


## PROJECT DATA SHEET

<b>Project Name</b> : Lemal & Rantau Panjang Flood Protection Scheme		
<i>Project no.</i> : 9059		
<b>Country</b> :	<b>State / Region</b> :	<b>Client</b> :
Malaysia	Kelantan	Department of Irrigation & Drainage, Government of Malaysia
<b>No. of Professional Staff Involved</b> :		
38		
<b>No. of Professional Man- Months</b> :		
160		
<b>Approximate Value of Project</b> :		
RM 180 million		
<b>Start Date</b> :		
December 1991		
<b>Completion Date</b> :		
December 1994		
<b>Associate firms (if any)</b> : Snowy Mountains Engineering Corporation, Australia		
<p><b>Description of Project and Services Provided:</b></p> <p>For the Lemal area, this project involved the construction of a dyke measuring 1 km away in parallel to the Golok river. For the Rantau Panjang area, the existing Lubok Stol-Rantau-Lanchang State road was upgrade to a flood protection bund to protect the agricultural areas and the surrounding towns. Necessary drainage were also provided for these areas. The increase in water levels in Golok river was reduced to pre-works level via a construction a 500m in width by pass channel and bridge.</p> <p><b>Services:</b></p> <ul style="list-style-type: none"> <li>• Flood Mitigation Studies involving Hydrology and Hydraulic Analyses</li> <li>• Mathematical Modelling of Flood in the Golok river basin</li> <li>• Detailed Design of Floodway, River Improvement and Flood corridor</li> <li>• Detailed Design of River bunds, River Walls and Bank Protection</li> <li>• Geotechnical Investigation and design</li> <li>• Sociological Studies</li> <li>• Formulation of Land Acquisition and Resettlement Plans</li> <li>• Design of Road Network and Pavements</li> <li>• Environmental Impact Assessment</li> <li>• Formulation of Agricultural Development Plan</li> <li>• Economic Evaluation of Project Options</li> </ul>		