

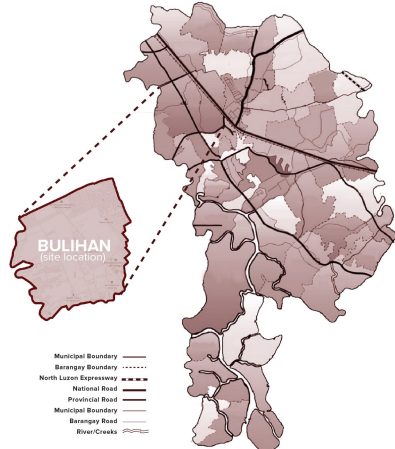
# kalinga hub

Specialized Holistic Health and Nutritional Facility



Throughout the years, Malolos, Bulacan has continuously improve and pave its way to urbanization. Yet, access to facilities for healthcare, recreation and livelihood still remain scarce and inaccessible to the general public. With that, this project aims to create a space that values the holistic health of the community, prioritizes the wellness and nutrition of its people, and provide livelihood opportunities to those in need. This site was selected as the project can be a non-clinical extension of the newly built hospital beside it and can also serve the residential and commercial spaces surrounding it.

## Ecological Profile of Malolos



**NUTRITION**  
Studies showed that undernutrition in school-aged children and adolescents is common in developing countries particularly in the Philippines. In fact, malnutrition has always been one of the recurring health issues that Malolos tries to focus and resolve. Yet, there is also a lack of training and expertise to how this can be properly integrated and established to the youth. With that in mind, it is important to build spaces to which not just the physical but also the nutritional aspect of health can be empowered. Providing the youth with knowledge and skills to make healthy food and beverage choices can help influence their physical and emotional well-being.

**AGRICULTURE**  
Due to its strategic location in the province of Metro Manila, the city of Malolos has now been venturing away from being mainly an agricultural area into more industrialized one. Nevertheless, a large percentage of the city's middle class is still being used in agriculture, with rice remaining to be the principal crop followed by vegetables and fruits. This calls for the development of urban agriculture and building green architectures in order to produce agricultural products within the confines of the city.

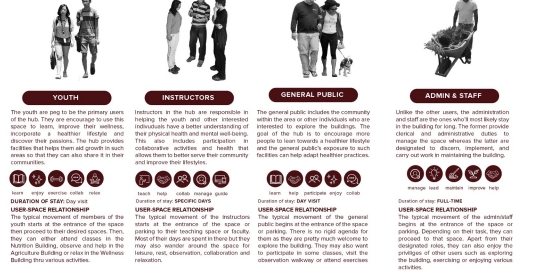
**HEALTH**  
Despite belonging to a developing nation where infectious diseases are prevalent, the non-communicable diseases (NCDs) including myocardial infarction, cardiovascular diseases and cancer emerged as the leading cause of morbidity and mortality in the city of Malolos. The high prevalence of the said NCDs has been primarily attributed to the changing lifestyle of Malolosans in recent years. Promotion of preventive health care which is also the national thrust in the country's health program is crucial to address the worsening problem of lifestyle-related diseases in the city.

**LIVELIHOOD**  
Apart from offering knowledge and skills that can help in the overall development of their individual health, it is also gratifying if these activities can also encourage the youth to acquire relevant competencies and resources necessary to enhance their livelihoods, and ultimately the livelihoods of others within their communities. Hence, the proximity of the site to institutional and commercial spaces can actually be helpful in influencing more youth to engage and participate in activities that leads them towards to betterment.

