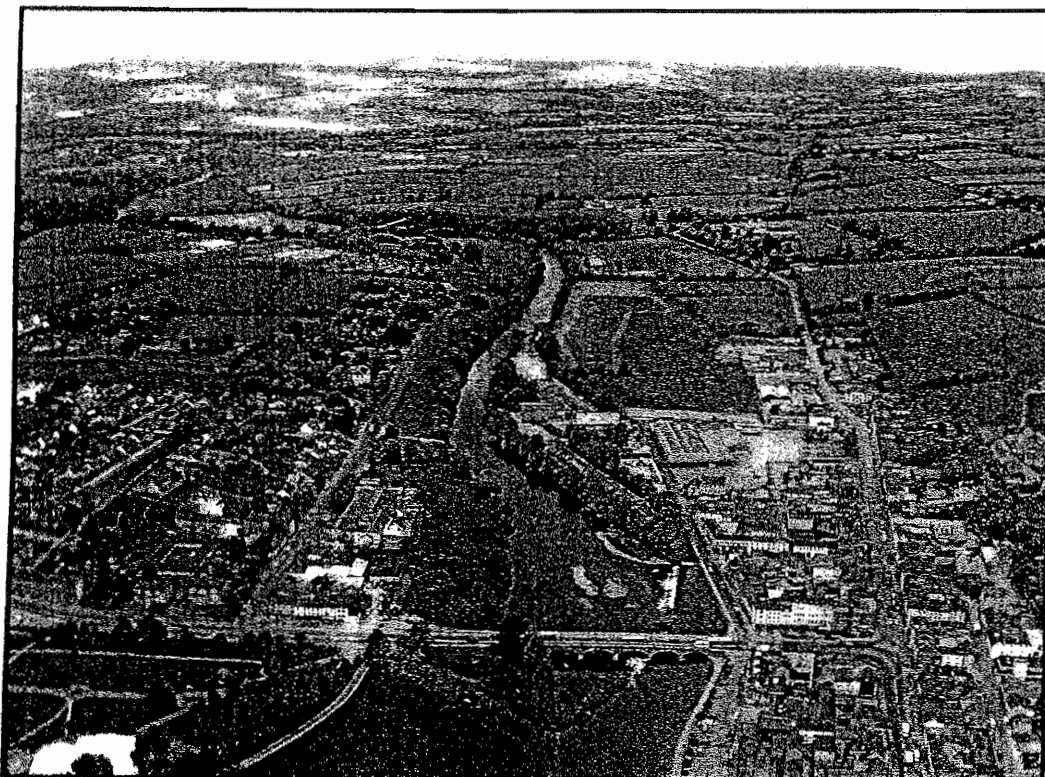


Michael Punch & Partners

**Munster River Blackwater
(Fermoy) Drainage Schemes**
Incorporating Fermoy North, Fermoy Southwest
and Fermoy Southeast



Environmental Impact Statement
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 **Michael Punch
& Partners**
CONSULTING ENGINEERS

*Michael Punch & Partners, Consulting Engineers, 97 Henry Street, Limerick
Phone 061-313877, Fax 061-319071, Email limerick@mpp.ie*

0.0 NON-TECHNICAL SUMMARY

The town of Fermoy, County Cork, has a long history of flooding from the River Blackwater which flows through the town. Records available indicate that flooding is a regular occurrence and on numerous occasions caused widespread damage to residential and commercial properties.

An engineering assessment has now been produced by the Office of Public Works in which a solution for a 1 in 100 year flood event has been designed. The works include for the construction of both permanent and temporary demountable walls as well as certain embankments on both the north and south banks of the river.

The detailed proposals are as follows:

0.1 North Bank (from west to east)

At the west side, the defence starts at the Mallow Road, which lies above the 1/100-year flood level. A permanent wall follows the boundary between the Town Park and Fermoy House, towards the south side of the park. Here, the line of defence turns east towards Brian Boru Square in an earthen embankment.

A demountable wall crosses the national primary road (Brian Boru Square) and runs through the slipway. It is intended that this wall will be independent of the parapet walls of the bridge.

At the eastern side of Fermoy Bridge, the earthen embankment continues east, crossing a derelict property towards Thomas Street.

Thomas Street is crossed by a demountable structure to allow access to the property on the riverside. From there an earth embankment continues east towards Rathealy Road. A demountable structure is proposed over the access road to the Diving Club. At the eastern side of the demountable structure, an earth embankment is proposed which ties into Rathealy Road, where the existing ground level is higher than the design water level.

