you're intending to use this data as part of a flood risk assessment, please include an appropriate modelling tolerance as part of your assessment. The Environment Agency regularly updates its modelling. We recommend that you check the data provided is the most recent, before submitting your flood risk assessment.

Flood risk activity permits

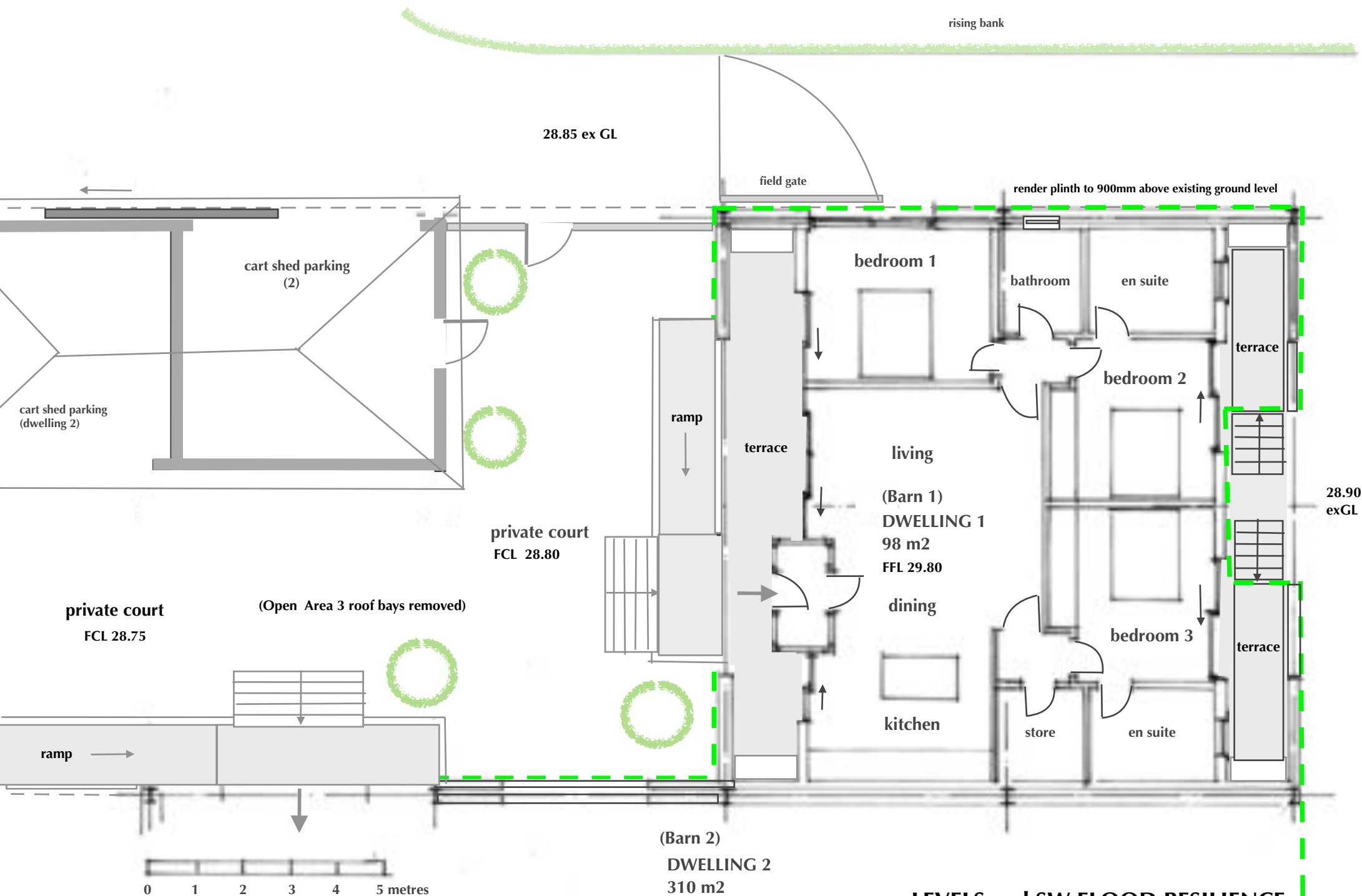
Under the Environmental Permitting (England and Wales) Regulations 2016 some developments may require an environmental permit for flood risk activities from the Environment Agency. This includes any permanent or temporary works that are in, over, under, or nearby a designated main river or flood defence structure.

