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# Architectural Design for Hospital

2018.11.07

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**01**

**ABOUT A&L  
HOSPITAL DESIGN**



# Aum&Lee Architects & Associates

**Since** April, 1948 ~  
**Employees** 204 Engineers & Experts  
**Services** Design, CM, Technical support

**Business sector**

- Urban city design
- Residential & Housing
- Hospitals
- Office & Commercial buildings
- Multi cultural facilities
- Hotel & Resorts
- Transportation facilities
- Educational & Training facilities
- Factories & Sports centers

**Address**

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 Seongdong-gu, Seoul, Korea  
 Tel) 82-2-2200-0747, Fax) 82-2-2200-0505

**Branch**

Philippines, Mozambique, Cameroon, Vietnam

**Web Site**

[www.aumlee.co.kr](http://www.aumlee.co.kr)

## Major Hospital Projects (Overseas)

**Garoua referral Central Hospital**



Year : 2016  
 Location : Garoua, Cameroon  
 Total area : 24,531m<sup>2</sup>  
 Beds : 292 Beds

**Quelimane Central Hospital**



Year : 2011  
 Location : Quelimane, Mozambique  
 Total area : 24,531m<sup>2</sup>  
 Beds : 600 Beds

**La Ceiba General Hospital**



Year : 2007  
 Location : Atlantida, Honduras  
 Total area : 12,500m<sup>2</sup>  
 Beds : 323 Beds

**Thua Thien Hue General Hospital**



Year : 2008  
 Location : Hue, Vietnam  
 Total area : 35,995m<sup>2</sup>  
 Beds : 502 Beds



# Thua Thien Hue General Hospital





# Thua Thien Hue General Hospital



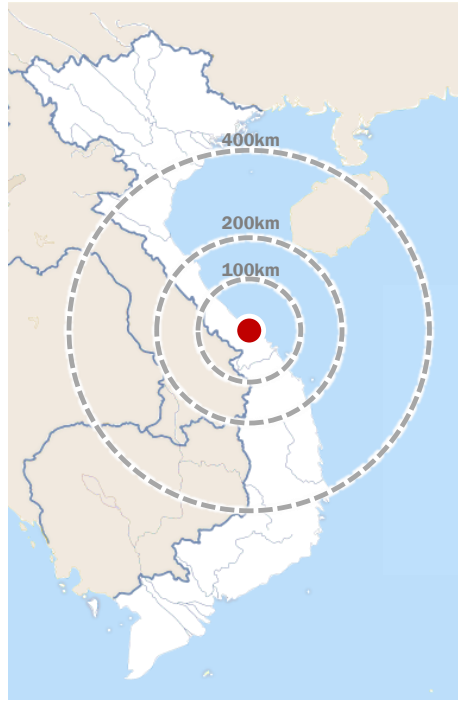


## Project Summary

- Fund : EDCF
- Objective:
  - 1) Improve availability of quality health service
  - 2) Improve access to quality health service
- Project Budget: 38,600,000 USD  
(EDCF : 30,861,000 / GOV : 7,739,000)
- Period: 44 months  
(Design 7M, Bidding 4M, Construction 33M)
- Project scope
  - 1) Building Hospital
  - 2) Procurement of equipment
  - 3) Training for O&M
  - 4) Consulting Service (Design & Supervision)



