

ENGINEERING & DESIGN

# CAPABILITY BROCHURE

Practical engineering support  
from concept to implementation.

WATER | INFRASTRUCTURE | HOMES | SITES

Senior expertise, licensed engineering capability and flexible  
international delivery for projects in Denmark, the Philippines and beyond.

[contact@yonsengroup.com](mailto:contact@yonsengroup.com)

[www.yonsengroup.com](http://www.yonsengroup.com)



# ENGINEERING CAPACITY THAT SCALES WITH YOU.

Nordic-led quality. Skilled international delivery.  
Practical support - from a single task to complete  
engineering work packages.

LET'S BUILD THE RIGHT TEAM

## YOUR PROJECT. THE RIGHT EXPERTISE. DELIVERED EFFICIENTLY.

YonSen Group combines senior engineering experience with competent resources  
in Southeast Asia - giving clients flexible capacity, close coordination and dependable quality.

## HOW WE CAN SUPPORT YOU

01

### WATER & CLIMATE ADAPTATION

Hydrology, flood risk, drainage,  
stormwater and resilient solutions.

02

### HYDRAULIC MODELLING

HEC-RAS, MIKE, Flood Modeller, SWMM,  
SewerGEMS, review and quality assurance.

03

### CIVIL & INFRASTRUCTURE DESIGN

Roads, drainage and site development  
using OpenRoads, Civil 3D and more.

04

### CAD, GIS & DIGITAL PRODUCTION

Drafting, digitisation, mapping, spatial  
analysis, 3D and drawing production.

05

### NATURE-BASED SOLUTIONS

Blue-green infrastructure, wetlands and  
water-sensitive, climate-resilient design.

06

### INDEPENDENT REVIEW & ADVISORY

Third-party checks, due diligence, QA,  
technical coordination and project support.

- **SENIOR EXPERIENCE**  
International project insight
- **FLEXIBLE CAPACITY**  
Task, team or work package
- **EFFICIENT DELIVERY**  
Nordic-Asian team model
- **TRUSTED SUPPORT**  
Clear, responsive collaboration

## READY TO STRENGTHEN YOUR PROJECT TEAM?

Start with a conversation about your next task or assignment.

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# HYDRAULIC MODELLING. DRAINAGE DESIGN.

From model set-up and review to detailed drainage design.  
Reliable solutions for roads, cities and  
critical infrastructure.

DISCUSS YOUR PROJECT NEEDS

## CLEAR MODELS. BUILDABLE DRAINAGE. RELIABLE DECISIONS.

YonSen Group supports projects from catchment assessment and hydraulic modelling  
to coordinated drainage design - delivered with senior oversight and dependable quality.

## HOW WE CAN SUPPORT YOU

01

### 1D & 2D HYDRAULIC MODELLING

HEC-RAS, MIKE and Flood Modeller for  
rivers, floodplains and structures.

02

### URBAN DRAINAGE DESIGN

SWMM, SewerGEMS and MIKE+ for robust  
stormwater network planning and design.

03

### STORMWATER NETWORKS & OUTFALLS

Pipes, manholes, inlets, detention and  
safe discharge solutions.

04

### CULVERTS, CHANNELS & CROSSINGS

Hydraulic sizing and design for roads,  
developments and critical infrastructure.

05

### FLOOD MAPPING & CLIMATE RESILIENCE

Design storms, climate allowances and  
clear flood depth, extent and hazard outputs.

06

### MODEL REVIEW, CALIBRATION & QA

Independent checks, diagnostics, model  
optimisation and transparent documentation.

#### 20+ YEARS' EXPERIENCE

Senior international expertise

#### MODELS THAT INFORM

Clear, decision-ready outputs

#### BUILDABLE DESIGNS

Practical solutions for delivery

#### FLEXIBLE SUPPORT

Task, review or work package

## NEED MORE MODELLING OR DRAINAGE CAPACITY?

Talk to us about your model, drainage system or next design package.

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# DESIGN YOUR HOME. BUILD WITH CONFIDENCE.

Practical house design for families and property owners in the Philippines - from first ideas to coordinated drawings supported by our licensed engineers.

START YOUR HOUSE DESIGN

## BEAUTIFUL, PRACTICAL HOMES DESIGNED AROUND YOUR LIFE.

Nordic design thinking meets capable local support in the Philippines - helping homeowners, families and OFWs move from an idea to a clear, coordinated and buildable home design.

