



Landscape
Institute
Awards 2017
Winner

- Award winning landscape design
- Community driven public realm
- Urban regeneration with water
- Permeable paving innovations

AUSTRALIA ROAD LONDON



INTRODUCTION

Bridget Joyce Square in Australia Road, White City, London, is a SuDS park with community at its heart.

Its design, by sustainable drainage (SuDS) consultants and landscape architects Robert Bray Associates, introduces the innovative concept of concrete block permeable paving as a thin overlay for existing streets, removing rainwater straight from the surface without gulleys and providing some attenuation and treatment before discharging to adjacent, well-planted basins.

The scheme won 'Winner of Winners' (the President's Award) as well as Winner of the 'Adding Value through Landscape' category at the 2017 Landscape Institute Awards, and also an ICE London Civil Engineering Award 2016.

Most importantly, it has been enthusiastically welcomed by local residents, as recognised by a Sustrans community survey. Ben Addy, Head of Collaborative Design, Sustrans, considered the project to be: "*a fantastic example of a Healthy Street. One that encourages walking and cycling, creates opportunities for play and socialising, and tackles a pressing need around water management and urban greening.*"



"An exemplary approach to partnership working in delivering solutions to so many problems in a way that can, and should be, replicated nationally"
– The Landscape Institute judges

COMMUNITY DRIVEN REGENERATION



In 2013, the head teacher of Randolph Beresford School and the White City Residents' Association approached the London Borough of Hammersmith & Fulham. They recognised that the road in front of the school was unsafe and unhealthy, and identified the need for a public meeting space where events could be held. Coincidentally, the Borough was looking for a landmark retrofit SuDS project at that time.

Consultation with local people and a realization of the potential for the site led to an integrated design that linked two disconnected spaces and created a social arena celebrating rainfall. Concrete block permeable paving was used to break the existing formal road alignment and introduce a 'piazza' within the Bridget Joyce Square.

The scheme also connected the Randolph Beresford Early Years Centre to an adjacent play area and generated a social hub for parents and children. Local residents were keen to retain memories of the low wall in front of the school, used as a balance beam in their youth. From this the thematic 'Wiggly Wall' was born and became part of a 'ribbon' motif that united the linear spaces and symbolised the bringing together of the community.



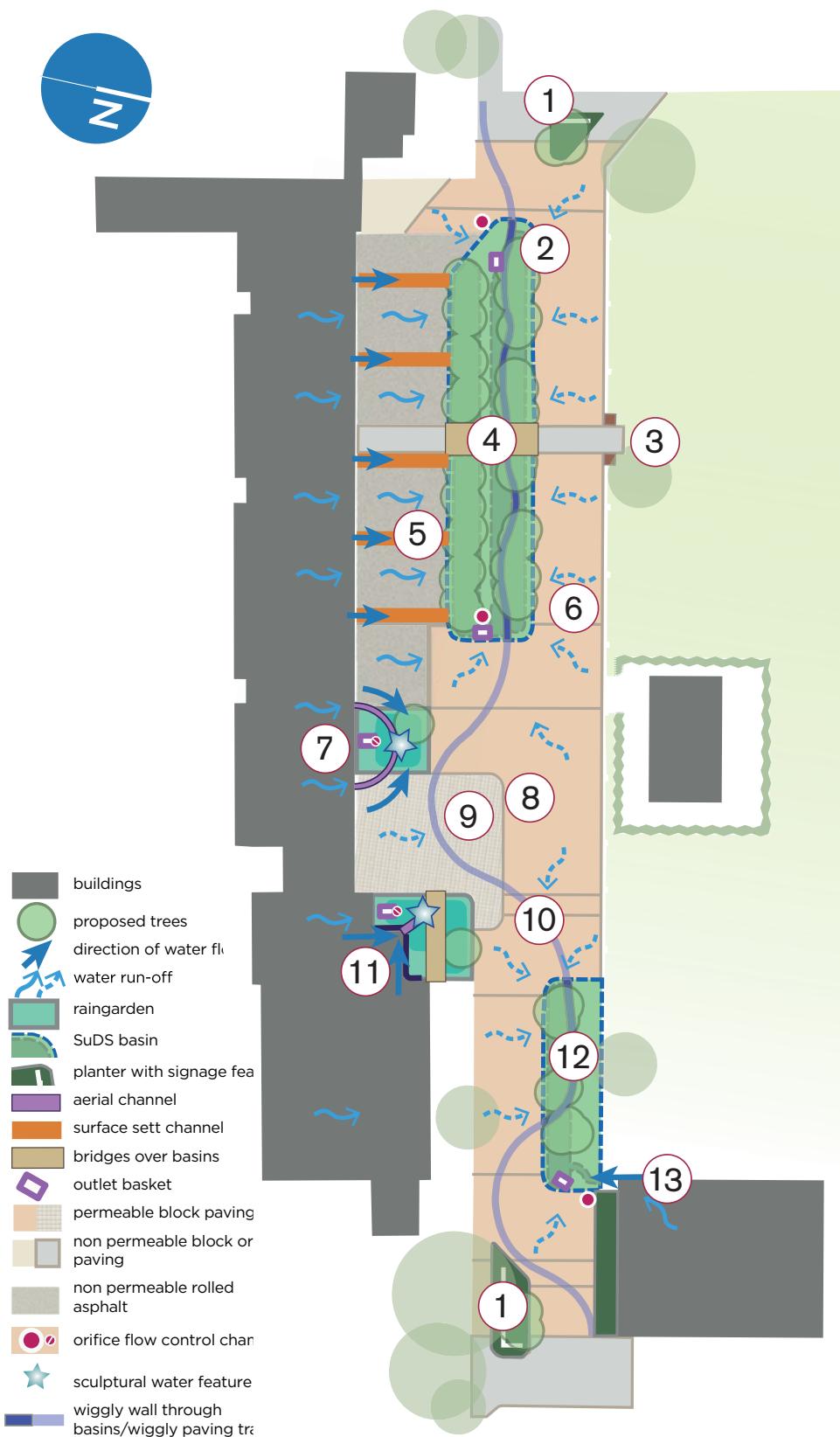
"I can't think of a better example of where a local authority has to do some work and they actually come to a community, learn from the experiences of that community and actually put in place things that are absolutely, directly responsive to the needs of the community"