# Site Location

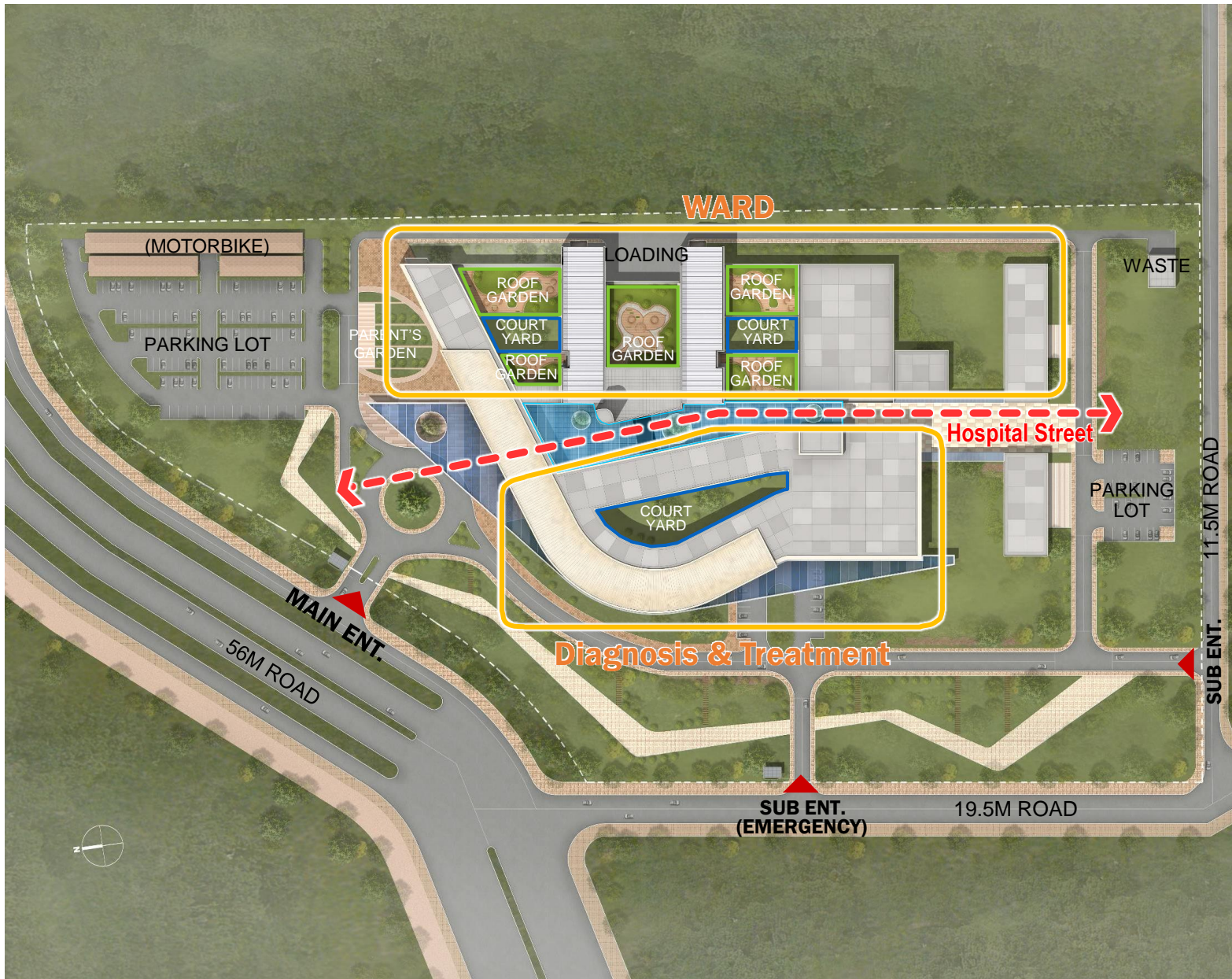


Status of Site





# Master Plan Design

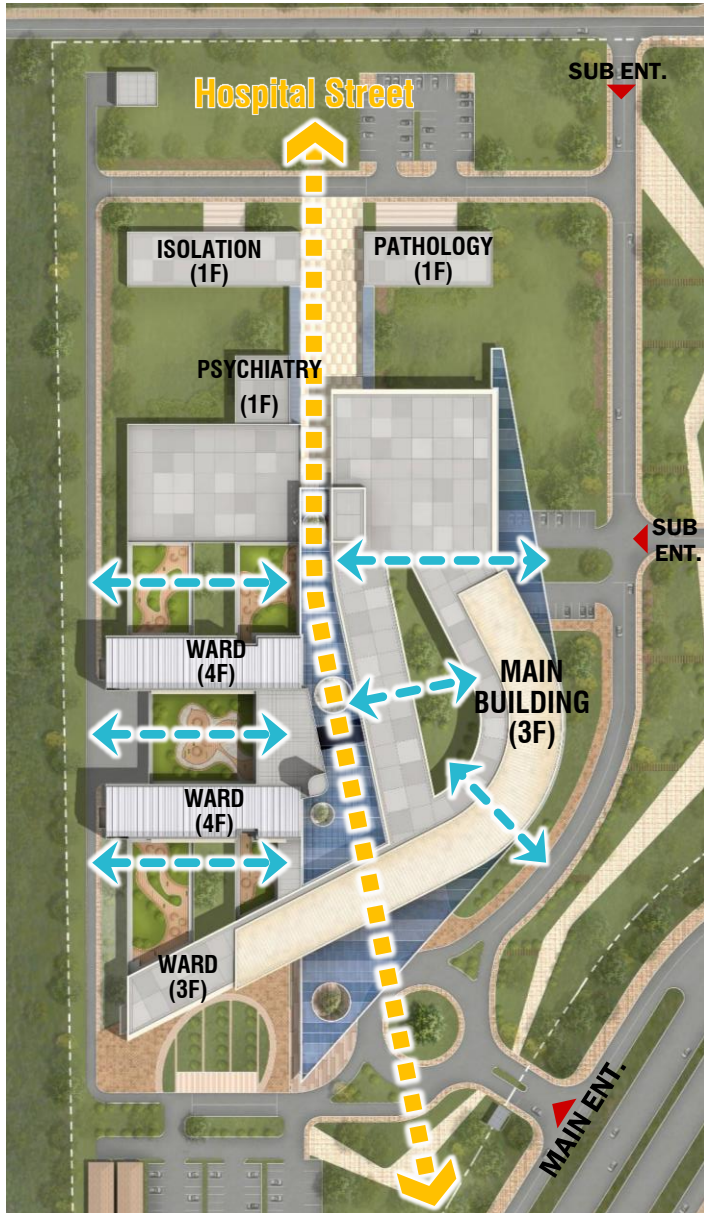


<b>Site Location</b>	HUE, VIETNAM
<b>Main Uses</b>	General Hospital
<b>Bed</b>	502 Beds
<b>Department</b>	7 departments
<b>Site Area</b>	70,806.00 m <sup>2</sup>
<b>Building Area</b>	21,277.94 m <sup>2</sup> (30.05%)
<b>Gross Area</b>	35,995.00 m <sup>2</sup> (50.84%)
<b>Building scope</b>	4 Stories
<b>Height</b>	37.1m (including tower)
<b>Car Parking</b>	185 Cars over 240 Motorbikes
<b>Elevator</b>	4EA (Service : 2, Patient:2)
<b>Facilities</b>	<ul style="list-style-type: none"> <li>• Surgery</li> <li>• ICU / NICU</li> <li>• Outpatient</li> <li>• Isolation</li> <li>• Pathology</li> <li>• Funeral</li> <li>• Ward</li> </ul>
<b>Medical equipment</b>	<ul style="list-style-type: none"> <li>• X-ray</li> <li>• Ultrasound</li> <li>• CT</li> <li>• MRI</li> <li>• BMD</li> <li>• Mammography</li> <li>• Dental X-ray</li> </ul>



