




13th & 14th November 2024
The Waterfront Hotel Kuching

REGISTRATION AS ACCREDITED CHECKER

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Outline of Presentation

- REGISTRATION AS BEM ACCREDITED CHECKER
- 1. BACKGROUND
- 2. APPLICATION
- 3.1 GEOTECHNICAL AC
- 3.2 STRUCTURAL AC

1. BACKGROUND

- Accredited Checkers (AC's) were first established by the Board of Engineers Malaysia (BEM) to enable development on steep hillside (slope greater than 25 degrees) to be independently scrutinised by engineers who had acquired the knowledge and skill to analyse the design in terms of its geotechnical and structural adequacies.
- The need to establish AC engineers started after the Highland Tower Tragedy in 1993.



Highland Tower Collapse, 1993



Taman Hillview Landslide, 2002



Landslide Kpg. Pasir, 2006








Landslide Bukit Antarabangsa, 2008





Debris Flow Genting Sempah, 1995




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Pos Dipang Debris Flow, 1996




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NSE Debris Flow near Gua Tempurung, 2004




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Bukit Lanjan Rockfall, 2003





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Po Shan Road Landslide Hong Kong, 1972








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- The need for the increase in the numbers of AC engineers becomes apparent as development has encroached on steep hillside..





Meru Valley, Ipoh



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- BEM has the responsibility to ensure that the AC's have acquired the knowledge and skill well above an average engineer through his/her professional career before admission.

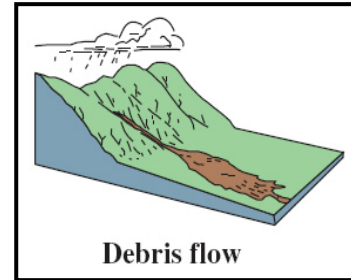
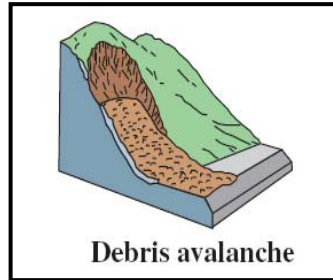
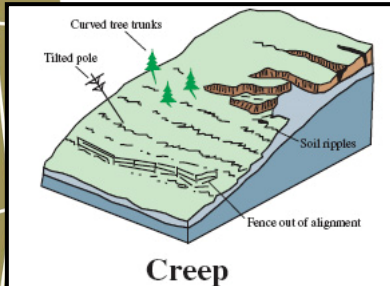


EXAMPLES OF SKILLS & EXPERIENCES FOR GEOTECHNICAL AC

- Ability to classify and identify landslides

- Rate of movement:

This ranges from very slow creep (mm/yr) to extremely rapid (m/sec).




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Good knowledge on geology;


1. Geological formation.
2. Geological mapping – skill to measure dip/strike of rocks joints and plotting them on stereonet.
3. Stereonet analysis.

