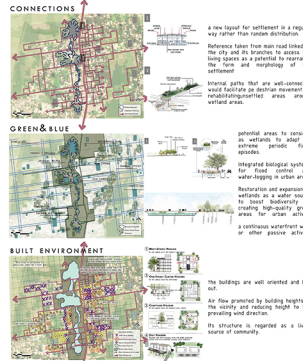


BUILDING RESILIENCE THROUGH CLIMATE-RESPONSIVE DESIGN:

A SYSTEM TO TOLERATE IMPACTS OF DRIVERS LIKE NATURAL HAZARDS WITHOUT IRREVERSIBLE CHANGE IN SUBURBAN SETTLEMENTS

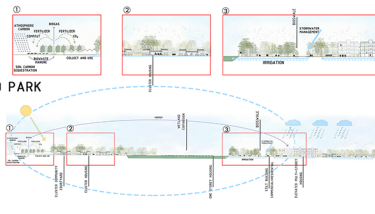
PROJECT SITE: LAJARIHAT, CHITTAGONG, BANGLADESH

MASTER PLAN



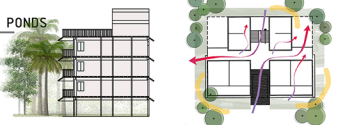
EXPLANATION OF THE CONCEPT

THE CONCEPT OF CLIMATE-RESPONSIVE DESIGN IS TO INTEGRATE NATURE INTO THE URBAN FABRIC AND PROVIDE A SUSTAINABLE LIVING ENVIRONMENT. THE DESIGN IS BASED ON THE PRINCIPLES OF CLIMATE-RESPONSIVE DESIGN, WHICH IS A DESIGN APPROACH THAT TAKES INTO ACCOUNT THE CLIMATE AND ENVIRONMENTAL CONDITIONS OF A SITE AND THE NEEDS OF THE COMMUNITY. THE DESIGN IS BASED ON THE PRINCIPLES OF CLIMATE-RESPONSIVE DESIGN, WHICH IS A DESIGN APPROACH THAT TAKES INTO ACCOUNT THE CLIMATE AND ENVIRONMENTAL CONDITIONS OF A SITE AND THE NEEDS OF THE COMMUNITY.



