

# Executive Summary

## 1.0 INTRODUCTION

- 1.1 The Environmental Impact Assessment (EIA) report is prepared for the **Proposed Development of a Hotel On Lots 9 & 10, Pekan Klebang Seksyen II, District of Melaka Tengah, Melaka**. This Project consists of 200 units of hotel rooms and basic infrastructure and utilities, including a *surau*, meeting room, swimming pool and gymnasium. The total development area is approximately 0.91 acres of land (0.37 ha.)
- 1.2 The proposed Project is a prescribed activity that falls under **Activity No. 12(a) of Schedule 1 of the Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order, 2015** made under **Section 34A of the Environmental Quality Act, 1974**. The Project initiator is required to prepare and submit an Environmental Impact Assessment (EIA) report to ensure the Environmental Impact Assessment is undertaken, consonant with the protocols established by the Director General of the Department of Environment (DOE), Malaysia.
- 1.3 This project is initiated by **Messrs. Prolific Resources Sdn. Bhd.** Any enquiries regarding the Project may be directed to:

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- 1.4 The EIA report is prepared and submitted by an EIA study team led by **Datuk Ir. Othman Abdul Rahim**, an EIA Consultant registered with the Department of

Environment (DOE Reg. No. C0006). Enquiries and correspondence pertaining to this report can be made to:

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## **2.0 STATEMENT OF NEED**

2.1 The Melaka Government has adopted a strategy of developing the State into a City-State by the year 2020. It aims to achieve this mainly by intensively developing the industrial and tourism sectors which will have a positive impact on population, job opportunities and demand for residential, commercial and industrial properties. In order to meet the growing demand of the tourism sector, the State Government of Melaka is planning to develop 20,000 hotel rooms and homestay over the next three years. (Source: 15 Million Tourists Expected in Malacca. *The Star*, p. 1, 19 January 2014).

2.2 As such, the proposed Project intends to contribute to the development of tourism in the State by taking all factors into account. By taking into consideration the location of the site as well as the land price in this area, the proposed site is suitable to be developed into a high-rise building. The Project is envisaged to complement the existing land use and would become one of the attractions for economic growth.

2.4 The proposed Project has been conceived to achieve the following objectives:-

- Provide tourist accommodation, viz., hotel with amenities and recreational facilities;
- Advocate of State government aspiration in ensuring steady growth of the basic and necessary tourism supply, viz., tourist accommodation in the State;
- To fully utilise the available space for sustainable development; and
- To increase the business opportunity for the local community and generate higher revenue for the local municipality, thus spurring the local economic development in the State.

### **3.0 PROJECT DESCRIPTION**

- 3.1 The development is proposed on a 0.91-acre land in Pekan Klebang Seksyen II, District of Melaka Tengah, Melaka. The proposed site is situated right next to Jalan Klebang Besar, about 200m to the east of Batang Tiga Police Station. The Golden Coast Condominium is situated about 90m to the west of the project site while Dataran 1 Malaysia is located about 100m to the south of the site.
- 3.2 The proposed project involves the transformation of 0.91-acre land into a 20-storey hotel with 200 rooms. Generally, the topography of the site is flat. The Project site can be accessed via Jalan Klebang Besar. **Figure 1** shows the site plan of the Project while **Figure 2** is the layout plan of the Project.

