

Layton District Centre Blackpool

High quality surface water drainage systems. Ability to tailor finish surface material to match client's specification. Product appearance to compliment surrounding materials.



The 2007 Urban Traffic Scheme of the Year Award was won by Blackpool Council for its regeneration of Layton District Centre. Not only could this pioneering scheme now form the blueprint for other similar areas across the country, it has also played a key role in the development of a new generation of aesthetically harmonised drainage products. Robert Sutcliffe, Senior Engineer at Blackpool Council explains.

Project:

A shopping area in Blackpool split in two by a main dual carriageway link with the M55.

Problem:

Long term sustainability threatened by high speed traffic and intrusive safety barriers.

Objective:

Area to receive regeneration programme based on the 'Shared Space' concept pioneered in the Netherlands in the 1970's.

Brief:

1. Create a visually appealing area with minimal street furniture.
2. Provide high quality road and footpath surfaces in attractive materials.

Solution:

1. ACO KerbDrain and ACO RoadDrain used to demark boundaries between pedestrian walkways and vehicle carriageways.
2. Appearance of the ACO drainage products to be altered to complement the surrounding environment.

Product:

1. Formulated colour additives added to the resin concrete base mix to achieve the right colour.
2. Close to 1000m of ACO KerbDrain and RoadDrain installed.

Project success:

Regeneration Scheme was awarded the 2007 Urban Traffic Scheme of the Year Award.

Two miles east of Blackpool, Layton District Centre was a shopping area split in two by the town's main dual carriageway link with the M55. Appearing drab, cluttered and run-down, the area did not reflect the character of the local community and, as a commercial centre, its long-term sustainability was threatened by the high speed of through traffic and the unwelcoming and intrusive use of safety barriers and railings.

The council believed the area could be successfully regenerated but needed to find a common approach that it could use to address similar situations in and around Blackpool. The decision was made to re-design the area as a 'Shared Space' - a concept pioneered in the Netherlands in the 1970s and now used across mainland Europe to create safe and attractive mixed-use zones.

Shared Spaces aim to strike a balance between vehicular traffic and all other users. They work through the physical alteration of the streets and roads in the targeted area by blending the pedestrian environment into the carriageway. Motorists' awareness of other users is heightened, forcing them to drive with greater care and at lower speeds.

The core objectives

After lengthy consultations with local residents and businesses, Blackpool Council defined the core objectives for the Layton zone:

- Create a visually appealing area with minimal street furniture.
- Provide high quality road and footpath surfaces in attractive materials.
- Improve street lighting and safety.
- Maximise parking for shoppers.

Within the finished scheme the road has been reduced to a single 20mph carriageway in each direction with the reclaimed space used for parking. All the traditional pedestrian crossings have been removed and replaced with raised continuations of the refurbished footways. These extend across the carriageway – acting as speed humps - and are clearly demarked using Harvest Buff coloured block pavements and driveway mix.

The central reservation has been turned into a pedestrian island, lowered to carriageway level and finished to match the footways. All the barriers have been removed and replaced with lighting, benches and trees laid out to encourage interaction between road users.

The use of contrasting yet complimentary colours across all the materials was critical for the zone to achieve its bright and attractive appearance. Here the drainage system finish played a key role.

ACO surface water products selected

The scheme designers had selected ACO Technologies' surface water channel products, ACO KerbDrain and ACO RoadDrain to lie on the demarked boundaries between the pedestrian walkways and the vehicle carriageways – close to a 1000m of product in total. The traditional resin concrete colour and smooth finish of the standard products, however, did not sit in harmony with the colour and texture palette for the zone.

Precise colour match

Working closely with Blackpool's engineers, ACO's production team devised a new method of tailoring the finish of the material to precisely match the designer's colour requirements. Introduced to the resin concrete base mix prior to moulding, the formulated colour additives do not impair the long-term stability of the material or the in-situ performance of the finished product.



Layton District Centre prior to the renovation project.



ACO KerbDrain installed – Finish of the product tailored to colour match surrounding environment.

To blend with the surface textures of the surrounding materials, each section of KerbDrain and RoadDrain was subjected to a series of new surface treatment and conditioning processes that expose the aggregate beneath surface to the desired degree.

The ACO team also devised a new method of cutting and bonding both straight and quadrant (90 degree) KerbDrain stones. This was used to create the precise 135 degree angle sections required for the pedestrian island perimeter and the parking zones. These were all manufactured at ACO's production facilities to ensure a uniform, complimentary finish with all the other units and to improve the speed of installation on site.

Through these production innovations it is conceivable that ACO could now manufacture its range of resin concrete systems to any aesthetic specification and to any boundary shape or configuration. This will help traffic scheme designers around the country introduce bespoke Shared Spaces in centres suffering similar problems to Layton, creating attractive, vibrant and safe areas in which the road users and the environment are totally integrated.



Installation of ACO Products.



The finished renovation project.

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