### HOW WE CAN HELP YOU

01

#### SPACE PLANNING & CONCEPT DESIGN

Functional layouts shaped around your lot, family, lifestyle and budget.

02

#### FLOOR PLANS & ARCHITECTURAL DRAWINGS

Clear plans, elevations, sections and details for design coordination.

03

#### 3D VISUALISATION & EXTERIOR DESIGN

See the character, materials and appearance of your future home before construction.

04

#### LICENSED ENGINEERING DESIGN

Design prepared, checked and signed by licensed engineers within their scope.

05

#### RENOVATIONS & HOME EXTENSIONS

Thoughtful improvements that make better use of your existing home and property.

06

#### DRAWING PACKAGES & DESIGN SUPPORT

Organised documentation, revisions and support as your project moves forward.

#### TROPICAL DESIGN

Comfort for heat and rain

#### FUNCTIONAL LAYOUTS

Designed around daily life

#### CLEAR VISUALS

Understand before you build

#### LICENSED ENGINEERS

Designs signed within their scope

Engineering designs can be signed and sealed by our licensed engineers within their professional scope and applicable Philippine requirements.

## PLANNING A NEW HOME OR RENOVATION?

Tell us about your lot, ideas, preferred style and budget.

[contact@yonsengroup.com](mailto:contact@yonsengroup.com)

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# PLAN THE LAND. BUILD ON SOLID GROUND.

Practical site and plot development support in the Philippines - from early planning to signed civil design by licensed engineers.

DEVELOP YOUR SITE



## TURN YOUR PROPERTY INTO A BUILDABLE, WELL-PLANNED SITE.

YonSen Group helps landowners, developers and OFWs plan practical residential and small commercial sites - combining Nordic engineering thinking with capable local support in the Philippines.

### HOW WE CAN HELP YOU

01

#### SITE ASSESSMENT & FEASIBILITY

Plot constraints, levels, access, runoff and development opportunities.

02

#### PLOT LAYOUT & SITE PLANNING

Efficient placement of buildings, roads, parking, open space and boundaries.

03

#### GRADING & EARTHWORKS DESIGN

Site levels, cut-and-fill planning, slopes and practical building platforms.

04

#### ACCESS ROADS & INTERNAL ROADS

Entrances, circulation, road geometry, levels and connection details.

05

#### STORMWATER & SITE DRAINAGE

Runoff paths, drains, culverts, outfalls and flood-aware site planning.

06

#### UTILITIES & DRAWING COORDINATION

Space for water, power and wastewater, with coordinated civil drawing packages.

#### BUILDABLE LAYOUT

Use land efficiently

#### CONTROLLED LEVELS

Reduce water and earthwork issues

#### RELIABLE DRAINAGE

Plan for tropical rainfall

#### LICENSED ENGINEERS

Signed civil design

Civil engineering designs can be signed and sealed by our licensed engineers within their professional scope and applicable Philippine requirements.

## PLANNING TO DEVELOP A PROPERTY IN THE PHILIPPINES?

Send us your location, lot dimensions, survey and development ideas.

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# THE RIGHT TEAM FOR YOUR PROJECT.

Senior international experience. Licensed engineering capability.  
Responsive delivery across Europe and the Philippines.

## ONE FLEXIBLE TEAM

Water & climate  
Hydraulics & flood modelling  
Roads, drainage & structures

## MEET OUR TEAM

Trusted people. Verified experience. The right expertise for each assignment.



**Vanessa Baclayon  
Jørgensen**

FOUNDER

DENMARK / PHILIPPINES



**Annaliza Baclayon**

COUNTRY MANAGER & STRUCTURAL  
ENGINEER

PHILIPPINES



**Jan Kamer**

SENIOR WATER & CLIMATE  
SPECIALIST

UK / NETHERLANDS / DENMARK



**Emre Hepgunes**

HYDRAULIC & GIS SPECIALIST

DENMARK / TÜRKİYE



**John Mark V. Pahilan**

DRAINAGE & ROAD SPECIALIST

PHILIPPINES



**Edrian L. Boado**

DRAINAGE & ROAD SPECIALIST

PHILIPPINES



**Mark Anthony R. Atanacio**

FLOOD MODELLER

PHILIPPINES

## COMBINED CAPABILITIES

● WATER & CLIMATE ● HYDRAULIC MODELLING ● ROADS & DRAINAGE ● FLOOD MODELLING ● STRUCTURAL & SITE DESIGN

**BUILD THE RIGHT TEAM FOR YOUR NEXT ASSIGNMENT.**

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Denmark / Philippines

