


<b>TITLE: EIA REPORT for Bungalows, Villas and Apartments at Palmar for PALM REALTY LTD:</b>	
<b>PREPARED BY:</b>  Mohammad Farook MOWLABUCUS <b>Qualifications</b> B.Sc (Hons.) Mathematics Hydrology/Water Resources Expert Experience in Hydrolgeology and Environmental Legislation Environmental Expert	<b>CLIENT:</b>  PALM REALTY LTD Represented by Mr.D.Mohes 
<b>CONTACT PERSON(S):</b> Mr. M.F.MOWLABUCUS (Mobile No.: 54996293)	<b>CLIENT CONTACT PERSON(S):</b> Mr. D.MOHES

---

## TABLE OF CONTENTS

### NON-TECHNICAL SUMMARY

<b>1</b>	<b>INTRODUCTION</b> .....	<b>1</b>
1.1	PROJECT HISTORY AND BACKGROUND.....	1
1.2	NEED AND JUSTIFICATION OF THE PROJECT.....	1
1.3	PROJECT IMPLEMENTATION SCHEDULE .....	2
1.4	LEGAL AND INSTITUTIONAL FRAMEWORK .....	2
<b>2</b>	<b>PROJECT DESCRIPTION</b> .....	<b>4</b>
2.1	PROJECT LOCATION.....	4
2.2	SITE OWNERSHIP.....	7
2.3	PROJECT PROMOTER & ORGANISATIONAL STRUCTURE .....	7
2.4	PROJECT DESCRIPTION.....	7
2.4.1	<i>Main project components</i> .....	7
2.4.2	<i>Architectural Brief</i> .....	18
2.4.3	<i>Other works to be constructed</i> .....	20
2.4.4	<i>Earthworks</i> .....	34
2.4.5	<i>Construction Materials</i> .....	35
2.4.6	<i>Construction Process</i> .....	36
2.4.7	<i>Workforce</i> .....	36
<b>3</b>	<b>ALTERNATIVES</b> .....	<b>37</b>
3.1	GREEN DEVELOPMENT .....	37
3.2	PROJECT SITING .....	37
3.3	SEWAGE DISPOSAL .....	37
3.4	THE “DO NOTHING” SCENARIO .....	37
<b>4</b>	<b>METHODOLOGY</b> .....	<b>38</b>
4.1	DEFINITION OF THE STUDY AREA.....	38
4.2	PRACTICAL APPROACH TO THE CONDUCT OF THE EIA.....	38
4.2.1	<i>Desk Studies</i> .....	38

---

4.2.2	<i>Initial Screening of Potential Impacts</i> .....	38
4.2.3	<i>Field Measurements and Investigations</i> .....	38
4.2.4	<i>Maps</i> .....	38
<b>5</b>	<b>PROJECT ENVIRONMENTAL BASELINE</b> .....	<b>39</b>
5.1	<b>TOPOGRAPHY</b> .....	<b>39</b>
5.2	<b>GEOLOGY AND SOILS</b> .....	<b>39</b>
5.2.1	<i>Surficial Geology</i> .....	39
5.2.2	<i>Soil Type</i> .....	39
5.2.3	<i>Water Table</i> .....	41
5.3	<b>CLIMATIC CONDITIONS</b> .....	<b>42</b>
5.4	<b>HYDROLOGY / DRAINAGE</b> .....	<b>42</b>
5.5	<b>HYDROGEOLOGY</b> .....	<b>42</b>
5.6	<b>HABITATS OF FLORA AND FAUNA</b> .....	<b>42</b>
<b>6</b>	<b>SOCIO-ECONOMIC BASELINE</b> .....	<b>43</b>
6.1	<b>INTRODUCTION</b> .....	<b>43</b>
6.2	<b>APPROACH</b> .....	<b>43</b>
6.3	<b>DEMOGRAPHY</b> .....	<b>43</b>
6.4	<b>POPULATION AND SETTLEMENTS</b> .....	<b>43</b>
6.5	<b>SECTORS OF ECONOMIC ACTIVITIES AND OCCUPATION OF THE POPULATION OF THESE VILLAGES</b> .....	<b>44</b>
6.6	<b>PUBLIC SERVICES AND UTILITIES</b> .....	<b>44</b>
6.6.1	<i>Sewage Collection and Disposal</i> .....	44
6.6.2	<i>Solid Waste</i> .....	44
6.6.3	<i>Electricity Supply</i> .....	44
6.6.4	<i>Domestic Water Supply</i> .....	44
6.6.5	<i>Telecommunication</i> .....	44
6.6.6	<i>Road Infrastructure</i> .....	44
<b>7</b>	<b>ENVIRONMENTAL IMPACTS AND THEIR MITIGATION</b> .....	<b>45</b>
7.1	<b>INTRODUCTION</b> .....	<b>45</b>
7.2	<b>IMPACTS ON AMBIENT AIR QUALITY AND THEIR MITIGATION</b> .....	<b>45</b>
7.3	<b>IMPACTS ON SOILS AND THEIR MITIGATION</b> .....	<b>45</b>
7.4	<b>IMPACTS ON GEOMORPHOLOGY AND THEIR MITIGATION</b> .....	<b>46</b>

