EXECUTIVE SUMMARY

ES1.0 Introduction

- TSR Ocean Park Sdn. Bhd., the Project Proponent intends to build a water villa development on the Lot PT742, PT747 and PT818, Port Dickson with a total acreage area of 17.31 acres. The proposed project development will involve shop lots, hotel and commercial lots in the vicinity of the project area so this proposed project will give benefits to development in the area. The area has been marked as a potential area for the commercial development in term of the suitability of location which is close to the available infrastructure and market demand. Therefore, it is envisaged that the proposed waterfront development shall contribute to the construction industry and development projects within the economic radius of the area.
- The original plot of land is PT 747, PT 742 and PT 818 will be merged under Section 204 and will be sub-divided into two new plots. Plot 1 with 11.19 acres will be developed gradually and the existing building structure occupying the plot will be demolished when the need arises. Plot 2 covering an area of 6.13 acres is part of the original Lot PT 742 and PT 818.
- This Environmental Impact Assessment (EIA) report will only cover Phase 1 of Plot 1 Development which focused on the water villas, commercial plots and other amenities with a total area of 11.19 acres. The details as per outlined in Chapter 5.
- The title of the Project is "*"Laporan Kajian Impak Terhadap Alam Sekitar (EIA) bagi maksud Permohonan Kebenaran Merancang Bagi Tujuan Permajuan Perniagaan Melalui Serah Balik Dan Berimilik Semula (Seksyen 204a KTN 1965) Untuk Mendirikan Sebuah Resort Vila Atas Air (Water Villa Resort) Yang Mengandungi:*

  (A) Pembangunan Fasa 1 Yang Terdiri Daripada 1 Blok Utama 3 Tingkat (Lobi, Penyambut Tetamu, 'Lounge', Bilik Mesyuarat, Dan Ruang Makan (All-Day Dining), 85 Unit Bilik Hotel (Atas Air/Darat) 3 Tingkat Hingga 6 Tingkat, 20 Unit Vila Atas Air 2

Tingkat, 1 Blok Penyelenggaraan/Persediaan (Back Of House Building) 3 Tingkat, 1 Unit Blok Kemudahan 1 Tingkat (Bilik Gimnasium, Yoga Dan Spa), Kolam Renang Dan Bilik Persalinan, 1 Blok Restoran 2 Tingkat (Specialty Restaurant), Dan 1 Unit Pencawang Elektrik Serta 1 Unit Pondok Pengawal:

(B) Pembangunan Fasa 2 Yang Terdiri Daripada 1 Blok Menara Hotel (Hotel Tower) 18 Tingkat Iaitu Lobi, Penyambut Tetamu & 'Lounge', Tempat Letak Kereta, Kemudahan Hotel Seperti Ruang Makan (All Day Dining), Bilik Mesyuarat & Bilik Untuk Majlis (Function Room) Dan 135 Bilik Hotel:

(C) 1 Lot Perniagaan Di Atas Plot A (PT742 (HSD 35427)), Plot B (PT747 (HSD 38706)) Dan PT 818 (HSD 38604), Di PD Waterfront, Bandar Port Dickson, Daerah Port Dickson, Negeri Sembilan Darul Khusus".

- The proposed project is a prescribed activity as specified under "***Activity 12: Development in Coastal and Hill Area a) Construction of building or facilities with 80 rooms or more in the coastal area"***. Therefore, a preliminary EIA report is necessary and will contain an assessment of potential impacts on the environment and also mitigation measures.

ES2.0 Project Proponent and Consultants

PROJECT PROPONENT

TSR OCEAN PARK SDN. BHD
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12 Jalan PJU 7/3,
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Contact Person: Lim Chong Wei

EIA CONSULTANT

NILAIMAS SERVICES
No. 17, Level 2 & 3, Jalan Equine 10D, Taman Equine,
43300 Seri Kembangan, Selangor
Tel : 03-8940 9959
Fax : 03-8940 9958
Contact Person : Hj. Mohd Nawahidudin Mohd Isa
Designation : Managing Director

ES3.0 Statement of Need

- In particular, the position of the site development is a strategic location and it is in the major development corridor area where this zone becomes the focus of various occupational and commercial sectors for Port Dickson, Negeri Sembilan.
- As part of Malaysia's growth plan towards high-income status, tourism was selected as one of the National Key Economic Areas (NKEA) under the National Transformation Programme (NTP) in 2010. It was envisaged to be a quick win in terms of drawing in tourist spending. Since the inception of NTP, the tourism industry has been expanding at a tremendous pace. It has opened up new opportunities and benefited Malaysians by bringing in RM19.4 billion of investment and contributing 1.77 million jobs (13% of total employment) in 2014 alone. In 2015, tourism was the second-highest private investment contributor at RM24.5 billion and the third largest GNI contributor at RM69.1 billion. As for 2016, the tourist receipts were more than RM82 billion and the number of tourist arrival achieved 26 million. Malaysia is now expecting bigger tourists entourage, especially from China and India besides the usual target of travellers from Singapore, Thailand, Indonesia and Brunei. The government is aiming to attract 31 million tourists with tourists' receipts of RM114 billion in the coming year.
- The project is situated strategically along the seafront of PD Waterfront. It has the potential for tourism development as it is a viable location to welcome visitor to explore the area. The project is not only accessible easily via the available road network system but is also located within mere minutes away from other tourist hotspots like Alive 3D Art gallery and Wild West Cowboy Indoor Amusement Park and etc. With the

development of new infrastructures and accommodation facilities, it is anticipated more tourists and visitors will be attracted to visit the Port Dickson area.

