Kent Catchment Flood Risk Management Scheme

Upper Kent Structural Investigations

Environment Agency

September 2022

The Environment Agency has proposed a Flood Risk Management Scheme (FRMS) to better protect residential and business properties from flooding in Kendal and across the Kent catchment. Below is a snapshot of some of the benefits being delivered as part of the scheme:

1480 Homes better protected

1151 Businesses employing 6,105 people better protected

82 Community facilities better protected

15,000 New trees planted within the Kent Catchment

4 Natural Flood Management Projects

50 Hectares of Peatland restoration

Burneside, Staveley and Ings – Structural investigations

To inform our initial design proposals we need to build our understanding of existing river walls throughout the villages of Burneside, Staveley and Ings by investigating their thickness and construction make-up. This knowledge will help us understand where flood defences could be located, and which walls could be re-used, modified or replaced if necessary.

Supervised by our delivery partner VolkerStevin, our investigations will be undertaken by a specialist coring contractor who are competent and experienced in carrying out works of this type.

You may notice our Contractors walking within the River Gowan and Kent to access pre-identified coring locations. You may also see equipment such as coring drills, small generators and environmental protection equipment; used to prevent dust and material entering the watercourse. All cores will be reinstated once completed.

When will the works take place?

Work will commence **from 7th September 2022 for a period of up to 3 weeks**. We will minimise our impact on the community throughout the duration of our works through considerate working hours and practices.

What do Structural Investigations tell us?

A structural investigation is a means of determining the present condition of a structure, or in this instance, existing river walls. They consist of minor intrusive works such as the drilling of 'structural cores', the primary purpose of which is to obtain an undisturbed, intact sample of the wall material. This will help determine:

- the thickness and construction of existing river walls;
- overall strength and density.

These investigations follow wider surveys we have undertaken over the last 2 years including, topographical, environmental and ground investigation surveys; to build up our understanding and inform our design considerations.

Structural surveys are extremely important as they help to minimise risk by better understanding potential hazards that can be addressed during the design phase, which may otherwise cause delays and additional costs during the construction phase.

What will we see?

All our works will be carried out by accessing the river, from which we will undertake different types of cores depending on the type of wall.

All cores will be taken perpendicular (at a 90 degree angle) to the face of existing walls. The type of equipment used to undertake the structural investigations depends on what information and data we need. In this instance, the investigations will be undertaken using small scale 'coring' equipment, not unlike a drill. However, rather than using a small drill bit, a 100mm structural coring barrel will be used where the wall has been identified as reinforced concrete. Where the wall has been identified as either dry stone or bound natural stone walls, a smaller 25mm pilot hole will be drilled to determine thickness and construction make-up.

In some locations we may need to restrict private access temporarily whilst we move our equipment into, or out of the river, for example, along private paths that run adjacent to the river. Where we need to enter private land, landowners will be informed.

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Frequently Asked Questions

What time of day will the survey works be undertaken?

Survey works will be carried out between 09:00 and 17:00, Monday to Friday. Noise levels will be kept to a minimum where possible and all tools/generators will be turned off when not in use.

How will coring locations be accessed?

Due to the location of the riverbank walls, the only feasible way to carry out the works is by entering the watercourse.

Will you need to access individuals land, gardens or need diversion routes?

We are not expecting to require access inside any properties. Where walls require structural cores from the boundary of properties, we will write to those affected. No footpaths should be impacted, therefore no diversion routes are required. If equipment is left in publicly accessible areas due to the narrow riverbank edge, these will be clearly and safely cordoned off.

How will the river be protected?

Whilst coring, either dust suppression, or dust extraction and silt curtains will be utilised to prevent material entering the watercourse. Generators will be situated on the riverbank edge in a suitable location close to the coring location and located on a plant nappy to contain any potential fuel spill. Additional spillage kits will also be present and available at all times. We will also be employing an Environmental Clerk of Works to carry out periodic site inspections during the works, and check Contractors are correctly implementing environmental mitigation to protect the watercourse and wildlife.

How will the river walls be left once the investigations have finished?

Coring samples will be taken away for laboratory testing. All cores will be reinstated once completed. The coring works will cause no structural impact to the existing condition of the riverside walls.

How many people will there be undertaking surveys?

This will vary but there will be a minimum of two operatives, one supervisor and one specialist operating the specialist structural survey equipment. The Environmental Clerk of Works will also be present on occasions. The total number of operatives at any given location will be kept to the absolute minimum required.

How long will you take to complete this work?

This will vary at each location based on the quantity of coring required. We expect the investigation works to take no longer than three weeks in total.

Contact us

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