



**Not
Bourne
Yesterday**



CHILTERN
CHALK STREAMS
PROJECT



**Chilterns
National
Landscape**



CCSP/2025/0003-S1R

Invitation to Tender

Scheme: River habitat restoration & barrier removal works to 1km of the Hughenden stream at Hughenden Manor

Works: **Design & build of river habitat improvement of the Hughenden stream at Hughenden Manor**

Location: Hughenden stream at Hughenden Manor including HP14 4LB and HP14 4LA



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1 Instructions and information on tender process

These instructions are designed to ensure that all tenders are given equal and fair consideration. It is important, therefore, that bidders provide all the information asked for in the format and order specified. If there is any doubt as to what is required, or if bidders have difficulty in providing the information requested they should contact aporter@chilterns.org.uk in accordance with the procedure for raising queries set out below.

1.1 Acceptance of Tenders

This tender has been created by The Chilterns Chalk Stream Project (“**CCSP**”) team within the Conservation Board for the Chiltern’s Area of Outstanding Natural Beauty (“the **CCB**”) as part of its Not Bourne Yesterday (“**NBY**”) project funded by the National Lottery Heritage Fund (“**NLHF**”).

The Chilterns Chalk Stream Project team are the sole managers of both the procurement process and delivery of the contract, subject to the procurement regulations of the National Lottery Heritage Fund (for any work funded through NHLF) and the CCB.

This invitation to tender expresses the current intentions of the Chilterns Conservation Board regarding this contract. It does not constitute an offer capable of acceptance. Its purpose is to obtain proposals from potential suppliers.

The Chilterns Conservation Board is not bound to accept the lowest price, and reserves the right to accept any Tender in whole or part. The CCB reserves the right to discontinue this tender process at any time. Any contract(s) awarded will be based on information described in *8 Tender Assessment and Evaluation*.

The letting of the contract is dependent on receipt of funding for the project. If the funding is not sufficient to deliver the project in its entirety, the components that should be prioritised for delivery will be declared by the Chilterns Conservation Board.

The Chilterns Conservation Board shall in no circumstances be liable for any costs involved in the preparation of a Tender.

A Tender shall only be accepted by the Chilterns Conservation Board by issue of a Contract Award Letter by the CCB.

1.2 Timetable and Administrative Arrangements

The envisaged key milestones for the tender are shown in the table below:

Number	Event	Date
1	Issue of ITT	Monday 22 nd September
2	Opportunities for site visits	Tuesday 30 th September to Friday 10 th October
3	Final date for receipt of any tenderer’s questions	Monday 13 th October
4	Response to questions circulated	Friday 17 th October
5	Deadline for return of tenders	Friday 31 st October
6	Preferred tender selected	Friday 7 th November

7	Intention to Award notice issued	Wednesday 12 th November
8	Commencement of contract	Wednesday 26 th November

1.3 Submission of tender documents

Your completed response should be submitted by the due date and time required:

Date: Friday 31st October 2025

Time: 12:00 noon, GMT

Responses should be submitted in an electronic format via email to aporter@chilterns.org.uk. No other method will be accepted.

In order to overcome file size difficulties, we request that tender submissions are completed in PDF format. Any attachments provided beyond those requested will not be reviewed.

Delivery of response as specified is the sole responsibility of the submitting company. Late responses will not be accepted.

If problems occur during the submission stage, please contact Adrian Porter in advance of the deadline (aporter@chilterns.org.uk).

The Chilterns Conservation Board takes no responsibility for identifying any clerical errors or misunderstandings in any tenders submitted. Tenderers must therefore ensure that the content of any Tender submitted is complete and accurate.

1.4 Sufficiency of Tender

The Contractor shall be deemed to have satisfied themselves before submitting their Tender as to the correctness and sufficiency of the rates and prices stated by them in their Tender which shall cover all their obligations under the Contract.

If the Chilterns Conservation Board suspects there has been an error in pricing or calculation in a Tender, it reserves the right to seek such clarification as it considers necessary from that Tenderer only.

1.5 Form of Tender

All entries entered by the Tenderer on the Form of Tender, and other submitted information, must be electronic (i.e. word processor). All prices must be specified in pounds sterling, exclusive of VAT. All Tender Forms must be signed by the Tenderer in a proper manner, by a Director or Secretary of a Company.

1.6 Validity of Tenders

All Tenderers will remain open for acceptance by Chilterns Conservation Board for a minimum period of 3 calendar months from the date fixed for lodgement of Tender. All Tenders must be submitted on this basis.

1.7 Amendments to the tender documents by the CCB

The Chilterns Conservation Board reserves the right to amend the enclosed tender documents at any time prior to the deadline for the receipt of tenders. Where amendments are significant, the CCB may at its discretion extend the deadline for receipt of tenders.

1.8 Questions / Clarifications Arising during the Tender Process

The Chilterns Conservation Board will endeavour to answer any questions the Tendered may have regarding the Tender.

Further information requests and clarification questions should be addressed to aporter@chilterns.org.uk. Clarifications will be circulated to all bidders via email.

Latest date to request clarification or ask questions: Monday 13th October 2025

1.9 Inducements

Offering an inducement of any kind in relation to obtaining this or any other contract with the CCB will disqualify the relevant tender from being considered.

2 Terms and Conditions applying to this tender

2.1 CCB Standard Terms and Conditions of Contract

This contract will be awarded using the Chilterns Conservation Board's standard conditions of contract, which will be implemented with the winning bidder. The CCB Standard Conditions of Contract are provided as an attachment alongside this document.

Attachment: *CCB Conditions of Contract 2024.pdf*

2.2 Other Terms and Conditions

There are no further Terms and Conditions applying to this contract.

3 Contract Summary

3.1 Scope

The contract will complete a habitat restoration scheme along nearly 1km of the Hughenden stream at Hughenden Manor.

We are anticipating responses to include offers for the full design and build process, with a target consent submission date of 31st March 2026 and project completion date of 31st December 2028.

3.2 Employer

The Employer is:

Name	Conservation Board for the Chiltern's Area of Outstanding Natural Beauty
Contract Supervisor	Adrian Porter (Rivers Officer)
Address	Chilterns Conservation Board The Lodge 90 Station Road Chinnor OX39 4HA
Telephone	07469 946200
Email	aporter@chilterns.org.uk
The Site is	A 950m length and adjacent river corridor of the Hughenden stream, a tributary of the river Wye, within Buckinghamshire Upstream Grid Ref.: SU 86571 95782 Downstream Grid Ref.: SU 86355 94937
The Works are	<p>Improve the character of nearly 1km of winterbourne chalk stream, including the complexity of the channel morphology and wider habitat mosaic, through the full hydrograph.</p> <p>Remove the impoundments caused by the six weirs, thereby reinstating natural sediment processes and restoring longitudinal connectivity including for fish and macroinvertebrates.</p> <p>Create an environment that supports natural processes and allows nature to thrive as well as providing opportunities for the many visitors to Hughenden Manor to observe, interact and connect with the stream, the landscape and the ecosystems it supports.</p> <p>Reduce the maintenance burden on the National Trust, the landowner, in maintaining the river channel and corridor in a condition that supports both the natural environment and human interaction with it.</p>
Contract Period	26 th November 2025 – 31 st December 2028
The defects date is	52 weeks
The defects correction period is	4 weeks
Conditions of contract	Chilterns Conservation Board Conditions of Contract (see separate attachment - <i>CCB Conditions of Contract 2024.pdf</i>)

Documents required in addition to the tender offer:

1. Programme of work
2. Method statement

3. Site-based risk assessment
4. Certificate of public liability insurance (minimum value insured £5m)
5. Certificate of professional indemnity insurance (minimum value insured £1m)

The Chilterns Chalk Streams Project will accept the successful Contractor's offer to Provide the Works by letter.

3.3 Chilterns Chalk Streams Project and Chilterns Conservation Board

An initiative of the Chilterns Conservation Board, the Chilterns Chalk Streams Project is a partnership of statutory agencies, local authorities and voluntary bodies which aims to conserve and enhance all major chalk streams in the Chilterns National Landscape, and to encourage enjoyment and understanding of them.

The Chilterns Conservation Board was created in 2004 by Parliamentary Order to manage the Chilterns National Landscape, then known as the Chilterns Area of Outstanding Natural Beauty (AONB). Further information about the organisation can be found here: <https://www.chilterns.org.uk/about-us/conservation-board/>

The contract will be with the Chilterns Conservation Board, but day to day management of the contract will be by the Chilterns Chalk Streams Project.

4 The Contractor's offer

Contractor details

Company name	
Address	
Contact	
Email	
Telephone	

The contractor offers to Provide the works in accordance with the *conditions of contract* for an amount to be determined in accordance with the *conditions of contract*.

The offered Contract Price is (excl. VAT)

We declare that this tender was prepared and is submitted in good faith.

We declare that we have not communicated to any person other than the *Employer*, the amount or the approximate amount of the tender prices and the prices have not been adjusted or fixed by arrangement or in collusion with any third party (other than in confidence to obtain insurance quotations or finance required in connection with tender).

We undertake that we will not enter into any such communication or enter into a collusive arrangement whether in relation to this tender or a tender submitted or to be submitted by a third party.

We also undertake that we have not and will not;
a) corruptly solicit, receive or agree to receive; or
b) offer or agree to give directly or indirectly to any employee, consultant or contractor of the *Employer*; any thing service or money for doing anything or showing favour or disfavour to any person, in relation to this contract or any other contract to which the *Employer* is party.

Signed on behalf of the *Contractor*

Name		
Position		
Signature		Date

The *Employer* shall accept the successful *Contractor's* Offer to Provide the Works by letter.

5 Price List

Entries in the first four columns in this Price List are made either by the *Employer* or the tendering contractor.

If the *Contractor* is to be paid an amount for the item which is **not adjusted** if the quantity of work in the item changes, the tendering contractor enters the amount in the Price column only, the Unit, Quantity and Rate columns being left blank.

If the *Contractor* is to be paid an amount for the item of work which is the **rate** for the work multiplied by the quantity completed, the tendering contractor enters the rate and the unit which is then multiplied by the expected quantity to produce the price which is also entered.

5.1 Itemised price list

An itemised price list is provided below that would allow the project objectives to be met. This list is to aid comparison between tender responses and to act as a prompt for the type of work that needs to be undertaken. We absolutely recognise the value that previous design and delivery experience brings to this type of project and welcome alternative solutions to achieve similar results.

The responder is encouraged to input their own design ideas but please do highlight where these are incorporated in the quote.

Item number	Description	Unit	Quantity	Rate	Price (excl. VAT)
Design – Completion & submission of consent applications necessary for delivery of project scope					
A1	Site surveys and levels				

A2	Project management planning & delivery phases				
A3	Drawings/plans/sections for design, construction and permitting work, to include LDC, TWC and other required consents.				
Preliminaries – Site set-up and management					
X1	Project management of delivery phases				
X2	Site compound, exclusion fencing & welfare				
X3	Mobilisation, demobilisation and maintenance of site facilities				
X4	CDM, RAMS and H&S				
Section 1 – Upstream of Hughenden Manor					
S1.1 SuDs	Modification of existing outfall to allow the installation of a 70m ² SuDS pond designed to intercept flows in at least 90% of events. Pond should be bunded from the channel with a lowered cill to allow overtopping				
Section 2 – Hughenden Manor grounds - northern boundary to access track overbridge					
S2.1 Fencing mods	Modification to existing stock fencing to single span across channel				
S2.2 Fencing	Installation of 85m of stock fencing, 8m back from the channel on right bank, with two stock gates for access.				
S2.3 Ford	Repair or armouring of existing ford (if required)				
S2.4 SuDS	Installation of 2x 30sqm swales (or similar) to intercept flow entering cattle grid				
S2.5 Bank regrading	Regrading of 50m of right bank to reduce slope and narrow channel				
S2.6 Habitat improvement	Installation of woody features in 90m of channel to increase flow variation				
Section 3 – Access track to the Nature reserve					
S3.1 Fencing	Installation of 400m of stock fencing, 15m back from the channel on right bank, with two stock gates and four pedestrian gates for access.				