ES4.0 Project Options

- The site has been granted to TSR Ocean Park Sdn. Bhd. by the state government of Negeri Sembilan under a lease agreement for the development of the aforementioned project. Basically, it can be considered that the proposed location has already been identified by the state government to be developed by the Project Proponent. This location is fixed and is not possible to change.
- The project site is in the coastal area of the state of Negeri Sembilan and it is also in line with most of the National, State and Regional Planning Policy and Regulations
- The proposed location of the project has also been determined strategically to its maximum value due to the following reasons:
- High market demands and return on investment of seafront property especially in Port Dickson, Negeri Sembilan.
- Existing road and infrastructure system are favourable for seafront development
- There is no mangrove forest observed in the immediate vicinity of the project site nor is it reported in the NPP3. The area is also not known for the presence of corals (Jabatan Perancangan Bandar dan Desa Semenanjung Malaysia, 2012), hence it is anticipated that there will be no corals found within the project site.
- Meanwhile, based on the statistical data and on-site observation, the marine traffic in the vicinity of the project area is not very heavy and it is not anticipated to cause significant impacts on this aspect.
- Under the 'No Project' option, no further development will be carried out within the existing Project site. The land will be left under its present conditions. Adapting the "NO-Project" Option would maintain the current site conditions. Nevertheless, it should be noted that the surrounding areas of the proposed project site are being developed rapidly, the proposed project site will be left idle and will not contribute to the economic growth if remain a status quo situation.

ES5.0 Project Descriptions

ES5.1: Project Background – Land Matter

- In general, this business proposal development site is based on 3 business plots PT 747, PT 742 and PT 818 with a total acreage of 17.31 acres. Therefore the project proponent wants to merge all the 3 existing plots and break down into 2 new plots by a way of surrender and re-ownership under Section 204 (KTN 1965). The proposed site is located under the administration of the Port Dickson Municipal Council (MPPD). The details of land ownership as tabulated in ***Table ES-1.***

Table ES-1 Land Ownership Details

Negeri			Negeri Sembilan Darul Khusus
Daerah			Port Dickson
Mukim			Bandar Port Dickson
Tempat			PD Waterfront
Nombor Syit Piawai			73-D
Nombor Pelan Diperakui			-
Kawasan Rizab			Tiada
Kategori Kegunaan Tanah			Bangunan
Syarat Nyata			Tanah ini hendaklah digunakan untuk bangunan perniagaan sahaja
Sekatan Kepentingan			Tanah yang dimiliki ini tidak boleh dipindahmilik, dipajak, digadai melainkan dengan kebenaran bertulis daripada Pihak Berkuasa Negeri
Taraf Pegangan			Pajakan selama tempoh 99 tahun berakhir pada 10 Februari 2115
Bil	**No. PT**	**No. Hakmilik**	**Luas (Meter Persegi)**
1	742	HSD 35427	15995 Meter Persegi
2	747	HSD 38706	27359 Meter Persegi
3	818	HSD 38604	26758 Meter Persegi

(Source: Jadual 4 (Sijil Carian Rasmi)

ES5.2: Project Concept and Justification – Land Matter

- 3 plots of land at the proposed site will be merged and break down into 2 new plots according to Section 204, National Land Code 1965. These plots of land shall be developed into a future business development area at PD Waterfront. Phase 1 for Plot 1 will be developed into a commercial plot consisting of a water villa resort with a provision of 1 unit on-site gym facilities as well as upgrading existing electricity substation utility.

- The existing commercial building currently occupying Plot 1 will be demolished during Phase 2 development. At present, the development plan for Plot 2 is still uncertain and shall remain as the existing land usage until further notice. Therefore, any business unit in Plot 2 will be maintained until a proposal for development is made.

ES5.3: Project Concept and Justification – Water Villa and Associated Development

- Basically, this development is one of the most exciting developments aims to accommodate the increasing number of visitors in Port Dickson by providing hotel accommodation as well as a water villa. Moreover, its position is located in the bustling Port Dickson can also provide a harmonious atmosphere for this water villa and commercial plot area. It is noteworthy to state that motor vehicles usage is prohibited from entering the area. The water villa and commercial plots are accessible through a 3.0-meter wide pedestrian walkway.
- The original plot of land is PT 747, PT 742 and PT 818 will be merged under section 204 and will be sub-divided into two new plots. Plot 1 with 11.19 acres will be developed gradually and the existing building structure occupying the plot will be demolished when the need arises. Plot 2 covering an area of 6.13 acres is part of the original Lot PT 742 and PT 818. The kebenaran merancang layout plan and total development area for land matter as per illustrated in ***Figure ES-1*** and ***Table ES-2***.

