River Thame Conservation Trust

Construction Specification: Cuttle Brook Improvements

Project	Cuttle Brook Nature Reserve
Date Last Updated	October 2024
Status	Version V1
Classification	Confidential

Working for a river catchment with healthy fresh waters and wildlife, valued and enjoyed by local people

Registered address: Bury Knowle House, North Place, Oxford, OX3 9HY www.riverthame.org
Company Reg. Number: 8399778 Charity Reg. Number: 1156118 Enquiries@riverthame.org

River Thame Conservation Trust

Contents

1 Introduction

The River Thame Conservation Trust (RTCT) is a grassroots charity that operates throughout the River Thame catchment, its tributaries and other neighbouring catchments.

RTCT is undertaking works to improve river habitat over approximately 3km of the Cuttle Brook[1] including sections through the Cuttle Brook Nature Reserve (NR) and Rycote Meadow. Following successful acquisition of the FRAP and funding to cover the work, we are now seeking to complete the following:

- Task 1: create two scrapes, including culverted discharge under path
- Task 2: remove one weir
- Task 3 (optional to be costed): enhancement of existing scrape and
- Task 4 (optional to be costed): removal of a hay bale in the Cuttle brook

This document is a tender specification to solicit tenders to undertake the works. **We require costs for all 4 tasks, although the 2 optional tasks will be tailored to the funding available.**

1.1 Site information

The Cuttle Brook Nature Reserve is located to the West of Thame, Oxfordshire. Figure 1 shows the area of the Cuttle Brook Nature Reserve and Rycote Meadow where Works will take place, and where the areas lie within the surrounding town of Thame.

Figure 1 Site areas within the wider landscape

[1] https://environment.data.gov.uk/catchment-planning/WaterBody/GB106039023840

1.2 Permitting

The Flood Risk Activity Permit was submitted to the Environment Agency and approved in August (Permit No. EPR/WB3752GM).

1.3 Scope of Work

The Scope of work includes the following:

1) One site visit prior to commencement of the construction work to be undertaken with RTCT at a time of mutual agreement;
2) Completion of the following elements of the project, in line with the constraints presented herein:

- Task 1 (more detail in Section 2.1):
  a. Sediment transport protection on site (silt curtain) downstream of weir removal;
  b. Removal of weir structure;
  c. Removal of weir materials from site that can't be reused on site;
- Task 2 (more detail in Section 2.2):
  a. Excavation and profiling of 2 x scrapes;
  b. Deposition of spoil outside of the floodplain in adjacent meadows (see below);
- Task 3 (optional):
  a. Enhancement of existing scrape in Rycote meadow, comprising removal of 30m^3 of spoil;
  b. Movement of spoil across Oxford Road and deposition of spoil outside of the floodplain in meadow adjacent to scrape 1;
- Task 4 (optional)
  a. Long arm excavator to remove a saturated hay bale (approximately 1.2m diameter x 1.5 m long), which has been rolled into Cuttle Brook and is currently approximately 5m from and 2.5 m below the bank (Figure 2).

Figure 2: hay bale in Cuttle brook

The scope of work will not include the following activities:

- Ecological clerk of works, provided by RTCT where required.
- Revetment of the banks directly downstream of the weir to be removed.

River Thame Conservation Trust

2 Description of the Works

2.1 Weir Removal

The existing weir is an obsolete concrete structure. The weir does not allow the passage of fish in low to medium flows and leaks below the structure and around the deteriorated concrete headwall adjacent to the left bank (Figure 3). RTCT have met on site with the landowners and the EA permitting and fisheries teams and there is full agreement that the weir is not serving any purpose as it currently stands and it should be removed to re-establish fish passage, reduce the sediment accumulation upstream and the scour downstream.

Figure 3 Photographs of the deteriorating weir structure

The headwalls comprise concrete and masonry, and the weir structure is concrete. Both the headwalls and weir structure are to be removed.

The removal may be by excavator. However, if this is the case, it is likely that tree removal may be required for access (see Section 3.2). RTCT's preferred option is the use of handheld tools, such as a jackhammer and a generator, if possible.

