

ISSUE 5 - MAY 2023



CREAM

e-magazine



- Sustainable INFRASTAR Certificate Presentation Ceremony to Malaysia Rail Link Sdn Bhd (MRL) for East Coast Rail Link (ECRL) Project
- Collaboration Visit to Railway Transportation Services Testing Centre (RTTC)
- Introduction to Contractor Quality Management System (CQMS) For Contractor
- Highlights on May Activities
- Statistics on QCLASSIC and SHASSIC Assessments

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about us

Construction Research Institute of Malaysia (CREAM) was established on 26 March 2004 as a Company Limited by Guarantee (SBMJ) under the Act Company 1965. CREAM became fully operational on January 1, 2006. Establishment CREAM is to be the research arm of the Industrial Development Board Construction (CIDB) Malaysia to encourage, promote and implement activities research and development (R&D) related to the national construction industry with Section 4(c), CIDB Act 1994 (Act 520). With the ability of knowledge and existing expertise, CREAM actively cooperates with parties interested in producing research that will benefit the sector construction. At the same time, CREAM also supports the development of the industry construction in a better direction through the quality and integrity of building materials when also offers testing, evaluation and certification services to industry players. CREAM will continue to be proactive in being active and reinventing the way we in doing something, to keep giving the best to all parties and always responsive to our customers.

vision

To meet the strategic needs of Research and Development in the Malaysian construction industry. CREAM is also committed to build partnerships with the industry's stakeholders and researchers while exploring and encouraging the development of a knowledge-based industries as well as ready to meet current demands and challenging changes.

mission

To make CREAM globally recognized as the leading institute for Research and Development (R&D) that drives quality, innovation, technology and skills towards achieving sustainability in the construction industry.





what we offer

- Research and Development
- Industry Consultancy and Engagement
- Lab Testing
- Product Certification
- Assessments – QCLASSIC, SHASSIC, MyCREST and Sustainable Infrastar
- Certificate of Approval
- Inspection and Sampling
- Forensic Investigation
- Technical Opinion
- Journal Publication



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Sustainable INFRASTAR Certificate Presentation Ceremony to Malaysia Rail Link Sdn Bhd (MRL) for East Coast Rail Link (ECRL) Project



*by Ts. Syed Hazni Abd Ghani
and Muhamad Azam Azmai*

The Sustainable INFRASTAR Certificate Presentation Ceremony was held in conjunction with the launching ceremony for the construction of the first East Coast Rail Link (ECRL) station in Tunjong, Kelantan on 12th May 2023, which was officiated by Prime Minister Datuk Seri Anwar Ibrahim.

The launching ceremony also witnessed the awarding of the Sustainable INFRASTAR certificate with a 5 Star rating on Design Stage by CREAM Chief Executive Officer Ir. M. Ramuseren to Malaysia Rail Link Sdn Bhd (MRL) Chief Executive Officer Datuk Seri Darwis Abdul Razak. This commemorates that the ECRL project has achieved a high level of sustainability and imposes a positive impact on the environment and society. It is also to recognise the design of the ECRL route as a sustainable infrastructure that has adopted the best environmental and social characteristics. This initiative is in line with the country's efforts to reduce the intensity of greenhouse gas (GHG) emissions from the Gross Domestic Product (GDP) by 45% by the year 2030.

The East Coast Rail Link (ECRL) will traverse the East Coast states of Kelantan, Terengganu, and Pahang before linking the Klang Valley on the West Coast of Peninsular Malaysia. As a national infrastructure, the ECRL will link cities and towns as well as upgrade public transportation along its rail network. At speeds of up to 160km/h, the ECRL passenger trains will significantly cut the travel time from Kota Bharu to ITT Gombak to approximately 4 hours. The ECRL is also expected to spur commercial activities, drive investments, increase job opportunities, and boost tourism activities along its rail network.



The Chairman of Malaysia Rail Link Sdn Bhd (MRL), Tan Sri Mohd Zuki Ali, said that the construction of this station is expected to be completed in December 2026 and to begin operations in January 2027. Tan Sri Mohd Zuki Ali also said that the 665-kilometre-long ECRL network will have a total of 20 stations, namely 10 passenger stations and 10 combined passenger and cargo stations. The ECRL project has seen the involvement of more than 2,100 local companies consisting of contractors, consultants, and suppliers since 2017 until the first quarter of this year.

The Malaysian Construction Industry Development Board (CIDB) has developed a sustainable infrastructure rating tool with the ultimate purpose to assess the extent of sustainability measures adopted by infrastructure projects in Malaysia primarily at both the design and construction stages. Launched in March 2019, Sustainable INFRASTAR was developed based on CEEQUAL, which is an infrastructure rating tool from the United Kingdom. Sustainable INFRASTAR is an assessment tool for infrastructure projects on key sustainability factors, such as land use, the impact of equipment uses, as well as resource and waste management on construction sites. It covers infrastructure construction, including highways and roads, water treatment plants, airport rail links, jetties and marinas, sewerage pipe networks, wastewater treatment plants, and telecommunication networks.

A certified assessment that achieves 40% and above credit percentage will be awarded an A-star rating. Currently, CREAM stands as a construction assessment centre for the implementation of Sustainable INFRASTAR for infrastructure projects in Malaysia.