– Harry Audley, Chairman of the White City Residents' Association

DESIGN STRATEGY

LAYOUT PLAN

- 1 Prominent gateway features create a sense of entrance into a new space. A change of paving signals the pedestrian realm.
- 2 The main planted basins feature the 'wiggly wall' weaving between Birch trees and tall grasses. Each of the two basins stores rainwater collected from the surrounding permeable paved areas and the school roof and releases it slowly to the sewer.
- 3 New gateway allowing access directly from the park to the playground.
- 4 SuDS Basin 1.
- 5 Surface sett channels take rainwater from the downpipes and carry it to the main basin.
- 6 Paved areas are permeable, collecting and cleaning rainwater before conveying it to the basins via the sub-base layer.
- 7 Raingarden 1.
- 8 Main plaza.
- 9 The school entrance is more open and welcoming with permeable paved area, bench seating and rain sculptures bringing rainwater down from the school roof to the flowering raingardens
- 10 A natural stone paving feature weaves through the park from one end to the other providing visual interest and a fun trail for children to follow.
- 11 Raingarden 2.
- 12 SuDS Basin 2.
- 13 Adventure playground building.





SUDS DESIGN

The SuDS landscape, designed in conjunction with McCloy Consulting, celebrates roof water collection with sculptural gutters, downpipes and twisted steel halyards bringing water into planted raingardens. Some roof water, together with car park runoff, flows along sett channels and through stainless steel letterboxes into planted basins.

The concrete block permeable paving overlay simply replaces a tarmac road surface over the original road base. The same blocks and 2-6mm grit bedding layer and jointing material as used in permeable pavements generally are here installed over a geo-composite conveyance sheet that transports water horizontally, on an impermeable membrane covering the road base. Water is attenuated and treated within the paving, then released horizontally via the stainless steel letterbox slots into the planted basins.

Finally, two flow control chambers on outlets from the basins protect the combined sewer, allowing water to flow from the site at 1 litre/second through 20mm orifices. Thus, rainfall remains within the SuDS landscape until storms have passed and the sewer can deal with water again

Water is transported via the bedding course below the blocks and a conveyance sheet.



