

Title	Studies on Environmental Planning and Design Urban Renewal Study for Nakanoshima, Osaka Through the Space Behavioral Approach
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**Studies on Environmental Planning and Design
Urban Renewal Study for Nakanoshima, Osaka
Through the Space Behavioral Approach**

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Abstract

This article presents the methodology to create the over all landscape in the central business district of Osaka.

The Nakanoshima area was selected as a case study because of the perceived need for an urban landscape identity.

Five basic guidelines were developed from the open space potential analysis of the study area.

Nakanoshima was classified into seven zones in order to create areas of identifiable landscape character. These areas were determined by projected use patterns, and will be used to guide future planning and landscape design.

In addition, concrete design suggestions were drawn up for specific locations throughout the study area.

Introduction

Nakanoshima, by virtue of its location in central Osaka City, its being the home of various urban facilities, and its special relationship with the rivers of the city, is the natural symbolic "face" of Osaka. However, because of changes in the structure of the city, this role of Nakanoshima has been obscured. Numerous studies have been conducted concerning the area, but due to narrowness of scope or the central position of business interests, little comprehensive improvement has resulted. The purpose of this study is to contribute to the effort to reaffirm Nakanoshima's symbolic role through the development of a landscape planning approach towards a total landscape and concrete proposals for its creation.

Background of Nakanoshima

Nakanoshima, which means "central island", is a crescent shaped strip of land between the Dojima and Tosabori rivers in central Osaka City. It is approximately 3 kilometers in length and 300 meters wide at its widest point. A true island (ie, completely surrounded by water), it is one of the few places remaining in Osaka where remnants of the city's former glory as Japan's Mizu no Miyako ("water capital") can still be felt.

Nakanoshima is crossed by five of the city's major north-south avenues (including Midosuji, the major financial street) and four public subway lines. Although the island has a definite east-west orientation, it has been incorporated into the city grid and there-

by broken into a number of "blocks" which exhibit strong north-south orientations. As a result, the identity of Nakanoshima as an entity is lost. Furthermore, elevated roadways passing over the rivers obstruct views of the water from outside the island and a riverwall, built to prevent flooding of the island during infrequent, but furious storms, blocks views of and access to the water from inside the island. Thus, Nakanoshima's identity as an island is also lost.

The eastern part of Nakanoshima, a center for public administration facilities, houses a number of older public buildings of architectural interest: Osaka City Hall; Osaka Prefectural Library; and the Chuo ("central") Meeting Hall. Nakanoshima park lies to the east and along the sides of these buildings. Central Nakanoshima is a center for various information industries: business information services; broadcasting; and newspaper offices. It is likely that these facilities will grow in both number and diversity in this area in the future. Western Nakanoshima is now characterized by a number of tall buildings such as lodging facilities; however, it is likely that many of the sites in this area will be redeveloped in the near future. The character of western Nakanoshima will be largely determined by the nature of this redevelopment.

Because eastern Nakanoshima has already been developed as a "core" in Osaka City's "green network" system, this study deals primarily with the area west of City Hall. Open space, riverfront development, planting, and other landscape elements of the total landscape will be integrated throughout the entire island with Nakanoshima park remaining an important focal area. In the present study, however, the more time consuming problems of correcting the fragmentation of the island and formulating controls for development in the central and western districts are considered.

Methods and Procedure

For the purpose of analyzing existing characteristics, data collected from field surveys, topographical maps, aerial photographs, and other sources were compiled into a number of maps concerning: open space (distribution of trees, location of open space, use of open space); land ownership; buildings (use, age, height, materials, coverage, floor area ratio); and streets and traffic (road width and location of sidewalks, pedestrian traffic volume, automobile traffic volume, location of public transit lines, public transit passenger volume).

Work then proceeded simultaneously on two fronts. Blocks were analyzed for potential with respect to the creation of usable open space either through the incorporation of existing miscellaneous space or through renewal. "Ideas" regarding the ideal form of the total landscape Nakanoshima, elements therein, or specific locations on the island were developed.

