Environmental Impact Assessment (EIA) for the Development of New Yangon City Project Masterplan

EIA Consultation
April 2019

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The business of sustainability
# Agenda

<table>
<thead>
<tr>
<th>Topic</th>
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<tbody>
<tr>
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Project Description
Project Location

- The Project Area is located in a semi-urban to rural area in Seikgyi Kanaungto, Twantay, Hlaing Tharyar and Kyee Myin Daing Townships to the West of Yangon
- It is separated from the main urban centre of Yangon by the Hlaing River to the East and from the Dala Township by the Twantay Canal to the South
Project Proponent

- The **New Yangon Development Company, Ltd.** (NYDC), incorporated under the Yangon Regional Government, plans to develop the New Yangon City and its future extension area.
Project Plan
Project Progress - Masterplanning

- **NYDC**
  - Incorporated 12/12/2017
- **SEMP**
  - Visioning 24/03/2018
  - Final 06/07/2018
- **Master Plan**
  - Visioning Workshop 07/12/2018
- **Master Plan Final Presentation**
  - 15/02/2019

- **AMA**
  - Socio Economic 26/10/2018
- **Environmental Scoping**
  - Regional 23/01/2019
  - Townships 01~03/02/2019

Environmental Impact Assessment for the Development of New Yangon City Phase 1 Master Plan
EIA Study
ERM: Third Party Organization EIA Studies

- ERM is the world’s largest independent Sustainability Company
- Global Company, over 5,000 employees worldwide, 160 offices in 41 countries
- ERM has an office in Yangon with local and international staff
- ERM is registered as an EIA Consulting Firm with MONREC
- ERM has been active in Myanmar since 1996 and have completed over 100 IEE, EIA, and EMPs
- Working with EQM Myanmar to undertake local engagement

Environmental Impact Assessment for the Development of New Yangon City Phase 1 Master Plan
EIA Process

- Project Proposal Report – January 2019
- Meeting with ECD – January 2019
- Third Party Registration – February 2019
- Scoping Consultation
  - Yangon Regional Government and Parliament Representatives – January 2019
  - Townships Consultation – February 2019
- Preparation of Scoping Reports
- Baseline Data Collection
  - Environmental – February to March 2019
  - Social : March 2019
- Second round consultation
  - Township and Village Tracts consultation - April 2019
- Preparation of EIA reports
Baseline Collection & Results
Baseline Data collection & Results
## Baseline Data Collection & Results

<table>
<thead>
<tr>
<th>Topic</th>
<th>Locations</th>
<th>Parameters and Remarks</th>
</tr>
</thead>
</table>
| Air           | 27        | • Tested for dust and pollutants (NO2/SO2)  
• Most samples within standards for dust. Some slight exceedances in Hlaing Thayar, Kyee Myin Daing, and Twantay |
| Noise         | 27        | • Sound levels measured during day and night.  
• Majority of point measured exceed Standards.                                                               |
| Soil          | 24        | • Tested for pH, metals, pollutants  
• All within the Standards                                                                                     |
| Groundwater   |           | • Tested for pH, metals, and other pollutants  
• Chemical Oxygen Demand – exceeded in two stations (Punn Hlaing River)                                         |
| Surface water |           |                                                                                                              |
Baseline Data Collection & Results
Social: Household data collection

- The sample size is 392 households;
- HH data collection size is based on the % of village area in relation of total area of the project
- The villages selected to collect data are based on the impact due to the project facilities

<table>
<thead>
<tr>
<th>Township</th>
<th>Area of Village Tracts/Wards (km2)</th>
<th>% of the Village Tracts/Wards are in relation of total area (182.5 km2)</th>
<th>HH data collection size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twantay</td>
<td>124</td>
<td>68</td>
<td>265</td>
</tr>
<tr>
<td>Seikgyi Kaungto</td>
<td>12.1</td>
<td>7</td>
<td>24</td>
</tr>
<tr>
<td>Kyee Myin Daing</td>
<td>12.5</td>
<td>7</td>
<td>29</td>
</tr>
<tr>
<td>Hlaing Tharyar</td>
<td>22.3</td>
<td>12</td>
<td>48</td>
</tr>
<tr>
<td>Ahlone</td>
<td>3.3</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Dala</td>
<td>8.3</td>
<td>5</td>
<td>19</td>
</tr>
<tr>
<td>TOTAL</td>
<td>182.5</td>
<td>100</td>
<td>392</td>
</tr>
</tbody>
</table>
Who we engage

