

CPCBC4018A

**Apply site surveys and set-out procedures to
building and construction projects**

Assessment No 2

Bulk Earth Work Volume

In class & take home assessment

Due Date: 25th October 2010

Name: _____

I certify that the works presented to prove my competence in this assessment are of my own efforts.

Signed: _____

Date: _____

Presentation – Your work is to be typed with the cover sheet attached only. No plastic covers or inserted in plastic sheets of any type is permitted.

-----Tear along here & return to learner-----

Assessment 2 Submission Confirmation to be filled in before submission

Name: _____

Submission Date: _____

Submission confirmation to be signed by assessor _____

Task 1 – Bulk Excavation

From your grid survey on the field day prepare. Long Sections at the 5 grids & determine volumes using. Use the spot height in the centre of your drawing as the formation height.

1. Sum of Grid Method
2. Simpson's Rule
3. Trapezoid Rule

Task 2 – Detail Excavation – Pads Only

A proposed building is to be situated as shown on. The bench out height is the same Reduced Level you used in Task 1. You are to determine the Volume of spoil to be removed allowing for

1. 1500mm to allow for paths & retaining walls
2. All fill to the structure is to be retained with drop edge beams to natural ground.

Collections Page

Simpson's Rule

	<u>Section Area</u>	<u>Multiplier</u>	<u>Answer</u>
1. Area Cross Section 1 or A	_____	x 1 =	_____
2. Area Cross Section 2 or B	_____	x 4 =	_____
3. Area Cross Section 3 or C	_____	x 2 =	_____
4. Area Cross Section 4 or D	_____	x 4 =	_____
5. Area Cross Section 5 or E	_____	x 2 =	_____
6. Area Cross Section 6 or F	_____	x 4 =	_____
7. Area Cross Section 7 or G	_____	x 2 =	_____

Note – Last Multiplier MUST be changed to 1.

Total Answers = _____

Volume = (Total Answer) x 5 ÷ 3 = _____

Trapezoid Rule

	<u>Answer</u>
1. (Area 1 st Cross Section + Last Cross Section) ÷ 2 =	_____
2. Area Cross Section 2	_____
3. Area Cross Section 3	_____
4. Area Cross Section 4	_____
5. Area Cross Section 5	_____
6. Area Cross Section 6	_____
7. Area Cross Section 7	_____

Total Answers = _____

Volume = (Total Answer) x 5 = _____

Datum	
Chainage	
Existing Ground Level	
+/- Datum	
Design Level	
Cut	
Fill	

Datum	
Chainage	
Existing Ground Level	
+/- Datum	
Design Level	
Cut	
Fill	

Datum	
Chainage	
Existing Ground Level	
+/- Datum	
Design Level	
Cut	
Fill	

Datum	
Chainage	
Existing Ground Level	
+/- Datum	
Design Level	
Cut	
Fill	

Datum	
Chainage	
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