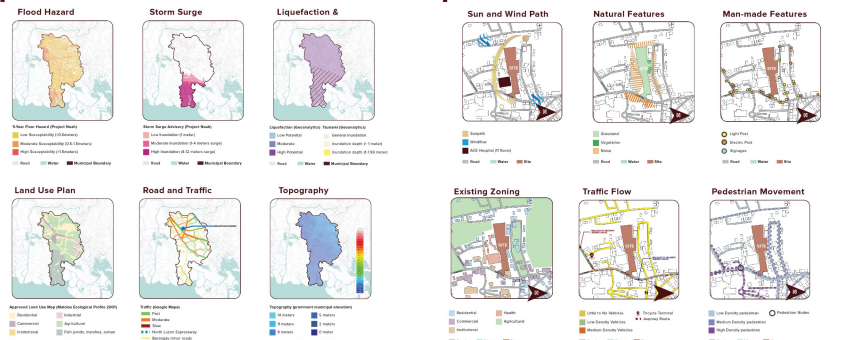
## Design Agenda



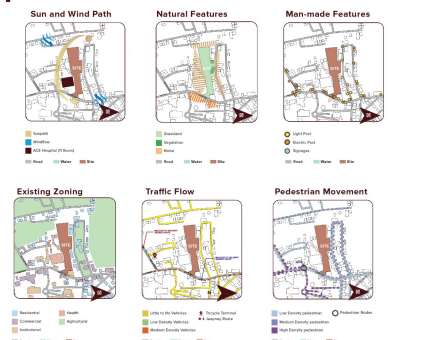
## User Analysis



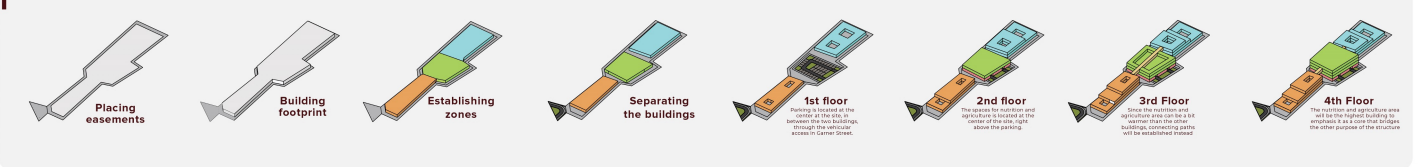
## Macro Analysis



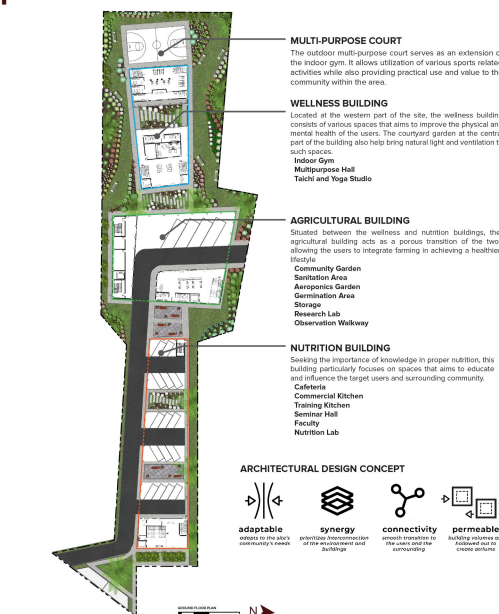
## Micro Analysis



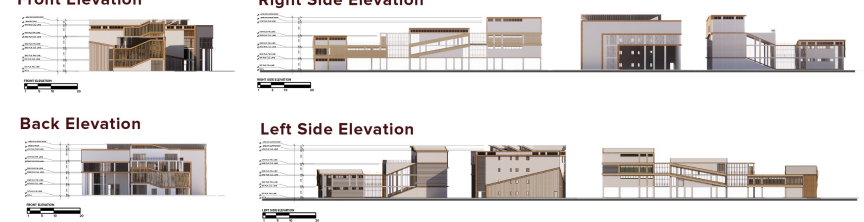
## Massing Studies



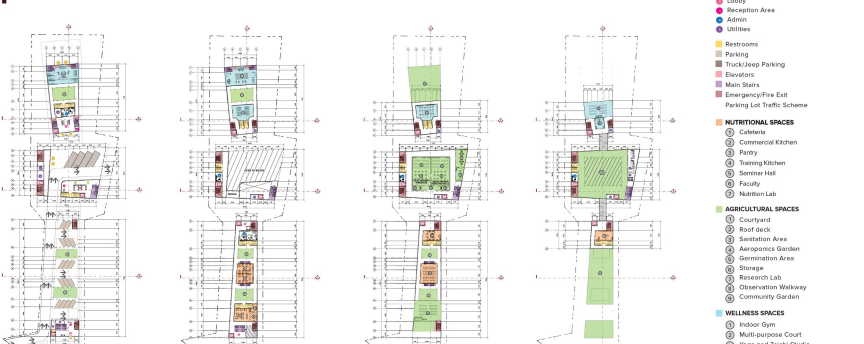
## Site Development Plan



## Elevations



## Floor Plans



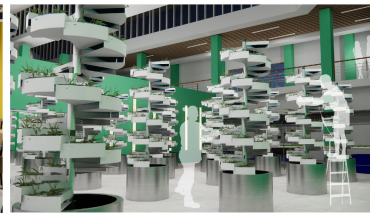




Nutrition Building Lobby



Nutrition Building Seminar Hall



Agriculture Building Aeroponics Garden



Wellness Building Fitness Gym

## Longitudinal Section



- PROGRAMMING & CIRCULATION**
- Entry/Exit
  - Lobby
  - Reception Area
  - Admin
  - Utilities
  - Parking
  - Restrooms
  - Elevators
  - Main Stairs
  - Emergency/Fire Exit
- **VERTICAL SPACES**
    - Storage Cabinet
    - Commercial Kitchen
    - Training Room
    - Nutrition Classroom
    - Studio
    - Nutrition Lab
  - **AGRICULTURAL SPACES**
    - Conservatory
    - Irrigation System
    - Aeroponics Garden
    - Observation Walkway
  - **WELLNESS SPACES**
    - Indoor Gym
    - Multi-purpose Hall
    - Tai Chi and Yoga Studio
    - Market Display Booth

## Space Programming

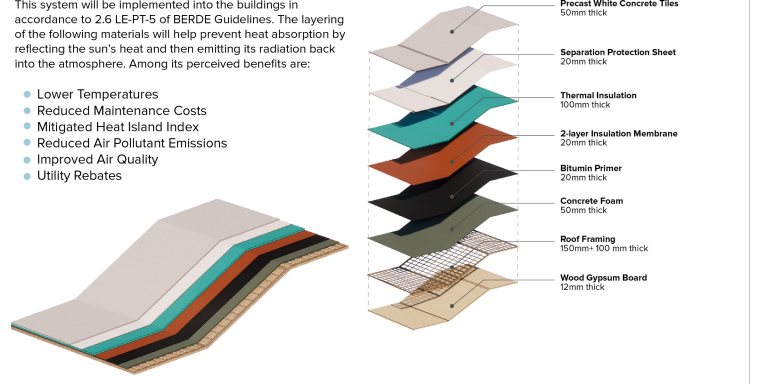
Space/Structure	Use Type	Program Activity	No. of Users	M2 of Use Area (m <sup>2</sup> )	Est. Area (m <sup>2</sup> )
<b>WELLNESS</b>					
Multisports Court	Multi	Multi-sport activities	1	120	120
Reception Area	Reception	Reception	1	14	14
Multi-purpose Hall	Multi	Multi-sport and general purpose	1	100	100
