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# An Overview of Philippines Road Network

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 SMEC  
Member of the Surbana Jurong Group

# About Surbana Jurong

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# ● SJ in Numbers

49

Countries

16,000

Employees

103

Nationalities

- CANADA
- USA

- AFGHANISTAN
- KAZAKHSTAN
- GEORGIA

- SHANGHAI
- BEIJING
- SHENZHEN
- XI'AN
- HONG KONG

- UK

#14  
2024 World's Top  
Architecture Firms  
(WA100)

#23  
2023 Top International  
Design Firms

- CHILE
- MEXICO

- SOUTH AFRICA
- KENYA
- TANZANIA

- INDIA
- SRI LANKA
- PAKISTAN
- BANGLADESH
- NEPAL
- SAUDI ARABIA
- UAE

- MALAYSIA
- VIETNAM
- MYANMAR
- INDONESIA
- PHILIPPINES
- PACIFIC

7,000  
Active Projects

\$2B  
2022 Revenue

**Singapore**  
7,400 staff

**North Asia**  
400 staff

**SEA**  
1,170 staff

**ANZ**  
2,570 staff

**SACA**  
2,040 staff

**Africa**  
1,025 staff

**Americas**  
430 staff

**UK**  
460 staff

- A collective of **specialist brands**



# Complete Value Chain Services

## Our value proposition



### PLAN & DESIGN

Concept & Feasibility Studies  
Master Planning  
Development &  
Project Financial Services  
Sustainability &  
Environmental Consultancy



### DEVELOP

Architecture & Landscaping  
Engineering & Specialist Services  
Quantity Surveying &  
Cost Management



### DELIVER

Project Management  
Construction Engineering  
Site Supervision  
Contract Advisory



### OPERATE & MANAGE

Smart City Solutions  
Facilities Management  
& Asset Enhancement  
Safety & Security Services  
Defence Services &  
Training Solutions

SUPPORTED BY OUR FAMILY OF SPECIALISTS

**Sj** SURBANA  
JURONG



atelier ten

B+H

K T P

PROSTRUCT  
CONSULTING

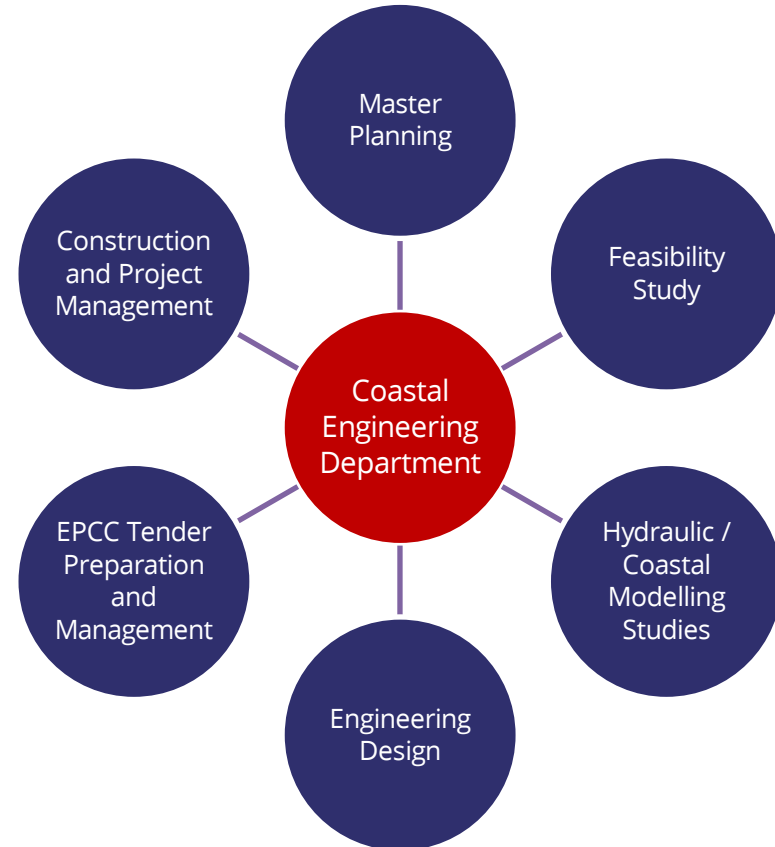
Robert Bird Group

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SMC

## SERVICES





# Overview Surbana Jurong Transport Business Sector

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**For more than 70 years, we have built a reputation as a trusted partner on major transport and energy infrastructure projects around the world.**

- Through our network of global experts collaborating with local partners, we connect you with the best teams and capabilities to deliver sustainable, innovative solutions across all major infrastructure and renewable energy projects.
- We understand that the infrastructure and energy markets are constantly evolving, and by combining digital technology with extensive expertise and detailed understanding of local conditions, we can deliver innovative and sustainable solutions that meet the needs of specific environments and users.