S3.2 Weir A	Removal of central third of weir plus top of wing walls. Replacement of rocks and making good				
S3.3 Weir B	Removal of central half of weir plus top of wing walls. Re-placement of rocks and making good				
S3.4 Weir D	Removal of weir and making good				
S3.5 Causeway	Creation of 90m causeway to form backwater & drain interception pond behind new channel. Some planting may be required				
S3.6 New channel	Creation of 300m of 2-stage chalk stream channel with gravel bed and hydromorphological variation				
S3.7 Tree works	Tree works to 400m of left bank, to include some felling into backwater and some processing for use in other in-channel features				
S3.8 Bank regrading	Regrading of up to 300m of right bank to reduce slope and narrow channel				
S3.9 Beach	Creation of 25sqm flint gravel beach to improve access. Selective bank grading required to reduce erosion				
Section 4 – Boundary fence and the nature reserve					
S4.1 Fencing	Installation of 60m of stock fencing on right bank, with one stock gate and one pedestrian gate for access.				
S4.2 Fencing re-alignment	Realignment of 65m of existing stock fencing				
S4.3 Fencing mods	Modification to existing stock fencing to single span across channel				
S4.5 Tree works	Tree works to 0.18ha of nature reserve to improve tree health and increase light levels to lower storey and channel				
S4.6 Weir E	Removal of weir and making good				
S4.7 Habitat improvement	Installation of large wood and pool & bar features into				

	150m channel to increase flow variation				
S4.8 New path	Creation/re-alignment of 120m of path through nature reserve				
Section 5 – Island pool and Weir F					
S5.1 Habitat improvement	Installation of large wood and pool & bar features into 50m channel to increase flow variation				
S5.2 Fencing	Installation of 170m of stock fencing on right bank, with one stock gate and two pedestrian gate for access.				
S5.3 Beach	Creation of 80sqm flint gravel beach to improve access. Selective bank grading required to reduce erosion				
S5.4 Weir F	Reduce height of weir and repair to ends to prevent outflanking. Pool & island to be retained.				
S5.5 New channel	Creation of 120m of 2-stage chalk stream channel with gravel bed to improve fish passage and sediment transport				
S5.6 Causeway	Creation of 70m causeway to separate channel from pool and to protect island				
Postliminaries					
X5	Long term management plan(s)				
The Total of the Prices (to be carried forward to The Contractor's Offer)					

5.2 Rates for Unspecified, Additional or Substituted Work

In the event that the *Employer* requires the *Contractor* to undertake additional or substituted work, then such work will be undertaken against firm fixed prices/rates. Prices and rates include overhead and profit.

Item Number	Description	Price/Rate

6 Specification

These activities are part of a scheme to improve the habitat, water quality and access along more than 25% of the Hughenden stream, within Hughenden Manor.

6.1 Objective

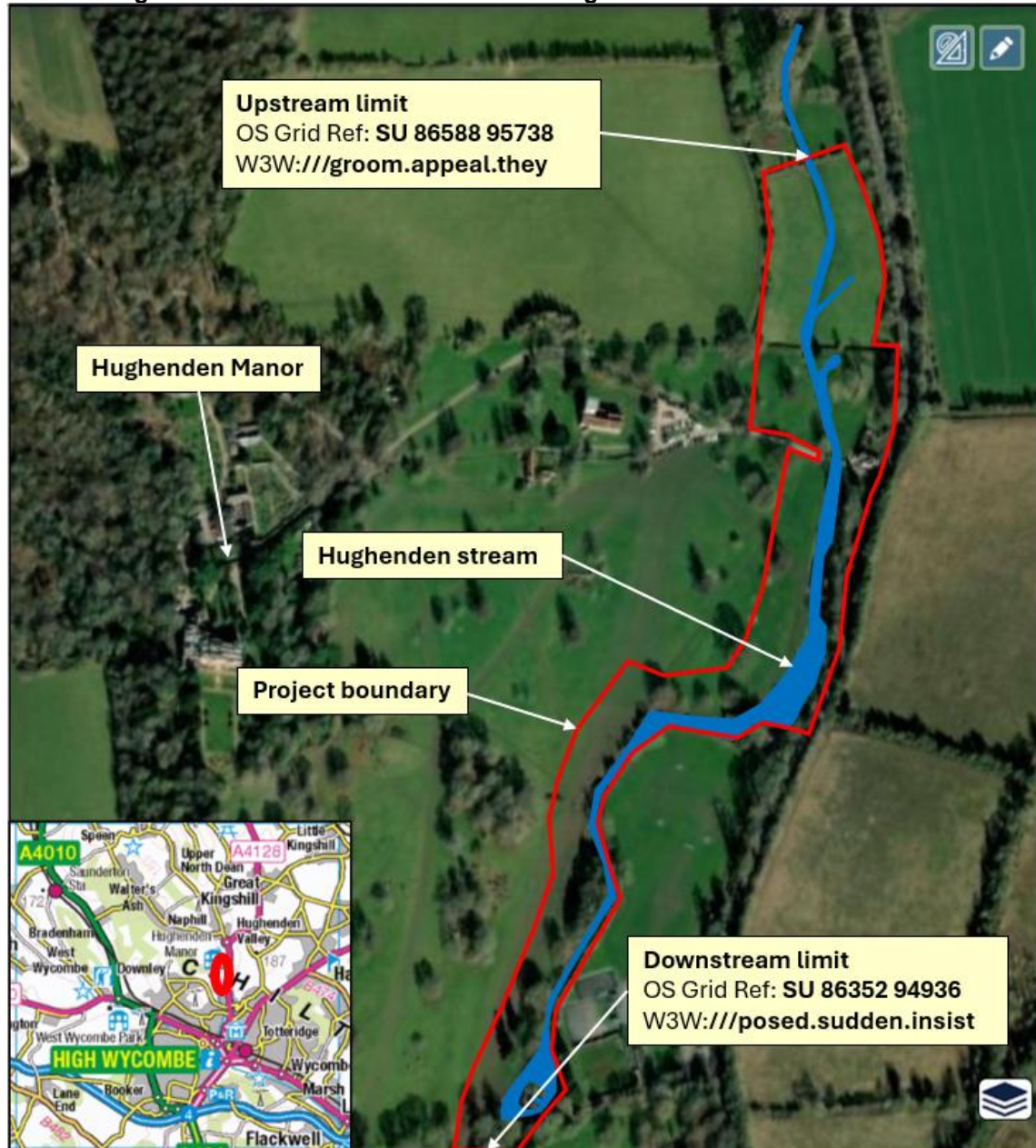
The Hughenden stream, shown in fig. 1, has been heavily modified, including through the construction of six weirs and associated pools. The channel is overwide, shows signs of dredging and has steep banks, and consequently lacks much of the character associated with a chalk stream.

With a joint focus on habitat improvement and access, the objectives of the project are:

1. Improve the character of nearly 1km of winterbourne chalk stream, including the complexity of the channel morphology and wider habitat mosaic, through the full hydrograph.
2. Remove the impoundments caused by the six weirs, thereby reinstating natural sediment processes and restoring longitudinal connectivity including for fish and macroinvertebrates.
3. Create an environment that supports natural processes and allows nature to thrive as well as providing opportunities for the many visitors to Hughenden Manor to observe, interact and connect with the stream, the landscape and the ecosystems it supports.
4. Reduce the maintenance burden on the National Trust, the landowner, in maintaining the river channel and corridor in a condition that supports both the natural environment and human interaction with it.

It is important that the appropriate consents are secured before the commencement of any practical works.

Figure 1 – Scheme area overview showing the locations of the activities



The scheme has been identified and developed by The Chilterns Chalk Streams Project working in partnership with the National Trust and the Environment Agency.

Key outcomes of the scheme;

- 950m chalk stream restored
- Six weirs removed
- Fish passage and sediment transport improved
- 5½ ha of river corridor enhanced
- 1100m of fencing and gates installed
- Long term management plan implemented

Once completed, the project will have transformed more than one quarter of the stream length, through a very public site, and greatly improved opportunities for the local community to interact with and learn about chalk streams.

Throughout the document, normal convention is followed, with banks identified as RB (right bank) and LB (left bank), when facing downstream.

6.2 Background

The Hughenden stream is one of nine major chalk streams that rise in the Chilterns National Landscape. Chalk streams are a globally rare habitat, confined mainly to England and Northern France. England has the majority of the world's chalk streams and as such, has a special responsibility to conserve this rare wildlife habitat and the particular ecosystem services it provides.

The Hughenden stream (WFD Waterbody ID: GB106039023900) is classified as having moderate ecological status and is currently failing to reach Good Ecological Potential (GEP). It has been designated as a heavily modified waterbody. The upper reaches have been landscaped with lakes and weirs and the lower reaches have been moved, straightened, and culverted.

The Hughenden stream is a tributary of the R. Wye that rises from springs in the village of Hughenden Valley and flows in a southerly direction, for 3.6km through Hughenden Manor and Hughenden Park, joining the Wye in High Wycombe town centre. Its catchment area is stated as 31.487km², but this is based on surface features and not the boundaries of the subterranean aquifers that collect rainfall and channel it down to the valley floor.

The official stream head is located immediately downstream of the disused Affinity Water pumping station in Hughenden Valley (OS Ref: SU 86422 96386), but the length that actually flows at any one time can be highly variable. This natural variation across the seasons, in response to the rainfall, uptake by plants, the impact of anthropogenic abstraction and temperature, and also across multiple years, can leave part or all of the streambed dry. And this is why the Hughenden stream is classed as a winterbourne.

It is typical for streams on Chalk catchments to be highly dependent on the groundwater conditions. The Hughenden stream is fed by water from unconfined chalk aquifers and flows for its entire length down a chalk valley, so both the amount of flow in the stream and the location of the stream head are controlled by the groundwater level, which in turn depends on the quantity and rate of aquifer recharge.

The stream has been heavily modified over at least the last 150 years, as different pressures created a need to control water flows. As demand increased for farmland so the channel would have been made single-threaded and straightened; ornamental landscaping of the Hughenden Manor Estate drove aesthetic alterations including the introduction of weirs and ponds; and more recently, the increasing expansion of High Wycombe and resulting urbanisation of the valley has culverted, revetted and even buried sections of channel.

In particular, the Hughenden Manor section of the channel is in poor condition:

- Past engineering of the channel has resulted in over-wide channel, pools and other structures, which combined with low flows, facilitate silt build up in the channel.
- Little resemblance to the chalk stream habitat it once was. Weir condition not sufficient to maintain water level in the lakes. Water level control boards are difficult to control and vulnerable to removal by the general public.
- With increasing costs and pressures on budgets, the National Trust cannot afford the cost of work required to restore the weirs.

- Maintenance of lake features is resource intensive and unsustainable – strong argument for restoration to a more ‘natural’ channel, which would require fewer resources to manage once the initial capital works are undertaken.

To address these issues the Chilterns Chalk Streams Project, has worked with partners, agencies, landowners and community groups to identify opportunities to enhance the Hughenden stream and its riparian corridor for wildlife and people. The scheme described in this specification forms part of this strategy.