1. Open space creation potential

Individual sites were analyzed to determine the relative ease of open space creation using existing open space conditions, probability of redevelopment, and land ownership as primary criteria. Using the latter two criteria as follows, three classifications were defined:

- (1) Redevelopment: predominantly publicly owned; renewal likely in near future;
- (2) Guide lines: predominantly privately owned; renewal likely in near future; future development might be directed through publicly administered controls

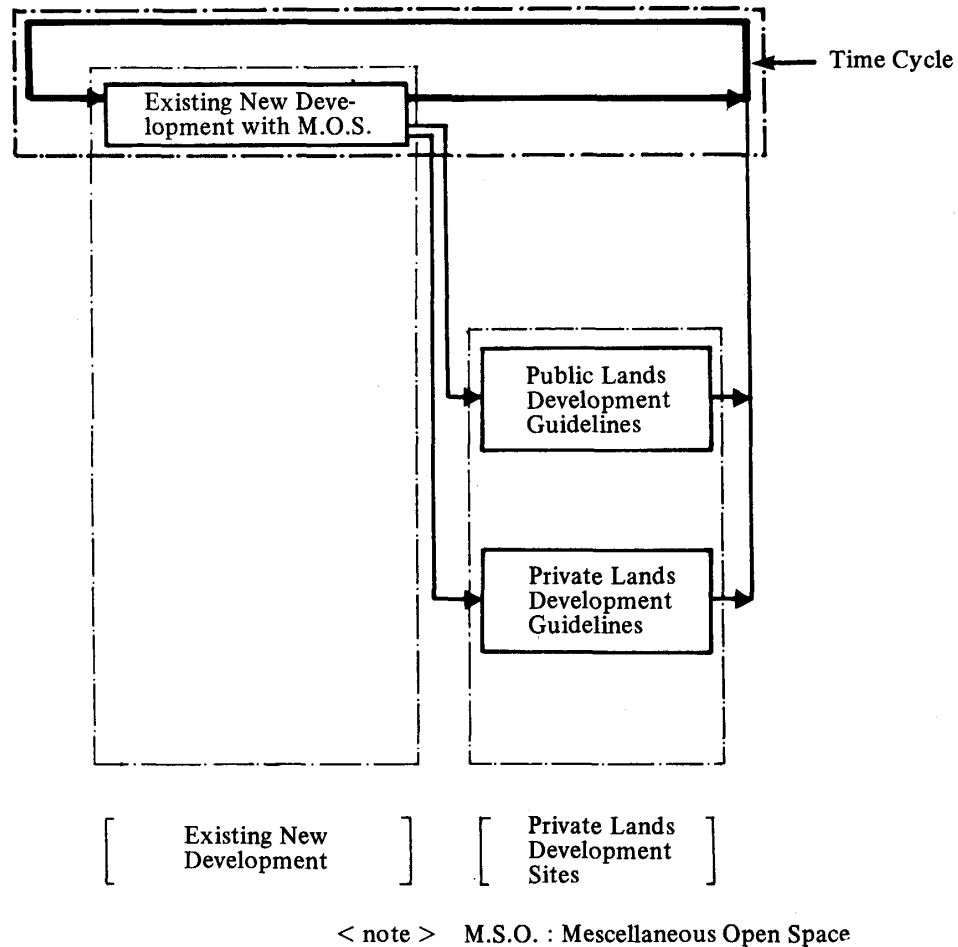


Fig. 1 PROCESS OF LANDSCAPE DEVELOPMENT

and/or incentives;

- (3) Existing New Development with Miscellaneous open space: predominantly privately owned; renewal unlikely; existing miscellaneous open space might be developed and tied together to create usable "open space".