[Find out more about flood risk activity permits](#)

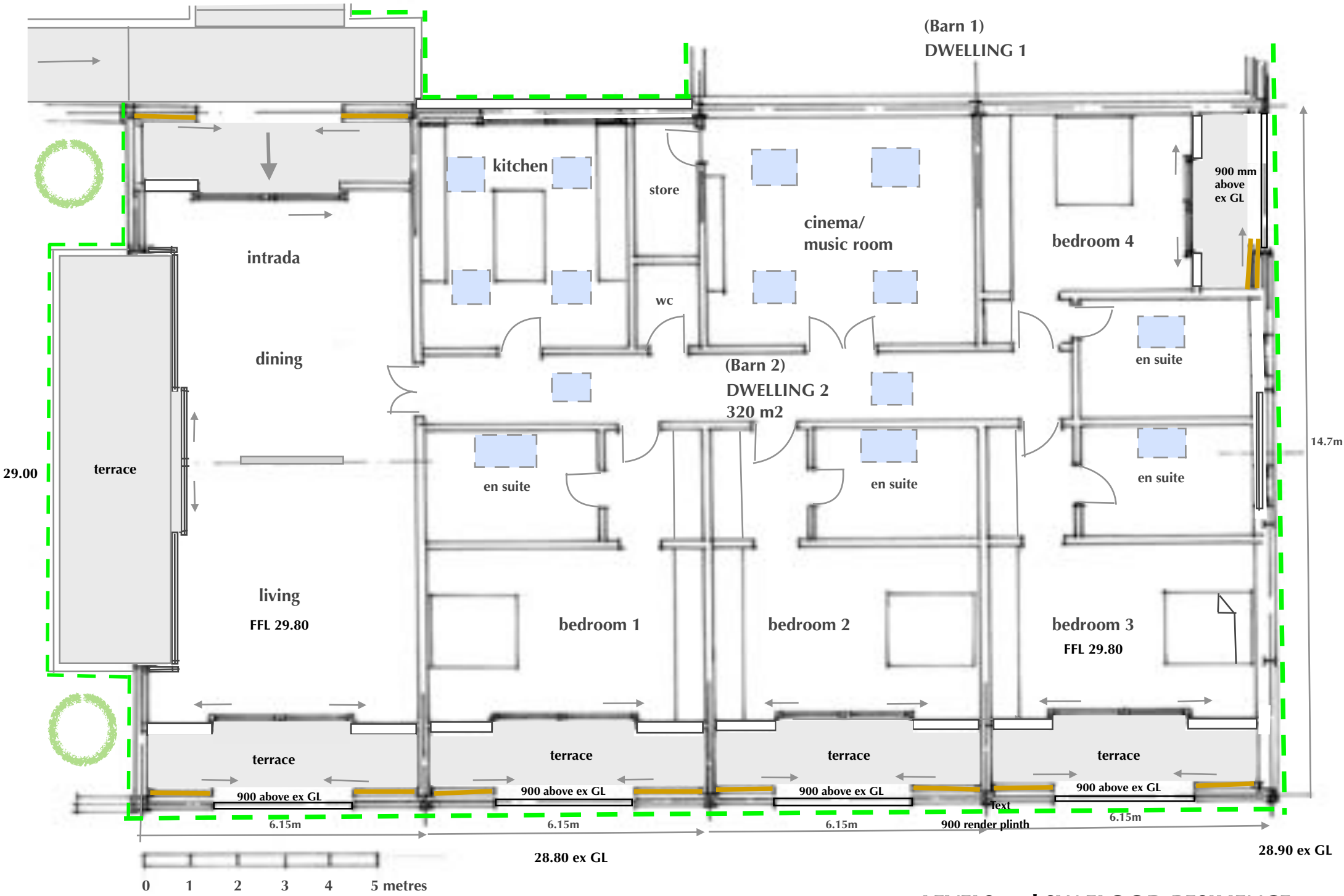
Help and advice

Contact the Solent and South Downs Environment Agency team at ssdenquiries@environment-agency.gov.uk for:

