Mallow Street Bridge and approach road

It has been evident for many years that the two rivers crossing the Shannon at Limerick are inadequate in capacity to serve the traffic demands placed upon them. The problem has been the subject of considerable controversy due to increasing development and growth on the right bank of the Shannon in Limerick, and increasing activity in Shannon Town, plus the inevitable growth on the left bank. The situation was described by the Shannon Eddy report as "an unstable and ever-changing system" which shows no trend of settling down to a reasonable development pattern, and this has continued to increase in volume to urban populations and trade, in spite of much improved fuel costs and truck payloads.

The location of the third bridge was determined by the position of the next traffic route to the west of Mallow Street Bridge, to be a key good connection and a through route, to be the River Blackwater. The route was considered to be the most suitable to give adequate traffic flow to the central city areas, so that Mallow Street Bridge would be able to carry more through traffic. Considerations were given in selecting the bridge on the North side to North Circular road at the Golden Vale Craneway corner, but the difficulties of (a) connecting this into the Ennis Road, (b) increasing the capacity of Ennis Road west of that connection point, and (c) the environmental and property damage to residential areas of Circular Road, (d) two major schools on either side of this line, implanted in the heart of the town, (e) a major road by-pass to munster road for Ennis Road, and (f) the new Ennis Road, 1951.

Subsequent investigations of the traffic engineering problems that would arise in this area led to the conclusion that the approach road should be carried further west of the new bridge, and the decision was taken in January 1979 to make the main Ennis Road connection to the new bridge on the north side of the Blackwater. This would provide a gap in our new development of the Shannon Corridor, building, in providing a direct connection for the north side of the city and a feeder to the centre of the city area, with a stream of traffic, which has since been built.

On the South Bank, the approaches were provided in an area which has the possibility of future development. The main feature here was the existence of wide expanses and semi-derelict buildings at one side of Lower Mallow Street in the area of catchment, and the Corporation to plan for a large building scheme at the Southern end of the bridge, and to provide a pedestrian system, involving a regrading and new development works, involving re-grading and new buildings. The roadworks on the South Bank were designed by McCarthy & Partners, and were included in the Mallow Street Bridge contract awarded to Healy Ltd.

Different

The North Bank of the river involved somewhat different conditions, but here again the broad outline of the Northern Approach Road and its offshoot was largely predetermined by existing development. The North Bank contained more traffic conditions in the city area and indeed well into the County area.

The geometric design of the road was prepared in a series of plans by McCarthy & Partners, for the section within the limits of the Provincial Council's works department staff designed the section in county council territory. Design in all cases was to standards laid down by An Taoiseach Council in R.T. 180 and R.T. 181. In the city area the bridge area was 50 km/h, immediately leaving the bridge at the North shuines.

This is the 60 km/h, for the remainder of the road, within the city, beyond the first junction at Shelleagh Road continuing. The road itself is entirely built on an embankment within the city area, and its overall width is 11.5m., consisting of 5.5m. carriageway and 2m. wide hard shoulder. In the section between the first junction and the bridge, it consists of an average width of 11m.

Side-drops are two to one, and the average embankment height above fairway is 3.6m. The design was worked out in conjunction with the design for the new bridge.

Mentioned

Al already mentioned, the line was already largely predetermined by the road-line was constrained by the Westfield and North Circular Road, with constriction being feasible, namely to lower Shollagh Road and Sallion Street. This junction alone involved major works in order to ensure safety of the children attendants of the largest schools in the city. Further out, in the country, similar clusters of residents were similarly encountered, but an effective major junction was eventually constructed with the Ennis Road at Clonduffing, about 500m. from the county-city boundary. There is a third junction in the county area taking the new approach road to the Ennis Road at Caherdahleen. This road was built by the Corporation.

THE STORY BEHIND THE NEW BRIDGE

THE decision to construct a new bridge from Mallow Street to the North Bank, represents a major step in the history of the city.

While the last river bridge to be built in the city was O'Dwyer Bridge in 1932, it must be admitted that the construction of that bridge was in isolation, when compared with the great achievement in bridge building during the years 1824 to 1846. These years saw the completion of the Ennis Road Bridge, formerly Weelnesday Bridge in 1825, and the reconstruction and rebuilding of the Railway Bridge on the Circular Road at chamberlain Bridge in 1846.

Consequently, it may be said that Mallow Street Bridge will mark the first major step in bridge-building in Limerick City in 120 years.

By the early 1970's Limerick Corporation had becoming involved in the traffic congestion on Sandford Bridge and the Newery Bridge, and their approach roads, which were all approaching their practical traffic capacity.

Consequently, in 1974, The Corporation appointed a firm of Consulting Engineers, McCarthy & Partners of Limerick, to examine the matter of a river crossing and its effect on the city. In October, 1975, the first report was submitted to the Corporation and as a consequence Limerick Corporation applied to the Minister for Environment for a Bridge Order.

After having received a further report on the matter, the Minister for the Environment held a Public Enquiry into the Bridge Order application in October, 1975, and in March, 1982, he granted a Bridge Order authorizing a two-lane bridge at Quay Level.

The Consulting Engineers were then instructed to proceed with the preparation of plans for this bridge and an N.o. 2 Approach Road. A report on the final design for the children attended was received in October, 1983, the final plans for the Bridge were received in February, 1985.

Work had commenced in November 1984 on the construction of the Northern Approach Road and in early 1985, after obtaining approval from the Minister, tenders were invited by public advertisement for the construction of the bridge. The successful tenderer was deemed to be Asone Ltd. of Kill, Co. Kildare, who submitted a bid of £2,397,725.

The bridge will be constructed of precast concrete with a reinforced concrete pier. The length of bank to bank will be 223 metres, with seven spans. The width of the bridge between parapets will be 24 metres, allowing for a two-lane carriageway of 10 metres width and two laybys of 2 metres width, with a pedestrian crossing. The width of the road will be approximately 5.590 m. of concrete and 1,200 tons of steel designed to carry 30,000 vehicles per day, approximately 8,500 tons of concrete and 1,200 tons of steel will be used in the construction of the Bridge.

PLANNING THE NEW STRUCTURE

IN reaching the decision to construct a bridge from the quays on the South Bank at Lowen Mallow Street, to the North Bank, the question of the approach route to the bridge was also of major importance. Traffic studies had established the need for the bridge, and an important part of the route of the bridge, to hold in September, was the consultation with the approaches.

On the South Bank, the approaches were primarily designed to be a series of improvements on existing conditions. A feature here was the existence of wide expanses and semi-derelict buildings at one side of Lower Mallow Street in the area of catchment, and the Corporation to plan for a large building scheme at the Southern end of the bridge, and to provide a pedestrian system, involving a regrading and new development works, involving re-grading and new buildings. The roadworks on the South Bank were designed by McCarthy & Partners, and were included in the Mallow Street Bridge contract awarded to Healy Ltd.

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