- 3 Piece-by-piece urban design, in which general policies and procedures are applied to a precinct of a city in order to steer development in specific directions.
- 4 Plug-in urban design, where the design goal is to create the infrastructure so that subsequent developments can 'plug in' to it or, alternatively, a new element of infrastructure is plugged into the existing urban fabric to enhance a location's amenity level as a catalyst for development.

The borderline between categories is fuzzy. The first two types, total and all-of-apiece urban design have historically been the core of urban design work but all four are considered as such in this book because they focus on the four-dimensional built environment and require the collaborative actions of all the design disciplines.

## Total Urban Design

Total urban design is really a combination of large (in geographical area or number of buildings) architecture and landscape architecture. It involves the design of both the public realm and the buildings that frame it. A team of people working as an individual unit holds total development and design control. The infrastructure and buildings are designed as a unit by the team. Much of the detail of the design is then completed by transportation engineers, architects and landscape architects who form part of the team. The debate about ends and means takes place within the team. In many people's minds, total urban design is seen as the norm of urban design practice. It seldom is.

There have been some major urban design projects around the world that sit comfortably in this category of total urban design. They vary in scale from new cities to precincts of cities to the design of plazas and other urban open spaces. Brasília, as described in Chapter 7, is perhaps, the best known of such city designs (see Figure 2.3). Many of the new towns built in the Soviet Union between 1950 and 1980 are similar in character and the myriad of company towns around the world are other examples of total urban design. Company towns are all 'administered communities' at the outset although they may evolve into ones in which controls are in the hands of the inhabitants themselves rather than being dictated by a single authority – the company (Gottschalk, 1975). Administered communities are totalitarian in nature even when located in the most democratic of countries.

Most total urban designs deal with precincts of cities rather than cities as a whole. Two of the best known are the capital complex (see Chapter 7) and the city centre superblock in Chandigarh (see Figure 2.4). Le Corbusier was given a free hand in their design. Over the past 50 years there have been many precincts of cities that have been designed and developed by one organization but the developments are seldom more than three or four traditional city blocks in size. In contrast, there are many large developer-initiated suburban estates around the world that are total urban designs. In many countries with socialist governments they were developed, designed and built by Public Works Departments or their