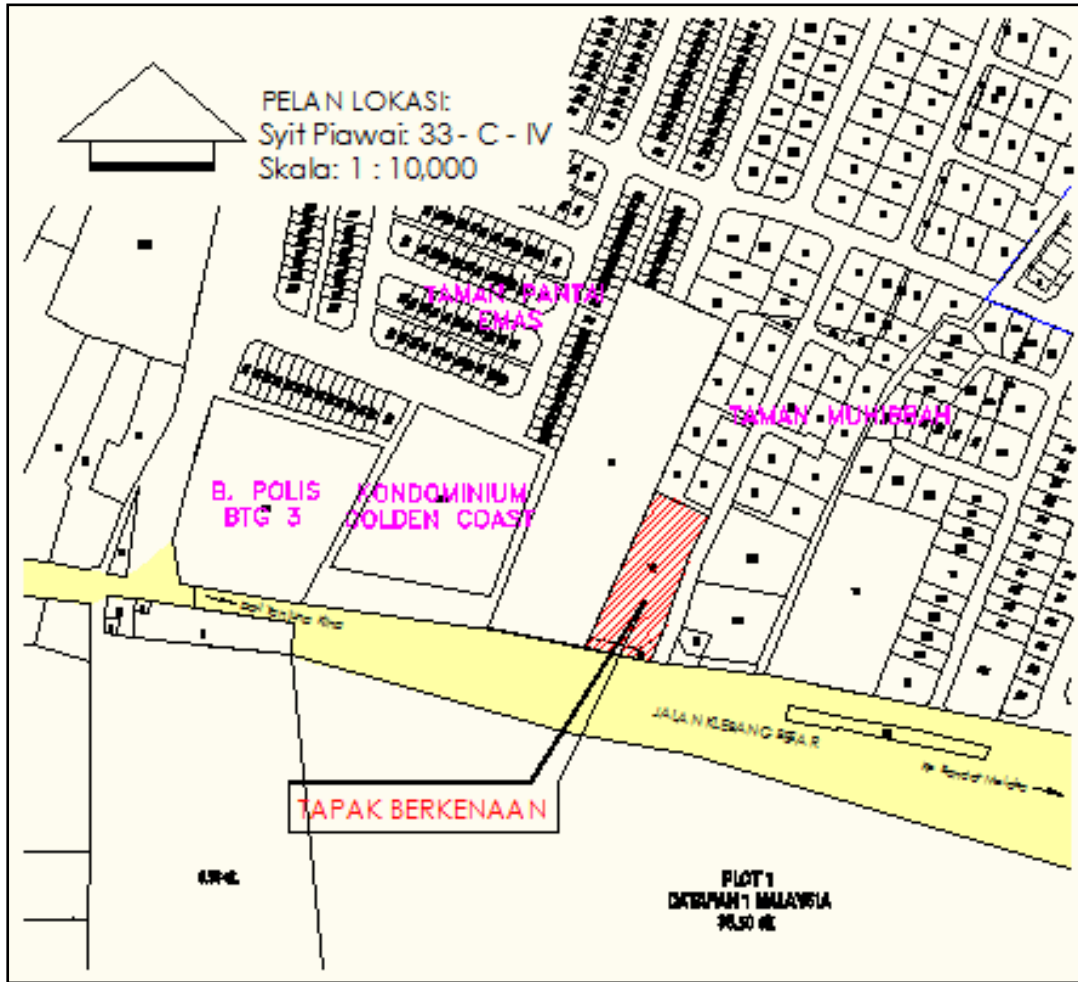
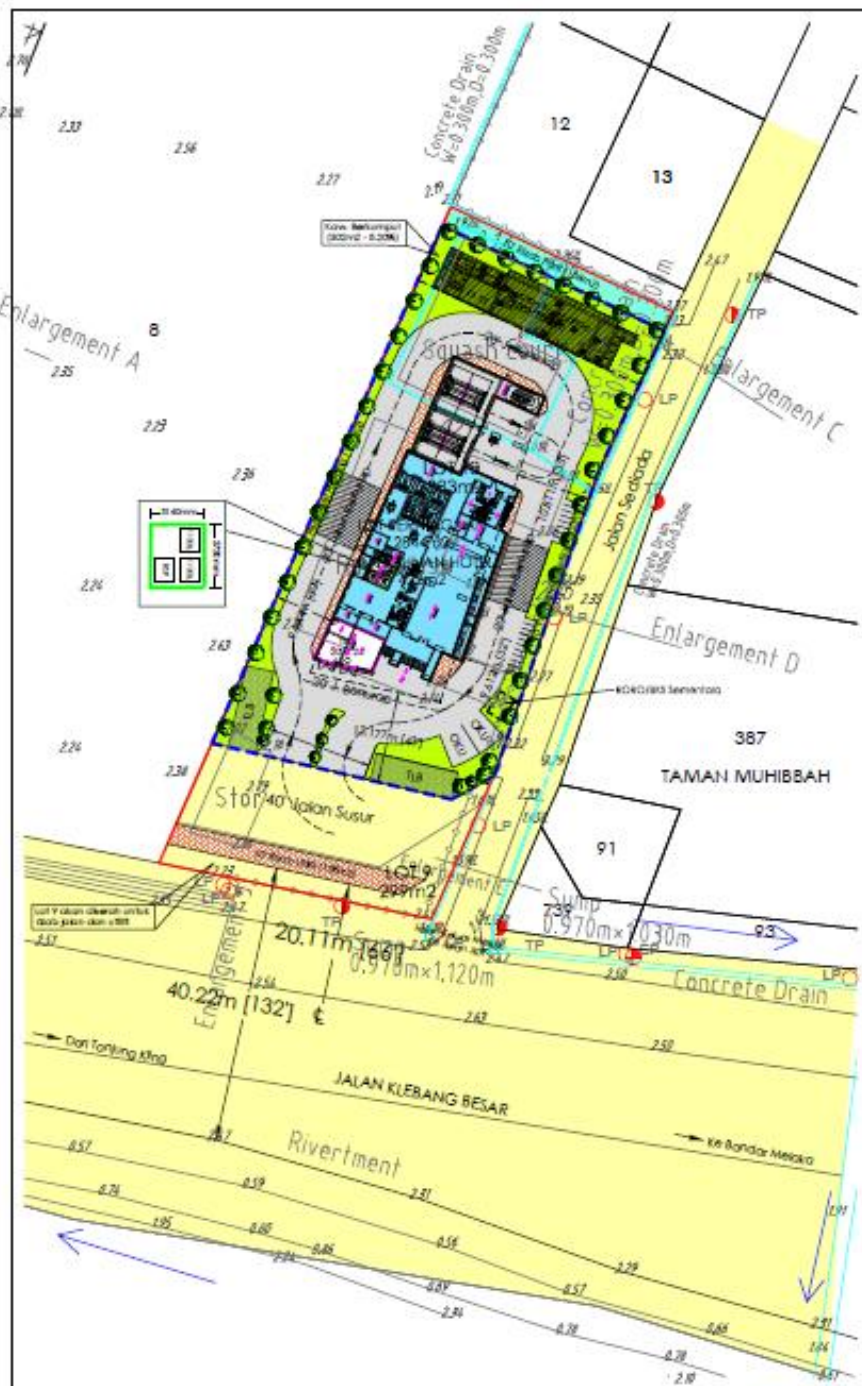


