BEAUMONT RIVERS

Invitation to Tender

Pleasley Vale Phase 1 Works:

Version 2

FOR COMMENT ONLY

Introduction

On behalf of Bolsover District Council and Dragonfly Management, Beaumont Rivers is seeking quotes for the below **design and build** works at: Pleasley Vale Business Park, Outgang Ln, Pleasley Vale, Mansfield NG19 8FB

Quotes are to be submitted by no later than midday on August 31 2024. Any quotes received after this date will not be accepted. Quotes must be valid for at least 90 days after the closing date.

As can be seen in maps 1 and 2, the majority of the works are on the embankment separating Mill Pond 1 from the River Meden.

As can be ascertained from the maps and PCI, access to the embankment is severely restricted, and contractors will need to either install a temporary bridge across the River Meden, lift plant and materials over with a crane, or potentially float plant across the pond to/from temporary structures. **Quotes are required to detail how they will overcome this challenge.**

We have provided as much information as is possible/pertinent at this time. Bidders may request further information, which (if held) will be shared with all parties requested to quote to ensure fairness.
Quotations will be assessed on the following criteria:

- Cost
- Safety
- Quality of deliverables
- Programme and availability

Following the award of the contract, the successful bidder will be required to produce scheme specific risk assessments and method statements. No site work will be undertaken until these are approved by the client.

Supporting Information

In addition to the quotation, please submit:

- Company Health and Safety Policy.
- Company Environmental Policy.
- Details of company insurances.
- Evidence of any quality management systems (internal policy, ISO 9000 or equivalent).
- Any examples of risk management on recent, similar works.

CDM Roles and Responsibilities

This contract is being offered as a design and build contract. The contractor will need to fulfil Designer and Contractor roles, and Principles of each if any elements of the work are subcontracted. The CDM Client will be Jonny Ackroyd at Beaumont Rivers Ltd. Formal Letters of Appointment will be issued on award of the contract.

This scope document is accompanied by a pre-construction information document detailing known risks of the site and design, as well as an environmental risk assessment for the envisaged methodology.

