



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

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5	Stakeholder Engagement
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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

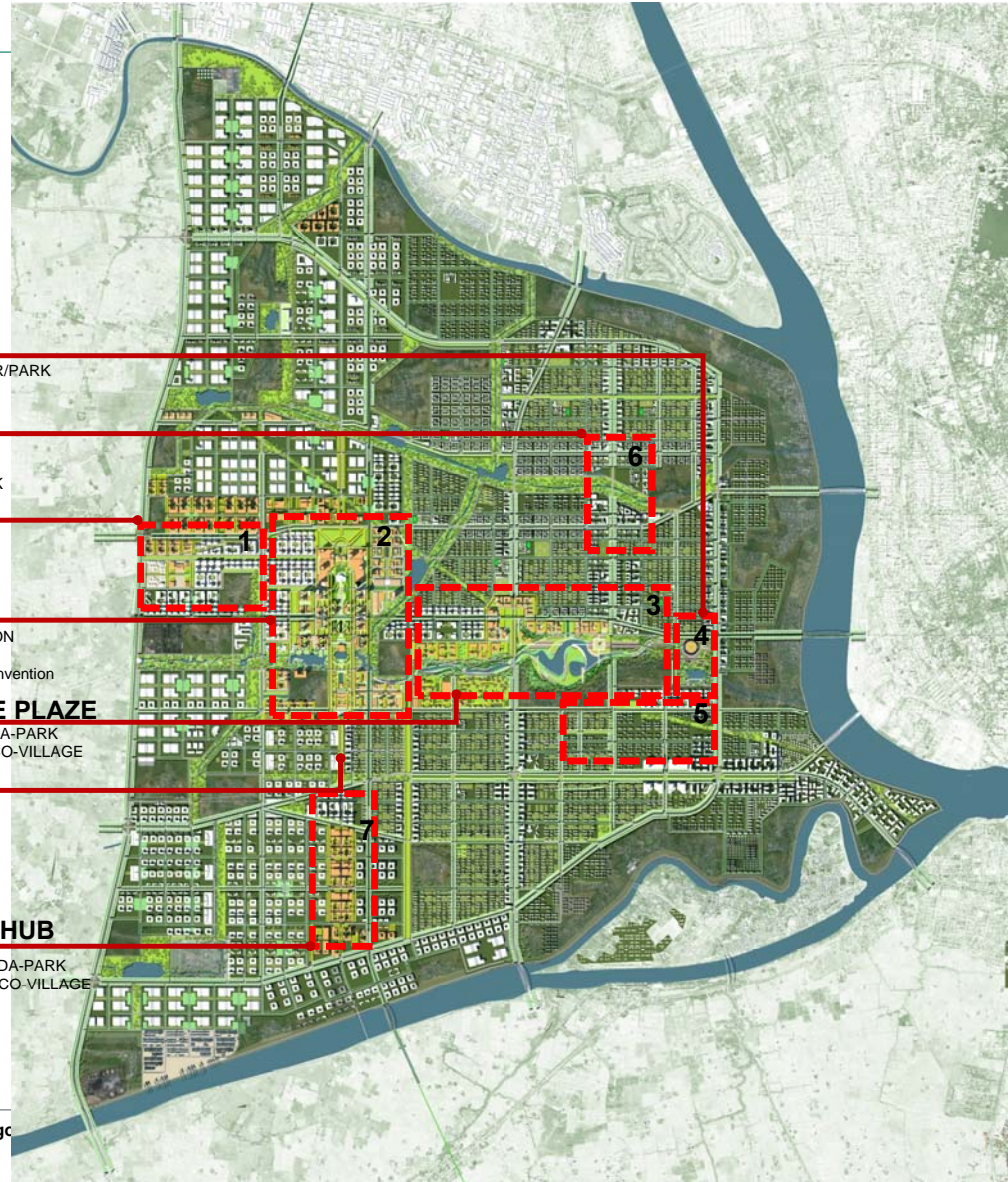


Project Proponent

- 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





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

REPUBLIC OF THE UNION OF MYANMAR
Ministry of Natural Resources and Environmental Conservation
CERTIFICATE FOR TRANSITIONAL CONSULTANT REGISTRATION
(ကြီးကုမ္ပဏီများလုပ်ကိုင်သူမှတ်ပုံတင်ခြင်းအထောက်အထားလက်မှတ်)

No. 0016 Date

The Ministry of Natural Resources and Environmental Conservation, hereby, issues this certificate to the organization under Environmental Impact Assessment Procedure, Notification No. 616/2015.
(ဝတ်ဝန်းကျင် ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ဆုံးလုပ်နည်း၊ အခွင့်ပြုငြာစာအမှတ်၊ ၅၁၆/၂၀၁၅ အရ သယံဇာတနှင့် သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာနသည် ဤအထောက်အထားလက်မှတ်ကို အဖွဲ့အစည်းအား ထုတ်ပေးလိုက်သည်။)