Indoor Gym	Gym	Gymnasium	1	100	100
Multi-purpose Classroom	Classroom	Classroom	1	100	100
Admin Area	Admin	Admin	1	50	50
Administration Office	Admin	Admin and Staff	1	50	50
<b>EDUCATION</b>					
Health Lab	Lab	Research and experimentation	1	50	50
Nutrition Lab	Lab	Research and experimentation	1	50	50
Agroponics Training Room	Classroom	Training and experimentation	1	100	100
Health Science	Classroom	Classroom	1	50	50
Computer Lab	Lab	Classroom	1	50	50
Multi-purpose Classroom	Classroom	Classroom	1	100	100
Administration Office	Admin	Admin and Staff	1	50	50
<b>NUTRITION &amp; AGRICULTURE</b>					
Organic Learning	Classroom	Classroom	1	50	50
Commercial Kitchen	Kitchen	Commercial kitchen	1	50	50
Storage Room	Storage	Storage	1	50	50
Composting Station	Storage	Storage	1	10	10
Waste & Compost Storage	Storage	Storage	1	50	50
Laboratory Area	Lab	Research and experimentation	1	50	50
Commercial Kitchen	Kitchen	Commercial kitchen	1	50	50
Aeroponics Garden	Garden	Aeroponics garden	1	100	100
Administration Office	Admin	Admin and Staff	1	50	50
<b>MARKET OFFICES</b>					
Admin Office	Admin	Admin	1	5	5
Shop	Shop	Shop	1	10	10
Warehouse (storage, display etc.)	Warehouse	Warehouse	1	100	100
Storage	Storage	Storage	1	5	5
Reception	Reception	Reception	1	5	5
Admin Office	Admin	Admin and Staff	1	5	5
<b>UTILITIES</b>					
Electric and Mechanical	Utilities	Utilities	1	100	100
Storage	Storage	Storage	1	10	10
Maintenance Shop	Storage	Storage	1	10	10
Storage Room	Storage	Storage	1	10	10
Waste Room	Storage	Storage	1	10	10
Waste Room	Storage	Storage	1	10	10
<b>TOTAL: 6232 SQM</b>					