Collaboration Visit to Railway Transportation Services Testing Centre (RTTC)



*by Ts. Syaza Nabilla Mohd Suhaimi, Mohd Termidzi
Mohd Ghani & Mohd Azizi Arshad*

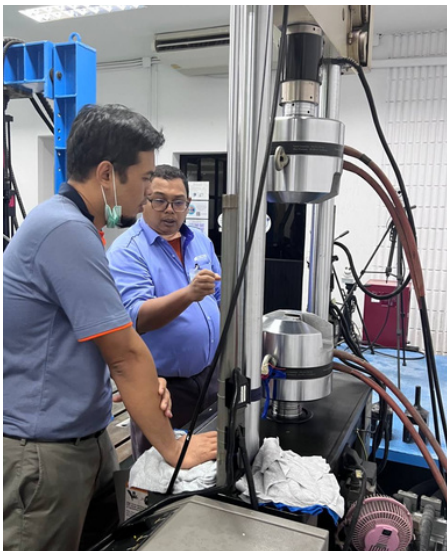


Group photo: CIDB delegation includes CIDB Deputy Chief Executive II, Sr. Zaid Zakaria and CIDB Senior General Manager of the Technology Development Sector, Mdm. Zainora Zainal. CREAM delegation was led by CREAM CEO, Ir. M. Ramuseren and TISTR delegation includes TISTR Governor, Dr. Chutima Eamchotchawalit, TISTR Deputy Governor, Dr. Pattra Maneesin, and the Director of RTTC, Dr. Anat Hasap.

CREAM and the Thailand Institute of Scientific and Technological Research (TISTR) through its subsidiary Railway Transportation Services Testing Centre (RTTC) have a long-term Understanding on bilateral cooperation in the rail industry, which includes research and product development, testing and certification, human capital development, standards development, and promotion. Since 2020, several technical visits and technology transfer programmes have been conducted between both organisations.

HIGHLIGHTS

On 30th May 2023, a delegation from Construction Industry Development Board (CIDB) and CREAM led by CIDB Deputy Chief Executive II, Sr. Zaid Zakaria and CREAM CEO, Ir. M. Ramuseren visited the RTTC laboratory located in Pathum Thani, Bangkok, Thailand. The team included CIDB Senior General Manager of the Technology Development Sector, Mdm. Zainora Zainal and Manager of Standards & Building Materials Division, Ts. Nur Hanis Amsari. Whereas, representatives from CREAM included Test Engineers, Mr Mohd Termidzi Mohd Ghani and Ts. Syaza Nabilla Mohd Suhaimi, as well as Assistant Engineer, Mr Mohd Azizi Arshad.



This year's visit held the purpose of discussing continuous collaboration activities and programmes between both organisations and the way forward of initial collaborations between CREAM and RTTC. The point of discussions also incorporated the current and incoming projects, including the plan for RTTC's incoming visit to Malaysia in June this year for R&D works together with CREAM and Keretapi Tanah Melayu Berhad (KTMB) on rail track inspection and monitoring works.

HIGHLIGHTS

We were truly honoured to be welcomed by TISTR Governor herself, Dr. Chutima Eamchotchawalit, TISTR Deputy Governor, Dr. Pattra Maneesin, and the Director of RTTC, Dr. Anat Hasap. Both meeting and visit to the testing facilities benefited CREAM to stay updated on the ongoing and latest testing equipment and practical testing methods. To complete the knowledge transfer between the two, RTTC officers were thoroughly briefed on CREAM's green rating programmes of MyCREST and InfraSTAR. We hope that our sharing sessions will aspire further collaborations covering more scopes.

On behalf of CIDB and CREAM, we would like to thank RTTC for the warm welcome and amazing hospitality in Thailand. We hope to see you soon in Kuala Lumpur on June 2023.



CIDB Deputy Chief Executive II, Sr. Zaid Zakaria receives a memento from TISTR Governor, Dr. Chutima Eamchotchawalit

Introduction to Contractor Quality Management System (CQMS) For Contractor



by Ts. Syed Hazni Abd Ghani

INTRODUCTION

Quality is an imperative component of the construction sector. It focuses on contractors' implementation of quality monitoring and control over their management and planning systems, work process, as well as materials and workers selection toward achieving a quality goal. In general, ISO 9001 stands as a Quality Management System (QMS) that provides a guideline for the implementation and quality achievement of general processes within an organisation.

As part of the strategies to cultivate quality in the construction sector, the Contractor Quality Management System (CQMS) has been introduced as an alternative Quality Management System among contractors. It is based on the Construction Industry Standards (CIS 29), which was published in 2021.

The standard development comprises various stakeholders, namely the Association of Consulting Engineers Malaysia (ACEM), Dewan Bandaraya Kuala Lumpur (DBKL), Jabatan Kerja Raya Malaysia (JKR), Jabatan Perumahan Negara (JPN), Master Builders Association Malaysia (MBAM), Persatuan Kontraktor Bumiputera Malaysia (PKBM), Real Estate & Housing Developers' Association (REHDA), SIRIM Berhad, Suruhanjaya Perkhidmatan Air Negara (SPAN), Telekom Malaysia Berhad (TM), and Universiti Teknologi Malaysia (UTM).

These organisations along with the implementation of CQMS share a mutual objective of enforcing the requirements for construction works management to ensure the quality delivery of a project.

