

Case study – Living with Water

Collaborating and innovating



A visit from key Living With Water stakeholders ahead of the re-opening of the street



Morrison Water Services (MWS) successfully designed and delivered an innovative and extensive SuDS (sustainable drainage system) project on Rosmead Street, Hull, during 2023. The project is part of the Living with Water (LwW) £23m regional investment portfolio to deliver sustainable drainage systems, protecting residents against surface water flooding, and is the first to be completed in Yorkshire. LwW is a strong partnership between Yorkshire Water (YW), East Riding of Yorkshire Council, Hull City Council, the University of Hull, and the Environment Agency. The street was reopened by Nicola Shaw, YW CEO.

The project out turned at a cost of £2.4m meeting time/budget expectations.

Approach to successful delivery on time/budget included:

- Competent delivery team; clear responsibilities e.g., for customer care/construction activities.
- Design, solution, and budget agreement with LwW stakeholders, avoiding design changes during construction.
- Detailed planning phase identifying and resolving solution challenges.
- Detailed reviews and cost-loaded/resource-loaded programme. Programme reduced to 6-months, from an 18-month alternative option proposal, with cost, service, and carbon reduction benefits.
- Cost monitoring/reporting to YW.
- Collaborative Project Teams (CPTs) maximised efficiencies/providing regular LwW stakeholder updates.

Approach taken to achieve successful delivery

Collaboration with stakeholders/customers was at the heart of our approach, addressing challenges such as:

- **Dealing with complex/diverse stakeholders.** We engaged early with partnership members to develop the solution and plan the works, ensuring smooth programme outcomes. Trust in the relationship developed through constant collaboration/communications.
- **Minimising disruption to the community.** The team went the extra mile to keep the community informed and minimise inconvenience. At St John's Community Church, we arranged resident ward forums/councillor drop-ins. Resident consultations feedback included how they wanted their street to look; maintaining car parking/access and improving green spaces - incorporated into the design of the solution. Informative press releases aimed at local outlets, letters regarding temporary car parking arrangements, and door-to-door meetings were undertaken. FAQs were posted on the LwW website. Personal safety alarms were issued to customers working on shifts as an extra safety precaution when walking to and from the temporary carpark during the hours of darkness. We invested 365 hours in community engagement.
- **Two temporary residents' carparks were set up** (using green space agreed with the Hull City Parks & Gardens Team).
- **Caring for 'Priority' customers.** We identified people with specific needs, e.g., people requiring palliative care, regular visits from medical staff, or oxygen deliveries. We facilitated safe access/egress, and several people were given mobility scooters.
- **Always ensuring access for 'Blue-light' services and deliveries.** We constantly communicated with the emergency services and agreed a coded padlock access/egress system at each end of the street. The police

Mark Jones, director of regeneration Hull City Council and chair of Living with Water said:

"Rosmead street is not only a fabulous piece of engineering, but it combines all partners working together with communities to bring surface water flood resilience into Hull. From modelling to engagement, the team has worked hard to finalise the street on time, safely and with the community. It truly is an exemplar in partnership working and we look forward to showcasing this nationally."

maintained a regular presence. We liaised with multiple organisations to facilitate access dates and times. We also deployed security guards on a 24/7 basis to assist with emergency access.

- **Managing traffic.** A detailed traffic management plan was agreed with the local Highways Authority - designing alternative routes avoiding multiple schools and narrow streets. HGV routes were identified, and we established plant and vehicle marshals to ensure safe movement/control.
- **Dealing with excavation waste and refuse.** Bulk excavation produced a significant amount of waste material (c9,500 tonne); this was transported to a local recycling centre for re-use. Site meetings were held with the Hull City Waste Management Team to formulate a strategy accommodating refuse collection.

Technical Capability

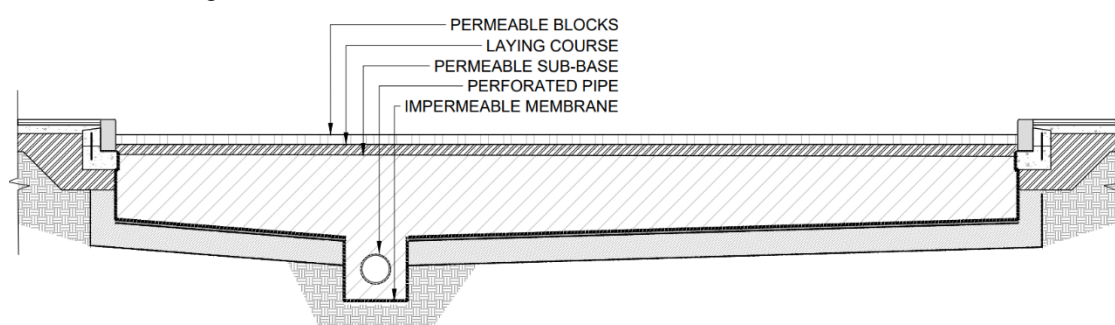


Laying the membrane prior to Type 3 stone, Tarmac and the permeable paving blocks.



The completed permeable paving, leaving an aesthetically pleasing finish to Rosmead Street

MWS developed the innovative design solution (see diagram below), the scope of works, and constructed 600m² of permeable paving laid (with spaces) across the full width of the highway along Rosmead Street, designed to store 365m³ of surface water run-off from the footpath/highway and property roofs before returning it to the existing combined sewer via a unique 3.5l/s flow control. The permeable paving was lined with an impermeable liner and underdrain, designed to slow the flow into the combined sewer, reducing peak top water levels during storm events and risk of internal flooding within the Southcoates area.



[Figure 1: Rosmead Street design cross-section]

Technical capability benefits & value-adds

The project reduced flood risk and brought life to the community environment. This approach is leading the way in partnership/multi-stakeholder working – the foundation for future AMP7/8 projects. Measurable benefits included:

- AMP7 property flood reduction Performance Commitment across Hull and Haltemprice region.
- 1 in 5 year + 25% uplift for climate change: reduction of 494 properties (5 properties reduction achieved).
- 1 in 30 year + 25% uplift for climate change: reduction of 808 properties (30 properties reduction achieved).
- 2022/23: commitment 5ha: 0.382ha
- 2023/24: commitment 10ha: 0.379ha

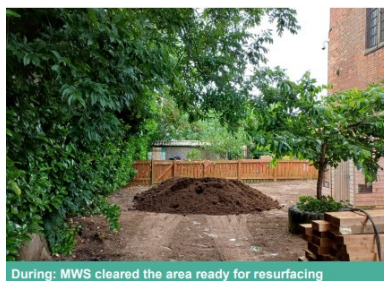
Contributing to the community

As part of our ongoing drive on delivering social value on our frameworks, we involved the community; children from Estcourt primary school helped lay the final blocks, and residents assisted the team in installing bird boxes in the green space to encourage more nature into the street.

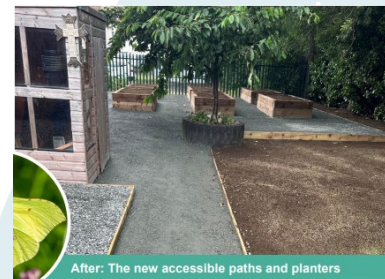
To thank St John's for their generosity and support throughout the project, the MWS team funded and delivered improvements to the grounds (see pictures below).



Before: The overgrown, inaccessible area



During: MWS cleared the area ready for resurfacing



After: The new accessible paths and planters