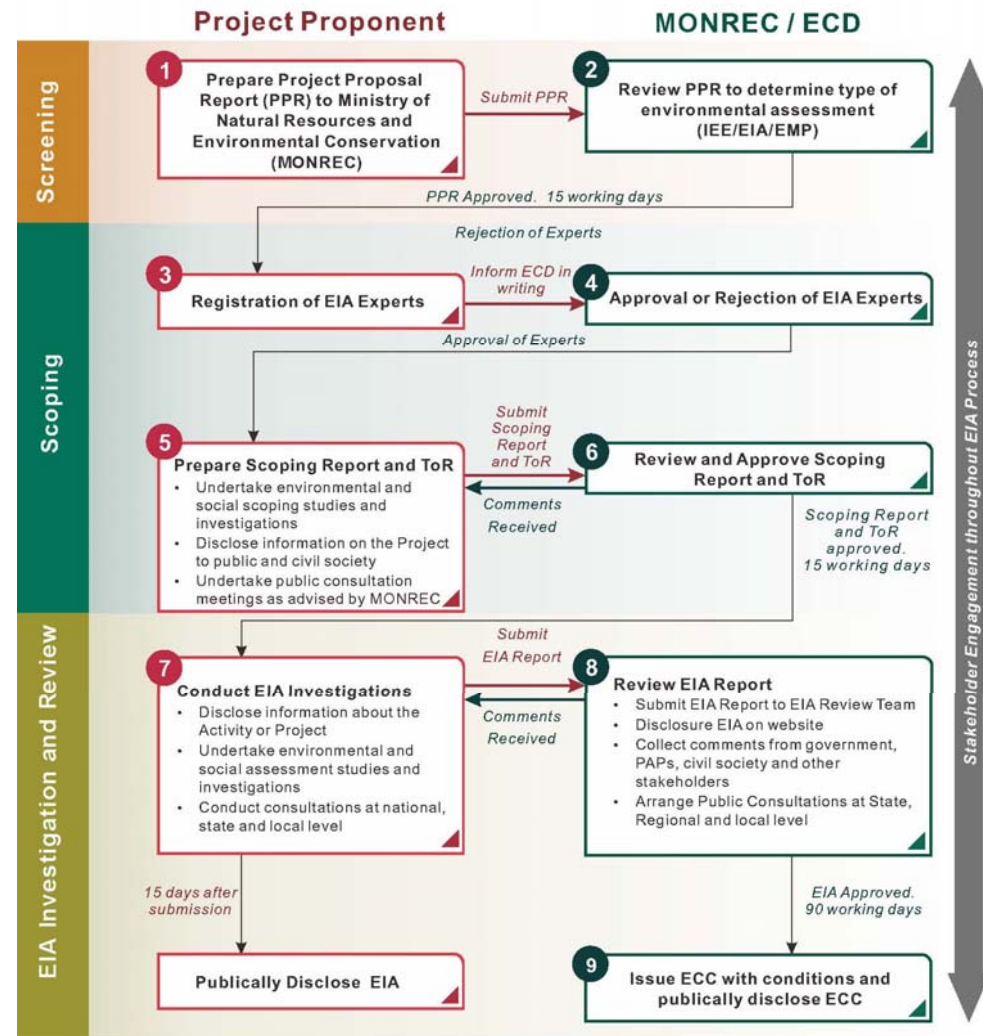
(a) Name of Organization (အဖွဲ့အစည်းအမည်)	Environmental Resources Management (ERM)-Hong Kong, Limited
(b) Name of the representative in the organization (အဖွဲ့အစည်းကိုယ်စားလှယ်၏ အမည်)	Mr. Craig Andrew Reid
(c) Citizenship of the representative in the organization (အဖွဲ့အစည်းကိုယ်စားလှယ်၏ နိုင်ငံသား)	British
(d) Identity Card /Passport Number of the representative person in the organization (အဖွဲ့အစည်းကိုယ်စားလှယ်၏ မှတ်ပုံတင်/ နိုင်ငံကူးလက်မှတ် အမှတ်)	528699851
(e) Address of organization (အကယ်၍လုပ်ကိုင်ရာ)	ERM-Hong Kong, Limited, 16/F, Berkshire House, 25 Westlands Road, Quarry Bay craig.reid@erm.com , (852) 6206 5065
(f) Type of Consultancy (အကြံပေးလုပ်ကိုင်မှုအမျိုးအစား)	Organization
(g) Duration of validity (သက်တမ်းကုန်ဆုံးရက်)	31 March 2018

EXTENSION
သက်တမ်းတိုးချက်
The VALIDITY of this certificate is extended for one year from (1.4.2018) to (31.3.2019)
ဤထောက်အထား (၁-၄-၂၀၁၈) မှစ၍ (၂၀၁၉-၂၀၁၉) ခုနှစ်အတွက် ထပ်မံသက်တမ်း တိုးချက်ပေးသည်။

For Director General
(Gee Hseng, Director)
Environmental Conservation Department
Director General
Environmental Conservation Department
Ministry of Natural Resources and Environmental Conservation

EIA Process

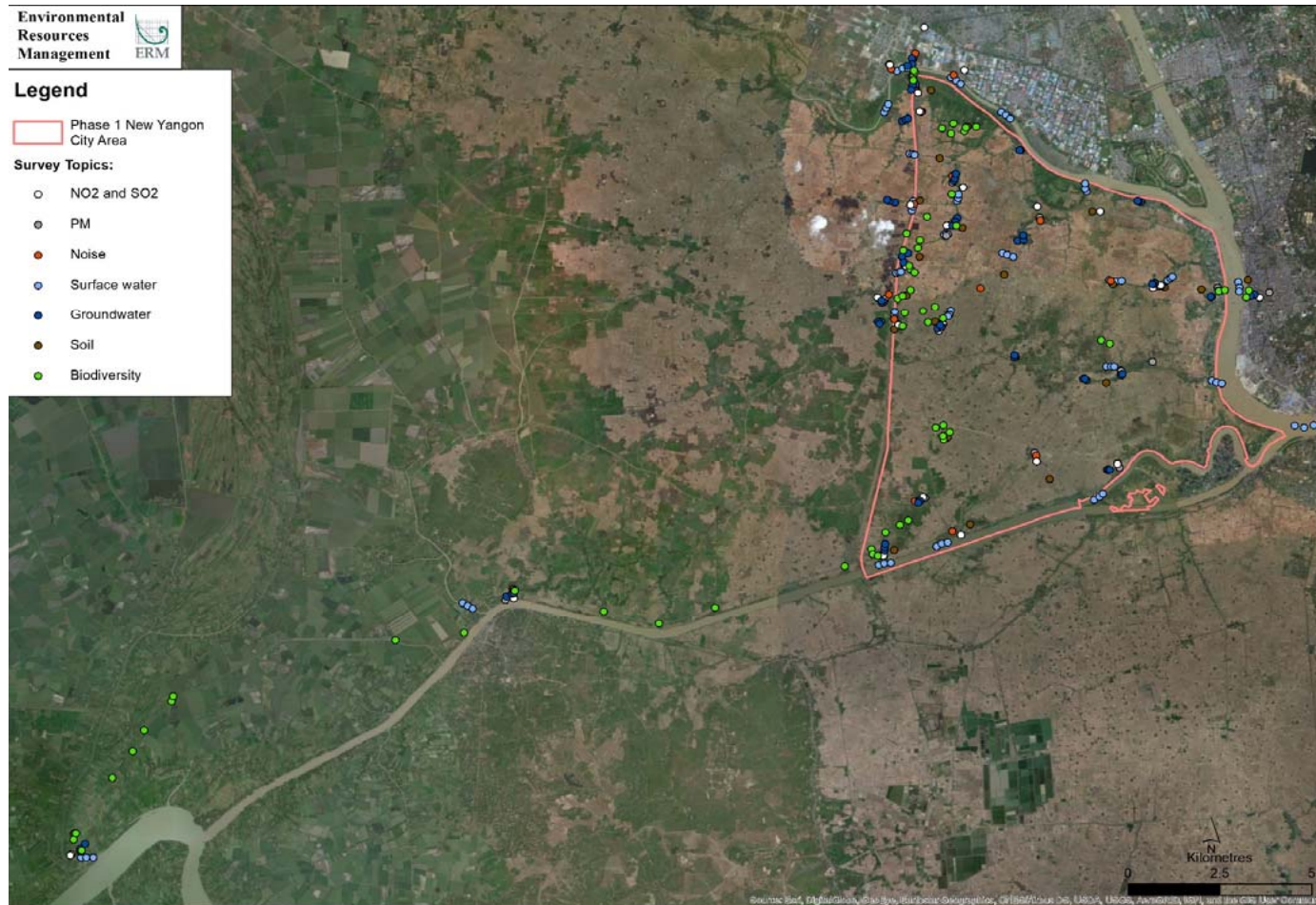
- **Project Proposal Report** – January 2019
- **Meeting with ECD** – January 2019
- **Third Party Registration** – February 2019
- **Scoping Consultation**
 - Yangon Regional Government and Parliament Representatives – January 2019
 - Townships Consultation – February 2019
- **Preparation of Scoping 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

