

**MARA INSTITUTE OF TECHNOLOGY**

**PROPOSAL FOR ADAPTIVE RE-USE ON PRE-WAR URBAN SCHOOLS**

**Case Study:**

**( Former ) St.Mary's Girls' School, No.7, Jalan Tengah, Kuala Lumpur**

**By**


**ROSLAN SALIM  
97012215**


**DISSERTATION**

**Presented to the Faculty of Architecture, Planning and Surveying  
of  
MARA Institute of Technology  
in Partial Fulfillment  
of the Requirements  
for the Degree of**

**BACHELOR OF BUILDING SURVEYING ( HONOURS )**

**APRIL 1999**

  
.....  
**ROSLAN SALIM  
ITM 97012215**

  
.....  
**AMRAN ABDUL RAHMAN  
Supervisor**

## **Abstract**

The main purpose of this dissertation is to study the potential development programme for urban pre-war schools, which were to be relocated elsewhere away from urban setting. When such situation happens, these schools will have to be carefully proposed for adaptive re-use so that it benefits everyone, especially both the developers and the local community.

**The St.Mary's Girls' School**, in Jalan Tengah Kuala Lumpur ( within the 'Golden Triangle ' ) was recently relocated to Taman Intan Baiduri Kepong Kuala Lumpur due to improper planning strategy and improper design proposal. The buildings are now left unattended and in very poor condition. If no proper development programme is proposed, the buildings will be declared unfit to live and demolition order will follow suit.

In this study, the author is therefore involved in finding a suitable new use for the pre-war school buildings, so that on the overall context of the site, preserving the old pre-war buildings will be seen as the catalyst to the overall development into the site.

**Adaptive re-use** of the pre-war buildings and redevelopment of the overall former school site has been seen as the approach to conserve the pre-war buildings and enhancement the environment of the site. Based on the location aspects and property market values ( theoretical-practical aspects ), the most suitable new use will be proposed and envisaged.

# TABLE OF CONTENT

TABLE OF CONTENT	i
LIST OF TABLES, DIAGRAMS AND PHOTOGRAPHS	ii
ABSTRACT	iii
ACKNOWLEDGEMENT	iv
<b>CHAPTER 1- INTRODUCTION</b>	
1.0 PREFACE	1-1
1.2 ADAPTIVE RE-USE OF SCHOOL BUILDINGS	1-4
1.3 ISSUES RELATING TO ADAPTIVE RE-USE OF PRE-WAR URBAN SCHOOLS	1-6
1.3.1 School buildings are in danger of demolition due to proposal for redevelopment.	1-6
1.3.2 Redevelopment programs seemed to be less sensitive to historical buildings.	1-6
1.3.3 Developers' view- Schools are no longer suitable in the city.	1-7
1.3.4 Currently few schools are listed under the Heritage Building Inventory.	1-7
1.3.5 Adaptive re-use is the popular option and current trend of today's development.	1-8
1.4 AIM OF STUDY	1-8
1.5 OBJECTIVES	1-9
1.6 HYPOTHESIS	1-9
1.7 SCOPE AND LIMITATION OF STUDY	1-10
1.8 RESEARCH METHODOLOGY	1-10
<b>CHAPTER 2- THEORETICAL STUDY OF ADAPTIVE RE-USE</b>	
2.0 PREFACE	2-1
2.1 PRINCIPLES OF ADAPTIVE RE-USE	2-2
2.2 ADAPTIVE RE-USE ACTIVITIES IN MALAYSIA	2-5
2.3 FACTORS AFFECTING ADAPTIVE RE-USE	2-7
2.3.1 Governing bodies / charter on conservation.	2-7
2.3.1.1 Listing of Historic / Heritage Buildings	2-9
2.3.2 Statutory Requirements Affecting Re-Use / Conservation	2-11
2.3.2.1 Antiquities Act, 1976 ( Act 168 )	2-11

