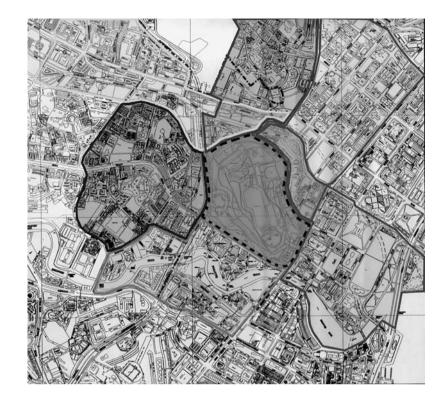
waterfront Singapore River, where 'the visibility of the developments on both sides of Orchard Road' is to be increased and 'more green relief in public spaces' is to be introduced on the Singapore River (Singapore URA, 2001a).

An urban design team, sponsored by Singapore URA, was established in January 2002 at the Department of Architecture of the National University of Singapore (NUS) through its Master of Architecture programme. The URA-NUS urban design studio aimed to rethink the area in between Orchard Road and Singapore River, and to explore the future form of downtown urban space in a broader urban context. The site covers the eastern part of Orchard Road, the future interchange Dhoby Ghaut, the historically significant Fort Canning with surrounding cultural resources, the six-lane Clemenceau Avenue intersecting the area and part of Clark Quay next to the avenue.

The urban design studio started with a series of questions. During the economic downturn, What would make Singapore continue to be a globally competitive city? How could physical urban quality contribute to this competitiveness? When development slows down and the projections for commercial development and tourism become pessimistic, what are the alternatives to the big sites, big capital and big developers? What alternative modes of development are there to the principles of functional planning which currently dominate the production of urban space through the overall control of development by government? What are the alternative strategies for design and development?

At the beginning of the studio, a 1-week intensive Urban Design Workshop was set in NUS to initiate a rapid response for the Singapore URA sponsored project. A short experimental design charette provided opportunities for students to learn the basic principles and skills in urban analysis, urban form making and development processes over extended spatial and temporal environments. A kilometre-wide downtown area surrounding Fort Canning was selected, which was then divided into six 'quadrants': Museum and Rochor Area, Civic and Cultural District, Singapore River, River Valley, Orchard Road and Dhoby Ghaut (Figure 9.6). Through the analysis of urban context and the fast development of sketch-conceptual design, different design approaches were tested and some critical urban issues were presented and highlighted during the final workshop meeting between NUS tutors, students and URA planners.

Figure 9.6 Site location.



The history of the urban design concepts was traced from 1970s' Shenton Way CBD to the 1990s' New Downtown design. The critical thinking on different downtown urban design approaches stimulated the studio's design question: What will be the next downtown urban form, which could sustain downtown liveability? How could appropriate design and planning interventions initiate a large-scale urban transformation that would respond to the current and future challenges of downtown design and development? This was not an easy task when facing the area with its multiple stakeholders, indeterminate and unpredictable programmes, and complicated spatial arrangements of urban activities and built forms.

Downtown interchange, Campus City and the Boulevard

The 'Sketch Concept Development' immediately followed the workshop. Three experimental concepts were developed during the preliminary design process, which was driven by the critique of the current downtown urban space. The three conceptual designs, Downtown Interchange, Campus City and