---

<b>7.5</b>	<b>IMPACTS ON WATER RESOURCES AND THEIR MITIGATION .....</b>	<b>46</b>
<b>7.6</b>	<b>IMPACTS ON LAGOONAL WATERS .....</b>	<b>46</b>
<b>7.7</b>	<b>IMPACTS ON TERRESTRIAL FLORA AND FAUNA AND THEIR MITIGATION.....</b>	<b>46</b>
<b>7.8</b>	<b>NOISE IMPACTS AND THEIR MITIGATION .....</b>	<b>47</b>
<b>7.9</b>	<b>IMPACTS ON LANDSCAPE AND THEIR MITIGATION .....</b>	<b>47</b>
<b>7.10</b>	<b>IMPACTS ON ROAD SAFETY AND THEIR MITIGATION .....</b>	<b>47</b>
<b>7.11</b>	<b>INDUCED IMPACTS.....</b>	<b>48</b>
<b>7.12</b>	<b>BENEFICIAL ENVIRONMENTAL IMPACTS .....</b>	<b>48</b>
<b>8</b>	<b>SOCIO-ECONOMIC IMPACTS AND THEIR MITIGATION.....</b>	<b>49</b>
<b>8.1</b>	<b>GENERAL .....</b>	<b>49</b>
<b>8.2</b>	<b>NEGATIVE IMPACTS .....</b>	<b>49</b>
8.2.1	<i>Loss of land.....</i>	49
8.2.2	<i>Dust &amp; Noise nuisances.....</i>	49
8.2.3	<i>Disruption of normal routine of residents &amp; road safety.....</i>	49
<b>8.3</b>	<b>POSITIVE IMPACTS .....</b>	<b>49</b>
8.3.1	<i>Improved Standard of Living.....</i>	49
8.3.2	<i>Improved Business Opportunities.....</i>	50
8.3.3	<i>Overall benefits.....</i>	50
<b>9</b>	<b>ENVIRONMENTAL MANAGEMENT PLAN .....</b>	<b>51</b>
<b>9.1</b>	<b>INTRODUCTION.....</b>	<b>51</b>
<b>9.2</b>	<b>INSTITUTIONAL ARRANGEMENTS AND REPORTING.....</b>	<b>52</b>
<b>9.3</b>	<b>COST ESTIMATE .....</b>	<b>53</b>
9.3.1	<i>Cost of Environmental Mitigation Measures During Construction Phase .....</i>	53
9.3.2	<i>Monitoring Cost.....</i>	54
<b>9.4</b>	<b>IMPLEMENTATION SCHEDULE .....</b>	<b>54</b>

