

Sir Francis Barker Flood Alleviation Scheme



This scheme in the Sir Francis Barker Recreation Ground is part of a wider project to reduce the flood risk caused by urbanisation and inadequate sewer capacity

It will increase local flood resilience and ability to adapt to climate change

Water quality will improve by reinstating lost vegetation and enhancing natural treatment opportunity



Barwell Lane 31-03-2023



Sir Francis Barker RG Ditch 31-03-2023

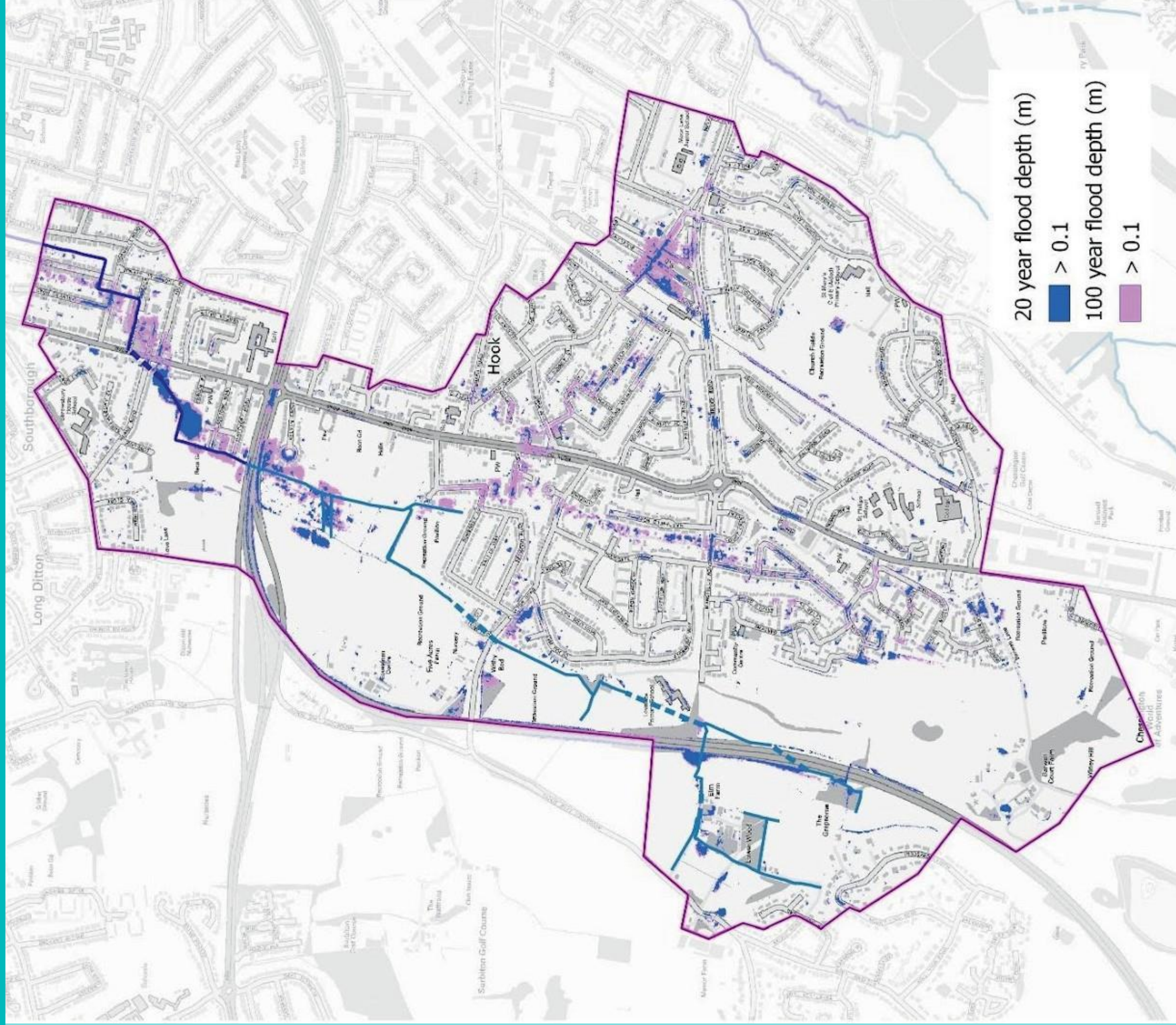


Sir Francis Barker Recreation Ground 31-03-2023



Entrance 23-06-2016

Flood Risk Information



Surface water flood modelling undertaken in the Hook Critical Drainage Area as part of the Outline

Business Case found:

- 205 properties are at very significant risk of flooding
- 139 are at significant risk of flooding
- 109 are at intermediate risk of flooding
- 165 are at moderate risk of flooding.