Figure 1: Site Plan



**Figure 2: Layout Plan**

3.3 The percentage and acreage for each development category are summarised in **Table 1**.

**Table 1: Details of the Proposed Component**

<b>Component</b>	<b>Unit</b>	<b>Area (acre)</b>	<b>Percentage (%)</b>
<b>Infrastructure</b>			
Road Reserve	-	0.15	16.89
Drain Reserve	-	0.03	2.93
Utility Reserve	-	0.03	2.93
<b>Sub-total</b>	-	<b>0.21</b>	<b>22.76</b>
<b>Commercial</b>			
Hotel (20-storey) - Level 1: Lobby, lounge, reception, control room, “rumah sampah”, TNB and other utilities. - Level 2: Cafeteria, surau, pantry, genset room and other utilities. - Level 3: Meeting room and other utilities. - Level 4-10: Hotel rooms (91 rooms) - Level 11-14: Hotel rooms (44 rooms) - Level 15-19: Hotel rooms (65 rooms) - Level 20: Gymnasium, cafeteria, landscape area including swimming pool and other utilities.	200	0.10	11.46
Mechanical Car Park	-	-	-
Open space	-	0.07	8.20
Perimeter planting	-	0.10	10.64
Sewerage Treatment Plant (underground)	-	-	-
Parking spaces	-	-	-
Paved road	-	-	-
Walkway	-	-	-
RORO / Temporary BKS	-	-	-
<b>Sub-total</b>		<b>0.70</b>	<b>77.24</b>
<b>GRAND TOTAL</b>		<b>0.91</b>	<b>100.00</b>