---

**APPENDIX 1 - Environmental Management Plan (EMP)**

**APPENDIX 2 - Environmental Monitoring Plan (EMP)**

**ANNEX 1 : COPY OF CERTIFICATE OF INCORPORATION**

**ANNEX 2 : COPY OF BUSINESS REGISTRATION CERTIFICATE**

**ANNEX 3 : COPY OF LAND RESERVATION LETTER FROM MOHL**

**ANNEX 4 : COPY OF AUTHORISATION TO MR.D.MOHES FOR OBTENTION  
OF EIA LICENCE**

**ANNEX 5 : CLEARANCE FROM CWA**

**ANNEX 6 : STANDARDS OF EFFLUENT FOR USE IN IRRIGATION**

**ANNEX 7 : COPY OF CLEARANCE FROM CEB**

**ANNEX 8 : CLEARANCE FROM WMA**

---

## **List of Figures**

FIGURE 2-1 : LOCATION OF PROJECT SITE .....	5
FIGURE 2-2 : LAND SURVEYOR'S SITE PLAN .....	6
FIGURE 2-3 : OVERALL LAYOUT PLAN OF PROPOSED DEVELOPMENT .....	9
FIGURE 2-4 : PERSPECTIVE OF VILLA TYPE I.....	10
FIGURE 2-5: GROUND FLOOR OF VILLA TYPE I .....	11
FIGURE 2-6: FIRST FLOOR LAYOUT OF RESIDENCES.....	12
FIGURE 2-7 : PERSPECTIVE VILLA TYPE II .....	13
FIGURE 2-8 : GROUND FLOOR PLAN, VILLA TYPE II.....	14
FIGURE 2-9 : FIRST-FLOOR PLAN OF VILLA TYPE II.....	15
FIGURE 2-10 : TYPICAL APARTMENT PERSPECTIVE.....	16
FIGURE 2-11 :GROUND FLOOR PLAN (APARTMENT) .....	17
FIGURE 2-12 : TYPICAL ROAD / DRAINAGE SECTIONS (A1 SIZE).....	32
FIGURE 2-13 : ROAD / DRAINAGE LAYOUT (A1 SIZE) .....	33
FIGURE 5-1: SUPERFICIAL GEOLOGY AT PROJECT SITE AND VICINITY.....	39
FIGURE 5-2: SOIL TYPES AT PROJECT SITE .....	40
FIGURE 5-3: HYDROGEOLOGICAL MAP OF MAURITIUS ILLUSTRATING LOCATION OF SITE WITHIN THE SEA-INTRUDED AREA .....	41

## **List of Tables**

TABLE 6-1 : PERCENTAGE DISTRIBUTION OF POPULATION BY DISTRICT AS AT 31ST JULY 2010 .....	43
TABLE 6-2 : POPULATIONS IN NEARBY VILLAGES .....	44
TABLE 9-1: RESPONSIBILITIES FOR IMPLEMENTING THE ENVIRONMENTAL MANAGEMENT PLAN.....	53
TABLE 9-2: ENVIRONMENTAL MITIGATION AND MONITORING COST (CONSTRUCTION PHASE) .....	53
TABLE 9-3: IMPLEMENTATION SCHEDULE ENVIRONMENTAL MEASURES .....	54

---

## ACRONYMS

CEB	Central Electricity Board
CWA	Central Water Authority
MoE	Ministry of Environment
MoHL	Ministry of Housing & Lands
PM	Project Manager
SE	Supervising Engineer
WMA	Wastewater Management Authority
STP	Sewerage Treatment Plant

m	metre
mm	millimetre
m <sup>3</sup>	cubic metre
°C	degree Celcius

Bungalows, Villas and Apartments Project, Palmar  
June 2014






---

**EIA REPORT PREPARED BY**

MOWLABUCUS Mohammad Farook      Environmental Expert  
c/o LUXCONSULT (MTIUS) LTD  
23, Stevenson Avenue, Quatre Bornes

**WITH CONTRIBUTIONS FROM**

**SIGNATURE**

The Promoter, represented by	Mr.D.Mohes	 27/7/2014
Project Manager	Mr.A. Chuttur of Chuttur and Partners LLP	 2/07/14
Architect	Mr. Christophe Gebert For G+F Architects	 30/06/14
Civil Engineer	Mr.S.Soborun	 27/06/2014
M&E / Building Services	Mr.S.Daliah	 27/06/2014

---

PALM REALTY LTD

The representative of the project proponent is Mr.Dharanjay MOHES, c/o Palm Realty Ltd, Butter & Dairy Enterprise Ltd, Industrial Zone Phoenix.