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KEY WORD: AIR TEMPERATURE / BUILDING / NATURAL SITE ELEMENT / EFFECT

WICHAI ITTIVISAWAKUL : THE EFFECTS OF NATURAL SITE ELEMENT TO AIR TEMPERATURE AROUND BUILDINGS.

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This thesis is to study the changes of natural environmental condition that affect the air temperature such as sunlight, wind direction or relative humidity, trees, water body ground covering plants, soil and environmental condition created by human like concrete parking lot, To study and find out the comparison of the advantages and disadvantages. Due to the increasing and decreasing changes of air temperature surrounds the building. As advantages in designing environmental condition around the buildings where as reduce the differences between the air temperature inside and outside the building (ΔT).

This research study is to compare the exactness of natural diversion and things created by human. Specify into 4 stages, Firstly : is to study the transform of air temperature in different high level by natural environmental condition in 3 types, compare with parking space. Secondly : is to study the temperature of the soil and water in different depthness of environmental condition under the big trees and wide field ground. Thirdly : is to study the changes of air temperature under the trees in many sizes. Fourthly : is to study the changes of air temperature that affect the wind direction by different environmental condition. By keeping the data every one hour for consecutive 48 hours.

The outcome found that, environmental condition in micro climate consist of natural diversion like trees, ground covering plants water source, and wind direction have the concept that air temperature will decrease into 3°C - 5°C . While the air temperature have high value compare the environmental condition in macro climate in the surrounding of Department of Meteorology, Don Muang and lower than the surrounding which the environmental condition is a concrete parking area 3°C - 10°C . That able to use in designing environmental condition around the building, in order to reduce the differences value between the temperature inside and outside the building (ΔT)

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