



# Proposed Tg. Aru Eco Development, Kota Kinabalu, Sabah

Special Environmental Impact Assessment - Terms of  
Reference

Addendum 01 – Documentation of Comments on TOR

Tg. Aru Eco Development Sdn. Bhd.

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# Proposed Tg. Aru Eco Development, Kota Kinabalu, Sabah

## Terms of Reference




### Addendum 01 – Documentation of Comments on TOR

Prepared for Tg. Aru Eco Development Sdn. Bhd.

Represented by Mr. Syed Faisal Alidrus

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### Current Revision Approvals

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# 1 Introduction

This document presents the public and TOR Panel review comments on the Terms of Reference (TOR) for the Special Environmental Impact Assessment (SEIA) for Tg. Aru Eco Development, Kota Kinabalu, Sabah.

A revised TOR was prepared following the public and panel review; this Addendum is a supporting document to the revised TOR to outline the specific comments and responses, and cross-reference these to the updated sections in the revised TOR. This document shall therefore be read in conjunction with the revised TOR.

For Special-EIAs, a Special Review Panel is established by the Environment Protection Department (EPD) to review the TOR and SEIA reports. In addition, the public is also given the opportunity to submit views and comments on any pertinent environmental issues and concerns that should be addressed in the EIA study through a “Public Hearing” whereby the TOR is made available to the public for review and comment (see EPD Handbook on Environmental Impact Assessment in Sabah, 2<sup>nd</sup> Edition 2005).

A summary of the issues raised and the responses are compiled in Section 2 of this document; while the actual submissions are reproduced verbatim in the Appendices together with the Proponent or EIA consultant’s responses. The background to the public review and TOR Panel Meeting is given in the following subsections.

Formal feedback from EPD requesting additional information to be incorporated into the TOR was received by DHI on September 12, 2014. EPD’s issues of concern and the EIA Consultant’s responses are outlined in Section 3.

## 1.1 Public Review

The TOR report was displayed on the Environment Protection Department website and at all district libraries in the state to facilitate public review from July 3, 2014 to July 22, 2014. The public were to submit written comments to the EPD before July 23, 2014.

A total of 27 submissions were received within the review period. Table 1.1 shows the breakdown of comments received from various parties such as public, NGOs, government agencies as well as political representatives.

Table 1.1 Breakdown of comments received from various parties

Category	Number of comments received
Public	19
Non-governmental organisation (NGO)	5
Government agencies	2
Political representatives	1

## 1.2 TOR Panel Meeting

The TOR review panel meeting was held on August 7, 2014. The panel selected by the EPD comprised representatives from government technical agencies and NGOs. The TOR was presented to the panel members, and a summary of the public comments received from was also given and deliberated by the Panel. The panel meeting minutes are appended in Appendix B.

## 2 Issues

Many of the comments both from the public and the review panel are repetitive and focus on the same issues. The feedback has therefore been distilled into the main issues or category of issues as outlined in this section. The proponent or EIA Consulting Team's responses are also presented in this section.

### 2.1 General Objection to the Project

#### 2.1.1 Issue/ Comments

Half of the public respondents objected to the Project, with the reasons for the opposition including:

- Tg. Aru beach belongs to the people of Sabah
- Opined that the project should be relocated to another location
- The project violates public rights of Sabahans due to conversion of public spaces to resort areas.

#### 2.1.2 Discussion / Response

The above reasons are premised on the misconception that the public beach will be lost, with the new beach inaccessible to the public. It is outlined in the TOR that the Masterplan provides that the beach, promenade along the beach and Prince Philip Park shall remain accessible to the public.

Nevertheless, it is noted that public perceptions of the project, including the adequacy of public access will be investigated during the SEIA as part of the socioeconomic surveys. The surveys will be carried out in a structured manner such that the perceptions of a representative sample of the population can be obtained as outlined in Section 5.2.10 of the TOR.

With reference to the suggestion that the Project is moved elsewhere, it is noted here that a key element of the Project is the provision of a stable and improved public beach at Tg. Aru, and the protection of Prince Philip Park. As such, the Project is predicated on its location at Tg. Aru. The rationale or statement of need for the project will be further elaborated in the SEIA to set out the reasons for the location of the Project at Tg. Aru Beach.

## 2.2 Project Concept

A total of nine (9) submissions touched upon the project concept:

- Public – 6 comments
- NGO – 3 comment

These comments pertain to the masterplan components, source of fill material and reclamation level as outlined below.

No.	Summary of Comments	Action/Feedback by Proponent/ Consultant
1	<p><b>Details on Environmental Standards to be Applied should be provided</b></p> <p>To outline the compliance of the project concept with Green Globe/LEED and Blue Flag Marina and Beaches standards at TOR stage. It should be made clear if these are going to be implemented for both construction and operational phases. The SEIA should be based on these standards.</p>	<p>No details are available at the time of writing however these will be further described in the SEIA, however these standards are targeted at the operations rather than during construction.</p> <p>Relevant standards or guideline limits available under these accreditation schemes will be incorporated in the SEIA with respect to impact indicators and quality objectives for the monitoring programme (updated in Section 5.4 of the TOR)</p>
2	<p><b>Project land use components</b></p> <p>A number of reviewers felt that the project components should be finalised before a TOR is done and also commented that the project land use components were not clearly indicated or explained in the TOR.</p> <p>The comments included, “ If "components are subject to change" how can the TOR be sure to cover all aspects?”</p> <p>Reviewers also commented that detailed design should be carried out before the SEIA is done.</p>	<p>The SEIA is a planning tool which should be carried out at an early phase of project development, such that any required changes or appropriate mitigation measures can be incorporated into the detailed design.</p> <p>As per EPD Guidelines, the objectives of EIA, among others, are:</p> <ul style="list-style-type: none"> <li>• To examine and select the most appropriate development options available</li> <li>• To formulate and incorporate appropriate abatement and mitigating measures into the development plan.</li> </ul> <p>In terms of the detailed design studies, it is important to note that for large-scale project such as the TAED, the detailed design works encompass an extensive and detailed scope, with an associated large financial commitment.</p> <p>It is therefore important that the EIA is carried out prior to the detailed design stage.</p> <p>This is underscored by the International Association for Impact Assessment best practice principles for EIA, which highlights that EIA is the process of “identifying, predicting, evaluating and mitigation the ...effects of development proposals <u>prior to major decisions being taken and commitments made.</u>”</p> <p>Project components will be further outlined in the SEIA, refer to Section 5.1.1 of the TOR. It is noted that the definition of the masterplan and assessment of potential impacts in the SEIA will be at a sufficient level of detail to enable the authorities to evaluate overall environmental outcomes that may occur through the implementation of the project and any (sub-) development within the TAED Masterplan.</p>

No.	Summary of Comments	Action/Feedback by Proponent/ Consultant
3	<p><b>Classification of Project development components</b></p> <p>Several commenters queried the land use breakdown given by the Proponent, in particular, the component parts of the “public area” vs ‘development area” categories, etc.</p> <p>One example given was that the Golf course should be included as part of the Project “development area”, thus this should be higher than the reported 32%.</p>	<p>Project components and land use breakdown will be further outlined in the SEIA, refer to Section 5.1.1 of the TOR.</p> <p>The breakdown will distinguish between built up areas (development areas), public recreation and open space, vs paid public amenities and recreational areas.</p>
4	<p><b>Utility demand</b></p> <p>Consumption of electricity and water during operations needs to be estimated in the SEIA and compared to current capacity.</p>	<p>The estimated demand of electricity and water during operations will be included in the SEIA study, refer to updated Section 5.1.1 of the TOR.</p> <p>Consultations will be carried out with Sabah Electricity and Water Department, see updated Section 5.1.4 of the TOR.</p>
5	<p><b>Beach maintenance</b></p> <p>Beach maintenance activity was not highlighted in the TOR. This should be listed as a project activity in the TOR.</p>	<p>Maintenance requirements and cost to be outlined in the SEIA, refer to updated Section 2.4.3.8 of the TOR.</p>
6	<p><b>Public access to beach</b></p> <p>Five submissions queried whether public access to the beach will be ensured</p>	<p>The public will have full unrestricted access to the full length of the TAED project beach and promenades as outlined in the TOR Section 2.4.3.2 and other sections.</p> <p>Vehicular access however is likely to be restricted but adequate parking and electric buses will be provided to facilitate public access.</p> <p>Other means of accessing the project site using boat taxis are planned and these and other routes will be described and evaluated in the SEIA report.</p>
7	<p><b>Sand source</b></p> <p>Details of the fill source(s), volumes and specifications of fill material for each component (i.e. land reclamation vs beach area) to be outlined in the TOR.</p>	<p>The sand sources in terms of land based fill, marine fill, top soil etc. have been updated in the TOR Section 2.2.2.5. However, the locations of these sources are as yet unknown as investigations are still ongoing as outlined in the TOR under Section 2.2.2.5.</p> <p>Volumes of fill required for the land fill component vs the beach material and top soil are given in Section 2.2.2.5 of the TOR.</p>
9	<p><b>Reclamation process</b></p> <p>Details on the reclamation process and the type of reclamation protection structures to be added in the TOR. (i.e. location of hard structures, vs beach, etc.).</p> <p>Source of armour rock to also be specified.</p>	<p>Updated in the TOR (Figure 2.17, Section 2.2.2.5. Details of the source(s) of armour rock will be included in the SEIA.</p>

No.	Summary of Comments	Action/Feedback by Proponent/ Consultant
8	<p><b>Project Finished Level</b></p> <p>One comment queried the project reclamation level and whether the project would result in Prince Philip Park being lower than the beach front.</p>	<p>It is the intention to raise the beach and promenade level by approximately 1.3 m from the existing level. The existing Park levels are low and will be susceptible to flooding from storm surges and global sea level rise in the future. Some local raising of levels within the park in the order of 0.3 m to 0.7 m is envisaged. The Park may be slightly lower than the beach front to protect it from waves but not lower than sea level.</p>
10	<p><b>Shoreline Management Plan 2005</b></p> <p>The Project's alignment with the SMP 2005 management strategy for the area was raised.</p>	<p>The SMP Management Strategy for the area is Promoted: Low/Medium Density Tourism.</p> <p>There is no mention or general prohibition on reclamation for this location, however, beach nourishment over hard structures such as the seawalls presently observed was recommended.</p> <p>The present proposal includes the creation of a stable beach, fulfilling the SMP objectives of retaining the public beach. Elements of the project masterplan, such as the marina and fishermen's wharf breakwaters, serve to ensure this beach remains stable, while the reclamation serves to push the beach into deeper water, where the seabed profile will allow penetration of waves to the beach to maintain high quality sand (by preventing siltation of fines).</p> <p>These elements or any other specific details were not specified in the SMP as no detailed studies were carried out to develop a specific solution or prescriptive measures for the Tg. Aru site as part of the SMP study.</p>
11	<p><b>Zoning Status</b></p> <p>Zoning status (viz Local Plan) to be addressed. If planning status is not confirmed, the proponent needs to get a planner to do a planning brief.</p>	<p>DBKK representative highlighted during the TOR Panel Review Meeting that zoning of the Final Draft Local Plan for the Project area has been revised to hotel and resort zone; this is updated in the revised TOR (Section 2.3.3.1)</p>

## 2.3 Baseline Environment

A total of five submissions addressed the baseline environment and SEIA methodology to describe the existing environment:

- Public – 3 submissions
- NGO – 2 submissions

No.	Summary of Comments	Action/Feedback by Proponent/ Consultant
1	<p><b>Physical-Chemical Component</b></p> <p>The study extent should extend to Tg. Dumpil.</p>	<p>The physical-chemical component model in fact extends beyond Tg. Dumpil as shown in Section 5.1.2 of the TOR.</p>

No.	Summary of Comments	Action/Feedback by Proponent/ Consultant
2	<p><b>Existing Erosion</b></p> <p>To document the existing erosion and other present other alternatives of coastal protection aside from the project proposal.</p>	<p>Erosion of the beach within the project area is visually clearly evident and will be documented in the SEIA. Note that the project area does not include the beach from Jalan Mat Salleh to the northern tip by the Shangri La's Tanjung Aru Resort (STAR).</p> <p>Photographic records including aerial images show that the beach within the project area has eroded at least 40m on Third Beach and 16m opposite Prince Phillip Park over a 48 year period. (Since 1966). The latest beach / erosion / vegetation line has been confirmed by two surveys to ensure consistency.</p> <p>These findings will be presented in the SEIA report. It should be clear that there are three issues at Tg Aru beach that require addressing, one is erosion, the second is low ground levels and the third is provision of an amenity beach. Any alternative should address all three points if any scheme is to be successful. If ground levels are not raised then the means of coast protection will change in severity to a flood defence issue with land remaining susceptible to flooding.</p> <p>There does not appear to be an alternative scheme that can meet all three requirements. The reclamation not only raises the ground levels of the project site protecting it from flooding, but it also moves the new beach seawards into deeper water where it is exposed to waves that provide a means to keep the sand clean from the muddy silts now being deposited on the beach. It provides a much wider beach at all states of the tide that not only improves the amenity value but also provides an improved coast protection function.</p> <p>This will be further explained in the SEIA, refer updated Section 3.1.3 in the TOR.</p>
3	<p><b>Geotechnical / Geohydrology</b></p> <p>Geotechnical and geohydrology (ground water) studies need to be conducted for the area due to excavation of the channel that is close to the airport runway as</p> <ul style="list-style-type: none"> <li>• the removal/disturbance of soil and disturbance of the water table in the area may affect the stability of the nearby building/runway (causing subsidence/ risk of liquefaction).</li> <li>• This may result in intrusion of salt water to the fresh water table.</li> </ul> <p>Geotechnical / groundwater expert to be included in the study team.</p>	<p>A geotechnical study incorporating assessment of the geohydrology will be included in the SEIA; this has been updated in Section 4.1.2.1 of TOR.</p>

No.	Summary of Comments	Action/Feedback by Proponent/ Consultant
4	<p><b>Water quality</b></p> <p>Comments on the sampling programme included:</p> <ul style="list-style-type: none"> <li>To assess not only site, but also surrounding areas; find source of discharges.</li> <li>To include an additional station off Kg. Contoh</li> </ul>	<p>Water quality sampling will be carried out at eight (8) marine stations on four separate occasions (previously seven stations). These stations are distributed around the potential impact area, including off Sutera Harbour, at the boundary of the TARP, nearshore and offshore of the project site as updated in Section 5.2.5.1 of the TOR.</p> <p>Two (2) water quality stations are placed inside Sg. Petagas to capture discharges from this main river.</p> <p>This comes up to a total of 10 marine and river water quality stations which will be sampled on four stages of the tide on two separate occasions (80 samples total).</p> <p>Discharges from the drains in the project area are also taken into account and included in the sampling. This encompasses 8 stations, and is to be carried out on 5 occasions as outlined in TOR Section 5.2.5.2. (40 samples total)</p> <p>In addition, water quality modelling will be carried out to extrapolate these data in space and time.</p>
5	<p><b>Coral Surveys in the TARP</b></p> <p>The description of the existing environment in the TOR document referred to some data on coral cover within the TARP dated from 1998. Comments on the age of this data were received.</p>	<p>The TOR refers to readily available data on live coral cover prior to the commencement of the SEIA study.</p> <p>As outlined in Section 5.2.8 of the TOR, coral surveys will focus on the reefs off Tg. Aru headland. Updated information will be sought on the live coral cover of reefs within the TARP from Sabah Parks and other sources; no primary surveys are proposed. The reason for this is that the impact evaluation methodology does not depend on the status of the reef. Rather, absolute water quality (suspended sediment) thresholds will be used to assess the impact on the TARP boundary, based on Malaysian Marine water quality standards for marine parks and a literature review of threshold limits for corals.</p>
6	<p><b>Drainage</b></p> <p>The characteristics of the drains discharging into the project site need to be detailed, including the sources of runoff which go into the drains</p>	<p>The catchment area for each of the drains that discharge onto the Tg. Aru beach has been identified. Most of these catchments are within the project boundary and will be addressed during detailed design. Those drains that flow into the project boundary from outside will require potential clean-up of discharges from source or will be treated prior to being discharged away from amenity areas.</p> <p>Further details of the drains in the area and their catchments will be provided in the SEIA, refer to TOR Section 5.2.3 and Section 5.3.7.</p>
7	<p><b>Terrestrial Vegetation</b></p> <p>The old growth trees that may be affected by the canal component, will it be addressed?</p>	<p>This will be determined during the SEIA study through mapping and identification of the old growth trees in the area as outlined in Section 5.2.7 in the TOR.</p>

No.	Summary of Comments	Action/Feedback by Proponent/ Consultant
8	<p><b>Socioeconomic</b></p> <p>Sample size of 200 residents to include 4 main residential areas is too small.</p> <p>Visitors/recreational users- 100 respondents is far too small a sample size for a project of this magnitude with so many beach users affected. This should be increased to at least 300.</p>	<p>The number of respondents will be based on a sample size of 10% of the households in these areas. This is considered adequate given that the five main residential areas targeted include:</p> <ol style="list-style-type: none"> <li>1. Waikiki Condo</li> <li>2. Residences along Jalan Aru (not a large number)</li> <li>3. Residences around Pekan Tg. Aru</li> <li>4. Kg. Tg. Aru (less directly affected)</li> <li>5. Kg. Contoh.</li> </ol> <p>The number of respondents for visitors/recreational users will be based on sampling effort rather than a set target number of people. The sampling for recreational users will be conducted over 2 weeks (10 weekdays and 4 weekends).</p>

## 2.4 Impact Assessment Issues and Methodology

A total of 8 submissions touched upon the impact assessment, mitigation and monitoring scope and methodology:

- Public – 4 comments
- NGO – 4 comments

No.	Review/Comment	Action/Feedback by Proponent/ Consultant
<b>Reclamation Impact</b>		
1	<p><b>Sediment plume impacts</b></p> <p>A total of 6 reviewers commented on the impact of sediment plumes from reclamation, in particular its impacts on the TARP.</p> <p>A reviewer also commented on the number of monitoring stations, stating “If only few locations along the TARP boundary are going to be monitored, so how is it going to be known if sediment, pollution etc are getting across the boundary into the Park at other points not monitored?”</p>	<p>Sediment plume impacts have in fact been identified as a Focus Issue (Section 4.3.1.4 of the TOR).</p> <p>As outlined in the TOR Section 5.3.2, sediment plume modelling will be conducted which will predict the potential impacts to the TARP with and without mitigation.</p> <p>It is noted that the location of water quality monitoring stations during the project implementation have not been identified or presented in the TOR as these will be based on the results of the above sediment plume modelling. The SEIA will propose management and monitoring methods which can detect water quality impacts to the TARP waters.</p>



No.	Review/Comment	Action/Feedback by Proponent/ Consultant
2	<p><b>Access to beach during Construction</b></p> <p>Commenters (5) considered the loss of access to the beach during construction as a key impact.</p>	<p>There will in the initial stages of construction be some impacts to the existing beach along the project frontage. Note however that the beach from Jalan Matt Salleh to the STAR (approx. 1/3 of the Tg. Aru beach) is not within the project site and will continue to be open to the public.</p> <p>Phasing of the construction works is intended to reduce as far as possible restrictions to public access and to return part of the new beach as early as possible for public use. Additional sections of beach are planned to be opened as soon as possible as the project develops.</p> <p>The planned constructing staging will be reviewed in detail in the SEIA, and changes to the schedule, phasing and other potential measures will be evaluated to determine the optimum.</p>
3	<p><b>Erosion at TARP</b></p> <p>One of the TOR review panel members stated that the TARP has experienced erosion due to the Sutera Harbour reclamation and questioned whether study has included the possibility of the project affecting TARP in term of erosion</p>	<p>Sediment transport / morphological impacts are included in the hydraulic modelling, which encompasses the TARP area as described in the revised TOR Section 5.3.</p>
<p><b>Impacts to the KKIA</b></p> <p>Potential impacts include:</p>		
1	<p>Impacts of Golf Course on Aircraft Safety:</p> <ul style="list-style-type: none"> <li>• Lighting from the golf course during operations may affect navigation</li> <li>• Golf courses attract birds with a resulting risk of increased bird strikes to planes</li> <li>• Potential danger of golf balls hitting planes</li> </ul>	<p>Noted. Impacts to be addressed in the SEIA. Updated in Sections 5.1.2 and 5.4 of the TOR.</p>
2	<p>Dust generated from the reclamation activities may also affect the airport and pilot visibility.</p>	<p>Refer to updated Section 5.4 of the TOR</p>
<p><b>Impact to Hydrology and Drainage</b></p>		
1	<p>Impacts to drainage at the KKIA runway should be investigated.</p>	<p>The drainage from the KKIA runway currently discharges mainly through an outfall at 3<sup>rd</sup> Beach. This drainage is being assessed as part of the detailed design and will be accommodated in the new scheme to ensure flow discharges are not affected.</p> <p>Further details will be included in the SEIA, see updated Section 5.3.7 in the TOR.</p>

No.	Review/Comment	Action/Feedback by Proponent/ Consultant
2	Impacts to the existing drains in the project area as well as the first beach need to be assessed.	The drains along 1st, 2nd and 3rd beaches and their catchments will be included in the SEIA study.  Refer to Section 5.1 and Section 5.3.3 in the TOR.
<b>Canal Sustainability</b>		
1	Will the canal need any maintenance dredging? The SEIA is to address flushing of canals to minimise maintenance requirements.	Siltation is likely to be very small therefore little maintenance dredging is expected. Further information on the flushing and likelihood of siltation will be documented in the SEIA report
2	What will the water quality in the canal be like?	Modelling studies have indicated that the flushing will be good apart from periods of low wind (as the wind drives the currents in the area).  The installation of tidal gates to control flow has been recommended as part of the hydraulic study and these findings will be comprehensively reported in the SEIA.
<b>Socioeconomic Impact</b>		
1	Socio economic assessment should take into account Tg Aru town and Kg Tg Aru and not only nearby to the project site.  The TOR Review Panel requested that Kg. Contoh located opposite the Project should be included in the socioeconomic surveys.	Tg. Aru town and Kg. Tg Aru are included in the socio economic surveys, refer to Section 5.2.10 of the TOR.  Kg. Contoh will be included in the socio economic survey; this has been updated in Section 5.2.10.1 and Figure 5.1.
2	Issues over security of having a large workforce living on site for 4 years must be addressed and be included in the socio-economic survey of stakeholders, including security issues relating to the airport.  The location of the workers quarters and access roads must also be identified in order to assess the potential impacts.	See Section 5.4 of the TOR.
3	The survey target group should include: <ul style="list-style-type: none"> <li>• Terminal 2 users</li> <li>• Stall holders at First Beach</li> <li>• Shellfish collectors.</li> <li>• Casuarina Hotel and houses on that road,</li> <li>• Borneo Beach House</li> <li>• Private houses on the road to STAR.</li> </ul>	With the exception of Terminal 2 users, the target groups mentioned are already to be included in the study (see Section 5.2.10 in the TOR).  It is unclear what the rationale for including Terminal 2 users would be. Dialogues with the operators (Department of Civil Aviation, Malaysia Airports Berhad) are instead proposed

No.	Review/Comment	Action/Feedback by Proponent/ Consultant
4	Only one public meeting is insufficient for this scale of this project. When is this public meeting to be held? Before, during or after the SEIA?	<p>The public meeting will be held towards the end of the SEIA study period.</p> <p>It is proposed that the Public Meeting is held after the first draft EIA has been prepared, to present the impact assessment findings, proposed mitigation measures and monitoring programme to the public.</p> <p>It is highlighted that this Public Meeting is to deliberate on the SEIA findings, not the project in general. It is agreed that additional public meetings and consultations should be held by TAED with respect to the details of the project.</p>
5	Social impact assessment (SIA) should be placed as a separate chapter in the SEIA.	Noted.
<b>Impact to Water Quality</b>		
1	Impacts of the project and discharges from the project on the First Beach and Sungai Patagas river mouth need to be assessed.	<p>The discharges that now flow onto First Beach that are outside of the Project boundary will most likely be incorporated into the new drainage being designed for the TAED project.</p> <p>The water quality from the Sg Patagas river is outside of the project scope but the scheme development has ensured that flows from the river are directed further offshore where it is diluted and pushed away from amenity beaches. The SEIA will investigate water quality impacts of both these areas as a result of the project footprint and operational activities.</p>
2	Ballast water from the marina / yachts needs to be taken into account in the water quality impact assessment.	Noted, the impact from the marine operations will be addressed as outlined in Section 2.4.3.7 in the TOR.
3	Impact of the breakwater structures on floating debris needs to be assessed, in particular to ensure that floating debris will not be trapped at the 1st Beach.	<p>Impact of the breakwater structures on the floating debris will be further assessed in the SEIA and mitigation measures explored, such as a Beach Management Plan during operations to maintain the beach condition along Tg. Aru Beach.</p> <p>See updated Section 2.4.3.8 and Section 5.3.1 in the TOR.</p>
<b>Impact to Land traffic</b>		
1	The proposed project will result in a huge increase in traffic -there are already traffic jams at peak school times, when flights land at Terminal 2 and during heavy use of the beach at weekends.	A supporting study to assess the impact of traffic will be undertaken, refer to Section 5.1.3 in the TOR.
2	The new access road to the project site may affect the road to Terminal 2, especially during construction of the new road directly in front of the Terminal, and may cause severe disruption and delays. This should be studied as part of the SEIA.	

No.	Review/Comment	Action/Feedback by Proponent/ Consultant
<b>Dust Impact</b>		
1	Dust during reclamation and earthmoving will be a major factor affecting both the marine and terrestrial environment and surrounding residents and airport.	Dust and other air quality impacts have been evaluated as a Remaining Issue, in Section 4.3.3.3, given that the reclamation will be use marine (wet) material with minimal fugitive dust and as standard mitigation measures can be used to minimise dust. As outlined in Section 5.4 dust impacts during the reclamation and earthworks phases will be evaluated, including impacts to the airport.

## 2.5 Implementation Issues

A total of four (4) submissions touched upon the implementation issues:

- Public – 2 comments
- NGO – 2 comments

No.	Summary of Comments	Action/Feedback by Proponent/ Consultant
1	<b>Transparency</b> How can the public be assured that the individual developers (sub-lot owners) will adhere to the building guidelines	The Masterplan's Development Guidelines will be incorporated in the Sales and Purchase Agreement.  The SEIA will examine ways to ensure transparency in the implementation of mitigation measures and EMP for the EIA  Other transparency issues are however beyond the scope of the EIA.
2	<b>Conflict of Interest</b> The conflict of interest of the approval of the various studies was raised when the TAED board are comprised of all approving authorities.	NA
3	<b>Publication of Masterplan</b> SEPA also queried why the masterplan was not shared to the public at an earlier stage (prior to finalisation of the masterplan).	The masterplan development involved many consultants and studies to optimise the many various design aspects. This entailed consultations with relevant government authorities and stakeholders. With the masterplan in such a fluid condition, TAED made the decision to delay publicising the masterplan until a more firm plan was in place.
4	<b>Beach maintenance</b> Responsibility for maintaining Prince Philip Park during and after construction should be identified in the SEIA study	It will be identified in the SEIA; updated in Section 2.4.3.8 of the TOR.

