SUMMARY

The Building and Construction Authority, BCA (formerly known as the Construction Industry Development Board) had since 1992 set up the Buildable Design Appraisal System (BDAS) to spearhead the construction industry to achieve better buildability practices. The BDAS was revised consistently to keep up with the latest trends in buildable construction and it is currently at the fourth edition.

Recently, the BCA announced its intention to legislate the submission of Buildability Score in the near future. The Code of Practice on Buildable Design is at the final draft stage with the purpose of guiding the industry on submission requirements for obtaining buildability approval. When legislated, the BCA, before approving the Building Plans, will also be checking the Buildability Score of the proposed development to see if they meet the minimum Buildability Score requirements.

Much earlier in 1989, the BCA launched the Construction Quality Assessment System (CONQUAS) as a national quality yardstick to encourage the industry to systematically deliver quality construction.

Similar to BDAS, the CONQUAS is periodically updated to keep pace with the latest advancement in technology as well as the quality expectation of the population. The current fifth edition, renamed as CONQUAS 21, was launched with the Bonus Scheme for Construction Quality (BSCQ) for public projects.

CONQUAS has been well received by the contractors and many have benefited from the Bonus Scheme especially for public projects.

However, it seems that the public sector, namely, the Housing and Development Board (HDB), former Public Works Department (PWD), Jurong Town Corporation (JTC) etc., had been the ones promoting BDAS. The private sector seems to be unwilling or slow in
adopting the BDAS as the guideline for private development projects. With the imminent legislation for buildability, there is a pressing need to understand the reluctance in embracing buildability, the industry’s readiness to accept buildability and the benefits of adopting BDAS.

The main objective of this dissertation is to investigate whether the practice of buildable design would enhance construction quality or simply “high BDAS scores would lead to high CONQUAS scores”. The other objectives are to understand the industry awareness, willingness to be trained for buildable design and its receptiveness in using the BDAS as a national indicator to measure buildable design.

A case study based on BDAS and CONQUAS scores of past projects was obtained from BCA to analyse its relationship. A questionnaire survey was conducted to reinforce the initial findings from the case study.

In the survey, the consultants’ perceptions and degree of acceptance of the BDAS, as well as their views on the relationship between BDAS and CONQUAS were examined.

The study concluded with both the case study and the questionnaire survey establishing whether BDAS has measured productivity accurately and if there is a link between BDAS and CONQUAS.