STANDARD INDUSTRI PEMBINAAN

(CONSTRUCTION INDUSTRY STANDARD)

CIS 29:2021

CONTRACTOR'S QUALITY MANAGEMENT SYSTEM (CQMS)

Description: Contractor Management System, Quality Requirements, Certification Criteria

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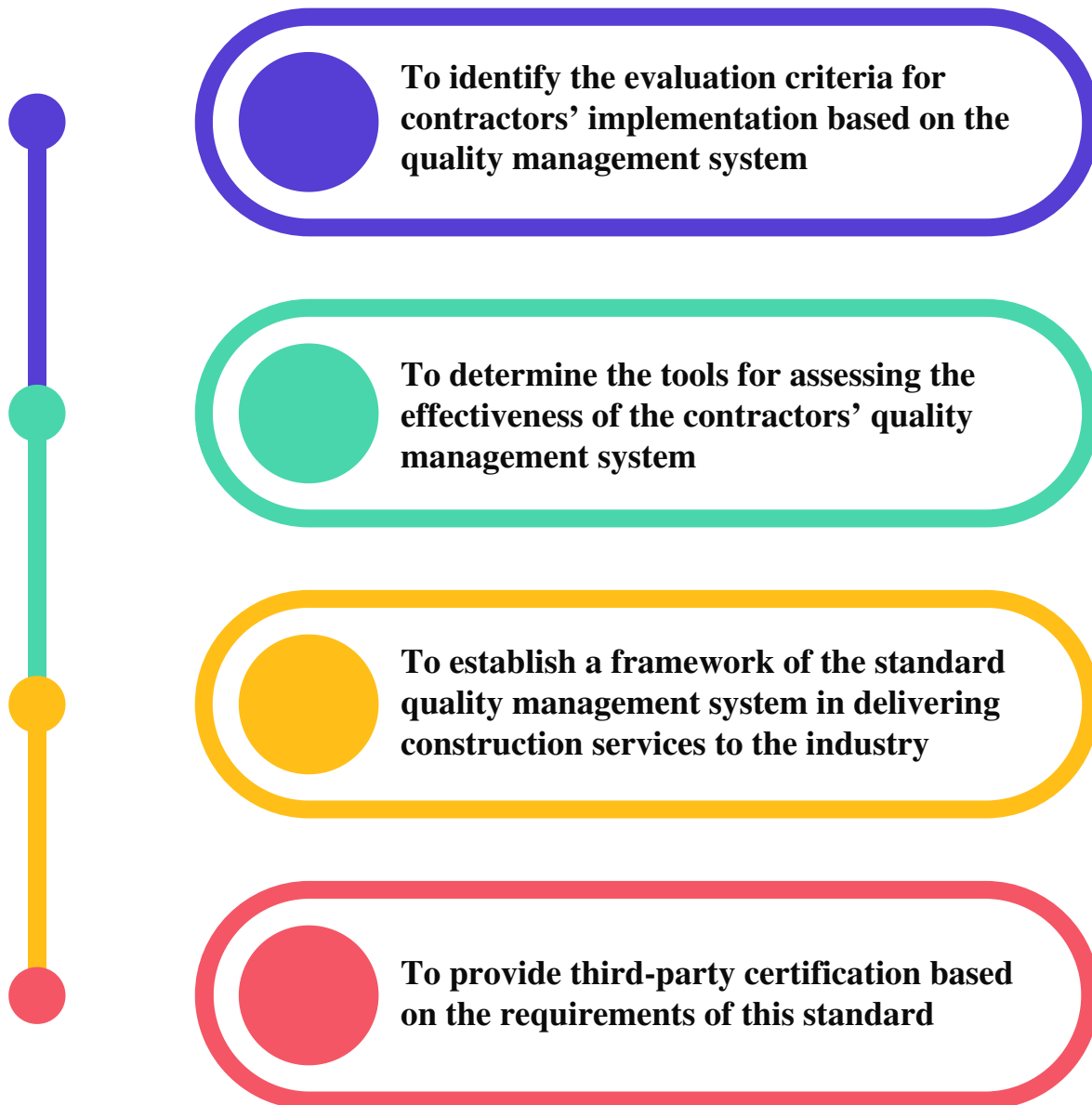
CONSTRUCTION INDUSTRY DEVELOPMENT BOARD



What is Contractor Quality Management System (CQMS)?

CQMS is an independent system that evaluates contractors' implementation of a quality management system based on a set of required standards. It highlights the structured quality requirements for contractors in dealing with tendering, construction planning, procurement, construction works, and post-construction processes that enable continuous improvement and delivery of quality projects on time.

The objectives of CQMS are as follows:



What are the benefits and advantages of CQMS?

Generally, CQMS aims to improve the contractors' internal process of evaluating the impact of quality management system in the organisations. This can be summarised into 3 main aspects:



Fulfilling the fundamental principles of CQMS through a practical framework



Providing assurance that meets the clients' requirements



Focusing on the clients' needs by meeting their requirements

CQMS also elevates the quality of management system through continuous improvement based on the fundamental responsibility of contractors to construct buildings or projects. It can also help to increase companies' marketability and boost the project owners' confidence to appoint them.

Besides that, the quality management processes typically start with the following aspects:

Policies and objectives

Documents including method statements to conform to the policy and achieve the objectives

Evidence of results to prove the existence of conformance to requirement

What is the scope of CQMS?

The scope of CQMS comprises two main categories of requirements (general and construction management requirements) for ease of understanding and implementation.

