Ministry of housing and Infrastructure

First Addedndum to Environmental Impact Assessment Report

Harbour Extension Works at Fares-Maathoda, Fares-Maathoda, Gdh. Atoll

Report Prepared by LaMer Pvt Ltd:
Hussein Zahir
Mariyam Shujaa-ath

February 2018

Land and Marine Environmental Resource Group Pvt Ltd, Maldives

First Addendum to the Environmental Impact Assessment for Harbour Extension Works at Fares-Maathodaa

Location of Project: Fares-Maathodaa, GDh Atoll

Prepared by: LaMer Group Pvt Ltd

Hussein Zahir
Mariyam Shujaa-ath

Proponent: Ministry of Housing and Infrastructure

February 2018

Contents

List of Figures

List of Tables

Consultants Declaration

I certify that to the best of my knowledge the statements made in this First Addendum to the Environmental Impact Assessment Report for Harbour Extension Works at Faresmaathoda are true, complete and correct.

Name: Hussein Zahir

Consultant Registration Number: P04/2007

Signature:

Company Name: Land and Marine Environmental Resource Group Pvt Ltd

Date: February 2018

Proponents Declaration

بسم الله الرحمن الرحيم

Ministry of Housing and Infrastructure
Male', Republic of Maldives.

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ގއ، ދިވެހިރާއްޖެ.

Economic Prosperity – Social Harmony

Date:12 February 2018

No: 138-PIS1/203/2018/١٩

Mr. Ibrahim Naeem

Director General

Environmental Protection Agency,

Ministry of Environment and Energy,

Green Building, Male',
Maldives.

RE: PROPONENT DECLARATION AND COMMITMENT FOR EIA ADDENDUM 1 FOR GDH. FARESMAATHODAA HARBOUR

Dear Sir,

As the proponent of the proposed project we guarantee that we have read the report and to the best of our knowledge, all information relevant to this project in terms of project description, project construction works and operational aspects provided here are accurate and complete.

As the Proponent of the project; we assure you our commitment to undertake the proposed mitigation measures and monitoring programme given in the report.

Thanking you

Sincerely,

Fathimath Shaana Farroq,

Director General

Ameenee Magu, Maafannu, Male', 20392, Republic of Maldives.
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1 Non-technical Summary

1.1 Background

This addendum to the EIA report is prepared to attain environmental clearance for addition of dredged material disposal site (eastern side of Fares ward) at GDh. Faresmaathoda. This is a variation to the initial EIA for the harbor extension project at Faresmasthoda. A detailed Environmental Impact Assessment report for the proposed harbor extensions works (LaMer Pvt Ltd 2016) was prepared prior to project commencement. The project proponent of the proposed project is Ministry of Housing and Infrastructure.

1.2 Change to scope of work

The proposed project involves addition of a dredge material disposal site at the eastern side of the island. The proposed area is undergoing heavy erosion and as the residential plots are very close to the eroded area, island council has requested to reclaim this area as part of the harbor extension project.

1.3 Key impacts and mitigation measures

Potential direct or indirect impacts on the environment from the proposed change to scope are:

- Impacts on marine water quality;
- Loss/change to marine habitat at immediate impact area; and
- Sediment dispersal impacts to marine and reef habitat (confined to project site)

Mitigation measures considered to minimize impact intensity include:

- Bunding of the area to minimize flow of sediment.

Since the monitoring works in EIA report (LaMer Pvt Ltd 2016) covers broad aspects of the project no additional monitoring is deemed necessary specifically for the change in scope of the project.

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2 Introduction

This addendum to the EIA report is prepared to attain environmental clearance for disposal of dredged material from habour extension area dredging works to south east central area of Fares ward at Fares-Maathodaa. A detailed Environmental Impact Assessment report for Fares-Maathodaa habour extension works (LaMer Pvt Ltd 2016) was prepared and approved in 2016. In the EIA report, the proposed location for of disposal of dredged material was to the eastern side of the habour extension area.

2.1 Purpose of the report and need for the Addendum

This document presents the findings of First Addendum to the Environmental Impact Assessment (EIA) for Fares-Maathodaa habour extension works. Developers of such development projects are required to carry out EIA studies under the Environmental Act of Maldives. The developer is required to obtain approval of the Environmental Protection Agency (EPA), prior to the implementation of any development activities on the island.

