

# Alternative Housing Options for Homeless Middle-income Households

Examining the Viability of a Different Housing Options for Homeless Middle-Income Families in the Urban Context



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The National Housing Authority is always at the forefront of providing shelter for the marginalized sectors, due to the huge demand, little emphasis was given to the homeless formal sector of the society. This paper aims to examine a viable housing solution for the **middle-income** (specially renters), who at the very least shy away from being included (yet) in the van wagon of informal sector. The steady increase in the housing demand and the high cost of available lots, Governments intervention is necessary to address the housing needs of this group. With the proposed development of NHA's prime property within North Triangle, Quezon City. production of affordable housing for the homeless formal sector within this vicinity may be worth considering.

## 1 Shelter Situation Analysis

### 1.1 Basic General Data

#### *Geography and Administration*

The Philippines, situated 800 kilometers from Asia's Pacific Coast, is an archipelago of approximately 7,100 islands with a total land area of 300,000 square kilometers (115,830 sq mi). It is located about 4° 40' to 21° 10' degrees from the equator, which accounts for the country's hot and



humid climate, with the average yearly temperature of 26.5°C (79.7°F).

The country is divided into three island clusters: Luzon, Visayas, and Mindanao. It is further subdivided into 17 regions, 81 provinces, 118 cities and 1,510 municipalities. National Capital Region (NCR) is the central region in terms of population and economic activity, as it contains the premier business districts of the country. The working percentage of its 11.55 million people generates a substantial amount of the Philippine GNP. Moreover, NCR serves as the Philippines' seat of government as it houses Manila, the nation's capital city.

The country has a presidential government system, headed by a President, Vice-President and a bi-cameral legislative system, which is composed of a Senate (Upper House), whose members are elected nationwide, and a House of Representatives (Lower House), whose members are elected by their respective districts. Local governance has been largely decentralized after the adoption of the Local Government Code in 1991.

### ***Demography***

The latest nationwide Census revealed that the total Philippine population has reached 88.7 million as of August 2007, making it the 12<sup>th</sup> most populous country in the world. The projected population is estimated at 90.3 million in 2008 and 92.2 million in 2009. Moreover, the country experienced an approximate annual population growth of 2.07% in 2000-2007, 0.29% less than the 5 year period of 1995-2000 (2.36%).

A disproportionate population distribution is evidenced by the obvious difference of density between urban and rural areas. In terms of population, NCR only ranks second amongst regions (lagging behind Region 4's 11.74 million or 13.2% of total). In terms of density however, it is unmatched by any other region: its population density is roughly about 18,160 people per square kilometer, which is incredibly high compared to the Philippines' average of 300.

### *Economy*

The Philippines is classified by the World Bank as a lower middle-income economy, experiencing an annual GNP of \$172.348 billion (as projected for 2008). The per capita income was projected to be around \$1,907 in 2008, steadily rising for past years, from \$1,051 in 2003, and \$1,029 in 2002.

A good number of Filipinos depend on the agriculture sector for their livelihood, as it provides about 40% of the total employment. However, it only contributes 20% to the Philippine GNP. Meanwhile, the industry sector and the services sector (the fastest-growing sector for the past decade) contribute 33% and 47%, respectively. Unemployment rate nationwide is 12.1% in 2004, and is even higher in the urban areas (in 2004, reaching 17.6% in NCR), due to rural poor migration. (ADB Country Economic Review)

## **1.2 Shelter Related Fact and Figures**

### *Accessibility to Shelter*

With a high annual increase in population, the demand for owner-occupied and rented housing also increases. However, the gap between housing supply and demand has also increased substantially in the past years. Housing demand in the country has been growing an average of 800,000 housing units annually. (Finding Shelter in the Philippines) This inadequacy in housing supply is then evidenced by the high incidence of informal settling and a high house prices-to-income ratio.

Santiago Ducay identifies several factors that contribute to this housing deficit: the high population growth rate, proliferation of squatter colonies and low affordability of targeted beneficiaries, spiraling cost of construction materials and land, and low level of housing production (Asian Forum in 2003). The National Economic Development Agency (NEDA) projects an annual backlog of 626,012 housing units in the Philippines for the 5-year period of 2005-2010, with the NCR

accounting for 82,821 (13.2%) of that demand. (Housing Need per Region 2005-2010).

A majority of targeted households are unable to pay for the cost of the delivered housing projects. According to Marife Ballesteros, in 1997, the minimum cost of P150, 000 (approximately \$3,191 today) per housing unit is 3.8 times the annual pay of an unskilled laborer. Moreover, housing prices increase at a rate of 32 percent per year, the highest among its neighboring cities in Asia. (The Dynamics of Housing Demand in the Philippines: Income and Lifecycle Effects)

According to the local economy report in December 2008, Quezon City located at the heart of Metro Manila, is one of the fastest growing metropolitan area in the Philippines today. Recently, it joined the ranks of Hong Kong, Singapore and Taipei, as one of the top 10 Asian cities of the future. Quezon City was ranked number 7 among more than 200 Asian cities, based on the survey commissioned by the London Financial Times through AsiaBiz Strategy, an investment and trade promotion consultancy based in Singapore. The city has 58,196 registered businesses in 2008, rising from 56,810 in 2007 and 56,753 in 2006. The annual average new business entrants total more than 11,000. The completion of new malls such as SM's The Block, Ayala land's Trinoma, Waltermart plus the operationalization of the University of the Philippines(UP)-Ayala Science and Technology Park, virtually an e-community at UP's 38-hectare Commonwealth Avenue property, has contributed to the high average of registrants in recent years.