Key Information



The plan consists of the creation of a 'Flood Attenuation Basin' at the northern boundary of Sir Francis Barker Recreation Ground, which will sit between the existing tennis court to the west and the existing playground to the east, where the unused grass tennis courts currently sit

The basin will redirect and capture the water runoff in the sports field and store the over running rainwater for up to 12 hours in the worst flood situations before releasing it back into the Thames Water system in a controlled way

This will reduce flooding in the local area and beyond to lessen the impact and frequency of flooding in these grounds, adjacent and downstream properties

The basin will provide approximately 450m³ of flood storage while improving the amenity and environmental benefits to the Sir Francis Barker Recreation Ground

During the works; Tennis courts will be closed for drainage installation, there will be minimal impact on the cricket pitches, and there will be no impact on the playground



Community



Environment



Flood Relief



Biodiversity

Flood Basin Design Details



The basin is designed with a maximum water depth of less than one metre

A low flow system will drain the basin towards the existing Thames Water Surface Sewer in Barwell Lane

There is an emergency overflow system for instances in which the low flow pipes become insufficient or clogged

The basin will be located next to the tennis court. This will enable the capture and storage of floodwater before it continues downstream



Environment



Dynamic Ecosystems: The natural flooding and drying cycles create a lots of different habitats, from shallow pools to dry grasslands, supporting a wide range of species

Pioneer Species: Flood basins often hold plants and microorganisms that are adapted to live in newly created areas and thrive in changing conditions

Planting designed for the environment: All planting around the basin will be a mix of UK native wildflowers and grasses, specialist for the environment

Tree replacement: Four trees will be removed (categorised as Category C by the recent Arboricultural survey). These will be replaced by 10 new trees; Three Birch, Six Apple and one Acer, between October and March



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Safety



A permanent barrier 1.2m high around the basin will provide safety for residents and pets

The proposed basin has side slopes not steeper than 1:2.5

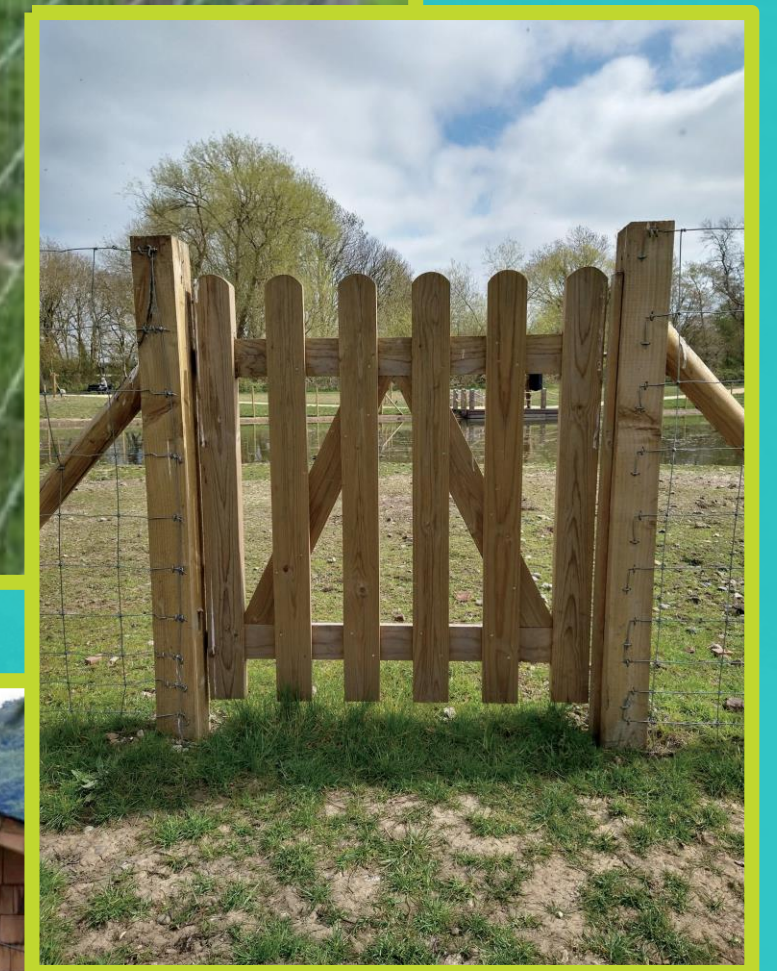
A BS EN 1176 padlockable double gate will provide access for maintenance

A padlockable single timber gate will provide access at the other end of the basin.