The Chilterns Chalk Streams Project is one of the flagship projects of the Chilterns National Landscape, and is a partnership of agencies, organisations and volunteers, all committed to conserving our threatened chalk streams and the wildlife they hold

6.3 Historical setting

The section through the Hughenden Manor site was first modified in the 1830s and has had very little intervention since the first publicly available maps, from 1874 and 1898 were published. The channel routing, together with the weirs and lakes that are evident today can be seen in the historic record (see fig. 2)

Figure 2 - Map of the Hughenden Manor area dating from 1846

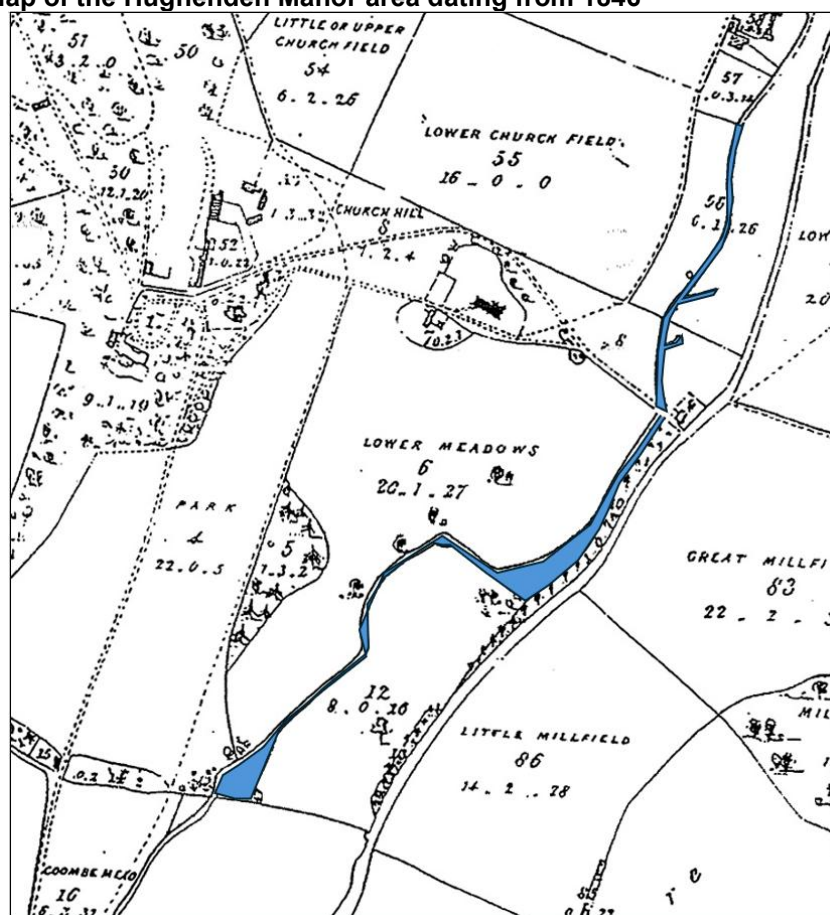
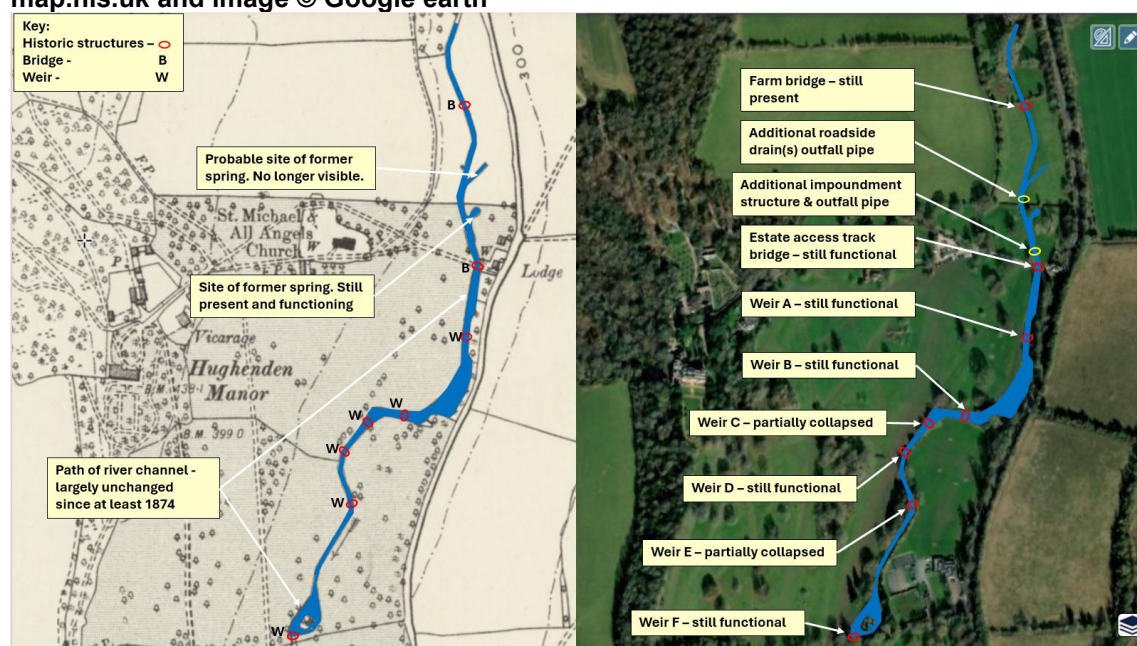


Fig. 3, below, shows a side by side comparison of how the project area looked in 1898 as compared with today. The location of each historic structure is provided together with a statement of the condition. One new impoundment structure which includes a culvert outfall pipe is additionally included.

Figure 3 - Historical comparison of Hughenden Manor in 1898 and today. Map © map.nls.uk and image © Google earth



6.4 Description of site

Reach description and identification of issues is based on prior knowledge of key stakeholders, observations made during a site walkover (4th June 2024 and consultation with a wider stakeholder group at a workshop (15th July 2024). Additional information can be found in the fluvial audit, carried out by Chilterns Chalk Streams Project in 2024 (available on request).

Like most chalk streams the Hughenden has undergone extensive modification. For approximately a third of its length, the Hughenden stream flows through the grounds of Hughenden Manor. Hughenden Manor, the former residence of Benjamin Disraeli, who lived there from 1848 until his death in 1881, is owned by the National Trust.

The Manor grounds and stream were landscaped in the 1830's to provide a large area of grassland with mature trees and a chain of lakes, dug along the course of the stream. The creation of the lakes included installation of six weirs constructed of large rocks, imported to the site.

Through an anonymous donation, the weirs were rebuilt in the early 1980's to restore the lake features and the pools were stocked with Brown Trout in the early 1990's and again in 2000 after the drought of 1996/97. The pools are an attractive part of the manor grounds and are popular with visitors. The bottom pool, which includes Horseshoe Island, a historical feature of the manor grounds, is a particular favourite with visitors.

All weirs appear to be of broadly similar construction, i.e. reinforced concrete base slab with infilled concrete block upstand walls. See fig. 4.

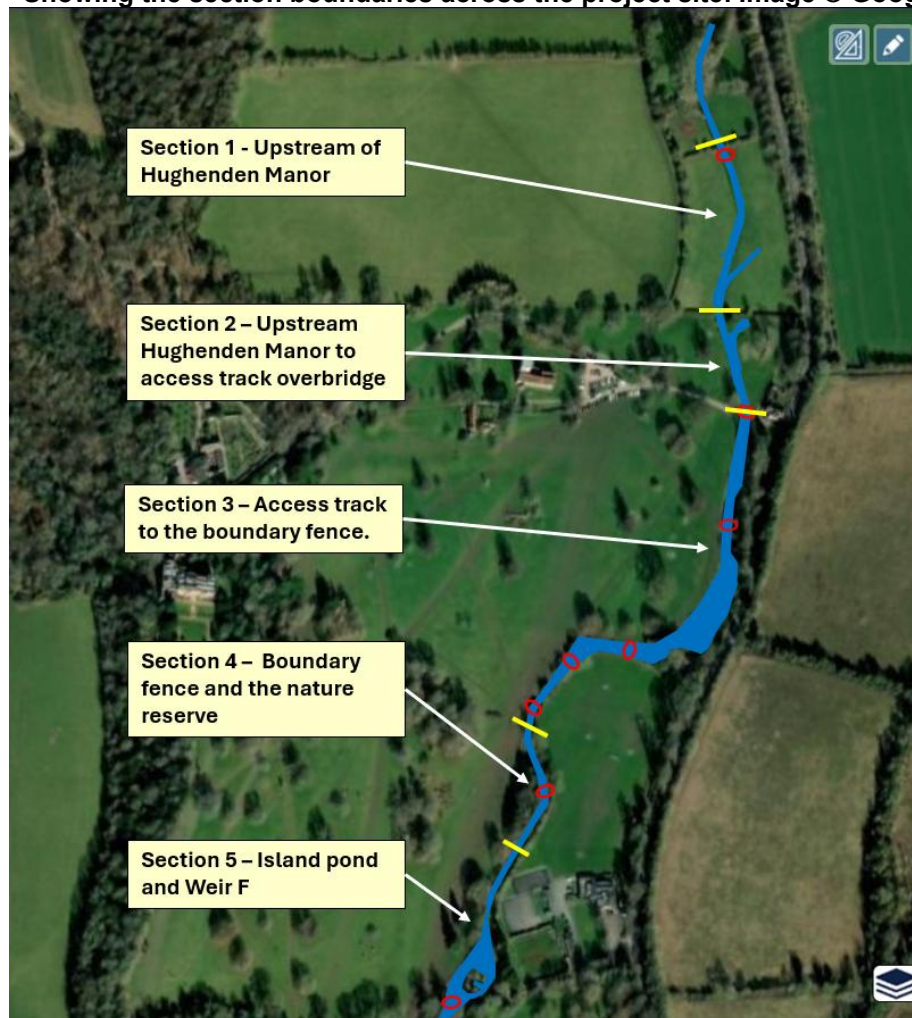
Figure 4 - Image showing the reconstruction of Weir F in the 1980s



The mean gradient through the project site is -0.0072 or 1 in 139, equating to a fall of 7m along the 950m reach. This compares with a typical gradient for chalk streams of 1 in 300.

For convenience the site has been divided into a series of sub reaches as shown in fig. 5.

Figure 5 - Showing the section boundaries across the project site. Image © Google Earth



6.4.1 Section 1 - Upstream of Hughenden Manor

The field immediately upstream of Hughenden Manor is let to tenant farmer on a 100-year lease, although this does not necessarily preclude any habitat improvement activities taking place on the land or the 150m channel contained therein.

There is a narrow farm-bridge at the top of the field which appears to be of concrete construction and single span. Although it has not been directly visited, it doesn't appear to be well-used or cause any significant impoundment on the channel.

The channel is in reasonable condition with clean gravels and in-channel vegetation creating several flow pathways. Marginal vegetation is present although the zone for growth is narrow and there is no riparian buffer which reduces both the habitat mosaic complexity and the natural channel protection. The sward is kept close-cropped which reduces opportunities for insects and flowering plants.

Dredging to create the channel and embanking from when Valley Rd was constructed, has left relatively steep banks and disconnected the channel from its flood plain. This doesn't allow water to spread beyond its fixed boundaries during higher flow regimes.

The field is devoid of shading which will impact water temperature particularly as flows begins to drop, and when the site is grazed stock manage to remove much of the diversity that exists in the channel and margins

Figure 6 - Views of the field, immediately upstream of Hughenden Manor, taken at different stages of the grazing cycle.



The southern boundary is marked by a mature mixed hedgerow with a 6m cut to allow the channel to flow through. Tucked under the end of the hedge on the true left bank is a service pipe outfall protruding from a concrete headwall - this is likely to be from the road drain at the eastern end of the hedge on Valley Road (SU 86663 95590). There are two further road drains on the same stretch of road, but it is not known whether these share the same outfall pipe or whether they have their own.

