

# Bretonside Viaduct, Plymouth

Testing & Report and Concrete Repairs



**Project:** Bretonside Viaduct

**Client:** Plymouth City Council

Testing & Report and Concrete Repairs

**Main Contractor:**

South West Highways Group

**Date:** 14th August - 20th October 2017

## The Problem

Built in 1959 Bretonside viaduct forms the covered area of the original Plymouth bus station. Now part of a new £53million redevelopment the original structure was showing signs of some deterioration. Before handover to the developer Plymouth City Council needed to be sure the concrete structure was in good condition. South West Concrete Repairs were commissioned to carry out a concrete condition survey which confirmed that whilst the soffits, beams and columns were in good solid condition there were some areas in need of concrete repair, especially to the concrete around the original glass blocks forming the central reservation which had numerous leaks over the years.



## The Solution

Redundant fixtures and fixings were removed and patch repaired over. Larger defects had the defective concrete broken out, steel reinforcement cleaned and treated with Flexcrete steel prime 841, a layer of Flexcrete Bond aid 842 applied before the repair using Flexcrete Monomix polymer modified cementitious repair mortar. In some of the larger defects Galvashield sacrificial anodes were fitted to give the repair additional electrochemical protection.



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Case Study