



Slow the flow installations

Constructed wetland at Howard Gardens

Hertfordshire County Council, Central Bedfordshire Council and North Herts District Council are working together to oversee the delivery of **flood risk management** works at Howard Gardens. The works form part of ResilienTogether, a Defra funded innovation project focused on improving how the Pix Brook catchment responds to **heavier rainfall**. The project combines monitoring technology, improved drainage and natural flood management measures to **slow the flow** of water during heavy rain and storms, reducing pressure on the Pix Brook.

As part of this work, several **Sustainable Drainage Systems (SuDS)** are being installed across the area, including a new constructed wetland at Howard Gardens alongside the Pix Brook, next to Howard Garden Bowls Club.

Why this location was chosen

This location was selected because of its proximity to the Pix Brook and its suitability for creating a controlled wetland feature within existing green space. The site offers sufficient space and suitable ground conditions to install a constructed wetland without affecting nearby homes or underground services.

Surveys, drainage modelling and environmental assessments confirmed that this location provides a **practical and effective** opportunity to store and manage surface water before it enters the Pix Brook, and helping to slow flows downstream during heavy rainfall. It also offers the opportunity to create an **attractive landscape feature** that enhances biodiversity and adds value to the local green space.

The site is owned and will be maintained by **North Herts District Council**.

What is a constructed wetland?

Constructed wetlands are a type of Sustainable Drainage System (SuDS) designed to manage surface water runoff during rainfall.

They are shallow, **engineered basins** with specialist soils and wetland planting that slow, store and naturally filter rainwater before releasing it gradually back into the drainage network or nearby watercourse. Constructed wetlands are typically used in **green spaces** where there is capacity to hold water for longer periods, while reducing pressure on watercourses and drains and helping **manage flood risk** during heavier and more intense rainfall.

Work starts
June
for up to
6 weeks*

Why constructed wetlands are used

Constructed wetlands **manage rainwater** at source rather than sending it straight into drains and watercourses. By slowing and temporarily storing runoff, they **reduce pressure** on drainage networks during storms and help moderate flows entering nearby brooks and rivers.

They also **improve water quality** by filtering sediment and pollutants, create habitat for wildlife, and enhance the visual quality of green spaces. Constructed wetlands form part of a wider, catchment-based approach, working alongside other drainage and flood management measures across the Pix Brook area to **improve resilience** during heavy rainfall.

What constructed wetlands look like

Most of the time, constructed wetlands appear as naturalistic, planted **water features** within green spaces. Unlike underground drainage systems, they are visible landscape elements with shallow open water and marginal planting. They are **designed to be safe** and in-keeping with their surroundings.

Below ground, constructed wetlands include **engineered layers** such as clay lining, specialist wetland soils and flow-control structures. These allow water to be stored, filtered and released gradually, while supporting healthy wetland vegetation above.

How it works

Rainwater from the surrounding environment is **diverted** into the wetland.