#### **4.0 EXISTING ENVIRONMENT**

- 4.1 The topography of the site can be described as generally flat. The ground levels at the Project site vary from the lowest level of 2.02m MSL to the highest level of 2.70m MSL. The higher levels within the site are mostly scattered at the northern portion of the site, while the lower levels of the site are found mostly at the southern portion of the site.
- 4.2 According to the Geological Survey Map, the main geological character of this area is Devonian. The rock types in this category are phyllite, schist and slate. Some interbeds of conglomerate, chert and rare volcanics are also available within this category.
- 4.3 From the Reconnaissance Soil Map of Negeri Melaka, the type of soil within the site is designated as Urban Land.
- 4.4 There is no river within the Project site. Surface runoff is discharged to the existing drains surrounding the project site and directly into the Straits of Melaka.
- 4.5 The meteorological data was obtained from Batu Berendam Airport Principal Station (No. Station: 48665 – N 02°16', E 102°15') of the Malaysian Meteorological Service Department. The area is characterized as hot humid days and cool nights. Based on the rainfall data from 1968 - 2014, the annual mean rainfall for Melaka is about 1,965.6 mm with the annual mean raindays of 171 days. For the period monitored, the wettest month of the year falls on the month of November which recorded a value of 234.5 mm with the highest corresponding raindays of 24 days. Meanwhile, the driest month occurs in January with an average rainfall of 81.8 mm (corresponding raindays of 9 days).
- 4.6 The annual wind rose for Melaka indicates that the dominant wind is blowing from Northeast (26.9%). The percentage of calm condition occurrences for Melaka is about 20.2% of the time. The annual 24-hour mean relative humidity is about 82.6% with the lowest and highest monthly 24-hour mean relative humidity recorded in the month

of February and November with values of 77.5% and 85.4% respectively. The average maximum and minimum mean daily temperature are 31.9°C and 23.5°C respectively.

- 4.7 Information on water quality was analysed at five (5) locations (W1, W2, W3, W4 and W5). The water samples were collected on 12<sup>th</sup> March 2016 from the existing drain surrounding the Project site. There is no water present at all sampling location except for W4. Since the Project site is located within a residential area, it can be said that non-point source pollution vis. runoff and pet wastes that have been washed into the drain might have influence the water quality at point W4.
- 4.8 Ambient air quality was measured using High Volume Sampler at four (4) locations (A1 to A4) for Total Suspended Particulate (TSP). The results obtained indicate that the ambient air quality is relatively well below the Recommended Malaysian Air Quality Guidelines of 260 µg/m<sup>3</sup>. The concentration of TSP detected at sampling location A1, A2, A3 and A4 are 52 µg/m<sup>3</sup>, 60 µg/m<sup>3</sup>, 52 µg/m<sup>3</sup> and 48 µg/m<sup>3</sup> respectively.
- 4.9 Noise levels were recorded during daytime, evening time and night time at four (4) locations (N1 to N4). The average LAeq readings recorded during day time and evening time are well within the permissible level of 60 dB(A) at both N1 and N2. The LAeq readings at N3 have exceeded the limit during day time and evening time. As for N4, the LAeq readings did not exceed the stipulated limit during the evening time, but have exceeded the limit during the day time. During the night time, the average LAeq reading recorded at all monitoring stations has exceeded the permissible sound level of 50dB(A).
- 4.10 The proposed Project is located in a flat land and it is near to the coast line. Currently, there are abandoned structures at the Project site and the land is filled with shrubs. Thus, the biological components and aquatic ecology can be considered as not significant to be assessed.

4.11 Based on the Malaysia Population Distribution and Housing Census 2010, a total of 6,498 people were recorded in Mukim Klebang Besar with a total number of households of about 1,680 with an average family size of 4.0. As for the ethnic composition, the total population recorded is only based on Malaysian citizenship, excluding non-Malaysian citizens. In overall, Chinese is the largest ethnic group with 3,005 people (46.24%), followed by Malay with 2,999 people (46.15%), Indian with 187 people (2.88%), other Bumiputra with 23 people (0.4%) and 22 (0.37%) from other ethnic groups.

4.12 The Project site is situated beside Jalan Klebang Besar that connects Sungai Udang to Melaka City. The data on the traffic volume was obtained from the Traffic Impact Assessment (TIA) report which was prepared by Ciri Selasih Sdn. Bhd. The locations of the traffic count are:

- Jalan Batang Tiga and Jalan Klebang Besar (FR5) as Junction A
- Jalan Klebang Besar (FR5) and Jalan Taman Muhibbah as Junction B
- Jalan Klebang Besar (FR5) and New Coastal Road as Junction C

From the Traffic Impact Assessment (TIA) report, it was found that Jalan Klebang Besar (FR5) has exceeded its lane capacity. It was also found that Junction A and B has exceeded the allowable capacity.

