

# Central Reclamation Phase III

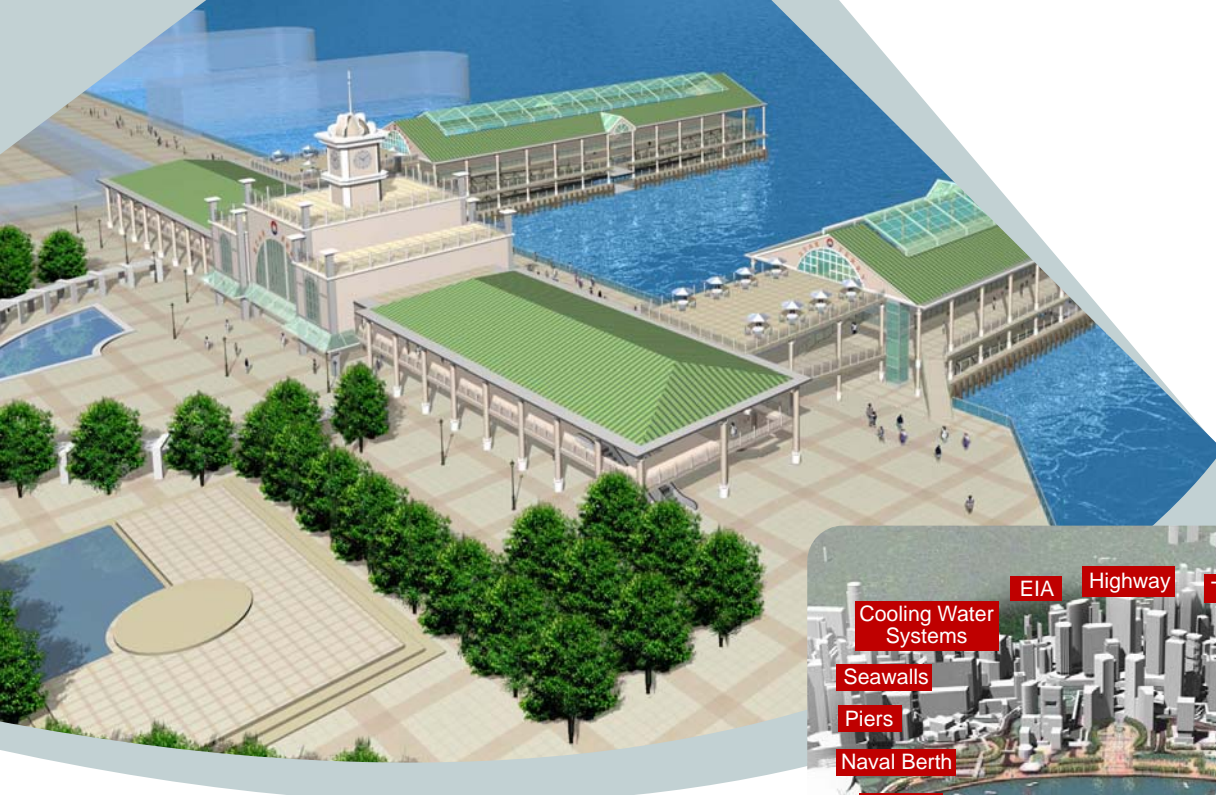
## INTRODUCTION

Central Reclamation Phase III (CRIII) is a high profile project on the north shore of Hong Kong Island in Victoria Harbour. The newly created area of land is required for essential transport infrastructure that will provide much needed relief for traffic congestion in the busy Central and Wan Chai districts and the new area will be developed into a world class waterfront.

Atkins were appointed, in 1995, by the Hong Kong government to undertake the planning, design and construction management of the project, which is due to be completed in 2009. The project planning and development process was complex and there were a wide variety of challenges in its design. The project has many interesting elements, such as the new piers for the famous Star Ferry service, which have been designed on a historic heritage approach to reinforce the Star Ferry icon, and the large pumping stations to supply cooling water to some of the largest and most prestigious buildings in the central business district. Another key element is the 1000m long cut and cover road tunnel that will form part of the strategic Central–Wan Chai Bypass. Innovative measures were employed in the seawall design to improve the wave climate in what is one of the busiest harbours in the world and the importance of minimizing the environmental impact and disturbance to the existing waterfront facilities during construction were also key factors in the construction planning.

