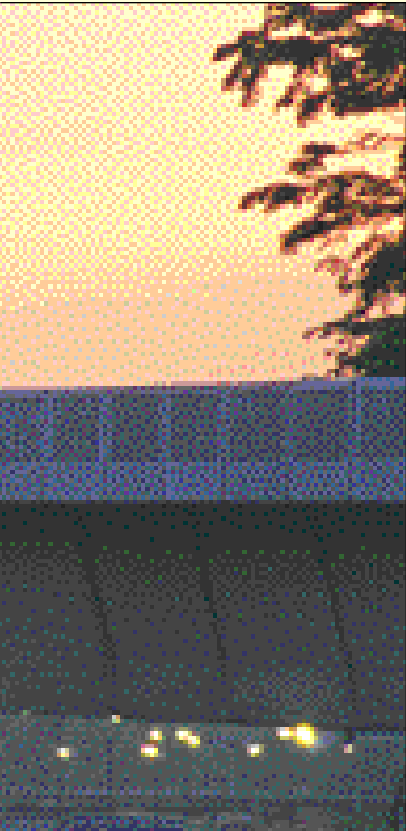




➔ *Amidst tangible signs of economic recovery, the year under review ended 31 December 1999 was one of moderate growth for Kinta Kellas and its Group of Companies. Operationally, there was also reason for a sense of accomplishment, marked by the successful completion of Section 2 of the Light Rail Transit System 2 for Kuala Lumpur. Compared with the previous year, our book order numbers have increased, with several new projects awarded to the Group.*

REVIEW OF OPERATIONS



Above: One of PUTRA -LRT's Bombardier trains making its run

Also projects that were shelved at the height of the economic recession are now being revived. A prime example is the Tanjung Tokong Land Reclamation Project off Pulau Pinang. Drawing on its years of experience and expertise, Kinta Kellas is poised to take on the challenges and tasks ahead.

➔ LIGHT RAIL TRANSIT SYSTEM 2 FOR KUALA LUMPUR

Section 2 of the Light Rail Transit (LRT) System 2 operated by Projek Usahasama Transit Ringan Automatik Sdn Bhd (PUTRA) commenced revenue collection on 1 July 1999. Spanning a distance of 14.59 km from Pasar Seni to Gombak, the second and final section of the PUTRA-LRT interfaces with System Transit Aliran Ringan's (STAR) LRT system at the Masjid Jamek Station. With the meeting of the two lines, commuters in the Klang Valley can now reach their destinations on the city's two LRT services with relative ease.

The timely completion of the PUTRA-LRT chalked up a new project milestone for Kinta Kellas. Apart from the challenge of meeting a tight schedule and without compromising on quality, the construction of Section 2 posed several engineering and technical challenges, notably in the construction of the five underground stations and a tunnel system along its route. Boring works on the two parallel underground tunnels were completed in September 1998. The targeted completion date was met, when part of Section 2 covering nine stations from Masjid Jamek to Setiawangsa started operations on 1 June 1999. The remaining alignment from the Setiawangsa to the Terminal PUTRA station started operations on 25 June 1999, marking the full commissioning of the PUTRA-LRT.

The 29 km PUTRA-LRT is the longest fully automated driverless LRT system in the world. It is also the first rail system in Malaysia to use linear induction motors for its propulsion system.

As project manager, Kinta Kellas' task was to undertake the management of design process and activities, procurement and contracts management, construction management, project controls and project scheduling and monitoring. While continuing to provide post-contract management services, Kinta Kellas is also involved in the construction management of the PUTRA-LRT station at KL Sentral, a project that has recently been revived.

REVIEW OF OPERATIONS

➔ PUTRAJAYA INTERCHANGE & LINK ROAD

Temporarily suspended in December 1997, construction work on the Putrajaya Interchange and an ancillary 8.8 km dual two-lane road (Putrajaya Link) was resumed in August 1998.