**National Level**
Relevant Ministries, Government Departments, Civil Society and Research Organisations.

**Regional Level**
Regional Government including Chief Minister, Regional Parliamentary Representatives and Relevant Departments

**Township / Village Tract/ Ward Level**
General Administrative Department, Relevant Government Departments, Township Level Authorities and Township Parliamentary Representatives of Kyee Myin Daing, Ah lone, Seikgyi Kanaungto, Hlaing Tharyar, Twantay, Dala, Hlaing, Kamayut, Lanmadaw and Sanchaung Townships, CSOs, NGOs, Village Tract Leaders, Ward leaders, Local Communities and Other Relevant Stakeholders
How we engage

Consult

Present

Communicate

Source: art4clip.com

Source: fpl.com

Source: satukis.info
Key Topics discussed During Scoping Consultations

- Waste discharges and disposal
- Job opportunity
- Source of Electricity
- Water collection
- Sand and Soil for construction
- Env impact to neighbours
- Land Utilization (Farmland)
- Roads and Transportation system
- Land Compensation
- Urban Management
  - Squatters
  - Physical Displacement
  - Resettlement Plan
  - Cemetery location
  - Administrative infrastructure
- Environmental Impact Assessment for the Development of New Yangon City Phase 1 Master Plan
Individual Component Details
Bridges

- **Where**
  - Yangon River Bridge: Kyee Myin Daing Township
  - Pan Hlaing River Bridge: Hlaing Tharyar Township

- **When**
  - 2019 to 2021 (2 years)
  - 2020 to 2022 (2.5 years)
Yangon River Bridge

- How
  - Two-way-six-lane
  - 100 years lifetime
Pan Hlaing River Bridge

- How
  - One-way two lanes
  - 100 years lifetime
Roads

• Where
  • Twantay, Seikgyi Kanaungto and Kyee Myin Daing Townships

• When
  • Road 1: 2019 to 2024 (5 years)
  • Road 2: 2019 to 2021 (2 years)
  • Road 3: 2019 to 2023 (4 years)
Roads

• How

<table>
<thead>
<tr>
<th>Road Type</th>
<th>Length (km)</th>
<th>ROW (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road 1</td>
<td>7.22</td>
<td>43.0</td>
</tr>
<tr>
<td>Road 2</td>
<td>9.17</td>
<td>50.0</td>
</tr>
<tr>
<td>Road 3 / Arterial Road</td>
<td>43.40</td>
<td>43.0/50.0/64.0</td>
</tr>
<tr>
<td>Sub Arterial Road</td>
<td>20.41</td>
<td>41.5/43.5</td>
</tr>
<tr>
<td>Collector Road (IZ 1, RA)</td>
<td>115.42</td>
<td>35.0</td>
</tr>
<tr>
<td><strong>Total Road Area</strong></td>
<td><strong>195.62</strong></td>
<td></td>
</tr>
</tbody>
</table>
Power

- **Where**
  - Twantay Township
- **When**
  - 2019 to 2022
    - (3 years)
Power

- **How**
  - **Transformer substation**
    - 230 kV x 1,
    - 66 kV x 2
    - 33 kV x 1
  - **Transmission lines**
  - **Distribution lines**
    - 230 kV, 66 kV and 11 kV lines
Water

- **Where**
  - Ta Man Gyi Village Tract
  - Twantay Township

- **When**
  - 2019 to 2021 (2 years)
Water

• How

• Water Treatment Plant
  • 60,000m³ per day
    and expandable to
    180,000m³ per day

• Raw water pipeline

• Treated Water
  Distribution Lines

• Water Intake Point
Waste Water

- Where
  - Yae Kyaw Village Tract
  - Twantay Township
- When
  - 2019 to 2021 (2 years)
Waste Water