	2.3.2.2 Town and Country Planning Act 1976 ( Act 172)	2-13
	2.3.2.3 Local Government Act 1976 (Act 171)	2-14
	2.3.2.4 Federal Territory (Planning) Act 1982	2-14
	2.3.2.5 Land Conservation Act,1960	2-14
2.3.3	The Scale of development / Re-use option.	2-16
2.3.4	The Technical Aspects Of Re-Use	2-19
	2.3.3.1 New facilities demand new spaces: Renovation and upgrading the internal layout.	2-19
	2.3.3.1.1 Upgrading the thermal performance and Climatic Control: Heating and Cooling	2-21
	2.3.3.1.2 Upgrading the acoustic performances of existing elements.	2-22
	2.3.3.1.3 Fire and Safety Requirements: Upgrading the fire resistance of the existing element structure and escape route.	2-23
	2.3.3.1.4 Preventing rainwater penetration through roofs.	2-24
	2.3.3.1.5 Lighting: How the building was originally Lighted.	2-25
	2.3.3.2 Preservation of existing building.	2-25
2.4	ADVANTAGES OF ADAPTIVE RE-USE	2-26
	2.4.1 Economic Advantages.	2-26
	2.4.1.1 Older buildings are more efficient.	2-27
	2.4.1.2 The availability of the existing infrastructure and space to accommodate for multi-purpose.	2-28
	2.4.1.3 Labour intensive and create jobs.	2-28
	2.4.1.4 'New' findings –new historical artifacts and knowledge.	2-28
	2.4.2 The Architectural Advantages.	2-29
	2.4.3 The Social Advantages.	2-29
2.5	CONCLUSION	2-29

<b>CHAPTER 3-</b>	<b>REDEVELOPMENT OF A PRE-WAR SCHOOL SITE:</b>	
	<b>A Developer's Proposal.</b>	3-1
3.0	PREFACE	3-1
3.1	SITE LOCATION	3-2
3.2	BACKGROUND OF SITE	3-3
3.3	DEVELOPER'S REDEVELOPMENT PROPOSAL	3-4
	3.3.1 Current Status of Site	3-4
	3.3.2 Stages of Redevelopment	3-6
	3.3.2.1 Feasibility Studies.	3-6
	3.3.2.2 Statutory Procedures.	3-9
	3.3.2.3 Design Concept and Layout.	3-12
	3.3.2.4 Traffic Flow: Vehicular and Pedestrian Circulation.	3-15
3.4	CONSERVATION ACTIVITIES.	3-16
3.5	CONCLUSION.	3-18
<b>CHAPTER 4-</b>	<b>DEVELOPMENT OF SCHOOL SITES.</b>	4-1
4.0	PREFACE	4-1
4.1	SCHOOL'S DEVELOPMENT IN KUALA LUMPUR CENTRAL AREA	4-2
	4.1.1 Kuala Lumpur Structural Plan	4-2
	4.1.2 Total Number of Schools in Kuala Lumpur	4-3
	4.1.3 Number of Students	4-4
4.2	Ministry of Education	4-5
	4.2.1 National Education Policy	4-7
	4.2.2 On the issue of Premier Schools a.k.a pre-war school sites	4-8
	4.2.3 Rational	4-11
4.3	Kuala Lumpur City Council	4-12
	4.3.1 Role of Kuala Lumpur City Council	4-12
	4.3.2 DBKL general policies on development	4-15
	4.3.3 DBKL's view on schools' development	4-16
	4.3.3.1 Existing school problems according to DBKL	4-17
4.4	Federal Department of Town & Country Planning	4-19
	4.4.1 School Planning Criteria	4-20
4.5	The Schools' Opinion	4-22
	4.5.1 Physical Urban Problems Relating To Urban Schools	4-22
	4.5.1.1 Land scarcity- Lack of school compound	4-22
	4.5.1.2 Road Safety	4-23
	4.5.1.3 Unsuitable school location	4-24