Figure 7 - Image showing the outfall pipe that may connect with the roadside gullies on Valley Road



6.4.2 Section 2 – Hughenden Manor grounds - northern boundary to access track overbridge

The upstream end of this 90m section is bordered by estate fencing which transects the channel where the hedgerow has been cut. This prevents stock from escaping but also traps detritus and dislodged vegetation brought down by the channel flows.

Adjacent to the fencing is a ford which is used by both vehicles and cattle to cross the stream. Soft verges and a lack of maintenance has widened the channel and created a source and pathway for sediment to enter the water.

Figure 8 - Impact of the estate fencing across the channel and the adjacent ford



Cattle are given access to this part of the channel and have caused it to be poached and overwidened. This has created an unstable, extended marginal area making the channel susceptible to sediment input.

Between grazing periods, channel vegetation can establish creating narrower flow pathways that have the energy to expose the gravels that lie close to the surface and returning some chalk stream character.

12m from the upstream fence line on the left bank is a diffuse seepage spring source that has been recorded on maps since at least 1846. Groundwater appearing here only has to travel 20m to join the main stream, but with the low gradient caused by dredging and additional impacts from poaching, it doesn't have enough energy to create chalk stream character and acts more as a source of sediment.

Figure 9 - Views looking upstream and downstream from the centre of the section. Note the spring site on the left bank and the impact of cattle on the channel form



Over many years, dredging of the channel has created embankments immediately behind the margins. These create a straight corridor which confines the stream and delineate the spring source on the true left bank. They also disconnect the channel from the wider flood plain and act as sources of sediment when cattle are on the site.

The bridge at the downstream end of the section is of stone construction and has an extended wingwall on the right bank. It appears to be in good condition and doesn't seem to impound during normal flow conditions.

Ten metres upstream of the bridge are blocks that are the remnants of a former weir that was removed sometime between 2003 and 2010. This structure does not appear on the historic maps and is therefore assumed to be a recent addition. The central gap is approximately 1.5m in width, and half a dozen blocks of the main structure remain. On the right bank, immediately downstream of the weir is a concrete headwall containing an outfall pipe. This probably acts as a drain for water entering the cattle grid built into the main access track to the Manor (SU 86598 95506), and will therefore be a source of sediment, sand, and car-derived particulates that end up in the channel.

Figure 10 - The impoundment structure and associated outfall at the southern end of the reach



6.4.3 Section 3 – Access track to the Nature reserve.

This section is 390m in length and includes three functional weirs and one partially removed weir, each with its own weir pool. Weir A has a drop of about 1.0m in total, Weir B around 0.5m, with another 0.5m lost in the channel sections in between.

It is likely that the channel was diverted from its original course to create the pools and this has created a straightened, unnaturally steep flow pathway. The mean gradient along this section is 1 in 150 and there is some evidence of a paleo channel to the west of the current flow path.

Figure 11 - The first weir on the estate together with the pool it was designed to create



With the steep gradient, where the channel can flow chalk stream character rapidly appears, for instance immediately below the access track overbridge and also below each of the weirs, but it disappears when the weir pools dominate and flow all but stops.

Weirs A and B are of concrete blockwork construction with sills of three different heights to provide passive flow management. The low sills on both weirs has a cumulative functional width of ~2m which ensures an even flow through the system, but this will be impacted through woody material and other floating debris being caught on the upstream sides of the slots. Although neither weir shows signs of being outflanked, both are in need of maintenance with signs of concrete degradation and water now passing below the structures.

Weir A, of width 12m, has an initial vertical drop of 0.2m and the remainder of the fall is through a collection of boulders below the concrete wall. These help absorb some of the energy and were perhaps intended as fish easements. They also mask the concrete base that will be ensuring structural integrity.

Above Weir A the banks are steep and soft, with short grass down to the water's edge on the right bank and mature tree and shrub cover on the left bank. Channel flow is very sluggish which has allowed an extensive layer of sediment to build up. Actual water depth is uncertain.

Below the weir, the wide shallow channel creates an elongated riffle with some in-channel vegetation able to take hold in the clean gravels. This lasts for only about 20m before the next weir pool slows the flow and sediment deposition starts again.

Figure 12 - Below Weir A the channel is lost to a 2500 sqm lake which forms an arc on the SE boundary of the estate.



The lake created by Weir B is 0.25ha in area. It is approximately 145m long and reaches 30m in width. Low intensity management has allowed extensive shading and cover to build up on the left bank and large woody material that enters the lake to remain providing some interesting habitat. Although the top of the lake has only patchy vegetation, there is quite an extensive build up in the lower part where there is less sediment.

The only riparian vegetation is where narrow sections of the bankside have been allowed to grow, with much of it cut to the water's edge providing views of the lake as well as access for dogs.

Figure 13 – Images of Weir B that creates the large lake and the elongated riffle that sits immediately below.



Weir B is approximately 8m in width and most of the drop is managed in a single step. There is a large concrete slab at the base of the fall which is at a slight down-sloping angle and there is rubble at the downstream edge of this to reduce the impact of the fall on the immediate channel bed.

Several large boulders may originally have been placed to further absorb the energy of the fall, but these are having minimal effect today.

Just above the weir the lake-bed is largely devoid of silt. This may be because the water has shed what it is carrying by this point, or the weir is creating a draw which is accelerating flow rates, or some combination. But the in-lake habitat immediately above the weir shows greater variation than elsewhere.

The wide channel immediately below the weir creates a shallow channel with a clean gravel base. The flow path exhibits characteristics of an elongated riffle and with the increased gradient this extends for 40m down to the pool at the bottom of the section. There is some good in-channel vegetation with riparian tree and shrub growth providing shading on the left bank.

The right bank has little in the way of riparian vegetation and there are signs of use of the area around the weir base by families and dogs. Parts of the right bank have been compressed and patches of bare earth are visible.

Figure 14 – The channel feeds into a smaller pool created by Weir C which has been partially removed. This is a spot favoured by families



The riffle ends at pool which is on the line of the possible paleochannel. The pool is an overwide, enlarged meander where the channel is forced to make an unnaturally sharp 90 degree left turn. The channel has been deepened and the bank erosion exacerbated by it being a favoured spot for families to picnic and paddle.

The slow flows are evident from the lack of surface features and the layer of silt that has formed. The presence of only low level vegetation on the right bank and very little in-channel is also indicative of the high use this section of the channel gets.

Weir C sits 10m downstream, above which a large piece of dead wood sits in the middle of the channel. With this and some bankside shading the habitat starts to improve.

Weir C consists of approximately a dozen rocks in a line across the channel. Of varying size, some of the rocks will be susceptible to movement. They currently bias flow paths to the right side of the channel, but this is likely to be subject to interference by children playing in the river. Although there is a small upstream impoundment, the primary impact is to create some interesting downstream habitat including a good balance of clear gravels and in-channel vegetation growth.

And due to the loose nature of the structure some water is able to outflank both sides of Weir C, encouraging lateral erosion.

The final 70m of the section contains three areas of deep shading from tree cover on both banks separated by cleared sections on the right bank. Here short grasses reach right to the water's edge and there are bare patches showing where families, dogs and cattle have accessed the channel. The channel is slightly embanked on both sides with an exaggerated slope running down to the water's edge.

Despite the channel still being over-wide for the flow rate, woody material and patches of in-channel vegetation have combined to create in-channel diversity and a line of clear gravel through the thin layer of fine silt indicates the path of preferential flow.

Figure 15 – In-channel variation in the lower part of section 3



Weir D is 40m below Weir C. It is of concrete construction, 8m wide with wing walls of 0.5m height. The 5m central span has a drop of 0.4m over which water will flow during normal flow conditions. A central slot of 1m width and 0.2m height has been cut to accommodate low flows and to act as a fish easement.

With ground compression and erosion adjacent to the weir the right bank now gets outflanked by water flows and this has caused erosion of material that has exposed the whole wing wall.

The weir pool is deeply shaded, with limited flows, no in-channel or marginal vegetation and a continuous layer of silt.

Figure 16 - Images showing poaching caused by stock (left), and Weir D which is immediately adjacent (right)



Due to the width of the channel below Weir D, the quality of habitat depends greatly on the flow. Clean gravels and in-channel vegetation dominate during higher flows, where as in low flows there is almost no vegetation and a covering of fine silt. An increase in algae growth has been observed due to the warmer, slower-moving waters and enrichment by cattle.

Section 4 – Boundary fence and the nature reserve

Section 4 starts at the boundary fence below Weir D and is characterised by an increase in the number of trees and the extent of the protected riparian area. The 150m of channel is enclosed within estate fencing that is intended to reduce access by dogs and stock, and allows for a more natural looking environment (see fig. 17).

Figure 17 – Views of the channel within the nature reserve, showing the increase in marginal vegetation from the reduced grazing input



Where the channel loops briefly to the east, estate fencing has been installed on the inside of the meander to enclose 0.26ha of bankside area and channel. This is intended to create a more natural looking area by protecting it from stock and reducing the pedestrian footfall. Dogs are asked to be kept on leads.

There is an extensive deciduous tree canopy, including oak and sycamore, with ground cover dominated by shrub and nettles wherever they can grow, right up to the margin. A footpath leads from the entry gate to the channel, running close to it for approximately half the length of the site before drawing away from it once more.

Where there is enough light and access to the water is limited, channel features are start to form. Emergent broad-leaf vegetation is extending into the channel from the margins and in-channel vegetation splits the flow, a sand-bar is developing and woody material that drops into the water collects plant matter that is brought downstream.

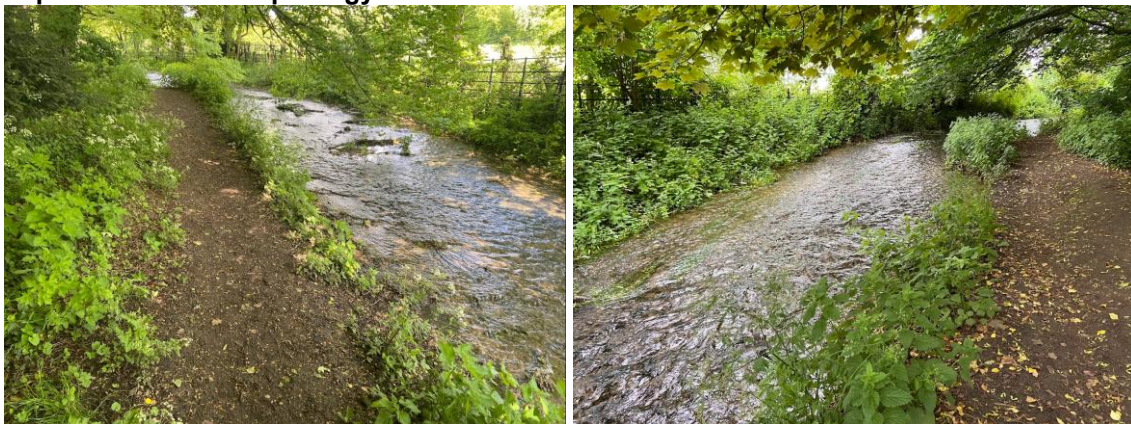
Much of this variation disappears when the footpath runs immediately alongside the channel. Although the gravel bed remains clean, there is a minimal margin and little or no in-channel vegetation

The remains of Weir E can be seen as a collection of loose rocks and concrete lumps in the channel. Without any formal structure, and being outflanked on the right bank, Weir E is not causing any appreciable impoundment and it is the only weir without a noticeable pool.

Figure 18 - Images of the remains of Weir E



Figure 19 – The proximity of the path to the channel reduces the marginal vegetation and impacts channel morphology.



At the downstream end of the section, with few trees and where the path has already pulled back from the channel, a dense growth of marginal vegetation flourishes, even encroaching into the channel. This is evident on both banks but is particularly prominent on the right bank. This comes to an abrupt end when fencing indicates that full access to the channel has returned.