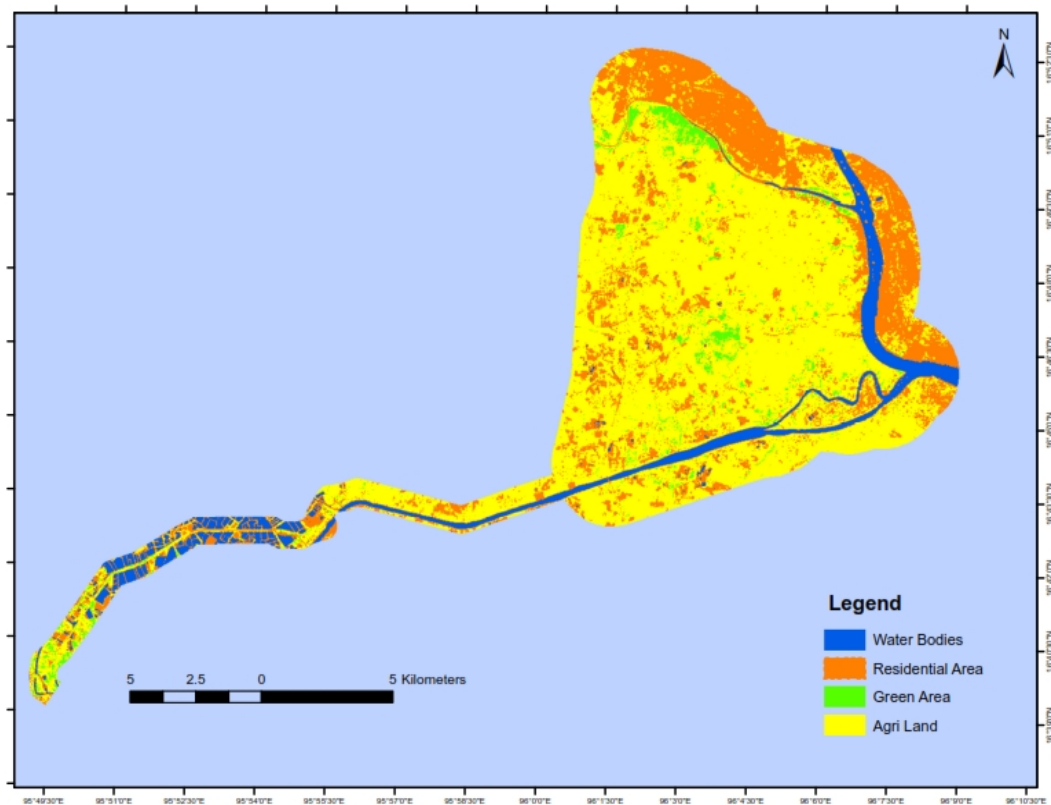


Baseline Data Collection & Results

Topic	Locations	Parameters and Remarks
Air	27	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Sound levels measured during day and night. Majority of point measured exceed Standards.
Soil	24	<ul style="list-style-type: none"> Tested for pH, metals, pollutants All within the Standards
Groundwater		<ul style="list-style-type: none"> 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

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



Stakeholder Engagement

Who we engage

Engagement Process

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, Ahlone, 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



Source: art4clip.com

Present



Source: satukis.info

Communicate



Source: fpl.com

Key Topics discussed During Scoping Consultations

Waste
discharges
and disposal

Job
opportunity

Source of
Electricity

Water
collection

Sand and Soil
for
construction

Land
Utilization
(Farmland)

Roads and
Transportation
system

Land
Compensation

Urban Management

- Squatters
- Physical Displacement
- Resettlement Plan
- Cemetery location
- Administrative infrastructure