Land and Marine Environmental Resource Group Pvt Ltd have been engaged by Ministry of Housing and Infrastructure to prepare the Addendum and to provide assistance in other environmental related activities. This Addendum is prepared in accordance with Environmental Impact Assessment Regulations 2012 and the environmental policy and guidelines of the Government of Maldives.

3 Terms of Reference (ToR)

All development projects that have a socioeconomic environmental relevance and are listed in Appendix Raa (Appendix 4) of the EIA Regulations 2012 are required to submit an Environmental Impact Assessment report which forms the basis for project approval. As such, projects are required to follow a screening process identifying the environmental impacts associated with the project. Projects which are not listed in the above mentioned Appendix has to follow a screening process, based on which EPA decides whether the project requires the submission of an Initial Environment Evaluation report or an Environmental Monitoring report. Based on the findings of this report, EPA as the regulator makes a decision on whether the specified project further requires the submission of an EIA based on the impacts associated with the project.

In accordance with the regulations of Ministry of Environment and Energy, a scoping application was submitted to the Environmental Protection Agency, for the proposed addition to the project. Based on this application, EPA stated the need for an Addendum to the EIA report and a Terms of Reference was finalized and approved by EPA on the 05th of February 2018 (see Appendix 2).

4 Project Setting

The project conforms to the requirements of the Environmental Protection and Preservation Act of the Maldives, Law no. 4/93. The Addendum to the EIA has been undertaken in accordance with the EIA Regulation 2012 of the Maldives by a registered consultant. Furthermore, it adheres to the principles underlined in the regulations, action plans, programs and policies of the following Ministries of the Government of Maldives.

- Ministry of Environment and Energy (MEE)

These are discussed in detail in Table 1.

Table 1. Legislation pertaining to the project

Legislation	How does current project conform to legislation
Environmental Protection and Preservation Act (Law 4/93)	EIA undertaken as stipulated in the Act, which states that any developmental project which has a potential impact on the environment should have an EIA done prior to commencement of the project. List of such projects are given in the EIA Regulations 2012
Regulation on dredging and reclamation (R-15/2013)	The Regulation on dredging and reclamation was gazette on the 2nd of April 2013 and came into effect on the day itself. The regulation was implemented to minimize the impacts on the environment due to dredging and reclamation works carried out as part of a project. The implementing agency for the regulation is the Environmental Protection Agency. In addition to listing the circumstances where dredging and reclamation can be undertaken on inhabited islands, the regulation also details the procedure to be followed prior to the commencement of dredging works. Dredging can be undertaken on an inhabited island, so as to improve the social and economic condition of the island. Prior to the commencement of dredging work, an application has to be submitted to EPA, with required documents, requesting for a dredging permit. Once the permit is obtained, an Environmental Impact Assessment of the work has to be carried out and report submitted to EPA, based on which EPA will provide a decision note which decides whether the project can be carried out or not. As per Regulation, the proponent submitted a dredging application to EPA for undertaking dredging works at

	proposed entrance location. EPA has given dredging permit for the project based on environmental clearance obtained through the submission of an Addendum to the EIA. The regulation also identifies from where dredging is banned. These areas area: • Area of 100m width from the outer reef edge to the island shoreline • Area of 500m width from the outer reef edge of an island or a reef • Area of 50m width from the shoreline vegetation of an island within a lagoon • Any area which has been declared as a protected area under the EPPA (Law 4/93) or is listed as an "*Environmentally Sensitive Area*"

5 Project Description

5.1 The Project

The proposed change to the project involves proposal of another site for disposal of dredged material (at Eastern side of Fares ward of the island) in addition to the proposed location in the EIA report. The eastern side of the harbor was proposed in the EIA report (LaMer Pvt Ltd 2016). During stakeholder consultation meetings Island Council requested eastern side of Fares ward as an alternative at the time. Since excess dredged material is available, the Island Council requested to dispose the remaining dredged material at eastern side of Fares ward, which at present is lacking a proper vegetation buffer between residential plots. This change to project does not increase cost or duration, since it involves disposal of already dredged material from habour extension works.

