CHAPTER 8

PRELIMINARY DESIGN OF STATIONS AND STATION PLAZAS

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8.1 Selection of Candidate Stations for Case Study and Principals of Preliminary Design

8.1.1 Selection Criteria of Candidate Stations for Case Study

The main criteria is whether the five station areas accord with the basic concept of the multi-modal station area development in related to the Standardization for Integrated Railway Network of Metro Manila (SIRNMM); what extent they will contribute to the attainment of the SIRNMM objectives; where are they in line strategy, and particularly whether they are accordance with the development concept presented in the development scenario in Chapter 2.

The evaluation criteria are established to select two stations from five candidate station areas. Two candidate stations for the case study are selected considering the following viewpoints:

(1) Viability in terms of Land Acquisition

Development of the multi-modal station area needs some extent of property for bus and jeepney terminal, access road to a station, sidewalk and commercial complex and residential building and others.

Suitable area for the multi-modal station has an available lump of land area to utilize public land, the site of demolished building and potential area of the relocation.

In this context, the following items are used for the evaluation:

- Simple landownership in term of number
- Available potential sites of demolished building and relocation
- Minority of heavy material structure buildings
- Transport facility of bus terminal to be utilized as a base land

(2) Development Benefit

The multi-modal station area development has an effect on raising land value due to creating convenient space for socio-economic activities, increasing the railway rider-ship and the railway transfer passengers due to improvement of accessibility and increasing

more potential of commercial complex development at the transship point because of the above condition.

The following items are used for the evaluation in terms of development benefit:

- Potential level of commercial complex and residential developments
- Magnitude of railway rider-ship and transfer passengers
- Improvement of deteriorated environmental condition in the surrounding area

(3) Transport Development Policy Oriented

Objectives of the multi-modal station area development are pointed out as follows: improvement of accessibility to the station including improvement of sidewalk, pedestrian deck, access road etc., conversion of transport networks system to railway transport as a primary transport from the current road-base transport, and alleviation of road traffic congestion.

The following aspects are used for selection of two stations as showcase for the improvement and the future development:

- Promoting and strengthening railway transport developments
- Alleviation of traffic congestion in the surrounding area
- Integration of bus and jeepney terminals in the surrounding area

(4) Institutional Efficiency

It is to be advisable that the multi-modal station area development should be designated in the City/Municipality Comprehensive Development Plan and legislated as specific development area like Export Processing Zone (EPZ) by PEZA.

The station area development in the urban area is a kind of area redevelopment project, which has two kinds of development method as follows:

The following aspects are considered for evaluation of five candidate stations:

- Strengthening institutional and planning capacity of LGUs
- Organization of redevelopment association with ease (No. of landownership)

8.1.2 Potential of Multi-modal Station Area Development

Potential of multi-modal station area development for five candidate stations is summarized in Table 8.1.1.

Some conceptual multi-station area development plans are shown in Fig. 8.1.1 to Fig. 8.1.3.