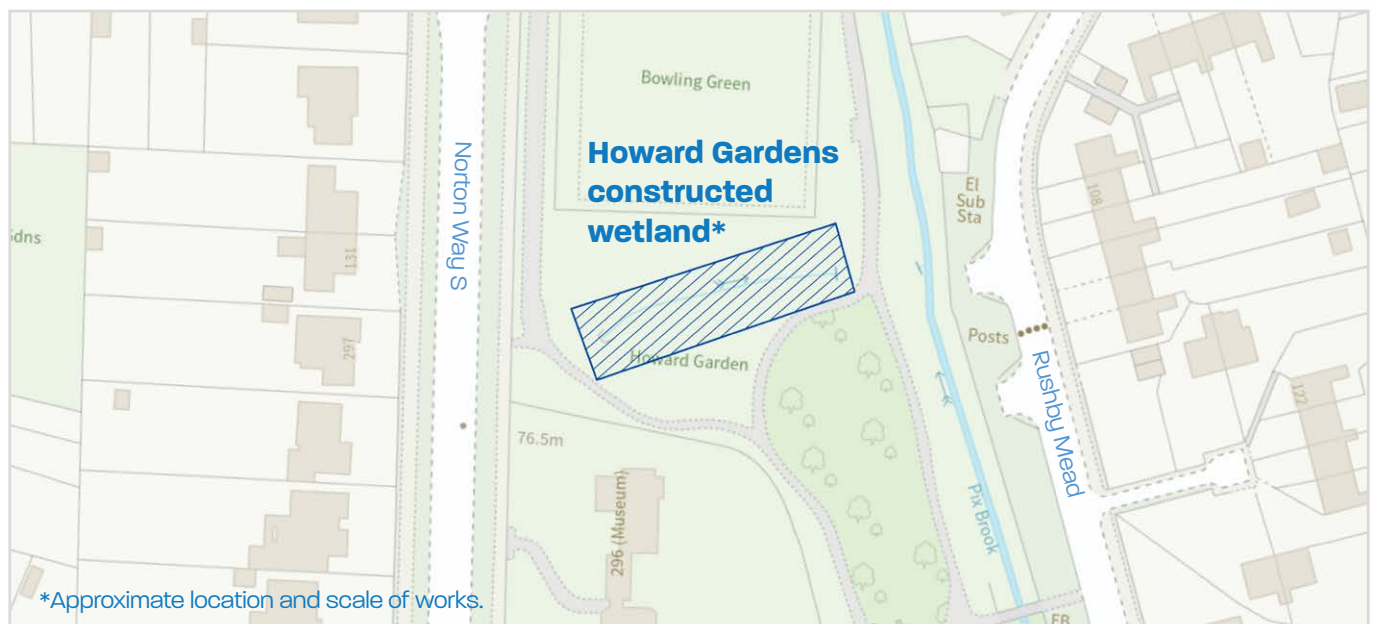
Water is **stored and filtered** through specialist wetland plants and engineered soils.

Monitoring **sensors** assess levels in nearby drains and the Pix Brook.

Automated controls release water when downstream capacity is available.

Overflow mechanisms operate during extreme rainfall events to **ensure safety** and system resilience.

Howard Gardens constructed wetland



What residents will see onsite

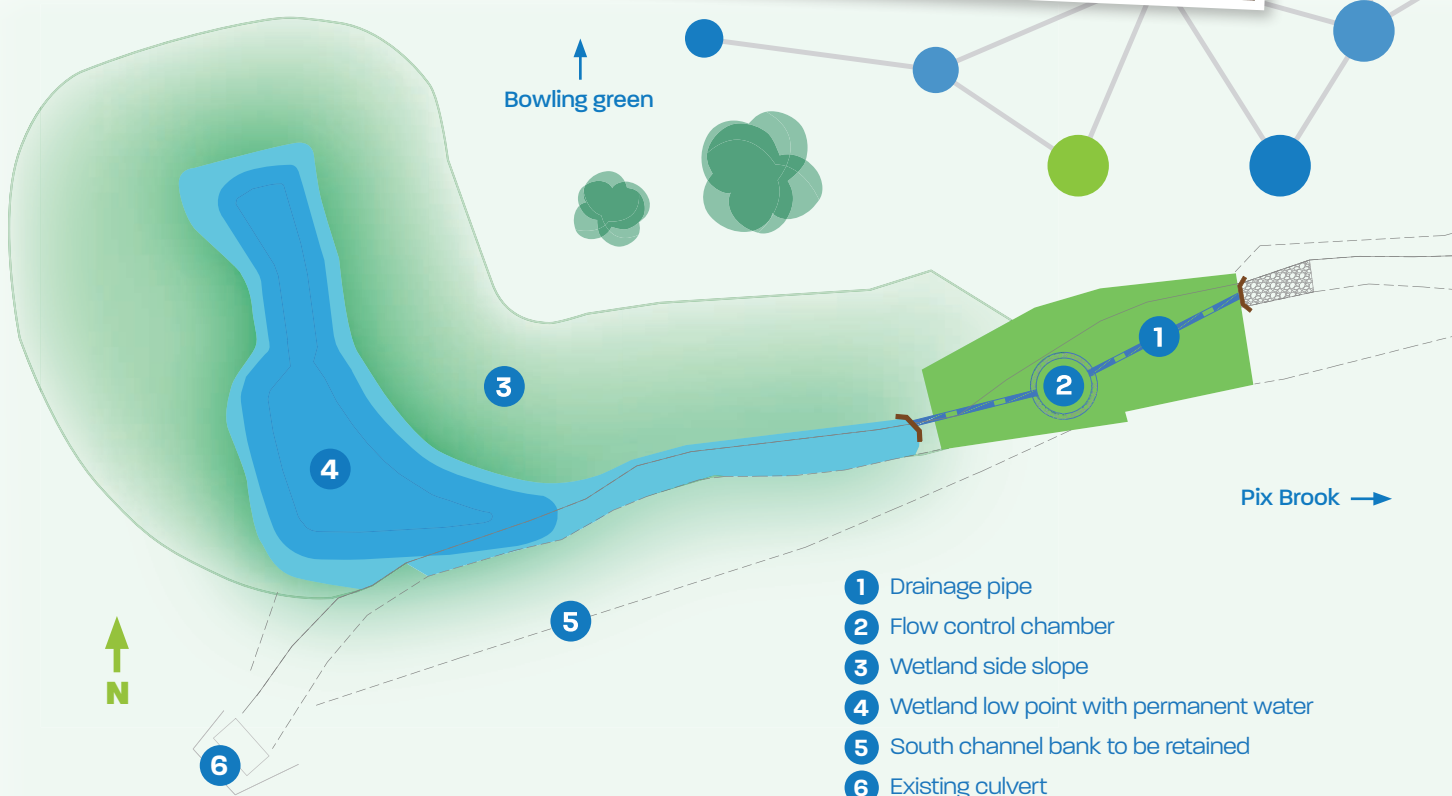
Works will include excavating part of the green space, installing a clay lining and engineered wetland soils to form the basin, fitting flow-control chambers and smart control equipment, and importing planting and landscaping materials to complete the wetland.