Approximate volume of material required for the filling is 6,236m^3. Maximum width of disposal area is 26m, with a length of 147m. Expected duration of work is 1 week and the dredged material is currently stockpiled near the habour. Heavy machinery for the work is already present at site. Any excess material dredged from the habour area shall be stockpiled at the reclaimed area and dredging width will not exceed 26m.

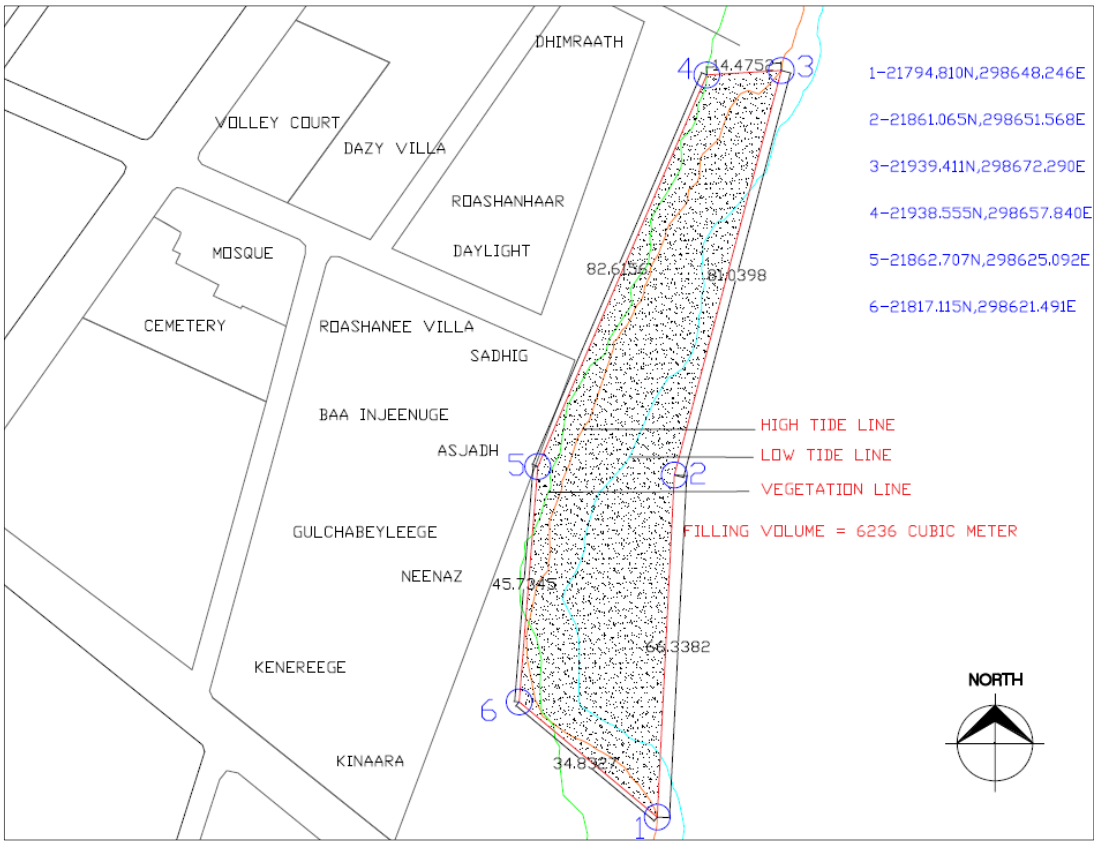

Figure 1. Schematic showing dredged material disposal area on the eastern side of Faresh Village at Faresh-Maathodaa

5.2 Need for the Addendum

The purpose of the addendum is to add an additional disposal location for dredged material. The reason for proposing additional disposal location is due to request by Faresmaathoda Island Council. According to council the proposed disposal area is observed with erosion and some of flooding occurs during highest tide periods. Furthermore the residential houses are very close to the shoreline hence council want to create buffer at the area as remedial measure against flooding.

As per the approved EIA report, dredged material disposal location is eastern side of the habour. But in the EIA, during stakeholder consultation meeting council requested current proposed area as an alternative for dredged material disposal should excess material is available (Figure 37, page 8-54).

5.3 Location and Extent of Site Boundaries

Fares-Maathodaa is located in the southern peripheral reef of Huvadhu Atoll. The proposed work will be carried out on the eastern side of Fares-Maathodaa (as shown in Figure 1 and Figure 2).