Figure ES-1 Layout for Permohonan *Kebenaran Merancang*

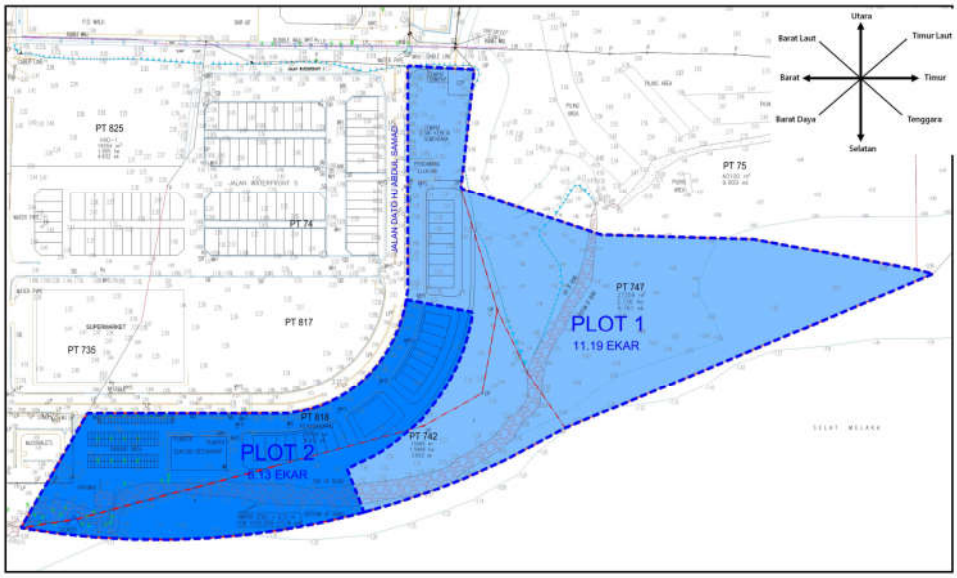

Table ES-2 Total Development Area For Land Matter

PETUNJUK PELAN					
PERKARA	PLOT TANAH	BILANGAN		KELUASAN	
		UNIT	%	EKAR	%
LOT PERNIAGAAN PLOT 1	1	1	50.00	11.19	64.61
LOT PERNIAGAAN PLOT 2	1	1	50.00	6.13	35.39
JUMLAH KELUASAN PEMBANGUNAN	2	2	100.00	17.32	100.00

ES5.3: Location and Project Scale – Water Villa and Associated Development

- **This Environmental Impact Assessment (EIA) report will only cover Phase 1 of Plot 1 Development which focused on the water villas, commercial plots and other amenities with a total area of 11.19 acres.** The acreage of the affected development is presented in ***Table ES-3***. Location and areas of the proposed Project site are illustrated in ***Table ES-4, Figure ES-2 and Figure ES-3.***

Table ES-3 Acreage of Proposed Project Development (Subjected to Plot 1 only)

Proposed Development	Area (acres)	Percentage (%)
Development Water chalet area (no reclamation) Commercial plots	11.19	100.00
Total	**11.19**	**100.00**

Table ES-4 Coordinates of the Project Site

Point	Latitude	Longitude
A	2°31'25.491"N	101°48'13.882"E
B	2°31'25.424"N	101°48'15.469"E
C	2°31'22.707"N	101°48'15.162"E
D	2°31'21.591"N	101°48'18.499"E
E	2°31'21.515"N	101°48'22.151"E
F	2°31'20.734"N	101°48'26.396"E
G	2°31'15.188"N	101°48'12.846"E
H	2°31'16.178"N	101°48'12.437"E
I	2°31'19.801"N	101°48'15.441"E
J	2°31'20.122"N	101°48'13.843"E