Env impact
to
neighbours



Individual Component Details

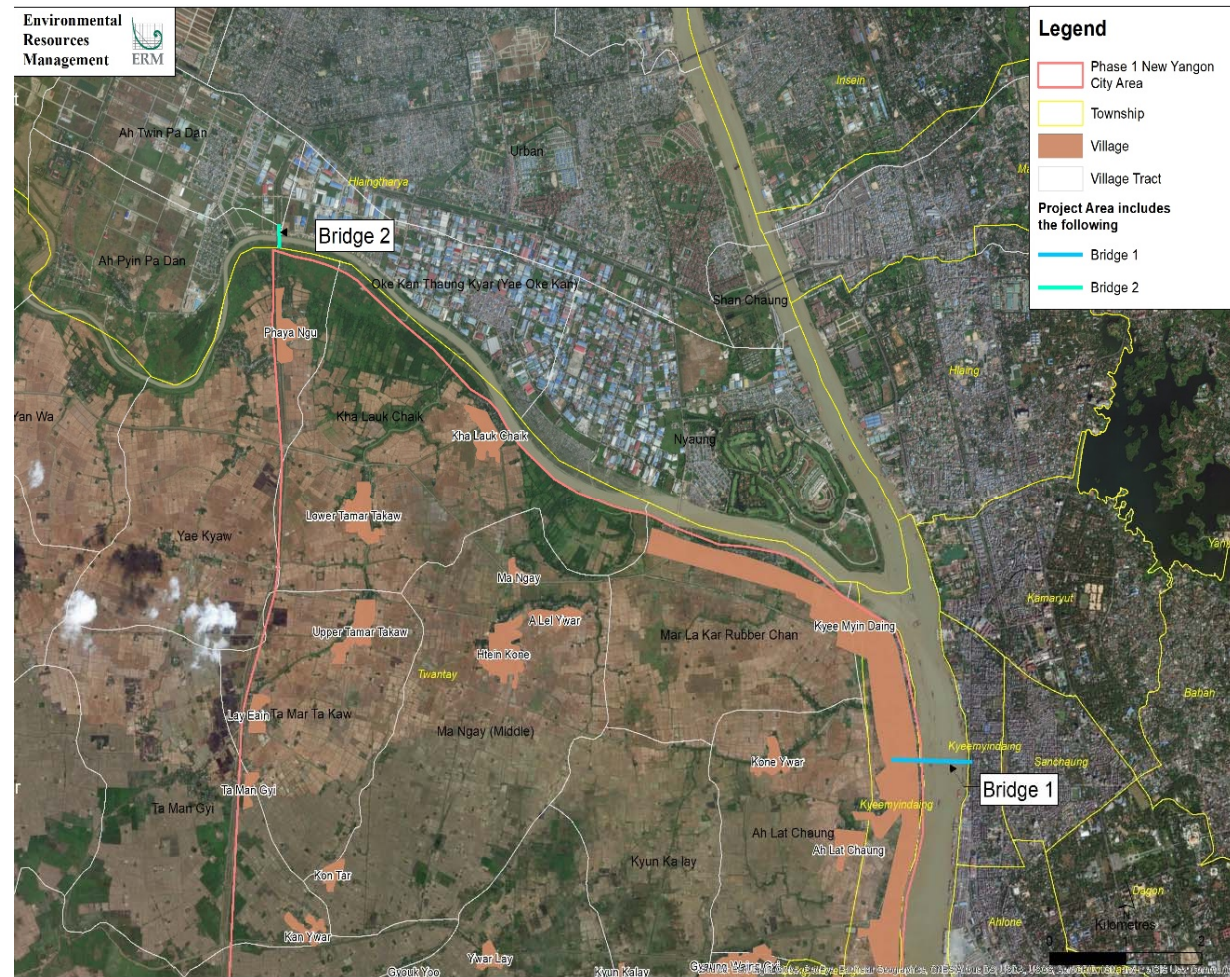
Bridges

- **Where**

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

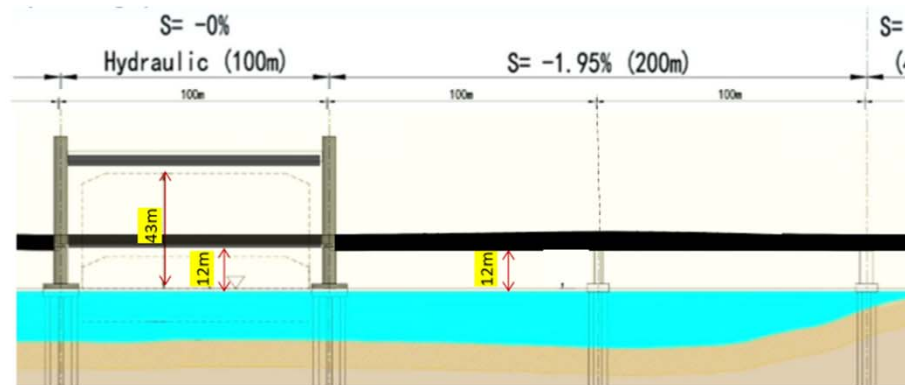
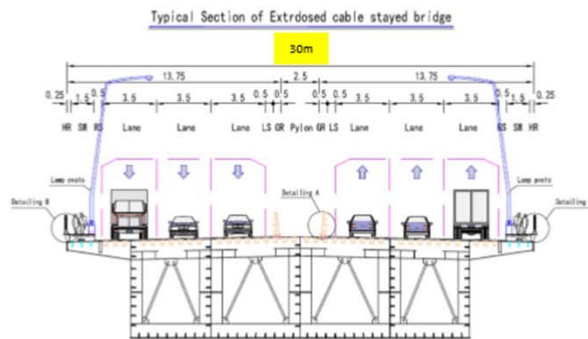
- **When**

- 2019 to 2021 (2 years)
- 2020 to 2022 (2.5 years)



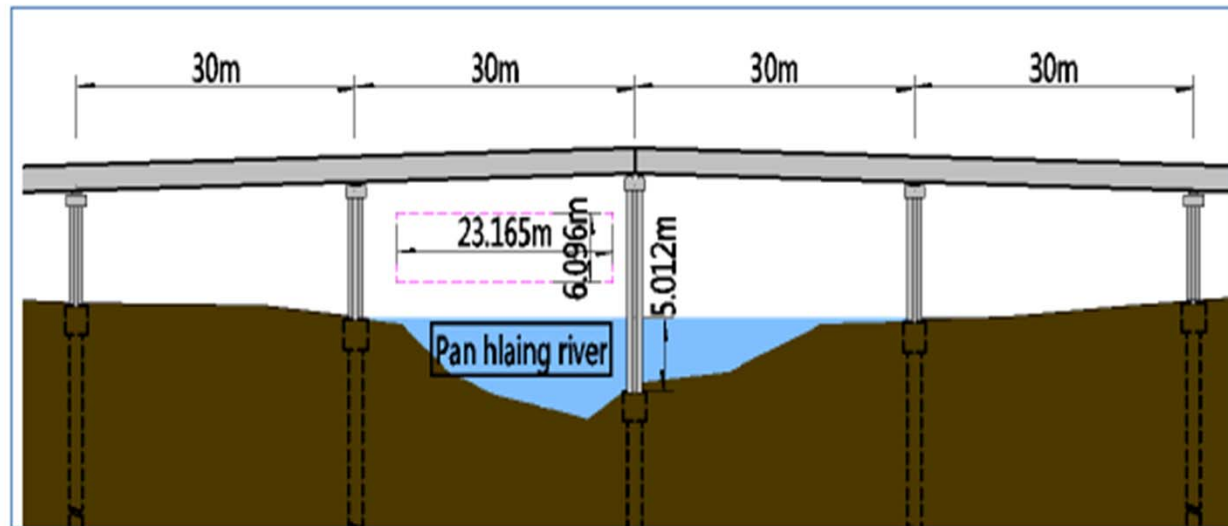
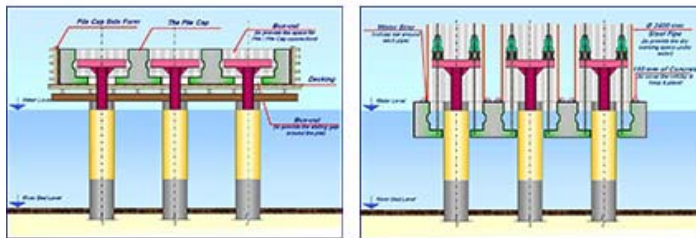
Yangon River Bridge