No.	Summary of Comments	Action/Feedback by Proponent/ Consultant
5	<b>Public Access</b> Adequacy of provisions for public access need to be assessed in the SEIA. E.g. Electric buses – are they to be paid? Is there a time limit of operations? Is it 24 hours?	These will be evaluated in the SEIA and measures proposed to improve access if found lacking.

### 3 Formal Feedback from EPD

A formal feedback letter from EPD requesting for additional information to be incorporated into the TOR was forwarded to DHI on September 12, 2014. The letter (EPD Ref: JPAS/PP/05/600-1/08/1/154 KLT.2(12)), requested that two (2) copies of the revised TOR be submitted upon incorporating the issues of concern in **Error! Reference source not found.:**

Table 3.1 Concerns listed by EPD

No	Issue	Feedback/Action by Proponent / Consultant
1	Masterplan of Tg. Aru Eco Development (TAED) Project	
1.1	The final masterplan for TAED project must be finalised taking into account comments from the public and inputs from the technical panel review held on August 7, 2014, to be incorporated to the revised TOR.	Noted. The SEIA study will be based on the final masterplan. Although there have been some modifications to the proposed land uses within the project site, the core project footprint/development boundary still remains the same.
1.2	Proponent must take into consideration the possible conflict between the resort occupants and public on the usage of the beach in the Masterplan TAED.	Potential conflicts affecting the public will be assessed in the SEIA.
1.3	Sequence of works for the development phase must be clearly stated to allow identification of issues and recommendation of practical mitigation measures.	Noted. Summary of the sequence of works during development/construction is given in Section 2.4.2 in TOR. Further details will be presented in the SEIA.
2	Scope of Study for SEIA	
2.1	Beach erosion impact to Kg. Contoh, Petagas and upwards to Kg. Dumpil	
2.1.1	The SEIA scope of study for beach erosion issue must extend to Kg. Dumpil shoreline.	Noted and the hydraulic modelling does extends past Kg. Dumpil. See Section 5.3.1 of the updated TOR.

No	Issue	Feedback/Action by Proponent / Consultant
2.1.2	The scope must cover beach erosion issue, morphological changes of Sg. Petagas, flooding issues during and after reclamation phase, and damages to property due to beach erosion as well as safety issue to residents along the shoreline.	<p>The scope covers beach erosion of the frontages immediately north and south of the project site and looks at sedimentation at the Sg Petagas river mouth.</p> <p>The project site is not affecting the adjacent frontages any more so than the existing KKIA runway extension so property damage due to erosion are not seen as an issue made worse by the project. Safety to the public is improved along the project site due to increased ground levels and improved coast protection.</p>
2.2	Utilities Requirements	
2.2.21	Assessment on impacts to utilities such as electricity and water supply during the construction phase and during operation must also be included in the scope of work.	<p>The estimated demand of electricity and water during operations will be included in the SEIA study, refer to updated Section 5.1.1 of the TOR.</p> <p>Consultations will be carried out with Sabah Electricity and Water Department, see updated Section 5.1.4 of the TOR.</p>
2.3	Drainage and Hydrology System	
2.3.1	Impact to drainage system along 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> beach as well as catchments of these drains must be included in the scope of study.	<p>The catchment area for each of the drains that discharge onto the Tg Aru beach has been identified. Most of these catchments are within the project boundary and will be addressed during detailed design. Those drains that flow into the project boundary from outside will require potential clean-up of discharges from source or will be treated prior to being discharged away from amenity areas.</p> <p>Further details of the drains in the area and their catchments will be provided in the SEIA, refer to TOR Section 5.2.3.</p>
2.4	Water Quality Station	

No	Issue	Feedback/Action by Proponent / Consultant
2.4.1	Additional water quality stations for marine sampling must be added in the area nearby Kg. Contoh and several other strategic locations along the coastline of Tg. Dumpil and marine parks.	<p>The baseline water quality is to be derived from sampling at eight (8) marine stations on four separate occasions. These stations are distributed around the potential impact area, including off Sutura Harbour, at the boundary of the TARP, nearshore and offshore of the project site including the additional station nearby Kg. Contoh as outlined updated in Section 5.2.5.1 of the TOR.</p> <p>Two (2) water quality stations are placed inside Sg. Patagas to capture discharges from this main river.</p> <p>This comes up to a total of 10 marine and river water quality stations which will be sampled on four occasions on two separate programme (80 samples total). Discharges from the drains in the project area are also taken into account and included in the sampling. This encompasses 8 stations, and is to be carried out on 5 occasions as outlined in TOR Section 5.2.5.2. (40 samples total)</p> <p>In addition, water quality modelling will be carried out to extrapolate these data in space and time.</p>
2.5	Geotechnical/ Geo-hydrological Impact	
2.5.1	Groundwater assessment and impact to the nearby structures around the project site and the dredged channel as well as area nearby the airport runway must be included in to the TOR scope of work.	A geotechnical study incorporating assessment of the geohydrology will be included in the SEIA; this has been updated in Section 4.1.2.1 of TOR.
2.5.2	Geotechnical expert or soil expert to be included in the SEIA study team.	Noted. To be included in the SEIA.
2.6	Zoning Status of the Project Site	
2.6.1	Consultant must review and confirm the zoning status of the project site before the start of project.	DBKK representative highlighted that zoning has been revised and approved; this is updated in the revised TOR (Section 2.3.3.1).
2.7	Public access to Tg. Aru Beach during construction phase and after operation.	
2.7.1	Scope of work identifying the access and public facilities to the beach as well as Prince Philip Park during and after project construction must be taken into account in the TOR study.	<p>The planned constructing staging will be reviewed in detail in the SEIA, and changes to the schedule, phasing and other potential measures will be evaluated to determine the optimum to balance the construction methodologies and beach accessibility to the public.</p> <p>The adequacy of public access to Prince Philip Park and the beach will be assessed as part of the SEIA socioeconomic study.</p>

No	Issue	Feedback/Action by Proponent / Consultant
2.8	Low Carbon Emission	
2.8.1	Implementation concept of The Green Building Index (GBI) must be included into the TOR.	<p>At this stage these options are being explored. The Green Building Index (GBI) for example requires fulfilment of a certain percentage of its requirements to achieve certain accreditation levels; which specific requirements out of the full list is something that will be determined in the detailed design phase.</p> <p>These will be further described in the SEIA, refer to updated Section 5.1.1 of the TOR</p>
2.9	Impact of channel construction	
2.9.1	Construction impact of the channel must be assessed in the study including nearby infrastructure such as airport runaway and building structures around the project site.	The construction impact of the channel will be assessed in terms of ground water lowering or raising which is seen as the main issue relating to this element of works.
2.10	Flushing Assessment	
2.10.1	Scope of work on flushing assessment to be included into the TOR.	The flushing of the channel, Marina and Fishermen's Wharf have been studied in details.
2.11	Sand Requirements for Reclamation and Construction of Man Made Beach	
2.11.1	Sand source for reclamation and maintenance of man-made beach component must be included in the TOR.	<p>The sand requirements in terms of land based fill, marine fill, top soil etc. have been updated in the TOR Section 2.2.2.5. However, the locations of these sources are as yet unknown as investigations are still ongoing as outlined in the TOR under Section 2.2.2.5.</p> <p>Volumes of fill required for the land fill component vs the beach material and top soil are given in Section 2.2.2.5 of the TOR.</p>
2.11.2	Sand source and rocks used must be identified and disposal site location for construction waste must be included in the TOR.	<p>The sand source location may not be determined at the time of the SEIA. Hence a separate sand source EIA will be required if there is no existing approval for the identified site(s).</p> <p>It is noted that borrow sand sourcing activities are often considered separately in many EIA studies. In some cases this is because the sand source is only investigated once the main project is approved, or in other cases it is left to the dredging contractor to source the sand – and the dredging contractor is normally appointed only after the main project approvals are in place.</p>



No	Issue	Feedback/Action by Proponent / Consultant
2.11.3	Comprehensive discussion regarding the project design including sequences of works for reclamation works and construction of coastal protection structure must be included in the TOR.	Summary of the sequence of works during development/construction was deliberated at Section 2.4.2 in TOR. Further details will be presented in the SEIA.
2.12	Assessment of Marine Water Quality Impact	
2.12.1	Consultant to review the pollution aspect of the marine water quality including technology that will be used for waste water treatment plant must be discussed in the TOR.	<p>The pollution aspect has been modelled for both the existing situation and the new project. The new project will incorporate water treatment and this will be investigated further during the detailed design stage.</p> <p>Details of the technology of the wastewater treatment plant may not be available but what is important is the treatment specifications, where the effluent discharge will adhere to the effluent standards under the Department of Environment (DOE).</p>
2.13	Socioeconomic Survey	
2.13.1	Scope of study for social impact must be identified and detailed in the TOR.	The scope of study for social impact will follow the issues outlined in Section 4.1.2.3. Socioeconomic surveys outlined in Section 5.2.10.1 of the TOR will feed into the assessment of the social impact for SEIA.
2.14	Building height limit	
2.14.1	The height of the building to be constructed must be revised by referring to DCA authority prior to construction.	<p>Noted, all proposed building heights will be reviewed in the SEIA. All DCA requirements will be adhered in the project design.</p> <p>Refer to Section 5.1 of the TOR.</p>



# A P P E N D I C E S



# Appendix A

## Public Comments



The comments received are tabulated below. As outlined above, many of the submissions relate to objections to the masterplan and the need for the project, rather than commenting on the scope and methodology of the SEIA as detailed in the TOR. Where these comments do not relate to the TOR, the action/ response denoted in the following tables is “NA - Not applicable”.





## A1. Wendy Chia

P.O. Box 15346,  
88863 Kota Kinabalu, Sabah  
Tel: 0128286783

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1	Objection to the Proposed Tg. Aru Eco Development Along Tg. Aru	Tg. Aru Beach do not need drastic development. Tg. Aru Beach only needs maintenance such as street lights, toilet, rubbish bin, cutting of grass and etc. Return Tg. Aru Beach to the people of Sabah, especially to the future generation. Do it at different location, but don't disturb Tg. Aru Beach.	Noted; these issues will be addressed in the Statement of Need in the SEIA report.

## A2. Y.Y. Yong

Tel: 0128669955

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1	Preserving the right of the public to use the beach	Will the project affect the public usage of the beach?	As outlined in the TOR, access to the beach is ensured in the design through the provision of a 20 m public promenade with cycling lane, public electric bus lane and pedestrian access along the entire 1.4 km stretch of beach. Refer to Section 2.2.2.1 in the TOR.

### A3. Chester Pang

Lot 28, Hse 8, Puri Saujana,  
 Jalan Kiansom, Inanam,  
 Kota Kinabalu  
 Tel: 0168336644 / 014-6797669

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1	Figure 2.3 – Page 2-6	What or how the public can enter the beach area? i) Need to go through resort (private)? ii) What is the warranty like STAR & Sutera Harbour that prohibit public entering the beach in front of their resort?	Please refer to Section 2.2.2.1 in the TOR.
		Proposed to relocate the project to Lok Kawi or Kinarut area	The improvement of Tg. Aru Beach for the benefit of the public of Kota Kinabalu is one of the key components of the project. Given that Tg. Aru Beach is not located in Lok Kawi or Kinarut, it will be impossible to rejuvenate Tg. Aru beach at these locations.  This will be addressed in further detail in the Statement of Need in the SEIA report.

#### A4. Stephan Gaimin

Stephan Gaimin  
 (Solidariti Belia Sabah)  
 Pos Mini Tenghilan,  
 P/S 194, 89260 Tenghilan  
 Tel: 0166668124

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1	Objection to the Proposed Tg. Aru Eco Development Along Tg. Aru	Tg. Aru Beach does not need drastic development. Tg. Aru beach only needs constant maintenance such as toilet facility, lighting, cutting of grass and maintenance of plants.	NA
		Please consider Tg. Aru will not be the same with the existing Tg. Aru if development is to be continued.	Impacts on the nature and character of Tg. Aru Beach due to the development will be addressed in the SEIA study; please refer to Section 4.3.1.2 of the TOR.
		Look for different location for development. Sabah has lots of different beach aside from Tg. Aru.	The improvement of Tg. Aru Beach for the benefit of the public of Kota Kinabalu is one of the key components of the project. Given that Tg. Aru Beach is not located in Lok Kawi or Kinarut, it will be impossible to rejuvenate Tg. Aru beach at these locations.  This will be addressed in further detail in the Statement of Need in the SEIA report.
		Priority to the public and not personal interest.	The Masterplan concept and whether it fulfils the public amenity and recreational needs will be assessed as part of the SEIA study.  This will be carried out through perception surveys, assessment of actual public areas, accessibility routes, parking, etc. in the SEIA report.

### A5. Jeffery A. George

House No 22, Block 5,  
Tanjung Aru Rumah Pangsa  
Tel: 0168027865 / 0178918832

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1	Objection to the Proposed Tg. Aru Eco Development Along Tg. Aru	<p>I object to the proposed Tg. Aru Eco Development Project because of what I saw at page 2-6, Figure 2.3.</p> <p>The proposal violate the public rights of Sabah especially residents of Tg. Aru area, whereby public cannot enjoy/play at Tg. Aru Beach area because almost all the Tg. Aru Beach area has been turned to resort area.</p>	As outlined in the TOR, access to the beach is ensured in the design through the provision of a 20 m public promenade with cycling lane, public electric bus lane and pedestrian access along the entire 1.4 km stretch of beach. Refer to Section 2.2.2.1 in the TOR.

### A6. Dexter Chin

No 18, Lorang Sena 4,  
Luyang Phase 7,  
88300 Kota Kinabalu, Sabah.  
Tel: 0168338737

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1	Objection to the Proposed Tg. Aru Eco Development Along Tg. Aru	<p>Why must developed at Tg. Aru Beach 2, 3,...?</p> <p>Proposed:</p> <ul style="list-style-type: none"> <li>i) Kinarut can still be developed</li> <li>ii) Kota Marudu Area</li> <li>iii) Kudat</li> </ul>	<p>The improvement of Tg. Aru Beach for the benefit of the public of Kota Kinabalu is one of the key components of the project. Given that Tg. Aru Beach is not located in Lok Kawi or Kinarut, it will be impossible to rejuvenate Tg. Aru beach at these locations.</p> <p>This will be addressed in further detail in the Statement of Need in the SEIA report.</p>

## A7. Jan Chow

8 Taman Fortuna PH1,  
88300 Luyang, Kota Kinabalu  
Tel: 0168485378

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1	How could you ensure the public usage friendly of the Tg. Aru Beach?	Please persuade me to agree with the development.	It is not the purpose of the TOR or SEIA study to convince the public to agree with the development. The SEIA study will assess and evaluate all potential issues affecting the environment, including the human environment, and will present the findings in a factual and non-biased manner.  The development proposal will be presented to a sample of the public and their perceptions canvassed (see socioeconomic survey Section 5.2.10 of the TOR). The results of this survey will be reported in the SEIA, although it is noted that the surveys are not designed as a poll / referendum on the matter.
	Will it destroy the beach that I grew up with? It is one of the priceless treasures of Sabah's natural resource.	I do not agree with reclamation nor any dredging at our beach. Its a natural gift that should be appreciated. If you want to build something human made, do it somewhere that doesn't have natural beauty.	NA

## A8. Ho Kah Feng

No. 28, Lorong Palma 2,  
Taman Casa Palma,  
Kolombong, Kota Kinabalu.  
Tel: 088431660 / 0198810334

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1	Reclaim land at Tg. Aru Beach	It is not necessary to reclaim land in order to rebuild a so call 'Beach'.	Project options/ alternatives will be explored in the SEIA. Updated in Section 5.1.1 of the TOR.

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
		We have a very beautiful 'natural' Beach. We can't find anywhere else have such a beautiful 'natural' beach like Tg. Aru Beach.	NA

### A9. Timothy Tsen Kin Tsung

Tel: 0168369444

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1	Concerning Tg. Aru Development.  Tg. Aru Beach for public has been taken for commercial development and not for public.	As stated will be returned to the public means will be taken.  Natural place should be maintained, the project can be developed at area more suitable.  A lot of private area is not allowed for public.	As stated in the Project Description, the beach and Prince Philip Park area will be increased.  Currently there is little public access or amenity value of the areas in the hinterland, which are mostly privately owned and undeveloped.  The SEIA will document the existing land use and public recreational areas and compare it to the post development situation.

## A10. Joshua Y. C. Kong

Founder member of SEPA  
 Email address: jknow823@gmail.com  
 16 July 2014

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1	Environment  The major item is the reclamation of the TAB of 444 acres out of 720 acres including a large part of the sea (possibly "unlimited" when started)	How much soil of quality be available and where do you get them? Need to cut a small mountain or dredge from sea nearby to destroy further the coastline of KK?	As stated in Section 2.2.2.5 of the TOR, approximately 17 million m <sup>3</sup> of fill material will be required for the reclamation and beach.  As also stated in Section 2.2.2.5 of the TOR, a suitable source of fill material is being sourced in parallel with this EIA. The sand may be obtained from an existing licenced provider, in which case they will have already carried out an EIA for the borrow sourcing; or the Proponent may have to carry out an EIA for a new location.
		Be reminded the small erosion had been worst in TAB since Sinsuran (1980s) and other part of KK city was reclaimed as the sea and waves find new equilibrium of the coastline. [more reclamation of the port area is in progress]	Impacts to the adjacent coastlines (both north and south of the project) will be assessed in detail in the SEIA. Please refer to Section 5.3 of the TOR for details on the numerical modelling methodology to be employed to assess this impact.
		How deep or high is the reclamation? If 4 to 20 feet over 444 acre, a new valley would be created with the airport and tanjung aru township when it is a hill on the side of Kepayan. So what happen when storms come to KK as Sabah is no longer the land below the wind, a disaster going to come to the TAB and the Airport & Tanjung Aru town?	The project area will have a number of different elevations based on the risk and asset value. The existing ground levels along the project frontage are already fairly low and not robust enough to withstand flooding from tropical cyclones or future sea level rise due to global warming.  The main reclamation will raise the level of the existing ground between 0.3 m and 2.3 m. There may be areas slightly higher for architectural reasons. The main beach frontage and promenade will be raised approximately 1.3 m. The project ground levels have been designed to take account of tropical storms, tsunami and predicted sea level rise.  These levels with respect to the KKIA levels and drainage issues will be assessed in the SEIA.

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
		<p>DHI did not consult Malaysian Airport Berhad or the Airport authority in the context of possible floods and massive air pollution during the massive reclamation as light dust of the soil in dry spell could be carried by storm to the sky to hit at the flying aircrafts nearby. Can anyone discount this possible disastrous event? The worst could happen when TAED is abandoned (possible complaints identified later) midway for various reasons and eyesores to tourists.</p>	<p>Such consultations will be carried out during the impact assessment phase, i.e. during the SEIA study.</p> <p>Consultations with the Malaysian Airport Berhad and Civil Aviation Department on project impact to nearby airport have been added in the TOR under Section 5.14.</p>
	Financial	<p>Eco project would be very costly as any fatal implementation of any area could spell disaster for rectification purposes. Where would be massive fund be available when the eco project is doom? Even now, where is the RM1.5billion coming from, when the land is not sold yet? Any delay for financial support means earlier doom to the eco project as proposed. That is what we do not want to see. The natural beach is free and need only little money to maintain it. Don't use an excuse of the present erosion and poor state of TAB to go to another bigger eco disaster when money stops coming.</p>	<p>The issue of project abandonment will be addressed in the SEIA. Refer to Section 4.1.4 of the TOR.</p>
	Legal – locus standi	<p>Whether we like it or not, who has the locus standi to destroy a natural beach of sandy beach once very white about 50 years ago. The destruction of God's creation is eternal. The double legal aspect is that DBKK had neglected the TAB with passive fault of the State Government and now more legal abuse is ongoing by the State Government directly.</p> <p>The various applications of the legal manipulations on TAB into TAED is very much questioned and only a legal challenge by the public would stop the eco project when TAED/TAEDSB is not really an eco project but a commercial one</p> <p>All the legal documents should be made public</p>	<p>Legal issues are outside the scope of the EIA study.</p> <p>The Project Concept as outlined in the TOR Section 2.2 very clearly shows that both public and commercial developments are planned in the TAED concept, however it is noted that the public beach and Prince Philip Park, i.e. presently the only public areas at TAB, will be expanded under the TAED.</p> <p>NA. However, the SEIA will examine methods to ensure that the environmental commitments made during the SEIA stage, their implementation status and efficacy are made transparent to the public during project construction and operational stages. See updated Section 5.5 in TOR.</p>



No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	<p>Guarantees for TAB as an eco project</p> <p>(Eco project really mean ecologically justified. If the eco project is going to create a bigger eco disaster, then TAB should be retained as it is, with some satisfactory maintenance)</p> <p>With all the guarantees of any eventualities of new floods, old trees dying from reclamation, and immediate gazette of new shore reserves and Prince Philip Park, there will be the much desired assurance of the adverse consequences taking place to be fully taken care of.</p> <p>Unless all the guarantees are sealed, it is better to forget TAB for TAED and go for the much more eye-sored Tanjung Aru Lama for eco development for tourism purposes.</p>	<p>So we want further guarantee that all the existing valuable old trees would be retained and any such tree to be given a price tag at the start of the eco project. Any missing tree would be accordingly compensated and made payable to the relevant societies. An audit would be done monthly for accountability.</p> <p>We also want guarantee that the portion of shore reserve and Prince Philip Park be gazetted for public access and usage at no costs back to KKCH before the project is implemented based on the approved master plan as suggested in SEIA report. The portion of shore reserve should be as big as the state land now acquired by TAEDSB. We cannot leave it to chance of official gazette post eco development as it is important we need to know the status of TAB. It is already a public disgrace that Prince Philip Park and land designated to KKCH once gazetted was de-gazetted without public knowledge. So what guarantee would there be if the new Gazette is not done prior to eco development of TAB</p> <p>DHI to consult the Airport Authority as how would TAED affect the air travel during and post eco development of TAED in term of heights, density of homes and building, and possible floods going in reverse from TAB.</p> <p>A guarantee from TAEDSB that any flood/ incidence in the Airport and the area nearby be compensated fully by the promoters of the TAED as eco project</p>	<p>Old growth trees will be mapped and retained wherever possible. Adequate compensatory mitigation measures will be explored for any that are unable to be retained.</p> <p>It is the Proponent's intention to subdivide the Masterplan area and confer the title for the beach and foreshore reserve and Prince Philip Park to the State Government.</p> <p>The SEIA will explore the means to ensure that this process occurs prior to construction of the project and is carried out in a manner transparent to the public.</p> <p>Noted, added in Section 5.1.4 of the TOR.</p> <p>The SEIA will investigate whether or not the project will exacerbate any flooding incidences in the airport. Refer to Section 5.3 of the TOR.</p>

## A11. Wong Ding Hook

Timbalan Pengarah,  
Civil Aviation Department,  
Sabah  
16 July 2014

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1		The building/structure height which will be built must be in accordance to the Department standard which is as per Land and Survey Plan No. 99197165.	Noted, all proposed building heights will be reviewed in the SEIA. Refer to Section 5.1 of the TOR.
		Project proponent is required to submit the approved DP and completed DCA OCL 1 form to the Department to ensure the height is in accordance to the standard before any approval can be provided.	Noted.
		Installation of street light along the Approach Light Runway 02 is not allowed.	Noted.
		Proposed Golf Development may affect the safety of the air field if it is being developed too near to the air strip. In addition, the lighting during night time from the golf field may affect the flight captain visual during landing operation.	Noted. Impacts to be addressed in the SEIA. Updated in Section 5.1.2 of the TOR.

## A12. Eleanor Wong

Town and Regional Planning Department (TRPD)  
 Tingkat 3, 4, dan 5, Blok B  
 Wisma Tun Fuad Stephens  
 Km. 2.7, Jalan Tuaran,  
 Kota Kinabalu, Sabah.  
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No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1		<p>Based on the draft Tanjung Aru Local Plan, the proposed area is within the zone of:</p> <ul style="list-style-type: none"> <li>• Coastal Conservation Area,</li> <li>• Setback,</li> <li>• Kota Kinabalu Aerodrome,</li> <li>• Existing Rugby Field,</li> <li>• Residential R (C )</li> <li>• Residential R (A)</li> <li>• SRK Tanjung Aru</li> <li>• Prince Philip Park</li> <li>• Setback</li> <li>• Service Apartment</li> <li>• Resort Commercial</li> <li>• 5 Star Resort Hotel</li> <li>• 3 Star Resort Hotel</li> <li>• Government Residential</li> <li>• Chalet</li> <li>• Theme Resort and Hotel</li> <li>• Sewerage Treatment Plant</li> </ul>	Noted.