Figure 2. Satellite image of Fares-Maathodaa showing dredged material disposal area (Green highlight is already reclaimed area, red highlight shows the area to be reclaimed)

5.4 Method and equipment

Harbour extension works addressed under the initial EIA assessment is almost complete and the machinery, equipment and the work force are present on site. It is estimated that 1 excavator and 1 dump truck will be used for the project.

Since the sand required for the proposed works is already stockpiled near the project location, it is estimated that the proposed works will be completed in a week's time. Other aspects of project management including health and safety, site access, emergency plans etc will be followed as per the initial EIA report (LaMer Pvt Ltd, 2016).

6 Existing environment

Reef survey was conducted at the new proposed entrance location using methodology provided in section 6 of EIA report for harbor extension project at Faresmaathoda (LaMer Pvt. Ltd. 2016). Qualitative survey method was used for assessing the marine environment of the new reclamation area. GPS Coordinates and locations of reef survey and water quality assessments are provided in Figure 3 below.

Figure 3. Locations of environmental monitoring surveys at Faresmaathoda, R1=Reef survey, W1=Seawater quality

6.1 Water quality

Seawater sampling was done in-situ using Hanna HI 9828 mulitprobe meter. List of parameters tested and their values are given in Table 2.

Table 2. Results of the parameters tested in-situ at site W1

Reading	Temp.[°C]	pH	EC[µS/cm]	TDS [ppm]	Sal.[psu]	D.O.[ppm]	Turbidity [FTU]
1	27.53	8.10	49290	24640	32.14	0.02	0.00
2	27.54	8.09	49280	24640	32.14	0.02	0.00
3	27.54	8.09	49280	24640	32.14	0.03	0.00
4	27.66	8.09	49120	24560	32.02	0.03	0.00

5	27.62	8.08	49180	24590	32.06	0.03	0.00
Average	***27.58***	***8.09***	***49230***	***24614***	***32.10***	***0.03***	***0.00***

6.2 Marine Survey

A section of the East side of Fares-Maathoda lagoon was surveyed (Refer to Figure 3 for survey locations and GPS Cordinates). The area had a 100% cover of sea grass that had epiphytic algae and turf algae growing on it. The fish life was poor and consisted of mostly wrasses and gobies. Benthic fauna consisted of a few sea cucumbers and gastropods. There were no rare or endangered fauna observed.

6.3 Island Topography

The island topography was done as part of the EIA report for flood mitigation measures at Faresmaathoda (LaMer Pvt. Ltd., 2013). The survey showed that topography at the eastern side of the island is quite low, with the height between 0.4 to 0.6 m (Refer to Appendix 3 for island topographic map of Faresmaathoda).

7 Stakeholder consultation

7.1 Consultation with Island Council

Date and time: 5th February 2018, 11.00 am.

Participant(s):

Nasrulla Mohamed	Council President	7444415

He went to show the area where the reclamation work would take place

It was the view of the council that the reclamation work in order to make a road that goes around the island is of great importance as it would be beneficial to the people living there. Furthermore, the people living in the houses adjacent to the coast, where the proposed development is going to take place is concerned about the erosion which is taking place a short distance from their houses. Therefore this would help them as well.

7.2 Consultation with Ministry of Environment and Energy (MEE)

MEE was requested for a stakeholder consultation via email and due to the small scale of the project, MEE informed via email (liusha.mohamed@environmen.gov.mv) that they do not have any concerns regarding the proposed Addendum to Faresmaathoda harbor extension project.

8 Environmental Impacts

8.1 Impact Identification

The Addendum addresses addition of dredged material disposal site (eastern side of Fares village). Hence impacts on the environment are only identified for this work. Overall impacts to the environment due to the project and the uncertainties in impact predictions have been addressed in the EIA report (LaMer Pvt Ltd, 2016).

Impacts on the environment due to reclamation activity has been identified through interviews with the project contractor, review of methodology and based on past experience in similar development projects.

Constructional impacts due to proposed reclamation activities are few and include:

- Changes in hydrodynamics;
- Loss/change to marine habitat at immediate impact area;
- Sediment dispersal impacts to marine and reef habitat (confined to project site); and
- Impacts on seawater quality (near shore).