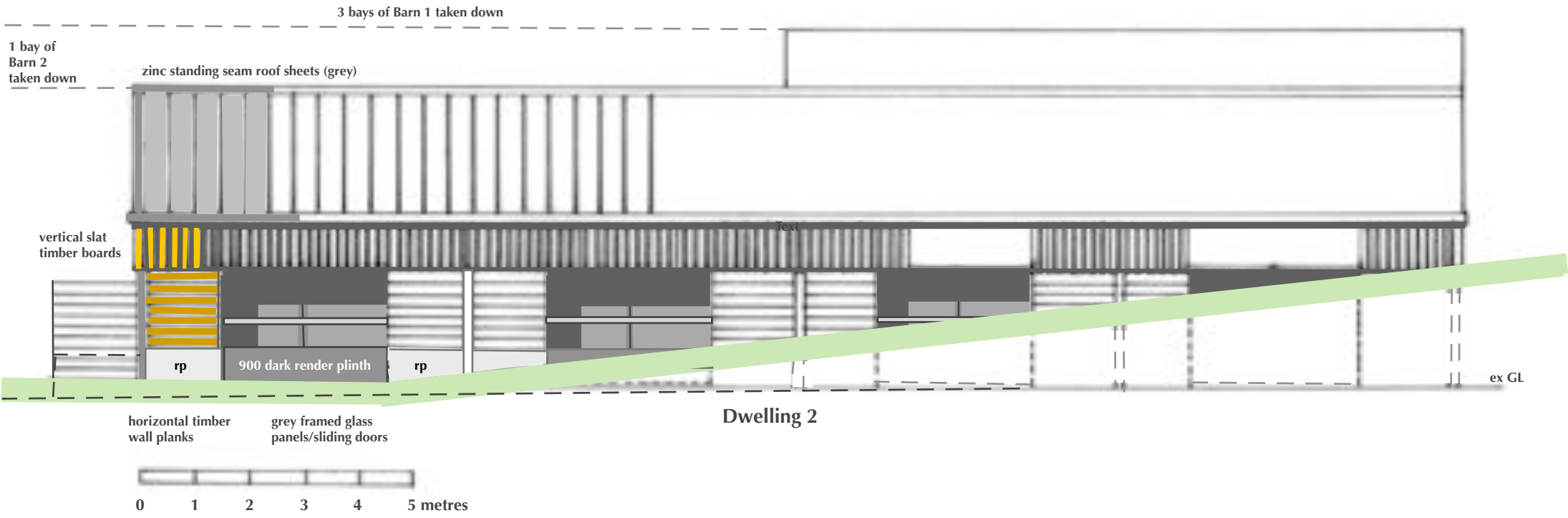
- [more information about getting a product 5, 6, 7 or 8](#)
- general help and advice about the site you're requesting data for