### A13. Cynthia Ong

CEO, LEAP (Land, Empowerment, Animals, People)

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1	Scope of TOR/SEIA/Masterplan	It would be more meaningful if the TOR could be scenario or zone based, e.g. beach, park, hotel area, residential area, marina, golf area zone, with clear tables showing environmental, social and economic approaches and issues.	<p>The SEIA report is issues and activity based, in accordance with the EPD Guidelines.</p> <p>It is also considered more appropriate that overall Masterplan is assessed holistically rather than breaking the impacts assessment into development components.</p>
	2.2 Project Concept	The TOR must give more details on how it is going to implement, comply with and enforce Green Globe/LEED and Blue Flag Marina and Beaches standards. It should be made clear if these going to be implemented for both construction and operational phases. The SEIA should be based on these standards.	<p>No details are available at the time of writing however these will be further described in the SEIA, however these standards are targeted at the operations rather than during construction.</p> <p>Relevant standards or guideline limits available under these accreditation schemes will be incorporated in the SEIA with respect to impact indicators and quality objectives for the monitoring programme (updated in Section 5.4 of the TOR)</p>
	2.3.1"...components ... are subject to change".	The public is being asked to comment on a TOR for a project of which components are not yet finalised and feasibility studies not yet carried out. If "components are subject to change" how can the TOR be sure to cover all aspects?	<p>The masterplan document outlines the layout and key components of the development. The elements that may be considered "fixed" as the basis of the SEIA have been outlined in the TOR Section 5.1.1 and includes the key potential sources of impacts such as the reclamation footprint.</p> <p>It is also noted that the figure referred to in the quoted statement (Figure 2.2 in the TOR) is a conceptual layout plan which indicates details such as configuration of the resorts, details on the type of residential developments, etc. which are not being assessed in this SEIA and hence the caveat.</p>

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	2.3.1 "detailed design will commence in parallel to SEIA"	So how can the SEIA cover items not yet been designed?	<p>As stated in the TOR (Section 5.1.1), components related to the key environmental issues, such as layout will be 'fixed' for assessment purposes.</p> <p>The SEIA should <b>feed</b> into the detailed design, noting that "detailed design" here means giving careful attention to details that are verified by design calculations such as sizes of armour rock, crest heights of breakwaters, slopes of revetments, quay wall types and confirmation of ground and structure levels, that are normally considered engineering rather than environmental issues.</p>
		Components should be finalized before a TOR is done and detailed design should be carried out before the SEIA is done.	<p>As above, the key components forming the basis of the assessment are fixed per Section 5.1.1 of the TOR.</p> <p>Carrying out the SEIA after the detailed design stage would negate the value of the SEIA as a <b>planning tool</b>. Environmental issues should be considered at the early phases of Project planning (according to most EIA literature) such that the EIA process can allow for changes to the <b>conceptual</b> design for the purpose of mitigating adverse impacts.</p> <p>Ideally, the detailed design will only be carried out when the conceptual design is finalised based on the SEIA findings.</p>
	2.3.1	The SEIA document must include results from all others surveys, feasibility studies and project approvals including sand sourcing, traffic impact assessment and social surveys.	Noted and details/results of all data collection will be incorporated or summarised where relevant in the SEIA report.
		The SEIA should clearly mention who will be doing the monitoring programmes and mitigation measures and who will review the effectiveness of corrective action.	Noted. This will be described in the SEIA.
		In general, the draft Masterplan is not strong enough to move forward, and does not sufficiently address the "Eco" aspects of the proposed project.	NA

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	2.3.2 Land Status	The SEIA must contain clear details of who owns the land currently, who owns the sea in the proposed project area currently, who will own the proposed reclaimed land etc. If it is reclaimed, could it be privatized?	Noted. This will be described in the SEIA.
		The SEIA must also contain clear information about the DBKK zoning, including the controversial Hotel and Resorts zoning proposed in the latest draft of the KK City Plan	Noted.
	2.4.2 Time Frame	Time frame for each component of construction should be given. The time frame which is a major concern to stakeholders is only briefly been mentioned in the TOR on page 41. The public must be informed in detail how this will affect their access to First Beach, Prince Philip Park, 2nd and 3rd beach etc.	The SEIA will examine the proposed schedule and seek to optimise the construction sequence and schedule to minimise impacts to public access.  The socioeconomic survey respondents will be briefed on the project, including the access restrictions during construction, prior to obtaining their feedback. Refer to updated Section 5.2.10.1 in TOR.
	2.5 Development duration expected to be in the order of 4 yrs, of which 26 months is for reclamation and earthworks with potentially extra 4 months for ground treatment	How then is the public's access to the beach and Park only going to be stopped for 18 months?  See 4.3.15: Loss of Beach Front during Construction  Depending on the detailed construction methodology and phasing, the beach areas and Prince Philip Park will be closed to the public for some period of time. The overall ground works period is estimated to be 18 months, with the beach being off limits to the public for this entire period in the worst case scenario.	
	Reclamation for the proposed golf course	When will this occur? Will it be after the beach reclamation? How long will it take?	The reclamation will be carried out in consecutive phases. The reclamation phasing/ sequence will be examined and optimised as part of the SEIA study.
Access 2.4.3.2 states "The proposed development will give back to the public... Prince Philip Park and Tanjung Aru Beach...".	This is totally misleading as they were never taken away. However they will be taken away for up to 1.5 years when they are closed during the construction phase, a point most members of the public are unaware of.	The statement in full is actually, "The proposed development will give back to the public through the upgrading and expansion of Prince Philip Park and enlargement of Tanjung Aru Beach as well as public facilities in the area."  The meaning of this statement is quite different when taken in its entirety.	

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		There is no adequate alternative location for people to use during construction. The stretch between the Yacht Club and STAR is much smaller and has extremely limited parking. Access to STAR and private houses would be compromised by people parking along the narrow road and causing traffic jams. This small beach area cannot be considered a reasonable or fair alternative for the public for the duration of 1.5 years	This impact will be addressed in the SEIA, please refer to Section 4.1.2.3 of the TOR.
	Access Figure 2.2	Where is the public access to the beach and Prince Philip Park? It appears to be one extremely small bridge across from the so-called Fishermen's Wharf or the public must follow the road past Terminal 2 through new housing area and across the proposed channel?	The public access points provided in the Masterplan and their adequacy will be evaluated in the SEIA.
		Will there be a draw bridge over the channel near Fishermen's Wharf? How will boats get out of the channel? This will affect public access to the park and beach.	
		The SEIA must contain detailed information on public access to these areas.	
		Where is the car park for the public? A large car parking area is needed yet it is not clear where this is.	The car parking will be at the Fishermen's Wharf, added in Section 2.2.2.3 in the TOR.
		Loss of access to beach and park for 1.5 years must be added to 4.2.1 (Matrix for Scoping of Environmental Issues).	Added in Section 4.2.1 matrix. .
	Public Benefits of the Project Table 2.2 shows 14.5% of the proposed project area will be	The Standard Town Development figure for this is 10%, only a small 4.5% increment. The Malaysian Green Building Index figure is 20% green space. Thus the project as it stands needs to increase its green space area in order to be truly 'eco'.	Noted.

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	"Green Space".	<p>Many so-called public amenities shown in the plan are financially out of reach of most of the public e.g. the proposed golf course, Yacht Club, Sailing Club, Tanjung Aru Golf and Country Club, which presumably will be membership only establishments. How many of the present users of Tg Aru beach will be able to afford membership fees of establishments such as these? Therefore it is misleading to say 68% of the project is open to the public- this should be qualified into 2 categories: open to the public free of charge and open with membership fees.</p>	<p>Noted; the SEIA will classify public areas in the masterplan into these two categories among other pertinent categories.</p>
		<p>The Masterplan does not show how it links with or ties in with Tg Aru town, the nearest population centre. How will the people there benefit or be disadvantaged?</p>	<p>The socio economic assessment covers effects on Tg. Aru Town, refer to Section 5.2.10 of the TOR. The SEIA studies will seek to address this question.</p>
	Reclamation	<p>Reclamation on this scale is potentially highly damaging and controversial, especially in such close proximity to Tunku Abdul Rahman Park (TARP). Massive reclamation such as this, next to a marine park should not be allowed.</p>	<p>The purpose of the SEIA is to evaluate the severity of this potential impact to assist the authorities in deciding whether or not reclamation at this location should be allowed.</p> <p>Impact to natural habitats (i.e. corals of the TARP) is classified as a "Focus Issue" and hence will be accorded detailed investigation in terms of impact prediction (numerical modelling) and mitigation and management measures.</p>
		<p>Apart from major damage to the marine environment, reclamation causes hotter, drier, dustier, noisier conditions and prolonged disturbance to wildlife.</p>	<p>Reclamation may potentially cause these impacts, depending on the existing environment at the project site and the specific activities and methodologies employed. Hence the SEIA will investigate these issues as outlined in the TOR (noise impacts – Section 4.3.3.2, air quality impacts – Section 4.3.3.3, natural habitat and wildlife impacts – Section 4.3.1.1).</p>
	Reclamation (2.4.2)	<p>Perimeter bunds will be sand bunds- how will sand from these bunds be stopped causing damage to the surrounding sea and TARP, especially during storms which are becoming more frequent and more severe? This must be detailed in the SEIA.</p>	<p>This will be detailed in the SEIA but the perimeter bunds are likely to be of sand but exposed only temporarily before protection layers are placed. The numerical modelling of the construction phases will address sediment plumes from these bunds.</p>
	Reclamation	<p>The SEIA should look at the effect on Petagas river out flow in terms of pushing the outflow of the river and its load of pollution further towards TARP if the reclamation goes ahead.</p>	<p>Agreed, this is specified in Section 5.3.3 of the TOR.</p>



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		The SEIA should also look at the effects on the shoreline from existing First Beach to STAR and on STAR itself.	Agreed, this is specified in Section 5.1.2 (study area of physical environment) and Section 4.3.1.3 (Morphological impact assessment) of the TOR.
		Will Prince Philip Park end up below sea level i.e. lower than the beach front?	The ground levels along the project frontage are already low and it is intended to raise the Park levels slightly to prevent flooding during extreme tides, tropical storms and potential sea level rise due to global warming. The levels of Park will therefore be above sea level but potentially slightly lower than the beach front that is installed to provide protection from waves.
	Sand sourcing 2.2.2.5 "...a separate EIA study for the borrow activity will be carried out if required".	This contradicts what is stated in 5.1.1 Approval of this project should be based on approval of sand source EIAs and EIAs for the sand sourcing must be available to the public for viewing as an integral part of this project	Section 5.1.1 states that "sand sourcing is not addressed in this SEIA. A separate EIA will be conducted for the sand sourcing activity" and hence there is no contradiction with Section 2.2.2.5.  The sand may in fact be sourced from existing licensed providers or TOL holders who may have already carried out their EIA. This is all under investigation at this stage of the project as outlined in the TOR.
	Sand sourcing	Will all sand be taken from one source area? Each area needs a separate EIA, including the highly controversial Balambangan Island site which is home to rare flora and fauna as well as turtles.	This is under investigation at this stage of the project as outlined in the TOR.
		What will be the source of the land fill for the proposed golf course?	As above; the fill material may be from a marine or land based source.

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	Barges	<p>If sand is sourced from northern Sabah, barges must travel a long distance to the proposed project site. The SEIA must look at the barge route.</p>	<p>The sand source location may not be determined at the time of the SEIA. Hence a separate sand source EIA will be required if there is no existing approval for the identified site(s).</p> <p>It is noted that borrow sand sourcing activities are often considered separately in many EIA studies. In some cases this is because the sand source is only investigated once the main project is approved, or in other cases it is left to the dredging contractor to source the sand – and the dredging contractor is normally appointed only after the main project approvals are in place.</p> <p>In any case the impacts of the transportation of sand will be assessed as part of this SEIA through indicative routes, e.g. Balambangan option vs offshore options. Refer updated Section 5.4.</p>
		<p>The SEIA should also look at the impact on tourism especially as barges would have to pass near the heavily used TARP and the sight of barges heavily laden with sand passing by the Park will not create a good ecotourism image.</p>	<p>This will be investigated as part of the SEIA (aesthetic impacts during construction, see Section 5.4 of the TOR).</p>
	Barges (4.1.3.2)	<p>Impact of barges on marine life such as turtles which are known to still occur in these waters could be severe and should be assessed. The SEIA should contain details on how many barges, will they travel at night, will they pass through TARP boundaries, pollution from the barges etc.</p>	<p>Noted, this will be included in the SEIA for potential sand source locations to the north and south of the TAED site. Updated in Sections 4.1.2.2 and 4.2.1, of the TOR.</p>
	Dust	<p>Dust during reclamation and earthmoving will be a major factor affecting both the marine and terrestrial environment and surrounding residents and airport.</p>	<p>Ambient Air Quality has been assessed during the Scoping exercise as a <i>Remaining Issue</i> (see in Section 4.3.3.3), given that the reclamation will be use marine (wet) material (i.e. with low potential fugitive dust) and as standard mitigation measures can be used to minimise dust.</p> <p>These measures are standard meaning they are relatively generic (not site-specific), nonetheless they will be outlined in the SEIA.</p>
		<p>Dust from both reclamation and earth moving should be added to 4.2.1 as a major threat to the airport and all establishments around the project area.</p>	<p>Noted, added to Section 4.2.1 in the updated TOR.</p>

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		Dust from reclamation and earthmoving should be added to 4.3.3.3, as Ambient Air Quality will not just be affected by machinery and vehicles. There will be a significant effect of dust over several years affecting surrounding houses, condos, hotels and road users.	Noted, added to Section 4.3.3.3 in the updated TOR.
		Dust could also be a real danger to planes, danger especially from the massive reclamation for the proposed golf course within a few metres of the airport boundary.	Noted, added to Section 5.4 in the updated TOR.
		Dust settling on the sea may also affect water quality and marine organisms and should be included in the SEIA.	Noted, added to Section 4.3.3.3 in the updated TOR.
	Dredging	<p>2.2.2.3 Dredging of the proposed channel, particularly to accommodate clearance of max. 6m and boats up to 100m long at the entrance of the proposed marina, would cause significant damage, as this channel would presumably have to be dredged out several hundred metres into the sea, which is very shallow.</p> <p>The sediment plumes, noise, oil spills, boat/machinery movements for creating the channel not only on land but also in the sea could have disastrous effects on marine life.</p> <p>This must be covered in detail in the SEIA.</p>	<p>The project design (layout) has taken into account existing water depths and the location of the channel entrances has been optimised (based on the anticipated vessel type and sizes) to minimise dredging. Some minor dredging will be needed in the basin inside the breakwaters (at Fishermen's Wharf).</p> <p>Nonetheless dredging works have been assessed as a Focus Issue (see Section 4.3.1.4) and hence will be investigated in detail in terms of prediction of impacts and development of mitigation and management measures. The impact assessment methodology is presented in Section 5.3.2 of the TOR.</p>
		The SEIA should also include a detailed map showing currents in the NE and SW monsoons and where these currents would take sediments from both reclamation and dredging sites, including south to Meruntum lagoon sea grass area and the whole of TARP.	This will be included as outlined in Section 5.3.2 (Sediment plume modelling).
		The SEIA should include details on how the proposed channel would be maintained in terms of silting up and how this would affect the marine ecosystem.	Noted

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	Tunku Abdul Rahman Park (TARP)  (3.2.3)	Figure of 3.8km is wrong. It is 3.1km to the boundary of TARP.	Amended. Distance to TARP boundary ranges from 3 km to 4.8 km
		It is unacceptable to quote/use 1998 figures for TARP coral coverage -these are 16 years out of date. Data should be from within last 2 years if possible as the situation is rapidly changing with coral bleaching (already currently affecting Peninsula Malaysia corals and likely to occur here), fish bombing, sediment run off from rivers, storm effects etc. If this data is not available, new surveys should be carried out as part of the SEIA	Available up-to date data for the TARP will be sourced from Sabah Parks and other published information to be used as baseline information.  Additional surveys are not proposed as part of the SEIA as the status of the corals (live coral cover) in the TARP will not have any bearing on the impact assessment for the reasons explained below:  As outlined in Section 5.4 of the TOR, whether or not any live corals persist <b>at the TARP boundary</b> , the Malaysian Water Quality Standard Class I for Marine Parks will be applied regardless of the presence or absence of live corals. In addition, a literature review will be carried out to determine threshold limits for corals, which will be applied to the border of the park, regardless of whether there are any reefs at this border or whether the cover is 5% or 100%. Hence this is considered a conservative assessment for impacts to the TARP.
		Table 3.1 must add boundary of TARP as 3.1km away.	Added to Table 3.1. Distance to TARP boundary ranges from 3 km to 4.8 km
	Marine Fauna/Ecosystem 4.2.1	Impact to marine fauna during construction will be significant and should not be classed as Minor.	Sighting of marine fauna has not been recently documented along the project area, where much of the construction machinery will be concentrated; therefore this was evaluated as Minor from the scoping exercise.  However, this will be thoroughly assessed as part of the SEIA, including impacts of marine transport of construction materials and machinery.

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	Marine Fauna/Ecosystem 4.2.1	Impact of lights during construction (considerable during reclamation) should be added as a threat to turtles known to still exist in these waters	<p>Lighting is a greater threat to nesting turtles and hatchlings at nesting beaches specifically. Tg. Aru Beach is not a turtle nesting beaches and no turtle nesting has been recorded in the past 20 years.</p> <p>However, the impact of light and measures to minimise light impacts to marine fauna will be addressed; see updates in Section 4.3.3.6 of the TOR.</p>
	Marine Fauna/Ecosystem Table 5.2	Confirm there will be NEW up to date baseline data collected on water quality/sediment, nutrient run off, chemical pollutants, coral coverage and quality BEFORE the project starts.	Baseline surveys will be conducted for the SEIA as outlined in Section 5 of the TOR.
	Marine Fauna/Ecosystem Table 5.2	It is not clear what "any impacts to the waters of the TARP will be considered a significant impact that should be mitigated " means, when only a few locations along the TARP boundary are going to be monitored, so how is it going to be known if sediment, pollution etc are getting across the boundary into the Park at other points not monitored?	<p>This statement means that predicted water quality impacts, based on water quality guidelines and coral tolerance threshold limits will be applied to the TARP border (as opposed to specific receptors such as coral reefs).</p> <p>The TOR does not indicate any water quality monitoring stations during project implementation. This is because the monitoring programme will be developed as part of the SEIA to determine actual, realised impacts during construction as outlined in Section 5.6.</p> <p>Sediment plume modelling will be conducted which will predict the potential impacts to the TARP with and without mitigation. These results will then be used to select the monitoring stations. The EMP outlined in the SEIA will also address detection of impacts to the TARP through point monitoring, continuous monitoring and forecast and hindcast modelling.</p>

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	Marine Fauna/Ecosystem Fig. 5.5	There should be more water sampling sites especially on the TARP boundary!	<p>The TARP boundary is located in the open sea. There will be no significant difference for example between one water station at the boundary near P. Mamutik versus another station nearer to P. Sulug. For the baseline what we have instead focused on is more sampling occasions as described in Section 5.2.5.1 of the TOR.</p> <p>In addition, the information on baseline water quality will be expanded upon both spatially and temporally through the use of numerical modelling.</p> <p>The reviewer is perhaps confusing the proposed baseline sampling stations with monitoring stations during construction; again, these stations will only be selected following the impact prediction and evaluation works.</p>
	Marine Fauna/Ecosystem 5.2.8	How will any changes be monitored if there is no up to date baseline data?	<p>Baseline data collection for the purposes of the SEIA is outlined in Section 5.2.7 and 5.2.8.</p> <p>Baseline data for the purposes of the monitoring programme will be outlined in the SEIA. As mentioned above, the baseline and monitoring programme should be developed to focus on the areas where impacts are predicted as well as reference stations. These areas can only be determined after the impact prediction and evaluation works of the SEIA study have been carried out.</p>
	Marine Fauna/Ecosystem 5.4 Impact Assessment "As long as this is met, no impacts to the coral reefs (or other primary producer habitats within the TARP boundaries would be expected".	As mentioned above, monitoring points along the boundary should be increased and monitoring should also occur within the Park. Details on how this monitoring complies with Blue Flag Marina and Beach standards should be given.	See above. Monitoring programmes during project implementation will be formulated as part of the SEIA.
	Marine Fauna/Ecosystem 2.2.3	A sport fishing centre is not advisable so near to the TARP area. Even if fishing is carried out outside the Park boundary many fish move in and out of the Park. They are facing enough stresses already and killing for sport in this area should not be promoted.	Noted; to be considered by the Proponent.

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	Terrestrial Fauna	4.2.2 The row for Impact on birds is blank. This should be considered as MAJOR- dust, noise, construction workers, heavy machinery etc will affect the area for 4 years and may result in permanent loss of some species.	<p>Updated in Section 4.2.2; impact on birds has been assessed as <b>Major</b> potential impact.</p> <p>It is noted that despite this error in the matrix table, the impacts on birds and the trees that provide habitat to the birds remain a Focus Issue in Section 4.3.1.1.</p>
	Shoreline/Currents	The SEIA should include data supporting the project proponent's statements that the beach has eroded over the last few decades. Where is the data to support this? This statement has been disputed by people who know the beach well who believe erosion has stabilized and is seasonal.	<p>It should be clear that we are discussing the beach along the project frontage (2<sup>nd</sup> and 3<sup>rd</sup> beaches) and not the 1<sup>st</sup> beach from the STAR to Jalan Matt Salleh.</p> <p>Yes it is true that beach movements are seasonal but the erosion has not stabilised and is generally continuing along the project frontage as documented by the following:</p> <ul style="list-style-type: none"> <li>• There is clear visual evidence of past and ongoing erosion.</li> <li>• Photographic records and recent surveys show the erosion that has occurred from 1966.</li> <li>• Two lines of existing coastal defences have failed due to coastal erosion.</li> <li>• Ongoing erosion is evident by the scouring of material occurring behind the line of existing defences.</li> <li>• The erosion of revetments and around tree roots at the south end is evidence of the continued erosion.</li> <li>• There is little usable exposed beach now at high tides.</li> </ul>
	Shoreline/Currents Table 5.1	Marine threat to existing shoreline from First Beach to STAR, with potential change in currents, wave action, beach erosion etc, should be added.	This aspect with regards to changes in currents, waves and sediment movement is being studied as part of the numerical modelling; see Section 5.3 of the TOR
	Shoreline/Currents 5.2.2	Any data collection should be done during both SW and NE monsoon periods for all parameters.	The data regarding currents has been collected at discrete periods of time to calibrate the numerical models in accordance with the DID guidelines for numerical modelling. This aspect has been taken into account in the numerical modelling and also includes the Inter monsoon period.

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	Golf Course	Golf courses attract birds and there is a real and serious danger of increased bird strikes to planes due to having a golf course right next to the airport. There is also possible danger of stray golf balls hitting landing planes. These factors should be incorporated in any studies.	Noted and issue added in Section 5.4 of the TOR
		2.4.3 Fertilizer, pesticide, herbicide run off 'will be optimised'. What does this mean? If zero run off cannot be achieved, there should be no golf course.	It is the project's intention to reduce contaminants that can cause algal blooms entering the golf course irrigation / fertilization system by selective choice of products. It is also the projects intention to treat any contaminated water prior to being discharged. The SEIA will address any further mitigation measures necessary.
		There are already algal blooms/red tides in this area which cause many problems for local people and marine life. Any increase in this is not acceptable. Studies on this should be incorporated in the SEIA.	Water quality modelling will be carried out as outlined in Section 5.3.3 of the TOR. The potential increase in algal blooms will be assessed based on predicted increases in nutrients, if any.
		Due to the serious factors above, and the massive reclamation needed for this part of the project, as well as problems of dust from reclamation right next to the airport, we feel the golf course component of the project should not be built.	The reclamation material will be predominantly come from marine based sources and contain minimal amounts of fine material to cause dust. This aspect will be reviewed within the SEIA and if dust is deemed to be a problem then there are mitigation measures that can be implemented.
	Sea level rise and climate change	Sea level rise and climate change must underpin all planning. The IPCC Fifth Assessment Report released last September states that sea levels could rise by 26-82cm (10-32 inches) this century. Storm events are also predicted to be much more frequent and severe, yet there is very little on these topics in the TOR.	Yes all aspects relating to tropical storms and sea level rise have been taken into account. Both the IPCC and NAHRIM assessments of potential sea level rise have been considered in the Masterplan development. The relevant studies will be attached to the EIA report.
		5.2.3 Should incorporate existing and projected sea level rise, including in the long term, as should all coastal modelling.	Yes the ground levels proposed for the project does take account of projected sea level rise.



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	Pollution	4.2.1, 4.2.2 Strongly disagree agree that oil and grease pollution will just stay in the project area during construction and operations. The overall impact is not Minor.	<p>The scoping findings rank Oil and grease as an Issue of Note given that the Project does not deal with vessels carrying / transporting large quantities of oil. Rather, the main sources would be leaks and small spills, which with the implementation of effective mitigation measures can be readily controlled. The magnitude of potential emissions just does not warrant a higher prioritisation/ more detailed assessments such as oil spill modelling.</p> <p>Water pollution due to oil and grease releases during construction and operation stage will be further assessed during SEIA, refer to Section 4.3.2.1.</p>
		4.2.1, 4.2.2 Algal blooms /red tides due to run off from the proposed golf course should be added as issues in the construction phase and operation stage of the golf course and should be addressed in the TOR.	<p>Added as an “Issue of Note” in the updated TOR under Section 4.3.2.1. The SEIA will address any further mitigation measures necessary.</p> <p>Water quality modelling will be carried out as outlined in Section 5.3.3 of the TOR and potential impacts on algal communities (blooms) will be evaluated based on predicted changes in nutrient loads, if any.</p>
		Sewage discharge from boats in the proposed Marina must be studied fully. There is a danger that this discharge will be flushed back onto the beach. How the Blue Flag initiative standards concerning E. coli levels etc will be implemented and monitored must be detailed in the SEIA.	<p>Included as part of Section 4.1.3.1 and will be assessed. The marina operator / management plan will prevent any vessels from discharging sewage direct into the marina. Sewage pump out facilities will be provided for this purpose.</p> <p>The SEIA will address the water quality monitoring of the new beach.</p>
	Noise	4.2.1The noise of excavators and other heavy machinery will not just affect the project area itself but will be heard by residents of Waikiki condo, private houses near the project area, Casuarina hotel and others and will occur over a long period. This should NOT be viewed as a MINOR disturbance.	<p>The matrix results in a <i>minor</i> severity classification as it is a temporary impact (during construction phase), reversible and relatively localised, i.e. to the residents of Waikiki, private houses, etc. rather than the wider community.</p> <p>It is stressed that the matrix results presented in the TOR are merely for <b>scoping</b> purposes. Actual noise predictions will be carried out during the SEIA to determine the level of impact significance.</p>

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		4.3.1 Noise should be included in FOCUS ISSUES not issues of note.	The categorisation is based on a structured scoping assessment which takes into account the limited spatial zone of impact, the temporary and reversible nature of the impact, and the availability of mitigation measures.  That being said, the SEIA will assess the actual impact based on noise predictions and overlay with the locations of these nearest sensitive receptors.
		Noise levels from planes landing and taking off should be measured. This noise will affect households/hotels near to the flight path.	Outside scope of the SEIA as this is a potential threat <u>to the project</u> rather than an <u>impact of the project</u> to the environment.
		Noise levels from future traffic should be assessed in the SEIA. What will be the increase in noise levels from an additional 12,000 ++ road users using the area?	Noted. This will be assessed during SEIA study, refer to Section 4.3.3.2.
	Traffic	Figure 2.2 A Monorail station is shown in the plans but not mentioned at all in the text.  Since this would have a major impact on traffic and access and Jalan Mat Salleh, there should be a detailed assessment of the effects of the construction of this and effects it will have. If it is not confirmed as a project or hasn't even got funding then it is wrong to show it in the plan and mislead people. It is not clear whether it is even inside the project area.	The monorail is not part of the TAED development. It is a government project in the pipeline. TAED will only allocate the location of the station as part of the design. It is the intention of the government to build the monorail in the future.
		The proposed project will result in a huge increase in traffic - there are already traffic jams at peak school times, when flights land at Terminal2 and during heavy use of the beach at weekends.	A traffic impact assessment is being carried out and will be incorporated in the TOR.
		2.2.2.4 What is the total no of new households in area that will be using the road, on top of existing users at peak times?	This will be verified and documented in the SEIA report.
		2.2.2.7 The vast majority of traffic does not go south to Putatan direction but in to KK town, so the construction of a link road past the airport south will have limited impact.	This link road it intended to provide access from the airport to the project site; it is not intended as a bypass route for general traffic.