It is the intention to reuse excavated material in the revetment work that RTCT will complete downstream of the existing weir (Figure 4). However excavated materials that cannot be reused on site will require disposal from site by the Contractor (likely 1 skip given the size of the weir). Figure 4 presents a schematic of the weir including measurement made by RTCT on site. The depth of the concrete structure into the bed however remains an uncertainty but is assumed to be no more than 0.3m below the bed.

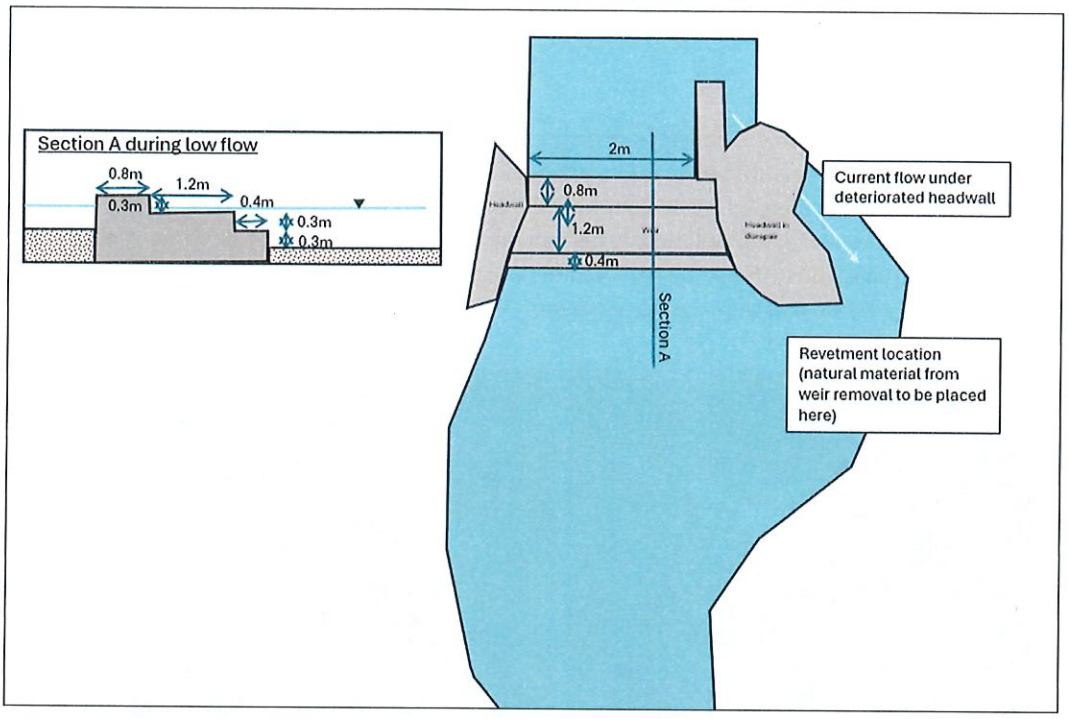

Figure 4: schematic showing plan view and long section through the existing weir to provide an idea of scale

The contractor selected to complete the work will be required to work in line with CDM regulations. The contractor will install a silt curtain downstream of the works to minimise the transport of sediment disturbed during the work by the Contractor.

2.2 Scrapes

The scope includes creation of two scrapes within the floodplain fields of the Cuttle Brook Nature Reserve. The objective of the scrapes is to improve habitat and biodiversity.

Both scrapes are required to be excavated with shallow margins of 1 in 10. The scrapes will be excavated in line with the EA exemption 25 (Excavating scrapes and shallow wetland features totalling 0.1 ha in a flood plain (FRA25)), meaning they will be no bigger than 0.1ha and no more than 0.5m deep. Excavation must not take place within 8m of the Cuttle Brook.

Scrape 1 will intersect the existing backwater (see Figure 6) so the scrape must drain towards the existing backwater. The 0.5 maximum depth in line with the exemption still applies.