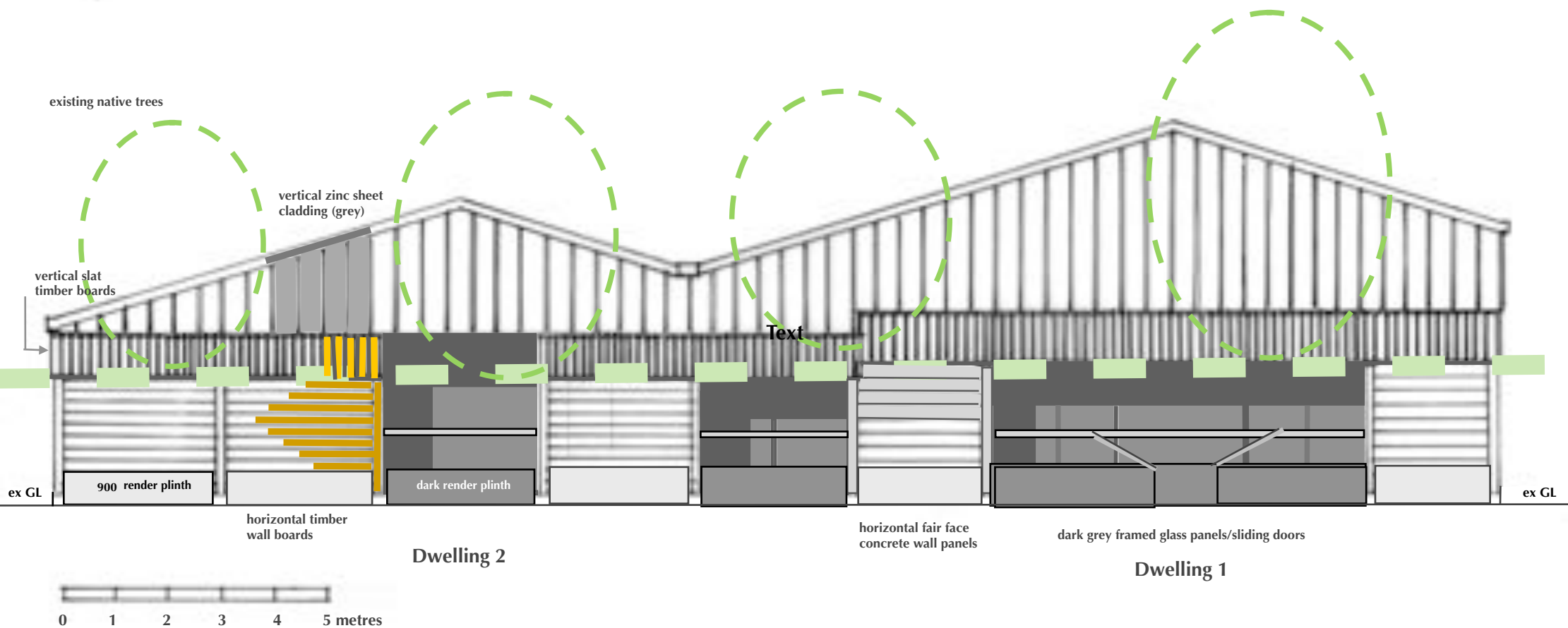
LEVELS and SW FLOOD RESILIENCE

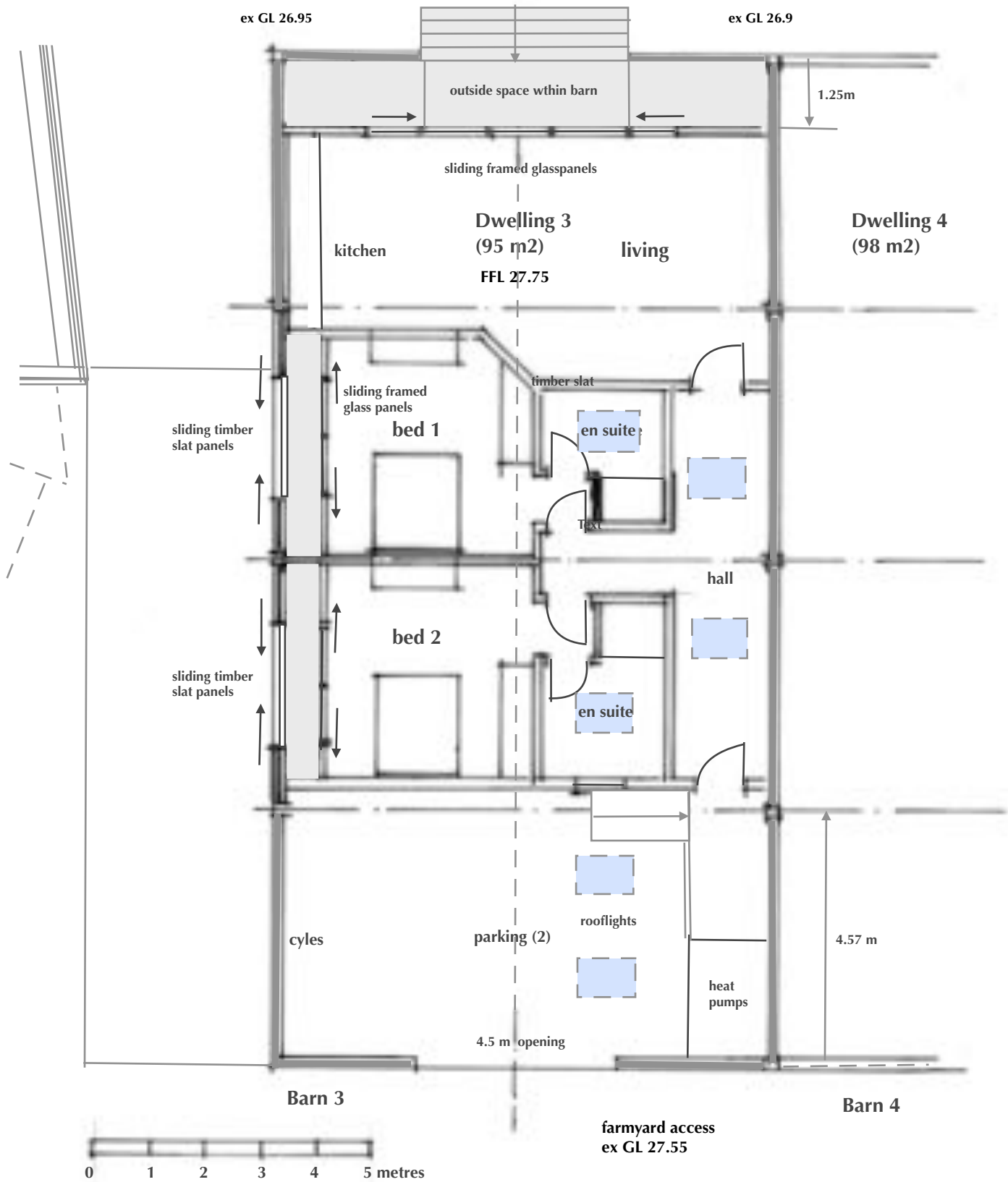


LEVELS and SW FLOOD RESILIENCE



LEVELS and SW FLOOD RESILIENCE





LEVELS and SW FLOOD RESILIENCE

4.8 m opening
(existing)

11.85 m

ex GL 26.95

ex GL 26.95

outside space within barn

sliding framed glass panels/doors

2.0 m

Dwelling 3
(95 m²)

Dwelling 4
(98 m²)
FFL 27.75

kitchen

living

bed 1

1.0 m

sliding slatted
timber panels

bed 2

hall

en suite

en suite

sliding slatted
timber panels

rooflights

covered parking (2)

cycles

4.57 m

heat
pump

Barn 4

4.8 m opening
(existing)

farmyard access ex GL 27.55

0 1 2 3 4 5 metres

LEVELS and SW FLOOD RESILIENCE

Barn 3

Barn 1

Barn 2

**brick culvert from
mill pond sluice**

overflow stream

Hammonds Mill

Class Q Barn Conversions

FRA

culvert at overflow stream

PHOTO FRA 1



lake

sloping ground to lake

bank

mill race