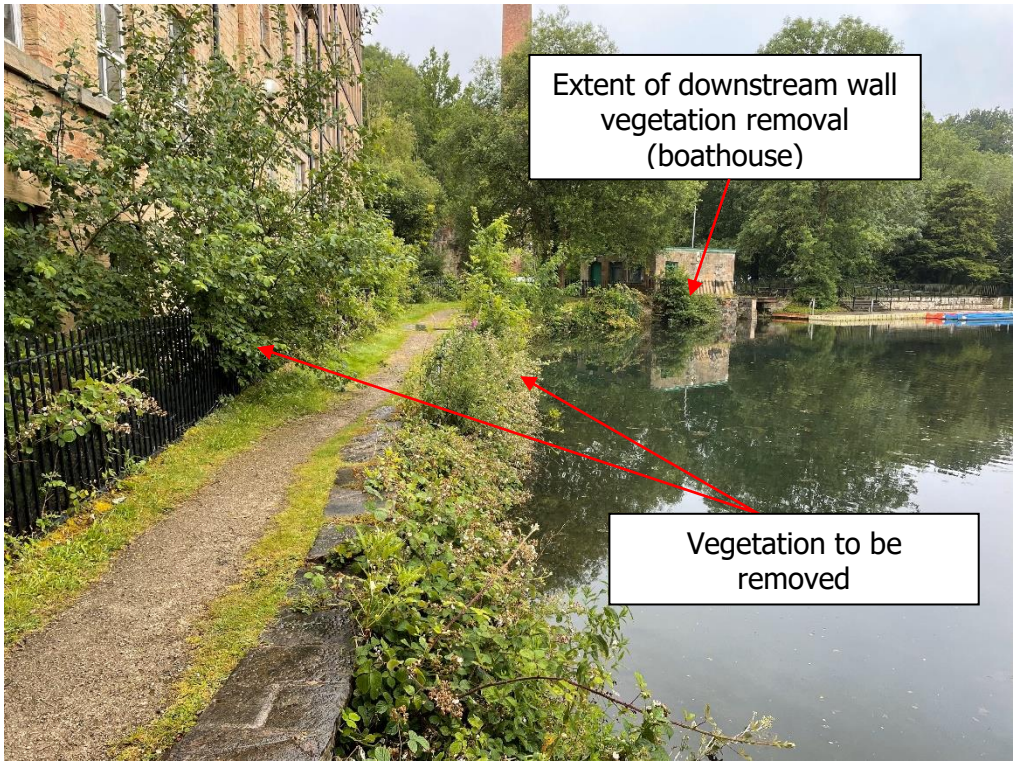
Further Information

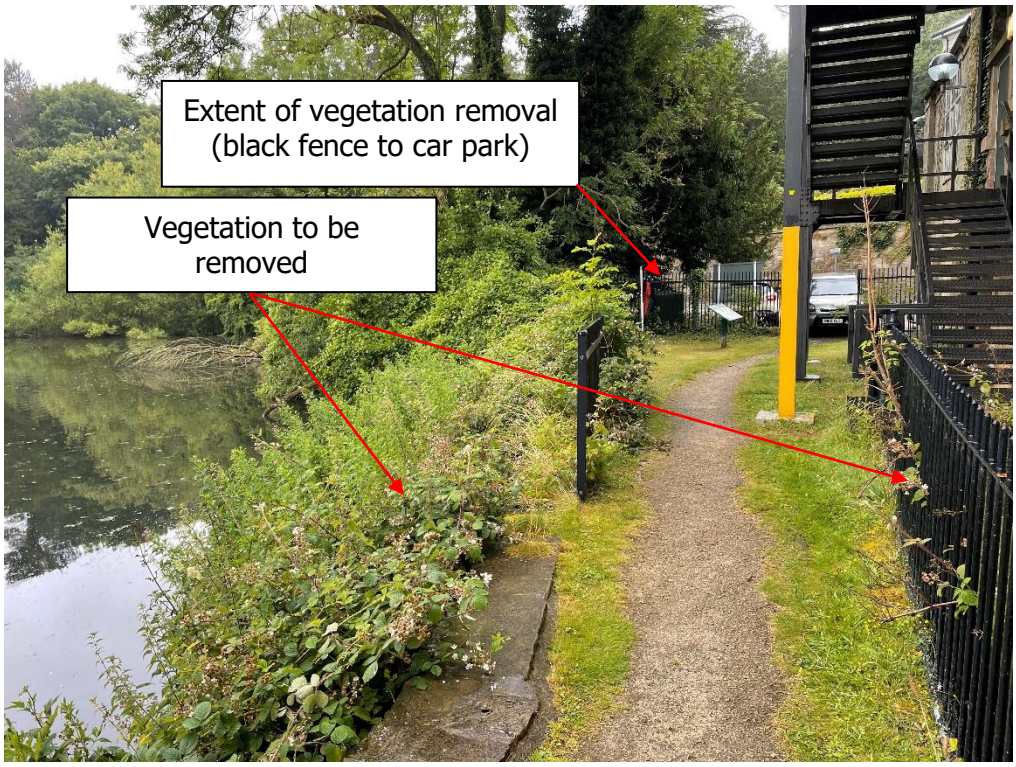
Any additional information can be requested from Jonny Ackroyd on the contact details below.

Email: Info@Beaumontrivers.com

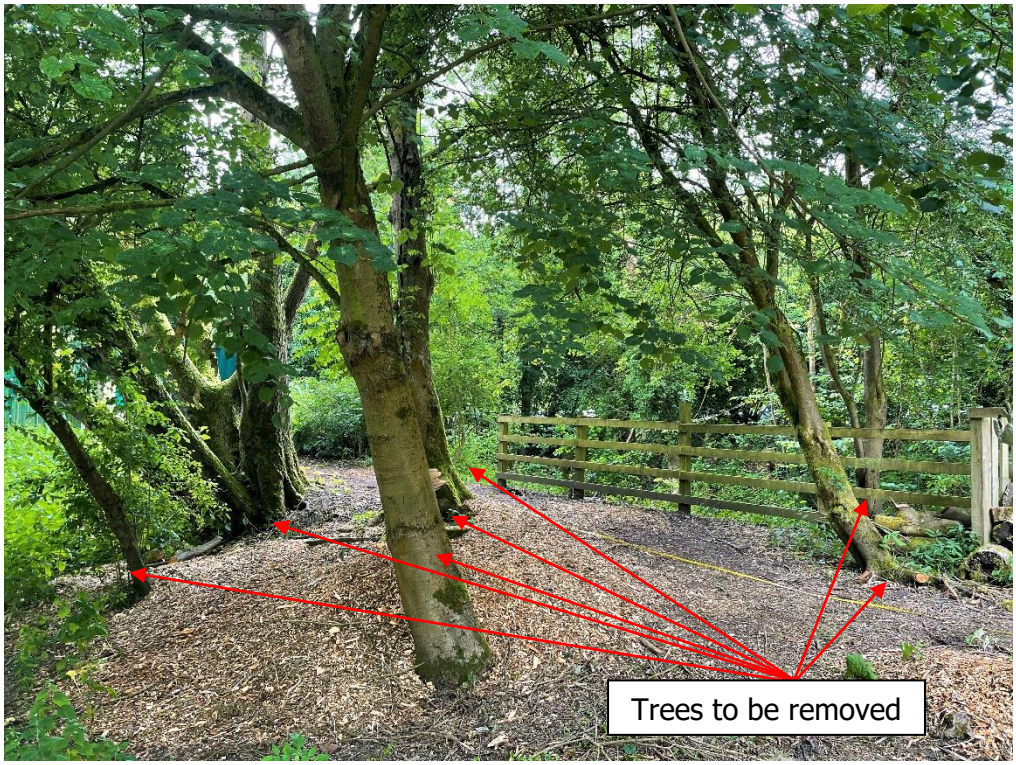
Tel: 07468 764825

1. **Remove all remaining trees from the embankment:**
   a) **67m of clearance of vegetation, particularly woody species along both sides of downstream wall from ///outfitter.cages.fails up to the black steel fence (at car park) at ///amuses.connector.choppers**





b) Remove 8no. mature trees and 1 sapling from spillway area.