# Design Strategy

## “ Local Climate & Functional Space ”



- Reduce maintenance cost
  - Reduce Infection Risk
- 





# Opening: 18<sup>th</sup> April 2013







**02**

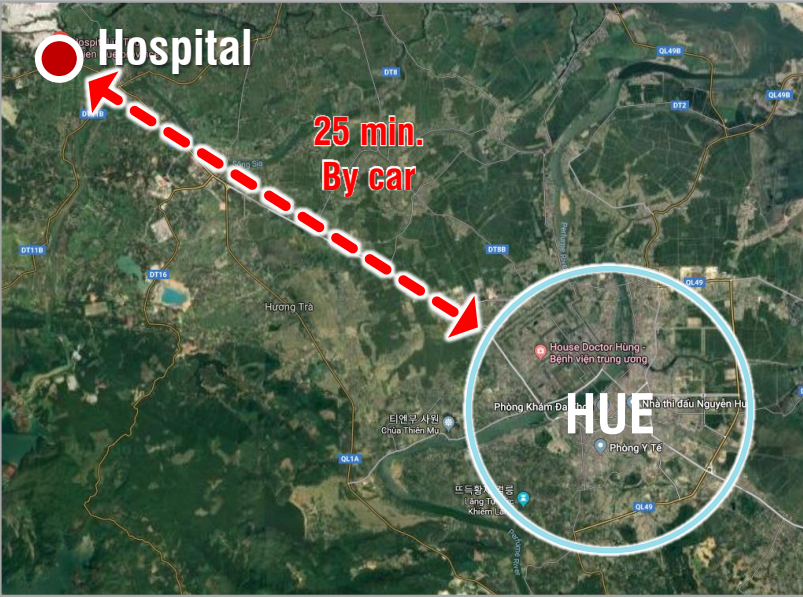
**LESSONS & LEARN**





# Problem

**1 Distance**



**Long Distance** ➔ **Few patients** ➔ **Low income**

**2 Medical Planning**

**[ Project Scope ]**

- Building Construction
- Provision of equipment
- Training
- Consulting service
  - : Design, Construction Management
  - Medical equipment
- **NO Medical Planning**

**No Medical Planning**  
**No Development Plan & Action Plan for operation**

**“ Difficulty in Sustainable Operation ”**



## Additional Project

### “ Q-Health Project by KOICA ”

#### Project Title

Q-Health Project for Thua Thien Hue General Hospital in Vietnam

#### Objectives

To contribute to the sustainable operation of Hue Hospital

#### Project Scope

- Formulation of Mid-and long-term Development Plan & Detailed Action Plan for the operation
- Capacity Development programs
- Korean Expert dispatch for the medical and administrative staffs
- Provision of the Equipment

