CONSTRUCTION OF GRADE SEPARATED JUNCTIONS AT PONT FER/JUMBO/DOWLUT ROUNDABOUTS

I. Project Background

For long, critical decisions in transport planning to shape the future of Mauritius were being awaited for implementation. In the meantime, the country is suffering from huge congestion costs which have increased to 4 Billion MUR during the last decade. Consequently, in order to provide an effective and efficient road network to support the socio-economic development of Mauritius, the Government, through the Road Development Authority, has already initiated the implementation of two major projects: "The construction of the Grade Separated Junctions at Pont Fer/Jumbo/Dowlut roundabouts" and "The construction of A1-M1 Link Road".

The main objectives of the project are:

- To improve fluidity of traffic in order to reduce congestion time and associated costs;
- 2. To decrease accidents by providing state-of-the-art road safety equipment; and
- 3. To enhance the level of service to road users through the provision of high quality infrastructure.

II. Project Scope

In order to address the high levels of congestion currently experienced at the Pont Fer, Jumbo and Valentina roundabouts in Phoenix, and with the consideration that the traffic along Motorway M1 in the northern and southern directions should constitute priority, it is required that grade separated junctions be constructed at all 3 roundabouts.

a) Pont Fer Roundabout

 In order to improve the mobility of M1 motorway and relieve the traffic congestion at the Pont Fer roundabout, a 315 m long new viaduct will be constructed over the existing motorway.

- By realigning the existing access road to the industrial zone, the risk of traffic accident when entering or exiting the industrial zone is expected to be considerably reduced.
- It is designed that the intersection will be controlled by a traffic signal so as to maximise the capacity of the roundabout during peak hours.



b) Jumbo Roundabout

- A new viaduct of 180 m will be placed along B63 road to provide vehicles heading for Port Louis with higher mobility. This viaduct will span the Jumbo intersection and then end before the Pont Fer roundabout to merge into the M1 motorway.
- The existing roundabout will be converted into a signalised intersection with three legs (T-shape) to ensure better integration with the Metro Express.
- Sodnac Link Road, which is directly connected with the Jumbo Roundabout, will be rearranged to reduce the congestion at the Jumbo intersection.



c) Dowlut Roundabout

- In order to achieve the primary goal of the Project, which is to maximise
 the mobility of M1 motorway, Dowlut roundabout will be graded to
 improve the fluidity of traffic from the south to the north and resolve the
 chronic traffic congestion resulting from the close proximity between
 Pont Fer and Dowlut roundabouts.
- Instead of roundabout, a new ramp (Dowlut Ramp 1) with a length of 28 m will be constructed to keep the connectivity between A10 road and the southbound M1 motorway. In the meantime, another ramp (Dowlut Ramp 2) will diverge from the Dowlut Ramp 1 to enable vehicles from the north to take the M1 motorway towards the south.



III. Project Data

Employer: Road Development Authority

Engineer: Korea Expressway Corporation

Contractor: Transinvest-GCC-Bouygues TP- VSLi Junction Pont Fer & A1-M1 Link Rd JV

Ltd

Contract Value: MUR 4.1 Billion including VAT (MUR 1.5 Billion for the Construction of the Grade Separated Junctions at Pont Fer / Jumbo /Dowlut Roundabouts and MUR 2.6 Billion for the construction of A1-M1 Link Road)

Duration: 958 days

