

We shape a safe, high quality, sustainable and friendly built environment.

Our Ref : BCA BC 15.0.3 VOL 11 Building Engineering Division (#05-00)

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26 Sep 2008

See Distribution

Dear Sir/Madam

COMMENCEMENT OF PROVISIONS ON UNDERGROUND BUILDING WORKS, TEMPORARY BRIDGES AND TEMPORARY EARTH-RETAINING STRUCTURES

I refer you to our earlier circulars dated 28 Nov 2007 and 7 May 2008 to notify that the following provisions in the Building Control Act will commence on 1 Oct 2008:

- (a) requirements for QP(Geo) and AC(Geo) for Underground Building Works; and
- (b) temporary structures (namely temporary bridge, temporary decking for a bridge or temporary earth-retaining structures) to be submitted for plan approval and permit.

Effective date for projects

I wish to remind you that the above provisions, which will come into effect on 1 Oct 08, will apply to all projects where the first structural submission for plan approval (i.e. the ST01 submission) is made on or after 1 Oct 08. All on-going projects where the ST01 submission is made before 1 Oct 08 will be regulated under the existing provisions and requirements.

Underground building works

- Underground Building Works has been defined as any of the following works:
 - (a) any excavation or other building works to make
 - i) a tunnel with a diameter, width or height of more than 2 metres;
 - ii) a caisson, cofferdam, trench, ditch, shaft or well with a depth of more than 6 metres;
 - (b) any building works for constructing, altering or repairing any earth retaining structure in or for a trench, ditch, shaft or well with a depth or height of more than 6 metres; or
 - (c) foundation works for buildings of 30 or more storeys.
- 4 For underground building works, the geotechnical aspects have to be prepared by a Qualified Person who must be a specialist PE in geotechnical engineering [or PE(Geo) in short], and checked by a specialist accredited checker [or AC(Geo) in short].

Temporary structures

- 5 Currently, temporary bridges and temporary decking for a bridge are regulated under the permit for temporary buildings whilst temporary earth-retaining structures are regulated under the conditions of permit for building works. From 1 Oct 08, all temporary bridges, temporary decking for a bridge or temporary earth-retaining structures will be regulated in a similar manner as permanent building works. It means that a Qualified Person must be appointed to prepare and submit plans for approval by BCA and to supervise the construction of these structures.
- Depending on the type of structure, checking by an accredited checker (AC) may also be necessary. The criteria on whether an AC is required and the category of AC required is similar to those for permanent works. The following Table summarises the requirements on AC checking for both temporary and permanent building works involving excavations.

| All permanent or temporary building works that involve | Appointments Required | |
|--|--|---|
| | Qualified Person | Accredited Checker |
| Earth retaining structures of concrete or steel to support excavation not more than 1.5 m deep | Plan approval is not required | |
| Structures for excavation more than 1.5 m deep but not exceeding 4 m deep | Any professional engineer can act as the QP for structural works | No AC is required |
| Structures for excavation more than 4 m deep but not exceeding 6 m deep | Any professional engineer can act as the QP for structural works | AC to check structural works (which is also the existing procedure for permanent works) |
| Structures for excavation more than 6 m deep and all underground building works | Any professional engineer can act as QP for structural works, but if he is not a PE(Geo), then the geotechnical aspects of the works has to be prepared by another QP who is a PE(Geo) | AC to check structural works, but if he is not an AC(Geo), the geotechnical aspects of the works have to be checked by an AC(Geo) |

Guidebook to explain details of the new provisions

Details and explanations on these provisions and other provisions introduced earlier this year can be found in a document called "A Guidebook to the Changes in Building Control Act & Regulations 2007/2008". The document may be viewed at BCA's website at the following url:

- 8 Should you need further clarifications, please contact Mr Choong Teck Min at Tel 63257587 or by email to: choong_teck_min@bca.gov.sg.
- 9 I shall appreciate it if you would bring the contents of this circular to your members' attention.

Thank you.

Yours faithfully,

CHEW KEAT CHUAN

Ag DIRECTOR

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