New turf, grass seeding and planting will take time to establish. These areas will be regularly inspected and maintained throughout the year by North Hertfordshire District Council.

Existing drainage

The scheme works with the existing drainage network and will not have any negative impact on local drainage or increase flood risk to properties.

Existing Howard Gardens site



Artists impression of the constructed wetland at Howard Gardens. Some details may be subject to change.

Traffic and access

- **Information signage** will be in place where needed, and disruption will be kept as limited as possible.
- We do not anticipate any disruption to **Bowls Club** users.
- **Ground Control**, the appointed contractor, will notify residents if site conditions or timings change.
- If **temporary traffic restrictions** are required, affected residents will be notified directly by letter.

Frequently asked questions

Will the wetland hold water all the time?

Yes. Constructed wetlands are designed to retain a permanent body of water, although levels will rise and fall depending on rainfall and seasonal conditions. This standing water supports wetland planting and wildlife, while still providing additional storage capacity during heavy rainfall.

Will this stop flooding to my home?

No single feature guarantees flood prevention.

The wetland's role is to slow flows and reduce pressure on the Pix Brook during storms. Benefits are primarily catchment-wide and felt downstream.

Will this increase flooding to my home?

No. This installation will not increase flooding to your home. It does not add any additional water to the area. Instead, it is designed to temporarily store and slow down rainwater that already flows through the site during heavy rainfall.

What happens during heavy storms?

The wetland is designed to manage **frequent rainfall events** and includes overflow mechanisms for extreme events. Automated controls help manage release rates based on real-time monitoring.

Is it safe for children and pets?

The wetland will be **shallow**. Designs follow national safety standards and are risk-assessed.

Will it attract mosquitoes or vermin?

The wetland will attract wildlife, which is a benefit. Drainage connections are designed to **prevent rat access** to sewers. Water movement and ecological balance reduce mosquito risk.

Onsite contact

A dedicated contact point, on-site signage and a named Ground Control site supervisor will be available throughout the works.

For serious out of hours **emergencies** such as vandalism or trespassing call Ground Control direct on **0800 334 5606** (weekends and 5pm to 9am weekdays).

Find out more

If you have any questions email the ResilienTogether team at:
ResilienTogether.Project@centralbedfordshire.gov.uk