The CQMS standard sets out the requirements that consist of the following:



General Management Requirement (GMR)

The elements of this category are:

Leadership and commitment

Documented information

Communication

Analysis and performance evaluation

Internal audit

Management review & quality decision

Nonconformity & corrective actions

Client's requirements fulfilment

Continual improvement

Construction Management Requirement

The elements of this category are:

Leadership and commitment

- Tender management
- Tender pricing scheme
- Tender negotiation

Procurement

- Purchase of materials
- Machinery requirement
- Manpower planning
- Project financing

Construction planning

- Assignment of project identification
- Appointment of project leaders and team members
- Compliance with legal and other requirements
- Decision on construction methodology
- Establishment of the work program
- Drawing-up site layout plan
- Planning for QA/QC method and OSH and Environment requirements

Post-construction

- Rectification work during Defects Liability Period (DLP)
- Certificate of Making Good Defects (CMGD)
- Project closeout and final claim

Construction planning

- Mobilisation to site
- Incoming materials inspection & testing.
- Materials, machinery, and equipment handling
- Construction activities
- Progress monitoring
- Joint inspection and progress claim
- Housekeeping
- Project Handover and obtaining CCC/ CPC

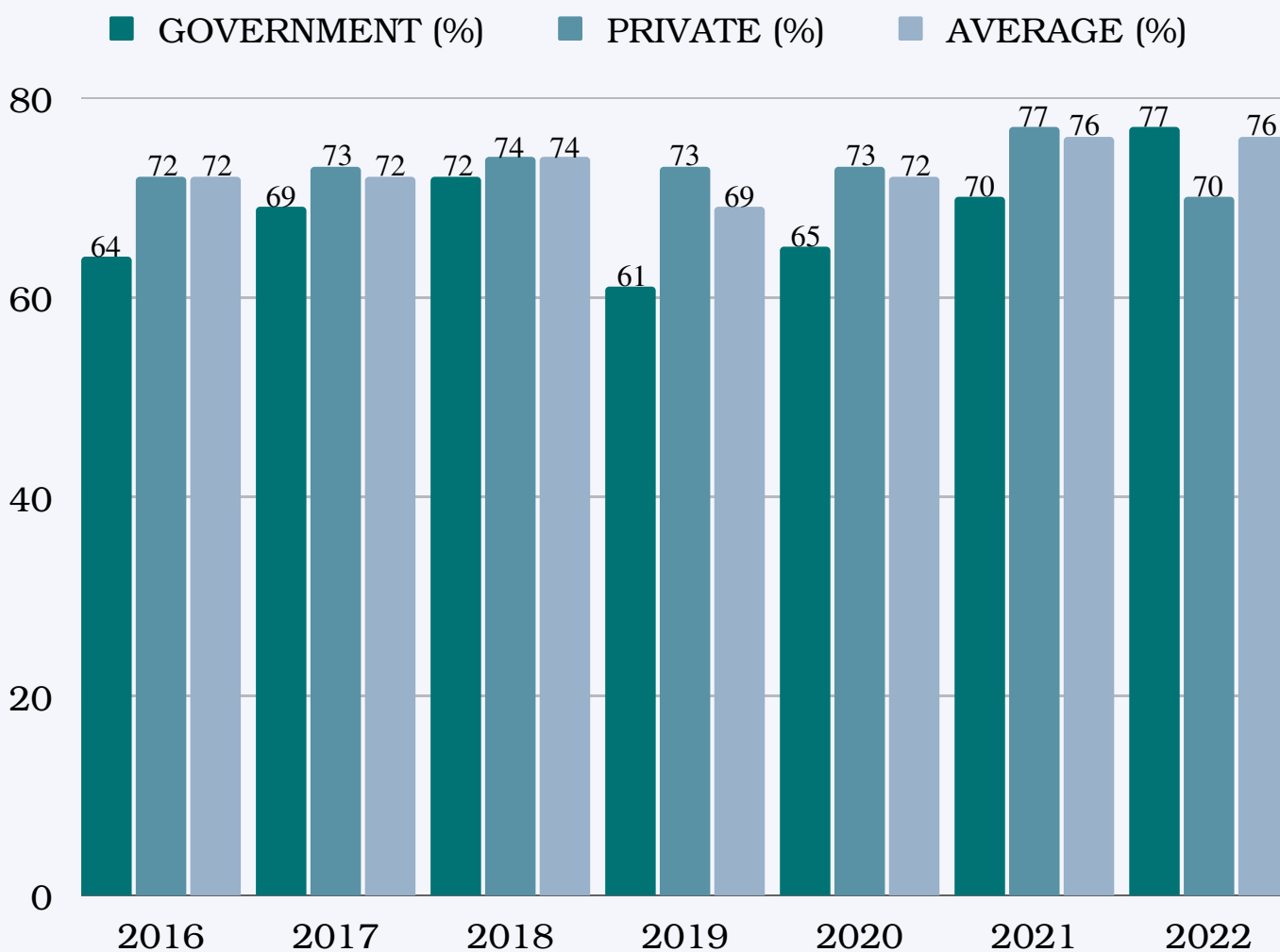
Conclusion

CQMS is an assessment tool to certify the contractors' process and procedures based on the evidence-based implementation of the CIS 29 requirements.

It aims to improve the overall quality delivery with good workmanship that comply with the project's specifications and best practices. This standard is applicable for contractors to improve their quality management system practices. In conclusion, it is the contractors' responsibility to ensure that the quality requirements of the construction work conform to the client's requirements as specified in the contract.