## Cool Roof System

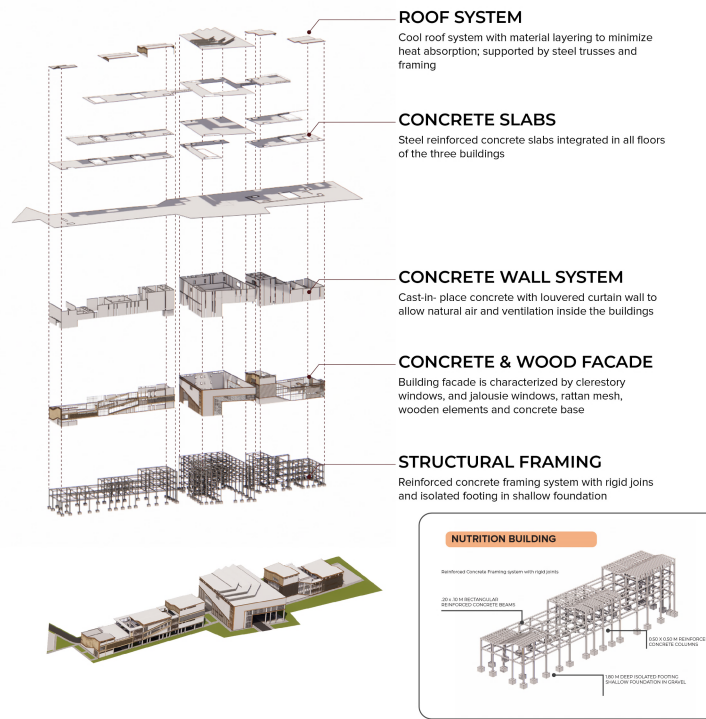
This system will be implemented into the buildings in accordance to 2.6 LE-PT-5 of BERDE Guidelines. The layering of the following materials will help prevent heat absorption by reflecting the sun's heat and then emitting its radiation back into the atmosphere. Among its perceived benefits are:

- Lower Temperatures
- Reduced Maintenance Costs
- Mitigated Heat Island Index
- Reduced Air Pollutant Emissions
- Improved Air Quality
- Utility Rebates

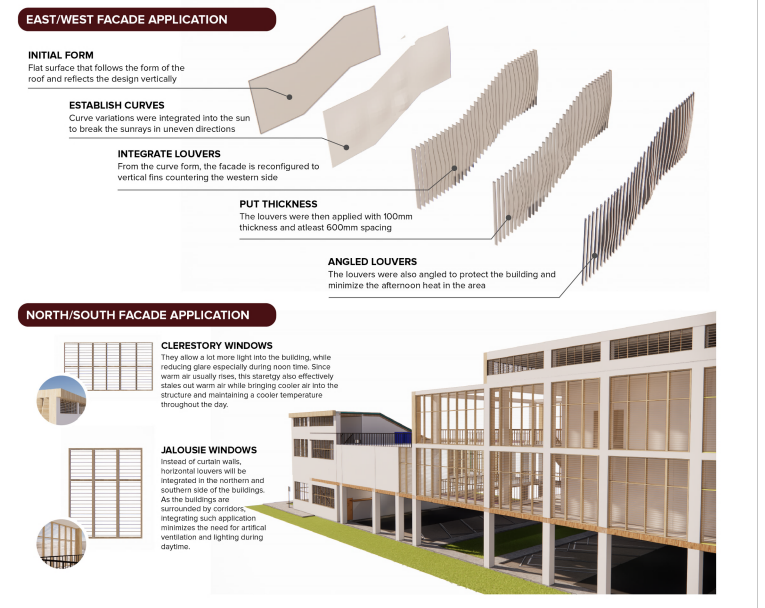


## Structural Framing System

In order to support the buildings, a reinforced concrete system shall be implemented. The structural system of each building will be independent of each other but will be composed of similar construction elements such as 0.50 x 0.50M reinforced concrete columns, 1.80M deep isolated footing; shallow foundation in gravel and 20x10M rectangular reinforced concrete beams. The figure on the right shows a blow up presentation of the building's construction and structural system.



## Facade Details



Entry to the Site



View from Garnet Road



Multi-Purpose Court



On-ground Parking