## **5.0 POTENTIAL SIGNIFICANT IMPACTS AND MITIGATING MEASURES**

5.1 The Project activities expected to have potential impact on the environment were broadly classified into four categories, viz., pre-construction, construction, operation and project abandonment. Impact assessments were carried out for each activity. Several impacts were assessed and the mitigating measures were proposed in order to control the effects. In arriving at decisions on environmental impacts, the guidelines given in the reference A Handbook of Environmental Impact Assessment Guideline' published by DOE were used.

5.2 The potential significant impacts and mitigating measures are described in **Table 2**.

**Table 2: Potential Significant Impact And Mitigating Measures**

<b>Issue</b>	<b>Source of Impact</b>	<b>Potential Impact</b>	<b>Magnitude of Significant Potential Impact (Severe / Moderate / Low / Negligible)</b>	<b>Mitigating Measures</b>	<b>Reference Page</b>
Soil erosion	<ul style="list-style-type: none"> <li>-Excavation works.</li> <li>-Movement of heavy lorries carrying fill materials.</li> <li>-Construction works.</li> </ul>	Soil erosion is not expected to occur	Negligible	<ul style="list-style-type: none"> <li>-Provision of proper entrance for construction traffic.</li> <li>-Entrance sweeping and drainage maintenance.</li> <li>-Filling and stockpile materials which are subjected to erosive force shall be properly located within the project site and covered.</li> <li>-Preparation of ESCP plan whenever it is needed and practical to be implemented on-site.</li> <li>- Non-construction measures or actions for the BMP should be referred and adopted whenever and wherever possible.</li> </ul>	5-4 and 6-1

<b>Issue</b>	<b>Source of Impact</b>	<b>Potential Impact</b>	<b>Magnitude of Significant Potential Impact (Severe / Moderate / Low / Negligible)</b>	<b>Mitigating Measures</b>	<b>Reference Page</b>
Hydrological regimes	Additional impervious area from the construction of the Project	Increase in surface runoff. However, it is not expected to be significant since the project is located near to the existing coastline.	Negligible	Proper internal drainage system shall be constructed and maintained at all times.	5-10 and 6-3

Issue	Source of Impact	Potential Impact	Magnitude of Significant Potential Impact (Severe / Moderate / Low / Negligible)	Mitigating Measures	Reference Page
Demolition Activities	-Demolition of the buildings.	<p>-Create noisy environment which will disturb the comfort of the nearby residential areas.</p> <p>-Degradation of air quality.</p> <p>- Production of solid waste that will need to be managed and disposed properly.</p> <p>-Possibilities of accidents that occurred during demolition to the workers involved.</p>	Severe	<p>- Full investigation shall be carried out to determine the type of structural framework before demolition begins.</p> <p>- Before commencement of work, all utility services either underground or above. should be located and clearly identified for the workers on-site.</p> <p>- All workers are to wear Personal Protective Equipment (PPE) to ensure their safety.</p> <p>- Machineries / equipment used for the demolition must be in a good, efficient condition and are well-maintained to reduce noise impact..</p> <p>- Hoarding must be installed and signages should be placed at the site to inform the public that demolition is in-progress.</p> <p>- Solid waste generated from the demolition works shall be handled properly and disposed of at the approved landfill.</p>	5-10 and 6-4

Issue	Source of Impact	Potential Impact	Magnitude of Significant Potential Impact (Severe / Moderate / Low / Negligible)	Mitigating Measures	Reference Page
Solid waste generation	i. During construction phase -Waste from labour camp. -Waste from construction works.	-Cause health hazard to the workers and the public in the nearby area. -Providing habitats for disease vectors→ jeopardise the public's safety and the ecosystem of the surrounding areas.	Severe	- Waste generated shall be collected and disposed off at the approved landfill site. -Any reusable or recyclable waste should be segregated as to enable recycling and waste minimisation to take place. - Any open burning and illegal dumping to the adjacent land is strictly prohibited. - Provide on each floor a special place to collect the construction waste.	5-11 and 6-5
	ii. During operational phase  -Estimated solid waste generated is 872kg/day  -Improper and unorganized collection of waste.	- Create health hazard and habitats for disease vectors.  -The rubbish accumulation will create eyesore and bad odor.	Severe	- A system of waste collection should be set up to ensure that regular and frequent collection of waste are carried out and disposed at the designated landfill sites - Collection of solid waste shall be performed by the privatised garbage contractors appointed by SWcorp. -Properly designed storage and collection method should be considered for wet solid	5-12 and 6-6