Figure 20 - Channel variation will increase where it is left alone (left), and looking upstream from the bottom of the fenced area (right)



Section 5 – Island pool and Weir F

The pool at the downstream end of section 5 is created by the 20m long concrete Weir F. It is 0.17ha in area and contains a 250 sqm island. Being close to the boundary between Hughenden Manor and Hughenden Park, the weir together with the pool and island are a major draw for the walkers, families and dogs who enjoy the setting as well as the opportunities for paddling.

The island supports a population of ducks, and with shade and shallow water the site is also frequented by the local cows.

Below the fenced enclosure the channel is straight with shallow-sloping banks. With high water flows the gravel is kept free of sediment, but the width of the channel will mean this is not maintained when levels drop.

The right bank has a wide margin with a slight embankment, and short grasses typically reaching down to the water's edge. The left bank has less margin and is steeper, leading up to a scrub hedgerow with some shading and branches trailing into the water.

Patches of riparian vegetation provide some protection to the channel from encroachment, but this is limited. If left undisturbed, ranunculus and marginal plants will establish, but sections devoid of plants show where stock and/or people have been entering the water.

Figure 21 - Above the island pool, looking upstream (left) and downstream towards it (right)



The weir pool is up to 70m in length and 30m wide. The island, already present on the 1846 estate map, is horse-shoe shaped and covered with trees and shrubs. Trees also provide shading along the entire left bank and for about half of the right bank, the remainder of which is short grass.

At the top of the pond, some submerged aquatic vegetation and emerging broad-leaved plants are visible but with the very slow flows the bed is covered by a continuous layer of sediment.

Around and below the island, there is no aquatic vegetation, but this is probably due to the amount of people, dogs and cattle that enter the water. This is supported by the high sediment disturbance immediately above the weir which has revealed a sandy bed beneath. The lack of gravels may stem from when the pond and island were constructed or from subsequent management activities.

Figure 22 - Views of the island in the pond above Weir F



The weir is of concrete construction, and is primarily formed from three 6m sections separated by 0.5m wide notches which provide a drop of 0.3m. The walls on either end have been built up to try and keep preferential flows in the middle of the weir and these sit 0.5m above the channel bed.

Heavy erosion from people, dogs and stock has caused the weir to be significantly outflanked on both ends, and now very little flow is passing through either of the two central notches.

In an attempt to reduce bank erosion some large rocks have been placed to try and block up the outflanking flows, but this is currently having little impact. The net effect is that the channel immediately below the weir is over 20m wide, although it narrows to around half this by the time it reaches the boundary fence. Although it is shallow, the steep gradient and flow volume mean the gravel is swept clean.

Figure 23 - Images of Weir F. Note that water outflanks the weir at both ends



6.5 Description of work

The following descriptions of work are not prescriptive solutions but are designed to give an indication of what needs to be achieved. The CCSP are open to suggestions that may achieve the same or better result with less disruption or lower cost.

6.5.1 Fencing

Existing fencing at Hughenden Manor is of estate style. Following discussion with the landowner, most of the new fencing has been specified as being stock fencing. This is expected to be 3-strand, high tensile wire with wooden posts, i.e. without mesh or barbed wire.

There is an option to explore a fence-free solution for some or all of the site, e.g. <https://www.nofence.no/en-gb/> or similar, and this would be worked through in the design phase.

6.5.2 Long term management

Long-term management plans are critical to the success of the project. They provide to the landowner a programme of activities and maintenance tasks that allow the improvements made to persist, support a recovery of the worked spaces and let them reach their full potential, and create the context and feedback opportunities for a monitoring regime.

It is always the intention that the burden of management after works have been completed is significantly below that required before the works, and this should be considered when designing the project.

The extent and number of long-term management plans depends on the complexity of the project and number of parties involved but would typically be one plan per landowner. The landowner is responsible for ensuring the activities are carried out according to the proposed schedule, but the actual execution may be spread across different organisations or groups, including citizen scientists.

The creation of the long-term management plans is a collaborative process and may involve input from experts, partners and statutory bodies. It should cover at least a ten year period and include applicable conditions raised as part of the consent or permitting process.

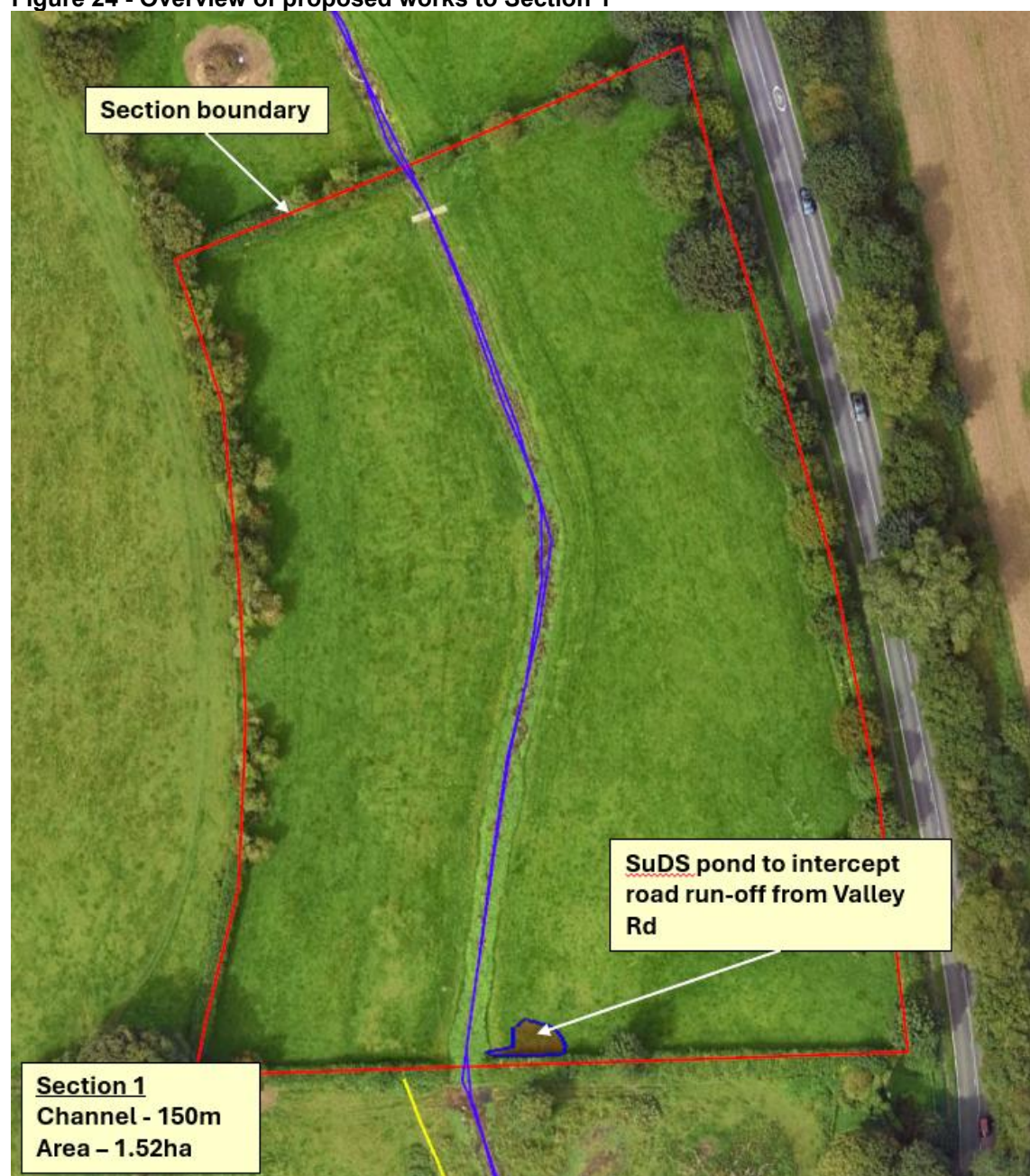
The plans should be in place and commence from the moment the contractor leaves the site.

6.5.3 Section 1 - Upstream of Hughenden Manor

The scope of works in Section 1 is currently limited to the installation of a SUDs device to intercept the outfall pipe(s) from the roadside gulleys on Valley Road. It would be a shallow pond with capacity to retain most flows from the road, planted with reeds, or similar, which would trap sediment and prevent it from reaching the main water course.

The pond needs to be high enough above the channel to avoid ground water inundation. A channel should connect the pond with the stream, with a cill designed-in that would retain water in most circumstances, but allow it to over-top in the event of heavy rain.

Figure 24 - Overview of proposed works to Section 1



6.5.4 Section 2 – Hughenden Manor grounds - northern boundary to access track overbridge

The existing estate fencing at the upstream end of Section 2 should be modified such that a single span of at least 3m width is created across the channel. This will reduce the likelihood of vegetation becoming trapped creating an impoundment and increasing flood risk.

To protect the channel, 85m of stock fencing should be installed on the right bank only, at least 8m back from the channel edge. It should include to include two gates, one to align with the existing ford, and the other to permit access to the riparian zone for seasonal grazing. The new fencing should tie-in to the existing fence (or that installed in

Section 1) at the upstream end of site and the road-side fencing at the downstream end.

Some repair of the ford may be required to reduce the sediment input to the channel by cattle and vehicles crossing, but this may be obviated by the reduced access by grazing animals.

Figure 25 - Overview of proposed works to Section 2



Consideration needs to be given to the outfall pipe which is immediately downstream of the impoundment structure, to reduce the sediment and other pollution that it delivers into the channel. With only 10m between the cattle-grid and the end of the outflow pipe, it may more practical to install SuDS ponds, swales or other flow interception system upslope of the cattle-grid and thereby prevent water from collecting in the first place. The remains of the impoundment structure can be retained as these are already narrowing the channel flows, but they could be obscured through covering with earth from the right bank or woody material.

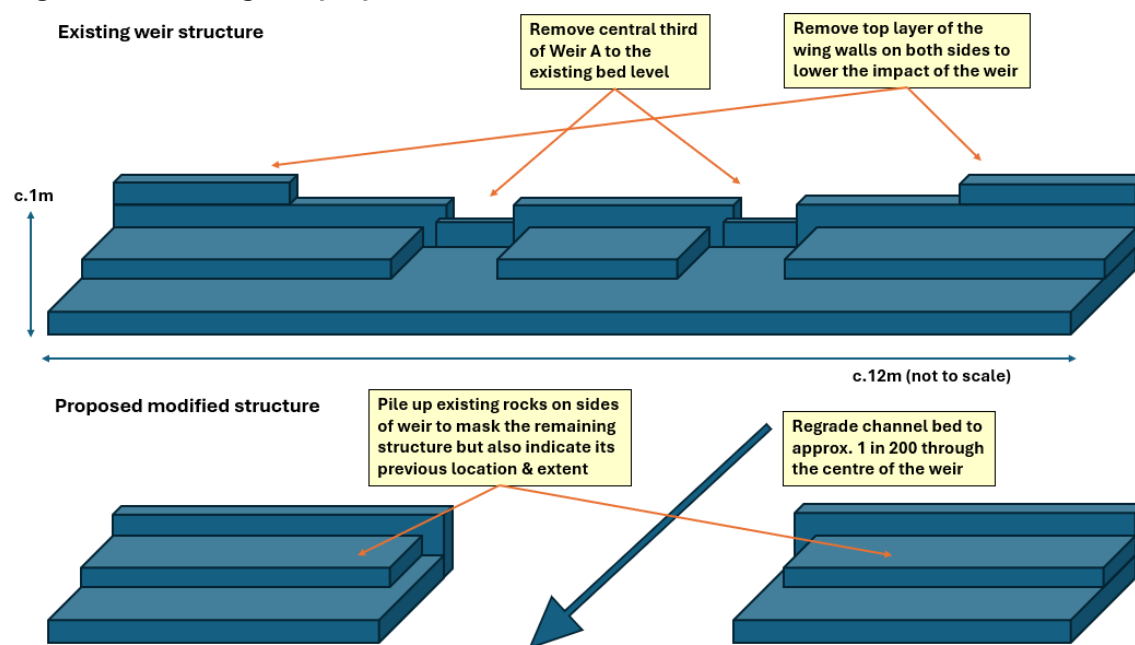
The existing channel is very overwide and to avoid it silting over and disappearing, especially during low flows, it would be beneficial to install some large woody material to narrow the channel and increase the variation, but another alternative could be to use the material that has built up in the artificially elevated and embanked right bank to concentrate and vary the channel flow.