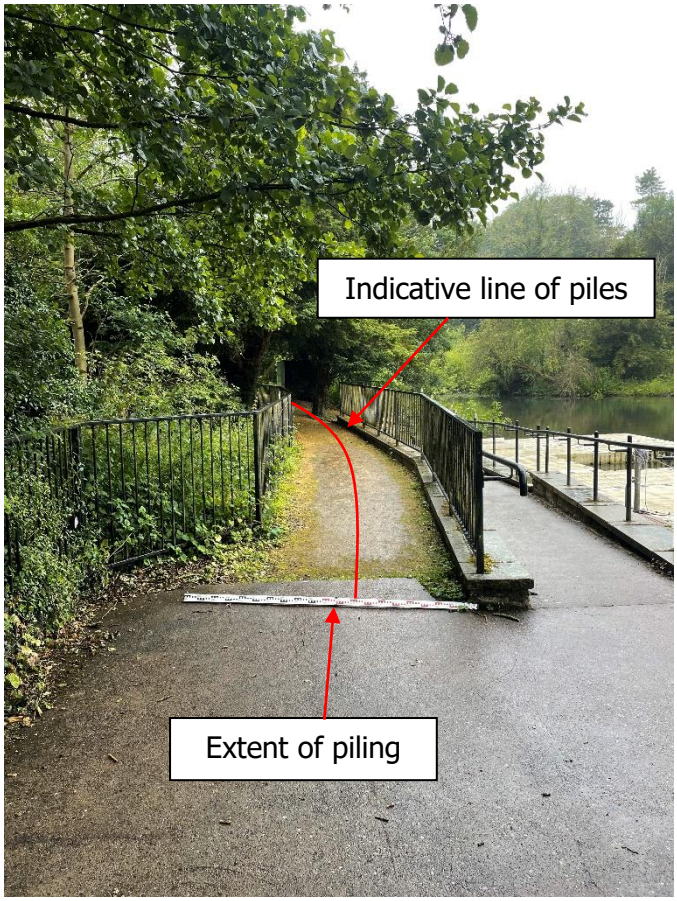
c) Continue removing trees from entire embankment, with particular attention to those impacting the retaining wall.

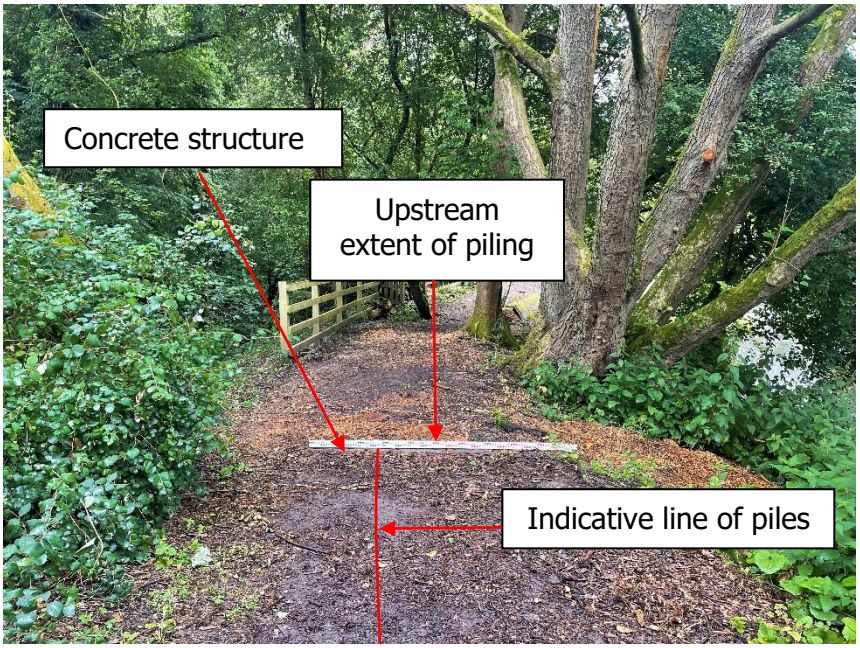
There are 15 mature trees growing from the wall and 6 in the centre of the embankment. There is an additional 56m of bank clearance at the edge of the lake. 56m clearance from ///chef.utter.arrival to pines.proofread.menswear

d) **Remove stump at ///chef.utter.arrival to facilitate further works.**

2. Install 48m of 3.5-4m piles from the edge of wall (access ramp) to concrete structure.

a) Cap piles to impoundment crest level of 104.5 mAOD.
b) Make good footpath surface along the extent of pilings.