Completed at the end of 1999, the Putrajaya Link now provides a critical link between Putrajaya, the Government Administration Centre, to the Kuala Lumpur International Airport at Sepang. It also serves the growing township of Cyberjaya, the nucleus of the country's Multimedia Super Corridor (MSC).

Owing to the adverse condition of the terrain traversed by the link road, which included peat swamps and disused mining pools, a combination of three major construction methods was adopted for the construction of the Putrajaya Link. These included 4 km of piled embankment, 2.4 km of elevated viaduct structures spanning the mining pools, with the remaining 2.4 km comprising the conventional cut-and-fill method.

The Putrajaya Link has been constructed with a closed toll system, which has been integrated with the system currently implemented in the expressways operated by Expressway Linkaran Tengah Sdn Bhd (ELITE) and Projek Lebuhraya Utara-Selatan Berhad (PLUS). A 10-lane toll plaza has also been constructed, with designated Touch 'n Go and SmartTAG lanes as a drive-through option and to facilitate electronic payment.

➔ ELECTRIFIED DOUBLE TRACK PROJECT BETWEEN RAWANG & IPOH

Kinta Kellas is a party in a consortium providing project management consultancy services to the Government for an Electrified Double Track project between Rawang and Ipoh. A Letter of Intent to this effect was issued by the Ministry of Transport to the consortium on 5 August 1999.

Keretapi Tanah Melayu Berhad (KTMB) currently provides freight and passenger services on the existing 180 km Ipoh-Rawang sector. However, the single track network does not allow for much flexibility in train schedules, whilst operational requirements have also exceeded the current track capacity. Thus, in line with the Government's policy to revitalize the economy and to ensure that rail transportation remains an attractive and viable option, the project for the double tracking and electrification of the railway line between Rawang and Ipoh was approved. Other considerations include a future extension of KTMB's commuter services up to Tanjung Malim, the introduction of a new rapid intercity service between Kuala Lumpur and Ipoh as well as plans to increase the track capacity to cater for the rapidly growing freight services.





To be implemented on a design and build basis, the project is divided into two packages covering infrastructure and systems. The systems package consists of electrification, signalling, communications, automatic fare collection components and the supply of track materials and machinery. The infrastructure package comprises the construction of an additional new track and the rehabilitation of the existing track from Rawang to Ipoh and onward to the Falim Depot about 2 kms away. The package also calls for the construction of 8 new stations, 4 halts, 2 freight stations, the Falim Depot and the upgrading of the existing Ipoh station. A total of 87 existing steel railway bridges will be demolished and replaced with pre-stressed concrete bridges. Additionally, 23 existing level crossings will be closed and replaced with overpasses, while 22 road bridges that do not meet the structure gauge requirements will be replaced. The route alignment will generally be confined within the existing railway reserve, except for certain locations where land acquisition may be required. This is to accommodate the new track's design speed of 160 kph and an operating speed of 120 kph.

Above: An aerial view of the completed Putrajaya Interchange

Facing Page Above: Putrajaya Interchange provides a critical link between Putrajaya, the Government Administrative Centre, to the KL International Airport.

Facing Page Below: Specially designated Touch 'n Go and SmartTAG lanes provide motorists with a speedy drive-through option.

The contractors for both packages have already submitted their technical and commercial proposals to the Government. Kinta Kellas is assisting KTMB and the Government to evaluate the proposals and is also engaged in commercial negotiations with the contractors. The entire project is expected to be completed within 45 months, with physical works at the site scheduled to start in the middle of 2000.

REVIEW OF OPERATIONS



➔ CYBERJAYA DEVELOPMENT

Kinta Kellas is providing project management and marketing support services for the Flagship Zone (FZ), the prime phase in the development of Cyberjaya. Officially launched by the Prime Minister on 8 July 1999, the FZ is planned as a multimedia haven strategically located within the MSC. Spread over 2,890 hectares, the FZ will be fully developed over a period of 20 years seamlessly blending a green eco-friendly environment with the latest technology in IT infrastructure and facilities. As planned, the FZ will be the global test-bed for the seven flagship applications of the MSC and home to a community of workers with information technology skills.