6.5.5 Section 3 – Access track to the Nature reserve

The intention is to remove the impoundment caused by the weirs in this section, whilst retaining some of the history that they represent.

For Weir A the proposal is to remove the central third of the structure down to the channel bed to create a gap of at least 4m for the channel to pass through, but retain the two wing walls (see fig 27). The top layer of the wing walls should also be removed to reduce the visual impact of the weir, but its former structure could be indicated by the placement of the existing boulders on the downslope side of each wing wall.

Figure 26 - Existing and proposed modifications to Weir A



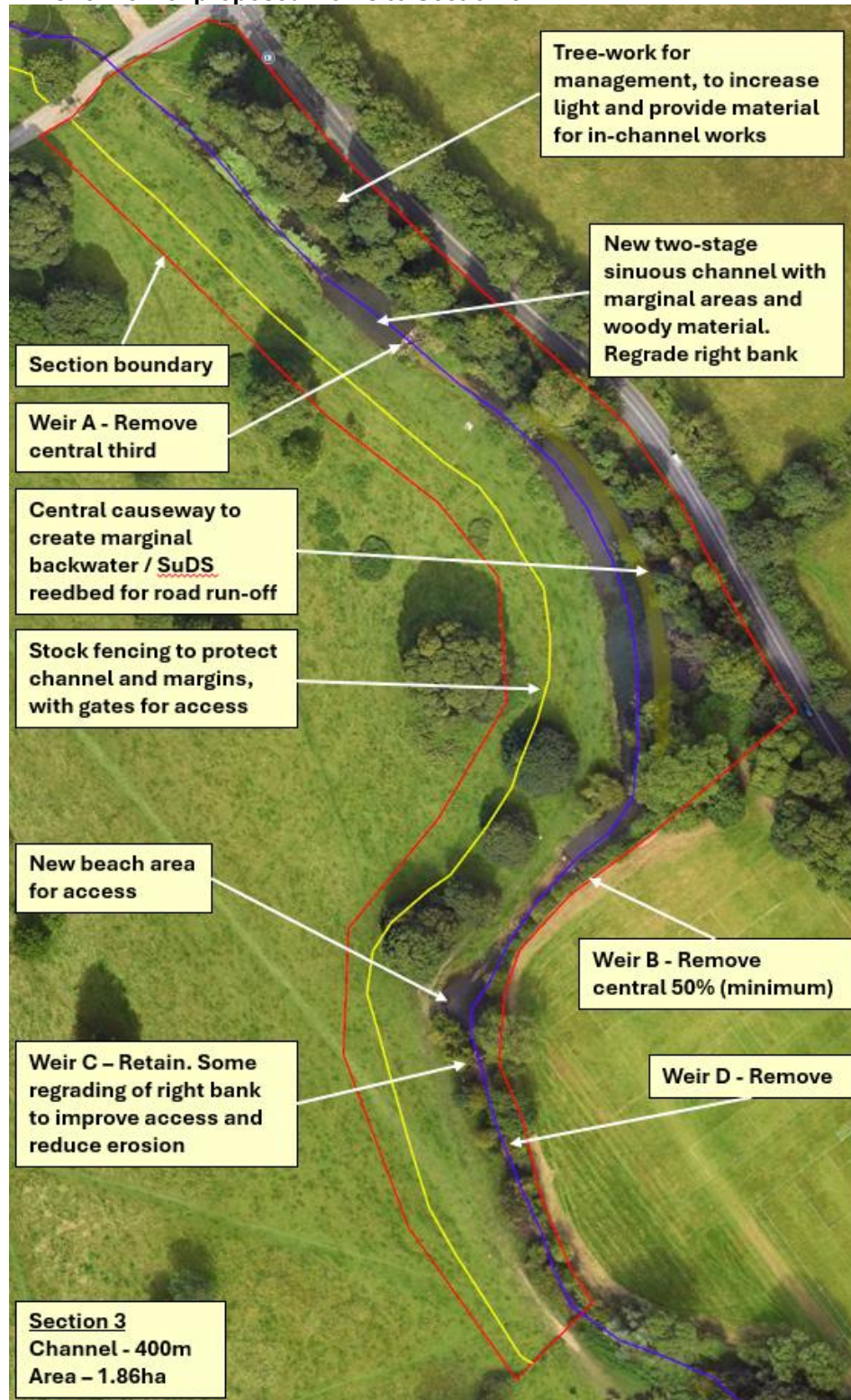
Weir B could be removed entirely, but it may be preferable to remove just 50% of the structure, again down to the channel bed. If the wing walls are retained the top layer of these should also be removed both as a safety precaution and to reduce its presence in the area.

With the modifications to the two weirs there is also an opportunity to create a feature chalk stream through a significant portion of Hughenden Manor. A new two-stage sinuous channel should be created that will accommodate no, low and high flow regimes, with a combined gradient of 1 in 200 or better. The new channel should start from 10m below the access track overbridge to avoid undermining the existing structure, and continue down to Weir C, a distance of over 300m. There is space for the path length to be extended to further reduce the gradient.

Material from the existing right bank can be re-graded to help narrow the channel from one-side and create its shape, reduce appearance of the embankment, and possibly to provide material for the new causeway. The sediment that has accumulated in the weir pools could also be used.

And the channel can be further improved through the addition of some large wood material and/or the creation of hibernacula on the bank edges.

Figure 27 - Overview of proposed works to Section 3



A causeway should be created in the pool above Weir B. This should form the left bank of the new channel, and be connected to it at the downstream end. The backwater behind the causeway will trap sediment and run-off coming from the drains on Valley Road to the east, but also act as a temporary pond in times of high water. The habitat of the backwater could be improved through felling of two or three trees directly into it, and additional management of the trees on the left bank will provide material for other parts of the site.

Figure 28 - Location of the causeway and backwater in the pool above Weir B



At the pool below Weir B, popular with families, the bank needs to be re-graded to re-shape the corner and narrow the channel. To protect the bank from further erosion and to facilitate access by families, a new beach should be installed. It should be approximately 5m in width and be topped with angular flint gravel, with transverse wooden struts to reduce downslope migration of material. The bank should be sculpted to ensure a beach slope of 17% or less.

Figure 29 - Views of a beach structure as an example of what could be installed



As Weir C is not causing any significant impoundment, this could be retained as present. As it is close to the new beach and will be popular with families, the right bank should be sculpted to a shallow batter which will improve access and reduce erosion. In this lower section, some tree management should be undertaken to balance the light levels in the channel and maintain tree health.

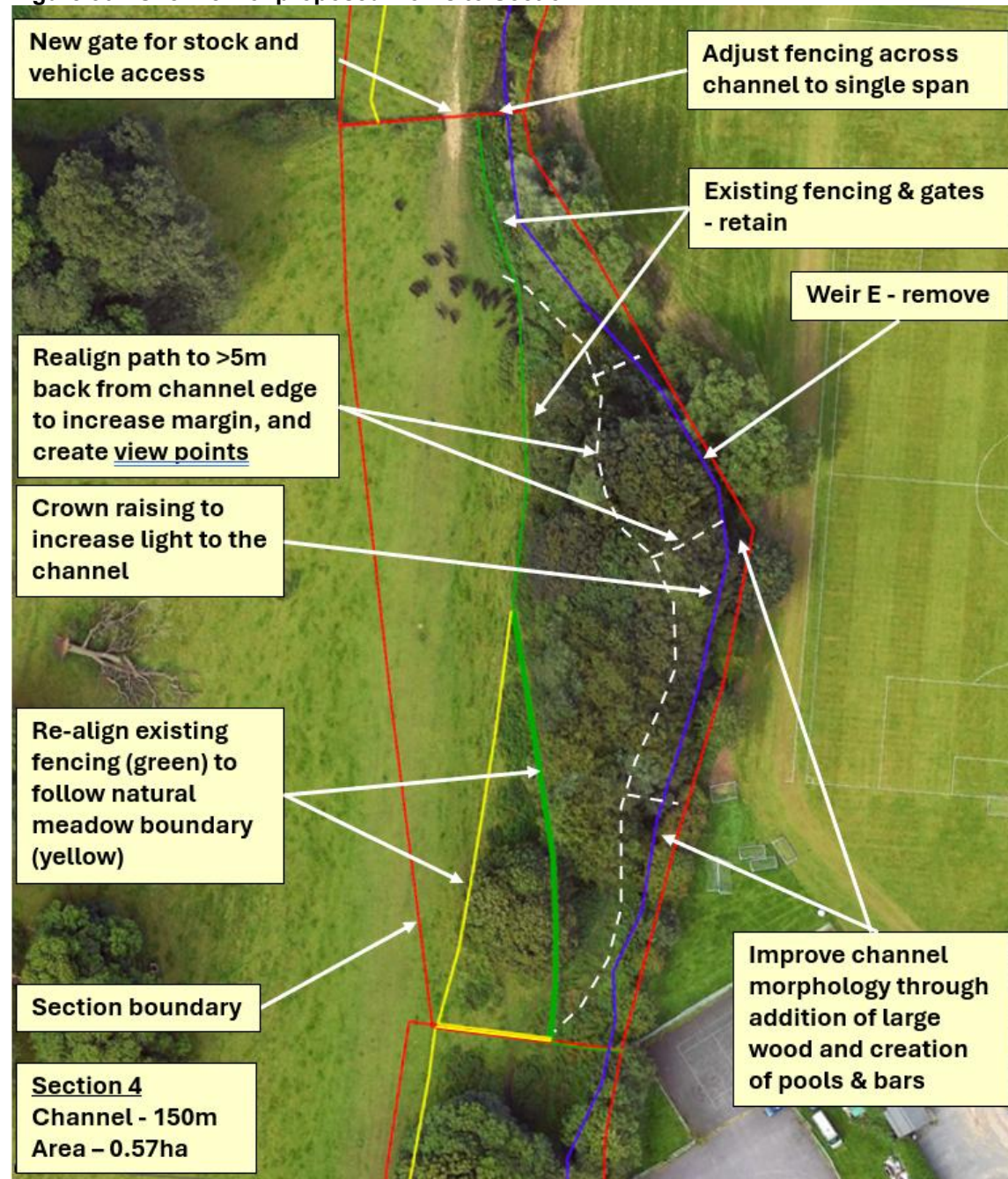
To assist with management of the new channel, margins and riparian area 400m of stock fencing should be installed. It should continue in line with that installed in Section 2, roughly follow the channel line and be up to 15m back from the channel edge. At the downstream end it should tie into the existing estate fence & hedge boundary. Two 2½m stock gates will be required as will four pedestrian gates to facilitate access both to the new beach area and the channel side walk.

With the small drop associated with Weir D, this can be removed in its entirety and the ground made good. The channel can then be allowed to naturally find its preferential route.

6.5.6 Section 4 – Boundary fence and the nature reserve

A modification to the spur that crosses the channel at the upstream end is required to ensure a strut-free span of at least 3m. A new pedestrian and stock gate is needed at the boundary to control access between Sections 3 and 4m which allows much of the existing estate fencing, which borders to the nature reserve, to be retained.