#### Budget

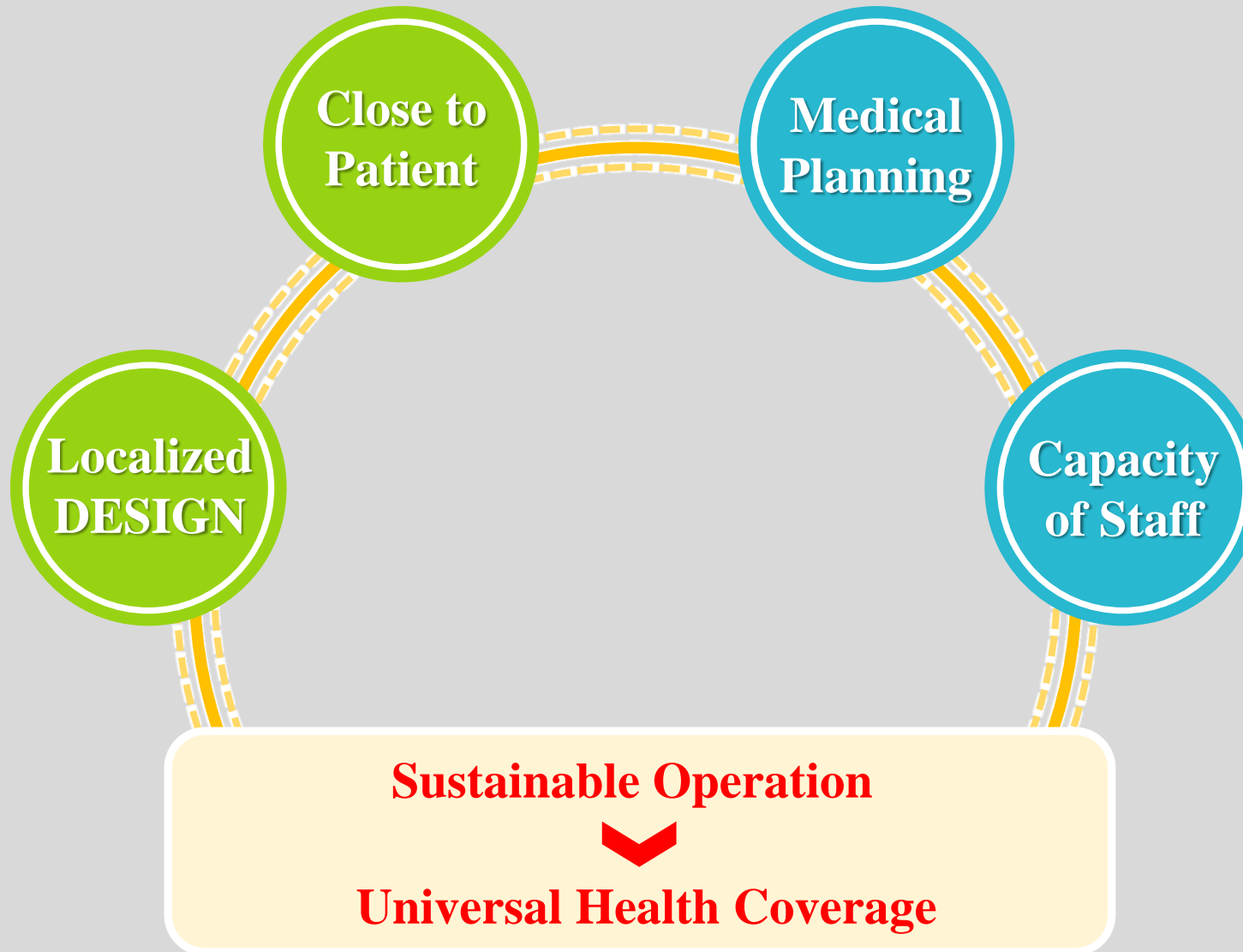
USD 3,550,000

#### Duration

From 2015 to 2018

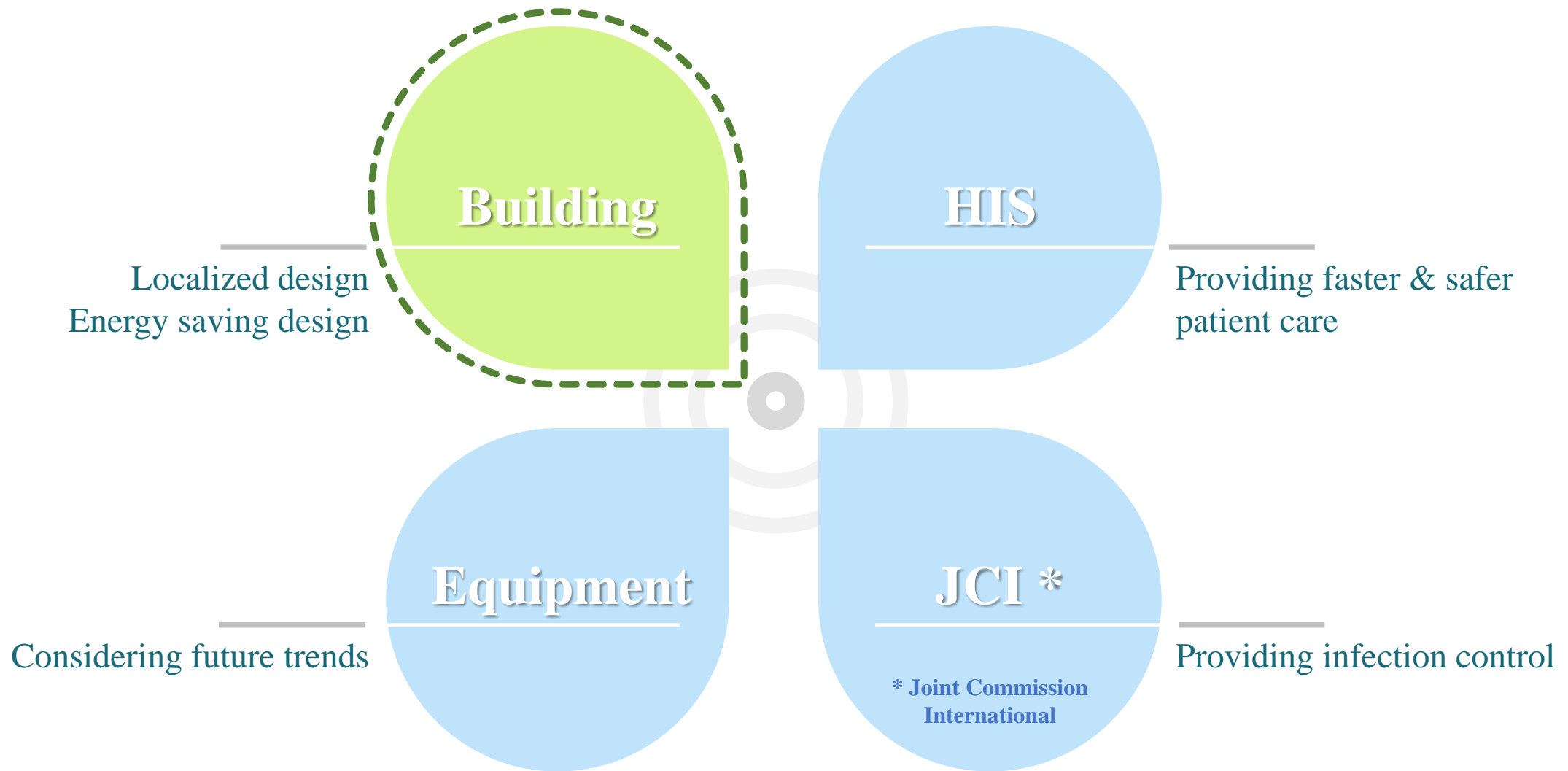


# Lessons





# Requirement for Modern Hospital





# Design Factor

## Local Culture

01



- Patient's family rest area
- Separate funeral area

## User Oriented Plan

02



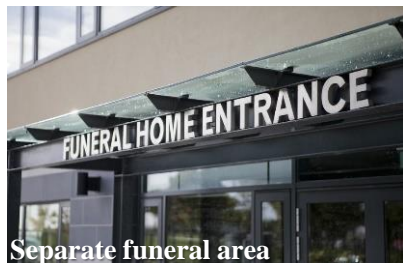
- Canopy of pathway
- Canopy of parking lot
- Piloti resting area
- Wide waiting area
- Natural hospital street

## Facilities

03



- Local building material
- Water purification
- Waste treatment (Black/Grey water, Medical waste)



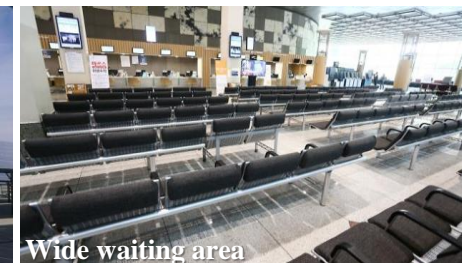
Separate funeral area



Canopy of pathway



Canopy of parking lot



Wide waiting area



Waste treatment plant



**T h a n k   y o u**