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
		2.3.1 Traffic Impact Assessment, sub-contracted to Perunding Traffic KlasiK Sdn Bhd- how do we know how they are going to do their survey? Is it in progress?	The traffic surveys were carried out from 18 – 21 June 2013 according to standard traffic study methods and in accordance with DBKK requirements.
		2.4.3.1 "... the population to the project area is expected to approximately 12,000 residents when fully developed, excluding hotel guests". It is not clear what this means. Does it mean approximately 12,000 extra people or 12,000 extra households will be residing in Tg Aru area?	Residents = people; residences = households. I.e. 12,000 extra people who reside (live) in the project area.
		If an additional 1,670 hotel rooms plus 766 in hotel villas plus staff of 3,000, there could be 17,436 extra people using the road into Tg. Aru.	Up-to date population and guest estimates will be reported in the SEIA and will be used as the basis for the impact assessment, including Traffic impact assessment.
		What about Marina boat users- is this number included?	Marina boat uses are not included in the residential population estimate.
		4.2.2 Impact of a massive increase in traffic should be added.	Noted. Refer to Section 4.3.3.4 in TOR.
		4.3.3.4 Traffic increase is a major factor, and the results any study must be available to the public as part of the SEIA.	Noted. Refer to Section 4.3.3.4 in TOR.
		Table 5.1 Add increase in traffic to ALL terrestrial components.	Traffic increase has been added into Table 5.1, refer to TOR Section 5.1.2, furthermore, land traffic is considered as one of the issues to be assessed during the SEIA, refer to TOR Section 4.3.3.4.
		Surveys should include not only all residents and school users of the area but also users' of Terminal 2.	It is unclear what the rationale for including Terminal 2 users would be. Dialogues with the operators (Department of Civil Aviation, Malaysia Airports Berhad) are instead proposed.
		Surveys should also look at increase in traffic fumes and impacts of safety on road users and nearby schools	Air quality impacts will be addressed; see Section 4.3.3.3
	Roads	Figure 2.11 The new access road to the project site may affect the road to Terminal 2, especially during construction of the new road directly in front of the Terminal, and may cause severe disruption and delays. This should be studied as part of the SEIA.	Noted. Refer to Section 4.1.2.3 in TOR

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
		Is the new road going to replace the existing road to Terminal 2?	The roads to Terminal 2 will be upgraded within the new project and slightly realigned. It is not the intention to replace them.  Further details will be included in the SEIA to assess the traffic impact to the area.
		Where is the traffic dispersal plan for the road going south past the airport?	The road going past the airport is intended for airport goers only; i.e. traffic to terminate at the airport.
	Waikiki/ Visual Impact	Table 3.1 Waikiki Condo is NOT 800m from the project site but around 50m from project boundary at First Beach. This is a serious mistake which must be corrected throughout.	Noted and has been updated at the TOR, refer to Section 5.1.2
		Figure 2.2. It appears "Shoreline Apartments" will be built directly in front of Waikiki Condo. How high are these proposed to be? These will block the sea view from the road and have significant negative visual impact.	The proposed apartment heights are around 21 m [based on February 2014 masterplan report]. Visual impacts will be addressed as part of the EIA; see Section 4.1.2.3
		4.2.2 Visual impact should be added. Waikiki Condo owners will lose their view of the sea if high rise buildings are built at First Beach.	Updated in Section 5.1.2 of the TOR
		Table 5.1 Add Visual Impact and loss of view for Waikiki Condo.	
	Social Aspects	3.3.2 fails to mention Tg Aru town or Pekan Tg Aru which is different to Kg Tg Aru and nearer to the project site and should be covered in any surveys.	It is mentioned in Section 5.2.10 that Tg. Aru town and Kg. Tg Aru will be included in the socio economic surveys.
		3.3.3 Socio economic surveys should include detailed data of Tg Aru town, Kg Tg Aru, right up to Tg Aru traffic lights, and along the road to STAR and Casuarina Hotel area as these will also be affected by the proposed project.	The socio economic survey covers up to Tg. Aru Town and Kg. Tg. Aru, refer to Section 5.2.10 of the TOR.

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
		<p>Table 3.1/Table 5.1As mentioned, Waikiki Condo is not 800m from the project site but more like 50m away. Likewise 'private residence' is not 900m away- if referring to the house at 1JIn Aru road, this house adjoins the boundary of the project site. STAR is less than 2km away from the project boundary and Kinabalu Yacht Club and Golf Club are nearer than 750m! These are serious errors that must be rectified.</p>	<p>Amended. Refer to updated TOR Section 5.1.2.</p>
		<p>4.1.2.2 Local people collecting shell fish from the beach and shallow sea is one group of stakeholders completely forgotten here, as are the 58+ stall holders at First Beach who will lose their livelihoods. These must be included in any surveys and assessments</p>	<p>These stakeholders have been addressed in the TOR: Stall owners are included in the “business owners” group in the TOR and are included in the socioeconomic survey, refer to Section 5.2.10 of TOR.</p> <p>Locals collecting shellfish have been included as a “recreational activities” and covered under Section 5.2.10.3 of the TOR.</p>
		<p>4.3.2.2 Socio economic impacts-this must include stall holders on First Beach. Over 58 stallholders stand to lose their livelihoods yet this has not been recognized.</p>	<p>These have been included in the TOR – these business owners are a specific target group listed in Section 5.2.10 of the TOR.</p>
		<p>Table 5.1Add Casuarina Hotel and houses on that road, Borneo Beach House and private houses on the road to STAR. These will be affected by the project</p>	<p>These are encompassed in the “Private residences” and “Business and commercial interests” group, refer to Section 5.1.2.</p>
	<p>5.2.10 Socio-economy survey</p>	<p>Add Terminal 2 users as a target group and stall holders at First Beach and shellfish collectors.</p>	<p>Except for Terminal 2, others mentioned have been included in the target group as listed in Section 5.2.10 in TOR.</p> <p>It is unclear what the rationale for including Terminal 2 users would be. Dialogues with the operators (Department of Civil Aviation, Malaysia Airports Berhad) are instead proposed</p>

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
		Sample size of 200 residents to include 4 main residential areas is too small.	The number of respondents will be based on a sample size of 10% of the households in these areas which include Waikiki, residences along Jalan Aru, around Pekan Tg. Aru, Kg. Tanjung Aru and Kg. Contoh with an estimated 300 respondents in total. Refer to updated Section 5.2.10.1 in TOR.
		Visitors/recreational users- 100 respondents is far too small a sample size for a project of this magnitude with so many beach users affected. This should be increased to at least 300.	Updated to state that the data collection for visitors/recreational users will be conducted for a period of two weeks (10 weekdays and 4 weekend). Refer to updated Section 5.2.10.1 in TOR.
		Ensure residents are truthfully informed about the project including the closure of Prince Philip Park and the beach for 1.5 years, dust from reclamation and earthmoving and likely massive increase traffic jams if the project goes ahead. So far mostly what we are hearing is propaganda.	The respondents will be briefed on the actual project concept, construction phases and schedule. Updated in Section 5.2.10.1 of the TOR.  Agreed that what the public have been exposed to may be propaganda from all fronts as evidenced by the persistent belief that the beach will be lost to the public.
	5.2.10 Public Meeting	When will this take place? Before, during or after the SEIA? The results, concerns and objections of the meeting should be incorporated into the SEIA.	The Public meeting is to be held during the SEIA, towards the end of the study such that the actual predicted impacts, the mitigation measures and monitoring programmes can be presented to the public for feedback.
	5.2.10.1	Again, sampling size for beach users is far too small and limited. Two weekends only will not give a representative or fair appraisal, e.g. if influenced by bad weather. This should be increased to at least 4 weekends.	Noted. Updated in Section 5.2.10.1 of the TOR.
	Security	Issues over security of having a large workforce living on site for 4 years must be addressed and be included in the socio-economic survey of stakeholders, including safety issues relating to the airport. Workers quarters location and access must also be spelt out	Noted and issue added in Section 5.4 of the updated TOR

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	Sewage	2.4.3.3 Everyone knows the problem with the sewage and filthy drains in Tg Aru already exists and will not go away with the establishment of this project unless the cause of the sewage and pollution upstream is dealt with. E.coli will still be coming down the existing drains into the sea and all the high end tourists at the resorts as well as the local visitors will be swimming in it. What is needed is a major improvement of the sewage/drainage system flowing into Tg. Aru from further inland.	Drains currently outside the Project area but discharging onto Tg Aru beach will be taken into account in addition to the drains within the project site.  While we fully agree that a major improvement of the sewage system in general is needed in KK, any marine dispersed pollutants from further afield is outside the scope of study.
		5.2.3 Outflow of the existing drains will be affected by any reclamation in the sea, especially if outflow into the sea is further out, with an increase in stench and the possibility of flooding in the drains in high tides.	Taken into account in the drainage design
		The Masterplan doesn't mitigate the current environmental problems of sewage.	Taken into account in the drainage design, sewage treatment plants etc.
		The Masterplan has no indication of grey and black water flow. Drainage reticulation must be shown and detailed in the SEIA.	This will be taken into account during detailed drainage design
		The location of the proposed Sewage Treatment Plants must also be shown.	This will be incorporated as part of the detailed sewage treatment design.
		The SEIA must address carrying capacity, including of sewage, water demand, electricity, parking and other important parameters.	The utility demand of the Project will be estimated and compared against existing capacity
	Airport	As mentioned earlier, the KK airport is in danger of being affected by dust from reclamation, increased bird strikes due to the proposed golf course and golf balls going over the perimeter of the airport. Access to Terminal 2 may also be seriously affected by increased traffic jams and disruption to road access.	Impacts to the airport have been included in the TOR, refer to Section 5.1.2.
	5.1.1 Building heights should not be guidelines but must be set by the DCA	DCA requirements will be adhered to.	

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
		Pollution from plane fuel jet engines -fine particles in an aerosol form- will affect areas near to the airport, including residences proposed to be built very near to the airport perimeter. This should be looked at in the SEIA.	This is a risk to the project rather than an environmental impact of the project and is outside the scope of the SEIA.
	Abandonment	2.4.4 Should add removal of any partially completed reclamation work/dredging work at the developer's cost. A half- finished reclamation bund or area, or dredged channel, would be a major environmental danger if left abandoned and should be removed.	This will be added in the mitigation and project closure / abandonment measures in the SEIA.
		The SEIA should specify how any toxic material would be removed and the site secured.	Noted.
	Consultations	5.1.4 Jabatan Kerja Raya should be added as should the Department of Civil Aviation and KKIA authorities.	Noted. Updated in Section 5.1.4 of TOR.



#### A14. Elena Shim

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No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1	<p>I object to the above development.</p> <p>We will lose our one and only natural beach. I have been going to this beach since I was young. I am 32 years old now. Even now, I take my family and pets to enjoy the beautiful sunset. I dare say it is one of the most beautiful sunset in the world.</p>	<p>Looking at the development plan, it reduces public space for the public and allows for sea reclamation along Tanjung Aru beach for hotels to be built. What is the real purpose of the development? Is it to acquire off-shore land or to tackle erosion? Why not maintain the existing beach but upgrade/repair and maintain the facilities?</p> <p>With regards to the erosion, there has been gradual erosion for the past 20 years. I would suggest a study to overcome the erosion, how best to overcome the erosion problem, with the least damage to the existing beach.</p> <p>It would be great if you can show proof of erosion and an independent study to come out with the best action to overcome the erosion. If any, with the least damage to the existing beach &amp; Environment.</p>	<p>Erosion issues along the project frontage have been discussed in earlier comments.</p> <p>In summary:</p> <ul style="list-style-type: none"> <li>• The existing ground levels are low and there is potential for future flooding.</li> <li>• The existing beach is eroding and is likely to continue.</li> <li>• The present beach is suffering from poor sand quality and requires better exposure to waves to ensure the sand is naturally washed.</li> <li>• Previous coast protection measures have failed and there are limited options available if the three key issues are to be resolved, namely public amenity improvement, coast protection and flood prevention.</li> </ul>

### A15. Chin Xiuli

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No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1	<p>As a concerned citizen of KK city, I would like to raise my objection for the loss of a natural beach. Growing up, the beach was like a second home as it would be a place for our family to relax and have fun. Friends and family from other countries envy us because we have a clean and accessible beach without having to travel great distances just to get to it.</p> <p>However, with this new development, I fear that it would bring greater destruction to the natural surroundings and bring about disease from pests. As witnessed from other areas such as Waterfront opposite Promenade and even Tanjung Aru Beach One, these places are infested with rats, flies and cockroaches. Waste water is released indiscriminately from kitchen drainage systems into the sea. This has brought about horrible stench and visitors can no longer swim or play in the sea, let alone appreciate the sea life as the water is murky and there are oil films on the ocean surface. Such projects</p>	<p>The TOR had cited that this development was proposed to counter erosion issues in that area. However, I wonder if there had been studies conducted to verify that claim. An independent body should be set up to study the area before any decision is made. Moreover, there are natural ways that are less destructive to rehabilitate the area.</p> <p>It has been documented previously that mangroves are able to rehabilitate degraded coastlines (Lit Review: Natural barriers to natural disasters: replanting mangroves after the tsunami by Edward B Barbier, 2006 )</p> <p>From what I understand, the Sabah EIA rules also require proponents to state if there are alternatives available. I did not find this mentioned in the TOR that was given.</p> <p>As a resident of this city, I demand that our natural surroundings (especially our beaches and coastlines) are protected, not just for future generations so they have a chance of experiencing nature as it's best, but also for all the current residents who call this city their home. In closing, I would like to re-emphasize my concerns for this proposed project at Tanjung Aru and sincerely hope that Tanjung Aru will be maintained as a natural beach for the benefit of the general public</p>	<p>Erosion issues along the project frontage have been discussed in earlier comments.</p> <p>In summary:</p> <ul style="list-style-type: none"> <li>The existing ground levels are low and there is potential for future flooding.</li> <li>The existing beach is eroding and is likely to continue. This is a fact independently established as far back as 1980s during the National Coastal Erosion Study by DID; and again in the ISMP Papar to Tuaran study by DID in 2012.</li> <li>The present beach is suffering from poor sand quality and requires better exposure to waves to ensure the sand is naturally washed.</li> <li>Previous coast protection measures have failed and there are limited options available if the three key issues are to be resolved, namely public amenity improvement, coast protection and flood prevention.</li> </ul> <p>Given the importance the public places on having a sandy beach at Tg. Aru, the option of mangrove planting to rehabilitate the coastline must be discounted; quite apart from the physical feasibility of establishing mangroves along an open sandy coast.</p> <p>Under the Handbook on Environmental Impact Assessment in Sabah (2<sup>nd</sup> Edition) November 2005 by EPD Sabah, TOR provides a written framework for the proposed study to proceed in a systematic manner. TOR outlines the background information and nature and extent of the project; scope of work for the study; schedule and methods of assessment, activities involved, list of team members as well as work schedule. Project alternative is not in the Sabah EIA Guidelines.</p> <p>Nevertheless, given the many public submissions requesting that options for Tg. Aru beach rehabilitation be addressed, the SEIA will include a section on Project Options.</p>

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	have made it impossible for people to enjoy a clean and disease - free visit to the beach.		

### A16. Kenny Liew Chin Kuen

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No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1	<p>As a citizen of Kota Kinabalu who has frequented the natural beach, I would like to voice my objection for a potential loss of a natural beach. While the many infrastructures proposed in the TOR is tempting, I find myself wondering where my family and I will be able to enjoy a natural beach or seaside view that is easily accessible in the future. Kota Kinabalu used to have a beautiful seafront near where Suria Sabah now stands not to mention that the small patch between Jesselton Point and Suria Sabah is now also closed up. The view between Sutera Harbour and Wawasan Plaza also is crowded by construction and now even the waterfront opposite Promenade Hotel has been blocked by yet another building. Apart from the small beach at Tanjung Lipat, Tanjung Aru is the beach where most of us have memories of playing in</p>	<p>How many cities can proudly say they have a natural beach in their care? Why must we inflict human structures to a natural place that is already beautiful to begin with? As a citizen of this city, I demand that a natural place like Tanjung Aru be kept natural, for us and our children to reconnect with nature and be able to experience nature first hand.</p> <p>If indeed, something needs to be done, it should not be to put in more human structures. Instead effort should be made to handle the sewage drains that drain directly into the bay. Not just those drains that are within this proposed project's area but all the drains that drain directly into the bay.</p> <p>In the TOR, it was mentioned that the project would tackle the beach erosion that has been happening to Tanjung Aru. From my own observations, there is very little erosion happening at the site. If indeed there is erosion happening, I would like to see proof of the erosion from an independent study. If indeed erosion is the matter, why not replant mangroves instead of building man-made structures that will most likely deflect the energy of the waves to the other parts of the coast and in turn result in more erosion elsewhere.</p> <p>From what I understand, the Sabah EIA rules also require proponents to state if there are alternatives available. I did not see this considered in the TOR.</p> <p>With that I would like to re-emphasise my concerns for this proposed project at Tanjung Aru and sincerely hope that Tanjung</p>	<p>Erosion issues along the project frontage have been discussed in earlier comments.</p> <p>In summary:</p> <ul style="list-style-type: none"> <li>• The existing ground levels are low and there is potential for future flooding.</li> <li>• The existing beach is eroding and is likely to continue.</li> <li>• The present beach is suffering from poor sand quality and requires better exposure to waves to ensure the sand is naturally washed.</li> <li>• Previous coast protection measures have failed and there are limited options available if the three key issues are to be resolved, namely public amenity improvement, coast protection and flood prevention.</li> </ul> <p>In addition, human structures if properly designed can improve coastal erosion problems. Mangroves tend to grow in areas of poor sand quality, namely muds and silts and are good at stabilising coastal areas in these environments. However mangroves are not considered appropriate for an amenity beach.</p>

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	the sand and walking down the beach. Not to mention the many school, club and social activities that have been conducted at Tanjung Aru Beach.	Aru will be maintained as a natural beach for the benefit of the general public.	

### A17. Lijin Chin

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No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1	As a citizen of Kota Kinabalu who has frequented the natural beach, I would like to voice my objection for a potential loss of a natural beach. While the many infrastructures proposed in the TOR is tempting, I find myself wondering where my family and I will be able to enjoy a natural beach or seaside view that is easily accessible in the future. Kota Kinabalu used to have a beautiful seafront near where Suria Sabah now stands not to mention that the small patch between Jesselton Point and Suria Sabah is now also closed up. The view between Sutera Harbour and Wawasan Plaza also is crowded by construction and now even the waterfront opposite Promenade Hotel has been blocked by yet another building. Apart from the small beach at Tanjung Lipat, Tanjung	<p>How many cities can proudly say they have a natural beach in their care? Why must we inflict human structures to a natural place that is already beautiful to begin with? As a citizen of this city, I demand that a natural place like Tanjung Aru be kept natural, for us and our children to reconnect with nature and be able to experience nature first hand.</p> <p>If indeed, something needs to be done, it should not be to put in more human structures. Instead effort should be made to handle the sewage drains that drain directly into the bay. Not just those drains that are within this proposed project's area but all the drains that drain directly into the bay.</p> <p>In the TOR, it was mentioned that the project would tackle the beach erosion that has been happening to Tanjung Aru. From my own observations, there is very little erosion happening at the site. If indeed there is erosion happening, I would like to see proof of the erosion from an independent study. If indeed erosion is the matter, why not replant mangroves instead of building man-made structures that will most likely deflect the energy of the waves to the other parts of the coast and in turn result in more erosion elsewhere.</p> <p>From what I understand, the Sabah EIA rules also require proponents to state if there are alternatives available. I did not see this considered in the TOR.</p>	<p>Erosion issues along the project frontage have been discussed in earlier comments.</p> <p>In summary:</p> <ul style="list-style-type: none"> <li>• The existing ground levels are low and there is potential for future flooding.</li> <li>• The existing beach is eroding and is likely to continue.</li> <li>• The present beach is suffering from poor sand quality and requires better exposure to waves to ensure the sand is naturally washed.</li> <li>• Previous coast protection measures have failed and there are limited options available if the three key issues are to be resolved, namely public amenity improvement, coast protection and flood prevention.</li> </ul> <p>In addition - Human structures if properly designed can improve coastal erosion problems. Mangroves tend to grow in areas of poor sand quality, namely muds and silts and are good at stabilising coastal areas in these environments. However mangroves are not considered appropriate for an amenity beach.</p>

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	Aru is the beach where most of us have memories of playing in the sand and walking down the beach. Not to mention the many school, club and social activities that have been conducted at Tanjung Aru Beach.	With that I would like to re-emphasise my concerns for this proposed project at Tanjung Aru and sincerely hope that Tanjung Aru will be maintained as a natural beach for the benefit of the general public.	

### A18. JunzWong

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No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1	<p>While some development may be necessary especially when it has the potential to create new business opportunities, jobs, housing and environmental improvements at Tanjung Aru, the several committees named and unnamed in the draft TOR exposed a very high potential for conflicts of interests arising even at the Tanjung Aru Beach Eco Development Sdn Board level.</p> <p>It appears the same team of Government Officers will be sitting on the Government's Review Panel, DBKK, Central Board and so on.</p> <p>I supported the SEIA for Tanjung Aru Beach as being a necessary process and is willing to go along just as long as the results are not a foregone conclusion. The Sabah Government needs to do everything according to its own laws and on top of that to strive and to achieve international best practice when given the opportunity. If the Executive Director can talk of international standards in design and development we should expect international standards starting from the</p>	<p>The finding of SEIA will not result in an automatic ticket to development because a large proportion of Malaysians in Sabah have traveled overseas and many local and overseas graduates know exactly they want to gift to their next generations. Some things just cannot be replaced. DAP Pakatan as the alternative government will not stand in the way of development provided investigations are undertaken properly and when they can prove there is overwhelming benefit to be gained from the development. But there has to be proper checks and balances at every step of the way starting from the conceptualization of the project, investigations, planning, design (and only should it get to this point) then in the development of the site itself. Up to now the transparency levels in the process appears to be equal to the water quality of the Tanjung Aru Beach and it is quite absurd that some people have used this (pollution) as the excuse when trying to justify their plans for development at Tanjung Aru. Shouldn't the</p>	NA.

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	investigations and public consultation.	government be finding out who is causing and then who should be catching and also penalizing the culprits? Or are they helping them to wipe off their fingerprints? I look forward to the Final Report of the SEIA for Tanjung Aru when my team will study findings from the Investigations in detail before making any further comment.	

### A19. Sheelasheena Damian

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 22 July 2014

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1	EIA Guideline for Land Reclamation on project boundaries	In the EIA guideline for Land reclamation in chapter 5.1.5 stated that the study are for the preparation of EIA report covers a 3KM radius from the project area boundaries.  It is important to study the impact of development to their adjacent area, especially when it is affected people living within the 3KM radius from the project boundaries.	The social impact of the development focuses on the potential zone of impact as required by the EPD. The affected areas which will be included in the socioeconomic surveys are listed in Section 4.1.2.3 of the TOR.
	Table 2.4 stages of project development	The table should include estimated timeframe of each stages of project development	Noted, will be clarified and assessed in the SEIA report.
	Sabah Shoreline Management Plan (SMP)	There is an Integrated Shoreline Management Plan (ISMP) reference to be made to the latest plan.	Noted. The latest ISMP will also be referred to in the SEIA.

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	Hydrology and drainage Section 3.1.4	As quoted “Several drains also discharge across the beach in the project area” – the characteristics of these drains need to be detailed, including what are the sources of runoff which go into the drains.	This is being investigated as part of site data collection and the drainage design.
	Marine Parks. Reference to Section 3.2.3	The distance between the project site and Tun Abdul Rahman Park (TARP) is approximately 3km, not 3.8km. TARP’s distance to KK city is 2km, not 3km. The coral reef survey in TARP should be from 1990s to 2010s; 1998 is shortly after the Greg storm which damaged some of the coral reefs in TARP, it is therefore a skewed dataset.	Amended, distance from project site to TARP ranges from the nearest 3 km to furthest point 4.8 km.  The brief descriptions of the existing environment given in the TOR should not be taken as the basis for the impact assessment during the SEIA.
	Distance project area reference to table 3.1	This table need to be revised some of the distance is incorrect.	Amended.
	Address erosion and pollution in Tg Aru	<p>The existing situation on pollution and erosion should be captured in the study as baseline (data should run from 20-50 years ago). The data should capture the whole Tg Aru area not only the project area.</p> <p>Should include the impact of the propose design to the existing erosion and pollution problem.</p> <p>At least the study impact should cover at least 3KM radius from the site project.</p>	<p>The existing situation on pollution and erosion will be captured in the baseline study. Certainly the erosion issue has been captured for at least 48 years.</p> <p>The morphological impacts of the project is one of the key issues to be addressed in the SEIA as outlined in the TOR.</p> <p>The impact of the proposed scheme on these issues is being taken into account and the impact covers an area much further than 3 km radius from the project site.</p>
	Traffic Assessment along Jalan Mat Salleh	<p>There is a need traffic assessment along Jalan Mat Salleh to be able to consider the propose design to the existing situation</p> <p>Impact on the social well-being of people who living to the adjacent area and people who using that road for daily work and activities</p>	Traffic impact assessment is being undertaken by the Project Proponent and will be incorporated in the SEIA.

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	Fill Material Source	<p>How much sand needed for the design</p> <p>What kind of sand needed to address erosion problem</p> <p>What kind of process that will be taken into for this sand filling</p> <p>What environmental impact towards the existing and adjacent area for the propose beach design</p>	<p>This will be covered in SEIA under methodology and reclamation impact. Some additional details have been added in the TOR, see updates in Section 2.2.2.5.</p>
	Wildlife	<p>Existing wildlife cover around Tg Aru area</p> <p>The impact of the development to these wildlife (bird) and fish on food supply</p> <p>Table 3.1 (birds) need some clarification on description</p> <p>Mitigation on retaining and enrich the wildlife cover</p>	<p>These impacts will be assessed as described.</p> <p>Clarification on birds updated in Table 3.1 in Section 3.4 of the TOR.</p>
	Environmental sensitive receptors sectors	<p>The list should be more comprehensive by expanding the list to include– wave, current</p>	<p>Waves and currents are processes, not sensitive receptors.</p>
	Proposed project land use components	<p>Table 2.2 – the components need be defined and detailed.</p> <p>Description of each of the component of the land use will form better understanding of the land use for the proposed project.</p> <p>On recreation component, the amount of 72.8 hectares is to what percentage from the current recreational area in Tg Aru.</p> <p>Table 2.2 and table 2.3 is inconsistent where does “commercial” and “resorts” fit into table 2.2. Table 2.3 should reflected table 2.2 hectarage of planned land use need to be included</p>	<p>The detailed descriptions of the land use components and comparison against existing situation will be carried out in the SEIA.</p> <p>Table 2.2 presents the proposed classification and size of the land uses in the project footprint. Meanwhile, Table 2.3 presents the proposed development within the project footprint. Both tables are presenting different details of information and should not be directly compared.</p>
	Noise Pollution	<p>The development plan of Tg Aru is adjacent to airport runaway; there is a need to do a Noise Pollution Assessment not only from the project development but also to 3KM radius from project area boundaries, but also airport runaway noise pollution to the project area.</p>	<p>Outside scope of the SEIA as this is a potential threat to the project rather than an impact of the project to the environment. The SEIA will focus on the effect of Project-generated noise only.</p>



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	Development that reduce footprint –less car	<p>There is a need of an assessment or study on Public Transport plan proposed by for the development plan. Example, the development plan for Putrajaya also include monorail within the area, but when the monorail failed the major problem they are facing right now is traffic jam and parking problem both for people working in this area and visitor.</p> <p>It is important to emphasize what is the mitigation of such failure.</p> <p>There is a need to identify the main road access to this area.</p>	<p>The proposed monorail is outside the scope of study. The impact assessment will not consider the monorail as the main assessment case.</p> <p>It is likely that the proposed monorail will be studied in the future phase of the masterplan.</p>
	Section 4.1 and 4.2 on the long list of environmental issues and	The list of issues should be cross-checked and revised as inconsistent.	Noted, scoping matrix in Section 4.2 is revised.