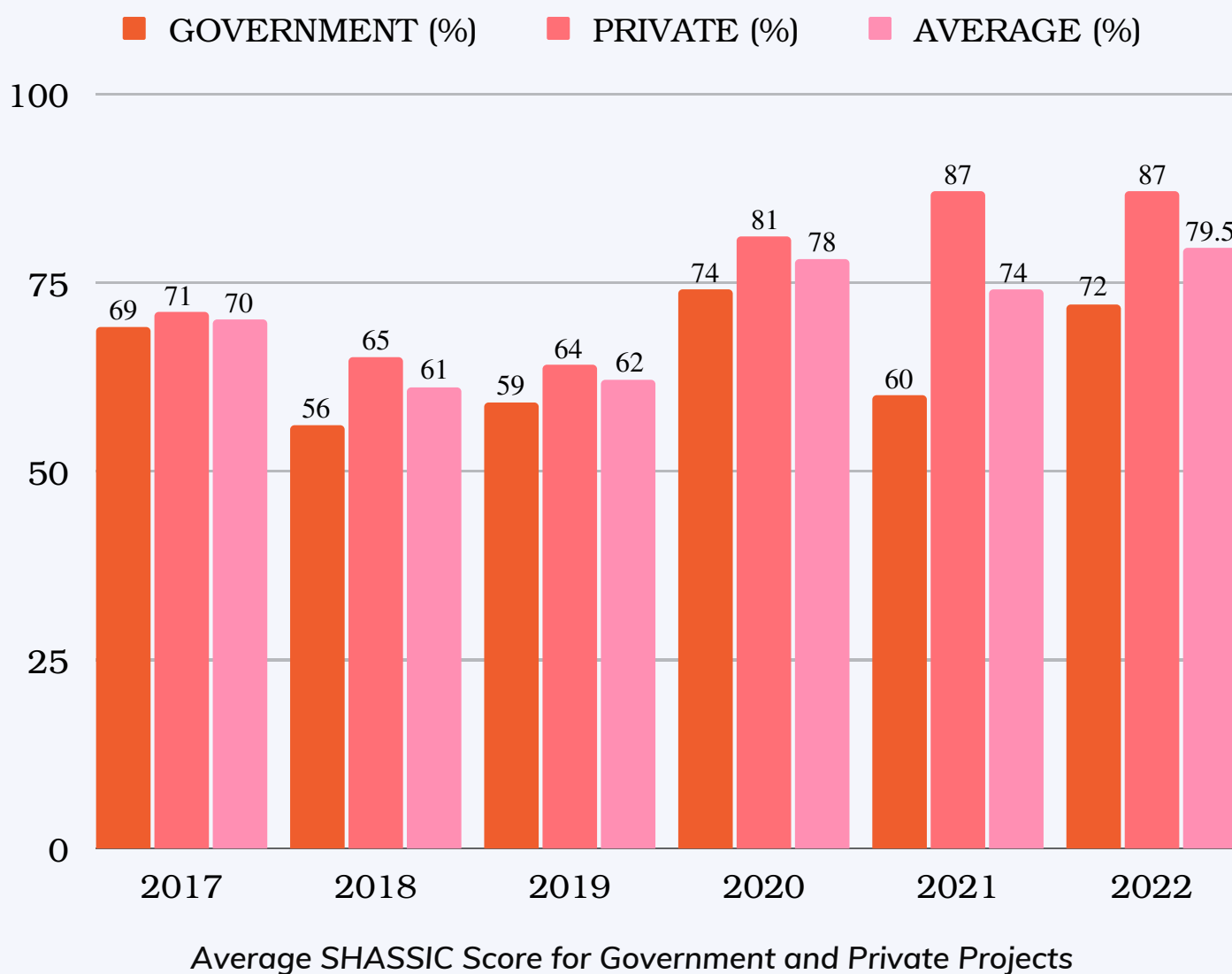
Scan for QLASSIC
brochure



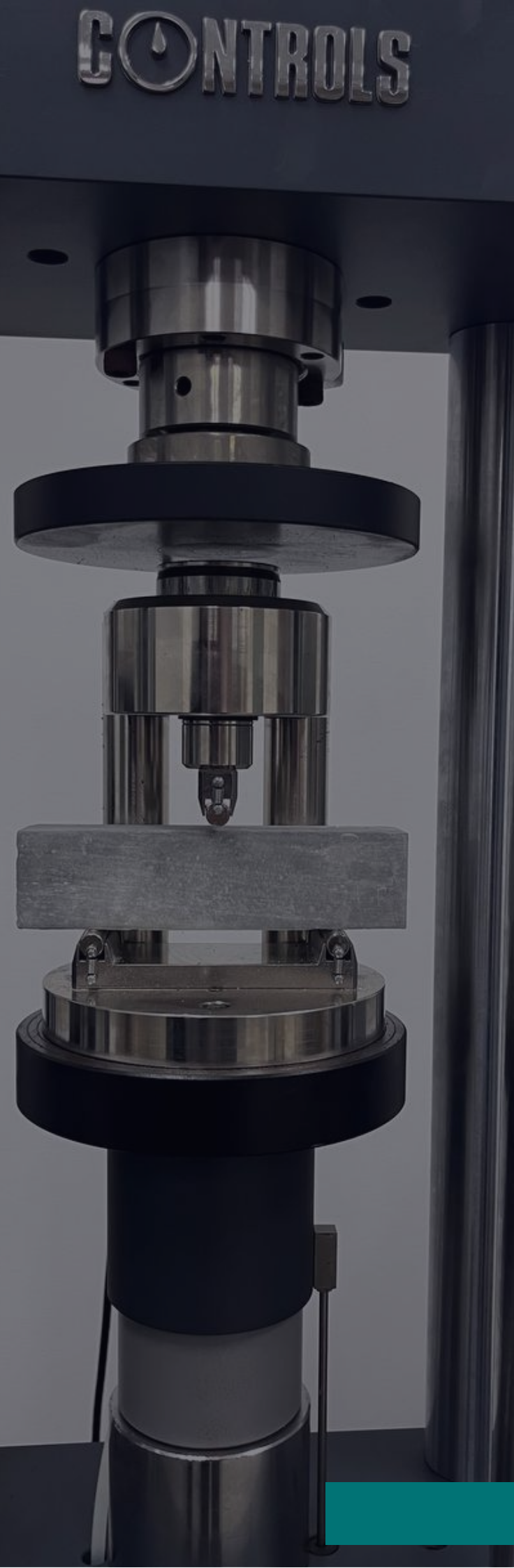
Average QLASSIC Score for Government and Private Projects



