EIA Quality Mark
Case Study

Northwich Town Centre FRMS: Delivering a Multi-Functional Public Realm

Key Issues –
Northwich is located in Cheshire, between Manchester and Chester, at the confluence of the River Weaver and the River Dane. The townscape, riverscape, and public realm are influenced by the legacy of past industries, a range of building styles, previous ad-hoc redevelopment, and ongoing regeneration work with an aspiration for the river corridors to function as ‘green infrastructure’ rather than industrial facilities. This history means the public realm in the town centre is highly varied and used for many purposes all within a concentrated area. The challenge was to provide substantial flood defences within this varied and multi-use setting whilst retaining, and where possible enhancing, the attractiveness and functionality of the town centre. A tight timescale dictated by funding conditions and the need to integrate with other regeneration works added complexity. In Environmental Statements (ES), public realm is typically considered within the Landscape and Human Population topics. However, an integrated design and EIA process requires cross-discipline working, with regulatory authorities and end-user groups needing to be involved. Delivering the Northwich FRMS also showed that the EIA process continues beyond completing the ES, with design changes and details having to be discussed right through to final completion of the works.

Purpose of the project
The Northwich Flood Risk Management Scheme (FRMS) has been delivered by Galliford Black & Veatch (GBV JV Ltd) on behalf of the Environment Agency. The purpose of the scheme is to protect the town centre from floods with up to a 1 in 100 (1%) annual chance of occurrence, reducing the risk of flooding to approximately 307 residential and 198 non-residential properties. The scheme also delivers one aspect of the ‘Northwich Riverside’ regeneration programme by forming part of a holistic plan to address flood risk in the town.

Description of the project
The project comprises:
- New brick/stone-clad flood walls, grassed embankments and ramps where flood defences cross existing access routes.
- Raising of existing walls and ground levels.
- Flood gates and fittings for demountable flood defences to be installed before a flood event.
- Structural flood proofing of existing buildings.
- Installation of floating habitat at selected locations on the riverbanks to replace bankside vegetation lost as a result of the scheme and to enhance the environment.
### Lessons learnt
Gaining a good understanding early in the project of the needs and aspirations of people using the public realm was very important. It is natural for design teams to focus on what is needed to reduce flood risk. However, from a public perspective river flooding events are rare in Northwich, whereas residents have to interact with permanent flood defence infrastructure every day. Following EIA principles throughout the design meant that the needs and aspirations of residents and visitors were considered as part of the design, including access, connectivity, safety, landscaping, integration with other regeneration schemes and betterment to encourage use of the river corridor (see inset)

The EIA process helped balance the perspectives from different user groups about what the river corridor should provide. For example, removing trees from river banks in certain areas was wanted by some stakeholders to create lighter, more open and safer riverside paths and a more open and connected townscape, but resulted in ecology impacts from tree loss. By considering these aspects in parallel it was possible to identify where replacement trees could be planted to retain a tree-lined riverside but without recreating dark and insecure footpaths; where mitigation measures such as bird and bat boxes could be best placed to provide habitat until replacement trees mature; and, the long-term net impact for the town.

### Lessons learnt cont. -
Schemes in historic urban areas often encounter unforeseen conditions. Design and construction teams need to be responsive to this, but effects on environmental aspects resulting from design changes also need consideration. For Northwich, continued involvement of the EIA team during detailed design and construction meant that such issues were picked up, and the necessary appraisals and consents carried out, in a timely manner. This included revisions to works affecting listed buildings and the final appearance of defences.

Hard and soft landscaping for the scheme was developed with landowners and managers including local authority and town council officers, Canal and River Trust, businesses, and Environment Agency operatives. This approach meant that aspirations were understood and helped gain overarching ‘buy-in’ for the design. However, this cooperative process was intensive and continued from project outset to agreeing fine details of cladding installation. The outcome is a high quality scheme and public realm, but the resources needed to deliver this should not be underestimated.

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**EIA Learning Outcomes**

**Lessons learnt**

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