

### The Philippines and Typhoon Haiyan - Yolanda

The Philippines is a Southeast Asian country ranked 3rd most at risk of natural disasters in the 2017 World Risk Index Report due to its geographic location and socioeconomic state. The reality of the Philippines' vulnerability was especially felt during the disaster of the Category 5 Super Typhoon Haiyan [Local name: Yolanda] that struck during November 8, 2013 - with wind speeds in excess of 300km/h and storm surges exceeding 4 meter heights. The super typhoon traversed the central part of the country, affecting more than 170 cities. This affected a total of 3 million families - approximately 14 million people, and destroyed or damaged 1 million dwellings, resulting in losses estimated at worth over PhP 571.1 billion.

### **Tacloban City**

Tacloban City, located in the island of Leyte of the Eastern Visayas Region, was on the direct path of the typhoon and sustained the most significant destruction induced by the unprecedented intensities of wind, storm-surges, and resulting inundation. The local government officials estimated that over 90% of Tacloban City was destroyed, incurring massive damage to shelter, comprising a total of 28,734 totally damaged and 17,643 partially damaged dwellings. Following this significant loss and destruction, drastic measures in recovery and rehabilitation processes were undertaken by the local officials with help from the rest of the world.

The strategic central location of Tacloban City makes it the gateway for trade, commerce, industry, education, communication, technology, and leisure for the Region. Tacloban has an extensive coastline that forms an integral part of the life of the city, providing livelihood and transportation for the residents. It is the core of Waray-Waray culture, rich with festivals and



Freighters beached on the Anibong shore due to Typhoon Haiyan. The present situation of Barangay Anibong five years post-Haiyan.

Small memorial dedicated to the lives lost to Typhoon Yolanda.

### Past and Present Anibong, Tacloban

Barangay [Local political unit] Anibong was one of the coastal settlements of Tacloban City that took the brunt of Typhoon Haiyan. Container vans and 5 commercial ships from the nearby pier were swept inland into the shore, crashing and destroying the settlements. The ships remained well after the storm even as dwellings were being rebuilt - the grounded freighters became iconic to the community to the point where the Anibong residents adapted the name "Yolanda Village."

Despite the comprehensive development plans of local officials, Barangay Anibong's development potential remains to be overlooked - the coastal fringe still containing only light, semi-permanent dwellings with mooring structures for small fishing boats bordering the said dwellings. It is, however, still one of the immediate sources of the workforce in the city due to its proximity to Tacloban's city center.

### **Key Issues in Anibong, Tacloban**



Lack of Psychosocial Interventions Vulnerability to Natural Calamities Neglected and Displaced Residents

the failure to address the emotional vulnerability of the losses and remembrance of the settlement typhoon.



Following Typhoon Haiyan, the The geographic location of The local officials made plans and The existing state of the informal Community facilities are largely residents slowly came back to Barangay Anibong makes it undertook measures to resettle the habitation is of serious concern inadequate such as health re-build the structures in the perpetually vulnerable to storm residents of barangay Anibong to roughly for safety and a hindrance to the centers, learning centers, barangay. However, even if their surges, tsunamis, and typhoons. 10km north of Tacloban's city center. potential development of a proper social services, cultural and physical lifestyle went back to what The lightweight structures built However, majority of Anibong residents community for the marginalized recreational spaces. it was before the disaster, there is by the residents exacerbate the are still employed in the City Center of residents of Anibong. The current, Tacloban, which makes the resettlement undeveloped state of the site lacks inconvenient and costly for the residents infrastructure, utilities, and coastal to commute on a daily basis. This led the protection. residents to return to Anibong again.



Misuse of Site



Lack of Civic and **Community Spaces** 



# PROPOSED JOGGING

### **Proposed Concepts and Interventions**

The development and revitalization of Barangay Anibong aims to weave together Community Design and Disaster Resilience, specifically, to create multivalent spaces to provide for the physical, cultural, social, and spiritual needs of a calamity-stricken community. The development focuses on the people - their past, present, and the future. The past of not just the disaster, but also the people's culture must be remembered and cultivated; the present need of the residents must be addressed; and the future needs of the people and the city's development plans must be considered - and all these must be integrated into one another, interweaved into one holistic design.



Weaves all the design concepts together - connecting not just the physical structures but also. the psychosocial aspects of the Community Design.



**EMPOWER** 

The present informal settlements by the shore is the major consideration of the development. The design provides for and enriches the needs of the residents in all aspects - making them part of the process and giving them a sense of belonging,

truly creating a community.



ELEVATE

The development, placed higher towards the hill and farther from the shoreline, creates a more flood-resilient community.



The shoreline becomes a cultural and social space, interspersed with flood-mitigating features.