The two-phase development of the FZ is progressing according to schedule, with infrastructure development given high priority. Two other major roads within the FZ, namely the Multimedia Road and the APEC Road (named after the APEC Leaders Retreat Meeting held in November 1998) are now opened to traffic. Construction work on other primary infrastructure facilities such as roads, utilities, telecommunications and chilled water facilities identified under the Phase 1 development are in progress. Meanwhile, accessibility to the FZ has improved with the completion of the Putrajaya Link, while the southern access to the FZ will be completed by early 2000.

In terms of facilities, June 1999 saw the first intake of students for the Multimedia University, while Cyberview Gardens which consist of sixty apartment units and eight office blocks, was completed and ready for occupancy. Other projects that commenced operations during the year included the NTT MSC Research and Development Centre and the MSC Central Incubator, a facility designed to house a new breed of entrepreneurs involved in generating IT innovations. Other facilities that are expected to be completed in 2000 are the smart schools, a city command centre, police and fire stations, a mosque and a park.



Above Left: Cyberview Gardens is set amidst immaculately landscaped surroundings

Above Right: The development of Cyberjaya is progressing on schedule

Facing Page: The double tracking and electrification of railway line will ensure that rail transportation remains an attractive and viable option.

➔ ELECTRIFIED DOUBLE TRACK PROJECT BETWEEN SENTUL & BATU CAVES

Through its participation in a strategic alliance, Kinta Kellas is also providing KTMB with project management consultancy services for the extension of the latter's existing commuter services from Sentul to Batu Caves. The scope of work includes design management, project scheduling and monitoring, procurement and contracts management, construction management, project controls and quality assurance services.

The extension of KTMB's commuter services over the 7.5 km long sector will meet a dual objective. Besides assisting the Government in its efforts to alleviate traffic congestion around Kuala Lumpur, it will help to promote Batu Caves as a tourist attraction. The project scope consists of the electrification and double tracking of the existing line between Sentul and Batu Caves, upgrading of the Sentul station, construction of three new halts along the sector and a new station at Batu Caves, along with miscellaneous roads and bridge works.

The functional and operational requirements of the commuter service, along with the Government's stipulations are now being finalized for incorporation into the project. The project is targeted for completion within 30 months on a design and build basis, with the appointment of the main contractor scheduled by the middle of 2000.



REVIEW OF OPERATIONS

➔ TOTAL EXPRESSWAY MAINTENANCE MANAGEMENT SYSTEM (TEMAN)

Kinta Kellas has been commissioned to help set up a Total Expressway Maintenance Management System (TEMAN) to facilitate the maintenance of the North-South Expressway, New Klang Valley Expressway and Federal Highway Route II operated by PLUS.

As a system for information processing, analysis and dissemination, TEMAN will play a key supporting role in managing PLUS's maintenance activities and decision-making processes. To be implemented in phases, TEMAN consists of various application sub-systems on a common database.

Under TEMAN Phase 1, four application sub-systems are being developed:

- Pavement Maintenance Management System (PMMS)
- Expressway Slope Maintenance Management System (ESMaS)
- Bridge Maintenance Management System (BMMS)
- Drainage Maintenance Management System (DMMS)

Each application sub-system comprises basic database modules such as inventory and condition assessment and query/reporting facilities. Additionally, specific sub-system modules such as aerial photo assessment and pavement analysis are included for ESMaS and PMMS respectively.

TEMAN will also incorporate a Geographic Information System (GIS) for the management of spatial or map data. An informative electronic map display is included to provide a visual impression of the inventory carried and its condition. Apart from system development, the TEMAN project involves the collation of baseline information, such as inventory and condition data, to facilitate start-up.

Work on the TEMAN project started in December 1998 and progress has been made up to the system design and programming stage. Phase 1 is targeted for completion in May 2000.

