

Bomanite Pervious Concrete Systems

PROJECT PROFILE

MANCHESTER METRO LINK, SALFORD QUAYS

PROJECT INFORMATION

With a phase of the light rail system passing through the prestigious Salford Quays. The aesthetic impact of a rail system was a major consideration. With a decision to increase the "greenspace" Grass Concrete Limited were called into design consultation with the Project Managing Joint Venture, Laing/Ansaldo. Design influences were: -To provide an access between the lines for light commercial vehicles. -To permit nature's drainage, even though a solid concrete slab was to be laid below the sleepers. -To create a surface that could not be vandalised. -To provide sufficient flexibility in plan profile to cater for the varying layout of the track. In consideration of these key factors, a pre-cast system was rejected and instead cast on site, GRASSCRETE was introduced. To enable casting, a formwork system was designed that framed a box over the rail line. Crossfall drainage was catered for by a sand/gravel bedding layer between the underside of the GRASSCRETE and the lower solid concrete slab. This was contained at each line by a fluted concrete kerb under the GRASSCRETE, designed and manufactured by Grass Concrete Limited. As well as forming a clearance gap between the paving and the line, this permitted crossfall drainage collection, via French Drains. With limited access for construction, the concrete placement and topsoiling operations were undertaken by using a road railer 360° excavator. With Manchester's reputation for rainfall, the establishment of a green landscape quickly followed.

PROJECT DETAILS

LOCATION

Manchester, England

CLIENT

Greater Manchester Passenger Executive/Atram

GENERAL CONTRACTOR

Laing/Ansaldo JV

INSTALL COMPLETED

1999

SQUARE FEET

4200 m²

BOMANITE SYSTEMS

GRASSCRETE GC3 (76mm thick)