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Geological Mapping

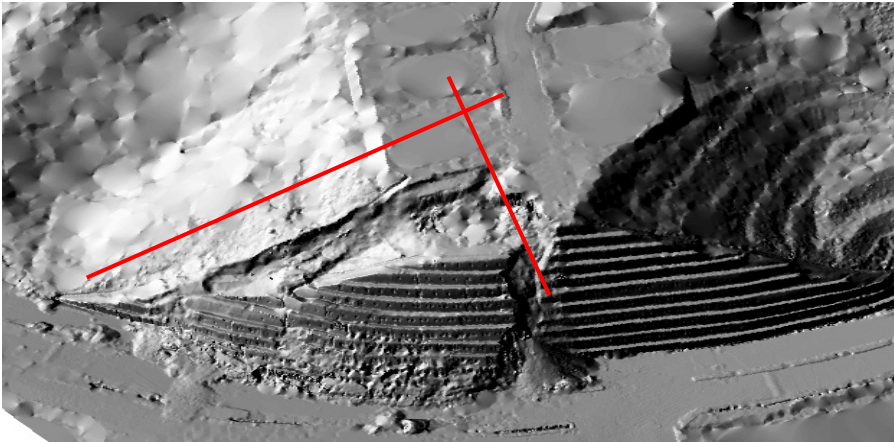


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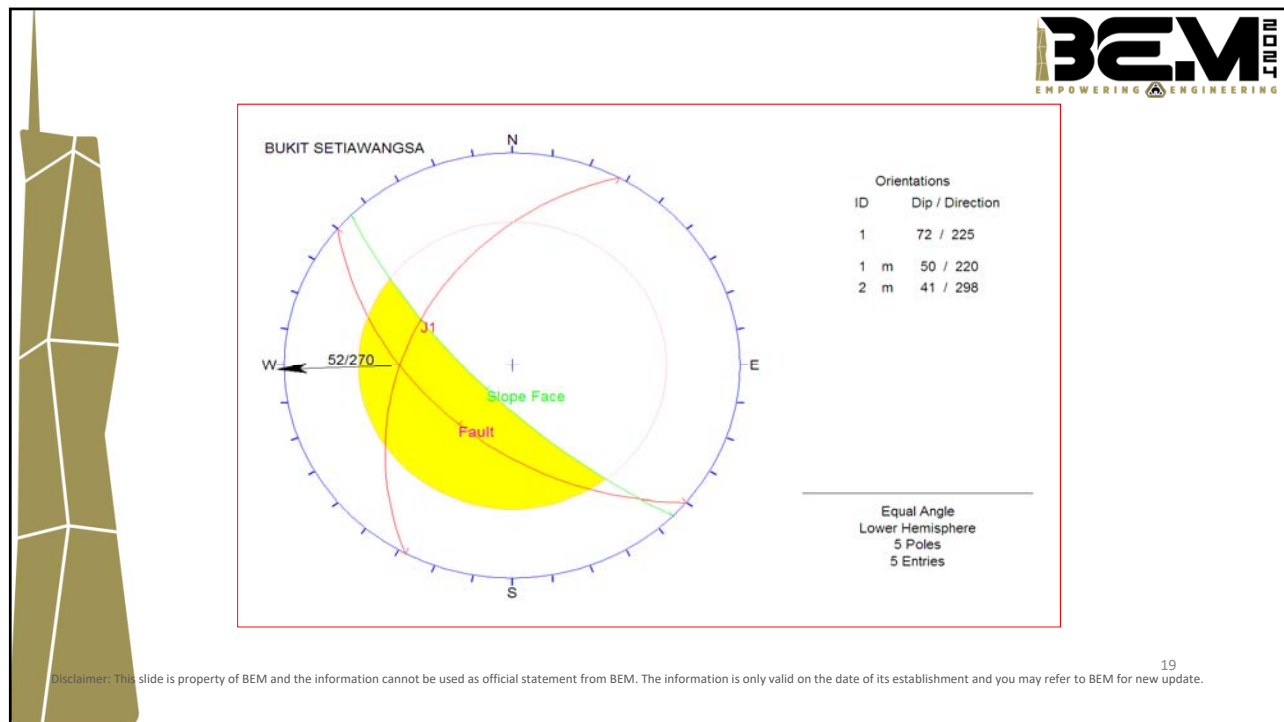