0.2 South Bank, Ashe Quay (from west to east)

The line of defence starts at the higher grounds, west of the newly built River Apartments. From here towards the bridge, the wall consists of a combination of a low permanent wall and demountable walls placed on top of the permanent wall.

The crossing of the national primary road at Pearse Square is with a fully demountable structure. On the eastern side of the bridge along O'Neil-Crowley Quay again a combination of a low permanent wall and demountable wall is proposed until it reaches Fitzgerald Place.

A demountable wall is proposed at the bridge across the Mill Race. From here a permanent wall continues along the north side of the Mill Race up to the Mill Building. In this area the defences are pulled back from the river in order to have more flexibility in dealing with higher floods than the 100-year in future. The existing car park will continue to operate as normal outside the defences, except during extreme floods (estimated to be approximately once every five years and above).

Around the Mill Building a combination of low walls and a demountable wall is proposed along with three flood barriers in the form of stop logs. The line of

defence then turns south across the carpark towards the southern boundary of the Mill building and crosses the channel. Again a stop log type structure is proposed for this channel.

From the southern boundary of the Bupa Building, the defence line follows the property boundaries, initially southwards and then around the Lidl property and recently constructed building until it reaches the Tallow Road. In this section, the proposed type of defence is an earthen embankment. The line of defence continues south across the Tallow Road in the form of a demountable structure and ties into the high ground on the south side of the road.

0.3 Environmental Assessment

The impact of the proposed flood relief measures on recreational activities is minor. On the south side of the river, the measures do not interfere with activities on Ashe Quay. The low wall proposed for this area may, however, reduce the size of the picnic area at this location. On the north side, the permanent wall proposed for the western boundary of the Town Park would not impact on any recreational facilities. The proposal has made allowances for the two slipways on the north bank and does not interfere with either of the picnic areas on this side. There is no adverse effect from the measures on any of the fishing activities.

The development will not impact directly on any recorded archaeological site. In places, the barrier falls within the Zone of Archaeological Interest for Fermoy Bridge and the partially demolished and renovated Corn Mill, but it will not directly impact on either of these.

The repair and strengthening of the Demesne wall to Fermoy House and some portions of the quay wall will impact on these walls. A full photographic and written survey of these walls would be carried out in advance of any work and all work to the walls will be carried out in a manner sensitive to the character and integrity of the walls.

Similarly, the insertion of sluice gates in the mill-race will be carried out in a sensitive manner. The earthen banks will run mainly in green-field areas. Archaeological testing of these areas will be carried out in advance to ascertain if any archaeological levels exist below ground in these areas.

A detailed assessment of the visual effects of the scheme has been carried out and appropriate mitigation measures are outlined in the environmental impact statement for key viewpoints.

The investigation found no plant in the development site which is a protected plant species.

The principal mitigation measure for plants and animals proposed for this development is that where mature trees or hedgerow species are felled that native species be planted with a mixture of native woodland species an appropriate mix of species Oak, Ash, Hawthorn Holly etc. It is recommended that non-natives in particular (Sycamore) be removed preferentially (where necessary for works) from areas of wood and treelines and that Sycamore be replaced by native species to increase the natural interest urban area.

Otters present in the vicinity of the town are clearly reasonably tolerant of human activity and traffic. The additional and closer impact of construction machinery may

result in some temporary disruption to their habits but this will have no significant effect on the local otter population.

In contrast to other areas of the Blackwater, the river around Fermoy does not support a wide variety or overall abundance of waterbirds. It is not envisaged that the scheme will have any serious negative impact on the local bird community.

There seems little likelihood that the construction of the defences will have a negative impact on the River Blackwater, because in most cases they are removed from the channel (in the case of the earthen embankments) and walls close to the river.

Analysis of the noise levels obtained and predictive noise calculations have shown that by taking due cognisance of recognised guidance procedures noise from activities related to the construction works will not result in a significant impact on the existing noise environment.

Construction of the flood protection embankments will require the importation of approximately 85,000 m³ of earth fill material.

Assuming a six month construction period for phases of the construction which include importation of earth fill material the works will generate approximately 70 loaded lorries inbound and 70 empty lorries outbound per day.

The level of construction traffic generated by the importation of earth fill will be much lower than the volume in heavy goods vehicles traffic which will be removed from the town centre due to the completion of the N8 Fermoy bypass and have an insignificant impact upon traffic flows.

Levels of traffic-derived air pollutants will not exceed air quality standards.

With the implementation of suitable mitigation and enhancement measures it is reasonable to predict that this development will have no significant negative environmental impacts.