

OURD-PTW4

Method of Works: Pottery Terrace Weir Fish Pass

Ribble Rivers Trust

OUR Douglas



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Pottery Terrace Weir Fish Pass

Method of Work

Introduction

Opening Up the River Douglas programme is an ambitious effort by the Douglas Partnerships Fisheries Sub-Group to improve the health and resilience of fish populations in the upper reaches of the River Douglas by addressing barriers to fish migration.

Pottery Terrace Weir is long sloped face weir located on the River Douglas, Wigan (SD 57550 04992; Figure 1). As the weir is considered to be acting as a major barrier to fish migration the Ribble Trust proposes to create a fish pass solution with low flow features to address this issue.



Figure 1. Pottery Terrace Weir on the River Douglas, adjacent to

Method of Work

1. Site setup must be completed before construction phase, with site compound and welfare as located on site map. Outside of working hours plant machinery will be kept in site compound.
2. The works will be registered with the EA early flood warning system, such that in the event of a flood, all equipment and personnel will be removed from the channel to ensure free flow of the river. In addition, the site manager will be signed up to MET Office weather warnings and will closely monitor the weather forecast. If a medium to high rainfall event is expected, plant machinery must be removed from the channel
3. Access established with construction of scaffolding and safe ladder access into site for works personnel. Access outside of working hour to be restricted in such a way that the public cannot enter the channel.
4. Where practicable a fish rescue will be carried out by Ribble Rivers Trust under licence from the Environment Agency. This will entail using a stop net or equivalent above the weir crest and electrofishing the area above the weir a minimum of three times. Rescued fish will then be released outside of the working area.
5. Upstream cofferdams will be constructed upstream of the weir crest. The dam will comprise of tonne bags with clean material and small bags with sand. Stop nets to be removed after the cofferdams are in place.
6. Water will be diverted away from right hand ½ of channel down left hand side to create a dry work area. This will be done with a mid-channel cofferdam running from upstream to downstream of the working area.
7. Sediment traps will be placed downstream of the working area to filter any drainage from the works and reduce sediment input into the stream.
8. The working area will be left to dewater with the slop of existing lined channel
9. Repairs will be carried out to the concrete joint to the channel wall.
10. The fish pass will be constructed in sections, working from the downstream end to the upstream end.
11. The weir will be broken out and excavated to form the pass entrance.
12. The downstream area for the rock ramp will be excavated to the required levels and reinforced with reinforced concrete. The general boulders which comprise the surface of the rock ramp will be placed and bedded into grano mortar. A central low-flow channel will be created by ensuring that the cross section of the rock ramp is slightly dished and that the central ~300 mm is the lowest part of the rock ramp
13. The pool section of the fish pass will be excavated to the required levels and reinforced with reinforced concrete.
14. The upstream area for the rock ramp will be excavated to the required levels and reinforced with reinforced concrete. The general boulders which comprise the surface of the rock ramp will be placed and bedded into grano mortar. A central low-flow channel will be created by ensuring that the cross section of the rock ramp is slightly dished and that the central ~300 mm is the lowest part of the rock ramp
15. Once the ramp is constructed and the concrete has set, the temporary works will be dismantled in stages and removed from the channel.
16. Excavated material must be taken from site and disposed in a legally compliant manner, with documented evidence of amounts removed and appropriate disposal.
17. After the works have been completed the access routes and compound are to be removed in a way, such that land is restored to an acceptable condition.

Duration of Work:

It is expected that the works will take 10 days, assuming no delays for weather.

Pollution Prevention:

1. The contractor will adhere to Environment Agency pollution prevention guidelines (PPG5) for working in or near water.
2. Hydraulic and lubricating oils used in the excavator shall be biodegradable.
3. A spillage kit shall be present on site at all times.
4. Straw bales will be used to filter site drainage as described in the method of work.
5. Any spills or other pollution incidents will be reported to the Environment Agency immediately.