Scan for SHASSIC
brochure



For more info and enquiries, contact us at casc@cream.my



highlight on May activities

Highlight on April Activities

Majlis Sambutan Hari Raya Aidilfitri CREAM

8 May 2023

Sunway Putra Tower, Kuala Lumpur

Majlis Sambutan Hari Raya Aidilfitri 2023 celebration organised by the Construction Institute of Malaysia (CREAM) was held at Level 29, Sunway Putra Tower, Kuala Lumpur.

The joyful celebration was attended by Chief Executive Officer, staff CREAM, clients, and friends. Guests were treated to an array of food including Nasi Minyak, Satay, Iontong, Bihun Sup, Apam Balik, kuih muih, cendol, desserts and many more.



Highlight on May Activities

Sabah Construction & Machinery Expo

5 – 7 May 2023

Sabah International Convention Centre (SICC)



CREAM-MKRM Sabah is privileged to be invited by CIDB Sabah to participate in the Sabah Construction & Machinery Expo 2023 (SCME 2023). SCME2023 was held on 5-7th May 2023 at the Sabah International Convention Centre (SICC). The event is a jointly organised by the Sabah Builders Association and Impact Zone Sdn Bhd and endorsed by Jabatan Kerja Raya Sabah (JKR Sabah) and CIDB.

The launching ceremony was graced by the guest of honour, YB Datuk Ir Shahelmy Yahya, Deputy Chief Minister III / Public Work Minister of Sabah. This 3-day expo aims to provide platforms for the built environment industries, policy makers, leaders, and players to showcase, teach and learn the latest innovations in building technologies, methodologies, products, and services.

During the launching ceremony, CREAM-MKRM Sabah booth was visited not only by the guest of honour, but other dignitaries as well. It was an excellent platform to introduce CREAM services to the industry players in Sabah.

The team also met with Datuk Astaman Abdul Aziz, Secretary Manager of Master Builders Association of Malaysia. Together with Mr. Rosmen Ag Hassan, State Director of CIDB Sabah, the team discussed on the prospective outcomes and potential of the testing laboratory in Sabah as well as the long- and short-term planning frameworks.

Throughout SCME2023, MKRM Sabah actively engaged in marketing session with the relevant industries, including PERI Formwork Malaysia Sdn Bhd, DOKA Malaysia, Winabumi Sdn Bhd, Beau Villas IBS Sdn Bhd, Leviat Company, University Malaysia Sabah (UMS), and several others. All these companies are the potential clients of CREAM-MKRM Sabah. Active future engagements and follow up session with these players are in the pipeline.

In conclusion, SCME2023 was a perfect platform to establish linkages with the industry and at the same time gather all industrial, manufacturing and construction network and exchange of ideas. At the same time, CREAM would be able to execute an in-depth assessment to determine the trends and pattern of the Sabah regional construction market.

Highlight on May Activities

CREAM -MKRM Laboratory Tour 2023

Date : 29 May 2023



It's a pleasure to have representatives from YTL Group and The Association of Consulting Engineer Malaysia (ACEM) to visit our CREAM-MKRM last 29th May 2023.

The main objective of the visit is to learn more about our testing facilities and services, and to discuss future collaboration opportunities. The visit was very productive and allowed the visitors to gather valuable information about the latest technology available at CREAM MKRM.

Thank you for joining us and making this visit a success. Our team at CREAM-MKRM is so glad to meet with you in our lab. We hope to cooperate with you soon as your business partner.

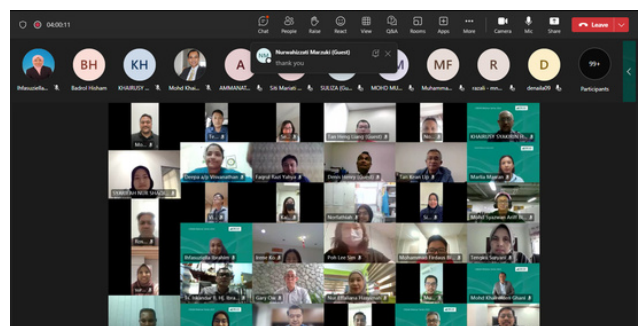
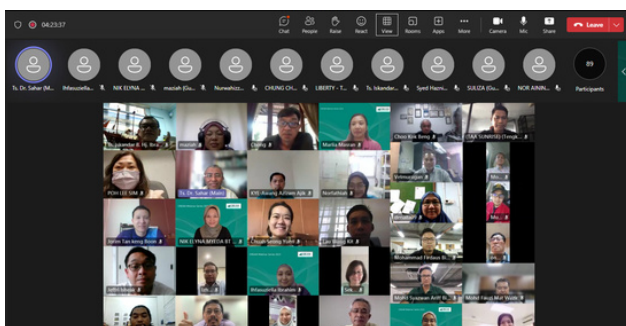
We are always open to visitors, so drop by and say hi! We would love to introduce our facilities and services to you.