These three classifications are intended to show the process of development over time through which open space can be created (Fig. 1). Given that many sites, both private and public, are due to be redeveloped in the near future, guidelines are required. Existing new development will continue to exist during this first redevelopment phase. In the future, these existing buildings will require redevelopment. At this time, guidelines will be enforced, thus finalizing the open space plan. This process is cyclical in nature, therefore allowing the evolution of the large scale site, this is the basic precept of the Space Behavioral approach.

2. Ideas

Team members were encouraged to conceptualize a total landscape, elements therein, or smaller environments within Nakanoshima. Thirty widely varying ideas were collected and analyzed for relationships. They were found to center around 5 targets or "elements" (water, greenery or open space, facilities, circulation and policy) and 5 goals (recreation, user attraction, visual improvement or "view" environmental improvement and island identity); and range in scale from Osaka City to individual sites. An idea sheet was drawn

up for each idea including the following: pattern sketch; situation (element, physical scale, time scale); location; problem description with sketch or photograph; and possible solutions. Suggestions for possible solutions were collected from team members and printed sources.

Results and Discussion

1. Basic guidelines for the creation of total landscape

Five basic guidelines for the creation of "total landscape" were developed from the open space creation potential analysis and the "ideas":

- (1) Land use character zones
Four land use/landscape character zones were defined in order to define future characteristics.
- (2) Skyline
Skyline guidelines were developed to insure a balanced view from surrounding areas and to insure the creation of usable open space.
- (3) Islandness
Guidelines were developed to make the island a visual entity. Thereby
 - a) creating an image of an island bordered by greenery;
 - b) rehabilitating the riverwall and creating a perimeter pleasure walkway; and
 - c) emphasizing the riverside greenery.
- (4) Greenery and open space
Greenery and open space guidelines were drawn up to insure the creation of usable pedestrian open space.
 - a) the island perimeter pleasure walkway; a place only for pedestrian as a part of the city's open space network;
 - b) the central green mall; the pedestrian space binding the island together by linking the western park, the hotels, the Osaka University redevelopment area and the central business area.
 - c) The existing central road would be closed to traffic and a new connecting path would be created by requiring new development to leave usable open space.
 - d) This green central space must be a requirement in Osaka University site redevelopment.
- (5) Landscape improvement guidelines were developed as practical suggestions for the treatment of areas according to their open space creation potential classification. These guidelines are to aid in the creation of the Nakanoshima "total landscape".
 - A. Redevelopment: The future of redevelopment sites, particularly the Osaka University site, will play a pivotal role in the determination of the eventual character of the "total landscape". It is of the utmost importance that redevelopment be carried out in concert with an overall concept for the island.
 - B. Controls/Incentives: Public controls and/or incentives should be used to insure that the renewal of privately owned sites provide usable open space which can be tied into the "total landscape".
 - C. Miscellaneous open space: Existing miscellaneous space should be developed into usable open space and integrated into the "total landscape" plan.

