# INDUSTRY PROFESIONAL TALK PROGRAM (OCT 2021 – FEB2022)

# **INFRASTRUCTURE DESIGN PROJECT (IDP)**

Mohamad Zain Hashim (PPKA) & Muriatul Khusmah Musa (APB)

The purpose of this professional talk program was to meet the course requirements for Infrastructure Design Project (IDP) CEC 594. The program's goals were to: i) provide students with practical knowledge of civil engineering and construction consulting work in industry ii) foster a culture of continuous learning iii) provide early input and enthusiasm for innovation to students, and iv) strengthen student-industry relationships. Students were required to attend each talk and submit a brief report about it.

The programme has managed to achieve the following learning outcomes:

- 1. Introduced students to some of the stakeholders and major players in the construction industry.
- 2. Exposed students to common civil engineering products and practices in the industry.
- 3 Exposed students to design requirements in the field of civil engineering.
- 4. Encouraged continuous learning in students to enable them to keep abreast of current developments in the industry.

### TALK 1 - TRAFFIC MANAGEMENT AND TRAFFIC IMPACT ASSESSMENT(TIA)

The first talk, titled "Traffic Management and Traffic Impact Assessment Preparation," was carried out on December 1, 2021 by Ts Zarina Binti Rahmat of ZR Traffic and Planner Sdn Bhd. The presentation was delivered online via the Microsoft team medium, as shown in FIGURE 1. The topic of the delivered talk covered the main key parameters in preparing TIAs, as shown in FIGURE 2.

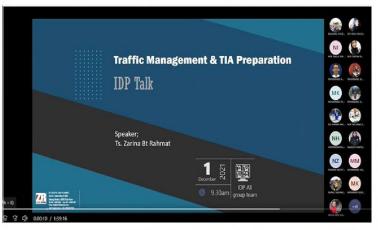




FIGURE 1: Talk1 - Traffic management and TIA preparation by Ts Zarina Binti Rahmat from ZR Traffic and Planner Sdn Bhd (sources: msteams)

FIGURE 2: Slide presentation on TIA preparation

DECTOR SERVICE

#### TALK 2 – ENVIRONMENT IMPACT ASSESSMENT

Talk 2 was conducted by Mr Cheong from Green Acre Sdn Bhd Company, titled "EIA Guidelines in Malaysia & Report Preparation," on December 7, 2021. This lecture was also delivered online via the Microsoft team's medium, as illustrated in FIGURE 3. Mr. Cheong detailed the EIA guidelines and report preparation in his presentation (see FIGURE 2).



FIGURE 3: Talk 2 - EIA guideline in Malaysia & Report preparation (sources: msteams)

## Isi – isi pembentangan

- Apakah EIA
- Mengapa kajian EIA perlu dijalankan?
- Apakah aktiviti yang memerlukan kajian EIA ?
- Apakah tindakan yang akan diambil sekiranya kajian EIA tidak dilaksanakan ?
- Siapakah yang menjalankan kajian EIA ?
- Apakah yang terkandung dalam sebuah kajian EIA?
- Bagaimana laporan EIA diproses oleh Jabatan Alam Sekitar

FIGURE 4: Contents of EIA slide presentation

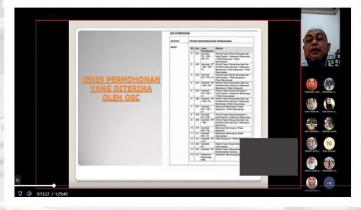


FIGURE 5: Talk by Ir. Ir Dr Hj Azlan Othman on Drawing requirements for submission to local authorities (source: msteams)

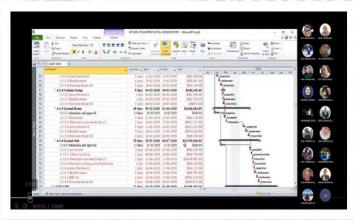


FIGURE 6: Slide presentation on "Scheduling and Project Monitoring using MS Project software" by Ts Dr Dzulkarnaen (source: msteams)

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#### **TALK 3 – DRAWING SUBMISSION**

Ir Dr Hj Azlan Othman of Ilham Jurutera Sdn Bhd delivered Talk 3 online on December 14, 2021, via the Microsoft team. His topic was "Drawing requirements for submission to local authorities." He discussed the various criteria required by the local authorities involved, including the Municipal Council, JPS, JKR, IWK, PBAPP, BOMBA, SPAN, and others. The explanation also included the drawing format that must be prepared, the colour coded drawings that must be used, different types of drawing title blocks and the content of the title blocks, as well as the requirements for important forms needed when submitting the drawing to the authorities.

#### **TALK 4 – MICROSOFT PROJECT**

Ts Dr Dzulkarnaen, a Microsoft project expert, delivered Talk 4 titled "Scheduling and Project Monitoring Using MS Project software" on January 7, 2022. Ts Dr Dzulkarnaen shared with the students the fundamentals of using MS Project for a project, such as organising task activities, estimatimating project duration, preparing costs, planning for start and finish dates, assign resources, and drawing an S-curve, as shown in FIGURE 6.

#### TALK 5 - TIA - CASE STUDY

Knowledge of Traffic Impact Assessment (TIA) is critical in one-area development planning. The requirement for TIA reports for all government and private projects has increased the demand for traffic planners. Thus. Talk 5 that was carried out on January 31, 2022, focused on an in-depth explanation of "Traffic Impact Assessment (TIA-Case study) and Road Safety Audit (RSA)." The speaker for this talk was Ts Syazwan from Ansart Sdn Bhd. During the first part of the talk, students were given a detailed explanation of how to calculate and prepare all parameters for the TIA report, as shown in FIGURE 7. In the second part of the talk TS Syazwan explained the current RSA study requirements for a specific road segment. (See FIGURE 8)

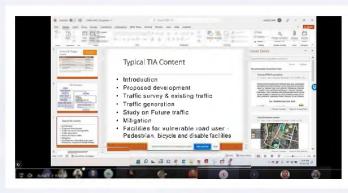


FIGURE 7: Talk 5 -Traffic Impact Assessment (TIA-Case study) by Ts Syazwan from Ansart Sdn Bhd. (source: Msteams)



FIGURE 8: Talk 5 - Road Safety Audit (RSA) by Ts Syazwan from Ansart Sdn Bhd. (source: Msteams)



FIGURE 9: Talk 6 - Project Management & Sharing Experiences by Ir Ku Adenan from HSS Engineers Bhd (source: msteams)

#### **TALK 6 – VIRTUAL SITE VISIT**

The sixth talked was delivered by Ir Ku Adenan from HSS Engineers Bhd .The lecture was titled "Project Management & Sharing Experiences" and was delivered online on January 31, 2022 via Microsoft teams (as shown in FIGURE 9). The students were virtually taken to the construction site during this talk. Some technical issues on the construction site were discussed with the students, as well as solutions. This virtual site visit experience exposed the students to the current construction site conditions.

Overall, this programme has provided students with extensive exposure to project design. The speaker's knowledge and experiences were extremely beneficial to the students in completing their infrastructure design project. It is hoped that the students would use their newly acquired knowledge to complete their assignment on comprehensive design project (P1R) and capstone project (P2R).

#### **ACKNOWLEDGEMENT**

My heartfelt thanks to all of the invited speakers who generously shared their experiences and knowledge with the students. In addition, I would also like to thank the KPP PPKA, KP PPKA, IDP PPKA team, and IDP PPKA students for their contributions to the success of the programme "INDUSTRY PROFESSIONAL TALK PROGRAM (OCT2021 - FEB2022) infrastructure design project (IDP) - CEC594".