Issue	Source of Impact	Potential Impact	Magnitude of Significant Potential Impact (Severe / Moderate / Low / Negligible)	Mitigating Measures	Reference Page
				<p>waste</p> <ul style="list-style-type: none"> <li>- The wet solid waste from the kitchen and other food and beverage outlets should be collected and kept in a chilled or air conditioned storage system until collected by the garbage trucks for disposal.</li> <li>- Proper garbage collection system should be provided in every unit of the hotel.</li> <li>- Proper housekeeping service shall be practised in order to ensure the units are clean</li> <li>- Adequate garbage bins shall also be provided at public areas.</li> <li>- Waste generated should be sorted out.</li> <li>- Reuse or recycling of garbage should be taken into consideration.</li> </ul>	
Scheduled waste generation	i. During construction phase - Maintenance of machineries / heavy vehicles on	-Spent oil → will cause water pollution if spills / leaks and cause health hazard if exposed to extreme temperature.	Severe	- The waste oils shall be stored in 200 L drums and shall be collected by licensed scheduled waste contractor approved by DOE for recycling or disposal.	5-12 and 6-7

Issue	Source of Impact	Potential Impact	Magnitude of Significant Potential Impact (Severe / Moderate / Low / Negligible)	Mitigating Measures	Reference Page
	<p>site.</p> <p>-Use of chemical for the construction works.</p>	<p>- Pose a threat to the surrounding soil → if it is not properly managed and disposed during the construction stage.</p> <p>- Directly contribute to the degradation of the surrounding ecology.</p>		<p>- Temporary storage of the scheduled waste shall have an impermeable floor, banded and covered with a simple structure of roofing to protect the container from the weather.</p> <p>- The storage area for schedule waste shall be enclosed on at least 3 sides, have adequate ventilation, be covered to prevent from rainfall from entering, be arranged so that incompatible materials are appropriately separated and have a signboard set up with the word DANGER</p>	

<b>Issue</b>	<b>Source of Impact</b>	<b>Potential Impact</b>	<b>Magnitude of Significant Potential Impact (Severe / Moderate / Low / Negligible)</b>	<b>Mitigating Measures</b>	<b>Reference Page</b>
	ii. During operational phase	Should there be any maintenance work that involves usage of chemicals, oil, lubricants etc., if it is not handled or managed accordingly, would undoubtedly cause a detrimental impact to the water quality at the nearby watercourse.	Negligible	The management shall enforce the ruling of no scheduled waste to be thrown within the premises.	5-14 and 6-8



Issue	Source of Impact	Potential Impact	Magnitude of Significant Potential Impact (Severe / Moderate / Low / Negligible)	Mitigating Measures	Reference Page
	ii. During operational phase -190m <sup>3</sup> of wastewater will be generated with the corresponding influent load of 44kg of BOD <sub>5</sub> /day and 54.4kg of SS/day.	<ul style="list-style-type: none"> <li>- If the effluent is not treated, it will impose a major pollution to the receiving watercourse.</li> <li>- Odour brought about by the decomposition of organic matter into pungent Hydrogen Sulphide gas.</li> </ul>	Severe	<ul style="list-style-type: none"> <li>- Proper management of used oil from the oil interceptor or grease traps.</li> <li>- Proper sewerage treatment plant.</li> </ul>	5-15 and 6-11

Issue	Source of Impact	Potential Impact	Magnitude of Significant Potential Impact (Severe / Moderate / Low / Negligible)	Mitigating Measures	Reference Page
Ambient air quality	<ul style="list-style-type: none"> <li>- Material transportation and vehicular movements.</li> <li>-Construction activities</li> <li>- Exhaust emission from additional vehicles movements during operation.</li> </ul>	<ul style="list-style-type: none"> <li>-Will affect health and visibility.</li> <li>-Demolition of the buildings will produce dust.</li> <li>- Piling activities could contribute to air pollution during construction especially during pile insertion process</li> <li>- Black smoke due to incomplete combustion of fuels (especially solid fuels) and dust derived from various sources have significant visual effects on the environment.</li> </ul>	Severe during construction, negligible during operation.	<ul style="list-style-type: none"> <li>i) During construction phase               <ul style="list-style-type: none"> <li>-Water dampening operation.</li> <li>-Speed limit for moving traffic.</li> <li>-Provision of tyre washing facility.</li> <li>-Proper approach on transporting construction material.</li> <li>-Proper method and environmental friendly material.</li> <li>-Provision of construction debris net as a safety measure</li> <li>- Provision of scaffolding</li> <li>-Provision of hoarding</li> </ul> </li> <li>ii) During operational phase               <ul style="list-style-type: none"> <li>- Air pollution during operational phase is not likely to be significant as the proposed project does not involve any industrial activities which generate gaseous emission.</li> </ul> </li> </ul>	5-16 and 6-12