**M** HOUSING



MEMORIAL MUSEUM



### PROPOSED IMPLEMENTATION

PHASE 1: MAIN (LARGEST) COMMUNITY NODE ON THE HILLSIDE, CONTAINING INSTITUTIONAL AND SOCIAL SPACES, AS WELL AS SOME RESIDENTIAL STRUCTURES

PHASE 2: MEMORIAL COMPLEX TO COMMEMORATE THE HAIYAN VICTIMS, AND TO PROMOTE FURTHER DEVELOPMENT PHASE 3: 2ND COMMUNITY NODE TO ACCOMMODATE MORE PEOPLE AND MORE

COMMERCIAL SPACES PHASE 4: CIVIC CENTERS BY THE MOUTH OF THE RIVER, TO FURTHER DEVELOP THE CULTURAL FACET OF THE COMMUNITY AND ATTRACT MORE PEOPLE FROM THE CITY CENTER PHASE 5: RESIDENTIAL AREAS BESIDE THE CIVIC CENTERS TO ALLOW FOR FURTHER

8th ICBR Lisbon | Nov 2018

**Building 4Humanity** 

**DESIGN COMPETITION** 

**Team Project Coordinator:** 

Team Members:

**Project Location:** 

Richelle Escolar

Arch. Danisa Fuentabella, LArch. Sophia Regina Silvestre

Civic structures such as this theater (photo on right) and amphitheater (photo below),

time, provide a possible avenue

support art and cultura endeavors and, at the same

for economic growth.

Brgy. Anibong, Tacloban, Leyte, Philippines

Arnell Gilberto Bercero, Josemaria Cadiente, Justin Benedict Navarro

(photo on right) are structures that aic the community in a sychosocial manne

**GROWTH OF THE COMMUNITY** PHASE 6: DEVELOPMENT OF A LINEAR PARK TO PROVIDE MORE OPEN, GATHERING SPACES



Category 2: **Resilient Projects (Unbuilt** TEAM CODE: **B4H-DC2138** 

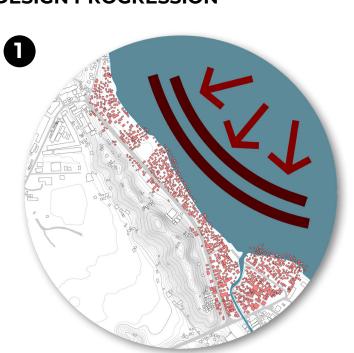


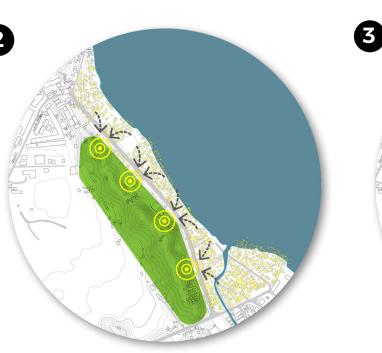
Theater Entrance





Sample Housing Extensions **DESIGN PROGRESSION** 

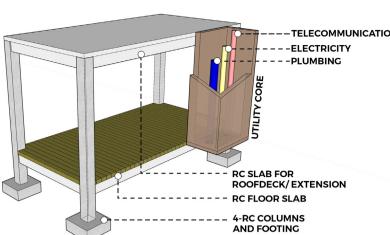




the following: - suitable building space based on the topography of the hill - proper spacing in between nodes to

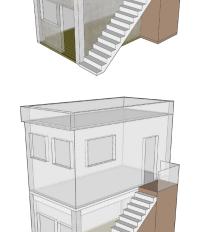


Life threatening vulnerability to storm surges Identify suitable nodes on the Hillside in terms of - Elevate communities on a podium to protect from extreme calamities - Provide retention ponds for ptential erosion - Plan the hilltop to prevent urban sprawl and preserve the landscape

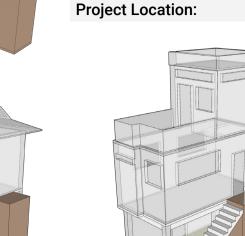


HOUSING MODULES 🕝

A Housing Module contains a basic structural framework and a utility core containing stubouts for plumbing, electrical and telecommunications. The rest of the house is up to the residents.







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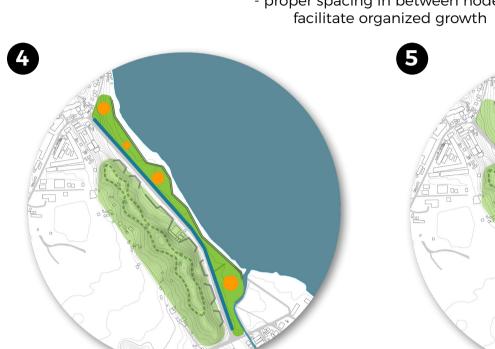




THEATER 🔠

Yolanda Museum (during rain

Tacloban is rich in performing arts activities, but lack adequate spaces to showcase such culture. Providing a performance theater addresses this issue. This component will be an avenue for local dance, musical, and stage performances.