3. **Grade back damaged bank, remove fencing and create spillway. Install 12m long concrete crest beam and a 12m wide, ~5m long concrete spillway using Dycel concrete revetment with geotextile underlayer. All fencing, trees and stumps must be fully removed. Crest height to be confirmed.**
   ///archives.passports.caked

Alternative (for discussion during meeting)

As we are yet to undertake any modelling to determine the size of the spillway, in the short term, the following alternative is plausible, but will not represent the best cost-profile in the long term as we will eventually have to install the Dycell spillway anyway. Dycell can be extended without issue should we need a larger spillway.

Grade back damaged bank, remove fencing, add topsoil and create an even 12m wide, ~5m long grass spillway.

All fencing, trees, stumps and other obstructions to flow must be fully removed. Crest height to be confirmed.

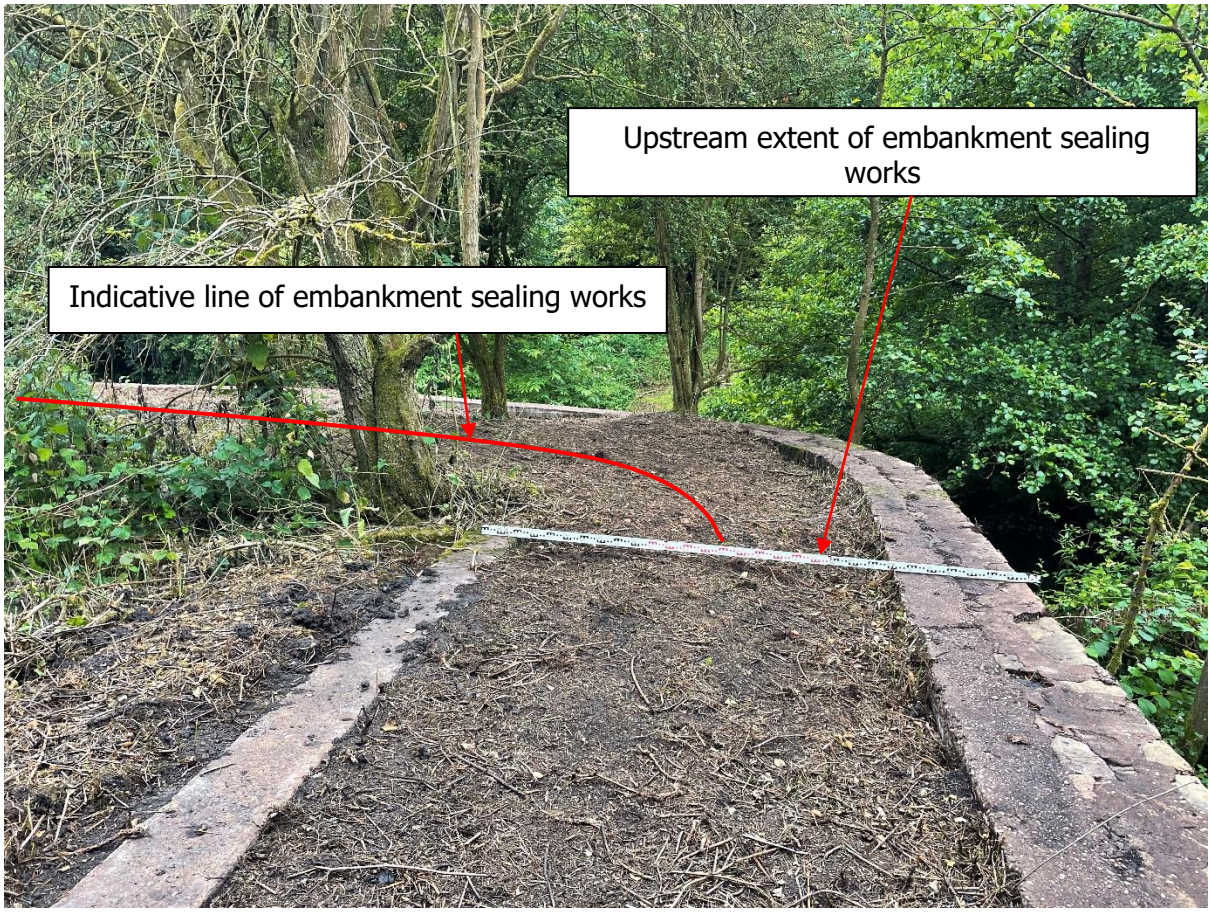
4. **Seal 141.6m of the central core of the wall from the surface to 50cm below river bed level (123m emergency works, plus 18.6m to full extent) from spillway to end of structure. Works are to be between the retaining wall and concrete pipework (see photos). Riverbed level is between 3.5 and 4m below the surface.**

   Wall is to be sealed in one of the three methods identified below:

   a) Pilings
   b) Dig trench and fill with bentonite slurry
   c) Investigate each individual void, dig out, grout the inside of the concrete retaining wall to seal and infill as required. There are 8-9 voids of unknown connectivity as detailed in scope items 5 and 6A-E.


