

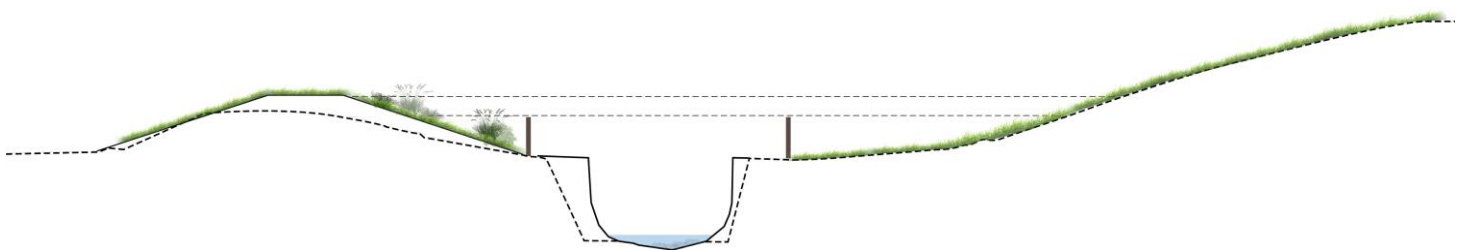
# Site 1

Our existing debris screen, camera and river level gauge are currently surrounded by a low-level earth embankment. This needs to be increased in height and will encircle the channel at this location. The raising will comprise embankments where space permits and flood walls where there is insufficient space for embankments.

There will be some visible tree loss at this site as we construct the new defences – some of this as a result of their location within the footprint of the flood defence. Trees cannot be placed on or adjacent to flood defences as root growth compromises the integrity of the structure – they allow a route for water to move through. Additional self-set trees which have grown on top of the concrete channel are also being removed to prolong the life of the channel itself. The Environment Agency sets a high standard for replacing lost trees, such that we will replace at a 5:1 ratio with trees that enhance the biodiversity value more so than those existing trees.



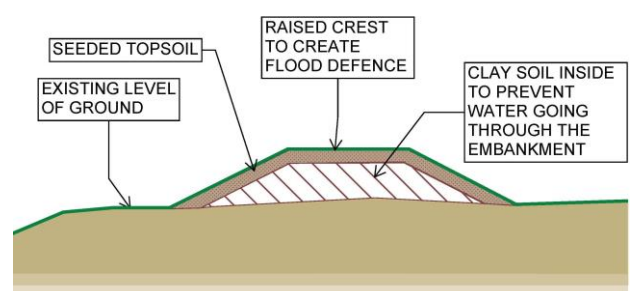
The embankments will be planted with a grass mix that provides a varied grass embankment to improve biodiversity.



The embankments are at a height as to contain the flood water in a flood event. The flood walls will be finished with a red brick such that they integrate into the existing Stoke-on-Trent architecture.

#### Embankments

Embankments are areas of raised ground typically covered with grass or vegetation that merge in to the surrounding land.



Arup, 2020