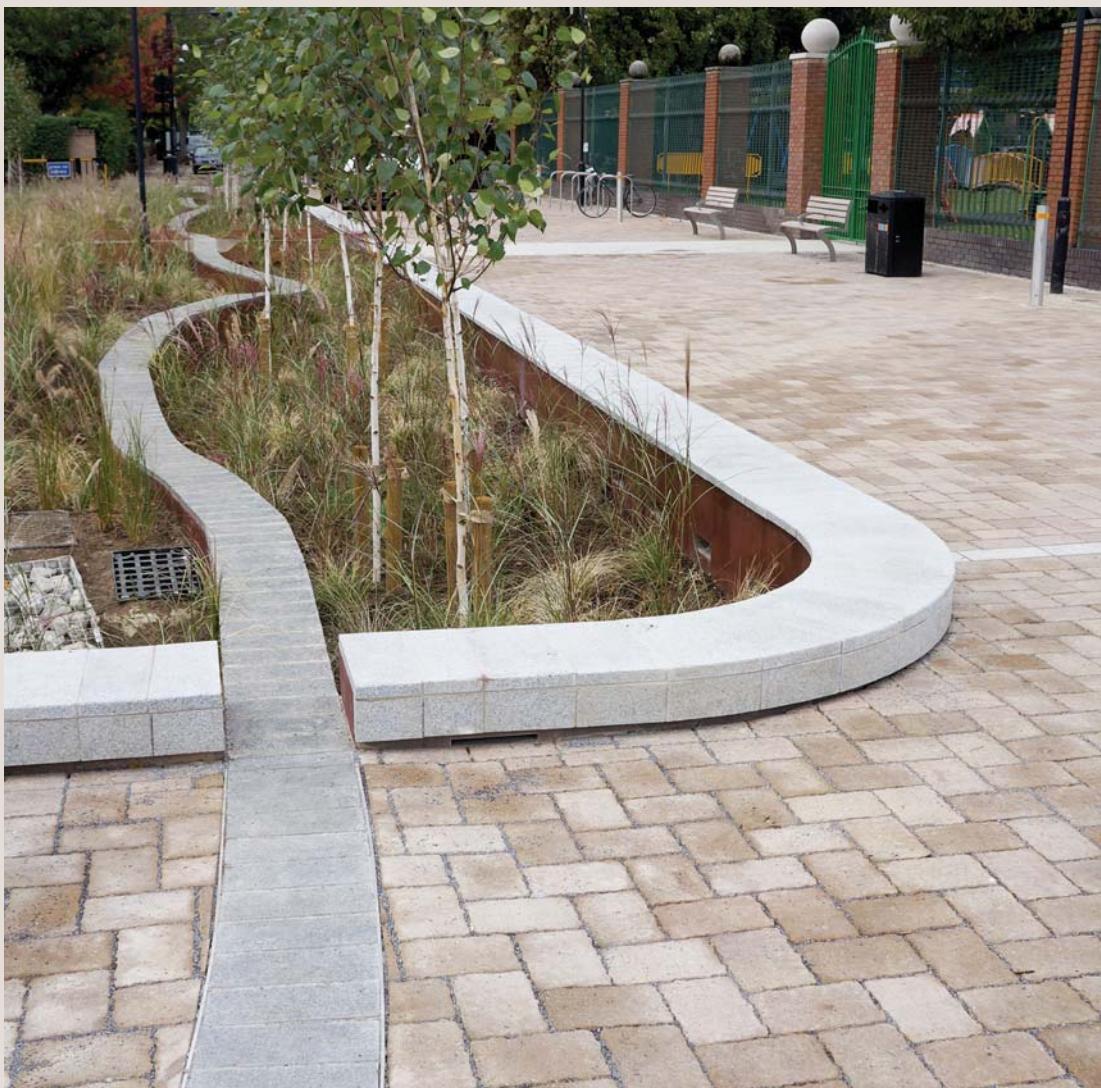
...to slots in side-walls discharging water from the permeable paving into planted basins.





Sculptural metal elements at high level feed roof-water into raingardens.

The original road surface has been replaced with attractive, 'self-draining' concrete block permeable paving. Clean water from the permeable paving passes into the planted basins. The 'wiggly wall' feature meanders through both paving and planting.



HARD LANDSCAPE AND INTERPAVE

Interpave is the Precast Concrete Paving and Kerb Association, promoting and developing concrete products – ranging from domestic uses to the most taxing heavy industrial applications. The Interpave website www.paving.org.uk provides the definitive source of background and technical information with project case studies celebrating the transformative power of inspired hard landscape in our cities.

Precast Concrete Paving

- Visually attractive and able to deliver distinctive local character
- Helping to deliver 'Manual for Streets' and other guidance
- Capability for clear differentiation between distinct areas
- Accessible to all with consistent slip and skid resistance
- Durable and maintainable with reliable product supply
- Sustainable – in every sense.

a diversity of shapes, styles, finishes and colours for contemporary design.

Concrete Block Permeable Paving

- Reducing, attenuating & treating rainwater near the surface
- Direct infiltration to the ground or conveyance to SuDS or sewers
- Multi-functional SuDS meeting current requirements
- Low cost storage using flow controls without additional land-take
- Established technology with decades of proven performance
- Safe, level, puddle-free, shared surfaces for all.

a gradual supply of clean water for landscape, biodiversity and harvesting.

Improving Paving Quality

Interpave supports the National Highways Sector Scheme for the Installation, Maintenance and Repair of Modular Paving (NHSS 30). This scheme assures the installed quality of all forms of modular paving by providing an industry benchmark and a foundation for ongoing improvement, while highlighting the importance of a suitably trained workforce.

FM Conway, the contractor for the Austraia Road project, was the first company in the UK to obtain NHSS30 certification, following a BSI audit.

Acknowledgements

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www.hodsons.com

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