Table 8.1.1 Consideration for Potential of Multi-modal Station Area Development

Station / Station Area	Current Land Use/ Development Plan	Land Ownership	Potential of the Development
a) C. M. Recto (LRT1, MRT2, 4 and PNR North)	Commerce/Business district Area redevelopment utilizing the site of Manila city jail is in progress for first multi-modal station area development in the Philippines by PEA	Relocation of the jail is committed and land acquisition of the surrounding area is also in progress The block (6.8 ha) will be owned by PEA	Area redevelopment covers bus &Jeepney terminal, commerce/business and residential developments The Study Team proposes underground station of PNR under C. M. Recto avenue. The area will become most busy multi-modal station area in Metro Manila with 4 stations.
b) EDSA (LRT 1 and LRT3)	Street commercial district along EDSA and Taft and the hinterland is designated as residential district. Construction of a shopping building is on going at the northeastern corner. Two stations will be connected through this building.	No public land Many landownership in the commercial district at the north-western corner A few durable structure buildings at the southeastern and northeastern corners.	The most favorable location for multi-modal station area developments are the northeastern corner followed by the northwestern corner during the short-term period. From the medium to long-term viewpoints after completion of LRT 1 extension project, these corners areas have potential of area redevelopment of commercial and business facilities due to the convenient location as a transshipment point.
c) Monumento	Commercial district along EDSA and Taft and the hinterland is designated as residential district.	Bus and jeepney terminal owned by bus company at the southwestern corner. Shopping buildings at the northwestern and southeastern corners Not so many land ownership at the above three corners	High potential for the multi-modal station area utilizing the bus and jeepney terminal as a base land. Low potential at the southeastern and north western corners due to large-scale shopping center The southwestern corner as best convenient location for the development.
d) Cubao	Commercial/business district at the southeastern corner. Commercial/business district at the other corners and residential area at the hinterlands	No public land Many durable structure building at the southeastern and southwestern corners. A few durable structure building at the northwestern and north eastern corners	Considering location of two stations (MRT 3and LRT 2), the southeastern corner is best candidate location followed by the northeastern corner. However durable structure buildings already occupy these corners. As a result the southeastern corners have low potential and pedestrian deck connected between two stations is needed. The northeastern corner has a difficulty on land acquisition. From the medium to long-term viewpoints, other corners have a potential of commerce/business development, however these areas are unsuitable for the multi-modal station area development.
e) Magallanes	Light Industrial district along the South superhighway and the hinterland is commercial district at the north- and southeastern corners. Mixed residential and commercial district at the northwestern corner. Street commercial district along the South Superhighway.	No public land Not so many landownership due to medium-scale factories at the north- and southeastern corners Many commercial oriented landownership along the South Superhighway at the southwestern corner.	The north- and southeastern corners have high potential of multi-modal station area development after completion of MCX project under the condition of relocation of these factories.

Source: JICA SIRNMM Study Team

8.1.3 Selection of Priority Stations

Selection of the priority station is based on three ranks for each of the criteria mentioned in the above and score of 0, 1 or 3 is given for each rank based on the qualitative reasoning. Maximum score limit is prepared for each evaluation account with total score of 5 for the avoidance of outstanding accounts. No weighting is applied to different evaluation accounts. The prioritization is classified as high priority area more than 14 of the total score, medium one with 10 - 13 score and low one less than 10 score. Evaluation results are shown in Table 8.1.2.

Table 8.1.2 Evaluation Result for Priority Areas for Multi-modal Station Development

Name of Station	Selection Criteria				Total Score	Priority Assessment
	A	B	C	D		
a) C. M Recto (LRT 1, MRT 2, 4 & PNR)	*****	*****	****	****	18	(A rank)
b) EDSA (LRT1 & LRT3)	**	****	****	***	13	B rank
c) Monumento (LRT1 & LRT3)	***	****	****	****	15	A rank
d) Cubao (LRT3 & MRT2)	-	*	*	*	3	C rank
e) Magallanes (LRT3 & MCX)	****	****	****	***	15	A rank

C. M. Recto, Monumento and Magallanes are selected to evaluate for the case study with high rank.

C. M. Recto has relatively high potential of multi-modal station area redevelopment utilizing the site of Manila city jail to be demolished and existing bus terminal as a base land. However the area has being developed by Philippine Estate Authority. Therefore the area is excluded from our study.

In this context, Monumento and Magallanes areas are selected for the case study.

8.1.4 Proposed Land Use Plan of Two Candidate Areas

Proposed land use plans are prepared for two candidate sites, Monumento and Magallanes areas for preliminary design of station facilities and station plaza development.

The land use plans are proposed based on the following condition:

1) Present land use
2) Role of the Station on railway network
3) Socio-economic potential of the station area
4) Policy-oriented for conversion of railway development to major transport mode

Those plans shall be considered to designate in the zoning plans of LGUs in order to avoid disorder development through public intervention.

The land use plans are shown in Fig 8.1.4 to Fig. 8.1.6.