According to Andres Winston C. Oreta on his paper titled SAFE CITIES- QUEZON CITY, PHILIPPINES( 15 March 2007); Quezon City, with an area of 16,112.58 hectares is the largest among the 12 cities and 5 municipalities in the region and is almost one-fourth the size of Metro Manila. The City is predominantly residential, comprising 45.45% of its land area. The housing shortage is becoming more and more pronounced as the population of QC increases. It is estimated that 41% of the population are in need of Shelter. Quezon City is the most populated city

not only in Metro Manila but in the entire country as well, with a population of about 2.7 million and population density of about 168 persons per hectare. Based on the study of the population growth rate of QC, it is projected that by year 2010, the city's population will reach about 3.4 million. The City's average monthly family income in 1997 is Php 34,502.00 which is higher than Metro Manila's average monthly income of Php 22,583.00. Families belonging to the upper income class, although making up only 16.75% of total families in QC, registered a very high average monthly income of about Php 123,585 which is way above the average income of families of the middle and lower income classes which are Php 28,357 and Php 7,180 (poverty line level set by NSO) respectively.



## 1.2 Housing Policy

In 1992, the Urban Development and Housing Act (Republic Act 7279) became into law, which provided, among others that NHA together with all local government units shall jointly identify sites for possible socialized housing development projects. Republic Act 7279 further provide that the NHA, with respect to lands belonging to the national government and the Local Government Units (LGU) with respect to lands within their respective localities, shall coordinate with each other to formulate and make available various alternative schemes for the disposition of lands to the program beneficiaries, which shall not however, be limited to those involving transfer of ownership in fee simple, but shall include lease with option to purchase, usufruct, or such other variations.

In the succeeding years (1994), the government, being aware of the pressing need to immediately address the housing problem in the urban areas, passed the “Comprehensive and Integrated Shelter Financing Act” (Republic Act 7835) commonly referred to as “CISFA”. The Law basically aimed to maximize utilization of scarce, high urban land cost and to augment the current housing stock. Among the salient provisions of said Act was the identification of the Medium Rise Public and Private Housing as one of the vital components of the National Shelter Program requiring government budgetary assistance. NHA is the agency tasked to formulate policies and guidelines pertinent to the implementation of the programs and further provides an initial amount of Php 3.0 Billion as subsidy allocation for the acquisition, construction and implementation .

## **1.4 Actors in Shelter Delivery and Their Roles**

### **1.4.1. GOVERNMENT SECTOR**

#### **A. Shelter Sector**

The government’s shelter sector is headed by the Housing and Urban Development Coordinating Council (HUDCC), which is tasked to coordinate the activities of the various government housing agencies. HUDCC is also mandated to monitor and evaluate the accomplishments and performance of said agencies.

Under supervision of the HUDCC are the following shelter agencies:

1. Home Guaranty Corporation (HGC), provides loan assistance and other incentives to attract private developers to embark on low and middle-income mass housing.
2. Housing and Land Use Regulatory Board (HLURB), provides technical assistance on land use planning to local government units, and regulates Homeowners Associations.

3. National Housing Authority (NHA), engages in direct shelter production for the lowest 30% of the urban population.
4. Home Development Mutual Fund/ PAGIBIG Fund, takes charge of development of saving schemes for private and government employees' home acquisition.
5. National Home Mortgage Finance Corporation (NHMFC), develops the secondary mortgage market and the Community Mortgage Program (CMP).
6. Social Housing Finance Corporation (SHFC), undertakes the administration of the CMP and other social housing programs.
7. Local Government Units and other support agencies.

#### B. Local Government Units (LGU) and other support agencies

The LGU's of every cities and municipalities in the Philippines headed by the Governors and Mayors are always supportive of the housing programs of the national government. They provide necessary logistical support and guidelines for the smooth implementation of every program. The national government incorporate in its designs the policies, building regulations and distinct guidelines of each LGU district.

Utilities such as water, electrification, road right of ways and other projects concerns are provided for by other support agencies.

#### **1.4.2 PRIVATE SECTORS**

Building contractors, site developers and construction workers plays an important role in the implementation of every housing projects of the national government. They provide the manpower, equipments and expertise necessary for the completion of project. In some projects, the government even tap the private sectors for funding and technical supports in a majority of joint venture projects.

## 1.5 Shelter Design

Philippine President Gloria Macapagal-Arroyo, through Executive Orders 620 and 620A, created the Urban Triangle Development (TriDev) Commission . Chairman is Vice President Noli de Castro; Quezon City Mayor Feliciano Belmonte, Jr. is co-chair; Members are National Housing General Manager Federico Laxa and Deputy Executive Secretary Joaquin Lagonera who represents the Office of the President. The TriDev's mandate is to manage the development and speed up the transformation of the North and East Triangles and the Veterans Memorial area of Quezon City into a model, mixed-use urban community, the Central Business District ( CBD ) of Quezon City.

North Triangle, East Triangle and Veterans Memorial property in Quezon City with a total area of 250.64 hectares is being eyed as the CBD of the City. NHA's property within the proposed CBD is about 66.5%. About 12.42 hectares (5%) of this project is earmarked for residential use. The TriDev commission is still on the preliminary stage of consultation wherein preliminary development plans were being presented and studied. Details and housing designs were not yet tackled by the commission .

Last August 27,2009, Property Giant Ayala Land Inc. signed a joint venture agreement with the National Housing Authority for the development of the 29.1 hectares which serves as catalyst for the development of the CBD area..

For the housing component, high-rise building complex within the CBD area intended for the renters and middle-income earners will be my proposed shelter design for this programme.