Scrape 2 will be piped into the adjacent ditch (Figure 5) under the footpath through a 450mm drainage pipe, to connect it to the Cuttle Brook. The ditch excavated for the pipe to be laid will be infilled with aggregate material.

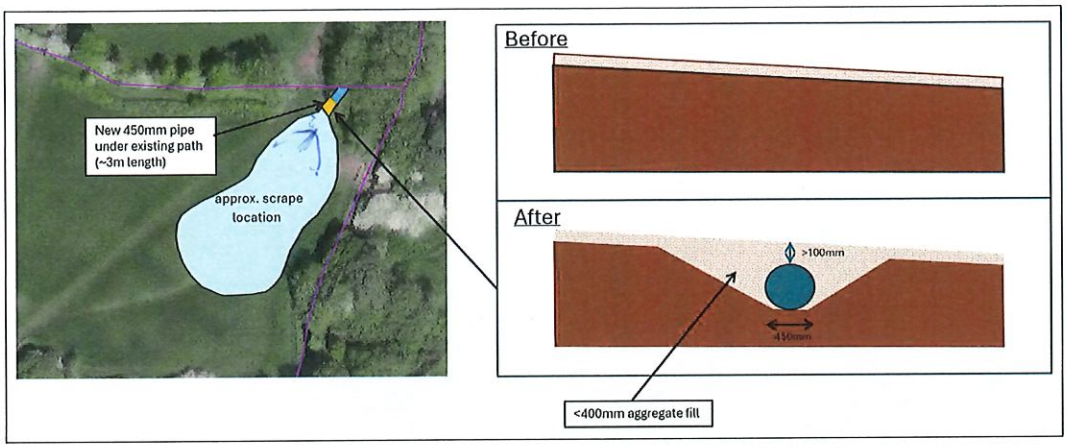

Figure 5: Scrape 2 location and schematic of drainage under existing path

The outline for each scrape will be set out on the ground using flagged stakes and/or spray paint by RTCT. A RTCT project officer will walk these over with the contractor at the start of construction.

Spoil arising from scrape excavations (which will be of a depth no more than 0.5m) will be deposited outside of the floodplain (Section 3.3).

3 Access

Figure 6 shows the access routes to the weir and scrape locations.