Figure 30 - Overview of proposed works to Section 4



The lower 65m of existing estate fencing should be realigned to match the natural boundary between the meadow and the tree cover and to improve the tie-in with the fencing in Section 5. A new 16m length may be required to tie the realigned fence into the existing channel spur at the down stream end of the nature reserve.

The footpath through the nature reserve should be re-aligned to keep it at least 5m back from the channel edge to reduce bank erosion and allow marginal areas to grow, but access paths to the channel should also be considered to act as viewing points.

The new foot-path routing can be influenced by tree-work & thinning which is needed both for tree health and to encourage diversity in the lower and mid storeys. This should be coupled with canopy raising along the channel to improve light levels. Material won from this can be used in in-channel features elsewhere on site.

Channel morphology can be improved through the removal of the remnants of Weir E, the addition of large woody material into the channel and the creation of pool and bar features by digging-out and side-casting channel bed material.

6.5.7 Section 5 – Island pool and Weir F

To preserve the current benefits provided by Weir F, the plan is to retain the pool as an off-line feature by creating a causeway that routes the stream along the current left bank and past the left flank of the weir. It would then join with a newly created lowered path of preferential flow through the shallow gravel at the base of the weir which continues to the downstream boundary of the site. By re-grading the new channel from the top of the pool all the way to the boundary, it should be possible to create a channel that is passable by fish. If needed a couple of shallow steps could be included in the design.

The causeway could be created using material that has been deposited in the weir pool, or by re-grading the left bank. It would need to be approximately 70m in length with an opening at the top end to allow some water into the pool to maintain levels. The opening should be naturally armoured to ensure that the channel doesn't revert to going through the pool all the time. At the downstream end, the causeway could be tied into the left side of the weir which would help address the flanking flows that take place at present.

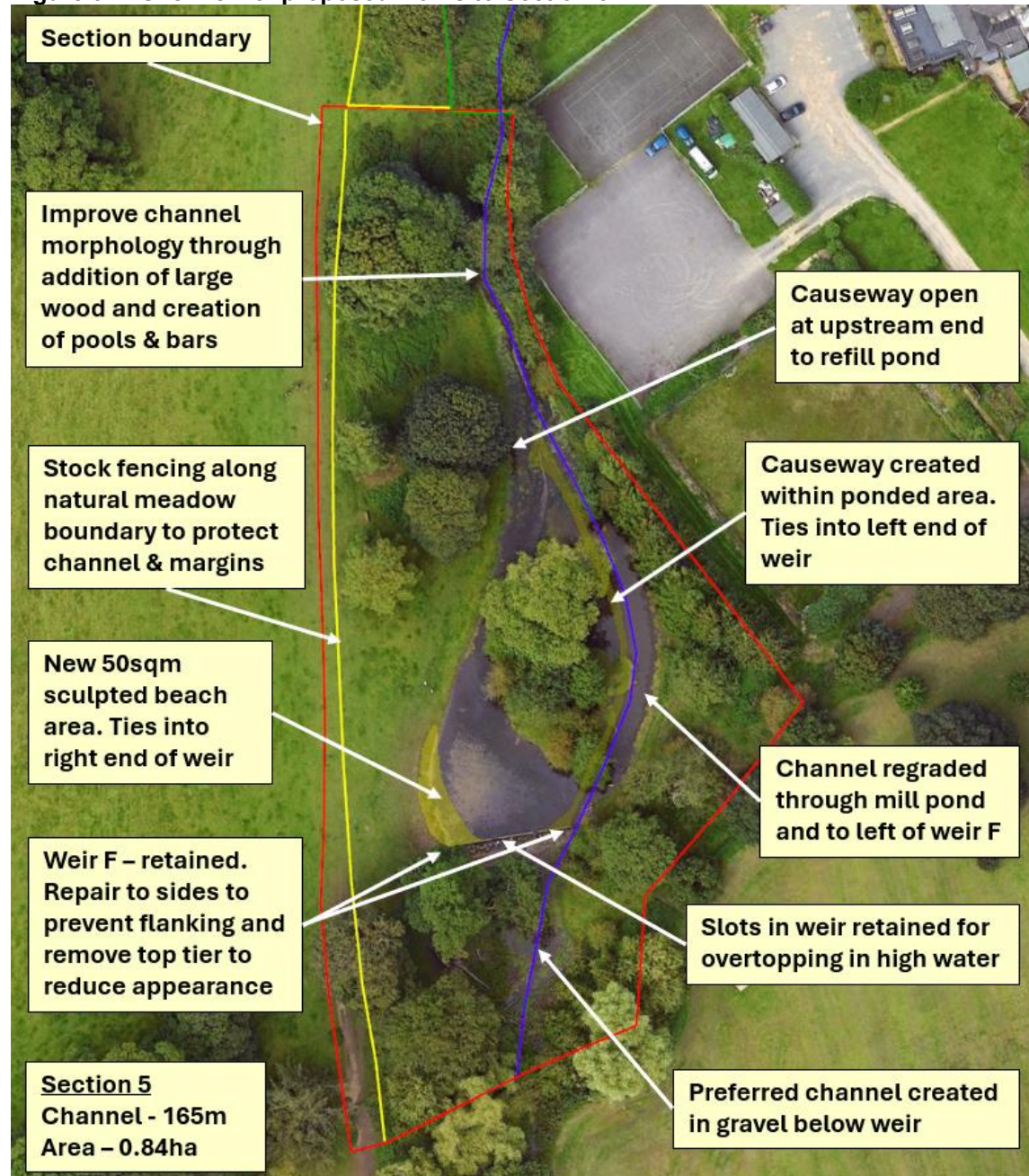
A new flint gravel beach on the right bank immediately above the weir could be used to both provide paddling access to the pool and also to address the right-side flanking flows. Regrading of the right bank may be needed to ensure a shallow enough batter (17% or less), and the beach could be used to create a more landscaped end to the pool.

With the new channel bypassing the weir structure, its overall height can be lowered to more closely match that of the pool. Two slots in the weir should be retained as points of preferred flow in the event the pool level rises.

By diverting the flow round the weir pool, the build-up of silt in the pool should be reduced. Some form of silt removal will be required in the future but this is likely to be much less frequent and with significantly smaller quantities of organic material and reduced impact from cattle poaching.

Upstream of the weir pool, the channel morphology can be improved through the addition of large woody material into the channel and the creation of pool and bar features by digging-out and side-casting channel bed material.

Figure 31 - Overview of proposed works to Section 5



To protect the pool and marginal areas from cattle poaching, 170m of stock fencing is required along the boundary of the meadow. This should tie into the hedgerow at the southern boundary of the site and will need two pedestrian gates installed to permit access.

The suggestion is to not allow cattle into this area and so an alternative water source will need to be provided.

6.5.8 Design phase

The design phase includes completion & submission of applications for required consents necessary for delivery of the project scope. A list of the possible consents is provided in Section 8.

Taking on board the documents and discussions had between the National Trust, the CCSP, the Environment Agency (EA) and Buckinghamshire (Bucks) Council, create an indicative design and accompanying method statement that meets the project objectives and supports applications for Impoundment licences, Land drainage consent, Temporary works consent, and other necessary permissions.

Figure 32 - Map showing the presence of Ordinary watercourses (pale blue line) and absence of Main rivers (dark blue line), in the area of the project (red boundary)



The Hughenden stream through Hughenden Manor is a designated Ordinary Water Course for which Buckinghamshire Council are the Lead Local Flood Authority (LLFA). See fig. 33. Flood risk for the site is shown in fig. 34.

With the removal of and modification to six weirs, engagement with the Environment Agency's Fisheries, Biodiversity and Geomorphology (FBG) team is required. Initial conversations with the FBG team have taken place and they are supportive in principle. The landowners, including the National Trust, are on-board with the design principles and project objectives. No conversation has yet taken place with the LLFA. All stakeholders will need to be consulted throughout the design process, and revisions may be necessary.

The site is within the Chilterns National Landscape and the Hughenden Manor conservation area. It is surrounded by areas of ancient and semi-natural woodland with various designations, see fig. 35. The entire site is classed as Woodpasture and Parkland BAP Priority Habitat, and Millfield Wood SSSI is 200m to east. There may be other designations to consider.

To be able to commence delivery of capital works by the Q3 FY26, permit applications will need to be submitted by Q4 FY25.

Notes from previous discussions and any relevant documentation will be shared at the appropriate time, to expedite the consent submission process.

Figure 33 - Map showing the flood risk of the project site (from <https://check-long-term-flood-risk.service.gov.uk>)

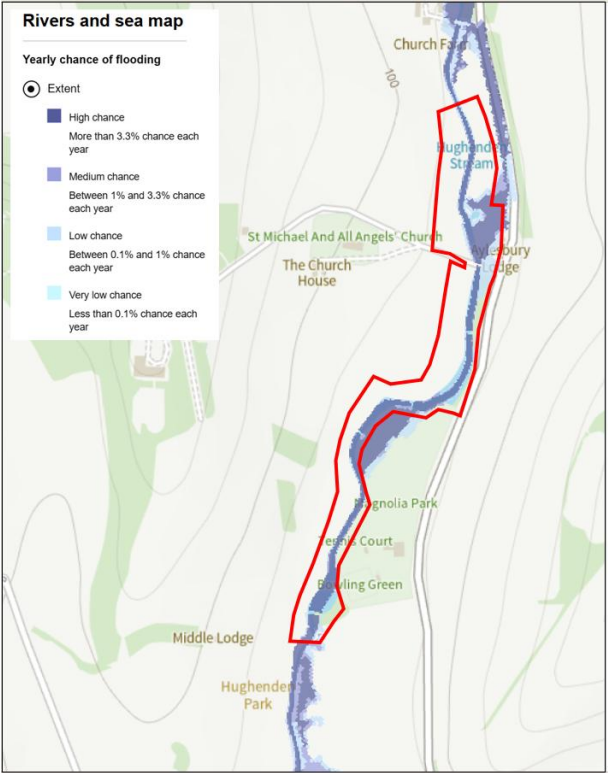


Figure 34 - Magic Map designations for the works site and surrounding area



7 Constraints

7.1 Sensitive landscape

The project area is wholly contained within the National trust site at Hughenden Manor, and is also within the Chilterns National Landscape. The contractor will need to develop and maintain good relationships visitors to the site and be able to manage interest and concerns from passers-by.

Working in a chalk stream river corridor requires knowledge of how to minimise the impact of heavy plant machinery on the landscape. Use of light machines, with wide tyre tracks, and reducing tracking movements is important to aid recovery post works.

7.2 Heritage

Sensitive consideration must be given to cultural and historical heritage of the weirs, channel and adjacent landscape, and implementation plans and operational movements may need to be adjusted accordingly.

Chilterns National Landscape will be providing an archaeological watching brief during earth moving works and this may result in a temporary cessation if anything of historic or cultural importance is identified.

7.3 Protected species - Water voles

Water voles are not known to be present on the site. However, the project method statement will need to clearly show how their disturbance will be avoided if water voles are found within the working area. A survey for water voles will be carried out by the CCSP prior to the works taking place and any areas of water vole activity will be marked out.

7.4 Invasive Non-Native Species (INNS)

There are no notifiable INNS present on the site. The method statement will need to incorporate appropriate biosecurity measures to ensure that INNS are not imported to the site, or exported elsewhere.

7.5 Extreme flow conditions

Although the current peak in flows is subsiding, like all of the chalk streams in the Chilterns area the Hughenden stream is dependent on groundwater levels. Over the last few years the river has experienced very low flows, a result of one of the driest 12 month periods on record, as well as the highest flows in a decade. Flows of either extreme, high or low, will have implications on how the channel works are carried out and particular attention will be required in ensuring that appropriate channel dimensions are restored.