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	scoping matrix are inconsistent.	Need to explain how the assessment for the environmental issues being ranked.	<p>The rating is explained in the TOR, refer Section 4.2. Each of the scores, including the “overall rating” is based on the judgement of the EIA consultant based on the knowledge of the sensitive receptors and types of impacts generated by the Project activities. This matrix is based on EPD guidelines and does not include a formula to transparently calculate a final score or impact rating.</p> <p>It is proposed that a more detailed matrix is used in the SEIA based on the RIAM method (Rapid Impact Assessment Matrix), which uses a similar scoring system for the following criteria (importance, permanence, cumulativity and reversibility) with the additional criterion of magnitude (the severity of the impact). The scores are used in the following formula, such that a transparent ‘score’ or impact severity rating can be calculated:</p> <p>(Impact X Magnitude) X (permanence + reversibility + cumulativity)</p> <p>This has been added in Section 5.4.1 in the Revised TOR.</p>
		Section 4.2.1-4.2.3 – No explanation on how the ranking being done (What is the baseline, what database, justification etc)	The ranking is based on a scoping exercise, based on the information of the project given in the TOR. This serves to identify the higher priority issues to be focused on in the EIA
		Overall ratings seem to be calculated inconsistently. Moreover, based on precautionary principle, a score of 2.5 should become 3 instead of 2. We disagree with many of the scores.	As outlined above, there is no calculation involved. The scores are ratings, which at this TOR stage are preliminary evaluations. .
		Section 4.2.2 – one row is without any score.	Amended.

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		<p>Section 4.3.1 – As it is, too many issues were left out or downplayed. For instance, water pollution is not only “issues of note”, it is a “focus issue”; morphological impacts need to include the south end of the project site, i.e. Sg Patagas.</p>	<p>The categorisation is based on the structured scoping assessment which takes into account the severity of the impact, its spatial extent, and whether it is temporary, reversible or cumulative. The availability of mitigation measures is also considered.</p> <p>With respect to water pollution, it is noted that sediment plume impacts are a “Focus Issue” owing to its potential spatial extent and the presence of sensitive receptors (STAR, TARP). It is only other pollutants during the construction stage (coliforms, oil and grease, etc.) that are “issues of note”, as are operations stage water quality impacts, where the project is expected to improve water quality along the nearshore waters due to diversion and treatment of the severely polluted drains currently discharging into the sea.</p> <p>That being said, the SEIA will assess the actual impact based data analysed and modelled with the locations of these nearest sensitive receptors.</p>
		<p>This section (and sub-sections) needs to be redrafted based on the comments above (related to Section 4).</p>	<p>This section is revised, however, review of the matrix revealed no basis to changing the categorisation of issues in the three groups.</p>
	<p>Abandonment plan for the project (Section 4.1.4)</p>	<p>Description of abandonment process of this project needs to be explained in all stages of the development as this project is so huge</p> <p>Abandonment stage is too limited in scope. This needs to be expanded for various abandonment scenarios at different stage of the project. Effect on hydrology of Sg, Patagas needs to be included</p>	<p>Abandonment of the project in the midst of construction will be investigated within the SEIA; see Section 4.1.4.</p>

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	Zone Potential Impact Reference to Table 5.1	The table in 5.1 is only discussing about the potential impact during the construction, there is a need to be descriptive on the impact after the project as well.  For instance what will happen to both end of the project area (First Beach and Sungai Petagas river mouth) on the water quality, discharge.	Table 5.1 discussed both potential impacts during the construction and operation phase due to the project development.  Morphological impact due to the project development will be assessed in the SEIA which includes the the Sg. Patagas river mouth, refer to the TOR Section 5.3.
		Existing discharged point in Tg Aru and Sungai Petagas need to be in the study	Existing drainage system will be identified in SEIA, refer to Section 5.2.3 of TOR.
		How TAED impacted to these discharge points	The project intends to divert the discharge points away from the beach. The SEIA will include a hydrological assessment to evaluate how this will impact runoff and localised flooding (see Section 5.3.7.
		How TAED will address the water pollution in all discharges	The Project intends will improve the water quality in the discharge water as it will channel grey water and others to a Waste Water Treatment Plant on site.
		What the negative impact of the design of the new beach after the reclamation	This will be addressed in detail in the SEIA.
		Some inaccuracies in the “distance and location from project site”, and the potential impact associated with the project is incomplete. This need to be revised	Noted. Updated in Section 5.1.2 of TOR.
	Table 5.2 SEIA Spatial Boundaries	The biological and human components should include a wider coverage.  The “coverage purpose” needs to be revised in accordance to the revised sections in Chapter 4.	Human scope expanded through the addition of Kg. Contoh in the socioeconomic surveys - updated in Section 5.1.2 in the TOR.  The EIA consultant is not clear which biological aspect needs to be included in the wider coverage.
	Section 5.1.4	Consultations should include regular and occasional users of the Tg Aru beach.	Noted, however, will not be able to identify the regular or occasional users of Tg. Aru Beach a priori.

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	Figure 5.2	Additional survey lines in the southern end, and it should extend further south by another 3km radius	The survey lines presented in the TOR for bathymetric survey are the detailed survey concentrating on the project area. Outside the study area, data will be supplemented with bathymetric data from C-Map chart and Admiralty chart for modelling purposes.
	Water Sampling	<p>Figure 5.5 – Add 3 more sampling stations near the river mouth of Sg Patagas. Because this area is within 3km radius from project site</p> <p>Section 5.2.5 – need to add 5 sampling stations for river water quality at Sg Patagas.</p>	<p>An additional station off Kg. Contoh has been added in this area.</p> <p>As Sg. Patagas is the only main river discharge in the immediate area, the two (2) river water quality stations placed inside Sg. Patagas plus the additional stations off Kg. Contoh are considered sufficient to capture the pollution load of discharges from this main river.</p> <p>It is not clear what the rationale of additional stations inside Sg. Patagas would be. The sampling stations are located in the downstream part of the river plus the river mouth, thus any pollution loads being discharged will be captured in the sampling. The objective of the sampling is to better determine what is being discharged from the river rather than an exercise to assess pollution distribution patterns within the river.</p> <p>It is noted that sampling is to be carried out on ebb and flood tide, during at least two separate occasions. This data will be input to the numerical model to obtain a more complete picture of the water quality conditions, both spatially and temporally.</p>
	Sediments Section 5.2.6	Need to measure also the depth and the hydrodynamic of sediment transportation.	Noted and this is already being addressed in the studies



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1	<u>List of Review Panel</u>	<p>It is not clear if the responsibility of the members of the "Panel Review Committee" is:</p> <p>(a) To review the TOR for the Special Environmental Impact Assessment? Or</p> <p>(b) To review the Findings of the Special Environmental Impact Assessment (SPEIA)?</p> <p>If the responsibility of the Panel Review Committee extends to a review of the SPEIA then it appears there will be numerous and unacceptable instances of duplication of roles of starting from the Project Proponent and Review Panel to Local Authority (Development Control) and Central Board etc.</p> <p>For the sake of transparency the principle to be adopted should be that the review panel and other Government Agencies which are responsible for assessing the SEIA and Master Plan and Development Plans should not appear on more than one committee. This would apply to TAED, Local Authority, Central Board, Cabinet Committee etc. There is little point of having several tiers of government and several tiers in planning and Development Control written into legislation if in practice all can be merged into one?</p> <p>This is a tricky situation where Government is both "Developer" and Administrator" but a good opportunity to demonstrate it is possible for truly transparent and efficient system of government and governance to exist and to work.</p>	NA

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	1.1 Project Proponent	<p>The Project Proponent is Tg. Aru Eco Development Sdn. Bhd. (TAED), also referred to hereafter as the “Proponent.” TAED is a fully government-owned company established for the express purpose for the implementation of the Project. Contact details pertaining to the Project Proponent are as follows:</p> <p>Tg. Aru Eco Development Sdn. Bhd.  H-0-10, Lot 10, Block H, Metro Town  Jalan Bunga Ulam Raja, Off Jalan Tuaran  88100 Kota Kinabalu, Sabah, Malaysia  Tel: 088 425 896  Fax: 088 434 773  Email: mail@taed.com.my  Contact Person:  Mr. Syed Faisal Syed Mohamad, Project Coordinator</p> <p>The TOR for the SEIA does not make it clear who is the Registered and Legal owner of all of the areas that are the subject of the SEIA is.</p> <p>The list of Registered and Legal Owners of the lands should be disclosed.</p> <p>It is important to clarify what the locus standi of TAED is to apply for and also to submit Development Plans for the lands?</p>	<p>As stated in the TOR Section 2.3.2, the Project area currently comprises a mix of privately-owned and State lands; but the government is in the process of acquiring the privately-owned land.</p> <p>The SEIA will not disclose the list of registered and legal owners of the lands as this is under the purview of the Lands and Surveys Department.</p>

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	1.2 Legal Requirement	<p>The proposed development requires an SEIA under the Environment Protection Enactment 2002, Environment Protection (Prescribed Activities) Order 2012, Second Schedule:</p> <p>Item 5 Land Reclamation:</p> <p>Reclamation of land in the river or sea or within the foreshore area or wetland forests for development of housing, commercial or industrial estates, resorts, recreational or tourism facilities, construction of major roads, or buildings for public purposes.</p> <p>It was worthy to mention that there are petition sent to the Mayor on Jun 7, 2014 to protest the zoning of Tanjung Aru Beach to Hotel and Resort.</p>	Noted.



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	1.3 SEIA Consultant	<p>The Lead Consultant for the SEIA study is:  DHI Water &amp; Environment (M) Sdn. Bhd. (592006-K) – EPD No. F008 (30/09/2014)  11th Floor, Wisma Perindustrian,  Jalan Istiadat,  Likas, Sabah  Tel: 088 260780 / 801  Fax: 088 260781  Contact Persons: Tania Golingi, SEIA Team Leader - EPD No. S0027 (30/09/2014)  Wong Lie Lie, Project Coordinator – EPD No. S0083 (23/09/2015)</p> <p>Worth to mention that same consultant has recommended that Tg. Aru beaches are the only reasonable quality public beaches in the near vicinity of Kota Kinabalu.</p> <p>“DHI therefore recommends this management unit be retained for public leisure and recreational uses. Some of the hinterland between the beach and the airport consists of abandoned government housing and projects, and it is recommended to upgrade this area for public use, i.e. a larger public park or some low density tourism facilities with a proper setback from the beach.”</p> <p>Source: Sabah Shoreline Management Plan, Shoreline Management Plan – Management Plan, DHI Water &amp; Environment 2005</p> <p>With the scale of sea reclamation and channel digging they have directly conflict with their previous recommendation thus lead to the question of their credibility.</p>	<p>Under SMP, the management strategy recommended for Tg. Aru recommended was public leisure and recreational uses.</p> <p>The project concept is in line with the strategy in which the beach and foreshore reserve will be gazetted for public leisure and recreational uses, while the public Prince Philip Park will be enlarged and low/medium density tourism facilities are proposed with a setback of approximately 100 m from the beach.</p> <p>The reclamation is a component of the overall solution to improve beach quality and stability, water quality and coastal flooding.</p>

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	1.4 TOR Outline	<p>The TOR details the purpose of the assessment and aims to identify the key potential environmental impacts of the proposed project in order to focus the SEIA study on the significant issues related to the development of the project. As such, this TOR includes the following:</p> <p>Project description: background information and detailed description of the project location, concept, development and construction activities (Section 2).</p> <p>A description of the environmental setting of the project (Section 3)</p> <p>Key issues identified during the scoping exercise (Section 4).</p> <p>Proposed approach and scope of work for the SEIA study including details of the methodology for the baseline data collection and existing situation analysis, impact prediction and evaluation, identification and assessment of mitigation measures and monitoring program (Sections 5 – 7).</p> <p>In order to have a common understanding of the environmental issues to be covered, it is recommended that the environmental consultant holds consultations with the Department on the contents of the draft Terms of Reference.</p> <p>A sample of a standard draft Terms of Reference which normally consists of approximately 10-15 pages, excluding curriculum vitae is available at the Department.</p>	NA.
	Figure 2.1	<p>Project boundary. Coordinates of the project boundary points indicated are given in Table 2.1. Revetment boundary refers to the 'toe' or bottom of the revetment slope at the seabed.</p> <p>TAED and the Sabah State Government should disclose and demonstrate how the proposed boundaries of the project were arrived at? For example, is there any risk or possibility that the project boundaries will expand or be altered in any way?</p>	<p>The proposed boundaries of the project are the masterplan studies that encapsulate studies from all aspects such as hydraulics, engineering and environmental of project area.</p> <p>Although the proposed land uses may be revised but the core project footprint/development boundary still remains the same. Changes to reflect the masterplan used for the SEIA will be applied.</p>

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	2.2 Project Concept	<p>The Project is a Masterplan which provides the framework for an integrated, mixed-use development incorporating residential, commercial, cultural, recreational, open space and institutional uses including a marina. In recognition of the socio-cultural identity and heritage value of the Tg. Aru beachfront to the people of Sabah, a key element of the Project is to improve the beachfront and associated amenities for the public, as a perpetual heritage to be enjoyed by all generations.</p> <p>Site preparation, infrastructure, landscaping and public use areas will be developed by the Proponent; while for the residential and commercial areas, individual land parcels will be marketed and sold to third party investors for development within the framework of the Project Masterplan.</p> <p>What is the Status of the Master Plan which the SEIA is supposed to address?</p> <p>Under which legislation is the Master Plan being prepared?</p> <p>What is the process for preparing the Master Plan? And What is the process for making amendments to the Master Plan?</p> <p>The key questions is Will the public be consulted and will the same persons be sitting on every committee from now on?</p> <p>In short, how will it be possible to make the processes now and in future transparent?</p>	<p>The SEIA will address the final Masterplan dated July 2014. The Masterplan is not being prepared under any legislation however will follow procedural requirements with respect to planning submissions.</p>

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	Table 2.2	<p>The areas in the Table 2.2 should be shown on a map so that there is no ambiguity with which areas are being referred to in the table.</p> <p>For example, are “Green Areas” referring to areas that will be garden and planting? Will it have 100 per cent permeable surfaces? Are all (100%) of Green Areas to be accessible to the general public?</p> <p>For example “Hospitality” uses should be described in terms of number of rooms, number of restaurants and number of workers. Residential dwelling numbers should be described in terms of expected population numbers and also demography to indicate likely age of future population in order to estimate the need for community facilities such as pre-school, primary school etc. There is also the need to plan facilities for emergency services such as Police, Ambulance, clinics etc and to adopt models from Australia and developed countries where emergency services are decentralized.</p>	<p>Project components and land use breakdown will be further outlined in the SEIA, refer to Section 5.1.1 of the TOR.</p> <p>The breakdown will distinguish between built up areas (development areas), public recreation and open space, vs paid public amenities and recreational areas.</p>
	2.2.2 Project Components	<p>Project Components</p> <p>The Project Masterplan includes the following key components:</p> <ul style="list-style-type: none"> <li>• 18-hole golf academy</li> </ul> <p>What is the difference between an Academy and Golf Course in terms of accessibility to Members only Vs General Public.</p> <p>Is this going to be a “private Members Only” or a Public Golf Course?</p>	<p>Project components and land use breakdown will be further outlined in the SEIA, refer to Section 5.1.1 of the TOR.</p> <p>The breakdown will distinguish between built up areas (development areas), public recreation and open space, vs paid public amenities and recreational areas.</p>

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	2.2.2.1 Beach	<p>The existing 1.4 km long beach at Tg. Aru will be replaced with a new beach seaward of the existing and made wider with imported sand as part of the land reclamation in order to improve the quality and the width of the beach.</p> <p>Apart from improvement in the beach sand quality and width, the extension of the beach out into deeper waters aims to improve water exchange with consequent improvement in water quality along the beach.</p> <p>The SEIA should emphasize methods to prevent, contain and clean pollution and spills at its source.</p> <p>The proposal by TAED appears to rely on a “Quick Fix” method that will give the impression there is less pollution because sediment is diluted in deeper waters. That may be acceptable in the short term. But what about the longer term when we should only accept clean discharge from site?</p>	<p>The SEIA will investigate the introduction of a pollutant spill management plan to address accidental spills of oil in the marina and waterways. The project concept is to only discharge clean water as water will be treated at a waste water treatment plant and reused within the site as far as possible.</p> <p>The longer term solution lies in catchment management planning which falls in the 5 – 10 year horizon and beyond and can only be achieved by the government technical agencies responsible.</p>
	2.2.2.2 Public Park Amenities	<p>An area of 27 acres is allocated for the refurbishment of Prince Philip Park, which is almost double the size of the present Park area (14.5 acres).</p> <p>How will the 27 acres assigned to Prince Philip Park be protected? Will it be through a new Gazette Notice? How will the existing character and qualities of Prince Philip Park be replicated, or replaced. It needs to be remembered that the Prince Philip Park currently interfaces with the beach (sand), is fairly informal in its character in terms of planting and designs and most importantly it is inexpensive and easy to get to for the general public</p>	<p>The intention is to gazette the area.</p> <p>The comments on the character and nature of the park are noted and further details on the design and character of the proposed updated PPP will be furnished in the SEIA</p>
	2.2.2.5 Reclamation	<p>Within its overall 739 acre development footprint, the project involves reclamation of approximately 444 acres (180 hectares), extending the existing shoreline between 100 m to 1,000 m further west (Figure 2.9).</p> <p>Material for the beach will be sourced from offshore with potentially a combination of land-based and marine sources for the land reclamation.</p> <p>No mention of possible environmental impact to the surrounding of the project area. Eg, kg contoh, kg tg aru</p>	<p>Sediment plume spread will be assessed to determine the impact zone.</p> <p>The effect on the adjacent coastal frontages are being investigated to ensure there are no environmental impacts</p> <p>Environmental impacts due to the reclamation are noted in Section 4.3 of the TOR.</p>

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	2.2.2.7 Southern Road Link	<p>Existing access to the project site is via Jalan Mat Salleh. A new access road approximately 3.6 km long will be created to connect the project development to the existing road network in the area as shown in Figure 2.11. A new internal road network will be established within the site and connect to the Kota Kinabalu International Airport (Terminal 1) to the south.</p> <p>Even if a Traffic Impact Assessment is included in the preliminary investigations, the reality is the current traffic jams at Tanjung Aru Beach will only get more serious. This is because it appears that all roads will lead to the round-about at the Tanjung Aru Town Center. Only peak traffic flows during events etc are important measures and indicators now and also for the future. No one can deny that we already experience serious traffic jams which are being caused by the fairly modest developments at Sugar Bun, Perdana Park and the Shangri La Tanjung Aru Beach Hotel. This happens particularly during weekends and public holidays and is much worse during the extra-long weekends. Access for Emergency Vehicles particularly (Ambulance, Fire Trucks and Police) particularly during peak periods need to be given priority.</p>	Noted.
	2.2.3 Phasing	<p>The Project development will be implemented in successive stages, with the preliminary programme as detailed in Table 2.4 below and illustrated in Figure 2.12. In considering the development sequence, priority has been given to reprovisioning the Prince Philip Park and the beach as early as possible in the programme. These proposed stages are subject to the findings of the soil investigation and detailed engineering design.</p> <p>It is hard to understand what this means. Why is it subject to the findings of the soil investigations and detailed engineering design? If this is the case how different can the programme be?</p> <p>What is the risk of changes becoming necessary? Has the soil investigations not been a part of the scoping studies?</p>	<p>The programme / phasing outlines the component stages to provide an overview of the development sequence in order to establish the right mitigation measures for each of the components throughout the development period.</p> <p>The soil investigations and detailed design may show that some areas require additional ground / foundation design or ground improvement measures which may alter the construction sequence. The effect on the programme, if any, is not easy to quantify at this stage.</p> <p>The “risk” of changes becoming necessary may be high, depending on the findings of the SEIA and feedback from the public. It is the intention of the SEIA to determine mitigation measures to minimise impacts, which may include proposals to change the phasing to optimise public access during construction.</p> <p>Soil investigations are part of the detailed design phase.</p>

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	2.3.1 Project Master Plan Development	<p>The project is currently in the masterplanning stage and project layout and components shown in Figure 2.2 above are subject to change. To date, the project proponent has initiated several studies such as masterplan design, marketing, surveys and preliminary engineering studies.</p> <p>Development Plan (Masterplan) approval by Town and Regional Planning Department.</p> <p>Should Master Planning precede the Investigations and SEIA?</p> <p>Why is the approval of the Development Plan (Master Plan) not the responsibility of the Local Authority (DBKK) and the Central Board as required in the Town and Country Planning Ordinance (Sabah Cap. 141)? Under which Legislation is the Town and Regional Planning Department required and authorized to approve a Development Plan (Master Plan).</p> <p>Once Approved (assuming it is by the correct authority) What is the process for "Amending the Development Plan (Master Plan)? Who in Government will be consulted and will the public be given the opportunity to comment if and when an amendment is proposed?</p>	<p>It is normal practice for concept plans and masterplans to precede detailed investigations for detailed design.</p> <p>The approval of the Development Plan is the responsibility of the Local Authority (DBKK) and the Central Board. This is updated in TOR.</p> <p>Nevertheless, the EIA approval conditions will also require that any substantial amendments to the masterplan which may change or nullify the predicted impacts, mitigation measures and monitoring programmes outlined in the SEIA be subject to additional impact assessment.</p> <p>Measures to include public consultation for any proposed amendments will be considered as part of the environmental management programme to be developed as part of the SEIA.</p>
	2.3.2 Land Status	<p>The project area comprises Government and private land, which will be acquired by the Government for this project.</p> <p>The Proponent intends to surrender the foreshore reserve and Prince Philip Park areas back to the State Government.</p> <p>If the foreshore is Government owned and also public property in the first place, why would there be a need for TAED to surrender the foreshore reserve and Prince Philip Park areas back to the State Government?</p>	<p>This is because the current foreshore reserve is a fixed plan area (i.e. not relative to the shoreline) and the new foreshore will be in a different location.</p> <p>Hence the entire Project area must be alienated first, then subdivided according to the final masterplan</p>

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	2.3.3.1 Local Plan	<p>Currently, the existing land use of the project area includes residential areas, government facilities, landscape and open space. At the time of writing, the project proponent is in discussion with Dewan Bandaraya Kota Kinabalu (DBKK) and Town and Regional Planning Department (TRPD) on the zoning of the project area.</p> <p>This is confusing. Why would it take more than 30 minutes to work out the zoning of the project area?</p> <p>Is it not documented properly?</p> <p>What is more important is to define areas as:</p> <p>(a) The areas that will be 100 per cent private. as opposed to</p> <p>(b) Areas which will be 100 per cent public. And</p> <p>(c) Areas which will allow restricted access to members and guests only</p>	<p>The local plan zoning for the proposed area has been updated to final draft local plan. Refer to the updated Section 2.3.3.1.</p> <p>As outlined above, the land use categories in terms of private, public etc. will be specified in the SEIA.</p>
	<p>2.3.3.2 Sabah Shoreline Management Plan</p> <p>The development area lies partially within Management Unit C5-19 of the SMP /1/ which is designated as Promoted: Low / medium Density Tourism (Figure 2.14). The recommendation for this management unit is to retain the beach for public leisure and recreational uses, while upgrading of the hinterland between the beach and the airport for public use was also recommended, i.e. a larger public park or some low density tourism facilities with a proper setback from the beach.</p>	<p>Again, worth to mention that petition of 1300 signature was submitted to Mayor of Kota Kinabalu on 7 Jun, 2014.</p> <p>Such recommendation doesn't include the sea reclamation activities and channel digging on the original shore of tg aru beach.</p> <p>Such recommendation also not consider in the making of artificial new beach 100 meters towards the sea from the original beach line with the excessive sand import from other area.</p> <p>Recommendation was made Integrated Shoreline Management Plan 2005 for Sabah that there should be setback of minimum 110m from high water line (HAT)</p>	<p>The present proposal includes the creation of a stable beach, fulfilling the SMP objectives of retaining the public beach. Elements of the project masterplan, such as the marina and fishermen's wharf breakwaters, serve to ensure this beach remains stable, while the reclamation serves to push the beach into deeper water, where the seabed profile will allow penetration of waves to the beach to maintain high quality sand (by preventing siltation of fines) and improved water quality.</p> <p>These elements or any other specific details were not outlined in the SMP as no detailed studies were carried out to develop a specific solution or prescriptive measures for the Tg. Aru site as part of the SMP study. The SMP does not specify what type of retaining structures should be developed, the angle of the beach etc. However, beach nourishment over hard structures such as the seawalls presently observed was specifically recommended.</p> <p>It is noted that the proposed scheme does include a setback of more than 110m from HAT.</p>



No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	2.4.1 Pre-construction Phase	<p>Activities during this phase include:</p> <ul style="list-style-type: none"> <li>• Topographic survey</li> <li>• Hydrographic survey</li> <li>• Geotechnical investigation</li> <li>• Design</li> <li>• Traffic planning</li> <li>• Agency approvals; and</li> <li>• Environmental assessment.</li> </ul> <p>Is there also going to be Social Surveys and specific Tests to determine the Water Quality and levels of pollution at Tanjung Aru Beach?</p>	Water quality and Social surveys will be conducted for the SEIA phase, see Section 5.2.5 and 5.2.10 of the TOR.
	2.4.2 Construction Phase	<p>This appears to be a Standard Statement which was lifted off some booklet and repeated over and over. Often (and more accurately) this condition is breached every time. And still it appears that enforcement by the Local Authority and Government Departments continues to be is weak and no one gets to be prosecuted. Moreover if what the consultant is claiming is a viable solution then how does it explain why the Tanjung Aru Beach and the Sembulan River are so heavily polluted today?</p> <p>What about excavation for basements? Will it have any effect on the water table?</p>	<p>NA</p> <p>Geo-Hydrological assessment added; refer to updated Section 5.3.6.</p>

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	2.4.3.1 Residents, Guests and Staff	<p>The proposed built development will bring in tourists, residents and employees, increasing the population size in Tg. Aru. Based on the development ratio dedicated for residential, hospitality and mixed use, with a total of 35% (104.7 hectares) the population to the project area is expected to approximately 12,000 residents when fully developed, excluding hotel guests.</p> <p>The number of staff on site on a daily basis is presently expected to be between 2,700 – 3,000 once the project is at full operational level.</p> <p>In addition to the above staff requirements, it is expected that indirect jobs will also be created as a result of the development; these are usually calculated on a 3:1 to 5:1 ratio, which equates to a range of between 540 to up to 1,000 indirect jobs.</p> <p>It is not clear whether the figure of “12,000 residents” refers to: residents plus workers but excluding hotel guests or Residents but excluding workers and hotel guests.</p> <p>More clarity is needed on expected population numbers but also their likely incomes and socio-economic status so their needs (in terms of public transport, food outlets, recreation etc.) can be catered for. I also doubt the “One Maid per House” which is common throughout Malaysia particularly among the middle and high income has been factored in.</p>	Noted, and it will be estimated and included in the SEIA

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	2.4.3.2 Public Areas and Facilities	<p>The proposed development will give back to the public through the upgrading and expansion of Prince Philip Park and enlargement of Tanjung Aru Beach as well as public facilities in the area. The TAED will create over 2,500 m of publicly accessible waterfront, including a beach length of 1,420 m.</p> <p>The point which needs to be made is there will be no necessity for “Giving Back”. If the Subject Land is already Government and Publicly owned and where access and use of the land is unrestricted, how and why is there a need and situation to “give back”?</p>	<p>The point needs to be made that the TOR does not state anything about the government giving back any <u>land</u> to the public.</p> <p>The term “give back” in the TOR (when read in context) is a term used as in “paying it forward” or similar and not literally giving back land access/ use.</p> <p>To quote in full, the TOR states, “The proposed development will give back to the public through the upgrading and expansion of Prince Philip Park and enlargement of Tanjung Aru Beach as well as public facilities in the area.”</p> <p>Please read this carefully as it is quite different from saying “the beach and PPP will be given back to the community”.</p> <p>Semantics aside, the State Government is in the process of claiming back much of the land within the Project area which was alienated to a private party through the courts. Although as yet undeveloped, the large areas of privately-held land puts public access to the beach at risk in the future.</p> <p>It is the Proponent’s intention to subdivide the Masterplan area and confer the title for the beach and foreshore reserve and Prince Philip Park to the State Government to ensure these areas remain for the public in perpetuity.</p> <p>The SEIA will explore the means to ensure that this process occurs prior to construction of the project and is carried out in a manner transparent to the public. Refer to Section 2.3.2 of the TOR.</p>

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	2.4.3.5 Land Traffic	<p>Increase in land traffic around the project area is expected during operational phase. The development site will be accessible to the general public from the north, while road access from the south is linked only to the KKIA Terminal 1. A large increase in traffic along the main access road, Jalan Mat Salleh, may therefore be expected.</p> <p>How many vehicles are expected to arrive during peak periods?</p> <p>What measures will be put in place to ensure development will be stopped immediately once traffic numbers exceed design predictions and expectations?</p> <p>The fact is projected traffic numbers is only one side of the story. There is also the question of parking for cars, taxis, buses and coaches. It will be a shame if the authorities resort to impose a Toll or unreasonable parking fees to discourage private cars from entering the area. However, if this is what is necessary it should be equitable.</p>	Land traffic will be assessed in SEIA, refer Section 4.3.3.4 in the TOR.
	2.4.4 Abandonment	<p>In the event of project abandonment and site closure, construction waste material and machinery would be removed from the development area; however, partially completed reclamation, open space or partially completed buildings may subsequently be fronting the sea.</p> <p>What is the environmental impact assessment of such scenario and the proposed mitigation plan? Who will bear the cost for the restoration?</p>	The impact of abandonment will be assessed in SEIA. Refer to Section 4.1.4 in TOR
	2.5 Development Schedule	<p>The overall project development duration is expected to be in the order of four years.</p> <p>An initial estimate of the reclamation and earthworks duration is approximately 26 months, with potentially an extra four months for ground treatment. Again, it is noted that the construction and development schedule can only be confirmed following detailed engineering design, which will be carried out in parallel with the SEIA study.</p> <p>Is 4 Years sufficient to complete the project? It appears to be possible yet over ambitious. What are the social impacts if the project is stretched out to 6 years?</p>	This is based on the best estimate from the marine engineering experts at this stage.