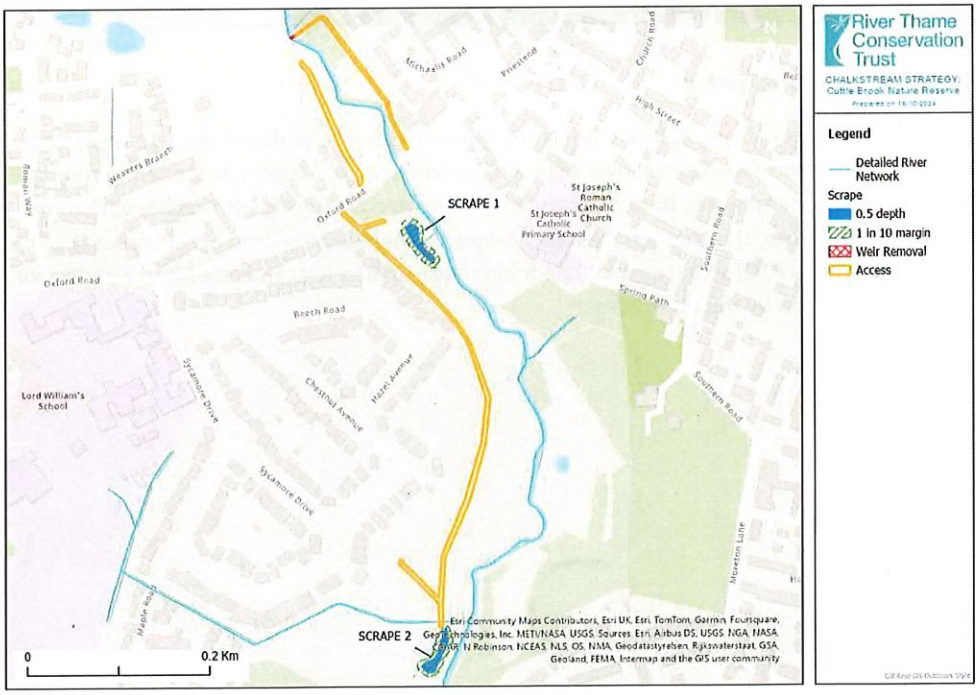

Figure 6 Access routes to site area for scrape excavation and weir removal

3.1 Weir Removal

Access to the weir will be either through a car park and grounds on the right-hand bank (A), or via Ryecote Meadow (North of the Oxford Road) on the left-hand bank (B) (See Figure 7).

Figure 7 Access routes for the weir removal

Access for machinery is constrained. Route A (Figure 8) is through a carpark and garden, restricted by two mature/veteran willows. The willows will require removal if machinery is needed to remove the weir, however, these trees may be subject to bat surveys and therefore not feasible within the time frame. Route B (Figure 9) is through Ryecote Meadow, where vehicles can obtain access up to the pedestrian gate only. RTCT expect use of handheld tools, such as a jackhammer and a generator, to be the preferred option by the Contractor.

Access route A:

Figure 8 Access route A for weir removal

Access route B:

Figure 9 Access route B for weir removal

3.2 Scrapes

Access for the scrapes will be through the Cuttle Brook Reserve car park (Figure 10). Scrape 1 is accessible directly left of the car park, through a gate. Scrape 2 is accessible down a 3m track (grass and gravels in places, and hardstanding (See Figure 11) and through the meadows. Spoil arising from the scrapes will be deposited in the meadow, out of the floodplain.

Figure 10 Photographs of the access route from the Cuttle Brook Reserve car park and down the footpath track

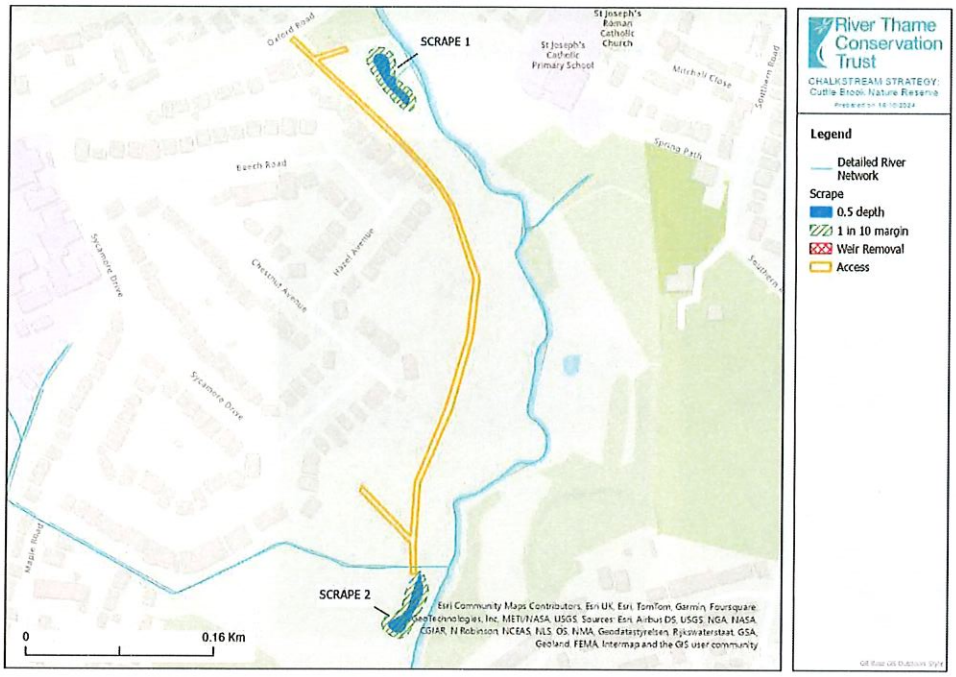

Figure 11 Access route for scrape excavation

3.3 Spoil Deposition

Approximately 350m² of material (not including the bulking factor) will be excavated from each scrape. Spoil will need to be transported and spread outside the floodplain (Figure 12Figure 12) in the nearest respective spoil location (Figure 12).