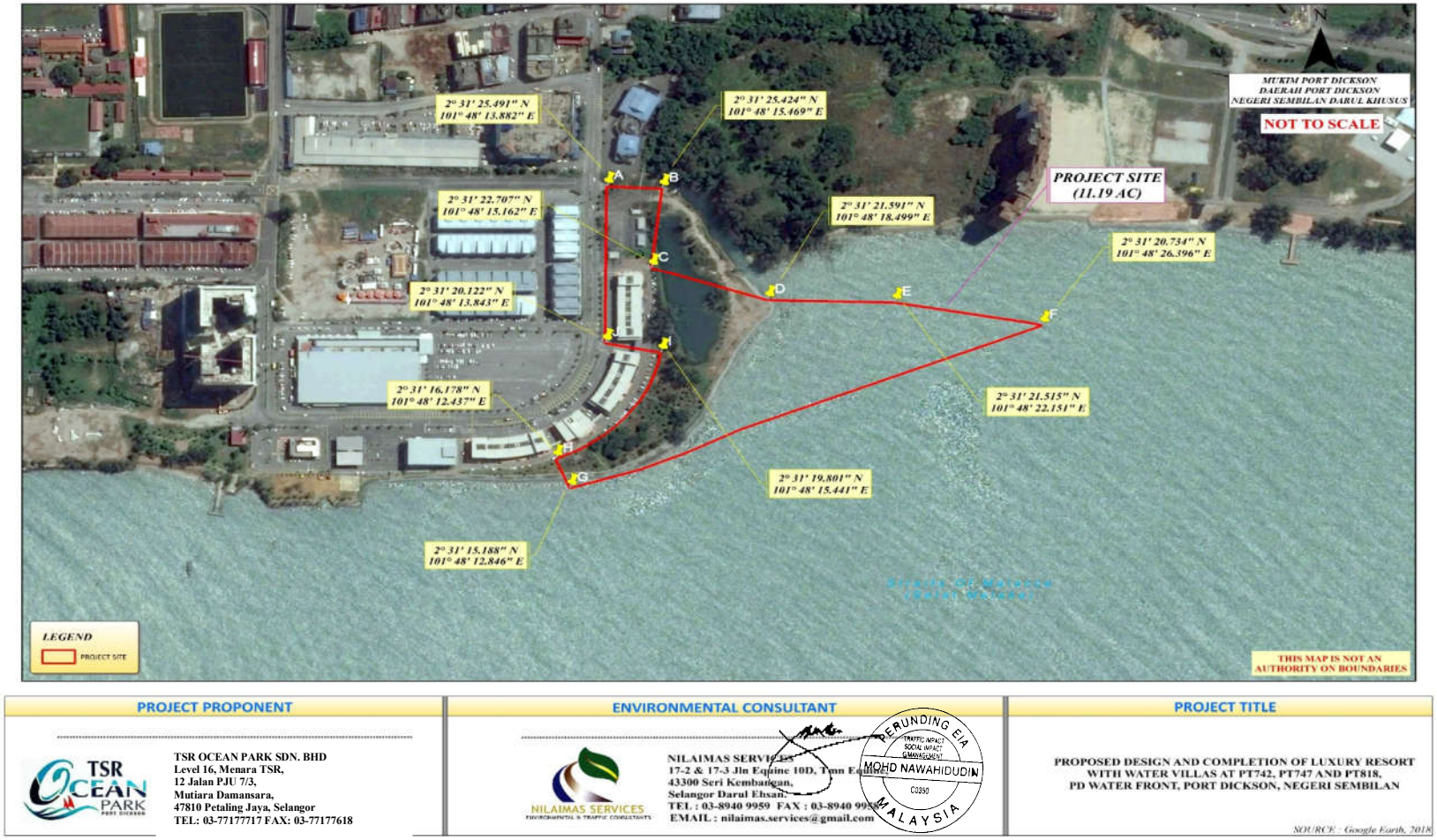

Figure ES-2 Project Location Plan

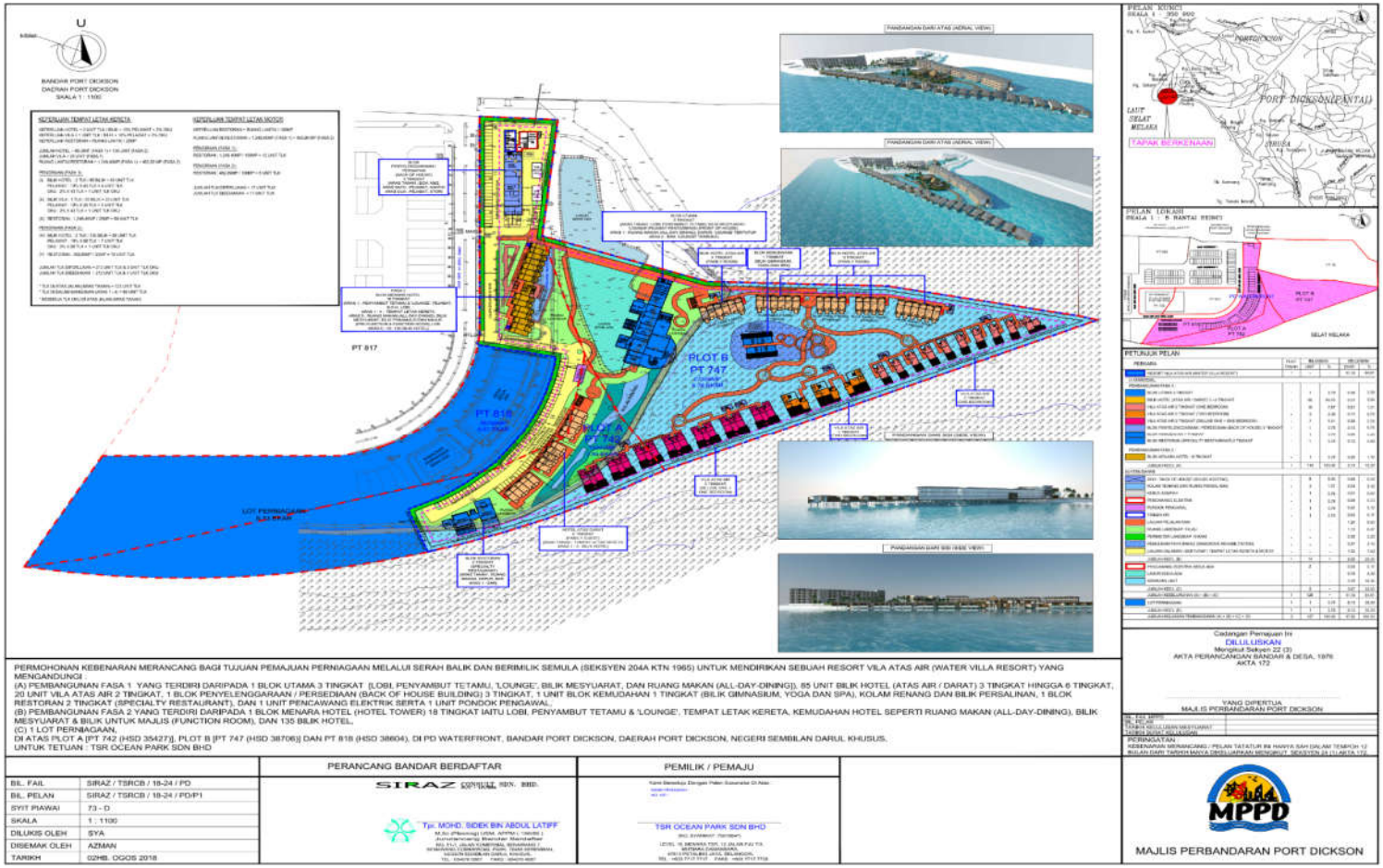

Figure ES-3 Layout Plan of the Proposed Site Area

ES5.2: Project Development Phases

The proposed project development phases include the followings:

- Site Preparation Phase
- Construction of Water Chalet and Commercial Plots
- Abandonment Phase

This phase mainly involves project kick-off, mobilization of the project team and types of machinery, the establishment of temporary facilities on-site as well as the clearance and removal of debris and rubbish, if necessary as well other needs.

- Clearance and authorities approval
- Setting up Storage and Base Camp
- Mobilisation
- Silt Curtain Installation

Construction of Floating Water Chalets

- The component consists of two types of commercial plots which is Hotel Block and Water Villas and other amenities.
- The details of the project components as per tabulated in ***Table ES-5*** below.

Table ES-5 Project Components

Project Components		
Phase 1	• Hotel Block: 85 units • Water Villa: 20 units • Etc	Plot 1
Phase 2	• Hotel Tower – 135 units	
	• Future development	Plot 2 – Future Development

*Blue coloured box notes future development (not within the EIA scope of study)

- The water chalet consists of a single-storey structural, where the main building will be constructed using reinforced concrete framing, which is supported by a driven piled foundation. Pitched roof trusses structure, a lightweight structure, will be designed and built by roof specialist. Construction of water chalets will be commenced right after the survey works.
- Main project activities during this phase are described in ***Table ES-6*** below:

Table ES-6 Main Project Activities during Construction of Water Chalets

Main Project Activities	Descriptions
Sub-structure Work/Site Foundation Work	Proposed spun pile with 500 diameters in size of g60 is chosen to support the structure and to minimize earthwork at the site. The pile cap will be constructed above the top of seawater with g50 (serve exposed condition) Spun pile machinery to be mobilised to a specific location and spun pile to be driven in at the location. Before pile cap works, all driven pile to be cut to levels and the pile cap will be constructed after all piles were driven into the seabed.