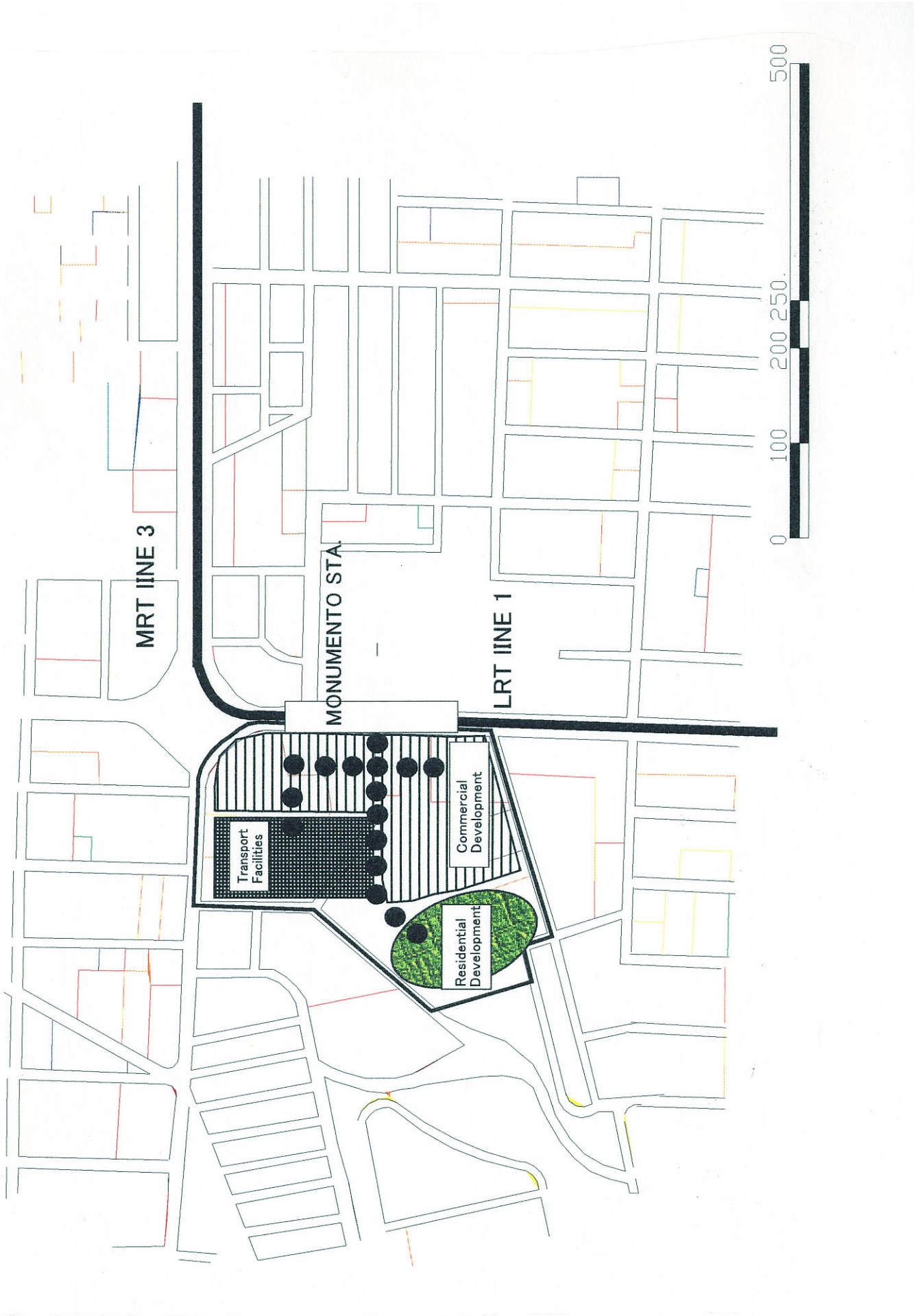

Fig. 8.1.1 Conceptual Multi-Station Area Development Plan, Monumento