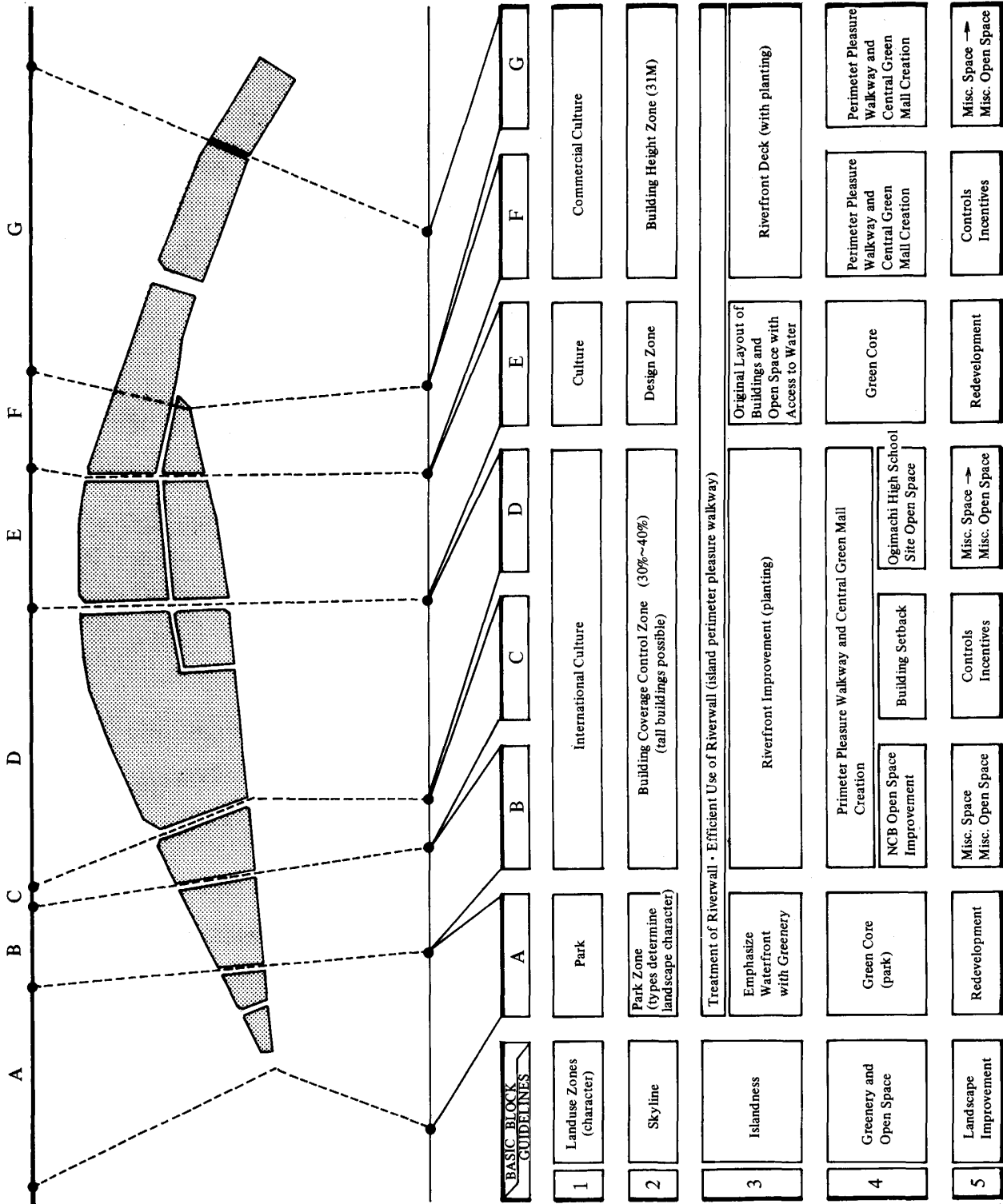


Fig. 2 BASIC GUIDELINES APPLIED TO BLOCKS

The chart (Fig. 2) illustrates how these 5 basic should be applied to specific problems throughout the island.

2. Specific Design Suggestions

In addition to the 5 basic guidelines listed above, concrete design suggestions were drawn up for specific locations throughout the island.

Block (see Fig. 2)	Suggestion target
A -----	green core park – rehabilitation of riverwall
B -----	use of space around Nakanoshima Center Building – treatment of elevated highway ramp
C -----	building set back control in central green mall – building height control along south side of central mall to insure sufficient sunlight
D -----	use of open space on Ogimachi High School site – shopping for central green mall – building height control along south side of mall
E -----	green core through "organic" site planning – use of water surface
F -----	open space through building set back control – treatment of central mall origin – integration of outdoor and indoor spaces – riverfront pedestrain walkway
G -----	use of existing space as "miscellaneous open space" – integration of indoor and outdoor spaces – riverfront pedestrain walkway

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