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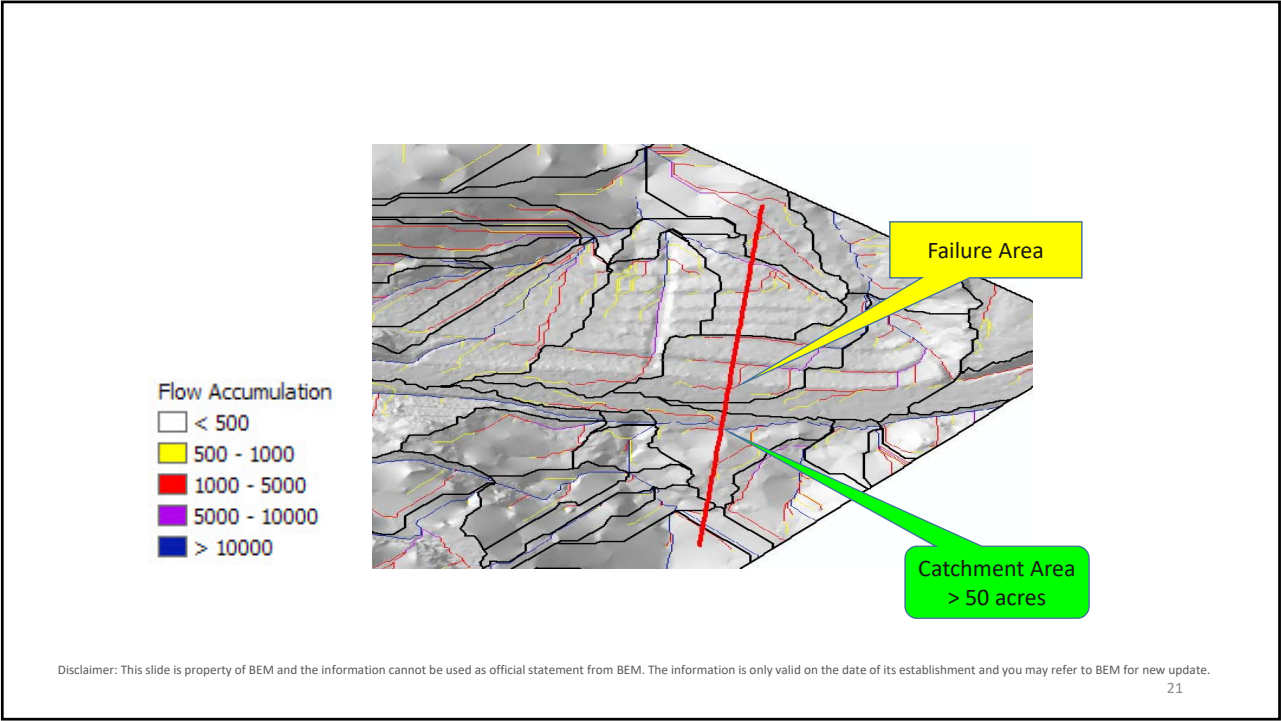



Good knowledge of slope geomorphology & hydrology;

1. Geomorphological mapping to identify features such as erosion, water seepage, vegetation & ground movement.
2. Use of terrain modelling to explain geomorphological features.
3. Use of terrain modelling to predict hydrological conditions.

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2. APPLICATION

Application for admission as an AC shall be made to the BEM by filling up the following forms:

1. Form A6
2. Self-Appraisal Form Rev. 3 BEM

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Form A6

Rev. No. 1
Date: 12.12.2016

Applicant's
current
passport size
photo

FORM A6

REGISTRATION OF ENGINEERS ACT 1967

REGISTRATION OF ENGINEERS REGULATIONS 1990

APPLICATION FOR REGISTRATION AS AN ACCREDITED CHECKER
(To be completed by the applicant in BLOCK LETTERS)

SECTION A (to be filled in by all)

Name:

Gender: Male ☐ Female ☐

Date of Birth:

Place of Birth:

Nationality: Identification Card No.:

Address in Malaysia (if any):

Tel. No.: Mobile Phone No.: Fax No.:

Postal Address (if different from above):

E-mail Address:

Professional Engineer With Practising Certificate Registration No.:

I wish to apply for Accredited Checker Branch:
☐ Structural ☐ Geotechnical

SECTION B (to be filled in by Non-Malaysians)

Passport No.: Place of Issue:

Date of Issue: Date of Expiry:

Country of Birth: Nationality:

Address in Country of Origin:

☐ I have been a Permanent Resident of Malaysia since Identification Card No. 1

SECTION C (to be filled in by Non-Malaysians)

☐ I am a holder of a Work Permit valid from to

Penalty

Section 24(1) of the Registration of Engineers Act 1967: "Any person, sole proprietorship, partnership or body, corporate who procures or attempts to procure registration or a certificate of registration, under this Act by knowingly making or producing or causing to be made or produced any false or fraudulent declaration, affidavit, application or representation whether in writing or otherwise, shall be guilty of an offence and shall, on conviction, be liable to a fine not exceeding fifty thousand ringgit, or to imprisonment for a term not exceeding three years, or to both."