## 2 Organization

The National Housing Authority (NHA) is the **sole** National agency tasked to provide quality and affordable housing for low-income families. Created by virtue of Presidential Decree 757 in July 1975, this government-owned and-controlled corporation (GOCC) is mandated to develop a comprehensive socialized housing program for the urban poor, or the lowest 30% income-earners.

The Authority's main Objectives were the following: (1) To provide and maintain adequate housing for the greatest possible number of people; (2) To undertake housing development, resettlement or any other activities that would enhance the provision of housing to every Filipino; and (3) To harness and promote private participation in housing ventures in terms of capital expenditure, land, expertise, financing, and other facilities for the sustained growth of the housing industry. (PD 757) Currently, its 1,574 employees around the country undertake various tasks to actualize these Objectives for efficient housing delivery: implementing Resettlement Programs, designing and construction supervising of various Public (Medium Rise Housing) and Private Housing Projects, the acquisition and development of raw land for these housing projects, among others.

## 3 Shelter Problem

The Government's efforts have long been focused on the urban poor, most of whom comprise the informal settlers (squatters) within the urbanized areas. The National Housing Authority has developed a total of 1,738 housing projects from 1975 up to 2008, which yielded a total of 794,346 housing units (roughly 24,070 units a year), most of which are socialized units awarded to informal settlers as per relocation projects. However, housing assistance for other non-homeowners has to be considered as well. Rental housing and/ or housing for the middle-income earners comprises a major component in the housing sector.

While the Government efforts focus on subsidizing the lowest 30% income earners (usually the informal settlers) and the private sector focuses on the highest

30% income earners for profit, it seems that the middle 40% income earners (formal settlers) usually end up renting small rooms/ units, without acquiring these properties in the long run.

As the Government targets to market affordable housing mostly to the informal settlers (squatters), the homeless middle income earners often resort to buying rights/awards from the beneficiaries. With lack of affordable rental housing for this sector, many of them even consider joining the bandwagon of informal settlers in the cities.

Hence, there is a need to examine alternative housing options for this often-neglected housing sector. This is important in relation to the low-income sector as well, because it should be assured that the Government's housing efforts do reach its intended beneficiaries. The limited housing options for the mid-income households can be an underlying cause (albeit indirectly) for an inefficiency in the low-income housing delivery. With proposed solutions to this problem, an improvement in the socialized housing system may be observed.

## Proposal for change and improvement

Since NHA is basically tasked with the production of socialized and low-cost housing in the country, It is my opinion that it is high time to venture on the production of affordable high-rise housing project for the middle-income and renters of Metro Manila, particularly Quezon City. The proposed location of the project is the north triangle area presently owned by the NHA. The cost of the property per square meters in that area in 2007 is Php 25,000 to Php 45,000.