Indicative line of embankment sealing works
Deep voids along embankment


Indicative line of embankment sealing works


Upstream extent of embankment sealing works
Indicative line of embankment sealing works

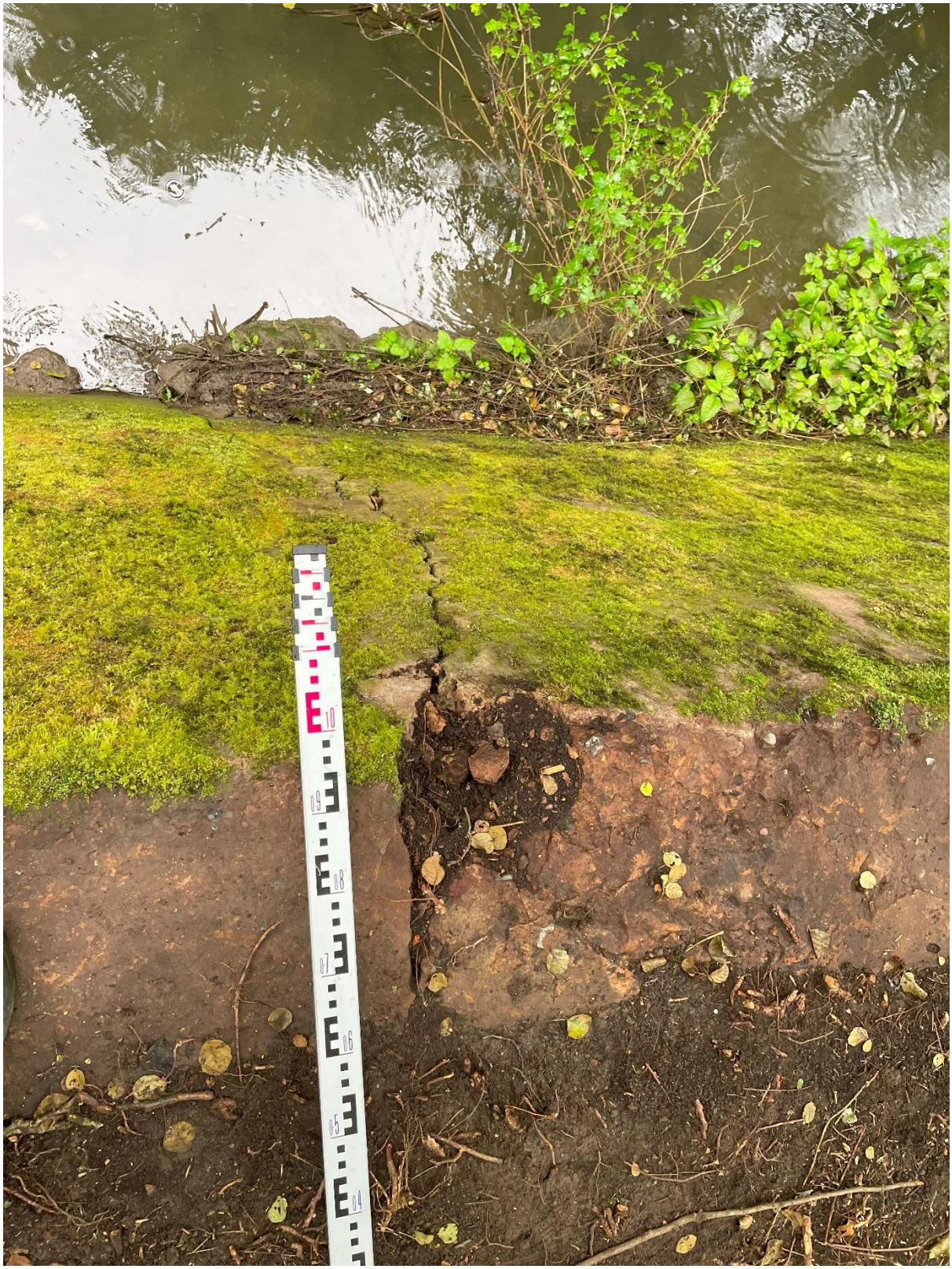
5. **Infill 8 to 9 voids to crest level with compacted clay topped with topsoil. Seed with grass mix.**

6. **Drill down and grout cracks along the full height of the concrete retaining wall at the following locations:**