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	3.1.5 Water Quality	<p>The nearshore waters along Tg. Aru beach are fairly turbid. Sg. Patagas is a key source of suspended sediments in the immediate project area, while during high rainfall periods, sediments and other pollutants discharged by Sg. Putatan can also affect the beach.</p> <p>Immediately on the beach, poor water quality along the shoreline is evident due to drains discharging black and malodourous water directly into the sea.</p> <p>Surely there should be Government figures and records which show what the water quality, pollution levels, E-coli bacteria counts etc are at Tanjung Aru Beach and other areas along the coast. If there is can these records be made public? If there is none then how can the State Government explain why the authorities are not required to collect and maintain records?</p>	<p>From the consultants' initial search there are no government records on water quality at TAB.</p> <p>NA</p>
	3.2.1 Shoreline Habitats	<p>The older Aru trees found along the beach act as nesting holes for these birds.</p> <p>How will the habitat including nesting holes for these birds be retained or replaced?</p>	<p>Measures to protect, relocate or compensate bird habitat will be explored during the SEIA stage.</p>
	3.2.2 Marine Habitats and Communities	<p>The reefs off Tanjung Aru coral reefs are primarily in Poor condition. These reefs are affected by turbid waters nearshore Tg. Aru beach.</p> <p>Polluted water runoff from the city may also affect the coral growth /2/.</p> <p>Has the Sabah State Government done anything to prevent this from happening? If not then why not?</p> <p>Can the State Government and DBKK disclose who is responsible for the polluted water runoff that is affecting Tanjung Aru Beach? Who is responsible for preventing pollution and also for cleaning up? These are important questions which need to be answered in the SEIA so the problem is solved and someone or an agency is responsible.</p> <p>It would be ridiculous for the Minister in the Chief Minister's office to lead Gotong Royongs to clean up the areas in the future.</p>	<p>NA</p>

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	3.2.3 Marine Parks	<p>Due to overexploitation, the quality of these marine resources had become poor. However, despite these pressures, the reefs within the park support a variety of coral growth containing a large diversity of species. A general survey carried out by the Marine Research Unit of Sabah Parks in 1998 showed that more than 50% of the coral reefs in TARP have between 11 – 30% live coral cover, and only about 16% of the coral reefs located at the monitoring stations have 31 – 75% live coral cover /4/. The coral conditions within the boundary of the marine park are better compared to the reefs outside of the boundary, which consists of poor quality coral reefs for example, the eastern side of P. Gaya.</p> <p>Who is the culprit for the “overexploitation”? Who is responsible for “policing” so overexploitation can be reverted? And how will the current situation be corrected?</p>	NA; this sentence has been amended
	3.3.1 Land use	<p>The immediate project area is an existing recreational area. The Tanjung Aru Beach is a popular public beach with facilities available to the public. The beaches of Tanjung Aru, popularly known as 1st, 2nd, and 3rd beaches, also includes Prince Philip Park, Sugar Bun Plaza (restaurants and food stalls), the Kinabalu Golf Club (KGC) and Kinabalu Yacht Club, open spaces and a number of private plots. On Tg. Aru headland itself, the Shangri-La Tanjung Aru Resort (STAR) bounds the northern end of the beach.</p> <p>At the end of the park is the Third Beach. It extends from the border of the Prince Philip Park to the end of the Kota Kinabalu International Airport boundary. Despite a litter problem, the area is a very popular place for leisure and recreation.</p> <p>This is a very important point. Despite the lack of facilities and litter that the place is popular. I suppose it is popular among locals and particularly the young. Planning for the future of Tanjung Aru Beach must ensure the young and less wealthy are not displaced or feel like second class citizens.</p>	Noted. This will be further studied in the SEIA, refer Section 4.3.2.2 in the TOR

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		<p>The project area is within the Kota Kinabalu district. According to Department of Statistics Malaysia in 2010, the Chinese community is highest in Kota Kinabalu, followed by Bajau and Kadazan/Dusun.</p> <p>What is more important to establish than race alone is who uses the beach. What is most important is to establish their ages and income levels and where they come from. Is it only Kota Kinabalu City or from towns near to Kota Kinabalu City?</p>	<p>The beach users will be identified through the socio economy survey as outlined in Section 5.2.10.1 of the TOR.</p>
	<p>4.1.2.1 Physical-chemical issues</p>	<ul style="list-style-type: none"> <li>• Suspended sediment plume impacts from reclamation, dredging and earthworks.</li> <li>• Oil and grease spillage from machinery</li> <li>• Noise Pollution</li> <li>• Air pollution (dust, particulate matter)</li> <li>• Waste generation and disposal</li> </ul> <p>Where are the Water Quality issues?</p>	<p>The water quality issues are outlined in Section 4.3.2.1 of TOR.</p>

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	4.1.2.3 Socio-economic components	<ul style="list-style-type: none"> <li>• Navigation safety for small boats travelling along the coastline</li> <li>• Economic impacts arising from sediment plume effects on fish stocks in the localised fishing grounds</li> <li>• Aesthetic impacts due to construction activity</li> <li>• Loss of beach and park area during construction works</li> <li>• Impacts to tourism and reaction (STAR, Yacht club, etc) from construction</li> <li>• Socioeconomic impacts due to construction workforce and workers' quarters</li> <li>• Traffic congestion</li> <li>• Impacts to health from dust, noise.</li> </ul> <p>It appears there is no intention to undertake Aircraft Noise Exposure Forecasts and its effect on residents of Kota Kinabalu City and visitors. The forecast method should take into consideration the additional flights that the TAED project on its own will generate and also the additional charter flights that will be required should the Tuaran to Kudat Tourism Master Plans and the many hotels and resorts they are likely to attract to Sabah generate.</p> <p>What will the increase of Aircraft Noise likely to be? Will the State Government impose curfews like in Sydney?</p>	Beyond the scope of study



No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	4.1.3.3 Socio economic components	<ul style="list-style-type: none"> <li>• Land traffic</li> <li>• Marine traffic</li> <li>• Restrictions on alongshore travel by local fishing boats and other vessels</li> <li>• Aesthetic impacts and change in character of the area</li> <li>• Social impacts due to change in cultural nature of the area</li> <li>• Social impacts – increased cost of living, land prices, increased visitor prices (e.g. parking, availability of cheap stalls, etc)</li> <li>• Provision of recreational amenity to public (positive)</li> <li>• Economic benefits due to increase in tourism</li> </ul> <p>There is the need to capture in words, pictures and numbers exactly what there is now in Tanjung Aru Beach, what will be altered, what will be lost, what will be replaced and what will be new.</p>	Noted.
	4.2.2 Operation stage	<p>Housing and public transport for workers need to be assessed. Where will workers spend their evenings and weekend or recreation?</p> <p>If they congregate at Tanjung Aru Beach there is the potential it will rob the locals of their recreation space similar to what has happened to parts of Singapore and Hong Kong when large numbers of foreign workers (particularly domestic workers and also construction workers) take over public parks on Sundays and public holidays.</p>	<p>High percentage of the employment opportunities will be for the locals.</p> <p>Potential impacts such as these will be evaluated in the SEIA.</p>

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	4.3.1.2 change in beach and landscape character	<p>Although the Project will address existing erosion problems and improve the beach quality, the development will inevitably change the nature of the environment from primarily natural and vegetated beach and immediate hinterland areas to a more built up landscape.</p> <p>This is a nice and honest statement and we hope to see such honesty being carried through throughout the SEIA. What is the evidence shown that Tanjung Aru are have a huge erosion problem?</p> <p>Is there other alternative in addressing the erosion problem?</p>	<p>Note that the project area does not include the beach from Jalan Mat Salleh to the northern tip by the Shangri La's Tanjung Aru Resort (STAR)</p> <p>There is clear visual evidence of past and ongoing erosion. Photographic records and recent surveys show the erosion that has occurred from 1966.</p> <p>Two lines of existing coastal defences have failed due to coastal erosion.</p> <p>Ongoing erosion is evident by the scouring of material occurring behind the line of existing defences.</p> <p>The erosion of revetments and around tree roots at the south end is evidence of the continued erosion. There is little usable exposed beach now at high tides.</p> <p>The problem at Tg Aru is not one of only erosion. There is the loss of amenity value of the beach and there are also the coastal protection and flood protection issues to address.</p>
	4.3.1.5 Loss of Beach Front during Construction	<p>Depending on the detailed construction methodology and phasing, the beach areas and Prince Philip Park will be closed to the public for some period of time. The overall ground works period is estimated to be 18 months, with the beach being off limits to the public for this entire period in the worst case scenario.</p> <p>What is the risk of the project period extending beyond 18 months?</p> <p>What is the risk of the project being abandoned following major earthworks? Will there be monies set aside for restoration works in case of abandonment of the project at any stage?</p>	<p>The risk and impacts of schedule overruns will be discussed in the SEIA.</p> <p>An abandonment and remediation programme will be addressed in the SEIA, including the need for a bond if required.</p>

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	4.3.2.2 Socioeconomic Impacts	<p>Socioeconomic impacts which require attention include disturbance to fishing activity and navigation in the area, both during construction and operational stages. These are not highlighted as priority impacts due to the absence of any major fishing grounds in the vicinity of the project site; however, this will be verified during the SEIA study.</p> <p>Aside from that, other socioeconomic impacts include socio-cultural issues due to the influx of construction workers in the area to the public and overall tourism value. These will also be verified during the SEIA study</p> <p>This is a very childish and pathetic attempt at assessing socioeconomic impacts. The consultant may as well not bother to do it at all.</p> <p>We need to remember the Government has just admitted the waters off Tanjung Aru Beach are polluted. How then can anyone expect to see good fish and even if there is fishing activity in the area people generally catch fish so they can eat the fish?</p> <p>What needs to be assessed is how the ordinary person uses Tanjung Aru Beach and also measure their "Attachment" to the Tanjung Aru Beach.</p> <p>The consultant should measure and describe how what will be lost can be replaced and what will be lost forever. How will this impact on the residents of Kota Kinabalu City?</p>	<p>Please also note that this is the TOR; no impact assessment is made at this stage.</p> <p>We seem to be in agreement that fisheries are not a focus issue for this site.</p> <p>The socio economic survey as outlined in Section 5.2.10 of TOR will canvass public perception towards the proposed project as well as impacts to their environment and livelihood. It includes survey of beach / recreational users.</p>

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	4.3.3.4 Land Traffic	<p>The increase in the land traffic in the area during the construction and operation of the TAED will also resulted in the increase of the risk of accident to the road users. Mitigation measures are to be implemented to minimise the risk of road accidents. Measures will be looked into during the SEIA study.</p> <p>A detailed Traffic Study is being conducted in parallel with the Masterplan and detailed design phases; this study will assess and mitigate operational traffic impacts arising from the increased traffic volume associated with the development, taking into account existing bottle necks and traffic issues.</p> <p>A serious flaw from a “Governance” perspective is that the Mayor is also a member of the TAED Board.</p> <p>This means there is potential for Conflict of Interest because he (and the Boards) will be submitting the Master Plan and Traffic Assessment and also be responsible for approving it. Can there be a better way to minimize conflicts of interest?</p>	NA

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant															
	Table 5.1 Zones of Potential Impact	<table border="1" data-bbox="616 316 1301 826"> <thead> <tr> <th colspan="3" data-bbox="616 316 1301 347">Terrestrial</th> </tr> </thead> <tbody> <tr> <td data-bbox="616 347 775 400">Scrub vegetation</td> <td data-bbox="775 347 898 400">Within project site</td> <td data-bbox="898 347 1301 400"> <ul style="list-style-type: none"> <li>Loss of scrub vegetation and habitat.</li> </ul> </td> </tr> <tr> <td data-bbox="616 400 775 512">Birds</td> <td data-bbox="775 400 898 512">Within project site</td> <td data-bbox="898 400 1301 512"> <ul style="list-style-type: none"> <li>Air quality decrease during construction</li> <li>Noise increase during construction</li> <li>Loss of old growth trees for nesting and feeding during construction and operation.</li> </ul> </td> </tr> <tr> <td data-bbox="616 512 775 624">Beach users (2<sup>nd</sup> and 3<sup>rd</sup> Beach)</td> <td data-bbox="775 512 898 624">Within project site</td> <td data-bbox="898 512 1301 624"> <ul style="list-style-type: none"> <li>Loss of recreational ground due to beach closure during construction.</li> <li>Improved beach during operation with cleaner sand, increased beach width and provision of improved public amenities.</li> </ul> </td> </tr> <tr> <td data-bbox="616 624 775 826">Beach (1<sup>st</sup> Beach)</td> <td data-bbox="775 624 898 826">0 m - 630 m</td> <td data-bbox="898 624 1301 826"> <ul style="list-style-type: none"> <li>Socio-cultural conflicts during construction due to influx of foreign workers</li> <li>Air quality decrease during construction</li> <li>Noise increase during construction</li> <li>Water quality decrease during construction</li> <li>Visual impacts during construction and operations</li> <li>Increased land traffic during constructions</li> </ul> </td> </tr> </tbody> </table> <p data-bbox="616 842 1301 1038">The proposed development has also failed to consider the rights of existence of the animal and plant populations such as various species of birds such as Blue Naped Parrot, the Oriental Pied Hornbill and others, and various species of trees, such as the old Rain trees and Casuarina trees - some of which are more than 50 years old. All these trees, that are the habitats of the animals, would certainly be cut down during construction.</p>	Terrestrial			Scrub vegetation	Within project site	<ul style="list-style-type: none"> <li>Loss of scrub vegetation and habitat.</li> </ul>	Birds	Within project site	<ul style="list-style-type: none"> <li>Air quality decrease during construction</li> <li>Noise increase during construction</li> <li>Loss of old growth trees for nesting and feeding during construction and operation.</li> </ul>	Beach users (2 <sup>nd</sup> and 3 <sup>rd</sup> Beach)	Within project site	<ul style="list-style-type: none"> <li>Loss of recreational ground due to beach closure during construction.</li> <li>Improved beach during operation with cleaner sand, increased beach width and provision of improved public amenities.</li> </ul>	Beach (1 <sup>st</sup> Beach)	0 m - 630 m	<ul style="list-style-type: none"> <li>Socio-cultural conflicts during construction due to influx of foreign workers</li> <li>Air quality decrease during construction</li> <li>Noise increase during construction</li> <li>Water quality decrease during construction</li> <li>Visual impacts during construction and operations</li> <li>Increased land traffic during constructions</li> </ul>	The impacts take into account the biological component which includes terrestrial flora and fauna as well as corals. These are listed as a Focus Issue for the study and as such are very much to be considered.
Terrestrial																		
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	5.1.3 Supporting studies	<p>On-going studies that will be referenced and incorporated in the SEIA include:</p> <ul style="list-style-type: none"> <li>• Hydraulic study including masterplan layout development</li> <li>• Traffic impact assessment</li> <li>• Soil investigation report</li> <li>• Landscape study</li> <li>• Engineering and environmental validation study</li> </ul> <p>No proper erosion studies made to support the proponent claim that the beach is in danger losing it to erosion.</p> <p>Testimonial from the old timers, comparison of old photos and basic observation of sign of erosion failed to see spot evidence of critical erosion happen along Tg Aru Beach</p>	<p>Erosion studies have been undertaken and it is also clear from visual observation that erosion is happening along the project frontage.</p> <p>Note that the project area does not include the beach from Jalan Mat Salleh to the northern tip by the Shangri La's Tanjung Aru Resort (STAR)</p> <p>The beach levels do fluctuate depending on the seasonal weather patterns but overall the beach has eroded over the past 48 years and is still doing so.</p>

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	5.1.4 Consultations	<p>List of authorities to be consulted in the SEIA study may include:</p> <ul style="list-style-type: none"> <li>• Land and Survey Department</li> <li>• Department of Irrigation and Drainage (DID) Sabah</li> <li>• Town and Regional Planning Department</li> <li>• Dewan Bandaraya Kota Kinabalu</li> <li>• Department of Fisheries (DOF), Sabah</li> <li>• Sabah Parks</li> <li>• Forestry Department, Sabah</li> <li>• Ports and Harbour Department</li> <li>• Marine Department</li> </ul> <p>Other stakeholders include NGOs such as SEPA and special interest groups (e.g. Sabah Surfing Association, Kinabalu Avian Club) will be consulted.</p> <p>We should all wonder what the Sabah State Government is expecting to hear from DBKK and the Town and Regional Planning Department when it appears that both agencies have allowed themselves to think of town planning and master planning as nothing more than a variety of colors on a map. Up to now there has been an old fashioned view on town planning demonstrated by resistance to mixed use and being business friendly.</p> <p>Non expert interest group and NGOs shall be in the panel to diversified and maintain the other users that indirectly affected such as the casual visitors who has been using this beach for many years.</p>	NA

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	5.2.3 Hydrology/Drainage	<p>Survey of the drainage network in the project area will be carried out in order to assess potential impacts on existing streams and drainage outfalls. Topography within the project site and surrounding areas will be described and the surface hydrology such as natural streams and storm drains will be mapped.</p> <p>Discussions will also be held with the Department of Irrigation and Drainage (DID) to obtain information on historical records of flood events for the project site, including height of flood and frequency upstream Sg. Patagas.</p> <p>It will be nice if such information is kept. Of course the keeping of such information (data and mapping) is considered to be standard operating procedure and publicly available in countries such as Australia. But in Sabah? There is going to be a need for major shift in the attitudes and behavior of public servants.</p>	Outside the scope of study
	5.2.5 Water Quality	<p>A specific water-sampling program within the project area is required to establish baseline conditions for suspended sediments and other pollution concentrations, such that the impact assessment regarding suspended sediment plumes and wastewater from the construction can be based upon relative changes rather than absolute values.</p> <p>The results of the sampling will be most interesting and will quite possibly “open a can of worms”. The consultant should be 100 per cent honest and be compelled to disclose its findings.</p>	Noted. All lab results and findings are included in the SEIA report.



No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	5.2.5.1 Marine Water Quality	<p>Samples will be collected at eight (8) marine water sampling stations on four (4) occasions considering the tide to cover the nearshore waters adjacent to the project site as well as at sensitive receptors further afield, e.g. STAR and offshore waters near TARP as shown in Figure 4.3.</p> <p>Proposed water quality parameters to be analysed are:</p> <ul style="list-style-type: none"> <li>• E-coli</li> <li>• Enterococci</li> <li>• DO</li> <li>• BOD</li> <li>• Ammonium</li> <li>• Total Nitrogen</li> <li>• Chlorophyll-a.</li> <li>• Nitrate</li> <li>• Total suspended solids</li> <li>• pH</li> <li>• Oil and grease</li> <li>• Salinity</li> <li>• Temperature</li> </ul> <p>Will these findings get published? Will the findings be made public?</p>	All lab results and findings are included in the SEIA report.
	Figure 5.5 Locations of water quality sampling stations	<p>It appears that many of the sample sites are in deep water where the readings will be fairly diluted. Is it not more appropriate to find out what is being discharged rather than to only concentrate on whether what is being discharged is affecting Tunku Abdul Rahman Park? Of course we should not deny the importance of protecting Tunku Abdul Rahman Park but what is equally and perhaps even more important is to prevent problems at Tanjung Aru beach itself. That way both Tanjung Aru and Tunku Abdul Rahman Park will be protected.</p>	Noted. Land based discharges are also sampled as outlined in Section 5.2.5.2 of the TOR.

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	5.2.5.2 Drain water quality	<p>Water quality samples to be collected at the drains along Tg. Aru beach on five occasions considering the tide and other factors affecting the load. Samples are to be analysed for the following parameters:</p> <ul style="list-style-type: none"> <li>• E-coli</li> <li>• Enterococci</li> <li>• DO</li> <li>• BOD</li> <li>• Ammonium</li> <li>• Total Nitrogen</li> <li>• Chlorophyll-a.</li> <li>• Nitrate</li> <li>• Total suspended solids</li> <li>• pH</li> <li>• Oil and grease</li> <li>• Salinity</li> <li>• Temperature</li> </ul> <p>Will these findings get published? Will the findings be made public?</p>	All lab results and findings are included in the SEIA report.
	Figure 5.6 Location of water sampling stations at drains found along the project area	There should be some sampling stations which are up stream of the project area to show whether only clean or some polluted water is flowing through the project area and the source of the pollution if any.	The objective of the sampling is to identify the pollution loads discharging onto the beach; this will capture whether clean or polluted water is flowing through the project area. Hinterland patterns of pollution are not required for the purpose of this SEIA.