7.6 Sediment management

Chalk streams are very sensitive to sediment, and during the works appropriate mitigation techniques should be employed to ensure the transport of sediment into the Hughenden stream is minimised

7.7 Services

There is one mains sewer that runs below the right bank of the channel, for which service hatches are visible.

Several roadside drains feed into the channel from Valley Rd and these are to be intercepted as part of the project.

As with all projects that require earth movement, a services inventory must be carried out prior to the works starting.

Where any overhead cables are within the works site, the contractor will be expected to gain the necessary consent from National Grid and keep them informed of changes and/or progress.

7.8 Public Access

The site is owned by the National Trust and connects directly to Hughenden Park. Both areas are open to the public and consequently the works site is popular with visitors. It is not anticipated that a footpath closure will be required but parts will need to be fenced off and appropriate action taken to ensure that users are made aware of the river & bank work.

All fenced sites will need to be kept safe and secure at all times.

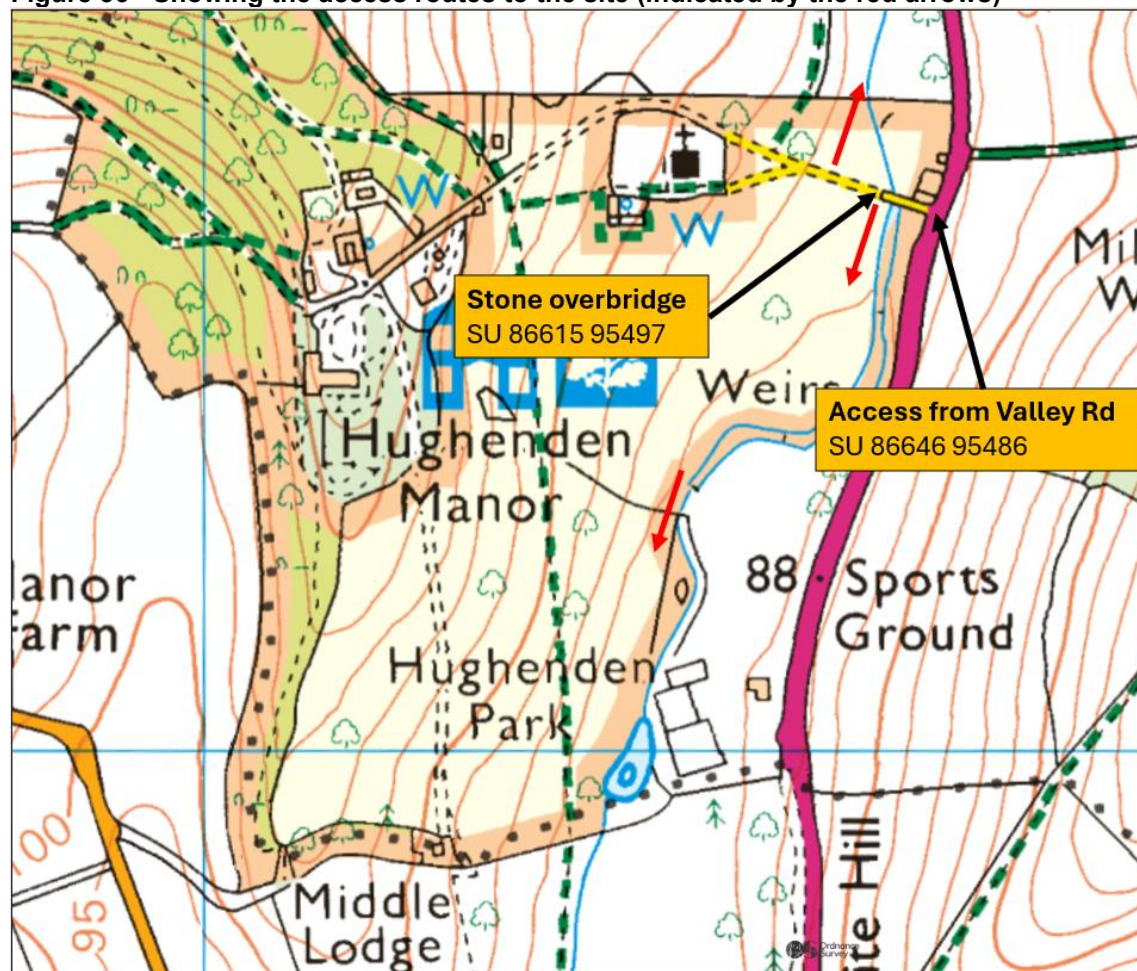
7.9 Access

Access to Hughenden Manor is via signed road off Valley Rd at SU 86646 95486. There is a stone bridge after 30m. For both the road and the bridge, the conditions and suitability for plant should be assessed before use to minimise damage that may be caused.

Figure 35 - Access to Hughenden Manor © Google Earth



Figure 36 - Showing the access routes to the site (indicated by the red arrows)



8 Consents

The Chilterns Chalk Streams Project will, in parallel with this tender process, approach various bodies to confirm what consents will be required to undertake the project works. As the design develops the type and number of consents may change, and it will be up to the contractor to ensure the right consents are in place prior to the commencement of works that are or may be governed by those consents.

8.1 Flood Risk Activity Permit

The Hughenden stream through Hughenden Manor is not classed as main river and the Environment Agency have confirmed that a Flood Risk Activity Permit (FRAP) **will not** be required.

We have been working closely with the Environment Agency in developing this project and would expect them to be involved through the design and delivery phases. In addition, the project is linked to Water Industry National Environment Programme (WINEP) requirements and will need Environment Agency sign-off as meeting the agreed requirements.

8.2 LDC and TWC

As the Hughenden stream is an ordinary watercourse consent from the Lead Local Flood Authority will be required before any works can commence, in this case

Buckinghamshire Council. This will likely include a Land Drainage Consent (LDC) and a Temporary Works Consent (TWC).

8.3 Impoundment licence

It may be necessary to secure one or more impoundment licences to undertake the modification to the weirs. This will be the responsibility of the contractor and they are advised to check the latest updates at <https://www.gov.uk/guidance/check-if-you-need-a-licence-to-impound-water> before submitting an application

8.4 Planning permission

Planning permission may be required as the site is wholly contained within the Hughenden Manor conservation area and/or to allow for earth movement and bank or channel realignment. This would be sought from Buckinghamshire Council.

8.5 Felling licence

If, as part of the tree works, more than 5m³ of wood is planned to be removed in a single calendar quarter, a felling license will be required. This does not include lopping or pollarding for tree health or for trees that have a maximum trunk diameter of 8cm at 1.3m above ground.

More information can be found at

https://assets.publishing.service.gov.uk/media/689ef6c7b4b6acd341133a26/FC_Tree_Felling_July_2025.pdf

9 Tender Assessment and Evaluation

9.1 Evaluation of Tenders (Compliance)

Submitted tenders will be subject to a compliance check, selection and finally a quality and price evaluation by means of a structured process in order to determine that the tender offers the best value to CCB.

The evaluation of tenders will be undertaken by a panel with representatives from CCB and Smarter Water Catchments partners.

The initial compliance phase will include checks to ensure the documents have been properly completed and all required information has been provided.

If, during the initial compliance phase, it is apparent that a Tenderer has submitted a fundamentally non-compliant or incomplete tender then the CCB reserves the right to reject that tender and continue to assess the other tenders as appropriate.

Tenderers who pass this initial screening will thereafter be subject to further assessment as detailed below.

The evaluation process will be systematic, thorough and fair.

After the initial assessment phase the tenders will be evaluated.

9.2 Evaluations of Tenders (Award)

Quality (70%)

The criteria for consideration will include:

Ref	Criteria	% Evaluation Weight
A	Ability to Meet Functional Specification	80
B	Appropriateness of Solution	10
C	Satisfactory case studies and/or references related to previous installations and solutions	10

Each reply will be scored according to the assessment given in the table below:

0-2	Unacceptable	Nil or inadequate response. Fails to demonstrate an ability to meet the requirement.
3-4	Poor	Response is partially relevant or poor. The response addresses some elements of the requirement but contains insufficient or limited detail or explanation to demonstrate how the requirement will be fulfilled.
5-7	Acceptable	Response is relevant and acceptable. The response addresses a broad understanding of the requirement but may lack details in certain areas on how the requirement will be fulfilled.
8-9	Good	Response is relevant and good. The response is sufficiently detailed to demonstrate a good understanding and provides details on how the requirements will be fulfilled.
10	Excellent	Response is completely relevant and excellent overall. The response is comprehensive, unambiguous and demonstrates a thorough understanding of the requirement and provides details of how the requirement will be fulfilled

Price (30%)

This will be determined by examination of the Pricing Schedule submitted by each tenderer.

The CCB is under no obligation to accept the lowest bid or any bid and will not be liable for costs or expenses incurred in connection with the appointment process.

9.3 Further Clarification

During the tender evaluation period, Tenderers may be required to answer questions on their bid, for the purposes of clarification. The quality scores may be altered by the evaluation panel following the process of clarification through the demonstration and interview process.

All costs involved will be borne by the Tenderers.

9.4 Confidentiality

As part of the tender evaluation process, CCB may elect to share some or all of the information supplied with partners who are critical to the success of the project.

CCB will not disclose to any other third-party information that is supplied in tenders that is marked as confidential. All other information supplied by bidders to CCB will similarly be treated in confidence except that references may be sought from banks, existing or past clients, or other referees submitted by the Tenderers.

9.5 Conflict of interest

Bidders are required to confirm that they are not aware of any conflict of interest or any circumstances that could give rise to a conflict of interest in the performance of the proposed Contract.

9.6 Consortia

Bids from multi-disciplinary organisations and specially formed consortia are welcome, but all organisations in specially formed consortia must be identified in the response to the ITT. Each group or consortium will be required to nominate a lead partner with whom the CCB can contract or form themselves into a single legal entity before contract award. In the case of group bidders or consortia, each service provider will be required to become jointly and severally responsible for the contract before acceptance.

If the tenderer is a group bidder or consortium, each member of the consortium must be identified separately as part of the response to this ITT.

If the tenderer is a member of a group of companies, they should provide information only about themselves and not the Group as a whole (except where Group information is specifically requested by the question).

9.7 Variant bids

Tenderers may also submit an alternative price and/or method of provision of the services or goods, which CCB, at its sole discretion, may or may not pursue.

10 Structure and Format of Response

10.1 Introduction

Your response to this tender document should follow the defined structure as outlined. Your response will be used to evaluate and score the different sections of each proposal received. All parts of this section are deemed Essential and require response.

The response should be presented in A4 format with an easily readable font style and size.

10.2 Approach to the Contract (Methodology)

Contractors should describe how they will approach the implementation and performance of this contract with particular regard to the requirements outlined in Section 5, Price List.

The methodology statement should not exceed two pages of A4.

10.3 Project Resourcing

Contractors should describe the resources that they will be deploying on this contract if they are successful, stating whether any staff resources are currently in place or will require to be recruited. They should also give indications as to the background and knowledge of key personnel who will be deployed in the delivery of this contract.

Explain any sub-contract arrangements that you will depend on to deliver the contract and explaining how you will manage this / these relationships with other stakeholders (if any). Any Lead Times between award of Contract and start of Services should be highlighted.

A project plan for your works should be included in this section of the tender return.

11 Supplier Questionnaire

As part of background checks and to demonstrate due diligence we may ask the tenderer to complete a Supplier Questionnaire as part of the tender process. If required, this will be provided separately and must be completed before any contract can be awarded.

A copy of this Supplier Questionnaire is available on request.

12 Appendix 1 – Chilterns Conservation Board Conditions of Contract

Please see separate document