TAYLOR'S UNIVERSITY

Wisdom • Integrity • Excellence

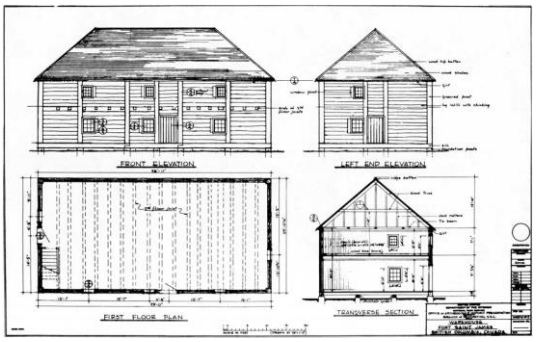
SCHOOL OF ARCHITECTURE, BUILDING & DESIGN
Modern Architecture Studies in Southeast Asia Research Unit (MASSA)
Bachelor of Science (Honours) (Architecture)

METHODS OF DOCUMENTATION AND MEASURED DRAWINGS [ARC 1215]

Project: 2
Measured Drawing
50% of final marks (Group work with 15% individual components)

Submission date: 2 March 2015

Introduction



This project will be carried out throughout the semester where students will be assigned to measure and document a historical / heritage building and translate all the data into a set of drawings and a model. Each group will have to only measure one particular building assigned by the lecturer. Apart from doing the measuring exercise on site, students will also need to do additional research in order to piece together all the important data about the building.

Objectives of Project

This project aims to produce a set of measured drawings of historical buildings or structures in a specific location. A report containing important and historical information of the buildings will complement the drawings. It is an on-site exercise where students are required to execute fieldwork and hands-on measurement exercise

Learning Outcomes of this Project

Upon successful completion of the subject, students will be able to:

- Recommend the appropriate method of architectural historic documentation
- Recognize and recall techniques of measured drawing and documentation
- Explain the as-built building constructions, architectural details and elements

- Interpret historic architectural element, structure and building
- Execute fieldwork and hands-on measurement exercise
- Translate measured data into scaled drawings
- Produce a report on the buildings highlighting its importance and historical significance

Tasks

In groups of certain number of students, depending on the size and complexity of the building to be measured, students are to do a measuring exercise on the particular building, taking all physical information of the building, from its location to its spatial layout as well as details. Each group will be given laser measuring devices and a 30 meter measuring tape. Students may bring along additional tools such as papers, pencils, clay and camera that may be useful in getting and recording all the data obtained.

It is **COMPULSORY** for all students to attend this field work as it is the most important part of this module.

Submission Requirement

2 set of A1 sized drawings (one with dimensions and one without dimensions) and 2 sets of A3 sized drawings (both without dimensions) comprising the following;

- Key plan
- Location plan
- Site plan incorporating the roof plan
- Floor plans
- Elevations
- Sections
- Site sections
- Exploded isometric / axonometric
- **A physical model** to show the construction / structure of the buildings using ONLY balsa wood OR white model boards as either one section OR an open-able full model
- Details – construction, architectural, decorative elements / ornaments **(minimum one each)**

All annotations should be made in bilingual terms highlighting traditional terminologies such as '*tebar layar*', '*dou-gong*' or '*sikhara*'.

Assessment criteria

The assessment for this assignment will be based on

- *Methods, accuracy and efficiency of collecting information during fieldwork*
- *Completeness of the drawings submitted*
- *Application of drawing convention, line thickness, symbols, abbreviation, layout , scale, labelling, annotation etc*
- *Progress – constant and / or increased development in the production of drawings and model*
- *Accuracy – ability to translate physical data into drawings and model*
- *Clarity – readable and comprehensive drawings and model*
- *Creativity and workmanship of the model*
- *Efficiency and consistency of the group performance*
- *Individual contribution on the drawings and models*

Marking criteria

Marks shall be distributed as follows: *50% for the final marks*

Progress marks (20%)

- On site performance – individual **10 marks**
  - *Methods, accuracy and efficiency of collecting information during fieldwork*
  -
- Interim submission (drawings & model) **10 marks**
  - *Completeness of the drawings submitted (5%)*
  - *Application of drawing convention, line thickness, symbols, abbreviation, layout, scale, labelling, annotation etc (3%)*
  - *Accuracy – ability to translate physical data into drawings and model (5%)*
  - *Clarity – readable and comprehensive drawings and model (2%)*

Final submission (30%)

- Completeness, Drawing Application, Accuracy and Clarity of drawings **15**
  - *Completeness of the drawings submitted (10%)*
  - *Application of drawing convention, line thickness, symbols, abbreviation, layout, scale, labelling, annotation etc (10%)*
  - *Accuracy – ability to translate physical data into drawings (5%)*
  - *Clarity (5%)*

- Model **10**
  - *Accuracy – ability to translate physical data into model (5%)*
  - *Clarity – readable and well-crafted model (5%)*

- Individual performance and contribution (peer assessment) **5**
  - *Individual contribution on the drawings and models*

Suggested References

1. Biefeld, Bert. 2007. *Basic Technical Drawing*. Germany. Birkhauser
2. John, Burn ed. 2004. *Recording Historic Structure*. New Jersey. John Wiley & Sons
3. KALAM-UTM, Risalah Panduan (Program Kajian Lukisan Terukur). UTM
4. Arnold, Dana. 2002. *Reading Architectural History*. London. Routledge
5. Hanafi, Zulkifli. 1999. *Lukisan Terukur Rumah Tradisional Melayu Pulau Pinang*. Kedah. Amber-Solara Publication
6. Hanafi, Zulkifli. 2004. *Lukisan Terukur Rumah Tradisional Melayu Melayu Perak*. Kedah. Amber-Solara Publication