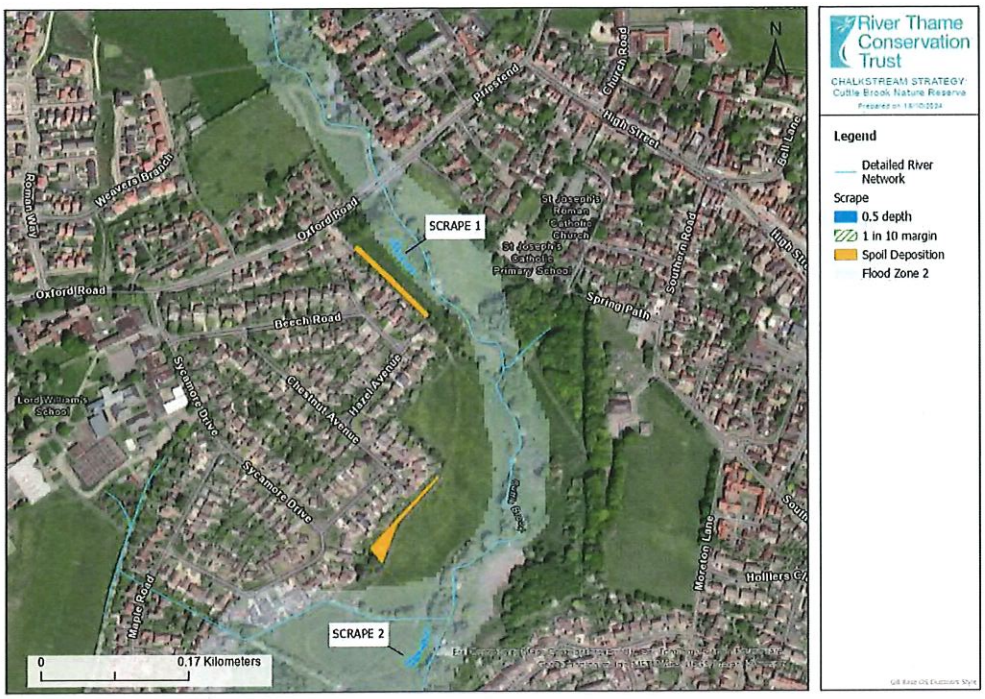

Figure 12 Spoil deposition locations

4 Working together

4.1 Contact Details

RTCT should be notified if there are any changes to key personnel. Table 1 presents the project roles (to be completed upon the appointment of a Contractor). The roles and responsibilities of each CDM role are set out in the HSE document: Managing health and safety in construction, Construction (Design and Management) Regulations 2015 - L153 (hse.gov.uk)

Project Role	Organisation	CDM Role	Lead Contact
Project Sponsor	EA	n/a	Kay Lidgard
Client and Project Manager	River Thame Conservation Trust (RTCT)	Principal Designer / Client	Andrew Morsley
Project Officer			Grace Cooper
Contractor	TBC	Principal Contractor	TBC

Landowner	Cuttle Brook Nature Reserve / Thame Town Council	N/A	Mike Furness

Table 1: Project Roles

A CDM brief will be generated by RTCT, which will form the basis for the CDM roles and relationships on the project. The Contractor will build on this with Health and Safety and Communication documentation generated prior to construction.

4.2 Communication

A landowner agreement will be drawn up between the landowners and RTCT prior to works commencing.

RTCT should be notified of any potential changes which may include, but are not limited to the following:

- Changes to access to the site
- Changes to the scope of works
- Changes to key personnel
- Changes to costs that have been pre-approved by RTCT
- Newly identified significant hazards
- Findings of inspections or audits requiring changes to risk control measures

Any variations in delivery and associated installation costs due to unforeseen site conditions need to be agreed, preferably in writing unless the exigencies of the situation do not permit in which event an oral agreement documented recorded within 24 hours will suffice, with the RTCT Project Manager, ahead of continuing.