Main Building Works	After the pile cap to be constructed, reinforced concrete column/pier to be cast from the top of the pile cap until to the roof level on stage. At the same time, all mechanical and electrical services works will be commenced. Meanwhile, reinforced concrete ground beams and ground slabs will also be cast accordingly. It is then followed by the construction of column to roof level and the casting of roof beam with anchorage steel bolts. The final step will be the installation of the roof structure, closing up with metal or ceramic roofing sheet or tiles and architectural finishes.
Exterior Finishes and Interior Trim	Final work is necessary for the completion of water chalets, which includes decoration, door and window trimmings, panelled jambs, finishing coat, painting, plastering, etc.

ES6.0 Existing Environment

ES6.1: Hydraulic and Hydrodynamic

- The maximum temperature varies from 31ºC to 33ºC and minimum temperature varies from 23ºC to 24ºC round the year.
- The ADCP instruments obtain to gather data of current speed, current direction and water level as well. ADCP 1 presented maximum current speeds to around 0.77m/s while the maximum current speeds in ADCP 2 reached up to 0.84m/s. The current direction also recorded to show different variation for direction pattern for spring tide and ebb tide. St 1 shows current direction Ebb tide at 150º to 200º and Floodtide 300º to 350º. St 2 produced slightly different pattern direction as follows, Ebb tide direction 110º to 150º and Floodtide 310º to 340º.
- Differential datum from Mean Sea Level to CD is -1.46 meter.

ES6.2: Land Use

- The proposed project comprising a total of 11.19 acres of water chalets construction activities and other amenities. It is located offshore of PD Waterfront, District of Port Dickson, Negeri Sembilan.
- Current access to the proposed site is through Federal Road 5 (Jalan Teluk Kemang – Lukut) from east and north, Federal Road 53 (Jalan Pantai) from the west and Jalan Dato' Abdul Samad with 2 junctions with Federal Road 53 (Jalan Pantai) Taman Puncak Maju. The project would not significantly impact views of the areas from surrounding uses.
- The townships and settlements are mainly scattered at the north, east and west within the impact area. Kampung Bahasa Kapur, Taman Muhibbah, Taman Impian Putra and Taman Mewah are the nearest residential areas that are found at approximately 300 to 400 m to the northeast and northwest of the project site.
- Another land use that can be found is an island. Pulau Arang is situated within 0.7 km to the south of the project site.
- The views from the surrounding uses would not change much as the current land use also consists of a mixture of land usages. The proposal of the development will meet the

established design guidelines keeping with the look and character of the surrounding development as shown in ***Figure ES-4***.

