

# Apply site surveys and set out procedures to medium-rise building

WA Unit Number W5939  
National Unit Number BCGCBC5006A

## Submission requirements for surveying projects

### Part 1 - Survey Field Notes

When you do any survey you need to record field notes. They provide a permanent record of your work done in the field. The notes must be organized and legible. All field notes must be recorded at the time the work is being done.

Your field notes should be done in pencil. Erasures of observed data are not permitted in the field notes. Incorrect field entries should be stroked out with a single line and the proper value clearly noted. If an entire page is to be ignored, a diagonal line should be drawn from corner to corner and the word VOID should be clearly written along with the reason why the data is wrong.

Field notes should contain: the date, the weather conditions, group members doing the survey, identification of the instruments (model & serial number) and other equipment, data collection etc., a brief description of the site and/or location details. Sketches of the building (with north arrows) and all field dimensions and any other notations which assist in clarification of the field and site conditions are essential. Which student did recording, placing pegs, measuring distance etc?)

<b>Central Institute of Technology</b>	
Apply site surveys and set out procedures to medium-rise building	
<b>Project No</b>	
Student Name: _____	ID: _____
Group No: _____	Group leader: _____
Date: _____ of field work	Date: _____ of submission: ;

Figure 1

Each set of field notes must have a title sheet as shown above. Use the same form for all three projects. Field notes must be submitted as soon as you have finished your project to your lecturer.

You will be given 3 different Projects

1. Setting out a L-shaped building using profiles and string line
2. Setting out a L-shaped building with the aid of chainline & offsets (offset method)
3. Setting out a L-shaped building using a theodolite (horizontal angles) and polar coordinates

## Part 2 - Project Report

Refer to the project notes for the scope of the three practical projects. Projects need to be submitted on due date, if not stated otherwise. Refer to 'Assessment Summary' on the *Learning Plan*.

Field notes (or copy) must be attached to your project report.

A report need to be submitted for each field exercise that you carry out. Each student must **individually** submit a report.

Please note there is only one theodolite on hand for Project 3; organise your work accordantly. Projects are carried out in groups of maximum four (4) students. The group size depends on the enrolment of student. The **group** as a whole is responsible for booking the instrument. The work should be equally distributed among group members. If the group cannot resolve an issue then you should discuss the problem with your lecturer

Write the reports as soon as possible after the field exercise. Don't forget to include an Assignment Attachment Form. Individual group members will be orally assessed to verify that the competencies have been achieved.

A word processor should be use to write the reports. The font is to be *12 point Times Roman* or *10-point Aerial*. Pages should be stapled at the upper left-hand corner. Margins should be one inch on top, bottom and right hand side and 1.5 inch on left hand side.

**Your report including field notes should be handed in as soon as possible.**

### Contents of Reports

You are required to:

- discuss your project achievement,
  - calculate all dimensions of the building given in Project notes,
  - record all field measurements (dimensions & angles).
  - prepare a final scaled sketch of the exercise include all measurements.
  - compare the given dimensions with all dimensions from field exercise.
1. **Coversheet** same as show in Figure 1
  2. **Contents page**  
Use [word](#) to generate the contents page. All pages must be numbered
  3. **Discussion**  
valuate existing given procedures and field survey data. Tabulate field data and calculated data. Compare these data and document any irregularities and discuss your results. A significant part of the exercise is **Team Work** - was the work equally distributed among group members? Were the exercise a success?
  4. **Sketches / Diagrams**
    - Neatly drawn sufficient freehand sketches to reference all calculated figures. Letters and numbers must be readable and need to be min. 3 mm in height.
    - Use the same letters & numbers in the freehand sketch that have been used in your calculations.

## 5. Calculations

- All calculations must be logically set out. State which formula you have used for the specific type of calculation. (Don't mix up units)
- Check all dimension for accuracy, are the field measurements the same as the calculated measurements? If not describe why not in your discussion.
- Use trigonometric function and Pythagors' theorem for the calculations.
- For project 2 & 3 calculate areas and all side length of the set-out building(s).

## 6. Drawings

A fully dimensioned scaled drawings of the building(s) outline must be included. Additional sketches may be required for clarification of you calculations.

## 7. Conclusion /

A conclusion should be as clear & concise as possible. Give particulars of the success or failure of the field exercise. Bring up anything that has not been covered in your discussion.

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### **Safety**

**For all field exercises students must wear a safety vest and appropriate footwear (tongs or sandals are not accepted).**

It is highly recommended to wear a wide brimmed hat (baseball cap style not suitable), long sleeved shirt with collar, long trousers (or similar)

Students have the responsibility to assess the risk and decide what to wear. During sunny weather don't forget to use sun protection body cream!

Use extreme care when you do the fieldwork. If you observe or feel that unsafe working conditions exist, inform the lecturer immediately.

If you need trigonometric formulas look at the [webpage](#) for sin, cos and tan function as well as sin and cos rules