8.1.1 Changes in hydrodynamics

Due to the small scale of the project the proposed reclamation is not expected to cause any changes to the coastal morphology or hydrodynamics of the island as it will not change the island profile.

8.1.2 Loss/change to marine habitat at immediate impact area

The proposed location for reclamation was composed of sea grasses with a low abundance of marine fauna. The sea grass habitat will be lost as a result of reclamation of the area. The loss of seagrass beds would be a negative long term impact, though of a low effect and significance.

8.1.3 Sediment dispersal impacts to marine and reef habitat

Impact due to reclamation is sedimentation of fines due to re-suspension during high and mid tide. High levels of sedimentation and silt from re-suspension is a major source of reef degradation. It is often the smaller corals and corals that exhibit laminar growth forms (acropora table corals) that are more vulnerable to extended sedimentation. Fine sediments with rapid rate of deposition are detrimental to certain corals especially the tabulate forms of corals. Such sediments blocks the coral polyps from feeding and the lack of nutrition and other physiological stress such as restricted respiration eventually starves and suffocate the corals leading to death. Finely deposited sediments

are often difficult to remove even with strong currents. The consequences of excessive sedimentation on corals are well known and include:

- direct physical impacts like smothering of corals and other benthic reef organisms,
- reduced light penetration, which has a direct effect on zooxanthellae photosynthesis and thus the net productivity of corals. It also reduces coral growth, calcification rates and reproduction.
- dredged silt may form false bottoms, characterized by shifting unstable sediments
- silt suspension may increase nutrient release, leading to eutrophic blooms
- silt may act as sink or trap for many pollutants, which are absorbed into the sediments

Wave and current patterns at Faresmaathoda shows that the main hydrodynamic factor affecting the wave climate around the island is swell waves (LaMer Pvt Ltd, 2016). Based on the analysis, it is envisaged that the sediment plume will be carried northwards as shown on Figure 4 below.

Figure 4. Schematic diagrams showing extent of sedimentation (Green highlight is already reclaimed area, red highlight shows the area to be reclaimed)

8.1.4 Impacts on seawater quality

The major problem due to dredging and reclamation is increased turbidity due to sediment stirrup, changing the ambient water quality at the reclamation site. In addition to sedimentation, reclamation could cause chemical release and reduce dissolved oxygen content.

Nevertheless, post construction monitoring after dredging a river system revealed that the water quality improved significantly close to pre-dredging concentrations (Ohimain et al., 2008), therefore, it is safe to say that the impacts of dredging and reclamation on water quality are highly localized and short term. Yet, proper mitigation measures should be followed to ensure any impacts on water quality are as less as possible.

Operational impacts envisaged from the proposed project include:-

- Risk of flooding; and
- Prevention of erosion.

8.1.5 Risk of flooding

There is the risk of flooding in case reclamation height exceeds the island topography at the area. Island topographic survey shows that the topography of Faresmaathoda at the project area is approximately 0.6 m (topographic map is attached in Appendix 3 of this report).

8.1.6 Prevention of erosion

The proposed addendum has been proposed upon request of Faresmaathoda island council as the proposed reclamation area is a highly eroded area. Moreover, residential area is very close to the shoreline at this area. The proposed project is expected to bring out positive outcomes in terms of prevention of erosion at this area.

9 Alternatives

There are two alternatives applicable to the proposed addendum:-

- Alternative location for stockpiling of excess material; and
- No project scenario

9.1 Alternative location

As an alternative location, the current stockpile location adjacent to the eastern side of harbor could be used. However, this area is already used for stockpiling under the initial EIA report.

9.2 No project scenario

The proposed disposal area was initially proposed as an alternative during the initial EIA stage of the harbor extension project at Faresmaathoda by the island Council. At the time it was estimated that the volume of dredged material will not be enough to reclaim the proposed area. However, since excess fill material has been dredged from the site, it has been proposed to reclaim this area in order to prevent further erosion on this side of the island.

If the no project scenario is selected, then there will not be any environmental degradation of the marine environment, however, it will lead to further erosion of the island causing damage to nearby residential blocks.

