



Westcountry Rivers Trust

CONSTRUCTION METHOD STATEMENT CRAIGSHILL WOOD GAUGING STATION WEIR

February 2020 - Rev 0.

Proposed works to Craigshill Wood Gauging Station Weir comprising the removal of five existing plastic lumber baffles, the extension of the central weir glacis and adjoining wingwalls downstream, the making good of fixing holes and any minor weir face damage/scour and the fixing of one hundred and forty-four proprietary Fish Brush heads to the weir's central downstream glacis.

Revision	Date	Details	Author	Checked by
0	14.02.2020	First issue for Land Drainage Consent	D Chapman	L Ousley
		Signed		

This document seeks to set out the method of construction for the proposed works to improve fish passage at Craigshill Wood Gauging Station Weir. It will be updated by the appointed Contractor prior to occupation of the site.

This document is to be read in conjunction with project Drawings, Westcountry Rivers Trust 01, 02, 03, 04, 05 and 06 comprising Site Location Plan, Site Block Plan, Existing Layout, Proposed Layout, Section & Details drawing and Proposed Temporary Works. The Brush Head manufacturer's arrangement details are also included.

01. Contract Administration

The work will be undertaken by a suitably qualified and experienced contractor to be appointed shortly. The works will be let using an NEC3 engineering and construction short contract. The contract will be administered by a Westcountry Rivers Trust (WRT) project manager with input from Environment Agency (EA) Biodiversity and Fisheries Officers; the EA are partners in the wider Water for Growth project, of which this proposal forms part, as are Natural England and South West Water (SWW).

Access to the weir is available via a forestry track on the right-hand bank. A small parking and laydown area exists directly adjacent to the weir. Pedestrian access is available on the left-hand bank from the public highway although this is an informal route through woodland some 60m in length that is steep in places.

It is anticipated that the WRT project manager and/or EA Officers will visit the site on most if not all days of the construction period.

02. Health and Safety

CDM2015 applies to the works although it is not considered that they are notifiable. A Construction Phase Health and Safety Plan will be required from the appointed contractor including appropriate risk assessments for all elements of the proposed works.

It is not thought that overhead or underground services exist on the site (other than those associated with the gauging station) although all work areas will be visually inspected, and CAT scanned prior to any construction operations taking place.

03. The Proposed Works

The fish passage improvements proposed are detailed on the project drawings that accompany this document but, in outline, they comprise the following:

- 1 - The lowering of part of the existing pre-barrage to facilitate a dry working area.
- 2 - The removal of five existing plastic lumber fish baffles.
- 3 - The extension of the central weir glacis and adjoining wingwalls by approximately 2.5m downstream.
- 4 - The making good of fixing holes and any minor weir face damage/scour.
- 5 - The fixing of one hundred and forty-nine proprietary Fish Brushes.
- 6 - The reconstruction of the part of existing pre-barrage lowered to facilitate a dry working area.

All works have been developed in close liaison with local EA staff and will adhere to all relevant current best practice guidelines.

The weir is an Environment Agency Gauging Weir, part of the national network of river flow monitoring stations; while the works are taking place local EA Officers will be on site to install and supervise temporary river flow monitoring equipment.

04. Site Infrastructure

Drawing 02, Site Block Plan, indicates the location of the weir in relation with its surroundings.

Existing services: It is not thought that overhead or underground services exist on the site (other than those associated with the gauging station) although the Contractor is to undertake a visual check prior to undertaking any works to ensure no additional overhead services exist. It is anticipated that no underground utilities service exists on and around the site although the appointed contractor is to satisfy themselves that none exist that could be affected by the works. All work areas are to be CAT scanned prior to the undertaking of the works.

The contractor is to provide proprietary WC and handwashing facilities at the site during the construction phase. Vehicle parking will be within the existing parking area adjacent to the weir.

05. Method of Work

It is anticipated that the works will be complete by 30 September 2020 subject to river conditions. It is anticipated that the works will take up to a maximum of twenty-five working days on site to complete. The appointed contractor is to provide a detailed works programme once appointed.

