



UNIVERSITI
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BUILDCON2023

**COMPILATION OF PROJECT INNOVATION IDEAS
SEMESTER MARCH – AUGUST 2023**

EMBRACING SMART CONSTRUCTION TRANSFORMATION

BUILDERS' CONVENTION DAY 2023

**Department of Built Environment Studies and Technology
College of Built Environment
Universiti Teknologi MARA Perak Branch**

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Organised by
Department of Built Environment Studies and Technology
College of Built Environment
Universiti Teknologi MARA Perak Branch
Malaysia

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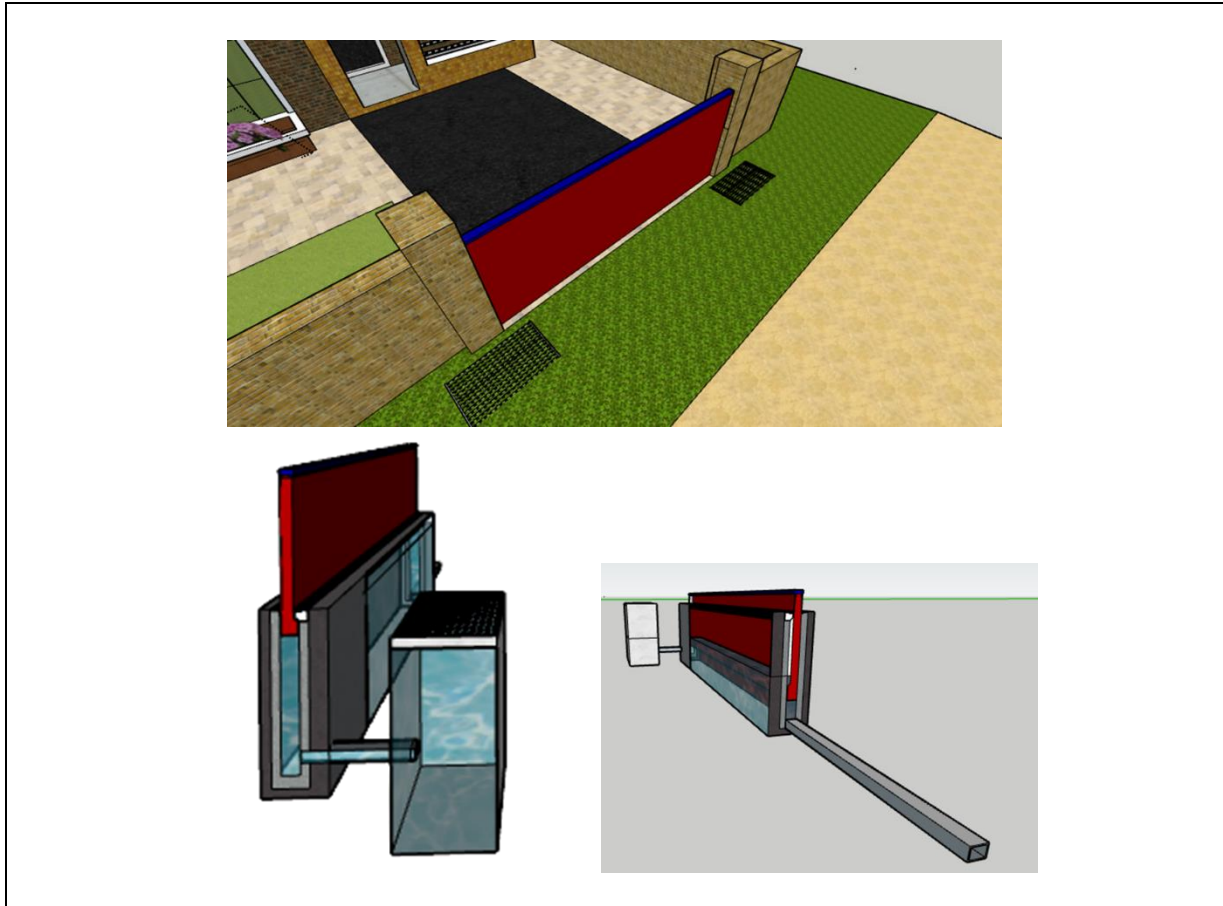
SELF AUTOMATED FLOOD PROTECTION FLOATING GATE

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Self Automated Flood Protection Floating Gate

Innovation Idea:

This research study aims to investigate and evaluate the effectiveness of an innovative flood gate, namely Self-Automated Flood Protection Floating Gate. Self-Automated Flood Protection Floating Gate is as a solution to enhance flood resilience in Malaysia. The frequent occurrence of floods in Malaysia, exacerbated by monsoon seasons and human-induced factors, has posed significant challenges to public safety, infrastructure, and economy. This study presents a comprehensive examination of the flood situation in Malaysia, explores innovative approaches to mitigate flood damage, and focuses on the development and assessment of the Self-Automated Flood Protection Floating Gate. The flood defence system is unique and effective which helps to protect people and property from inland waterway floods caused by heavy rainfall. This system is intended to provide optimal protection against extreme high-water levels. Rapid-onset flooding caused by heavy rainfall poses the greatest challenge for traditional manually operated flood doors and floodgates. These systems need a warning period and time to set up the flood gate. Conversely, a self-Automated Flood Protection Floating Gate can operate itself without the

need of manpower or electricity. The Self-Automated Flood Protection Floating Gate overcomes all issues associated with these flood defences and has a considerable advantage of not requiring any intervention during a flood warning. The Self-Automated Flood Protection Floating Gate uses the approaching floodwaters to automatically raise the flood gate, effectively using the problem to create the solution.

Surat kami : 700-KPK (PRP.UP.1/20/1)

Tarikh : 20 Januari 2023

Prof. Madya Dr. Nur Hisham Ibrahim
Rektor
Universiti Teknologi MARA
Cawangan Perak



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Kelulusan daripada pihak tuan dalam perkara ini amat dihargai.

Sekian, terima kasih.

“BERKHIDMAT UNTUK NEGARA”

Saya yang menjalankan amanah,

SITI BASRIYAH SHAIK BAHARUDIN
Timbalan Ketua Pustakawan

nar

Setuju.

27.1.2023

PROF. MADYA DR. NUR HISHAM IBRAHIM
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