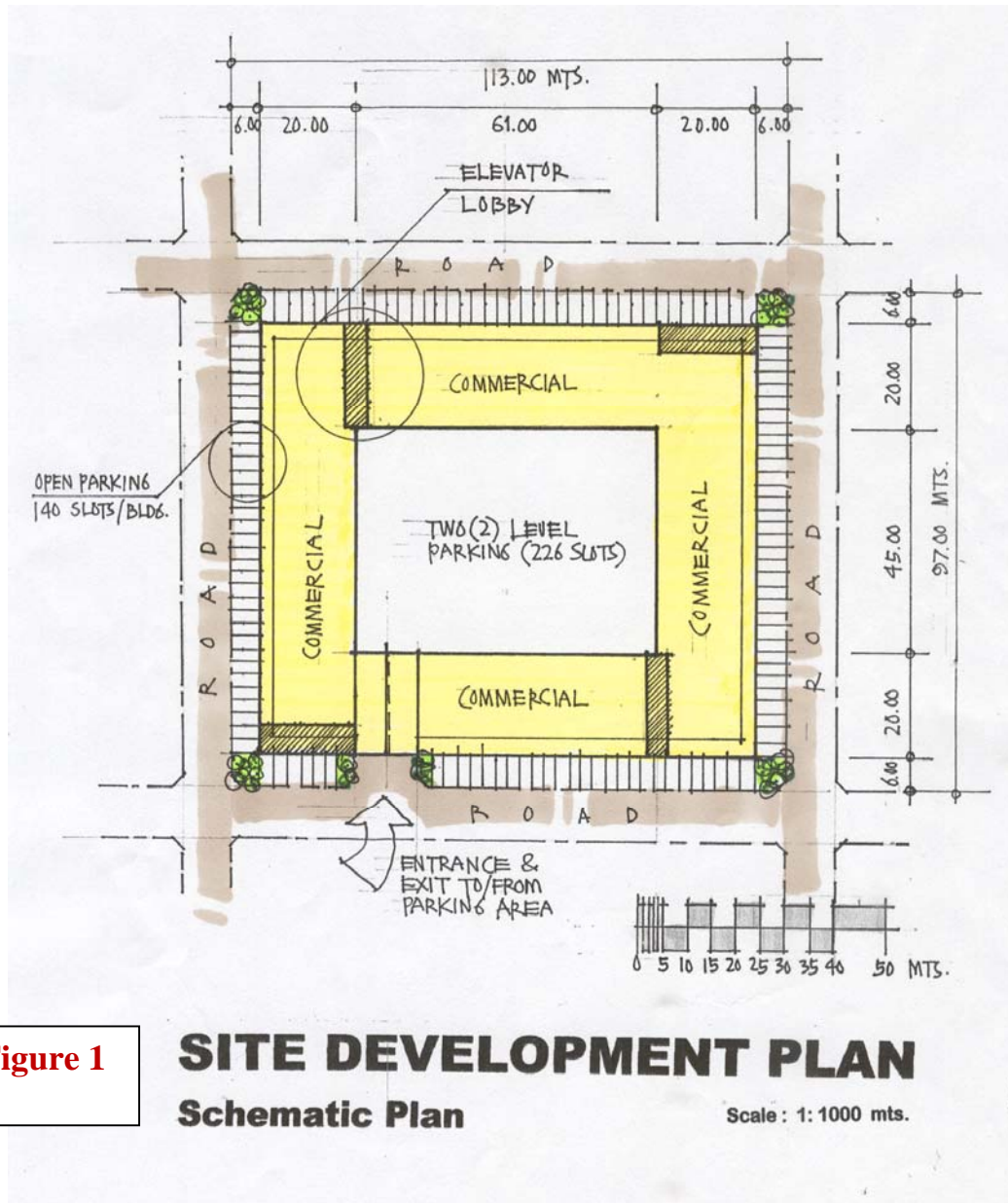


The proposed high-rise housing project is envisioned to have the following designed criteria ;

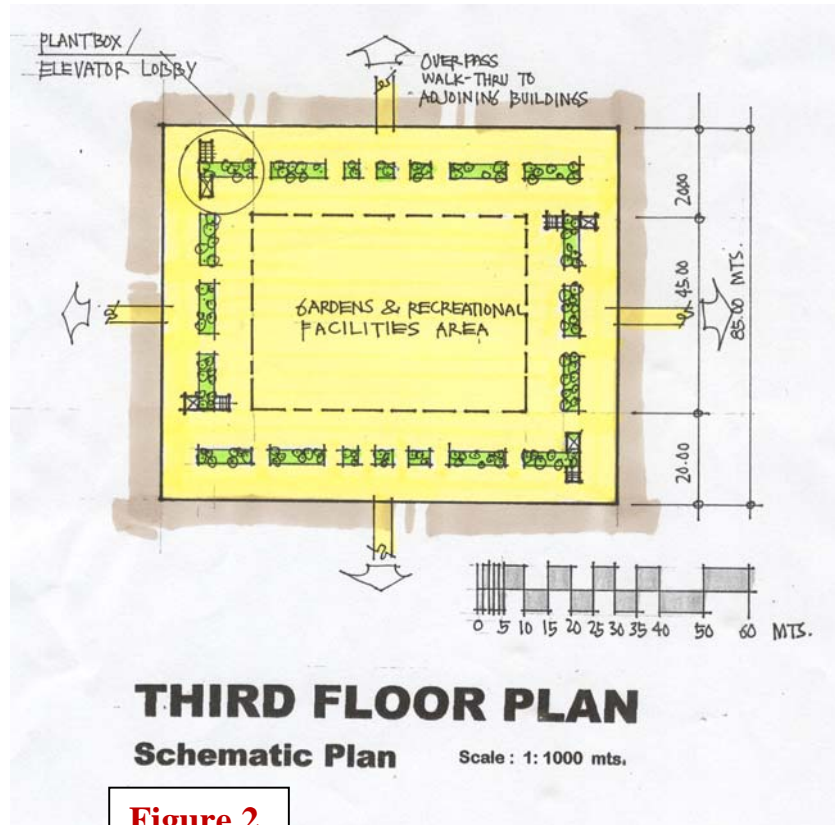
- a. To separate walking /common area from vehicular traffic by elevating these area by about 5.00 mts. from the road level ( pictures provided taken at Stockholm and Copenhagen serves as inspirations of the design).
- b. Minimum ratio of 1 parking slot per 5 housing units.
- c. Residential units can accommodate expansion of floor space.
- d. The project building provides amenities such as commercial areas, nursery school,daycare,etc.

The proposed building can be contained on a 10,961 sq. mts.(113.00 m.x 97.00 m.) property. A two (2) level parking is to be located at the inner square of the building which can accommodate 226 parking slots ( 2.5 m. x 5.00 m.). Additional open area of 138 parking slots ( 2.5 m. x 6.00 m.) is to be located within the

periphery of the building. The first two (2) floors shall be allocated for commercial and institutional use ( stores, schools for nursery, daycare, business establishments, etc.). ( Fig. 1,Site Development Plan).



The Residential activity area/ Common Area starts on the 3<sup>rd</sup> Floor where the whole floor is intended for open spaces, gardens, walking areas, sports facilities, etc. This area is about 5.00 mts. above the existing ground elevation and can be connected at any point to other similar buildings by overpasses / walking bridges; thus separating people from vehicular traffic. The total floor area of this Common



**Figure 2**

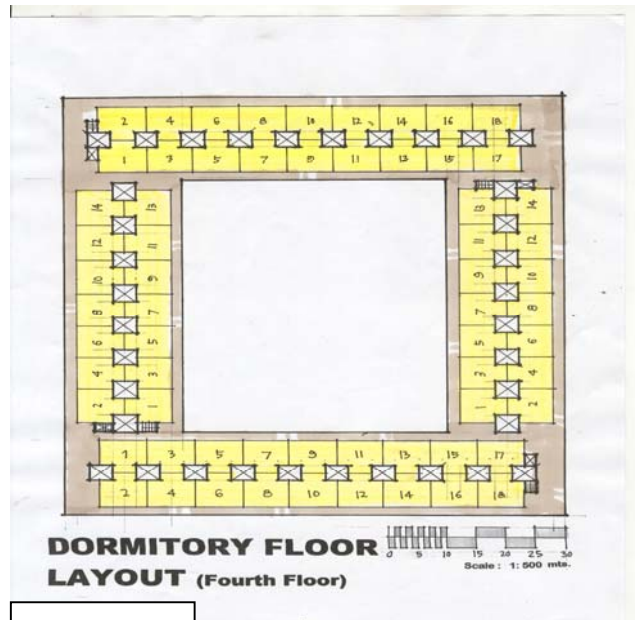
Area shall be open on all sides to maintain good natural ventilation for the residential units. ( Fig.2, Third Floor Plan and Picture 1)

**Figure 2 :** open spaces, gardens, common areas and walking space shall be elevated to separate people from vehicular traffic. These common areas shall be interconnected to provide ample space for movement and ease.