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	5.2.9 Land use	<p>Detailed land use map within project site; mapping of sensitive receptors within 5 km radius based on satellite imagery and ground truthing will be carried out. Following are method proposed for land use verification:</p> <ul style="list-style-type: none"> <li>• Analysis of high resolution satellite image of the area</li> <li>• Ground surveys</li> <li>• Land use maps from Town Planning Department and other studies/reports.</li> </ul> <p>Are these local or foreign satellite imagery?</p>	Foreign satellite imagery
	5.2.10 Socio-economy	<p>A socio-economic survey will be carried out within a 5 km radius of the boundary of the proposed project site. Profiling of residents and business owners around the project area, as well as visitors /recreational users of the project site will be carried out.</p> <p>The socio-economic survey will be carried out to gather the following information:</p> <ul style="list-style-type: none"> <li>• For residents: socio- -economic information such as educational achievement, employment, household income, quality of life, economic status, etc.</li> <li>• Perception towards the proposed project whether they are agree or disagree with the proposed development, perceived benefits and disbenefits from the project, and impacts to their environment and livelihood.</li> </ul> <p>How will the consultant ensure the persons being surveyed understand the future impacts of the proposed project?</p>	The respondents will be briefed on the project concept and activities.
		<p>How will the consultant ensure the persons being surveyed are able to “bench mark” the existing and the future development against similar beaches and parks in the rest of Malaysia and internationally.</p>	<p>The bench marking will be incorporated in the questionnaire. However, bench marking and questionnaire are two different things. Bench marking could be used as a tool to analyse the respondents' feedback and to ensure planning and implementation is according to international standard. Questionnaire survey is just to get public (respondent) response and opinion where only facts and figures about the project will be provided (to respondents). In other words, the questionnaire must be independent at all times.</p>

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
		<p>We should not be rude but we need to be honest and accept the fact is there is very little point in consulting persons who have no clue about what is good and what is bad about a public parks and also why.</p>	<p>Noted.</p>
		<p>The questionnaire survey forms should be released for public comment before they are adopted by the consultant</p>	<p>The questionnaire survey forms will not be released to the public for comments as the survey are geared to collect unbiased public views and perception of the project. The questions are structured to gather information as listed in the TOR under Section 5.2.10.1.</p>
		<p>Consulting professional people and NGO's makes a lot more sense even if there is the likelihood of the greatest resistance to the proposed TAED development coming from these groups.</p>	<p>Consultations with relevant authorities and NGOs will be undertaken for the SEIA, refer Section 5.1.4 of TOR.</p>
		<p>There are already several thousand signatures REAPPEAL THE REZONING TG ARU AS RESORT AND HOTEL submitted to the Mayor on Jun 7, 2014. The consultant should explain how ONE HUNDRED respondents can help to "shed more light" and sway TAED and Sabah State Government's thinking?</p>	<p>This well illustrates the point above on ensuring the persons responding understand the proposal. The rezoning plan shown by DBKK does not at all represent the Masterplan.</p>

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	Public Meeting	<p>Public Meeting</p> <p>One public meeting will be carried out to seek public involvement in scoping of issues. Apart from getting detailed information on the perception of general community on the project development, the meeting will also provide the stakeholders relevant information about the proposed project, and a discussion on the benefit and disbenefits accrued from the development of the proposed project both the local communities, district and the state.</p> <p>ONE (Planned) PUBLIC MEETING – appears to be a very dangerous proposition given that the people most concerned about preserving Tanjung Aru Beach for future generations are busy professionals and business people who work long hours and travel often.</p> <p>If only One Public Meeting is conducted for the Scoping of Issues, will there be more public meetings planned when the State Government and TAED is ready to present the findings of the SEIA for Tanjung Aru Beach?</p>	<p>The public meeting will be held towards the end of the SEIA study period.</p> <p>It is proposed that the Public Meeting is held after the first draft EIA has been prepared, to present the impact assessment findings, proposed mitigation measures and monitoring programme to the public.</p> <p>It is highlighted that this Public Meeting is to deliberate on the SEIA findings, not the project in general. It is agreed that additional public meetings and consultations should be held by TAED with respect to the details of the project</p>
	5.2.10.1 Recreational use	<p>Visitor counts and record of activities will be conducted at three (3) locations along the beach and one location within the public park to record visitor densities and activities. Counts will be carried out over two one-hour periods (morning and evening) on two separate weekends.</p> <p>Counts of visitors only during One-hour periods (morning and evening) can be misleading. Particularly the morning. It appears the beach is busiest at sunset. Apart from weekends the counts should be taken during long weekends and holidays when Tanjung Aru Beach is busiest. That is when the figures matter most. For example the week ending 25 July 2014.</p>	<p>Survey for the SEIA study will take into account the holiday season and long weekends, refer updated TOR at Section 5.2.10.3</p>

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	5.3.3 Water Quality Modelling	<p>The study will focus on modeling the seasonal water quality in and around the development study site and the canal system with specific focus given to biological oxygen demand, dissolved oxygen, bacteria i.e. E. coli, intestinal enterococci and eutrophication/nutrients (ammonium and nitrate). Additional emphasis will be given to the seasonal influence of potential pollution sources such as Sg. Patagas and the impacts this river will have on water quality at the study site.</p> <p>Modelling shall also consider the possibilities of pollution by the resort, hotel owners and also the condominium house. Studies also should consider the marina and super yacht dock where big ships would potentially bring other evasive marine or animal and ship waste into the fragile ecosystem of the tg aru beach and surrounding area.</p>	<p>All the present discharges that currently flow over the complete length of Tanjung Aru beach are included within the studies.</p> <p>The marina management plan developed by the marina operator will address the problems of vessel waste within the marina.</p>
	5.5 Identification and Assessment of Mitigation measures	<p>A detailed review and assessment of mitigation measures appropriate to the proposed project is required for each environmental issue identified. Mitigation measures to be considered will include those based on the Consultant's experience and those recommended in EPD publications.</p> <p>Mitigation measures based on control (i.e. pollution control) will be identified based on industry best practice with respect to environmental impact and a review of relevant legislation, guidelines, assessment criteria and standards relating to environmental quality pollution issues.</p> <p>The consultant and TAED needs to explain why. Because if this is and was possible then why is it that the drains, waterways and beaches in Sabah and Kota Kinabalu are this polluted today? Granted this assertion is made from sight and smell alone. But no one can deny we have some of the most polluted drains in Kota Kinabalu City. Which by the way is most surprising given that we do not have any "heavy industries" and we also have a fairly small and low-density population?</p>	Outside scope of study

## A21. Marathamuthu S. (SM Muthu)

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No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1	<p>The TOR does not carry full details of a very important aspect of the project that is:</p> <ul style="list-style-type: none"> <li>Background information on the nature and extent of the project - that it involves reclamation of large tracts of the sea – at the moment about 444 acres. What are the alternatives to reclamation?</li> <li>There is no mention of any studies or records of erosion that is supposed to be the primary reason for the project.</li> </ul>	<p>The TOR states that the company developing the project is in the process of getting all the lands and also the approval for change in zoning. So, the lands are not theirs yet.</p> <p>As such isn't the developer putting the cart before the bull? Why is there such a hurry? Is there an attempt to like bulldoze their way through?</p>	<p>Discussion of the existing erosion and project options will be included in the SEIA. This has been updated in the revised TOR in Section 3.1.3 and Section 5.1.1.</p>
	<p>The proponent in his last statement gave a figure of RM45million to maintain the park and beach. The authorities can't even spend a few tens of thousands to upgrade and properly maintain the present Prince Philip Park, what more</p>	<p>This is not a private property but PUBLIC PROPERTY – who decided on the concept? Who made the decision to cover the natural beach and replace it with an unstable and extremely expensive to maintain man-made beach?</p> <p>The public were not involved in the concept and design as they were no public consultations of any sort on it. The beach belongs to the public and there should be a referendum on such a treacherous decision</p>	<p>The breakdown figure required for the maintenance of the entire development will be further discussed in the SEIA.</p>

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	<p>RM45 million a year. Would they continue to spend such amounts? For how long? Where will the sand come from? Balambangan would have run out of sand by then – its beaches sand-less. The man-made beach is not sustainable in the long run. If they insist on it, all the sands from all the islands of Sabah would slowly but slowly be 'mined' to sustain the man-made beach.</p>	<p>Heritage values have not been taken into account. It was the first and only beach for the people of Kota Kinabalu (Jesselton). Tanjung Aru beach also means so much memories to so many residents and people of Kota Kinabalu. This project will bury forever all these memories.</p>	<p>The socioeconomic surveys will take into account the impacts of the proposed project to the public which includes heritage values. Refer to updated Section 5.2.10.1 in the TOR.</p>
	<p>4.3.1.2 Change in Beach and Landscape Character</p> <p>"Although the Project will address existing erosion problems and improve the beach quality, the development will inevitably change the nature of the environment from primarily natural and vegetated beach and immediate hinterland areas to a more built up landscape. This affects the cultural and aesthetic character of the area. Given the increasingly urbanised nature of Kota Kinabalu City, natural areas are increasingly limited and are in general highly valued by the residents of KK. ..."</p>	<p>For any project that is Environmentally sensitive – there must be an in-depth study into alternatives available. The questions to ask are: 1. If it's a case of erosion – "Are there alternatives to solve the problem without reclamation?" 2. If it's a case of wanting lands – "Is Sabah short of land?"</p> <p>For the above reasons and due to the fact that global warming is threateningly on to us, I strongly suggest that the Environmental Protection Department – as custodians and caretakers of the State's Environment – reject not just the TOR but reject the project outright and stop it from going any further.</p> <p>The EPD in fact, should remind City Hall to upgrade and maintain the natural existing beach and the surrounding waters from the aspects of health, ecology, Environment, aesthetics and social</p>	<p>Project alternatives will be discussed in the SEIA.</p>



## A22. Sabrina Melisa Aripin

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No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1	<p>I reject this ToR because the beach belongs to us the public and we were not involved in the concept and design as there were no public consultations of any sort.</p>	<p>As a concerned member of the public, I also noticed that many so-called public amenities shown in the plan are financially out of reach of most of the public eg. the proposed golf course, Yacht Club, Sailing Club, Tanjung Aru Golf and Country Club, which presumably will be membership only establishments. How many of the present users of Tg Aru beach will be able to afford membership fees of establishments such as these? Therefore it is misleading to say 68% of the project is open to the public – this should be qualified into 2 categories: open to the public free of charge and open with membership fees.</p> <p>I doubt that any of the proposed luxurious residential areas will be affordable to the common Sabahan who are already suffering, which concludes that this development is NOT for Sabahans, thus debunking the so-called tagline "Bringing the Beach Back to the People".</p>	<p>The public perception to the proposed project will be collected during the socioeconomic surveys as outlined in Section 5.2.10.1 of the TOR.</p> <p>Project components and land use breakdown will be further outlined in the SEIA, refer to Section 5.1.1 of the TOR.</p>

### A23. Jaswinder Kaur Kler

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No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1		<p>There are inconsistencies in the TOR for the SEIA document, indicating that this is a development concept that is still on the drawing board. On this basis alone, this TOR should be rejected as the SEIA is not for the final development, which is subject to change. This is clear from Section 2.3.1 that states "...components ... are subject to change". The public is being asked to comment on a TOR for a project of which components are not yet finalised and feasibility studies not yet been carried out. If "components are subject to change" how can the TOR be sure to cover all aspects?</p>	<p>The SEIA is a planning tool which should be carried out at an early phase of project development, such that any required changes or appropriate mitigation measures can be incorporated into the detailed design.</p> <p>As per EPD Guidelines, the objectives of EIA, among others, are:</p> <ul style="list-style-type: none"> <li>• To examine and select the most appropriate development options available</li> <li>• To formulate and incorporate appropriate abatement and mitigating measures into the development plan.</li> </ul> <p>In terms of the detailed design studies, it is important to note that for large-scale project such as the TAED, the detailed design works encompass an extensive and detailed scope, with an associated large financial commitment.</p> <p>It is therefore important that the EIA is carried out prior to the detailed design stage.</p> <p>This is underscored by the International Association for Impact Assessment best practice principles for EIA, which highlights that EIA is the process of "identifying, predicting, evaluating and mitigation the ...effects of development proposals <u>prior to major decisions being taken and commitments made.</u>"</p> <p>Project components will be further outlined in the SEIA, refer to Section 5.1.1 of the TOR. It is noted that the definition of the masterplan and assessment of potential impacts in the SEIA will be at a sufficient level of detail to enable the authorities to evaluate overall environmental outcomes that may occur through the implementation of the project and any (sub-) development within the TAED Masterplan.</p>

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
		<p>I am also concerned that the beach will be closed for a minimum of 18 months in the event this project gets a nod. Please do not expect the public to crowd at that small stretch between the Kinabalu Yacht Club and Shangri-La's Tanjung Aru Resort, or to use Likas Bay as an alternative. What guarantee is there this project to widen the beach will not fail? And if it does, who is going to bear the responsibility?</p>	<p>The construction programming will be addressed in the SEIA to see how the restrictions to public access can be minimised.</p> <p>Point noted and the beach will be studied as part of the modelling and technical review to ensure the new beach will not "fail"</p> <p>The management and monitoring of the beach will be included within a beach management plan to be addressed by the project proponent.</p>
		<p>It is interesting that the signboard and commitment of the State Government is to return Tanjung Aru Beach to the people of Sabah. How is it that this project has reached TOR stage WITHOUT consulting the very people it is for? I understand that there was only ONE public meeting, and this does not justify a project of this scale. We are the stakeholders here, and we deserve every right to be involved in whatever the government wishes to do with Tanjung Aru.</p>	<p>NA.</p>
		<p>The public amenities shown in the plan are out of reach, financially, for most of the members of public who currently frequent the beach with their families. The proposed golf course, yacht club and sailing club are clearly places that only accept members. It is therefore misleading to state that 68% of the project is accessible to the public. In this case, selected members of the public. We need to know details of how much is for the public free of charge and areas designated for exclusive clubs.</p>	<p>Project components and land use breakdown will be further outlined in the SEIA, refer to Section 5.1.1 of the TOR.</p> <p>The breakdown will distinguish between built up areas (development areas), public recreation and open space, vs paid public amenities and recreational areas.</p>
		<p>Impact on the beach area between STAR and Sugar Bun is not included, and the only explanation for this would be that the effects are damaging and this is why it has been left out of this TOR</p>	<p>Refer to Section 4.3.1.2 and Section 5.1.2 in the TOR.</p>

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
		Need clarification on Section 2.2.2.1 on the beach width being 50 to 100metres, as it does not state what definition is used for this.	Refer to Section 2.2.2.1 in the TOR.
		I am also concerned about sewage and filthy drains, which will not disappear overnight with this project, as claimed. The problem is at the source – including Sabah’s sewage system that is not functioning well, statewide. To state that this project will overcome this problem is downright misleading.	The TOR does not claim that this project will overcome the problem of Sabah’s sewage system.
		Reclamation is another worry, and I am sure it will impact not only the vicinity, but also the Tunku Abdul Rahman Marine Park (TARP). As it is, sedimentation can be seen at sea when flying into KKIA (if you sit on the left side of the aircraft). I am imagining this to be quite a disaster	Sediment plume modelling will be conducted to assess the impact of the plumes during the reclamation stage. In addition, monitoring will also be conducted throughout the implementation stage.

#### A24. Michael R Hastie

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No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1	Water quality	There is no mention of preventing continued pollution from existing sewerage discharges and how they will be monitored. This is the main cause of poor and unhealthy water quality on the beaches	The existing discharges flowing out of the drains across the Tg Aru beach will be addressed as part of the project.

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	Beach/Foreshore Erosion	<ul style="list-style-type: none"> <li>• There has been much talk of erosion to the natural foreshore recreational area and loss of Aru tree cover as a reason for the need of this development</li> <li>• There is no mention of this in the TOR in spite of the continuing reference to the supposed problem.</li> <li>• In fact records show that there is no loss of natural beach and tree cover over the last 50 years.</li> </ul> <p>This important reason for validating the development should be covered in the TOR and it should show how it will mitigated and the area replaced for use by the Public.</p>	<p>See revised TOR for the description of the existing shoreline condition including erosion at Section 3.1.3.</p> <p>A key element of the Project is to improve the beachfront and associated amenities for the public, as a perpetual heritage to be enjoyed by all generations. The measures to mitigate any impacts due to the development will be further discussed in the SEIA.</p>
	Public Amenities (Open Public Access)	<ul style="list-style-type: none"> <li>• Prior to the proposed development there was approximately 35Ha of beach foreshore frontage freely accessible to the public plus 3 football pitches (one of which is taken up by Perdana Park) and Prince Philip Park.</li> <li>• What replacement facilities with free access to the public will mitigate the loss of this facility. Apparently there is only 4Ha remaining on Beach 1 and the proposed new Prince Philip Park (without vehicle access).</li> </ul> <p>What facility will be provided to replace and mitigate this loss of public access?</p>	<p>Improved facilities are as outlined in Section 2.2.2 of TOR.</p> <p>There will in the initial stages of construction be some impacts to the existing beach along the project frontage. Note however that the beach from Jalan Matt Salleh to the STAR (approx. 1/3 of the Tg. Aru beach) is not within the project site and will continue to be open to the public.</p> <p>Phasing of the construction works is intended to reduce as far as possible restrictions to public access and to return part of the new beach as early as possible for public use. Additional sections of beach are planned to be opened as soon as possible as the project develops.</p> <p>The planned constructing staging will be reviewed in detail in the SEIA, and changes to the schedule, phasing and other potential measures will be evaluated to determine the optimum.</p>

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	Public Amenities (Marine Activities) Sailing	<ul style="list-style-type: none"> <li>• Currently Recreational and Competitive Dinghy sailing takes place from Kinabalu Yacht Club which is also a source of tourist revenue at the various Annual Regattas.</li> <li>• The prime area of dinghy sailing takes place in the area proposed for reclamation at beaches 2 and 3 ie within the 350m of reclamation from the current shore.</li> <li>• The long shoreline is perfect for windsurfer sailing. With breakwaters projecting 1200m and 600m into the open sea the activity will be significantly curtailed.</li> <li>• How is this amenity loss going to be mitigated as the area to the North (previous sandbar) is too shallow at Low Tide for sailing activities.</li> </ul>	<p>The launching of the yacht club dinghies takes place in front of the yacht club and this will not change.</p> <p>The actual sailing occurs offshore and it is anticipated that this will still occur once the project is implemented.</p> <p>However the point is noted regarding the concern with the breakwaters projecting some distance into the sea and the shallow water to the north and this will be investigated during the SEIA.</p>
	Public Amenities (Marine Activities) Parasailing, etc	<ul style="list-style-type: none"> <li>• Loss of access to the beach 2 and 3 will severely restrict all those activities that require open spaces to take place.</li> <li>• This will reduce the current benefits of the 3km of beach front available to both local participants and visitors.</li> <li>• How is this loss going to be mitigated?</li> </ul>	<p>Noted and will be assessed further in SEIA, refer to Section 5.1.2.</p>

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	Public Amenities (Marine Activities) Recreational exercise	<ul style="list-style-type: none"> <li>Few areas in Kota Kinabalu remain accessible in their natural environment for Jogging, walking etc., except Tg Aru. and Tun Faud Park at Bukit Padang. Both for Local Residents and Visitors</li> <li>To replace this with an artificial jogging track constructed of concrete / asphalt paved roads cannot be compared to a natural beach.</li> <li>The current beach extends uninterrupted for approximately 3 Km. This will be now broken by deep wide drainage channels and private beaches.</li> <li>What alternative / mitigation is to be provided. This is not mentioned in the TOR</li> <li>There is no mention of what areas in the development will be accessible to the public. A figure of 69% of the development area will remain un- built. How much will be accessible to the public</li> </ul>	<p>Refer to Section 2.2 in TOR.</p> <p>Public can still choose to run on beach. Refer to Section 2.2.2.1 of the TOR.</p> <p>The current beach is in fact broken up by several drains which discharge directly across the beach. With the proposed development, the 2<sup>nd</sup> and 3<sup>rd</sup> beaches are unbroken by any drains or structures and will be accessible to all (i.e. no private beaches). People can easily cross from the First Beach to Second Beach through the access bridges provided at the Fishermen's Wharf area. There are no private beach areas in the Project; the full length of beach is for public use.</p> <p>Project components and land use breakdown will be further outlined in the SEIA, refer to Section 5.1.1 of the TOR.</p> <p>The breakdown will distinguish between built up areas (development areas), public recreation and open space, vs paid public amenities and recreational areas.</p>
	Public Amenities (Marine Activities) Group activities	<ul style="list-style-type: none"> <li>Currently the foreshore and beach are freely available for group activities such as beach football kite flying, picnicking etc., private vehicle parking is easy for access to the beach.</li> <li>The proposed development has no public access to what is now Beach 2 and 3.</li> <li>There is no mention in the TOR on how this loss will be mitigated.</li> </ul> <p>World wide there is no example of a Public Beach of such value being built over for Commercial purposes.</p>	<p>The public will have full unrestricted access to the full length of the TAED project beach and promenades. Access however is likely to be restricted to vehicles but adequate parking and electric buses will be provided to facilitate public access.</p> <p>Refer to Section 4.3.1.2 in TOR.</p>

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	Construction (Drainage channels and marinas)	<ul style="list-style-type: none"> <li>The drainage channels will cut the foreshore and beach into small sections most of which will be inaccessible to the Public.</li> <li>How will the loss of this continuous open recreational area be mitigated.</li> <li>The excavation of a 4m deep channel in sandy ground will require substantial protection. Also there will be constant silting of the channel.</li> <li>How will this be mitigated to prevent water stagnating.</li> </ul> <p>Is there any benefit to KK residents in the two drainage channels?</p>	<p>The entire beach will be open for use by the public.</p> <p>The length of the existing and the new beach will be the same and additional lengths of promenades will be created for public access.</p> <p>The channel will have foundations designed to prevent settlement and problems within the ground and studies show that the channel will not be subjected to constant siltation problems. The entrance to the channel is offshore outside the area where most of the sediments move and there are no inlets into the channel to cause silt to enter.</p> <p>Studies have been undertaken to show that most of the time the water will not stagnate, however in case there is a problem a means of controlling the flow and flushing of the channel will be incorporated.</p> <p>The channel is not for drainage other than normal surface water run-off and it should provide a nice promenade on which the public can walk.</p>
	Construction (Reclamation Filling)	<ul style="list-style-type: none"> <li>Filling with what and from where??</li> <li>This is a key component of the proposed development. Where will the fill material be derived and how will it be placed.</li> <li>What will be the effect of excavation and filling on the source and on Tg Aru and the people (Residents and Visitors) who currently enjoy the beach and foreshore facilities in the area.</li> </ul> <p>The environmental effects both temporary and permanent are not clearly addressed in the TOR</p>	<p>The sand fill requirements in terms of land based fill, marine fill, top soil etc. have been updated in the TOR Section 2.2.2.5. However, the locations of these sources are as yet unknown as investigations are still ongoing as outlined in the TOR under Section 2.2.2.5.</p> <p>The environmental impacts during construction (temporary) and operation (permanent) are outlined in Section 4.1 of the TOR.</p>



No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	Construction (Beach Development)	<ul style="list-style-type: none"> <li>• The proposal to construct a beach in 2+m of sea water (at low tide) 350m out into the open exposed sea is unlikely to succeed.</li> <li>• Natural sand will not be deposited as shown at the Airport Breakwater at beach 3 and all other local Kota Kinabalu reclamation projects.</li> <li>• No mention is made of where the beach sand will be derived and what the effect will be in the area of excavation.</li> <li>•</li> <li>• If the beach was constructed how would it be maintained particularly during the South West Monsoon when the sand will be washed away.</li> <li>• These and other related points need to be investigated within the TOR. Mitigation for the source and the proposed beach material should be clearly stated.</li> </ul> <p>A white elephant beach would not be appreciated by anyone.</p>	<ul style="list-style-type: none"> <li>• The beach stability will be assessed as part of the modelling for the Masterplan and detailed design stage.</li> <li>• It is not the intention to have an amenity beach along the airport breakwater.</li> <li>• The source of beach sand is currently being investigated and will be either from offshore or on shore sources. The sand source may require a separate EIA if it is not obtained from an already licensed source.</li> <li>• The modelling and engineering design will assure the beach is not washed away during any monsoon condition.</li> <li>• All the points will be assessed as part of the SEIA</li> </ul>
	Construction (Breakwater North)	<ul style="list-style-type: none"> <li>• The Northern breakwater approaches the -5m contour and would require a construction height of about 7m (23ft) this construction will disrupt and endanger all marine activities (Sailing, fishing, parasailing, boating, skiing etc.)</li> </ul> <p>What mitigation will be taken to allow the continuation of these activities particularly sailing regattas.</p>	<p>The breakwaters approach the -3m to -4m CD contour and the height is being assessed as part of the engineering design with the view to keep the height to an acceptable limit.</p> <p>The mitigation for water activities with regards to disruption and danger will be assessed during the SEIA</p>

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	Construction (Breakwater South)	<ul style="list-style-type: none"> <li>The Southern breakwater and access to the proposed marina is in about 12m (40ft) of water requiring a structure of about 16m (53ft) high with a wide extended base.</li> <li>This along with the protection of the proposed golf course will require a vast amount of stone.</li> <li>There is no indication from where the stone will be taken from and how it will be transported and placed and what disruption will occur to the marine activities.</li> </ul> <p>Details of mitigation measures for excavation, transporting and placing the huge size and volume of stone required, needs to be addressed.</p>	<p>Point noted regarding the breakwater and the height is being assessed as part of the engineering design with the view to keep the height to an acceptable limit.</p> <p>Point noted about the stone (armour rock) and this will be assessed as part of the SEIA and the detailed engineering design.</p>
	Construction (Siltation Beach 1)	<ul style="list-style-type: none"> <li>The construction of breakwaters to the North and South ends of beach 2 and 3 will disrupt the natural flow of water and sand.</li> <li>This is most likely to result in a build up of fine silt with resulting loss of the current sandy beach and a muddy sea bed.</li> </ul> <p>How will this be mitigated by the development.</p>	<p>The breakwater positions and the effect on the beaches, currents, waves and sediment movement are being fully assessed as part of the modelling for the Masterplan development.</p> <p>Any mitigation measures will be contained in the SEIA.</p>
	Construction (Climate Change) Not mentioned	<ul style="list-style-type: none"> <li>There will be a rise in sea levels and a likely increase in the intensity and frequency of storms.</li> <li>This will affect our children and grand children, together with all the current residents and visitors to Kota Kinabalu.</li> </ul> <p>No mention is made of the mitigation that will be required for this very important situation.</p>	<p>Noted. The design will fully take account of future sea level rise, tropical storms and potential tsunamis</p>

## A25. Tan Hui Shim

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No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1	Chapter 4 Environmental Issues	Many of the important issues were deprioritised or dropped along the way	The issues identified in Chapter 4 will be assessed in the SEIA as indicated in Section 4.3 in the TOR. The purpose of the scoping and the TOR is to set priorities in terms of the issues to focus on in the SEIA.
	Chapter 4.2	Some ratings seem to be modulated.	Ratings and criteria listed in this chapter are based on EPD's recommended SEIA matrix. Refer to Section 4.2 in TOR.
	Chapter 4.2.1 – 4.2.3	Is the ratings done in an objective and credible manner? How was the overall ratings derived. All these need to be documented. The categorization of impacts is inadequate.	<p>The rating is explained in the TOR, refer Section 4.2. Each of the scores, including the “overall rating” is based on the judgement of the EIA consultant based on the knowledge of the sensitive receptors and types of impacts generated by the Project activities. This matrix is based on EPD guidelines and does not include a formula to transparently calculate a final score or impact rating.</p> <p>It is proposed that a more detailed matrix is used in the SEIA based on the RIAM method (Rapid Impact Assessment Matrix), which uses a similar scoring system for the following criteria (importance, permanence, cumulativity and reversibility) with the additional criterion of magnitude (the severity of the impact). The scores are used in the following formula, such that a transparent ‘score’ or impact severity rating can be calculated:</p> <p>(Impact X Magnitude) X (permanence + reversibility + cumulativity)</p> <p>This has been added in Section 5.4.1 in the Revised TOR.</p>
	Chapter 5	Omitted many of the issues and/or details identified earlier in the Chapter 4. The scope of work is therefore incomplete.	The scope of works described under this chapter encapsulate all the issues identified in the earlier chapter.

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	Coral Reef Survey	Reference to the 1998 coral reef survey data for TARP is unacceptable; coral reefs around KK, including those in TARP, were heavily damaged by Tropical Storm Greg in December 1996. Some pre-1996 surveys and more recent surveys should be referred to.	<p>The TOR refers to readily available data on live coral cover prior to the commencement of the SEIA study.</p> <p>As outlined in Section 5.2.8 of the TOR, coral surveys will focus on the reefs off Tg. Aru headland. Updated information will be sought on the live coral cover of reefs within the TARP from Sabah Parks and other sources; no primary surveys are proposed. The reason for this is that the impact evaluation methodology does not depend on the status of the reef. Rather, absolute water quality (suspended sediment) thresholds will be used to assess the impact on the TARP boundary, based on Malaysian Marine water quality standards for marine parks and a literature review of threshold limits for corals.</p>
	Before monorail (which is outside the control of this project) is put in place	How would public access the Tg. Aru Beach? Will there be enough parking space? As it is, many are desperate enough to park illegally in front of Waikiki Condominium and risk being fined.	The public will have full unrestricted access to the full length of the TAED project beach and promenade. Access however is likely to be restricted to vehicles but adequate parking and electric buses will be provided to facilitate public access.
	The breakwater/terminal structures on the north and south sides of the project will affect the current flow, the waves, the transportation of sands, the floating debris, the outflow of Sg. Petagas, and so on.	These are not yet included in the scope of study	<p>All these aspects will be fully studied as part of the Masterplan development and within the engineering design.</p> <p>Section 5.1.2 of the TOR showed the local model extent in the analysis of the hydraulic study. Section 5.3 described the hydraulic study that will be carried out during the SEIA study.</p>
	The study, surveys and modelling need to take into consideration the extreme weather events which are becoming more often and severe (e.g. flash floods, storm surges, rainstorms, strong winds) and rising sea level associated with climate change.	The timeframe for the data collection is not detailed; the timeframe for data collection may not reflect the seasonal changes of the biological environment, the weather and related impacts.	Data collection schedule will be documented in the SEIA study. It is noted that for currents, waves, water quality etc which are governed by seasonal changes, the data will be extrapolated temporally through numerical modelling.