- How
 - Two-way-six-lane
 - 100 years lifetime



Pan Hlaing River Bridge

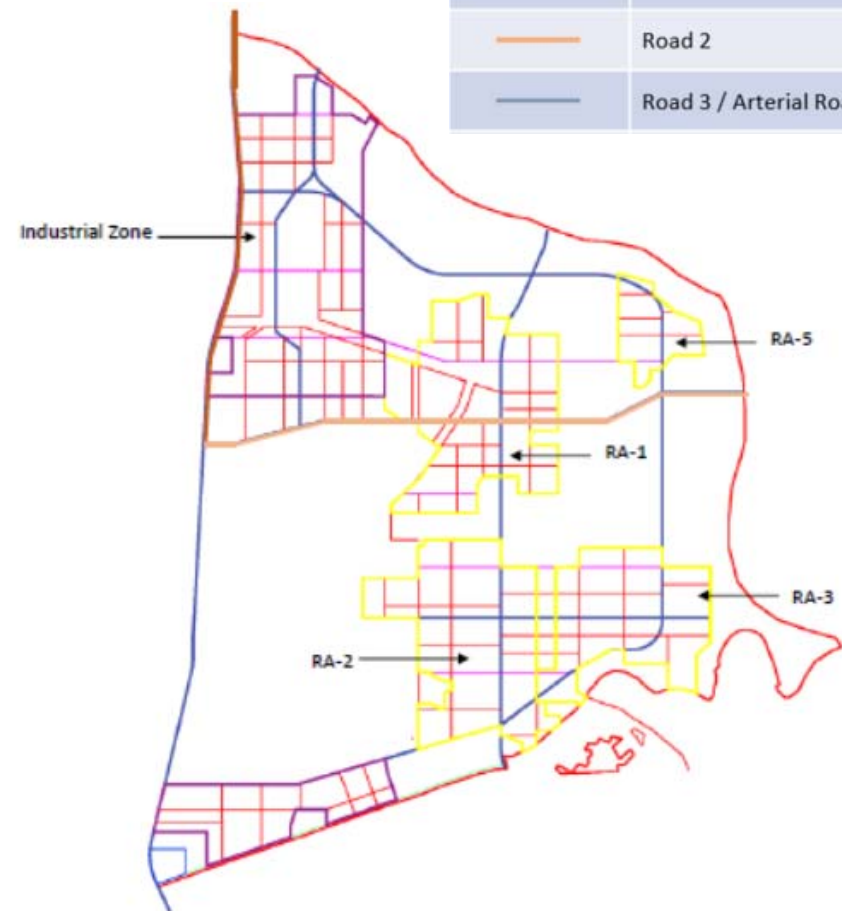
- **How**
 - One-way two lanes
 - 100 years lifetime



Roads





	Road Type
	Road 1
	Road 2
	Road 3 / Arterial Road

- **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

	Road Type	Length (km)	ROW (m)
	Road 1	7.22	43.0
	Road 2	9.17	50.0
	Road 3 / Arterial Road	43.40	43.0/50.0/64.0
	Sub Arterial Road	20.41	41.5/43.5
	Collector Road (IZ 1, RA)	115.42	35.0
	Total Road Area	195.62	