Highlight on May Activities

CREAM Webinar Series 2023

CREAM Webinar Series 2023 is a monthly program organised by CREAM and it is a part of our efforts to initiate conversations on issues, challenges, opportunities and initiatives for the construction industry and beyond.

The theme for this month's webinar is "**Emerging Trends in Asset and Facilities Management Innovation**".



Session 1: Current Asset and FM Policy and Its Direction in Business Sustainability

25 May 2023

Speakers:

- Dr. Khairusy Syakirin Has-Yun Hashim
Senior Lecture, International Islamic University Malaysia (IIUM)
- Sr. Dr. Badrol Hisham Hashim
Executive Director, Skylark Solutions Sdn Bhd
- Ts. Dr. Hj Mohd Khairolden Ghani (Adjunct Professor. UTM)
Manager, Construction Research Institute of Malaysia (CREAM)

No of participants: 98 pax

Session 2: The Trends in Asset and FM Industry: Where Are We Now?

31 May 2023

Speakers:

- Ts. Maziah Abu Hassan
Superintendent Civil Engineer, Jabatan Kerja Raya (JKR) Malaysia
- Ts. Dr. Saharani Jaafar
Assistant Secretary, Malaysian Association of Facility Management (MAFM)
- Sr Dr. Nik Elyna Myeda Nik Mat
Senior Lecture, Faculty of Built Environment, Universiti Malaya (UM)

No of participants: 92 pax

Highlight on May Activities

Resilient Construction Courses 2023 (Central Region)

Date: 30 & 31 May 2023

Venue: CIDB Negeri Selangor



On 30 and 31 May 2023, the Resilient Construction Courses 2023 by the Construction Research Institute of Malaysia (CREAM) was held to great success. 2 courses on Resilient Construction for Central Region have been conducted at CIDB Negeri Selangor. The event brought together over 40 participants around Klang Valley from various government agencies and industries including local authorities, technical agencies, ministries, universities, developers, consultants, and contractors for these 2-day courses. This event was a continuation of the previous Resilient Construction Training in 2021 for local authorities all over Malaysia. On 23 June 2022 was a 'game changer' for Guidelines on Landslide Vulnerability Assessment and Risk Index for Critical Infrastructure in Malaysia where this document has been approved at the 79th National Council for Local Government (MNKT) meeting chaired by Senior Works Minister Datuk Seri Haji Fadillah Yusof.

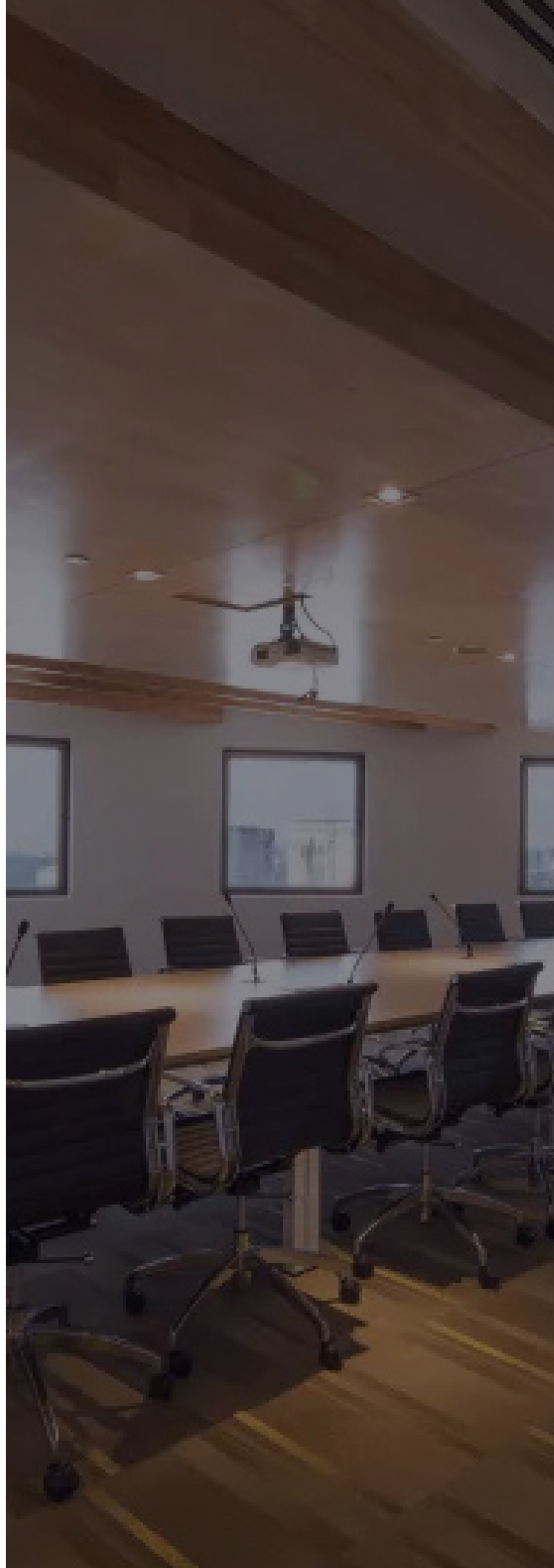
The speakers of these two courses were Dato Ir Dr Che Hassandi Abdullah (Former Senior Director of JKR CREaTE), Dato Zakaria Mohamad (Chairman of Board of Geologists Malaysia), Datuk Ir Haji Abdullah Isnin (Former Director General of Jabatan Pengairan dan Saliran Malaysia) and Dr Nor Eliza Alias (Senior Lecturer at Universiti Teknologi Malaysia). All of these speakers have been involved in the development of these guidelines and manuals.