• How

  • **Waste water Treatment Plant**
    • process 40,000 m³ per day and expandable to 120,000 m³ per day
  
  • **Waste water and storm water collection systems**
    • Collection and discharge of rainwater and sewage will be separated
Industrial Zone

- **Where**
  - Twantay Township
  - 10 sq.km in the north west (Kha Lauk Chauk, Ta Mar Ta Kaw, Ma Ngay Village Tracts)
  - 3 sq. km in the south west (Ku Lar Tan Village Tract)

- **When**
  - 2019 to 2027 (8 years)
Industrial Zone

- How
  - Heavy, medium, and light industry
  - With Related infrastructure such as fire stations, sewage pumping stations, refuse transfer stations, and administration buildings
Impact and Mitigation Measures
Potential Impacts

- Air
- Noise and Vibration
- Waste
- Workers Influx
- Traffic
# Preliminary Identification of Potential Impacts and Proposed Mitigation Measures

<table>
<thead>
<tr>
<th>Impact</th>
<th>Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Air Quality</strong></td>
<td>- Emission in line with International and Environmental Quality Emissions) Guidelines (EQEG)</td>
</tr>
<tr>
<td></td>
<td>- Dust suppression methods</td>
</tr>
<tr>
<td></td>
<td>- Good maintenance (vehicles and machinery)</td>
</tr>
<tr>
<td><strong>Noise Impact</strong></td>
<td>- Emission in line with International and Environmental Quality Emissions) Guidelines (EQEG)</td>
</tr>
<tr>
<td></td>
<td>- Good maintenance (vehicles and machinery)</td>
</tr>
<tr>
<td></td>
<td>- Install temporary noise control barriers where appropriate</td>
</tr>
<tr>
<td><strong>Water Quality</strong></td>
<td>- Discharge in line with International and Environmental Quality Emissions) Guidelines (EQEG)</td>
</tr>
<tr>
<td></td>
<td>- Good storage (fuel, equipment and construction materials to minimize soil contamination or water pollution)</td>
</tr>
<tr>
<td></td>
<td>- Techniques to minimise compaction of soil</td>
</tr>
<tr>
<td><strong>Waste Impact</strong></td>
<td>- Discharge in line with International and Environmental Quality Emissions) Guidelines (EQEG)</td>
</tr>
<tr>
<td></td>
<td>- Waste disposed through third party</td>
</tr>
<tr>
<td><strong>Biodiversity (Flora and Fauna)</strong></td>
<td>- Disposal of materials in accordance with the dredge material management plan.</td>
</tr>
<tr>
<td></td>
<td>- Retain major existing channels and create new retention ponds as part of flood mitigation which may increase aquatic habitat</td>
</tr>
</tbody>
</table>
## Preliminary Identification of Potential Impacts and Proposed Mitigation Measures

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Traffic Impact</td>
<td>▪ Traffic mitigation measures to be proposed</td>
</tr>
<tr>
<td>Socio-economic Impact</td>
<td>▪ Grievance Redress Mechanism</td>
</tr>
<tr>
<td>Health and safety</td>
<td>▪ Health and safety procedures</td>
</tr>
<tr>
<td>Construction Workforce</td>
<td>▪ Local recruitment priority</td>
</tr>
<tr>
<td>Cumulative Impact</td>
<td>▪ Maintain in newly restored sites</td>
</tr>
<tr>
<td>Job Opportunities</td>
<td>▪ Local recruitment priority</td>
</tr>
<tr>
<td>Landscape and Visual</td>
<td>▪ Design mitigation measures to be proposed</td>
</tr>
</tbody>
</table>
EIA Schedule (Next Steps)
Way Forward

- Consultation will continue throughout the lifetime of the Project
- Finalize EIA report
- Submit to ECD and Disclose

Disclosure

- NYDC’s website
- Advertisement on local newspapers
- EIA Executive Summary Document (Myanmar Language) will be disclosed to GAD in Twantay, Hlaing Tharyar, Kyee Myin Daing, Ahlone, Seikgyi Kanaungto and Dala Townships
Environmental Impact Assessment (EIA) for the Development of New Yangon City Project Masterplan

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**Website:** www.nydc.com.mm
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