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Self-Appraisal Form Rev. 3 BEM

Rev. No. 3
Date: 26/11/2010

SELF EVALUATION BY APPLICANT/ASSESSOR

PURPOSE

(i) To ensure and enhance safety and stability of building and structure design especially for hill site developments.

(ii) To prevent structural failures by checking the design of structural and geotechnical engineering works.

EVALUATION

1. Qualifications:	Yes	No	N/A	Comments (for official use by assessor) * Please use separate sheet for comments.
I wish to be:-	Yes	No		
(i) A Professional Engineer registered with the BEM in the Civil or Structural or geotechnical engineering discipline and specializing in: <input checked="" type="radio"/> Structural <input type="radio"/> Geotechnical	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Experience: The applicant:				
(i) I have at least 10 years' relevant practical experience in the design or construction of buildings	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(ii) I have the ability and standing in the profession, or specialized knowledge or practical experience in civil, structural or geotechnical engineering.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Refer to statement
(iii) I have been engaged in geotechnical or structural design after registration as a Professional Engineer.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(iv) For a continuous period of 1 year immediately preceding the date of my application, I have the practical experience in the relevant field gained in Malaysia.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(v) I have much more experience in the structural and geotechnical areas than the typical Professional Engineers registered with the Board.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Important Notes:

1. The applicant have to substantiate all the statements he make.

2. Failure to sign the application form, the application will be rejected.

3. The Assessor have to give the rating.

Rating: 1 - Poor 2 - Fair 3 - Satisfactory 4 - Good 5 - Excellent

4. The Assessor will verify the statement and document submitted

5. To indicate N/A if the statement are not applicable

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2.1 PRE-QUALIFICATION

Candidates who wish to submit an application to BEM for AC admission shall possess a Professional Engineer with Practicing Certificate (PEPC) and have been Professional Engineers with BEM for more than 10 years.

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2.2 ADDITIONAL SUBMITTING DOCUMENTS



All submissions shall be accompanied with:

1. CV.
2. Write-up of not more than 1000 words of relevant experiences in projects undertaken **after PE admission**. Candidates must give detailed account of their **specific involvement, roles and responsibility** in each project **relevant** for this application.
3. AC Examination Project Reports (see Section 3.0).

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- Application shall be made for one of the following disciplines,
 1. Geotechnical AC
 2. Structural AC
- The candidate shall, in the application of either discipline, submit 2 (two) reports,
 1. at least one shall be **Compulsory Examination Project Report**
 2. a **Supplementary Examination Project Report**.
- Compulsory and Supplementary Project Reports shall be made exclusively for AC examination and each **shall not** exceed 150 pages.



- **Company report on projects will not be accepted.**
- Computer data printouts **shall not** be included in the report.
- The report shall list the candidate's involvement in the project either in planning, investigation, design processes, construction, instrumentation & monitoring, etc. It is important to highlight the candidate's role & responsibility and scope of works in the project to facilitate examiners in formulating questions for the examination.
- To enhance candidate's chances of passing the AC examination, published technical papers in journals and proceedings of recognised conferences shall be included in the report.



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3.1 GEOTECHNICAL AC

- **Compulsory Examination Project Report** shall be made on experiences related to design of slopes greater than 25 meters in height.
- This compulsory submission can also be made on experiences related to retaining wall design greater than 10 meters; walls can be of Reinforced Concrete, Reinforced Earth/Soil, CBP, secant wall (not related to basement design) or any type of Gravity Wall.
- **Supplementary Examination Project Report** can be made on design experiences related to design of basements greater than 2 levels, foundations and ground treatment for embankments greater than 5 meters in height.

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- 2 (two) reports shall be produced by the candidate, at least one of which must be a compulsory report.

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3.2 STRUCTURAL AC

- **Compulsory Examination Project Report** shall be made on experiences related to design of buildings exceeding 20 storeys with basements not less than 2 levels.
- **Supplementary Examination Project Report** can be made on design experiences related to special structures, e.g. space frame structures, transfer structures etc or buildings that will result in complex interactions with existing buildings.
- 2 (two) reports shall be produced by the candidate, at least one of which must be a compulsory report.

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- [AC FAQ's](#)

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Q & A

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THANK YOU



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