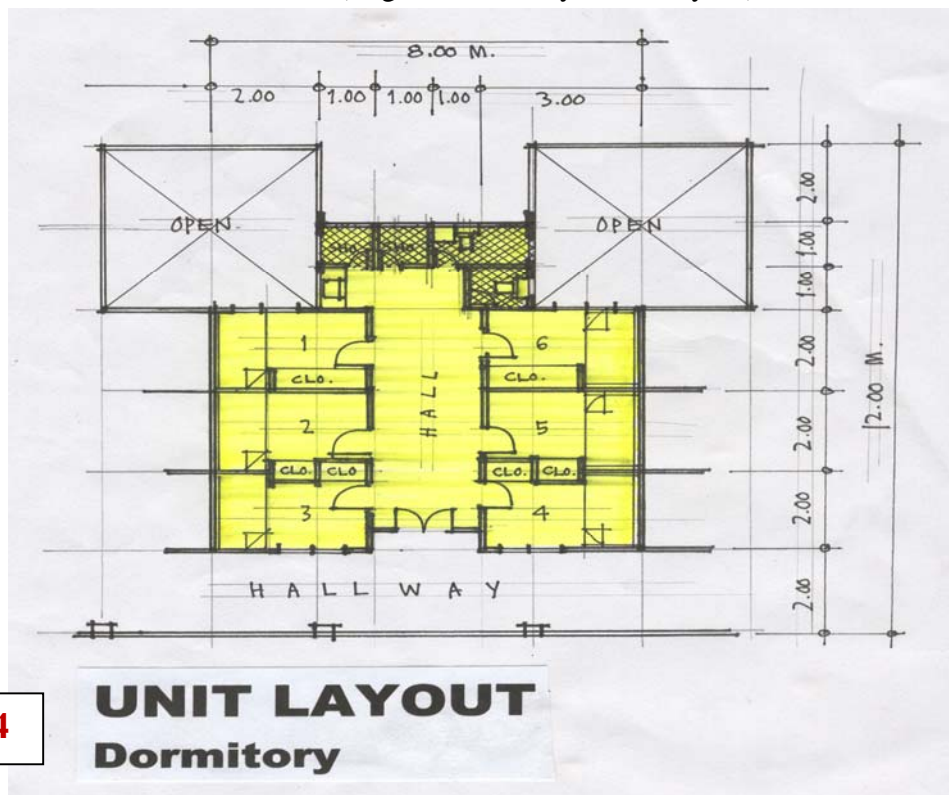
**Picture 1:** taken in Stockholm :Common area would be elevated to separate people from vehicular traffic.



Considering that the proposed building shall be located within the Central Business District of Quezon City, a dormitory floor that can accommodate 384 rooms (presumably with double deck beds/room) a cluster of six(6) bedrooms with common service area is being planned for inclusion in the building, ( Fig.4, Dormitory Unit Layout). This floor shall be accessible by stairs only and shall be located on the fourth floor ( Fig. 3, Dormitory Floor Layout)