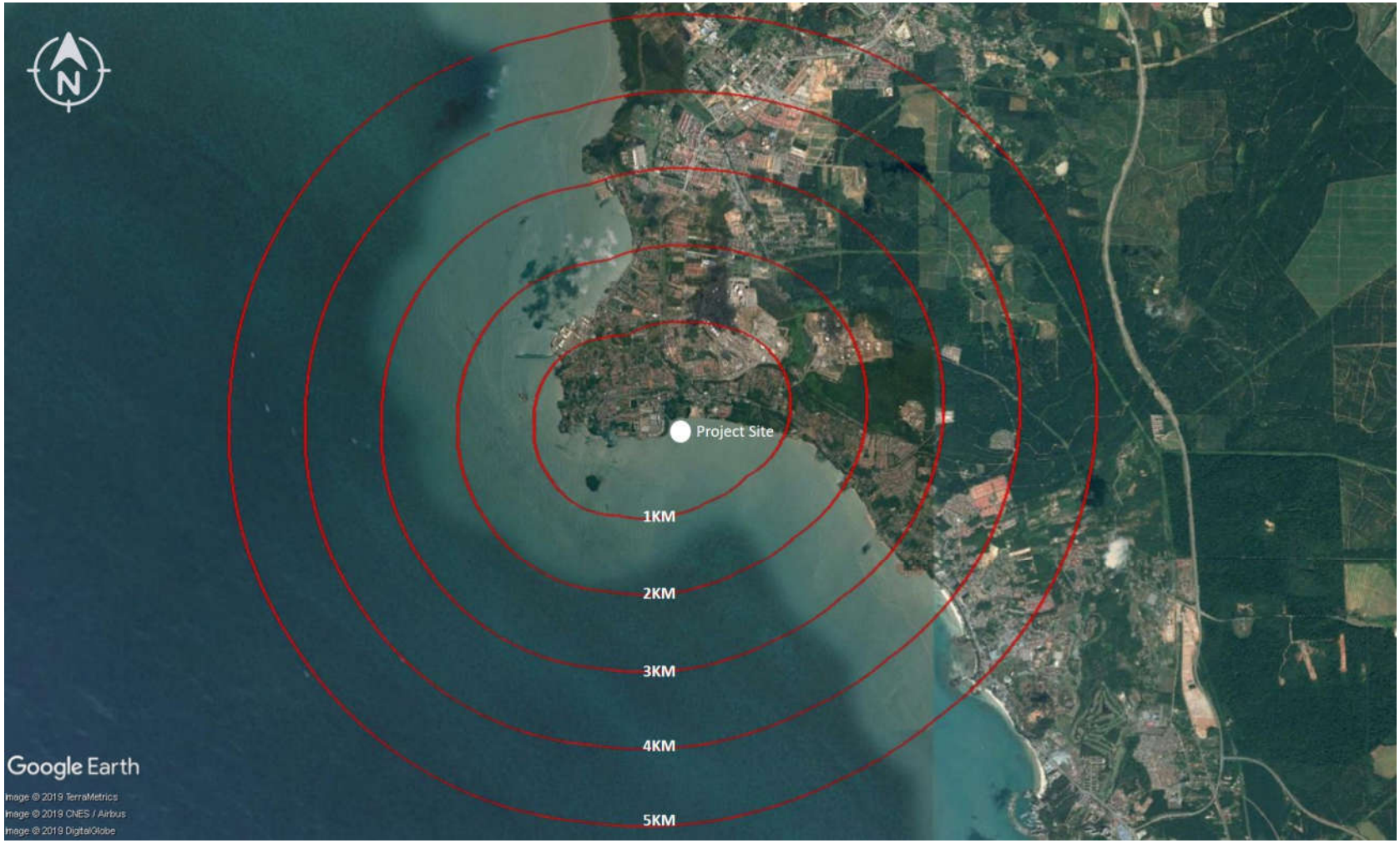

Figure ES-4 Map of 5km radius within Proposed Project site

ES6.3: Water Quality

- The water quality analyses carried out in this study showed are discussed below:
  - **pH**: The pH levels measured at all stations indicated that the seawater was slightly alkaline with values higher than 8.00 but not exceeding 9.00. There was no significant difference shown among all the stations.
  - **DO**: DO concentrations recorded for all stations ranged from 7.27 mg/l to 7.93 mg/l. These values showed no significant difference among all the stations. If high levels of DO appear, it indicates low organic loading which reflected unpolluted watercourses. Thus, DO is a vital component for living organism in any water body system
  - **TSS**: The TSS concentrations recorded ranged from 9 mg/L to 21 mg/L). The values recorded showed no significant difference for all the sampling stations. According to the MWQCS (Class 2), the stipulated limit for TSS is 50 mg/l. Based on the results obtained, none of the stations had exceeded the stipulated limit of MWQCS. Thus, the values indicated good water quality in the sampling area.
  - **Ammonical nitrogen**: The ammonia concentrations recorded ranged from 0.15 mg/L to 1.29 mg/L. The recommended limit for NH3 stipulated under Class 2 in the Marine Water Quality Criteria and Standards for Malaysia (MWQCS) is 0.07 mg/L. From the results, most of the stations exceeded the recommended limit stipulated in MWQCS

ES6.4: Ambient Air Quality

It is observed that parameters measured at all sampling station were found below the recommended limit stipulated for Malaysian Recommended Air Quality Guidelines except A2 for PM_{10}. The higher results recorded at A2 reflected from the sampling location next to the existing busy road.