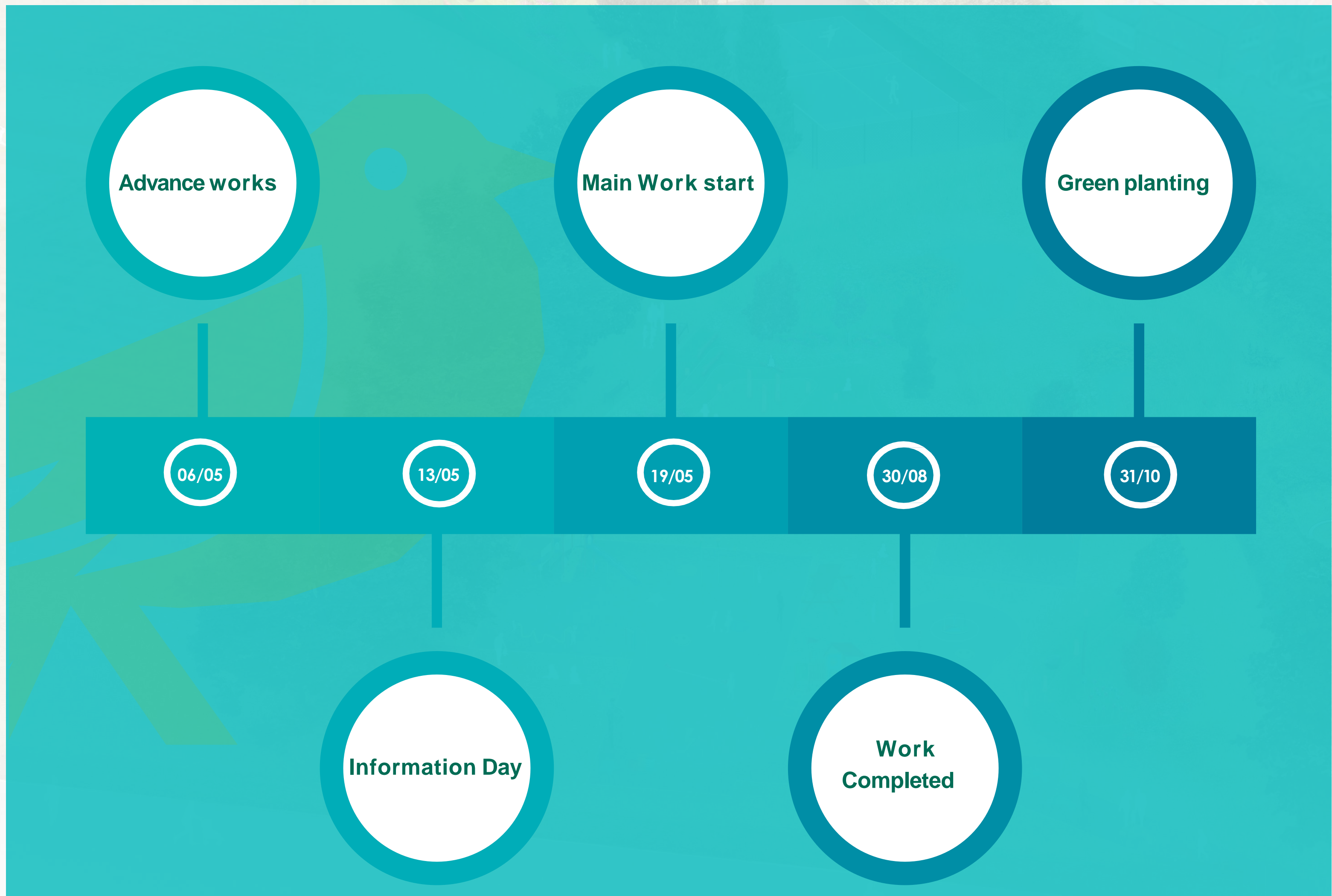
Water will only collect during heavy rain periods

During construction access to site will be via Barwell Lane reducing the impact on the recreation ground

The site will be secured by temporary fencing while construction is in progress



Timeline



Community



Environment



Flood Relief



Biodiversity