**Figure 3**

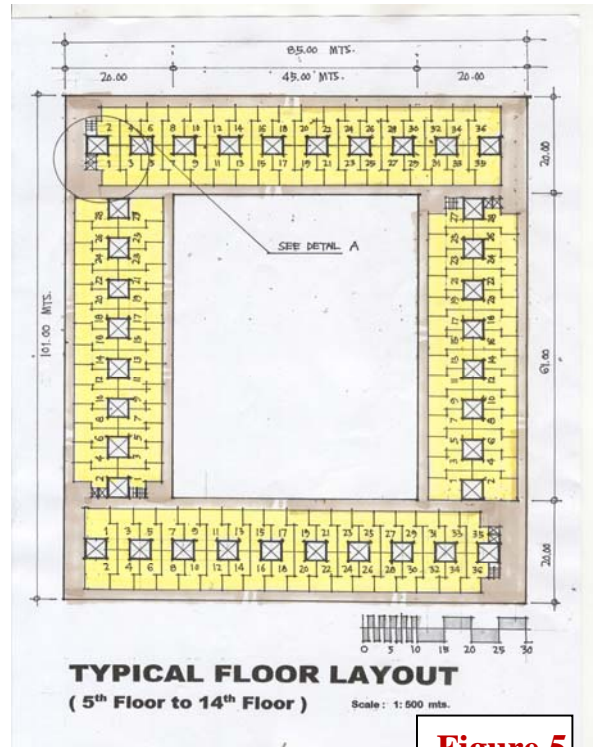


**Figure 4**

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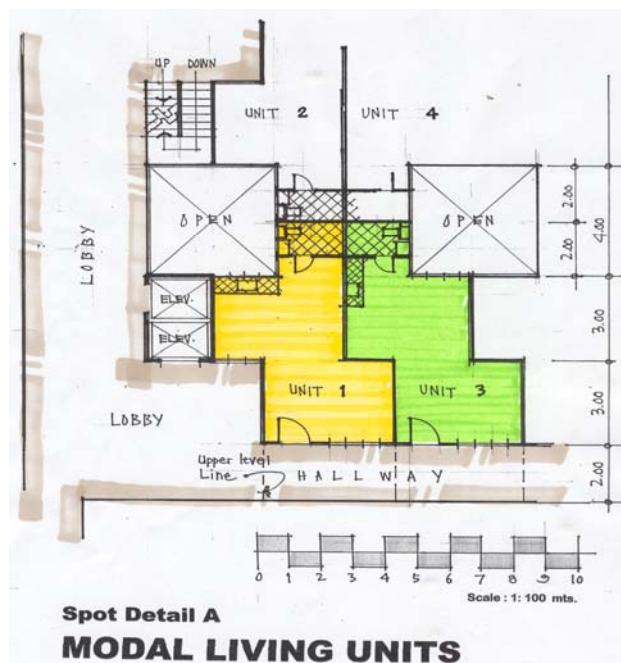
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Starting on the 5<sup>th</sup> Floor up to the 14<sup>th</sup> Floor would be the residential floors that can accommodate 120 units of 36.00 sq. mts and 8 units of 44.50 sq. mts. ( 128 residential units per floor). Each floor shall be serviced by eight (8) units of elevators ( 2.50 m. x 2.20 m) and four(4) emergency stairs located at the four corners of the building. All units shall be accessible thru a 2.00 mts. wide hallway. Each unit has ample natural/cross ventilation provided for by 4.00 m. x 4.00 m. ventilation shaft located at the rear portion of each unit. ( Fig.5, Typical Floor Layout ). It

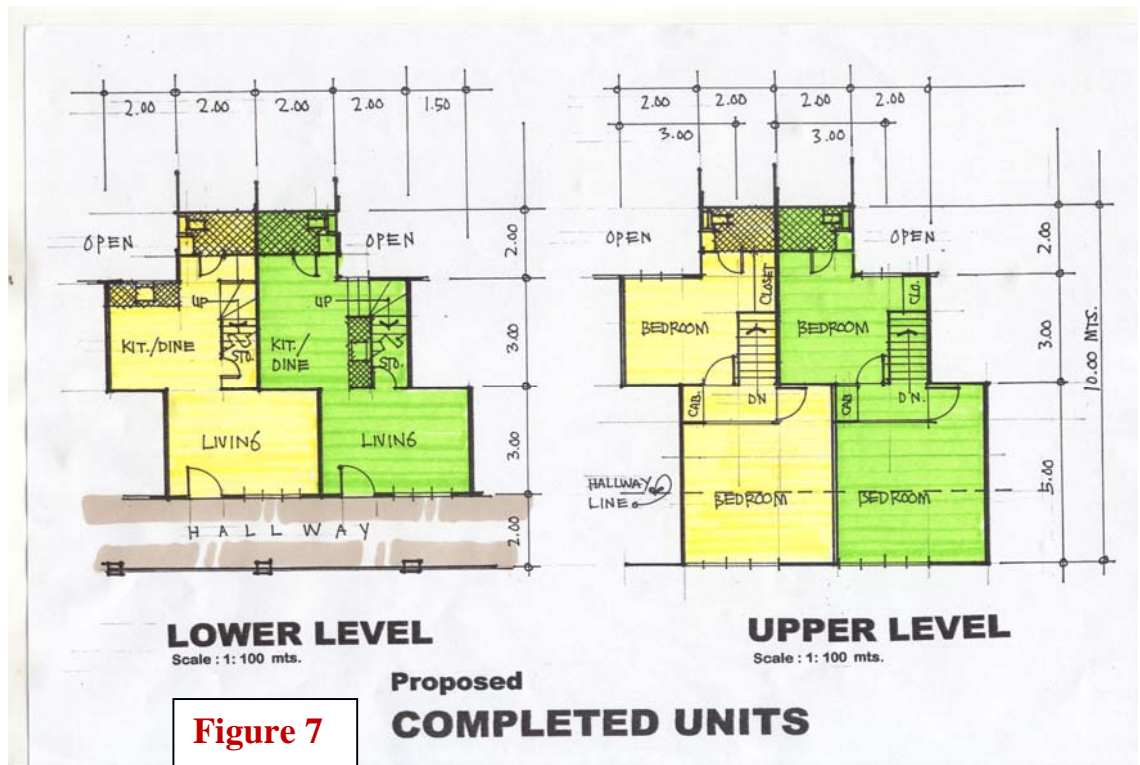


**Figure 5**

can be observed that the plan of the unit was indented by 1.50 mts. on the rear portion, it was done to create an illusion of space and creativity with the design (Fig.6, Modal Living Units).