10 Mitigation Plan

Due to the scope of the Addendum, mitigation measures required are few as well. However, mitigation measures have been considered for the various negative impacts. Mitigation measures considered and their location and estimated costs are shown in Table 2. In addition to the detailed mitigation measures provided in the EIA report (LaMer Pvt Ltd 2016), the following shall be considered at the reclamation area.

Table 3. Mitigation measures for the proposed additional reclamation area

Phase	Possible Impacts	Mitigation measures	Location	Time frame	Impact intensity	Institutional responsibility	Estimated cost (USD)
CONSTRUCTION PHASE	Sedimentation impacts	Bunding of the reclamation area prior to sand disposal	Reclamation area	During reclamation works	Minor to moderate short term impact	Proponent, Contractor	N/A (no additional cost) should be included in the project cost
OPERATIONAL PHASE	Risk of flooding	Reclamation height shall not be higher than the island topography at the area (Topography map is provided on Appendix 3). The beach shall be properly levelled and sloped.	Reclamation area	During reclamation works	Minor to moderate short term impact	Proponent, Contractor	N/A (no additional cost) should be included in the project cost

11 Monitoring Programme

Environmental Impact Assessment report for extension of habour at Faresmaathoda (LaMer Pvt Ltd 2016) provides comprehensive monitoring program for the project construction and operational stage. Since the monitoring works covers broad aspects of the project no additional monitoring is deemed necessary specifically for the change in scope of the project.

12 Conclusion and recommendations

The proposed reclamation area at the eastern side of Faresmaathoda was proposed as an alternative site in the initial EIA addendum of the habour extension project (LaMer Pvt Ltd 2016).

One of the main objectives of the proposed reclamation is to find a permanent solution to erosion at the east side of Faresmaathoda. This will also prevent damages to the residential area close to the erosion prone area. Therefore, further development shall not be allowed by any means at this newly reclaimed area. Even though the monitoring program outlined in this report will be borne by the project proponent, MHI, the island council shall take full responsibility of monitoring the area for erosion.

Considering the possible environmental impacts, the proposed location consists of a seagrass habitat which will be lost but abundance of marine fauna was low The reclamation of the proposed location can be considered mostly as positive since existing proposed area is a highly erosion prone area.

Therefore, with due consideration to the environmental components identified in the report and the extent of impacts due to the change in scope, the consultant concludes that the works proposed in the proposed addendum is feasible. Appropriate mitigation measures have been considered to correct and minimize unfavorable environmental changes.

Acknowledgements

The consultant acknowledges the contribution provided by the team members in this report for the valuable contribution to the report and at the field. The consultant also acknowledges the input provided by the island council.

References

Government of Maldives, 1993. Environmental Protection and Preservation Act (Law 4/93)

LaMer Pvt Ltd Pvt, 2016 Environmental Impact Assessment report for Extension of Harbour at Faresmaathoda, prepared for Ministry of Housing and Infrastructure.

LaMer Pvt Ltd Pvt, 2013 Environmental Impact Assessment report for Flood Mitigation and Reclamation Works at Faresmaathoda, prepared for UNOPS.

Appendices

Appendix 1 List of abbreviations

EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
MEE	Ministry of Environment and Energy
ToR	Terms of Reference

Appendix 2 Terms of Reference (ToR)

- **Revised**

No: 203-EIARES/138/2018/15

Terms of Reference for First Addendum to the Environmental Impact Assessment Report for Extension of Harbor at Faresmaathodaa

1. The following is a terms of Reference issued following the scoping meeting held on 29th **January 2018, for First Addendum to the Environmental Impact Assessment Report for extension of harbour at Faresmaathodaa (addition of dredged material disposal site (eastern side of Fares Village)).** The proponent of the project is **Ministry of Housing and Infrastructure.**

2. **Introduction and rationale** – Describe the details of dredged material disposal site. Objectives of the additional works should be specific and if possible quantified. Define the arrangements required for the environmental assessment including how work carried out under this contract is link other activities that are carried out or that is being carried out within the project boundary. Identify the project financing and institutional arrangements relevant to execution of the project.