Arterial Road

Typical Section



Local Road

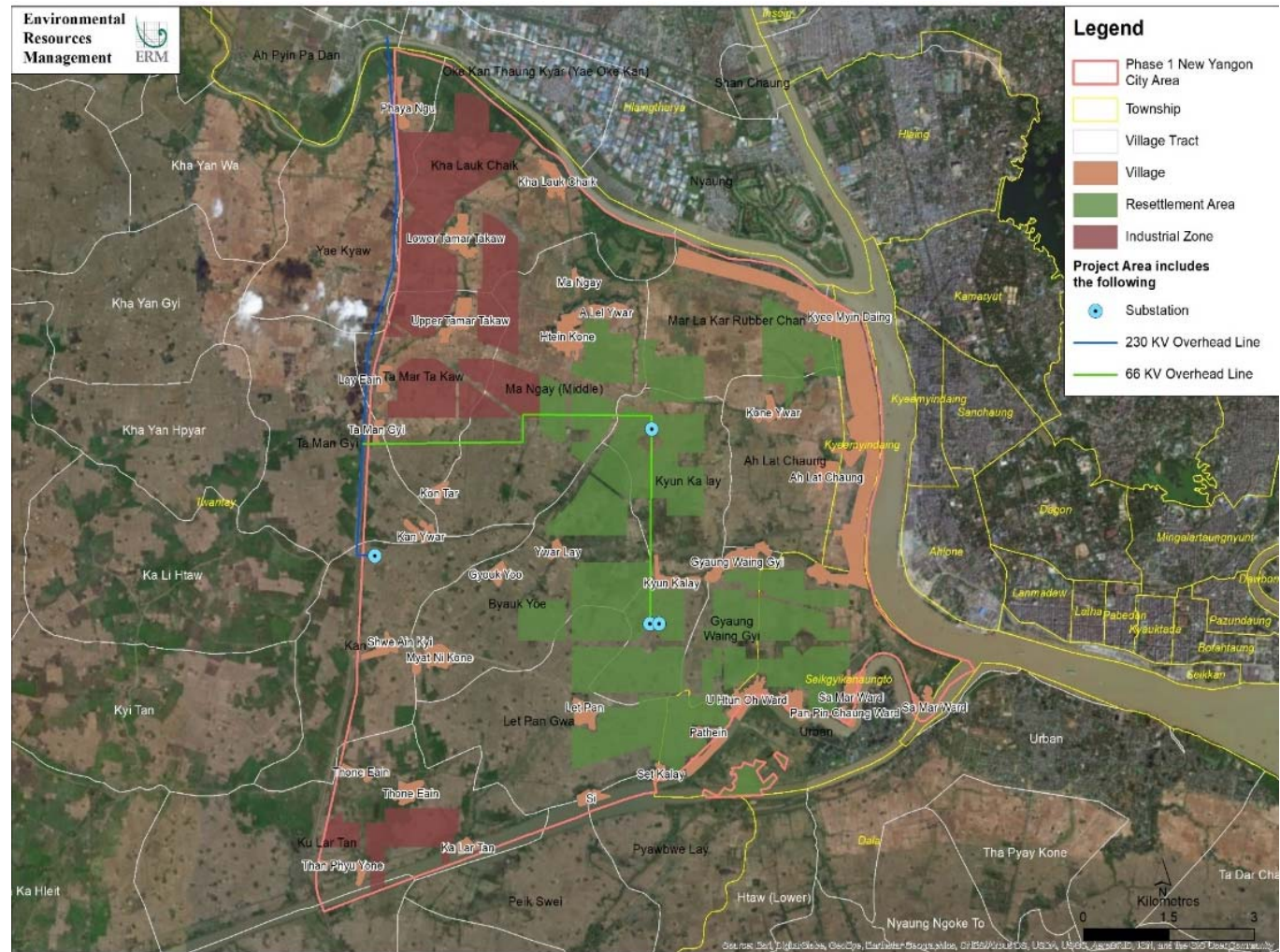


Collector Road



- **Where**

- **When**



Power

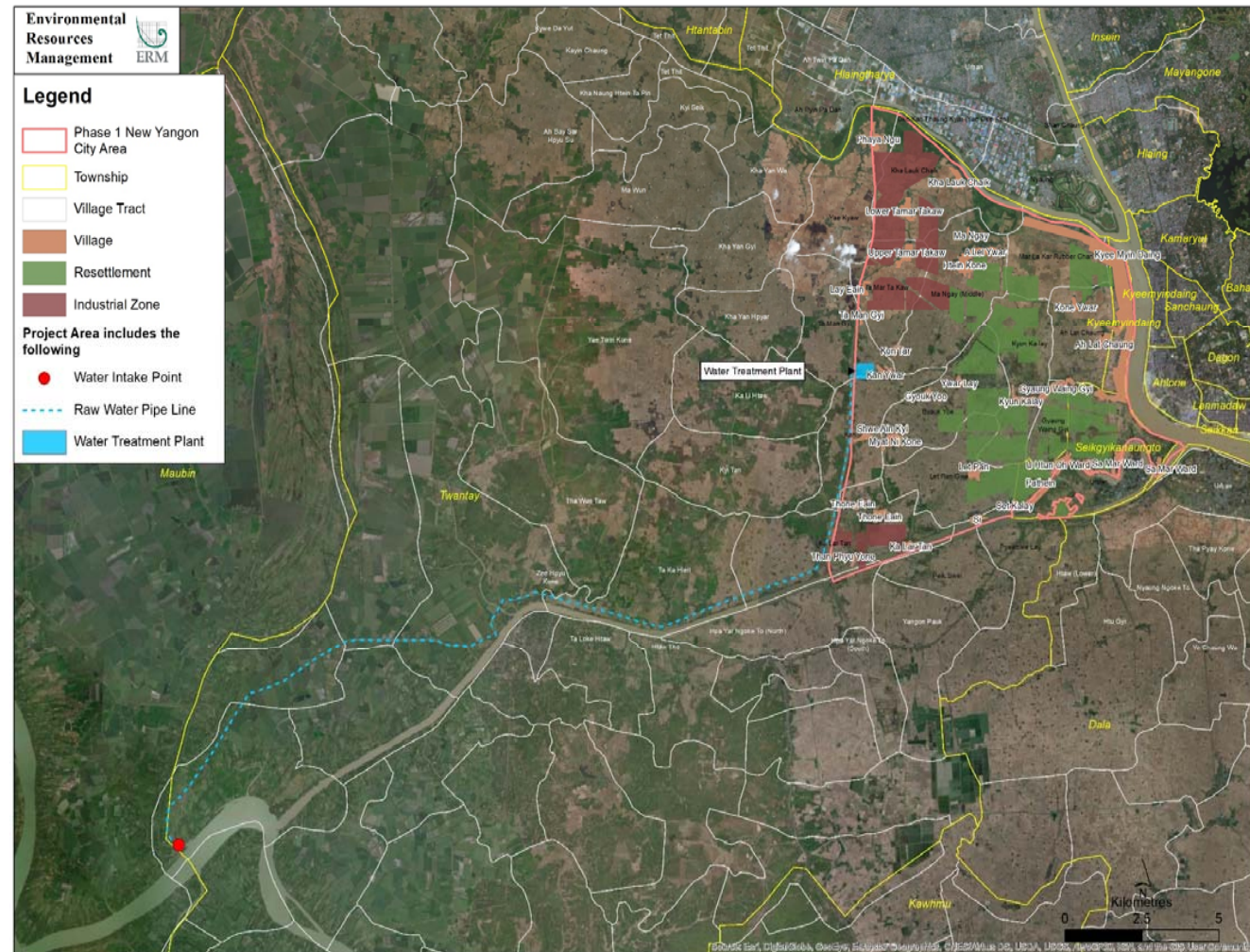
- **How**
 - **Transformer substation**
 - 230 kV x 1,
 - 66 kV x 2
 - 33 kV x 1
 - **Transmission lines**
 - **Distribution lines**
 - 230 kV, 66 kV and 11 kV lines