- Mitigating effects on shoreline such as breakwaters, tiered landscape, swales, and berms - Develop the shoreline as a cultural and social space for the community



Provide direct connections to the sea for the community, the physical and psychological aspect of the development.

## MEMORIAL MUSEUM

Complementing the memorial museum, there will be pocketmemorials located throughout the district. These spaces are meant to commemorate the victims and





## COMMUNITY CENTER









The Community Centers focus on livelihood training, community events, and gatherings -enriching the culture and social needs of the people. These also serve as training grounds for livelihood and eLearning, and for different arts such as theater, dance, and visual arts. These are geared towards neighborhood and development



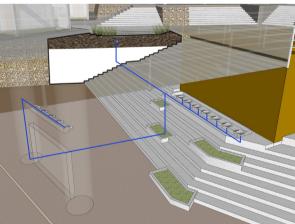




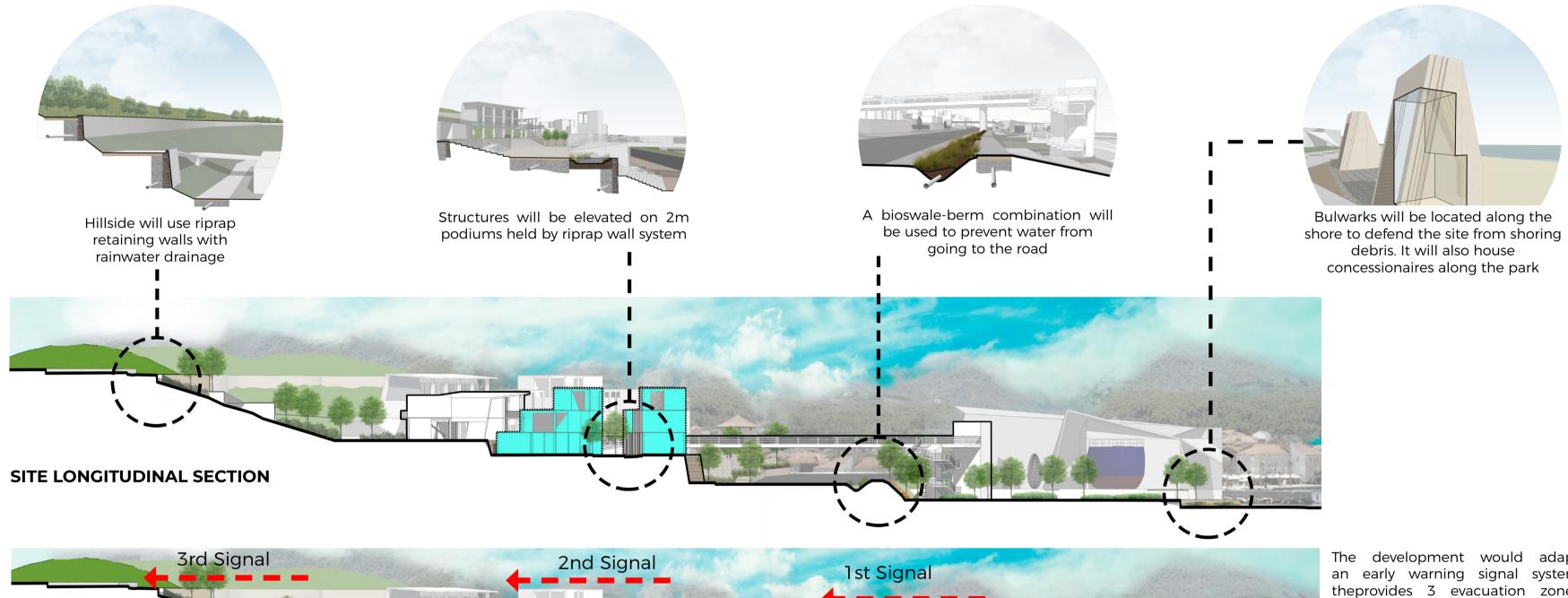
In times of emergency, the Community Centers also serve as evacuation centers, fitted with solar panels, water filtration systems, and satellite dishes. These alternative energy systems will be utilized at times when water supply, electricity, and telecommunication services are compromised. The E-learning center would utilize a cloud-based internet connection to provide communication during times of disaster. Squat-type toilets and shower heads, which are situated at the community nodes, are serviced by filtered rain and surface water from retention ponds.



Community Center Showing Solar panels, Water Flltration Systems, and satellite dishes



Emergency Toilets and Showers to be used during Disasters



The development would adapt an early warning signal system theprovides 3 evacuation zones from the shore to the hill

debris. It will also house



**EVACUATION PLAN**