3. **Study area** – Submit a minimumA3 size scaled plan showing dredged material disposal site. Specify the agreed boundaries of the study area for the environmental impact assessment highlighting the proposed development location and size. The study area should include adjacent or remote areas, such as relevant developments and nearby environmentally sensitive sites (e.g. coral reef, sea grass, mangroves, marine protected areas, special birds nesting or roosting sites, ecologically and economically sensitive species (nursery and feeding grounds). Relevant developments in the areas must also be addressed including residential areas, all economic ventures and cultural sites.

4. **Scope of work** –
   Task 1. Description of the proposed project – Provide a full description and justification of the of new dredged material disposal site, using maps at appropriate scales where necessary. Information on the following activities should be provided where appropriate:
   - Extent of disposal site on an A3 scaled map
   - Method and equipment used
   - Measures to protect environmental values during construction,
   - Project management (include scheduling and duration of the project; communication of construction details, progress, target dates, access to site, safety, equipment and material storage, fuel management and emergency plan in case of spills)

   Task 2. Description of the environment – Description environmental condition based on baseline data provided in the EIA report

   Task 3. Potential impacts (environmental and socio-cultural) of proposed project, – The EIA report should identify all the impacts, direct and indirect, during and after construction, and evaluate the magnitude and significance of each. Particular attention shall be given to impacts associated with the following:

   Impacts on the natural environment
   - Changes in current flow velocities/directions, that may result in changes in erosion/sedimentation patterns, which may impact shore zone configuration/coastal morphology due to coastal modification
   - Loss of marine habitat, and related ecosystem impacts
   - Sedimentation impacts to direct impact area and nearby marine habitats,
   - Impacts on sea water quality (near shore)

The methods used to identify the significance of the impacts shall be outlined. One or more of the following methods must be utilized in determining impacts; checklists, matrices, overlays, networks, expert systems and professional judgment. Justification must be provided to the selected methodologies. The report should outline the uncertainties in impact prediction and also outline all positive and negative/short and long-term impacts. Identify impacts that are cumulative and unavoidable.

Task 4. Alternatives to proposed project – Describe alternatives including the *"no action option"* should be presented. Determine the best practical environmental options. Alternatives examined for the proposed project that would achieve the same objective including the "no action alternative". This should include alternative location, designs, timing, etc. environmental, social and economic factors should be taken into consideration. The report should highlight how the location was determined. All alternatives must be compared with locally accepted standards of similar nature. The comparison should yield the preferred alternative for implementation. Mitigation options should be specified for each component of the proposed project.

Task 5. Mitigation and management of negative impacts – Identify possible measures to prevent or reduce significant negative impacts to acceptable levels. Mitigation measures to avoid or compensate habitat destruction, e.g. sediment control structures. Measures for both construction and operation phase shall be identified including cost the mitigation measures, equipment and resources required to implement those measures. The confirmation of commitment of the Developer to implement the proposed mitigation measures shall also be included.

Task 6. Development of monitoring plan – Identify the critical issues requiring monitoring to ensure compliance to mitigation measures and present impact management and monitoring plan for ground water and sea water quality. Ecological monitoring will be submitted to the EPA to evaluate the damages during construction, after project completion and every six months thereafter, up to one year. The baseline study described in task 2 of section 2 of this document is required for data comparison. Detail of the monitoring program including the physical and biological parameters for monitoring, cost commitment from responsible person to conduct monitoring in the form of a commitment letter, detailed reporting scheduling, costs and methods of undertaking the monitoring program must be provided

Task 8. Stakeholder consultation, Inter-Agency coordination and public/NGO participation) — Identify appropriate mechanisms for providing information on the development proposal and its progress to stakeholders, government authorities, NGOS, engineers/designers, development managers, and staff. The EIA report should include a list of people/groups consulted and summary of major outcomes. The following stakeholders should ideally be consulted.

a. Ministry of Environment and Energy
b. Island Council

Presentation- The environmental impact assessment report, to be presented in digital format, will be concise and focus on significant environmental issues. It shall contain the findings, conclusions and recommended actions supported by summaries of the data collected and citations f or any references used in interpreting those data. The Addendum to the environmental assessment report will be organized according to, but not necessarily limited by, the outline given in the Environmental Impact Assessment Regulations, 2012 and relevant amendments.

Relevant documentation, references for consultants – Include publicly available studies or references relevant to the current project to be used by the consultant.

Timeframe for submitting the EIA report – The developer must submit the completed EIA report within **6** months from the date of this Term of Reference.

