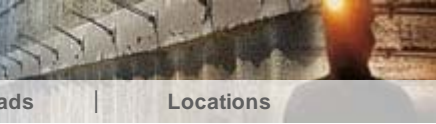




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Cantilever Segmental Bridge Erected with DYWIDAG Form Travellers, Taiwan

Nantou Section, National Expressway No. 6

Due to geographical obstructions created by the Central Mountain Range, outward traffic towards Eastern Taiwan has been inconvenient, and the development of the eastern area has been, for a long period of time, slower than much of the western Taiwan area. To promote the development of the eastern Taiwan area, it is necessary to build a rapid and safe highway transportation system between eastern and western Taiwan.

That is why the government instructed the Taiwan Area National Expressway Engineering Bureau (TANEEB) to investigate the feasibility of a Central Cross-Island Rapid Highway. After nearly a decade of studies, the project, now known as National Expressway No. 6, was proposed. It is divided into two sections: the Nantou section,

from Wufeng to Puli, and the Central Crossing section, from Puli to Hualien. The current infrastructure plan calls for constructing the first section from Wufeng to Puli immediately, while the Central Crossing section will be evaluated further once the first section has been completed.

The township of Puli is located in Nantou County, where a major earthquake measuring 7.3 on the Richter scale hit in 1999, causing more than 2,300 deaths and 6,500 people to suffer injuries. Puli is also the gateway into Taiwan's famous Central Mountain Range. During weekends and holidays, flocks of tourists travel through Puli on their way to the scenic Central Mountain area. Currently, the only major road connecting Wufeng and Puli is the four lane surface carriageway Provincial Route No.14 traversing through various small towns within Nantou County. Horrendous traffic jams often occur on Route No. 14 during the weekends and holidays. In addition, Nantou County is also a major source of quarry rock. As Route No. 14 also serves as a major quarry truck transport route, heavily loaded trucks increase the risk of accidents with tourist vehicles and worsen the traffic along the way. One of the main purposes of the six-lane Expressway No. 6 project is to alleviate traffic congestion and to improve traveling safety in this region.

The Nantou Section of the National Expressway No. 6 is 38 km long, starting with a connection to the Second Expressway at Wufeng in Taichung County, and extends along the River Wu eastwards into the mountainous Nantou County. The Expressway crosses the River Wu at several junctions and follows the treacherous terrain along the valley of the River Wu. Elevated structures make up more than 65% of the Nantou Section, while tunnels and roadworks comprise the other 35%. Among the nearly 25km of elevated structure, almost 18km is to be constructed by the free cantilever segmental method.

The 38 km project is divided into 10 civil contracts, and construction started in March 2004.

As one of the largest free cantilever bridge specialists in Taiwan, DYWITECH has been chosen by several Contractors to cope with the difficult working terrain and tight construction schedule. In Taiwan and overseas, DYWITECH has accumulated more than 17 years of experience with cantilever bridge construction and has completed over 40 projects as well as designing and supplying over 200 sets of form travellers. Currently, DYWITECH is participating with a varying scope of work in 4 of the civil contracts – C601, C605, C607, and C608, which covers around 8km of the free cantilever bridges, or 45% of the total free cantilever viaduct length on the Expressway No. 6 Project.



Scope of work on the different contracts: Lot C601: Owner Taiwan Area National Expressway Engineering Bureau (TANEEB) +++ **General Contractor** Pan Asia Corporation +++ **Engineer** Sinotech Engineering Consultants Ltd +++ **Duration** November, 2004 - April, 2008

DYWITECH Scope Design and supply of four pairs of DYWIDAG Form Travellers; Assembly, relocation and final dismantling of the Form Travellers on 20 piers; launching operation work of Form Travellers for 400 segments; supply of DYWIDAG THREADBAR[®] system for permanent and temporary applications

Lot C605: Owner Taiwan Area National Expressway Engineering Bureau (TANEEB) +++ **General Contractor** Kung Sing Engineering Corporation +++ **Engineer** Sinotech Engineering Consultants Ltd +++ **Duration** October, 2005 - July, 2008

DYWITECH Scope Design and supply of fourteen pairs of DYWIDAG Form Travellers; assembly, relocation and final dismantling of the Form Travellers; launching operation work of Form Travellers for 200 segments; work commenced October, 2005

Lot C607: Owner Taiwan Area National Expressway Engineering Bureau (TANEEB) +++ **General Contractor** Evergreen Construction Corporation +++ **Engineer** Sinotech Engineering Consultants Ltd +++ **Duration** October, 2005 - July, 2008

DYWITECH Scope Design and supply of six pairs of DYWIDAG Form Travellers; assembly, relocation and final dismantling of the Form Travellers; design and supply of the pierable shoring and formwork system; construction engineering of superstructure; post-tensioning detailing and engineering; superstructure construction of eleven pierables; superstructure construction of 382 cantilever segments; superstructure construction of all closure side spans

Lot C608: Owner Taiwan Area National Expressway Engineering Bureau (TANEEB) +++ **General Contractor** Raito Engineering Corporation +++ **Engineer** Sinotech Engineering Consultants Ltd +++ **Duration** May, 2005 - October, 2007

DYWITECH Scope Design and supply of two pairs of DYWIDAG Form Travellers for Taiwan's first extradosed cable bridge; assembly, relocation and final dismantling of the Form Travellers; supply of DYWIDAG THREADBAR[®] system for permanent and temporary applications