



Resin Bound Paving - GeoPave

- Product:** *GeoPave - Adbruf's resin bound surfacing system*
- Project:** *Phoenix Flowers, Garscube Landscape Link, Glasgow*
- Client:** *Glasgow Canal Regeneration Partnership - Glasgow City Council, ISIS Waterside Regeneration with British Waterways Scotland*
- Architect:** *7N Architects and RankinFraser Landscape Architecture - www.7Narchitects.com - www.rankinfraser.com*
- Principal Contractor:** *Land Engineering (Scotland) Ltd - www.landengineering.co.uk*
- Sub Contractor:** *Woodroyd Contract Services Ltd - www.woodroyd.co.uk*

Background

The Garscube Link project delivers the transformation of the public realm under the M8 at Garscube Road, the gateway to the Speirs Locks area of Glasgow.

This revitalised link is the gateway point connecting a large area of North Glasgow back to the City Centre. Speirs Locks covers a wide area of underdeveloped industrial land adjacent to the Forth and Clyde canal to the north of the city centre. The area was originally a busy trading centre that unfortunately became neglected due to the decrease in popularity of the canal. The elevation of the M8 motorway in the 1960's only added to the disrepair of the area and severed the link to the city centre, leaving only an isolated concrete underpass.

The whole area is undergoing regeneration and the crucial underpass link that once was a dark, dirty, noisy, and intimidating corridor was to be given a radical overhaul transforming it into a light, bright colourful area that was a pleasure to walk or cycle through.

The project was designed by 7N Architects and RankinFraser Landscape Architecture on behalf of the Glasgow Canal Regeneration Partnership, a partnership between Glasgow City Council and ISIS Waterside Regeneration, supported by British Waterways Scotland. The inspiration for the project was Phoenix Park that once occupied the site and is the first phase of a wider regeneration framework for the Speirs Locks area, a strategy entitled "Growing the Place".



Design Brief

The Garscube underpass was a dull and dirty path under the M8 motorway and slip roads. The project was to refurbish with new landscaping, planting and lighting to raise the amenity value and make the whole vicinity less daunting for pedestrians. The GCRP called for the space to signal the wider transformation of the Speirs Locks area, establishing an exciting and welcoming entry point which helps to unlock the regeneration opportunities immediately north of the M8.

The architects design was to transform the underpass to a pleasant, approachable place. The underpass was to be wider, alleviating the former confrontational single track route.

An essential part of the project was the surfacing of the footpath into a single flowing surface that stretched across the whole area. The foot and cycle path was designed to be a flowing, bright surface that was a contrast to the grey concrete roads. The specified surfacing material had to be a flat even surface that was suitable for wheelchair access, was low maintenance, easy to install and environmentally friendly.



Solution

Woodroyd Contract Services Ltd recommended a resin bound system GeoPave manufactured by Adbruf Ltd. GeoPave is a two part, polyurethane hybrid resin system, that is made from bio-mass materials making it environmentally friendly, solvent and odour free. A resin bound surface is flexible but durable and creates a flat, even layer over an existing substrate to meet with the architect's specification.

The design team selected a bright red dyed flint aggregate in a small size provided by Hoben International Limited. The system was installed at 20mm thick on new and existing asphalt. GeoPave UVR resin was used in conjunction with the selected aggregate.

The area was lit by a band of decorative coloured aluminium flowers that reached 8m into the sky, balancing the harsh concrete surrounds with ambient inviting flowers that reminisced to the days of the Phoenix Park.



Installation

The principal contractor Land Engineering (Scotland) Ltd were responsible for the delivery of the whole project which included the resin surface, the reconstruction of the footways, stone kerbing, drainage and ducting works, installation of the new street furniture and the installation of new decorative steel cladding to the bridges.

Land Engineering (Scotland) Ltd deployed Woodroyd Contract Services Ltd as their specialist sub contractor to carry out the installation of the resin bound surface GeoPave. Woodroyd was established with the aim of providing a high quality sub-contracting service to main contractors requiring floor screeds, bound and bonded aggregate systems and also under-floor heating.

Trees were planted to soften the area. GeoPave Tree Pit Pack was used as a surround as it is designed to provide an attractive and aesthetically pleasing porous paving system. The open texture achieved provides a highly porous surface allowing the tree roots access to both air and water penetration. 3-5mm silver grey granite was used in combination with the resin.

The material was laid 20mm thick on a clean, dry, contamination free base of new and existing asphalt. The two part resin mix provides the binder; the components are mixed together thoroughly until homogenous. A suitable mixer is then charged with the selected aggregate; the resin is added and mixed until the aggregate is fully coated. Finally, the mix is transported to the application area using a polythene lined wheelbarrow and then trowel applied, smoothing with white spirit. The system is then left to cure.

Product Details

GeoPave is a trowel-finish, resin bound paving system that is available in a wide range of natural aggregates, recycled materials, marble and glass.

GeoPave provides a smooth, attractive, UV stable and hard wearing surface. The system can overlay existing surfaces such as asphalt, concrete and other stable substrates, and is also ideal for new build projects.

Uses Include:

Access roads, driveways, landscape schemes, footpaths, patios, flat roofs/balconies, tree pits, new developments and as part of a SUDS system.



Client's Comments

7N quote - Ewan Anderson, Partner

"We set out to "turn up the volume" a bit in the approach to the new underpass to compete with the scale and visual cacophony of the M8 flyover. The intention was to grab some critical territory back for pedestrians and cyclists by giving it a rather otherworldly feel to transform what was previously a grey and mundane experience into a slightly surreal swathe of colour".

Jim Harte - Woodroyd Contract Services Ltd

"The project was an exciting challenge for us, it was nice to be part of a regeneration project that is shaping Glasgow. Adbruf's GeoPave is an easy to use system, and we are confident in the quality of the resulting paving."