4.3 Procurement

RTCT will reimburse the Contractor for the Works described herein following completion and after sign-off by RTCT.

The Contractor completing The Works will abide by the contents of this document. The Contractor may sub-contract an individual or organisation to complete the Works providing that the Sub-contractor abides by the contents of this document and RTCT provide their approval.

The Contractor will provide a quote for The Works to RTCT. RTCT will acquire approval from the Sponsor. The Contractor will liaise with RTCT regarding commencement of The Works.

4.4 Operational Requirements

In the Contractor method statement, the Contractor must state compliance with all relevant working legislation, notably:

- The Construction (Design and Management) *Regulations 2015*
- Health and Safety at Work Act 1974
- The Environment Agency's conditions attached with the Flood Risk Activity Permit Consent
- Control of Pollution Act 1994
- Department of Employment Code of Practice for Reducing the Exposure of Employed Persons to Noise

- The Control of Pollution (Silage Slurry and Agricultural Fuel Oil) Regulations 1991

The Principal Contractor must be signed up to the EA Floodline Warning Direct Service.

5 General Working Practice and Constraints

5.1 Environmental Management and Emergency management

Contractors using plant that has been used within or adjacent to any other watercourse, lake, pond, ditch, or scrape must comply with the Defra and associated bodies' best practice guidelines for avoidance of introduction of invasive non-native species. The Contractor must ensure all equipment and machinery entering onto site is clean so that non-desirable seeds and species are not imported into the Site. Plant will be inspected upon arrival to the site by the Project Officer.

The Contractor is responsible for ensuring no pollution or negative environmental impacts arise from delivering the Works. The Contractor is liable for any pollution that arises from the Works and will effectively remediate. The Works are to be carried out in a manner that is sympathetic to the surrounding environment. Anti-pollution measures must be in place to prevent water pollution. (http://webarchive.nationalarchives.gov.uk/20140328084622/http:/www.environment-agency.gov.uk/business/topics/pollution/39083.aspx).

Any disruption to wildlife should be minimised and, where possible, prevented. No activities should be undertaken to contravene wildlife legislation (http://webarchive.nationalarchives.gov.uk/20140328084622/http://www.environment-agency.gov.uk/business/142637.aspx

5.2 Site Establishment

The Contractor will be responsible for the provision of all temporary fencing and gates to the Works Area as may be required, to ensure the protection of equipment, materials, operatives, disturbance to adjacent land/vegetation, prevention of vandalism and public hazard. Temporary fencing and gates are to be agreed with landowners and will also be sufficient to discharge the Contractor's obligations under the contract and Health and Safety Legislation. The Contractor will provide all the necessary signs and barriers.

All access routes, footpaths, working areas, site compounds, roads etc. affected by the Works will be reinstated to their original state or to the requirements of the landowners/ occupiers and/or the relevant Authority.

5.3 Public Access

The Cuttle Brook Nature Reserve and Rycote Meadow are open to the public for recreational use. The Contractor will put the following measures in place:

- Appropriate signage to notify workers and right of way users of the works / rights of way, at all crossing points.
- Speed limit of 10mph for plant along access routes.
- A banksman will be made available should further safety coordination be needed due to an unexpected increase in use of the right of way.

6 Site Management

River Thame Conservation Trust

6.1 Site Condition

The Contractor will take all reasonable measures to avoid causing any damage to structures and property on the land and access routes, which will remain after the works are completed. RTCT recommends a pre-works site visit with the Project Manager to assess the condition of the Works Area and access. It is advised for all parties that pre-works condition photographic survey is undertaken to avoid the risk of potential disputes. Any damage will be rectified at the expense of the Contractor to pre works condition, as documented in pre-site photo survey and to the satisfaction of the landowners.

6.2 Waste disposal

Any waste generated during construction work will need to be removed off site in line with current legislation https://www.gov.uk/managing-your-waste-an-overview