Buletin FKA PENGAJIAN KEJURUTERAAN AWAM UNIVERSITI TEKNOLOGI MARA CAWANGAN PULAU PINANG

EDISI 2022



UNIVERSITI TEKNOLOGI

Cawangan Pulau Pinang Kampus Permatang Pauh



ENVIRONMENTAL IMPACT SCREENING (EIS) AND SOCIAL IMPACT ASSESSMENT (SIA) FOR PROPOSED NEW ROAD ALIGNMENT AT CAMERON HIGHLANDS, PAHANG, MALAYSIA

Prof Dr Shanker Kumar Sinnakaudan, Ts. Siti Isma Hani Ismail, Zarina Rahmat, Mohd Rizal Shukor, Maisarah Abd Ghani

Cameron Highlands can be access by road via Tapah, Simpang Pulai, Gua Musang or Sungai Koyan. Until 1990s, the only access road to Cameron Highlands was by FT59 which begins in Tapah, Perak. In 2004, a new access road, FT185 was open connecting Simpang Pulai, Perak through the northern part of the Highlands and Gua Musang in Southern Kelantan before terminating in Kampung Kuala Jenderis in Hulu Terengganu, Terengganu. By 2010, the third access road, FT102 was opened connecting Ringlet to Felda Sungai Koyan, Pahang. However, the main access road within Cameron Highlands itself it only via FT59 connecting Blue Valley to Ringlet **(Figure 1)**.



Source: RTD Cameron Highlands (Amendment)

to this sudden traffic influx (Figure 2).



Figure 2: Existing Traffic Condition

2030 Due to the existence of multiple access roads to Cameron Highlands, the number of tourists had increased tremendously especially during public and school holidays. The traffic condition at FT59 is getting worse as there are many tourist attractions spots along the route. Because of this problem, local people have experienced severe traffic congestion due

Therefore, a study to propose alternative road to serve the traffic demand is urgently in need to overcome this problem. As such Kementerian Kerja Raya Malaysia (KKR) via ZR Traffic & Planner has appointed WAREM to carry out specialized studies on Environmental Impact Screening (EIS) and Social Impact Assessment (SIA) for the proposed road alternatives to curb the Traffic Congestions at Cameron Highlands. Since environmental and social impact awareness in the country has significantly increased in recent years, the government has been developing and reviewing national policies to address environmental and social impact findings in various projects before granting any development approval. The



construction, maintenance and rehabilitation of roads, however, have caused widespread environmental and social degradation to the surrounding area. Poorly planned roads and bad practices in construction, maintenance and rehabilitation works have far-reaching and leading to negative effects. The resulting damages, in many cases, are left permanent without any mitigation actions. The negative effects continue for a long time and have lasting consequences. In such cases, the adverse impacts are so severe that they offset their benefits of facilitated linkages, enhanced mobility and improved accessibility. Hence, to materialise these critical findings, the research project is granted under the Directly Funded Research (PBT) Scheme.

Environmental Impact Screening (EIS) sector was led by Prof Dr Shanker Kumar Sinnakaudan, a Registered EIA Consultant with Department of Environment Malaysia (CEP-C0372) while the Social Impact Assessment (SIA) was led by Ts Siti Isma Hani Ismail, a Professional Registered SIA Consultant (MSIA A023) with Malaysia Social Impact Assessment Association.

The main objectives of EIS for the said project are set as follows: a)To outline the necessary requirements for the proposed project to undergo initial screening and assessment; b)To outline the relevant baseline information required for incorporation into the EIA study; c)To outline the methodology and tools to identify, predict, evaluate and assess the significant environmental issues; d)To identify suitable pollution prevention and mitigation measures (P2M2s) to minimize the significant environmental issues arising from implementation of the proposed project and identification of residual impacts; e)To outline an Environmental Management Plan (EMP) framework for EIA study; f)To outline the environmental monitoring and audit programmes for EIA study. Furthermore, the budget for a new alignment in Cameron Highlands allocated in the Belanjawan 2021 emphasized the need for environmental consideration in constructing the new road alignment.

While the critical objectives for SIA is to address the social issues due to the project development during the construction and operation stages of the proposed road alignment; a)To identify and determine the targeted groups that may be affected by the proposed project; b)To assess the impacts on community affected by the proposed project, c)To assess issues and options that lead to the identification of alternatives in the design of the project, plan and program, d)To propose appropriate mitigation measures whereby the recommendations may include avoidance of impacts by not taking or modifying an action, minimizing, rectifying, or reducing impacts through changes in design or operation of the project; e)To propose Social Impact Management Plan (SIMP) of the project for future mitigation planning; e)To propose monitoring an audit program that should be carried out during the implementation of the project.

The proposed study area shown in **Figure 3** which comprises a 5 km radius impact zone from the prophetical road alignments.

The environmental and social study can give exposure greater exposure Postgraduate and Under Graduate students in carrying out questionnaire survey that they can practice in Industrial Design and Final Year Projects (IDP and FYP). Some of the students participated at SIA field surveys.

While there exist various forms of adverse impacts on the natural environment in the region, the negative effects of road development on the environmental social are also highly significant. Undesirable consequences in terms of health, safety, economic wellbeing, security, community cohesiveness, social values, and cultural heritage have been observed. As we are aware, sustainable urban and rural development requires a systematic and comprehensive transport infrastructure to complement the current and future land use development trend. Hence, the present study which was carried out in line with Rancangan Tempatan Daerah Cameron Highlands 2030 (Penggantian), aiming to restore Cameron Highlands' pre-eminence as a prosperous and sustainable highland tourism destination by 2030 without compromising Environmental and Social impacts which may arise due to the proposed development.



Figure 3 Proposed ZOS and ZOI for the Study Area Reference to RTD