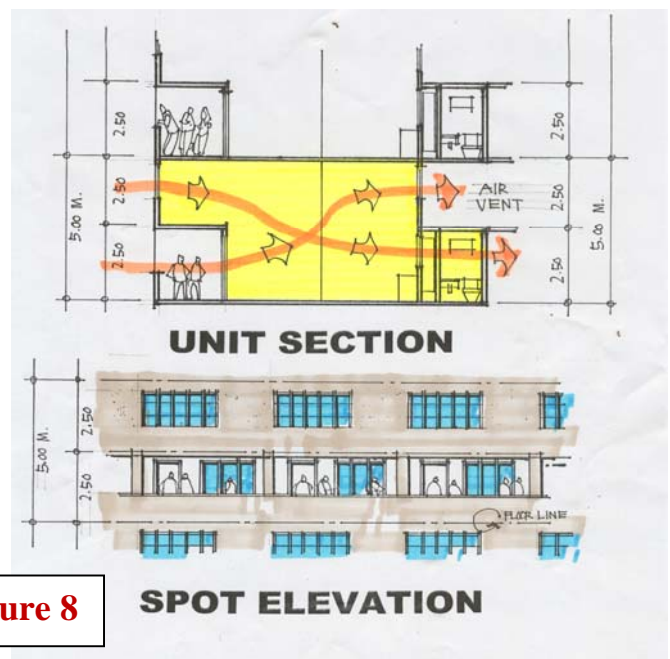


**Figure 6**



**Figure 7**

At the awardees/beneficiaries expense, each modal living units can be expanded and or modified from 36.00 sq.mts. to a maximum of 68.00 sq. mts.( Sample is on Fig.7, Completed units). The problem of privacy is tackled a bit with the concept of locating the bedrooms on the upper floor, away from the traffic of the hallways and common areas ( Fig.8, Spot Elevation)



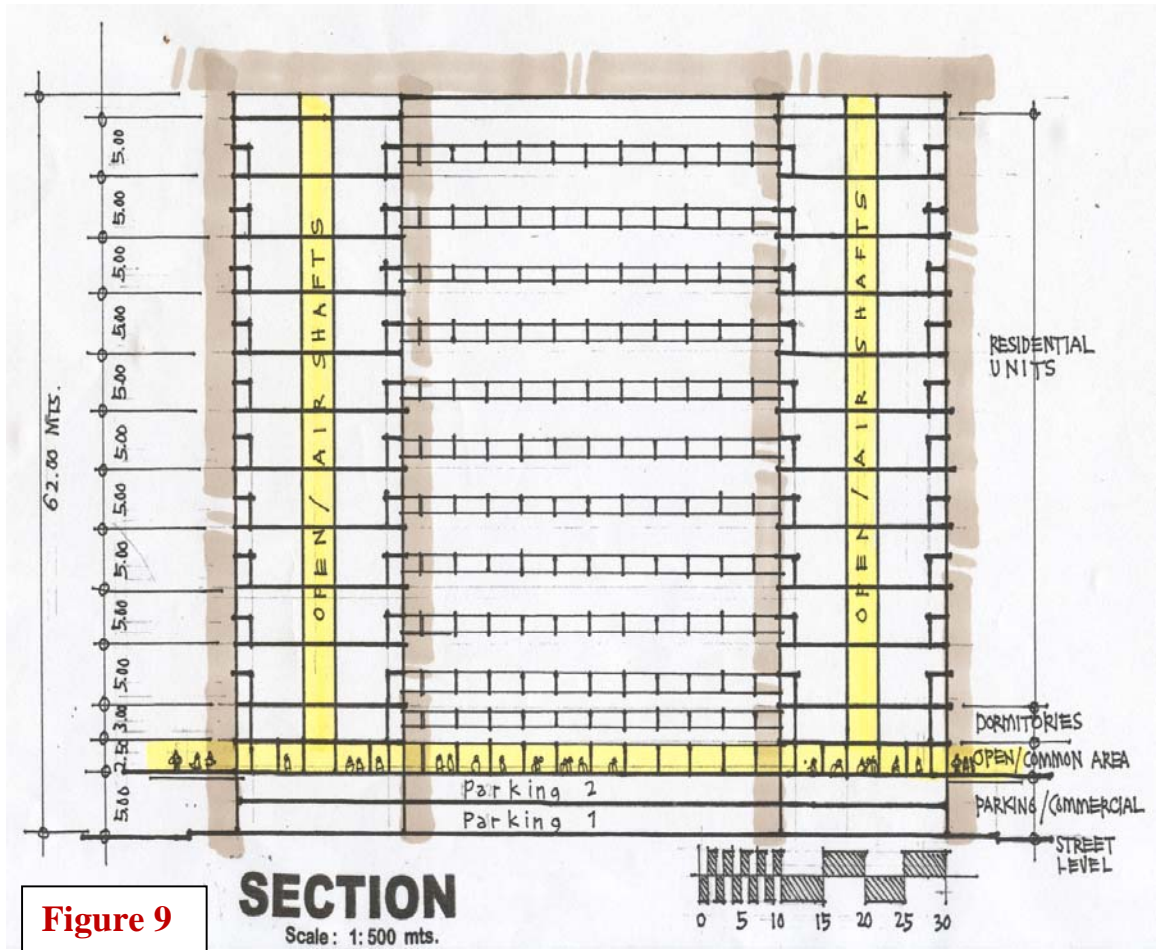
**Figure 8**

Natural ventilation is properly



considered in the design by providing ventilation / air shaft at the rear portion of each unit and adequate windows to provide good cross ventilation( Fig.8 Unit Section and Figure 9).

From the common area at the 3<sup>rd</sup> floor which is open on all sides, air passes freely on the air shaft provided for each unit ( Fig.9, Section), this common area provides the space where people can interact with each other ( jog, walk, play, etc.). From this level, a walk up stair is accessible on the each corner of the building which serves as access to the Dormitory Floor located at the next level.



**Figure 9**

## Cost Consideration

### Computation for Unit / Building Cost

1.0 Land Area = 10,961 sq. mts.

- directly occupied by the building = 5,840 sq. mts.
- occupied by two (2) level parking = 2,745 sq. mts.
- open area w/in the bldg. periphery = 2,376 sq. mts.