ES6.5: Noise and Vibration

- From the monitoring, it is noted that the Equivalent Continuous Sound Level, Leq was found within the Recommended Noise Limit of 65.0 dB (A) at day time and 55.0 dB (A) at night time for all sampling points

- Ground-borne vibration levels are within the JMG Standard. However, to prevent adverse impacts on adjacent structures in the area, operational activities in the project site shall adopt systems that produce very low vibration and noise levels.

ES6.6: Marine Environment

- **Plankton**: Thirty-two taxa of phytoplankton were identified; mainly dominated by diatom (Bacillariophyta) derived from 10 families and 18 genera occupying more than 80% of the relative abundance. Only one family of cyanobacteria and dinoflagellates.
- **Macrobenthos**: Individual macrobenthic organisms in study area range at 60 to 112 individuals/m^2, ominated by the sand crab and hermit crab (Crustacean; Arthropoda). Polychaete (worms) were dominant in estuarine area (small stream within project site). Another group of organisms found dominant in the rocky area (Quadrate 1) are the Molluscs (gastropods and bivalves). Typical exposed rocky shore communities consist of periwinkles, barnacles and limpets.

ES6.7: Fisheries Study

- The Malaysian commercial fisheries involved three main types of gear the trawl fish, the purse seine and the anchovy purse-seine. The traditional fisheries included shellfish collection and fishing with the use of other seines, drift gillnets, traps, hooks and lines, bag nets, barrier nets and push nets.
- All species are common in coastal waters of Straits of Malacca or in Peninsular of Malaysia. They are from family Latidae, Serranidae, Gobiidae, Mullidae, Haemullidae, Gerreidae. Among them are the common commercial species; jenahak, kerapu, senangin, kurau, stingrays, prawns and swimming crabs (‘ketam bunga’).

ES6.8: Soil and Geology

- The site area located in a clayey and silt (marine) deposit. The soil formation is from the geological time of the Quaternary period, which usually consists of marine and continental deposits. The formation consists of clay, silt, sand, peat with minor gravel.

ES6.9: Traffic

- Current access to the proposed site is through Federal Road 5 (Jalan Teluk Kemang – Lukut) from east and north, Federal Road 53 (Jalan Pantai) from west and Jalan Dato' Abdul Samad with 2 junctions with Federal Road 53 (Jalan Pantai). The road network is complemented by a number of local access such as Jalan Shell (Access Road to Taman Impian Putra) and access road to the Kompleks Pentadbiran Daerah Port Dickson.

ES6.10: Marine Traffic

- Shipping lanes in the Straits of Melaka practices the Traffic Separation Scheme (TSS) of eastbound (ships from north to south) and westbound (ship from south to north). The introduction of TSS is to improve the safety of navigation in converging areas where the density of traffic is great or where freedom of movement shipping is inhibited by restricted sea room, the existence of obstructions to navigation, limited depths or unfavourable meteorological conditions.

ES6.10: Human Environment

- Out of 206 respondent, 52.4% of the total respondent are Malays, followed by Chinese (31.1%) and Indian (16.5%). The overall distribution of age of respondents in the study area shows that the dominant age group is between 31 - 40 years, which made up of 30.1% of total respondents. The lowest is from the age group of 60 years and above, which encompasses only 1.0% of respondents.
- Study findings have identified that the majority of the residents within a radius zone of influence have no knowledge of the proposed development. Only 23.3% are aware of the Project. The rest (76.7%), are not aware of the proposed Project. (refer to ***Table ES-7***).

Table ES-7 Awareness of the Proposed Project

Respondent's Awareness	No. of Respondent	Percentage (%)
Yes	48	23.3
No	158	76.7
Total	**86**	**100.0**

- From 206 respondents, the majority of respondents did not oppose the proposed project, with 85.4% of the respondents having no objection. .9% from respondents are not sure towards the proposed project as they mentioning that the agreement is on the village chief.
- Among those who disagreed (10.7%) stated that the reasons for their disagreement are mainly due to their perception on the certain existing hotels along the coastal area, which bring negative impacts on the health and environmental aspects especially the direct impact to the beach such as erosion.
- A Focus Group Discussion (FGD) for this Project has been done on 17th May 2019. The representatives of the fishermen community were seen to be rejecting the proposed Project as the Project will affect their income as the fishermen. Moreover, the proposed Project also will bring no benefit to their community
- As for the closing, the Director of Lembaga Kemajuan Ikan Malaysia (LKIM) Negeri Sembilan welcoming any collaboration between Project Proponent, TSR Ocean Park Sdn Bhd. and local fishermen communities. He also expects Project Proponent to consider some sort of compensation for the community's loss.