   a) ///itself.wake.riskiest

b) ///scale.sourcing.uproot

c) ///cookbooks.headless.last



d) ///dictation.villa.inflation

e) ///absorb.relax.encodes

7. **Remove redundant RSJ at ///schooling.toolbar.tribal**

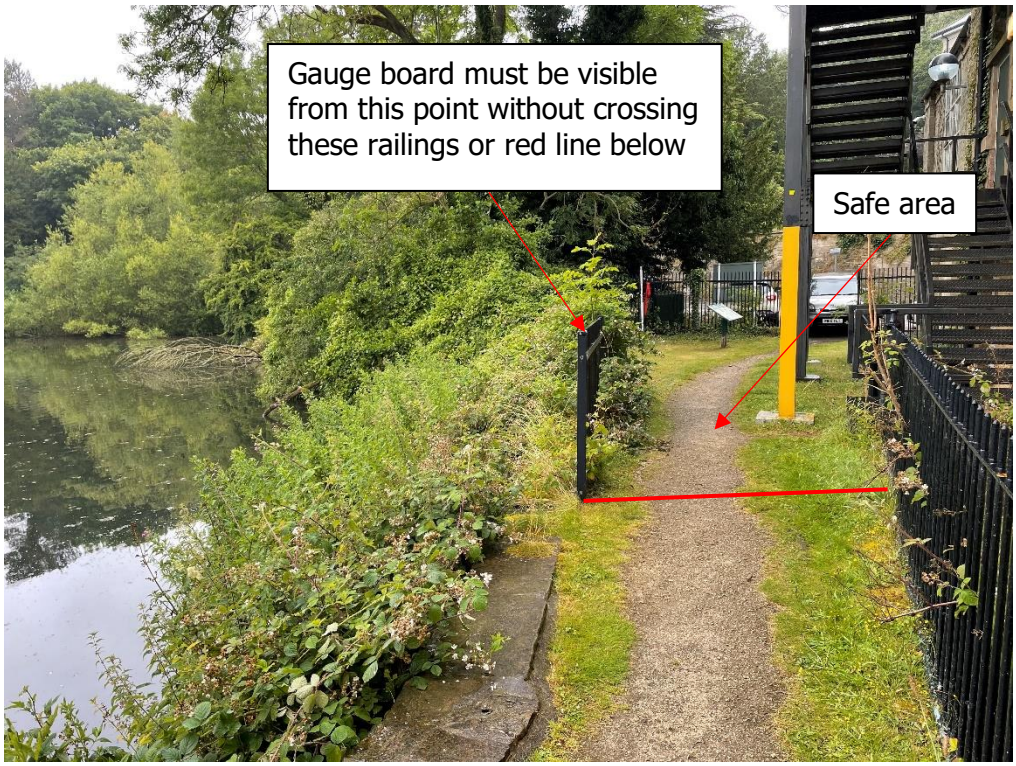
8. **Clear obstructions (trees and vegetation) from bed of the channel along the retaining wall.**

9. **Clear channel and downstream trash rack of any accumulated debris on demobilisation.**

10. **Install chainage markers at 15m intervals along the entire length of the raised embankment.**
    Chainage must be visible from the top and opposite bank of the Meden. Markers are to be affixed securely in a manner that is deemed permanent. It is suggested to use bolts drilled and chemically anchored into the wall.
    Install a gauge board levelled into grid.

    Board must display crest level, spillway level, top of culvert level, and descending to bed level. Gauge board must be glow-in-the-dark and display 105mASL in red at the top (crest level is 104.5mASL). Board may need to be reinforced with marine ply if it extends above ground level

    Board must be clearly visible/readable from behind the bankside black railings shown in photograph below, so anyone reading the board during a flood event does not need to walk beyond the railings (red line shown in photo).



11. **Install floating boom upstream of spillway culvert to catch debris and prevent blockages/unauthorised accidental access.**
    Boom must be easily removable for maintenance and future (phase 2) works. Boom must be a minimum of 3m away from the upstream headwall.

12. **Repair stonework on bed and sides of damaged culvert to ensure resilience in a flood event.**

Note that this will require either working in a confined space, or temporarily deculverting the asset.