Issue	Source of Impact	Potential Impact	Magnitude of Significant Potential Impact (Severe / Moderate / Low / Negligible)	Mitigating Measures	Reference Page
Noise level	<p>-During construction activities, noise generated is from machineries and equipment.</p> <p>- When completed, the main sources of noise will be from vehicles arriving and leaving the Project site.</p>	<p>- Noise impacts during earthworks and construction are mainly short term and confined to the period of works.</p> <p>-The high proportion of heavy vehicles during the construction period is likely to influence noise levels in the area.</p>	Severe during construction, negligible during operation.	<p>- Limit working hours to daylight hours only and construction activities are not allowed on rest day.</p> <p>- Controlling the speed of the vehicles entering the project site.</p> <p>- Hoarding should be placed as the first stage prior to the commencement of the construction.</p> <p>- Driven pile will produce higher noise level compared to jack-in / injection pile and bore pile. Hence, suitable piling method shall be adopted to prevent or reduce noise pollution</p> <p>-After the project completion it is suggested that trees which have the ability to absorb noise to be planted at the site to reduce the noise impact.</p>	5-18 and 6-14

Issue	Source of Impact	Potential Impact	Magnitude of Significant Potential Impact (Severe / Moderate / Low / Negligible)	Mitigating Measures	Reference Page
Vibration Impact	Piling and demolition activities as well as equipment, machineries and transporting vehicles used at the site	-If pile insertion process is not done properly, it will create adverse impact to the surrounding buildings and interfere with the comfort of the nearby community	Severe during construction, negligible during operation.	<p>-Suitable piling method be applied to minimise vibration impact - the usage of driven pile will undoubtedly produce significant vibration impact while jack-in / injection pile and bore pile will be better options in terms of controlling the impact from piling activities.</p> <p>- Usage of efficient machineries and proper maintenance of the equipment will help to ensure minimum vibration impact to the nearby area.</p>	5-20 and 6-15

Issue	Source of Impact	Potential Impact	Magnitude of Significant Potential Impact (Severe / Moderate / Low / Negligible)	Mitigating Measures	Reference Page
Socio-economic impact	i. During construction - Material transportation. - Construction traffic, vehicular movement and mobilisation of heavy machinery. - Additional of heavy vehicles transporting construction material. - Use of immigrant labour.	-Public community in the surrounding may be subjected to air pollution (dust) and noise interference. - Cause an interference to the nearby road users and commercial activities in the vicinity, especially at the entrance to the site. - Create extra congestion to the existing traffic. -If the development involves foreign labour, it will result in some social problems	Severe	- Project Proponent should ensure that their contractors provide suitable accommodation with adequate sanitary and toilet facilities for the workers. - Enforce sufficient control over the workers, especially immigrant labour so that no social problems will arise. - Having adequate and professional site management staff during construction.	5-20 and 6-16
	ii. During operational phase - No adverse impact.	- It is expected to result in many positive impacts for the locals as the development will	Negligible		

Issue	Source of Impact	Potential Impact	Magnitude of Significant Potential Impact (Severe / Moderate / Low / Negligible)	Mitigating Measures	Reference Page
		create employment opportunities. - Yield more positive socio-economic benefits.			
Biological component and aquatic ecology	The biological component and ecology of the site are not expected to be significant.		Negligible	It is recommended that during the operation of the Project, suitable coastal vegetation/ plants be grown along the walkway.	5-21 and 6-15
Traffic Impact	-During construction: construction vehicles -After construction: management staffs and hotel visitors	- The total vehicles estimated from the Project site is expected to have an impact on the present Jalan Klebang Besar. -The increase in traffic volume will cause traffic congestion, noise and traffic hazards, if the traffic is not properly controlled.	Severe	i) During construction phase - Haulage activities, material transportation and heavy vehicles ingressing and egressing the site to be scheduled away from the commuter peak hours. - The allocation of warning signboards as a warning of heavy vehicles access and egress shall also be adopted at the road near to the entrance of the Project site during construction stage.  ii) During operational phase - The authorities to upgrade the	5-21 and 6-17