All works will be undertaken in accordance with all relevant best practice including **PPG5 – Pollution Prevention Guidelines, Works and maintenance in or near water**; although this document has been withdrawn it still provides the benchmark guidance for works such as those proposed.

All fuelling is to take place well away from the watercourse in a proprietary bunded space. All building materials and chemicals to be stored in work areas is to be secured in bunded storage containers. Spill Kits are always to be available in case of emergency. Should a pollution incident occur at this site, it is to be reported immediately to the

Environment Agency on the incident hotline 0800 807060 and the Westcountry Rivers Trust contract manager 07854 716263 or 01579 372140.

River flows in the St Neot – due to releases of water from Colliford Reservoir the St Neot River experiences high flows through much of the summer period. As such it is considered necessary to remove part of the existing pre-barrage structure to facilitate the fluming of flows around the weir's central glacis and the forming of a suitable dry works area.

Site access – access to the weir is available via a forestry track on the right-hand bank. A small parking and laydown area exist directly adjacent to the weir. Pedestrian access is available on the left-hand bank from the public highway although this is an informal route through woodland some 60m in length that is steep in places. The parking area adjacent to the weir will provide contractor parking and temporary laydown area.

Prior to the works commencing, all access consents will be in place. All surfaces are to be appropriately protected and left in an 'as found' condition as far as practical.

Please note, the weir's crest is formed from granite and is extremely slippery when wet.

Site setup – a formal site compound and welfare area will be setup in the area adjacent to the weir on the right-hand bank. Access into the main work area will be provided by fixed ladders directly from the site compound. The majority of the access will be from the right-hand bank although the pedestrian access from the left-hand bank could be utilised for the partial removal and reconstruction of a section of the pre-barrage structure. Please refer to the Site Block Plan.

Dry work areas and temporary dams – It is anticipated that three dry work areas will be formed sequentially; the first, located on the left-hand bank, to facilitate the lowering of part of the pre-barrage; the second, comprising the main work area, to facilitate the fish passage improvement works; the third being a repeat of the first area to allow the pre-barrage to be reconstructed.

Due to the high summer flows expected, the dry works areas will be formed from proprietary AquaDams or sand filled dumpy bags. The undertaking of all works is dependent on it being possible to create temporary dams capable of creating the dry work areas required. **Please refer to drawing 06 – Proposed Temporary Works.**

All work is to be undertaken in dry, fully enclosed work areas. On appointment, the selected Contractor is to submit details of their proposed temporary dams/dry work areas for approval prior to any works taking place on site.

It is anticipated that the works will be undertaken in a single phase and, as river flows can be reasonably predicted, it is proposed to leave temporary works in the river over weekends. However, should it become evident that river levels are about to rise, it is highly likely that the temporary works can be removed from the river to allow the high-water event to pass. Site staff will be on 24hr call out should a rain event take place.

All temporary dams are to be a maximum of 1200mm high above riverbed level.

Once the works are complete, the temporary dams will be removed in a controlled manner to ensure normal flows are restored gradually.

Completion of works – On satisfactory completion of the works the contractor will be allowed to demobilise and vacate the site. The contractor is to leave the site area in an ‘as found’ condition as far as practical.

Defects and Monitoring period - There will be a 12-month defects period for the NEC3 construction contract from the satisfactory completion of the works. During this period, the site will be monitored by the EA/WRT on an approximately monthly basis to ensure it is in good condition and operating correctly.

Should some fine tuning become apparent, we will liaise with EA Fisheries Officers, EA Hydrometry and Telemetry and the appointed contractor to consider undertaking these. All necessary consents / permits / licenses and landowner agreements will be obtained prior to any additional works taking place.

06. Contingency Planning

Should an unexpected event occur during the undertaking of the works, such as bad weather or unexpected ground conditions, it should be possible to react quickly and safely due to the relatively limited nature of the proposed works and the pre-planned control measure to be put in place. In-river temporary works can be removed very quickly, and site staff will be on 24hr call out should a rain event take place.