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	Public consultation	Should include wider representation (not only within 1 km from the project site) because users of Tg. Aru beach come from many parts of Kota Kinabalu and Sabah.	The socio-economic surveys will be carried out within the direct impact zone of the proposed site that will covers target groups from Kg. Contoh up to Kg. Tg. Aru. Refer Section 5.2.10.1 of the TOR.
		Since this project impact on public interest, there should be peer review of the SEIA report by experts in relevant field.	The SEIA will be reviewed by a panel of technical experts appointed by EPD to review the report.

## A26. SEPA

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
26	Project Proponent	The document states that this is a fully government owned company. But this can change at any time, which means future plans can be changed at any time.	NA
	TOR Outline: Section 1.4	Has not taken cognizance of the above notes on TOR, where is section 5-7? It is not available in this document. The TOR is incomplete. There are many parts that are missing.	Section 5 – 7 is available in page number 5-1 onwards. The TOR submitted is a complete version.
	Project Concept : Section 2.2	The master plan framework needs to be detailed in SEIA with the specifics of which initiatives will be used. The project concept is not detailed properly components are missing from the overall list (e.g. infrastructure and utilities have no explanation). There are insufficient details on “how the public will access the public areas”.	Noted. The master plan framework will be described in details in the SEIA.
	Table 2-2 page 2-4	The table uses the unit of hectares, but figure 2.9 is in acres. There should be consistency in the usage of units. No interchanging should be allowed, choose and use one unit for the whole document.	Noted. The same unit will be applied for the whole document in SEIA.
	Table 2.2 Proposed project land use components	The breakdown of components (hospitality, residential...etc) does not give a clear indication. Please clarify the definition of mixed use, recreation and green areas.	Noted. A definition of the components will be provided in the SEIA report.

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	Figure 2.2 VS Figure 2.7	<p>Tg Aru Golf Club VS Tg. Aru golf and country club + Academy School VS not identified in 2.7.</p> <p>Seaview apartments VS not identified</p> <p>Oceanic park VS oceanic park + adrenalin park</p> <p>Fishermans wharf VS fisherman wharf + maritime museum</p> <p>Old ship?</p> <p>Beach area VS sailing club</p> <p>Beach area VS beach Club (3)</p> <p>Sunset viewing deck VS Tg. Aru look out</p>	<p>Both figures show different level of information and cannot be compared side by side.</p> <p>Figure 2.2 shows the proposed conceptual layout plan at a macro level and Figure 2.7 is showing the location of the proposed visitor attractions and community facilities only.</p>
	Section 2.2.2.1 Beach	<p>What do the consultants mean by beach width being 50 – 100m? Define the consultants usage of “beach width” (normal definition is the distance between dune crest and shoreline position at high tide). The consultants then continue to state that the beach crest is around 30m? Does the beach crest include the berm crest and the storm berm crest? A more detailed explanation is needed. Figure 2.4 includes the promenade and the green area at 50m.</p> <p>Why are there 2 promenades in Figure 2.4?</p> <p>Indicate swash zone rather than beach slope. Indicate low water mark and high water mark, berm crest and storm berm crest.</p> <p>Details on retaining wall should be included.</p> <p>There are not sufficient details within this section for the Panel reviewers to make informed decision.</p>	<p>The beach width has been designed based on a distance from the promenade to the Mean Sea Level of approximately 110m. The beach crest (upper flat section) has been designed with a width of 50m.</p> <p>The distance from the promenade to Highest Astronomical Tide is to be approximately 90m.</p> <p>Obviously these distances will change depending on the monsoon season and after severe storm events. The distances from the promenade to HAT are sufficiently wide to allow a buffer should the beach move seasonally. What is equally important is the beach crest level which will be raised approximately 1.3 m from the existing level.</p> <p>The correct annotation will be addressed in the SEIA</p> <p>The retaining wall / backstop protection is provided in the unlikely event that the new beach defences are compromised in terms of lowering of levels. Details on the low level protection to ensure stability of the seawall will be provided within the SEIA.</p>

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	<p>SMP</p> <p>Low/medium density, in addition to chronic water quality problems, the main public beach at Tg. Aru is suffering moderate erosion and needs restoration, preferably through nourishment to maintain the quality of the beach (Ref: SMP Sectoral report on Coastal Processes – DHI)</p>	<p>MU C5-11 Tg. Aru Beach</p> <p>The Tg. Aru beaches are the only reasonable quality public beaches in the near vicinity of Kota Kinabalu. Tg. Aru Beach is suffering light to moderate erosion. The old seawall structures have failed, and a new structure based on left-over pile caps has been installed along the worst hit sections of the beach, see Figure 2.10. Whereas this may serve the purpose of stopping further retreat of the coastline and protect the adjoining Prince Philips park, the solution is not very attractive and does not solve the underlying problem, which is a lack of sediments within the cell. This cell suffers from a general lack of supply of sediment, and although the loss rates are small, it will lead to continued erosion that will eventually starve the sediment cell and affect its recreational value. It is recommended to consider carefully engineered nourishment to maintain the beach and recreational value rather than (or in combination with) hard structure solutions (Ref: Ibid, page 2-21)</p> <p>In the SMP context, coastal reclamation is generally discouraged, but there are some areas where the positive effects are judged to outweigh the potential negative impacts, and where reclamation in a properly planned manner is recommended. Whereas it is impossible to give specific rules on the use of reclamation, some pros and cons together with examples of appropriate and inappropriate use of reclamation will be provided (Ref: Ibid, page 6-1).</p> <p>It is noted that this cell suffers from a general lack of supply of sediment, and although the loss rates are small, it will lead to continued erosion that will eventually starve the sediment cell and affect its recreational value (Ref: Sabah SMP Baseline Report – Cell by Cell Description by DHI, Dec 2005)</p>	<p>Point noted and all the aspects of providing an amenity, coast protection and flood defence are being incorporated into the proposed scheme to address all the points of concern.</p>
	<p>Section 2.4.1</p>	<p>All surveys, studies and investigation to be made available to the public. Erosion assessment and studies should be conducted in detail. Plus risk factors</p>	<p>Noted and to be included in the SEIA</p>

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	Section 2.4.3.1 Hotels	12000 residents excluding hotel guests, please include residents on site for hotels at full capacity. Mentions 5 hotels, earlier sections mention 4 hotels and at a recent presentation there was mention of 6 hotels by Datuk Victor Paul. There appears to be inconsistencies.	Noted. At the time of the TOR submission, the latest masterplan was referred. Nevertheless, the final masterplan will be applied for the SEIA study, although the proposed land uses are revised but the core project footprint/development boundary still remains the same. Changes to reflect the masterplan used for the SEIA will be applied.
	Section 2.4.3.2 Public Areas and facilities	Be consistent and include areas in acreage/hectarage. Figure 2.15 indicates a width of 50 – 110m. There is a huge difference between 50 and 110. In earlier parts of the TOR it mentions 100m. Once again be consistent and the range given is too large. What is the exact area that would be fully accessible and owned by the public?	Noted. Updated in the TOR Section 2.2.2.1. .
	Section 3	There is no mention of erosion. Should be included.	Updated in the TOR Section 3.1.3
	Section 3.2.3	Include reasoning as to why sedimentation is very high in the marine parks. And what would the impact of this project be on the surrounding ecosystems?	Current sedimentation at the marine park is outside the scope of the SEIA. However, potential morphological or water quality impacts as a result of the project will be assessed in the SEIA.
	Section 3.3.3 Socioeconomics	The commentary is generalised, focus on the Tg. Aru area.	Details will be included in SEIA. Information to be presented in SEIA is as outlined in Section 5.2.10 of the TOR.
	Table 3.1	Why is Seri Mengasih not listed? Mention was made of important mudflats in the TOR, however this has not been added in this table. Do not limit this table to within study site area for the human environment. It should be extend to the ZOI.	Noted. Updated in Section 3.4 of TOR. Revised, no mudflats occur in the Project area. ZOI is the extent of possible impacts due to the project, which includes the sensitive receptors tabulated in Table 3.1. Refer updated Section 3.4 and 5.1.2.



No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	Public Meeting	Why only one?	<p>The public meeting will be held towards the end of the SEIA study period.</p> <p>It is proposed that the Public Meeting is held after the first draft EIA has been prepared, to present the impact assessment findings, proposed mitigation measures and monitoring programme to the public.</p> <p>It is highlighted that this Public Meeting is to deliberate on the SEIA findings, not the project in general. It is agreed that additional public meetings and consultations should be held by TAED with respect to the details of the project.</p>
	Erosion	There is no data to support the purported erosion. Or it is just a matter of insufficient accretion, it was mentioned in the SMP that this area suffers from lack of supply of sediment. (Ref: Sabah SMP Baseline Report by DHI; Dec 2005)	<p>It should be clear that we are discussing the beach along the project frontage and not from the STAR to Jalan Matt Salleh.</p> <p>The erosion is generally continuing along the project frontage as documented by the following:</p> <p>There is clear visual evidence of past and ongoing erosion.</p> <p>Photographic records and recent surveys show the erosion that has occurred from 1966.</p> <p>Two lines of existing coastal defences have failed due to coastal erosion.</p> <p>Ongoing erosion is evident by the scouring of material occurring behind the line of existing defences.</p> <p>The erosion of revetments and around tree roots at the south end is evidence of the continued erosion.</p> <p>There is little usable exposed beach now at high tides.</p>
	Beach nourishment	There is no mention of the continuous beach nourishment that would have to take place and the amount of funding that would have to be poured into this project, to ensure that the beach remains. Years? How much? Sand sourced? EIA? How long? Who bears the cost?	The beach nourishment is being assessed as part of the modelling for the Masterplan and will be included as part of a Beach Management Plan. The design will be undertaken to ensure beach nourishment is kept to a minimum.

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	Modelling	<p>Methodology and detailed explanations should be provided on assumptions made, situational bias, model-tweaking, pessimist and optimist biases, advocacy and politically correct biases.</p> <p>What is the impact of substituting laboratory measurements for nature?</p> <p>Detailed explanations should be provided for when short term predictions are scaled up for long term predictions and the risks that are involved.</p>	<p>Sensitivity analysis has been undertaken in the modelling where appropriate.</p> <p>The latest methods for assessing the design criteria as input into the design of marine structures and beaches is being used to assess the Masterplan and project performance.</p>
	Approach	<p>The SEIA should not be limited to the masterplan concept and design only. It should encompass the whole project holistically. It should include the EIA for the source of the reclamation sand, the traffic. Detailed design and implementation of the individual investors should be aligned to the Masterplan SEIA.</p>	<p>The SEIA will incorporate the results and analysis of the supporting studies listed in Section 5.1.3 of the TOR.</p> <p>The masterplan contains detailed development guidelines for the individual investors which will be binding through incorporation in the sales and purchase agreements, hence assuring alignment with the Masterplan.</p> <p>It will however be impossible to include the detailed design for the developments of the individual investors who do not yet exist and incorporate this into the SEIA.</p>
	SEIA	<p>The aim of a SEIA is to protect the environment by ensuring that the agencies or bodies when deciding to grant the necessary approvals/licenses for a project, that is likely to have significant effects/impacts on the environment, does so in the full knowledge of those likely significant effects/impacts, and takes this into account in the decision making process</p>	<p>Yes. Noted.</p>
		<p>The aim of the SEIA is also to ensure that the public are given early and effective opportunities to participate in the decision making procedures.</p>	<p>Yes.</p>

No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
	TOR	<p>The TOR is not indicative of a MASTERPLAN SEIA. It clearly states in page 5-1 that the SEIA assesses only the masterplan concept and design. This therefore does not satisfy the definition of an SEIA. It is not possible to assess the design of a concept as many factors would not be accounted for.</p> <p>This along with the total absence of public consultation, where public consultation is defined as a regulatory process by which the public's input on matters affecting them is sought. This is to ensure efficiency, transparency and public involvement in large-scale projects or laws and policies.</p> <p>Due to the above the TOR should be rejected to be redone and amended after the necessary public consultations have been conducted properly.</p>	<p>The definition of the Special EIA is "projects having special magnitude and sensitivity regarding the environmental impacts which may extend beyond the geographical boundaries of the project site and/or can adversely affect the welfare of local communities" (Source: Handbook on Environmental Impact Assessment in Sabah (Second Edition) November 2005 by EPD Sabah). The fact that it is an SEIA means that the public consultation ('hearings') are conducted during the TOR/SEIA review process. It does not change the objective of the EIA which is to study in detail the key priority issues related to the specific project, which are identified in the TOR.</p> <p>In this case, the Project in question is a masterplan in which individual development areas will be sold to third parties <i>after</i> the necessary Project approvals and as such details of these developments are simply not available at this stage.</p> <p>We are unclear as to what is referred to by a "Masterplan SEIA". The many factors unaccounted for are also not specified.</p> <p>Public consultation on the TOR is covered through the public review period as required by EPD. There is no requirement for other consultations under the EIA review procedure.</p>

**A27. Dr. Rahimatsah Amat**

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 Jln Aru. Tg. Aru.  
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No	Item/Page	Comment	Action/Feedback by Proponent/ EIA Consultant
1		Sand source details and fill material to be clearly defined.	This will be defined within the SEIA
	Item 2.2.2.6	HAT need to be identified	HAT is a water level defined in the Malaysian and Admiralty tide tables and is defined in the modelling report.
	Project Boundary	Soil erosion for the entire area must be analysed and not just project boundary	Yes this is being taken into account
	Item 2.4.3.3	Solid waste management and catchment study.	Further details to be included in SEIA.

## A P P E N D I X B

### Technical Panel Review Comments



The comments received from the technical panels review are tabulated below. Comments received mainly on the project concept, scope and methodology of the SEIA as detailed in the TOR. Where comments do not relate to the TOR, the action/ response denoted in the following tables is “NA - Not applicable”.





Item	Description	Contributor	Action /Response
1	<b>Masterplan</b>		
1.1	<u>Project Land use Breakdown</u> Project “development area” of 32% was questioned. Golf course for example should be considered as development area.	SEPA	The SEIA will provide a clear breakdown and will distinguish between open public and paid public areas. See Section 5.1.1 of TOR
1.2	<u>Masterplan Changes</u> DHI highlighted that the latest masterplan (May 2014) is different from that presented in the TOR. The TOR presentation showed mostly updated figures, however, some figures were showing the old masterplan.	DHI	Differences between the two masterplans (TOR vs May 2014) were shown and discussed. Changes related to project components only such as addition of bridges and housing units. There were no changes in project footprint.
1.3	<u>Drainage</u> DHI informed the meeting that as part of the TAED development, drains at 1 <sup>st</sup> beach will be diverted and treated. WWF & SEPA request for this component to be minuted and noted.	DHI	For info
1.4	<u>Project Layout</u> The Masterplan must be fixed at the time of the SEIA report submission, as detailed design studies must be based on the latest Masterplan.	EPD	Noted.
2.	<b>EIA Scope</b>		
2.1	Marine Risk Traffic Assessment (MRTA) was not listed in the TOR as a supporting study to the project.	WWF	MRTA will be conducted as shown in TOR as page 2-20. It has also been added under supporting study at Section 5.1.3 of TOR.
2.2	Erosion impact and socioeconomic assessment should include Kg. Contoh located opposite the Sg. Petagas rivermouth.	EPD, SEPA	Noted. Updated in Section 5.1.2 (Figure 5.1)
2.3	Utility demand is to be considered in the SEIA, especially on the consumption of electricity and water during operations. Data on existing power line in the area must be included in the study. Discussion with electrical (SESB) and water department must be conducted.		SESB and water department will be consulted. See Section 5.1.4 of TOR.

Item	Description	Contributor	Action /Response
2.4	<b>Hydrology and Drainage</b>		
2.4.1	What happens to the water draining from KKIA runaway? Would the reclamation affect the flow discharges from the runaway?		The drainage from the KKIA runway currently discharges mainly through an outfall at 3 <sup>rd</sup> Beach. This drainage is being assessed as part of the detailed design and will be accommodated in the new scheme to ensure flow discharges are not affected.
2.4.2	What is the effect of the project on the existing drains in the area? Will the drain system in the area be assessed?		Yes, as outlined in Section 5.3 of the TOR.
2.4.3	Will the drains located at the 1 <sup>st</sup> beach be assessed?		Yes, as outline in Section 5.2.3 of the TOR, all the drainage network in the project area will be assessed.
2.4.4	The drains along 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> beaches and their catchments will be included in the SEIA study and flooding impacts will be addressed.	DHI	As outlined in Section 5.2.3 of TOR, assessment will be undertaken to address potential flood impact.
2.5	<b>Baseline Water Sampling</b>		
2.5.1	Marine water station to be added at Kg. Contoh for baseline data collection phase.	EPD	Updated at Section 5.2.5.1 of TOR
2.5.2	Study area for the Physical-chemical component should extend to Tg. Dumpil.		Yes, the physical-chemical component extends past Tg. Dumpil, refer to Section 5.1.2 Figure 5.1 of the TOR.
2.5.3	DOE informed that they have a water quality station within the TARP.	DOE	Info
2.6	<p><b>Geotechnical / geohydrological impacts</b></p> <p>Geotechnical and geohydrological (ground water) studies need to be conducted for the area due to excavation of the channel that is close to the airport runway as</p> <p>the removal/disturbance of soil and disturbance of the water table in the area may affect the stability of the nearby building/runway (causing subsidence/ risk of liquefaction).</p> <p>This may result in intrusion of salt water to the fresh water table.</p> <p>Geotechnical / groundwater expert to be included in the study team.</p>	JMG	Noted. Refer to updated Section 5.3.6 of the TOR.

Item	Description	Contributor	Action /Response
2.7	Zoning status (viz Local Plan) to be addressed. If planning status is not confirmed, the proponent needs to get a planner to do a planning brief.	TRPD/ DBKK	DBKK representative highlighted that zoning has been updated. Refer to updated Section 2.3.3.1.
2.8	<b>Public Access to the Beach during Construction</b>		
2.8.1	Responsibility for maintaining Prince Philip Park during and after construction should be identified in the SEIA study	DBKK	Noted. Refer to updated Section 2.4.3.8 of TOR.
2.8.2	Emphasise public park development in the construction sequence, i.e. prioritise handover of public areas, - park / beach should not be left till last.	EPD	The planned construction staging will be reviewed in detail in the SEIA, and changes to the schedule, phasing and other potential measures will be evaluated to determine the optimum with respect to socioeconomic impacts.
2.9	<b>Coral Reefs</b>		
2.9.1	1998 reef data used in the TOR is not a good representative of the reef condition in the current state. Newer data is to be referred in the SEIA study.	WWF	<p>The TOR refers to readily available data on live coral cover prior to the commencement of the SEIA study.</p> <p>As outlined in Section 5.2.8 of the TOR, coral surveys will focus on the reefs off Tg. Aru headland. Updated information will be sought on the live coral cover of reefs within the TARP from Sabah Parks and other sources; no primary surveys are proposed. The reason for this is that the impact evaluation methodology does not depend on the status of the reef. Rather, absolute water quality (suspended sediment) thresholds will be used to assess the impact on the TARP boundary, based on Malaysian Marine water quality standards for marine parks and a literature review of threshold limits for corals.</p>
2.10	Ballast water from the marina / yachts that could pollute the water quality in the area.	WWF	Noted. This will be assessed in SEIA, refer to Section 2.4.3.7.

Item	Description	Contributor	Action /Response
2.11	Impact of the breakwater structures on floating debris, in particular to ensure that floating debris will not be trapped at the 1 <sup>st</sup> Beach.	WWF	
2.12	Explanation on how low carbon emission objectives will be implemented.	WWF	Currently at TOR stage these options are being explored. The Green Building Index (GBI) for example requires fulfilment of a certain percentage of requirements; which specific requirements out of the full list is something that will be determined in the detailed design phase.
2.13	<b>Transparency &amp; Public Assurance of Compliance</b>		
2.13.1	How can the public be assured that the individual developers (sub-lot owners) will adhere to the building guidelines.	SEPA	The Project Proponent clarified that the Development Guidelines will be incorporated in the Sales and Purchase Agreement.
2.13.2	SEPA has also questioned the transparency issue on the reason to why the masterplan is not shared to the public at the earlier stage.	SEPA	DHI noted that transparency and conflict of interest was raised as an issue via the public written submissions and that the EIA will examine ways to ensure transparency in the implementation of mitigation measures and EMP for the EIA in order to mitigate this concern.  Other transparency issues are however beyond the scope of the EIA.

Item	Description	Contributor	Action /Response
2.14	Explanation required demonstrating that the limited water quality sampling period proposed for this project is sufficient.	WWF	<p>The baseline water quality is to be derived from sampling at eight (8) marine stations on four separate occasions. These stations are distributed around the potential impact area, including off Sutura Harbour, at the boundary of the TARP, nearshore and offshore of the project site as outlined updated in Section 5.2.5.1 of the TOR.</p> <p>Two (2) water quality stations are placed inside Sg. Petagas to capture discharges from this main river.</p> <p>This comes up to a total of 10 marine and river water quality stations which will be sampled on four occasions on two separate programme (80 samples total).</p> <p>Discharges from the drains in the project area are also taken into account and included in the sampling. This encompasses 8 stations, and is to be carried out on 5 occasions as outlined in TOR Section 5.2.5.2. (40 samples total)</p> <p>In addition, water quality modelling will be carried out to extrapolate these data in space and time.</p>
2.15	The old growth trees that may be affected by the canal component, will it be addressed?		This will be determined during the SEIA study through mapping and identification of the old growth trees in the area. Refer to Section 5.2.7 of TOR.
2.16	Will the canal need any maintenance dredging? The SEIA is to address flushing of canals to minimise maintenance requirements.	SEPA	<p>DHI explained that siltation is likely to be very small therefore little maintenance dredging is expected. However some propeller wash may reduce the visible water quality therefore the channel may need to be lined with rock/gravels or other material.</p> <p>Flushing assessment will be documented in the SEIA report</p>

Item	Description	Contributor	Action /Response
2.17	What will the water quality in the canal be like?	SEPA	Modelling studies have indicated that the flushing will be good apart from periods of low wind that drives the currents. The installation of tidal gates to control flow has been recommended as part of the hydraulic study and these findings will be comprehensively reported in the SEIA.
2.18	The modelling coverage should extend further than Kg. Contoh.	Mr. Yusri (JMG?)	DHI clarified that the model extent in fact extends beyond Tg. Dumpil
2.19	<b>Fill / Construction material</b>		
2.19.1	The TOR does not differentiate between the volume of sand required for general fill and for beach nourishment. Specifics of this component need to be provided in TOR. Amount of land based fill material vs. marine sand fill to be specified.	EPD	Noted. Refer to updated Section 2.2.2.5 and 2.2.2.6
2.19.2	Beach maintenance activity was not highlighted in the TOR. This should be listed as a project activity in the TOR. Maintenance requirements and cost to be outlined in the EIA.	EPD	Noted. Refer to updated Section 2.4.3.8
2.19.3	Sand requirements such as volumes of sand required for beach filling or earthfill to be listed in the TOR.	EPD	Noted. Refer to updated Section 2.2.2.5 and 2.2.2.6
2.20	Source of armour rock to be specified.	Mr. Yusri	Noted. Refer to updated Section 2.2.2.5 and 2.2.2.6
2.21	Dumping ground for spoil material was not identified in TOR.	??	Further details will be included in the SEIA.
2.22	EPD requested that more details on the reclamation process and the type of reclamation protection structures to be added in the TOR. (i.e. location of hard structures, vs beach, etc.).		Noted. Refer to updated Section 2.2.2.5 and 2.2.2.6
2.23	Sabah Parks highlighted that TARP experienced erosion due to the Sutera Harbour reclamation and questioned whether study has included the possibility of the project affecting TARP in term of erosion.	Sabah Parks	Sediment transport / morphological impacts are included in the hydraulic modelling, which encompasses the TARP area.
2.24	<b>Water Quality Impact Assessment</b>		

Item	Description	Contributor	Action /Response
2.24.1	The discharges of Sg. Petagas diverted to deeper water may affect the fish population in the area. This need to be assessed in the SEIA.	WWF	Noted; water quality modelling of salinity, TSS and DO among others will be undertaken.
2.25	Water quality is currently placed as an “Issue of note”, WWF considers that this should be classified as a Focus Issue in the TOR.  The technology for the WWTP needs to be assessed in detail.	WWF	At scoping stage of the TOR, water quality was categorised as Issue of Note based on the matrix. The actual magnitude of water quality impacts may differ based on the assessment results during SEIA stage.
2.26	How is the project proponent safeguarding the security of the sub-lot buyers due to the presence of the public?	EPD	Detailed security measures will be left up to the individual operators; however in the masterplan, the setback of 35 m from the public promenade along the beach is considered an adequate buffer between the public promenade and the hotel/ resorts.
2.27	<b>Socio-economic Issues</b>		
2.27.1	Socio economic issue should be placed as separate chapter in the SEIA.	EPD	Noted.
2.27.2	Adequacy of provisions for public access need to be assessed in the SEIA. E.g. Electric buses – are they to be paid? Is there a time limit of operations? Is it 24 hours?	WWF	Noted.
2.28	DCA noted that their written comments have been sent, but highlighted the need to adhere to their height limit; the building plan to be submitted to DCA	DCA	Noted.

Item	Description	Contributor	Action /Response
2.29	The Project's alignment with the SMP 2005 management strategy for the area was raised.	EPD, SEPA	<p>The SMP Management Strategy for the area is Promoted: Low/Medium Density Tourism.</p> <p>There is no mention or general prohibition on reclamation for this location, however, beach nourishment over hard structures such as the seawalls presently observed was recommended.</p> <p>The present proposal includes the creation of a stable beach, fulfilling the SMP objectives of retaining the public beach. Elements of the project masterplan, such as the marina and fishermen's wharf breakwaters, serve to ensure this beach remains stable, while the reclamation serves to push the beach into deeper water, where the seabed profile will allow penetration of waves to the beach to maintain high quality sand (by preventing siltation of fines).</p> <p>These elements or any other specific details were not specified in the SMP as no detailed studies were carried out to develop a specific solution or prescriptive measures for the Tg. Aru site as part of the SMP study. The SMP does not specify what type of retaining structures should be developed, the angle of the beach etc.</p>