13. Block off pipe inlet structure at upstream end.

14. Investigate functionality of Mill Pond 1 drawdown sluice and service mechanism.

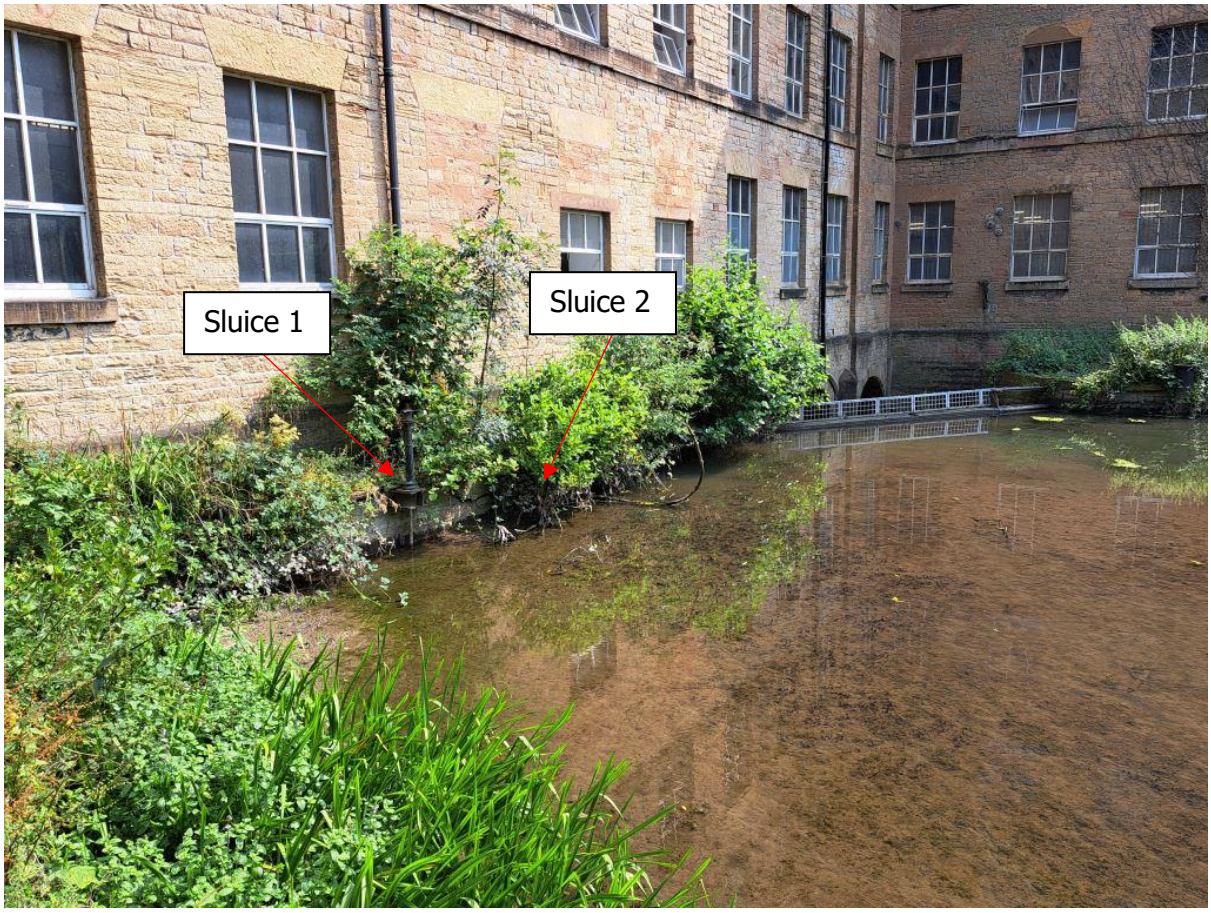
15. **Inspect full length of the drawdown sluice culvert beneath Mill 1 and provide a quote to restore to full functionality.**

This is likely to include:

- Desilting/removing debris along the length of the culvert.
- Unblocking 1no. outflow pipe (found to be blocked in 2017)
- Removing tree roots/blockages.
- Rehanging service pipes within the tunnel.
- Off-site disposal of removed material.

16. **Investigate functionality of 2no. Mill Pond 2 drawdown sluices and service mechanisms to make operable.**
    - Take measurements of sluice openings at maximum aperture.
    - Repair wheel on second sluice (sluice 2) to operable condition.


Sluice 2


Sluice 1
Sluice 2

17. **Inspect and trace culverts from Mill Pond 2 (from sluices in task 16) to the unknown terminus and provide a quote to restore to functionality.**
    This asset may be between 400-500m long. Tracking it may require use of tracer dye, ground penetrating radar or conventional pipe tracing with excavations at the extent (usually 60m) of the tracer. This may need to be facilitated by jetting to unblock the pipe to trace it.

Task is likely to include:

- Initial use of tracer dye to identify outflow.
- Desilting/removing debris along the length of the culvert.
- Removing tree roots/blockages.
- Off-site disposal of removed material.
- Replace/refurbish 2no. penstocks.
- Installation of inspection chambers at ~60m intervals.