# Our Services

- **Planning, investigation, survey and design**
- **Formation, track and interchange design**
- **Route selection and analysis**
- **Condition assessments**
- **Rail terminal master planning**
- **Construction management**
- **Rail and transport design**
- **Project management**
- **Station design and upgrades**
- **Asset management**

## **Delivering throughout the project lifecycle**

- we provide a whole-of-life approach to the design, construction, operation and maintenance of railway infrastructure, helping to transform mass transportation worldwide.
- Our technical specialists have undertaken a range of rail and metro projects from the design of new routes for urban metro, main line, provincial and light rail networks to the rehabilitation and maintenance of existing routes.
- We continually explore and implement practical application of advancing technologies to provide innovative, cost effective and appropriate solutions to rail and metro projects worldwide. Our team provide advice, planning, design, supervision and project management services for complex rail infrastructure works through the entire lifecycle of the design, from feasibility to construction

# Our core markets

**We provide technical expertise and advanced engineering services to resolve complex challenges within roads, highways, rail, metro, airports, hydropower and renewable energy markets.**

## Roads and Highways

Our specialist teams manage all aspects of engineering and advisory for roads and highways, including feasibility studies, design, construction, maintenance and asset management services. We draw on our extensive expertise in bridges, road alignment and pavement design, tunnelling and geotechnical engineering to provide advanced design and advisory solutions to complex road and highway challenges.

## Rail, Metro and TOD

We are global specialists in a broad range of rail, metro and underground projects, having designed and delivered technical firsts in many countries. Our extensive experience in railway engineering consultancy services includes high-capacity metro, passenger railways, light rail, freight and heavy haul railways. We collaborate with international contractors and asset operators and draw on the specialist expertise of our global group of companies to offer transit-oriented development solutions.

## Hydropower and Dams

With Surbana Jurong Group's heritage founded in one of the most famous hydropower schemes in the world, the Snowy Mountains Hydroelectric Scheme, we are a specialist in pumped hydropower. Our expertise extends from small hydropower projects to some of the most advanced schemes in the world. We draw on the knowledge and experience of our global engineers, planners and specialists to provide tailored solutions, value engineering and innovation in the design, construction and project management of hydropower and dam projects.

## Renewable Energy

We bring specialist expertise to the renewable energy sector, collaborating with our clients and partners to reduce carbon emissions and deliver efficient and cost-effective systems for a broad range of renewable projects including solar and wind farms, Battery Energy Storage Systems, waste to energy, and transmission and distribution. Our expertise includes grid connection studies, substation design, policy and sector planning, carbon services, load forecasting models, and long-term generation planning using simulation and dynamic programming techniques.

## Aviation

We provide integrated aviation consultancy services and solutions for both airside and landside aviation infrastructure across the entire aviation value chain. Our expertise comprises the planning, design, construction and maintenance of airports and associated facilities, as well as the development of management systems and procurement programs for the aviation sector.



# Overview of Ports of Manila

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# Ports of Manila



- Three Major Ports:
  - Manila North Harbor
  - Manila South Harbor
  - Manila International Container Terminal (MICT)
- Total area of 137.5 hectares.
- Total 22 berths
- Total cargo handled at Port of Manila in 2022 – 99,429.585 MT [~ 3.5 mil TEU] including domestic, import and export cargo.
- On an average about 275,000 tons in a day.
- About 9000 trucks in a day.

*Reference: PPA Website - Cargo statistics for 2022*

# Road Network outside Port of Manila

- National secondary roads connected to port of Manila.
- NLEX-CAITEX Port Express Way





# Overview of Philippines Road Network

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# PH INFRASTRUCTURE & ENERGY – Developments in Philippine Road Network for Cargo



## **NORTH LUZON EXPRESSWAY (NLEX) Harbor Link and Connector Road Project**

- Aims to connect the North Luzon Expressway to the Port of Manila. This will improve Cargo Transport in between NLEX and Radial Road R10 in Navotas serving as an access to the Port of Manila.
- This expressway network is divided in to four segments, namely:
  - Segment 8.1 (Mindanao Avenue Link) 2.70km
  - Segment 8.2 (C-5 Link / Citi Link) 8.30km
  - Segment 9 (Karuhatan Link) 2.42km
  - Segment 10 (Harbor Link) 5.58km
  - Segment 10 to R10 Exit Ramp 2.60km
- Currently, segment from Mindanao Avenue in Valenzuela to Navotas is operational.