### 2.0 Space Distribution

2.1 Total Floor Area = 83,659 sq. meters

- 2.1.1 Ground & 2<sup>nd</sup> Floor ( comm'l,inst'l,parking,etc) = 17,170 sq.m.
- 2.1.2 3<sup>rd</sup> Floor ( Common area, garden,etc) = 8,585 sq.m.
- 2.1.3 4<sup>th</sup> Floor ( Dormitories) = 5,264 sq.m.
- 2.1.4 5<sup>th</sup> to 14<sup>th</sup> Floor (Residential units @ 5,264 sm/flr.) = 52,640 sq.m
- 2.2 Non-marketable area ( Service area ) = 16,229 sq. meters
- 2.2.1 Ground & 2<sup>nd</sup> Floor ( hallways and service areas) = 1,176 sq.m.
- 2.2.2 3<sup>rd</sup> Floor ( Common areas, gardens,etc.) = 8,585 sq.m.
- 2.2.3 4<sup>th</sup> to 14<sup>th</sup> Floor ( Service areas @ 588 sm./flr ) = 6,468 sq.m.
- 2.3 Projected Project Cost (PPC) = Php 2,210,162,500.00 per building
- a. Cost of land
- 10,961 sq. mts. @ Php 45,000 per sq. meters = 493,245,000.00
- b. Building Construction Cost
- 83,659 sq. mts. @ Php 15,000 per sq. meters = 1,254,885,000.00
- Eight (8) units elevators @ Php 2,500,000/unit = 20,000,000.00
- c. Indirect cost ( 25% of Direct Cost ) = 442,032,500.00

### 2.3 Affordability Analysis

“ The City’s average monthly family income in 1997 is Php 34,502.00 which is higher than Metro Manila’s average monthly income of Php 22,583.00. Families belonging to the upper income class, although making up only 16.75% of total families in QC, registered a very high average monthly income of about Php 123,585 which is way above the average income of families of the middle and lower income classes which are Php 28,357 and Php 7,180 ( poverty line level set by NSO) respectively. “

- a. Cost per sq.mts. = Project Cost (PPC) divided by Total Marketable Area  
= 2,210,162,500 / 67,430 sq. mts. = 32,777,139 say Php 33,000/m2

b. Cost per Unit ( Modal Unit)

$$\text{Modal unit} = 36.00 \text{ sq. m.} \times 33,000/\text{sq.m} = \text{Php } 1,188,000^1$$

( Usd 24,750.00 )

$$\text{Bigger unit} = 44.50 \text{ sq.m.} \times 33,000/\text{sq.m.} = \text{Php } 1,468,500$$

( Usd 30,593.75 )

$$\text{Dormitory unit} = 64 \text{ sq.m.} \times 33,000 = 2,112,000/6 = \text{Php } 352,000$$

( Usd 7,333.33 )

c. Fair Lease Rate Computation through Band of Investment Method

$$\text{Fair Lease Rate of Unit ( LRU)} = \frac{\text{FMVU} \times \text{PRAFU}}{12 \text{ months}}$$

Where :

FMVU = Prevailing Fair Market Value of Unit

PRAFU = Prevailing Rental Rate Appraisal Factor for the Unit (7.5% )

$$\text{Modal Unit} = 1,188,000 \times 7.5\% / 12 \text{ months} = \text{Php } 7,425.00/\text{month}$$

$$\text{Bigger Unit} = 1,468,500 \times 7.5\% / 12 \text{ months} = \text{Php } 9,178.13/\text{month}$$

$$\text{Dormitory Unit} = 352,000 \times 7.5\% / 12 \text{ months} = \text{Php } 2,200.00/\text{month}$$

**Applicable Housing Loan Amortization Table ( Thru Pag-ibig Fund)**

Interest Rate	Loanable Amount (Php)	Loan Amortization ( Principal + Interest) /month / Loan Terms in Years					
		5	10	15	20	25	30
8.5%	1,000,000.00	20,516.53	12,398.57	9,847.40	8,678.23	8,052.27	7,689.13
9.5%	1,150,000.00	24,152.14	14,880.72	12,008.59	10,719.51	10,047.52	9,669.82
9.5%	1,200,000.00	25,202.23	15,527.71	12,530.70	11,185.57	10,484.36	10,090.25
10.5%	1,400,000.00	30,091.46	18,890.90	15,475.59	13,977.32	13,218.55	12,806.35

<sup>1</sup> Exchange rate to the US Dollar was computed at Php 48.00 to a Dollar

## **Cost Comparison**

1.0 The “ Grass Residences “, a high rise condominium located about 1.50 kilometers from the proposed site is being sold at the following rate :

- 22 to 32 sq. mts. @ Php 1.9 to Php 2.5 Million ( \$ 39,583.33 to 52,083.33 )
- 46 to 52 sq. mts. @ Php 4.8 to Php 5.2 Million ( \$ 100,000.00 to 108,333.33)
- 63 to 68 sq. mts. @ Php 6.8 to Php 7.0 Million ( \$141,666.66 to 145,833.33)

2.0 Based on Newspapers , Ads and actual random surveys conducted within nearby Barangays, rental units with an area of 9.00 sq. meters to 30.00 sq. meters are being offered and/or rented at a rate of Php 4,000 to Php 18,000.

## **Conclusion**

Based on the preliminary data and computation, the proposed project is viable and affordable to the target clientele. The projected amortization is within the range of monthly rental for the target beneficiaries, thus, return of investment (ROI) may not be a problem for the government.

The recent flooding which affected most of the residential areas within Metro Manila may also be a contributing leverage to consider future housing projects above ground.

The National Housing Authority though mandated to provide housing for the homeless has not yet ventured on this kind of project, being the present owner of the proposed site maybe a factor in giving this proposal a chance for consideration.

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