5th February 2018

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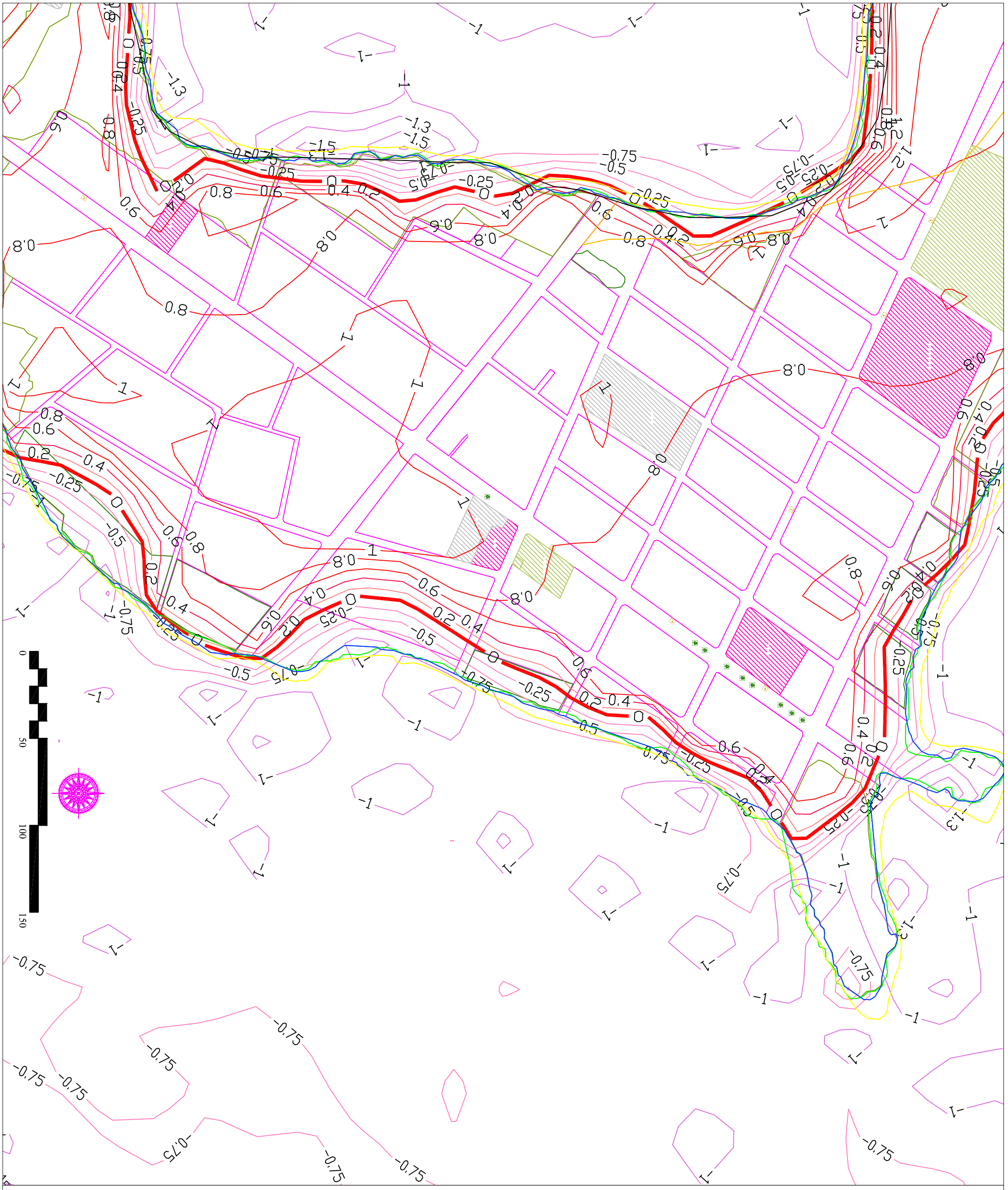
Email: secretariat@epa.gov.mv
Website: www.epa.gov.mv

Appendix 3 Topographic Map of Faresmaathoda



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Toporaphic and Bathymetric survey of Faresmaathodaa

Client: Faresmaathodaa Island Council

Faresmaathoda Harbor Extension Project- EIA

2018

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