# PH INFRASTRUCTURE & ENERGY - Current Philippine Road Network for Cargo

## **NORTH LUZON EXPRESSWAY (NLEX) Harbor Link and NLEX-SLEX Connector Road Project**



# Forecast for Philippine Road Network Improvements

## ***Proposed PPP Projects (200 km radius)***

**HSH Network 2020**  
Existing = 420 km  
Proposed for 2020 = 206 km  
Total by Yr 2020 = 626 km



## ***Proposed PPP Projects (200 km radius)***

**HSH Network 2030**  
Proposed for 2030 = 236 km  
Total by Yr 2030 = 862 km

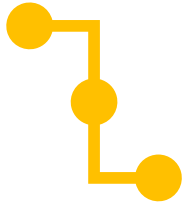


# Forecast for Philippine Road Network Improvements

## BENEFITS



Decongest City  
Traffic



Improve Connection  
Between North &  
South



Provide Trucks With  
Alternative Routes

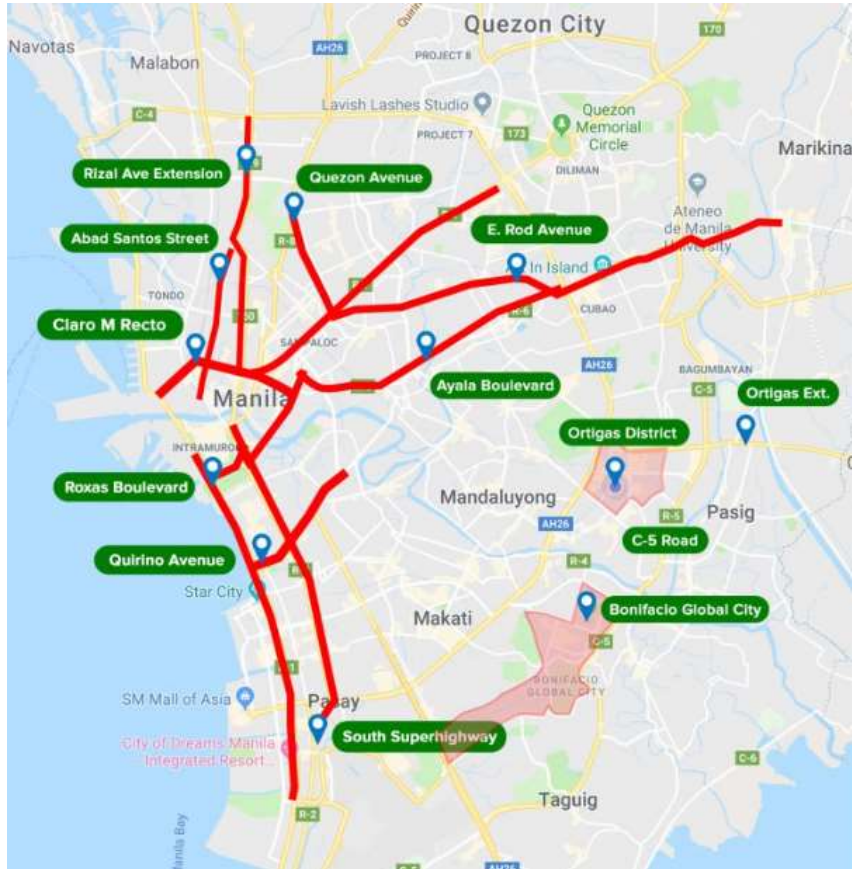
### ***Proposed PPP Projects (200 km radius)***

**HSR Network 2030**  
Proposed beyond 2030 = 133 km  
Total beyond Yr 2030 = 995 km

**HSR Network (Beyond 2030)**  
862 + 133 = 995 km



# PH INFRASTRUCTURE & ENERGY - Transport Sector



## TRUCK BAN ORDINANCE

- The Metropolitan Manila Development Authority Truck Ban Ordinance restricts large trucks, including Closed Vans (3000kg & 4000kg), Open Trucks, 6w Fwd Trucks, and Wing Vans, from driving on certain roads. There is a “Total Truck Ban” along Epifanio Delos Santos Avenue (EDSA), between EDSA Magallanes to North Avenue Quezon City, every day except Sundays and Holidays.
- Road restriction is implemented from 6:00 AM to 10:00 AM and from 5:00 PM to 10:00 PM every day except Sundays and Holidays. During these hours, no cargo truck shall be allowed to travel or pass along the following:
- Exemptions:
  - Garbage Trucks
  - Fuel Trucks
  - Trucks carrying essential and/or perishable goods regulated by the MMDA

# Thank you

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