Highlight on May Activities

Day 1 of the event focused on Guidelines on Landslide Vulnerability Assessment and Risk Index for Critical Infrastructure in Malaysia and how to do landslide vulnerability assessment and calculate risk index for the vulnerable area before obtaining planning permission (KM) using a tool developed by CREAM. Day 2 of the event explained the Development of Risk Assessment and Flood Vulnerability Index for Critical Infrastructure in Malaysia. The participants learned how to calculate risk for certain areas using the risk calculation formula.

CREAM will organize 5 more series of these courses monthly. Please follow our social media accounts for more updates.

upcoming events



CREAM WEBINAR SERIES 2023

Construction 4.0 - The New Construction Landscape



10 CCD POINTS
PER SESSION

Session 1: Emerging Technologies For The Future of Construction Industry

21 June / 9am - 12pm

Session 2: Rebuilding the Construction Industry via Design for Manufacturing and Assembly (DfMA)

27 June / 9am - 12pm

REGISTER
NOW



FEES:

(per session)

RM75
(PER PAX)

Student:

RM30
(PER PAX)

GROUP REGISTRATION:

(MIN 10 PEOPLE PER GROUP)

RM50
(PER PAX)

Student:

RM20
(PER PAX)

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[cream_cidb](https://t.me/cream_cidb)



Construction Research Institute of Malaysia

KURSUS PEMBINAAN BERDAYA TAHAN 2023



25 MATA CCD (2 KURSUS)
10 MATA CPD (2 KURSUS)

OBJEKTIF

Untuk memberi pendedahan dan melatih pihak industri dan PBT bagi penggunaan garis panduan yang telah dibangunkan oleh CREAM bagi penilaian risiko bencana tanah runtuh dan banjir di sesuatu kawasan sebelum pembangunan diadakan.

Kursus Pembinaan Berdaya Tahan - Guidelines for Landslide Vulnerability Assessment & Development of Risk Index for Critical Infrastructure in Malaysia

Hari Pertama

Kursus Pembinaan Berdaya Tahan - Flood Risk Assessment & Flood Vulnerability Index for Critical Infrastructure in Malaysia

Hari Kedua

Sasaran Peserta:

- ✓ Pihak berkuasa tempatan (PBT)
- ✓ Pemaju
- ✓ Kontraktor
- ✓ Perunding

PAKEJ YURAN PENYERTAAN

1 Kursus
RM200/pax

2 Kursus
RM350/pax

Peserta Berkumpulan Min 3 orang
RM150/pax/kursus



**DAFTAR
SEKARANG**

**Guidelines for Landslide Vulnerability Assessment & Development of Risk Index for Critical Infrastructure in Malaysia telah diluluskan oleh Majlis Negara Kerajaan Tempatan (MNKT) ke-79 2022 untuk digunapakai di peringkat Pihak Berkuasa Tempatan*

**Maklumat
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Construction Research Institute of Malaysia

Sungai Petani, Kedah

Hari Pertama: 5 Julai 2023

Hari Kedua: 6 Julai 2023

Kota Bharu, Kelantan

TBC

Johor Bahru, Johor

Hari Pertama: 6 Sept 2023

Hari Kedua: 7 Sept 2023

Shah Alam, Selangor

Hari Pertama: 30 Mei 2023

Hari Kedua: 31 Mei 2023

Ayer Keroh, Melaka

Hari Pertama: 2 Ogos 2023

Hari Kedua: 3 Ogos 2023

Kuching, Sarawak

Hari Pertama: 4 Okt 2023

Hari Kedua: 5 Okt 2023

**DAFTAR
SEKARANG**



Penceramah:



Datuk Ir. Hj. Abdullah Isnin

Mantan Ketua Pengarah,
Jabatan Pengairan dan Saliran Malaysia



Dato' Paduka Ir. Dr. Che Hassandi Abdullah

Mantan Pengarah Kanan,
CREaTE JKR



Dato' Zakaria Mohamad, P.Geol

Pengerusi,
Geomapping Technology Sdn. Bhd. dan
Board of Geologist



Ir. Hjh. Bibi Zarina Che Omar

Pengarah Teknikal,
Dr. Nik & Associates Sdn Bhd



Dr. Nor Eliza Alias

Pensyarah Kanan, Fakulti Kejuruteraan Awam,
Universiti Teknologi Malaysia (UTM)



Ts. Dr. Mastura Azmi

Pensyarah Kanan, Pusat Pengajian Kejuruteraan Awam,
Universiti Sains Malaysia (USM)

**Para penceramah adalah terdiri daripada Ahli Jawatankuasa Teknikal bagi Pembangunan Garis Panduan Tanah Runtuh & Banjir serta mempunyai pengalaman yang luas di dalam bidang masing-masing*

Che Omar

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