ES7.0 Summary of Potential Impacts and Mitigation Measures

Impact Sources And Project Activities	Environmental Impact And Its Significance	Proposed Mitigation	Residual Impact And Monitoring
Investigation Stage			
	Insignificant	Not Necessary	Insignificant
Air and Noise Measurement	Insignificant	Not Necessary	Insignificant
Water Analysis	Insignificant	Not Necessary	Insignificant
Construction Stage (Subjected to Land Disturbance Activities – If Any)			
Site Clearing and Earthwork	Insignificant loss of vegetation and generation of vegetative waste	Not necessary	Insignificant
	Air pollution	No open burning allowed	Requires air quality monitoring from time to time Insignificant
	Significant localized noise	Necessary for maintenance of vehicles and equipment as per DOSH requirement.	Significant. Need maintenance of vehicles and machinery progressively.
	Potentially significant increase in soil erosion	Build and maintained a silt trap and sedimentation pond. Minimize cleared area and expedite works during the drier season.	Significant and monitoring by EO.
Placement of Infrastructure and Facilities	Insignificant increase in noise pollution	Not necessary	Significant
	An insignificant increase in air pollution (dust and exhaust emission)	Not necessary	Significant

Impact Sources And Project Activities	Environmental Impact And Its Significance	Proposed Mitigation	Residual Impact And Monitoring
	Safety and health construction workers	Comply with Factory & Machinery (Building Operations and Works of Engineering Construction) Regulations, 1986	On-going supervision needed.
Operational Stage			
Maintenance of Access Road	Significant as the work involves the transportation of materials inside and outside of the project site. Minor air pollution due to the mobilization of machinery and trucks.	Road sprayed with water by water browser (if necessary) Proper maintenance of the machinery.	Insignificant Insignificant
Transportation of products	Potential dust problem affecting the health of workers and public Potential noise problem to on-site workers.	Observe safety aspects pertaining to the condition of the trucks used. Road sprayed with water during dry, windy weather. Respiratory masks to be worn during normal operations. Workers to expose to dust to be sent for a periodic medical check-up. Earplugs to be used by workers (if	Insignificant Insignificant Insignificant Requires periodic medical check-up and monitoring Insignificant

Impact Sources And Project Activities	Environmental Impact And Its Significance	Proposed Mitigation	Residual Impact And Monitoring
		necessary) Yearly audiometric testing for workers.	Need supervision
Hotel operation & maintenance	Workers Health and safety	Workers supplied proper safety and masks during the pesticides spraying process. Implement safe working procedures.	Requires monitoring and supervision
	Dust and particulate dispersion and emission	Emergency action in case of failure o	Significant
	Potential water pollution Potential air pollution	Workers should use PPE	Significant
Abandonment Stage			
Abandonment of project	An aesthetically acceptable if the site is left without proper decommissioning and rehabilitation.	Proper decommissioning and removal of all buildings and equipment.	Proper abandonment plan needs to be prepared at the end of the project lifespan.

ES8.0 Environmental Management Plan

- In order to manage the environment in a proper manner, a good and systematic management program must be adopted, with a strong emphasis on employee education, regular monitoring, environmental auditing and employing best management practices to prevent environmental issues from arising whenever possible.
- An Environmental Management Team (EMT) must be set up by the project proponent to implement, monitor, audit and report based on the Environmental Management Plan (EMP) on all matters pertaining to the environment.
- The organization chart in Chapter 9 presents the organization structure and lines the responsibility of the key personnel and organization for the environmental management of the project. The key personnel and organization involved are listed below:
    i. The responsibility of Project Proponent
    ii. The responsibility of the Main Contractor
    iii. The responsibility of the Design Consultant
    iv. The responsibility of the Environmental Consultant
- Environmental monitoring provides feedback about the actual environmental impacts of a project. The monitoring results help judge the success of mitigation measures in protecting the environment. It is also used to ensure compliance with environmental standards and to facilitate any needed project design or operational changes.
- It is recommended that environmental impact monitoring of the project activities be implemented according to the following sampling locations, the frequency of sampling and analytical methods.
- An Emergency Response Plan (ERP) is an essential component of a facility's safety and loss strategy. It provides an organized structure for a chain of action to be put into motion in the event of an emergency at the proposed project site. In the context of emergency in the ERP, it is defined as an incident which has the potential to cause injury or loss of life, and/or damage to property and the surrounding environment.

ES9.0 Conclusion

- The study has shown that with proper mitigation measures, the project will not present any significant long-term residual impacts on the environment.
- With proper mitigation measures as recommended in this report, the project development can be carried out in the best manner. The proposed project development is not expected to generate any disturbance to the surroundings
- To ensure the effectiveness of the measures formulated, monitoring programs are recommended. Results of the monitoring program would be useful in determining the residual impacts (if any) on the environment and remedial actions to be undertaken as required. Some unfavourable effects on the socio-economy would be in the form of disturbance to nearby residents. The study has shown that with proper mitigation measures taken, the proposed project will not present any significant long-term residual impacts on the environment and to the surrounding population.
- Many other mitigation measures and recommendations have been incorporated into the EIA Report. They are more clearly spelt out in the various sections of the report dealing with erosion control, water quality, wastes, air quality, noise, sewage and socio-economic.
- In conclusion, the potential environmental impacts that would be created by the various project activities during operational phases of the proposed project development can be effectively controlled through the implementation of properly designed, properly installed and properly maintained mitigation measures. Approval of the proposed project development will promote positive impacts on the tourism sector and also improve the socio-economic and development potential surrounding the proposed project area.