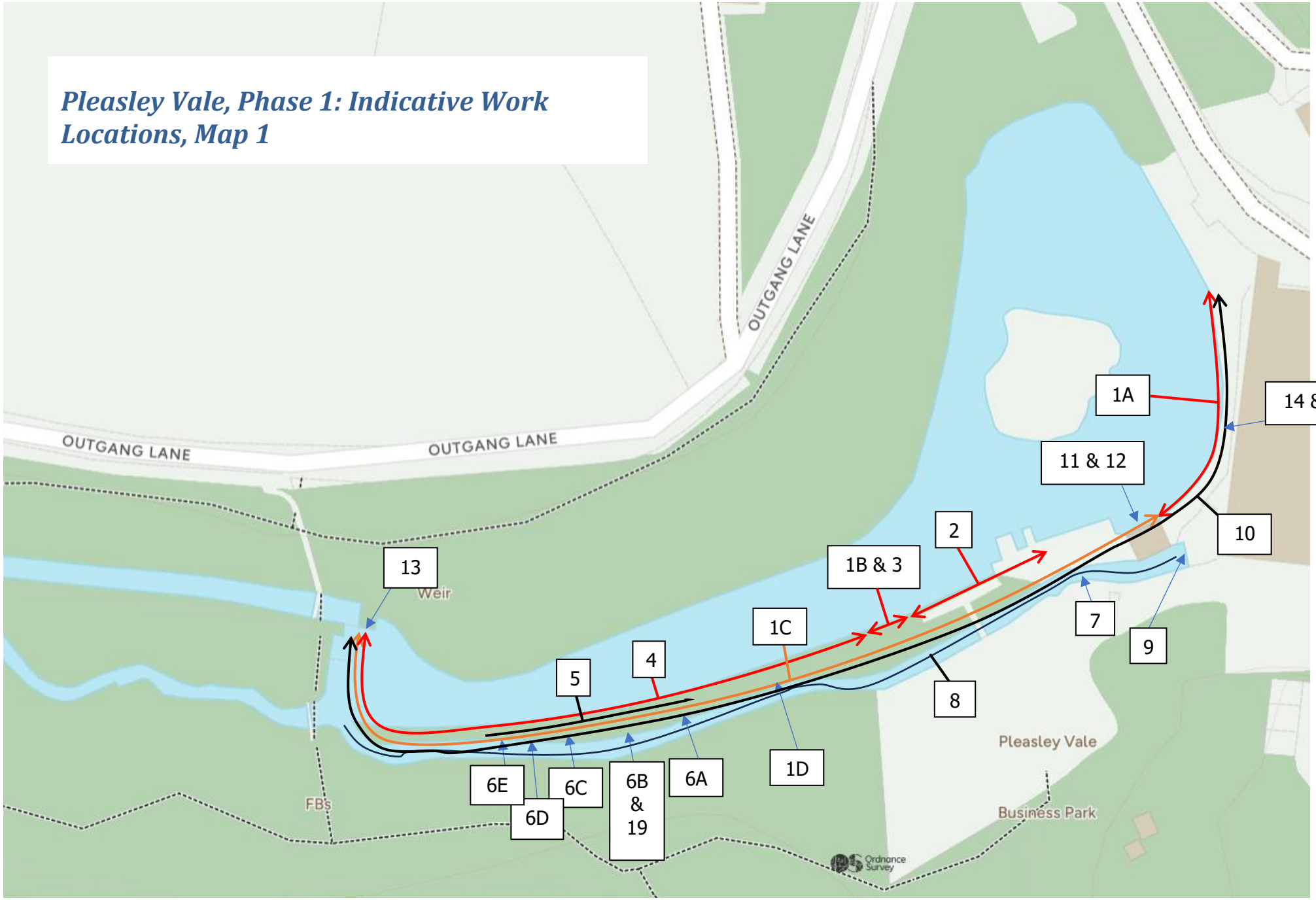
Photo below: Possible terminus @500m from culvert headwall (see map 2)

18. Provide budget quote to de-silt Mill Pond 2. There are no silt surveys at present.

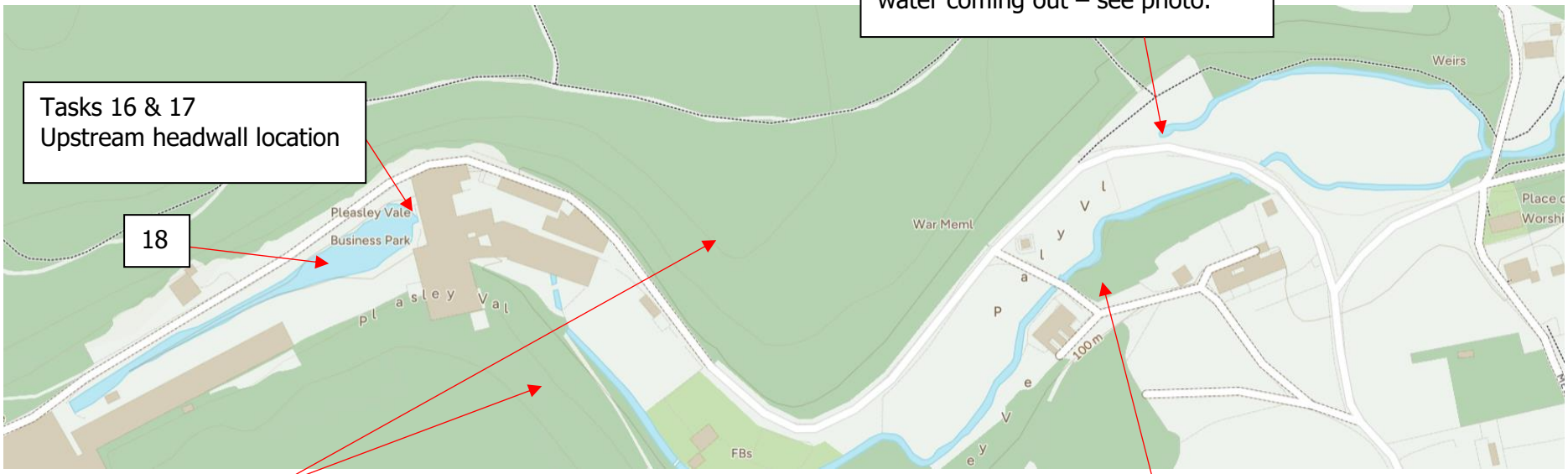
19. **Investigate if blanked pipework at the base of the embankment is under pressure. There are 2no. pipes to be checked.**

20. Prepare Health and Safety File detailing works for all assets repaired or replaced.

Pleasley Vale, Phase 1: Indicative Work Locations, Map 1



Pleasley Vale, Phase 1: Indicative Work Locations, Map 2



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