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**

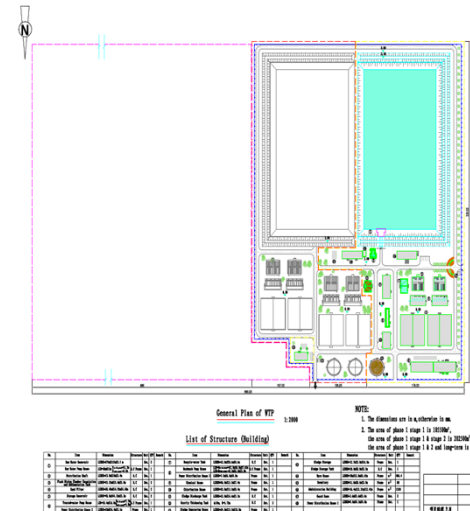


Figure 5-71 Backwash Pump House



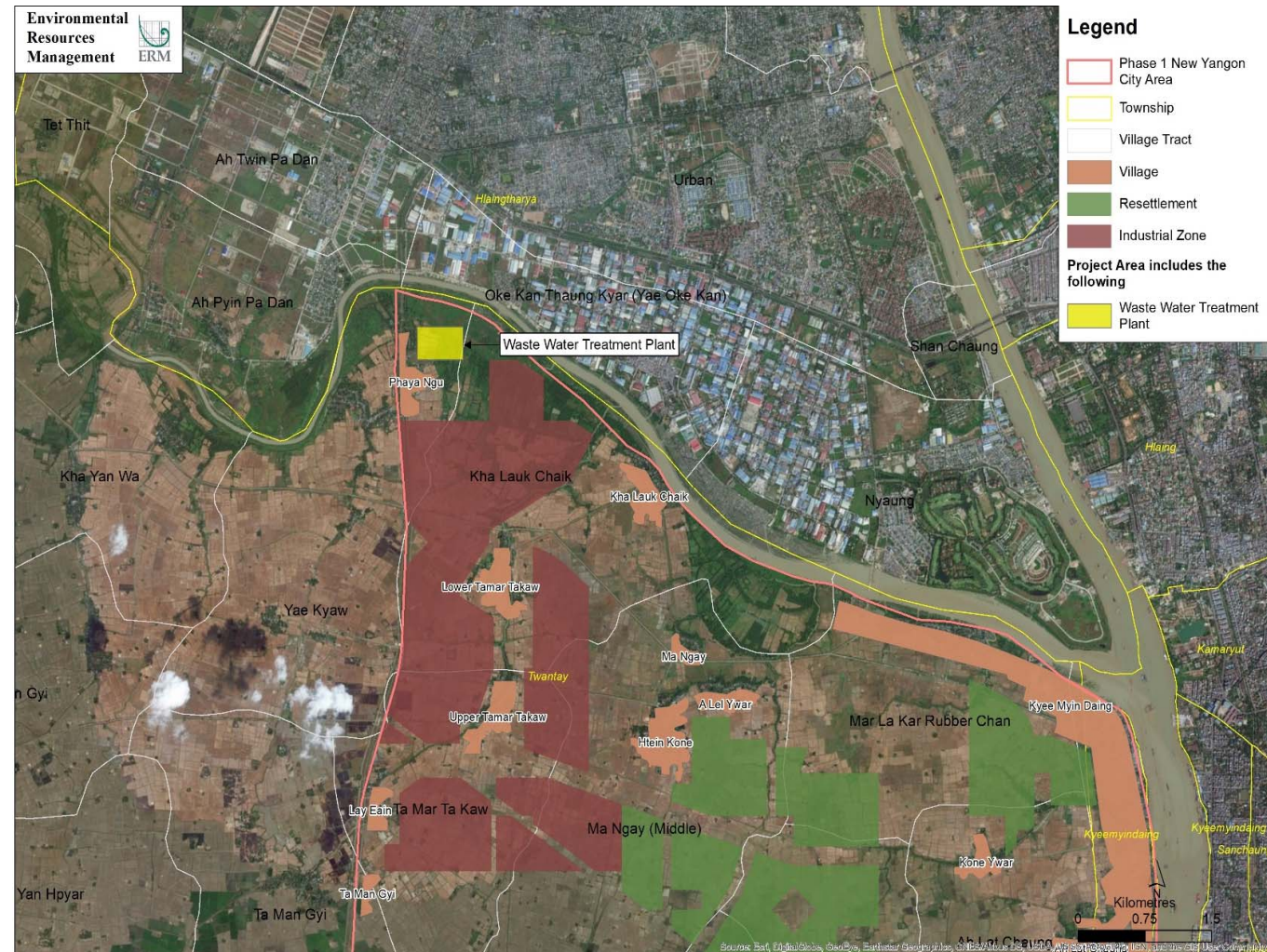
Waste Water

- **Where**

- Yae Kyaw Village Tract
- Twantay Township

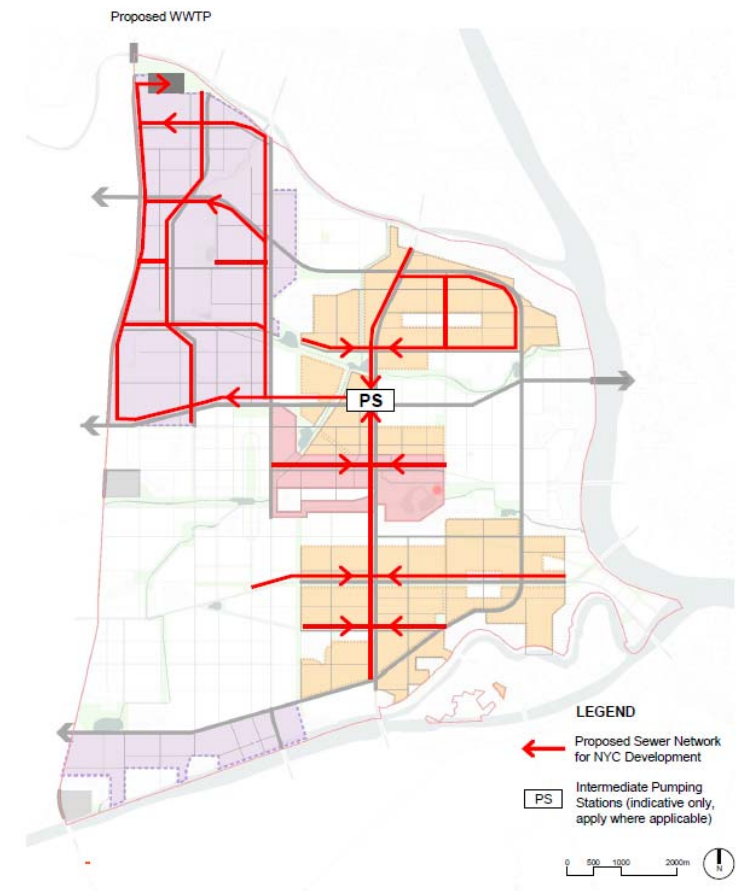
- **When**

- 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



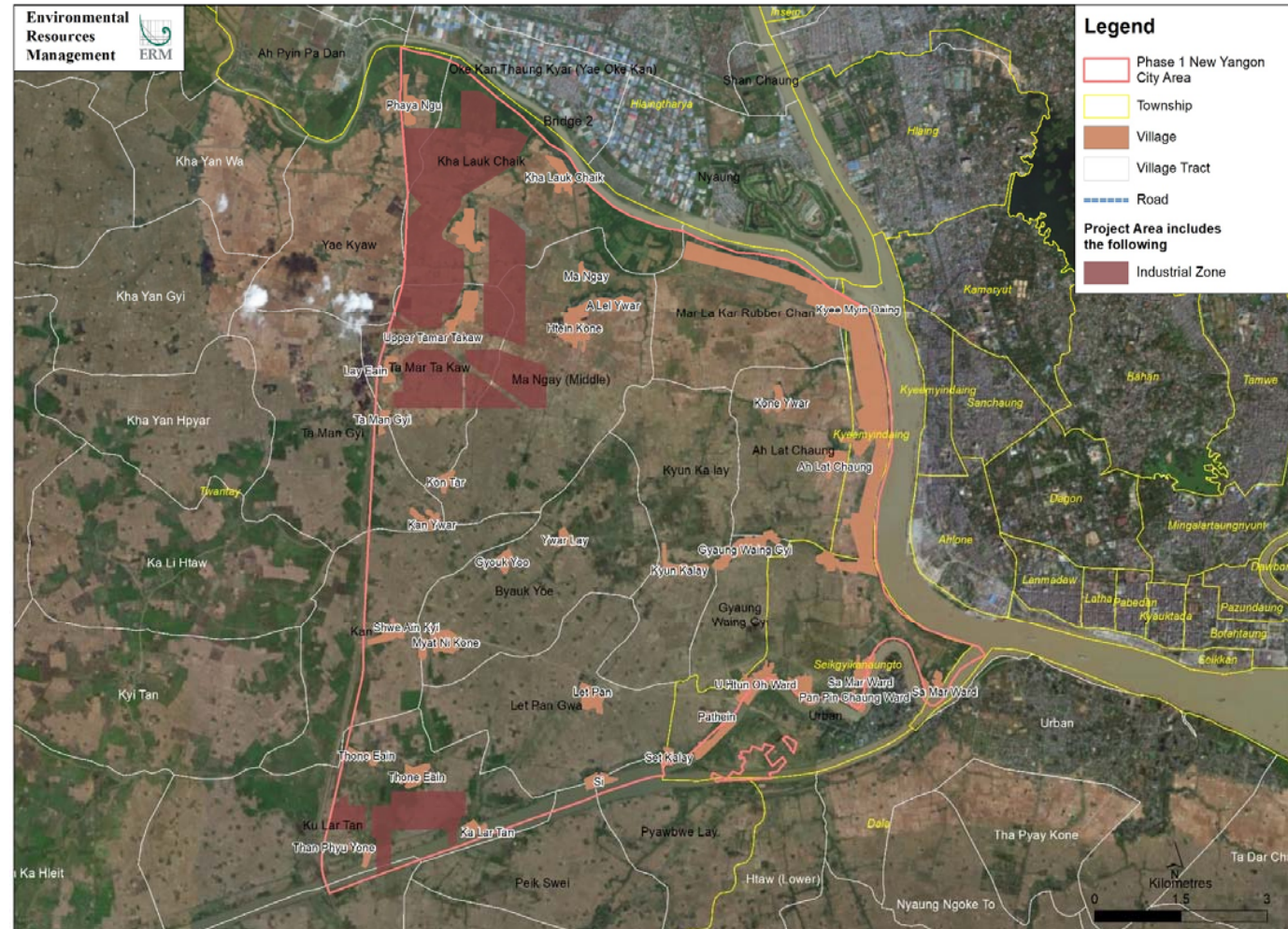
Industrial Zone

- **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



Source: environsolutions.wordpress.com



Source: dream/time.com



Source: cellcode.us



Source: procoen.com



Source: panaynews.net

Preliminary Identification of Potential Impacts and Proposed Mitigation Measures

Impact	Mitigation Measures
Air Quality	<ul style="list-style-type: none"> ▪ Emission in line with International and Environmental Quality Emissions) Guidelines (EQEG) ▪ Dust suppression methods ▪ Good maintenance (vehicles and machinery)
Noise Impact	<ul style="list-style-type: none"> ▪ Emission in line with International and Environmental Quality Emissions) Guidelines (EQEG) ▪ Good maintenance (vehicles and machinery) ▪ Install temporary noise control barriers where appropriate
Water Quality	<ul style="list-style-type: none"> ▪ Discharge in line with International and Environmental Quality Emissions) Guidelines (EQEG) ▪ Good storage (fuel, equipment and construction materials to minimize soil contamination or water pollution) ▪ Techniques to minimise compaction of soil
Waste Impact	<ul style="list-style-type: none"> ▪ Discharge in line with International and Environmental Quality Emissions) Guidelines (EQEG) ▪ Waste disposed through third party