Issue	Source of Impact	Potential Impact	Magnitude of Significant Potential Impact (Severe / Moderate / Low / Negligible)	Mitigating Measures	Reference Page
				<p>existing single lane carriageway to a 4-lane dual carriageway from Melaka City to Tanjung Kling.</p> <ul style="list-style-type: none"> <li>- The authorities should consider reducing the traffic volume on Junction A (Jalan Batang Tiga and Jalan Klebang Besar) by having a coastal highway from Melaka City to Tanjung Kling.</li> <li>- To have a signalised junction at Junction B (Jalan Klebang Besar (FR5) and Jalan Taman Muhibbah)</li> <li>- The material transportation and heavy vehicles ingressing and egressing the site to be scheduled away from the peak hours.</li> <li>- Ensure a proper maintenance of the nearby roads as to accommodate the anticipated traffic growth and the safety of the road user after the completion of the development.</li> </ul>	
Abandonment	-Abandonment during buildings	- The site shall be left behind with un-	Severe	- A proper abandonment plan shall be prepared appropriately to ensure all	5-22 and 6-18

<b>Issue</b>	<b>Source of Impact</b>	<b>Potential Impact</b>	<b>Magnitude of Significant Potential Impact (Severe / Moderate / Low / Negligible)</b>	<b>Mitigating Measures</b>	<b>Reference Page</b>
	<p>foundation works prior to the completion of piling activities.</p> <p>-Abandonment during the building proper construction stage.</p>	<p>aesthetic repercussions</p> <ul style="list-style-type: none"> <li>- Induce additional financial burden to the Government.</li> <li>- Leave behind half completed structures and unmanaged construction materials.</li> <li>-Create adverse socio-economic impacts to the general populace and un-aesthetic repercussions.</li> <li>- Create a suitable habitat for harboring pests and disease vectors; and a potential site for indulgence in anti-social behavior.</li> </ul>		<p>measures are taken care off.</p>	

## 6.0 ENVIRONMENTAL MONITORING PROGRAMME

6.1 During construction phase, monitoring for surface water quality, silt traps / sediment pond discharge, ambient air quality and noise level shall be done. Details of the monitoring are as follow.

**Table 3: Details of the Monitoring Programme**

<b>Monitoring Programme</b>	<b>Parameters</b>	<b>Frequency of Monitoring</b>
Surface water Quality	Suspended solid, pH, BOD <sub>5</sub> , COD, DO, Ammoniacal Nitrogen as N, <i>E.Coli</i> , heavy metals and oil & grease.	Once per month.
Silt traps / sediment pond discharge	Total suspended solid (TSS).	Once per month.
Ambient air quality	Total Suspended Particulate (TSP).	Quarterly interval or earlier should it be required by the DOE.
Noise level	$L_{eq}$ , $L_{max}$ , $L_{min}$ and $L_n$ continuously for 24-hour duration.	Quarterly interval or earlier should it be required by the DOE.

6.2 During operation phase, ambient air quality monitoring and noise level monitoring can be carried out should it be required by the DOE. Parameter for the air quality monitoring should be TSP while  $L_{eq}$ ,  $L_{max}$ ,  $L_{min}$  and  $L_n$  should be carried out continuously for 24-hour duration for noise level measurement should it is required by the DOE.

## **7.0 CONCLUSION**

- 7.1 The development of the site into a hotel is considered a suitable option for the project site. The completion of the Project will have a positive impact on the socio-economy of the area as well as the State, by utilising the available land with a compatible development in order to cater for the increase of tourists accommodation demand. The economic and social benefits accruing from its implementation are far greater than if the 'No-Project option' or other Project alternatives are chosen.
- 7.2 With careful planning and good construction and management practices, the Project will not bring about any significant adverse environmental impacts on the surroundings but rather its implementation will contribute to the development of the State in general.