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ISSUES IN FACILITIES MANAGEMENT AND MAINTENANCE A MALAYSIAN PERSPECTIVE

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FIRE RISK ASSESSMENT IN MAINTENANCE MANAGEMENT THE CASE OF HERITAGE BUILDINGS IN MALAYSIA

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1.1 INTRODUCTION

There is a growing interest in the adaptive re-use of heritage buildings and converting existing building stock into new functions. Bacon (2001) describes adaptive re-use as a method of renovating old buildings to accommodate new uses. It also represents a common means of preserving heritage buildings by providing economically viable alternatives to find new uses for vacant deteriorating structures, underused structures or building demolition in the cities. In Kuala Lumpur, there are currently many buildings that have adopted this concept of conservation. However, in doing so, fire safety and fire risks are significant issues that must be taken into consideration. These represent inherent risks associated with the adaptive re-use of buildings.

Due to these trends, there must be an assessment of the inherent fire risks and hazards in such heritage buildings. The protection of heritage buildings from fire damage is important as most of these buildings were built without much thought given to fire protection (Ab. Wahab, 2001). Historic (heritage) buildings also pose a particular risk in relation to fires due to their building materials, construction techniques, their use and often, within the sites where they are located (Larsen and Marstein, 2000). The spread of fire in heritage buildings is aggravated by the nature of the historic fabric such as the building materials and void in buildings (Kidd, 2001). For example timber is used excessively as part of their structure and architectural elements of heritage buildings and timber structures are particularly vulnerable to fire. The situation is worsened with the non-existence of automatic fire detection or extinguishment systems in the majority of heritage buildings which will further exaggerate the fire risk.