Biodiversity (Flora and Fauna)	<ul style="list-style-type: none"> ▪ Disposal of materials in accordance with the dredge material management plan. ▪ Retain major existing channels and create new retention ponds as part of flood mitigation which may increase aquatic habitat

Preliminary Identification of Potential Impacts and Proposed Mitigation Measures

Impact	Mitigation Measures
Traffic Impact	<ul style="list-style-type: none"> ▪ Traffic mitigation measures to be proposed
Socio-economic Impact	<ul style="list-style-type: none"> ▪ Grievance Redress Mechanism
Health and safety	<ul style="list-style-type: none"> ▪ Health and safety procedures
Construction Workforce	<ul style="list-style-type: none"> ▪ Local recruitment priority
Cumulative Impact	<ul style="list-style-type: none"> ▪ Maintain in newly restored sites
Job Opportunities	<ul style="list-style-type: none"> • Local recruitment priority
Landscape and Visual	<ul style="list-style-type: none"> • Design mitigation measures to be proposed



EIA Schedule (Next Steps)

Way Forward

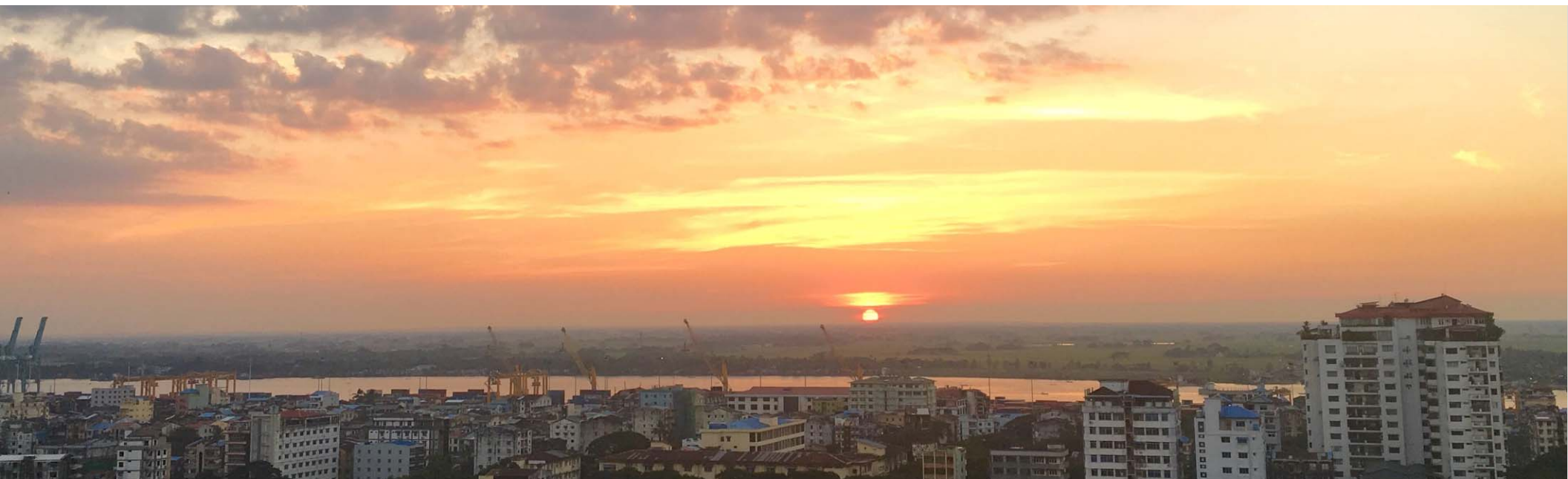
- Consultation will continue throughout the lifetime of the Project
- Finalize EIA report
- Submit to ECD and Disclose

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



Contact Details



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

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To provide comments please use the following contact details:

NYDC

Address: New Yangon Development Company, 56 Chindwin Road, Kamayut Township, Yangon, Myanmar.

Telephone: +95 (9) 402111525

Email: comments@nydc.com.mm

Website: www.nydc.com.mm

Facebook: <https://m.facebook.com/NydcMyanmar/>

ERM

Address: Unit 01, 20th Floor, Crystal Tower, Junction Square, Kyun Taw Road, Kamayut Township, Yangon, Myanmar.

Email: thaesu.kyi@erm.com