The project is being implemented under a single contract, which has a value of HK\$3.8Bn and is one of the largest government contracts ever awarded in Hong Kong.





## OUR SOLUTION

Our planning concept for the area was based upon improving the integration with the existing urban environment, providing enhanced transportation infrastructure and creating a large area of public open space. At the same time the area of reclamation was kept to an absolute minimum through the careful design, and construction planning, of the wide variety of new infrastructure, which included the following:

- 18 ha of new, dredged reclamation;
- marine piers (including the Star Ferry and public piers);
- innovative wave-absorbing seawalls;
- 1000m long dual three lane cut and cover road tunnel;
- cooling water pumping stations and systems for over 1M m<sup>2</sup> of GFA;
- a heliport;
- a public cargo working area at Chai Wan Basin;
- an extension tunnel for the Tung Chung & Airport metro lines;
- 3km of at-grade roads, an underpass and a 300m long footbridge; and
- large stormwater drainage culvert extensions.



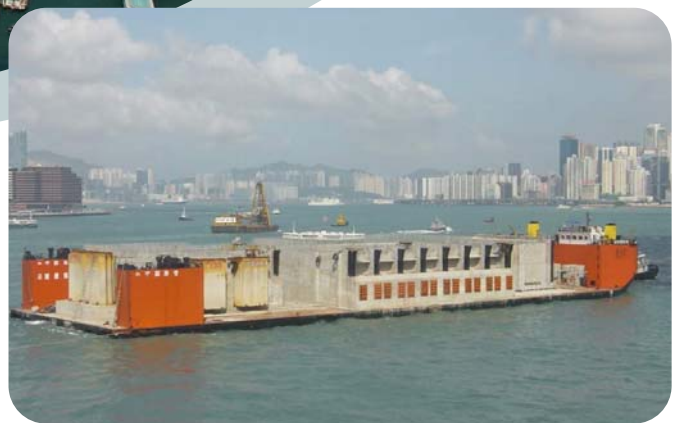
The most significant challenge in developing the implementation plan for the project was the requirement to keep the existing waterfront facilities, such as the marine piers, heliport, cooling water pumping stations and the large drainage culverts, in operation until the new ones were completed. Each element was specifically designed and phased so that it could be completed and made operational before the corresponding existing facility was decommissioned. Strict phasing requirements were also enshrined in the construction contract to ensure the continuous operation of all the facilities in this critical area of the harbour and the central business district.



## OUR APPROACH

Comprehensive planning and feasibility studies were carried out to confirm the optimum arrangement for the project. Extensive public consultation and full statutory approval procedures were completed to obtain the authorization for the project to proceed. This included a thorough Environmental Impact Assessment, which was approved by the Environmental Protection Department. At the peak of the design phase over 100 Atkins design staff, from a wide range of disciplines, were involved in the project. The breadth of experience and the expertise in the project team, coupled with strong project management, ensured that every aspect of the project was coordinated and completed smoothly. This included reaching agreement with over 30 government departments and overcoming many challenges and external changes along the way.

At the end of the design phase Atkins also prepared the large construction contract documentation and administered the tendering process - including the tender assessment and award. With a resident site staff organization of 80 staff, Atkins is managing the construction through to completion in 2009.



## OUTCOMES

Through careful planning and integrated design Atkins have ensured that this complex and high profile project has proceeded smoothly through all of its phases, from the strategic planning and detailed design through to construction. The new area of land has been designed to meet the core objectives of relieving traffic congestion, reducing pollution, enhancing the attractiveness of the harbour and enabling the creation of a truly world class waterfront. The project is at the heart of the future vision for the city, which is "to bring the people to the harbour and the harbour to the people", and will enhance the quality of the harbour for the benefit of the community and future generations.

Plan Design Enable