➔ CENTRAL CONTRACTS AGENCY

By grouping companies into industry clusters, one of the aims of a restructuring exercise recently completed by the Renong Group is to allow greater realisation of synergies and the sharing of resources. This will also enable asset-based companies to focus on core operational aspects. To this end, the task of the management of the planned heavy repairs of infrastructure assets would be delegated to a proposed Central Contracts Agency (CCA) which will be established in 2000.

Kinta Kellas has been assigned to take on the role of the CCA to provide project management services in the implementation of maintenance works, including contract administration and construction management. Initially, this will cover all relevant maintenance works on expressways, but will eventually be extended to other parts of the transportation infrastructure operated by the Renong Group.



Above: The North-South Expressway is the backbone of Malaysia's road system

Below: Work has started at the Tanjong Tokong land reclamation project in Penang



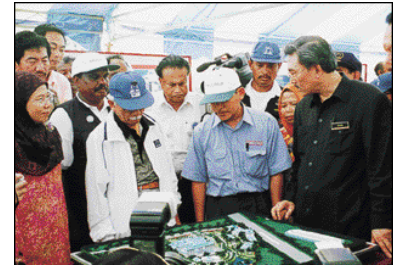
➔ TANJONG TOKONG LAND RECLAMATION PROJECT

A project that has recently been resuscitated is the Tanjung Tokong Land Reclamation Project off the island state of Penang. Kinta Kellas' involvement in the project dates back to October 1992 when it was engaged by the concessionaire, Tanjung Pinang Development Sdn Bhd, to prepare a Conceptual Development Plan.

The land reclamation and development project is located off the coast of the Tanjung Tokong-Gurney Drive. The master-plan calls for a unique integrated waterfront development on 980 acres of reclaimed land. Designed to be environmentally friendly, the project encompasses a headland, the extension of the existing mainland at Tanjung Tokong and four islands interlinked by bridges and a circular primary road distribution network. Upon completion, the development will offer a wide range of facilities and attractions such as business parks, fisherman's wharf, hotels, condominiums, waterfront housing, marinas, a convention centre, waterfront promenade and a theme park, all of which will be serviced by modern and efficient infrastructure facilities.

Above: For a unique dining experience, commuters now have access to two overhead bridge restaurants straddling both sides of the expressway. The first, located near Sungai Buloh and the second, at Ayer Keroh in Malacca

REVIEW OF OPERATIONS



The project is being implemented in three phases over a period of 22 years. However, the schedule will ultimately be demand-driven following a programme of land reclamation, construction, marketing, land sales and property development. The execution of a Development Agreement on 21 October 1999 paved the way for the construction work of Phase 1 to commence. This phase consists of a headland extension to the existing mainland at Tanjong Tokong, and entails the reclamation of approximately 240 acres of land.

Kinta Kellas is the project manager for the land reclamation, primary infrastructure and other associated works. The duration of these construction works is envisaged to span over four years.

➔ SUNGAI PETANI HOSPITAL, KEDAH

Ensuring that Malaysians have access to quality healthcare services is one of the objectives outlined under the current Seventh Malaysia Plan. In line with this objective, a new hospital is being constructed in the new township of Bandar Aman Jaya at Sungai Petani, Kedah. Constructed over an area of 40 acres, the new Sungai Petani Hospital will have a 498-bed capacity. The ground-breaking ceremony was officiated by the Finance Minister, YB Tun Daim Zainuddin, on 24 November 1999.

Kinta Kellas is the technical support service consultant to the TH Universal Builders Sdn Bhd and Bina Darulaman Berhad Joint Venture that will undertake the design, construction, equipping, commissioning and maintenance of the hospital. With the technical and financial proposals submitted to the relevant authorities, Kinta Kellas is presently providing technical audit services for the pre-award stage. We are also assisting the joint-venture in formulating the project quality plan and procurement strategy.

*Above Left: Model of the
Sungai Petani Hospital*

*Above Right: YB Tun Daim Zainuddin
officiated the Sungai Petani Hospital's
ground-breaking ceremony*

*Facing Page: Labuan is set to be
transformed when the landscaping and
beautification project gets underway*