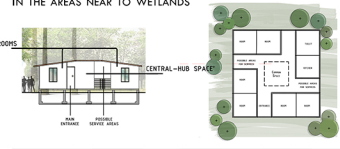
1 MULTI-STORY HOUSING

IN THE AREAS WITH THE DENSITY OF SLUMS



2 ONE-STORY CLUSTER HOUSING

IN THE AREAS NEAR TO WETLANDS



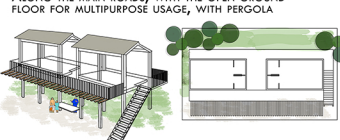
3 COURTYARD HOUSING

IN THE AREAS NEAR TO AGRICULTURAL AREAS

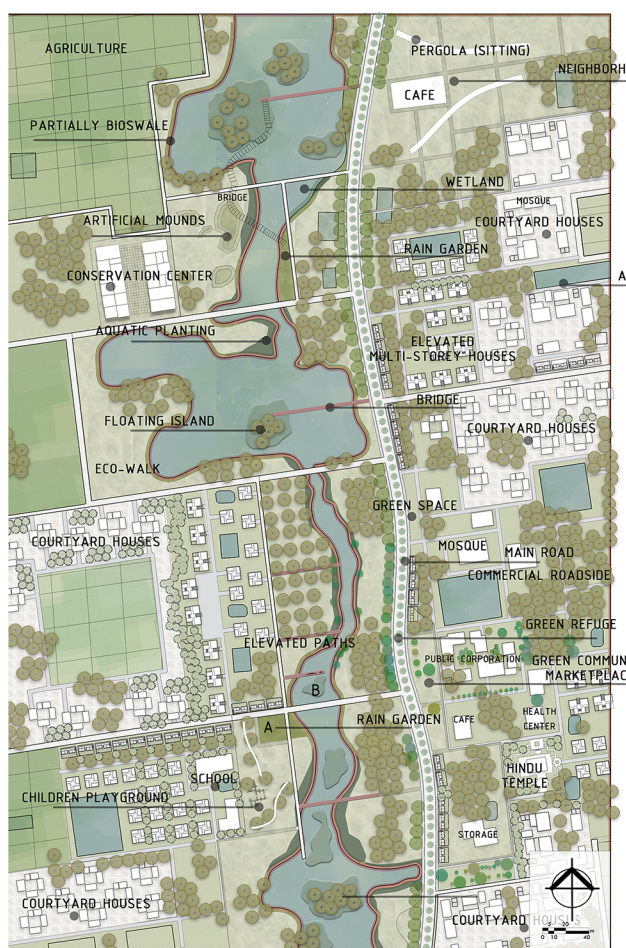


4 STILT HOUSING

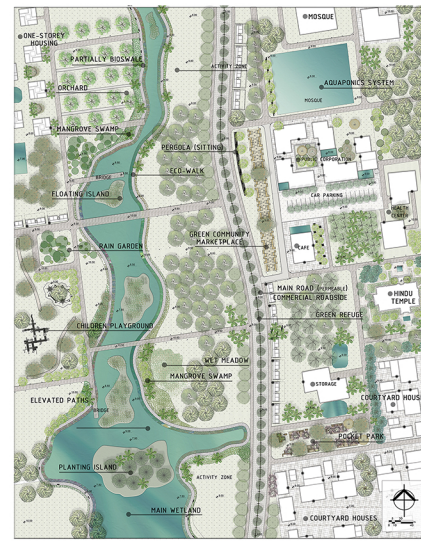
ALONG THE MAIN ROADS, WITH THE OPEN GROUND FLOOR FOR MULTIPURPOSE USAGE, WITH PERGOLA



SITE PLAN

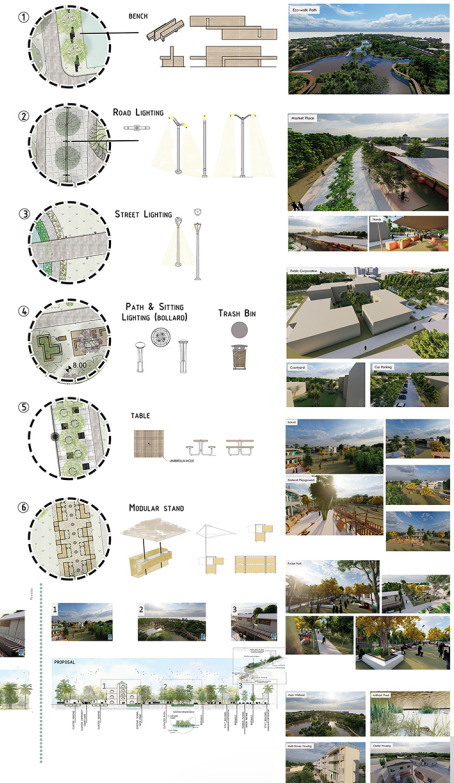


APPLICATION DETAILS



PLANT LIST

- ✓ Carica papaya (papaya)
- ✓ Phyllanthus emblica
- ✓ Broussonetia papyrifera (bamboo)
- ✓ Manis (mango)
- ✓ Crotalaria retusa (along the stream)
- ✓ Diogenes malabaricus (Dew)
- ✓ Kalmia (underfoot roadside)
- ✓ A. banyas (1) Spring (Found in riparian forests along river sides)
- ✓ Pongamia pinnata (2) Shore (canopy)
- ✓ Phyllanthus bartha
- ✓ Phoenix paludosa (palm) (5m*2m)
- ✓ Hibiscus thibetanus (2.5m*4m)
- ✓ Cyrtosperma cooperi (6m*4m)
- ✓ Barringtonia acutangula (8m*3m)
- ✓ Swertia robusta (1.5m*1m)
- ✓ Cissampelos grandis (10m*4m)
- ✓ Cyrtosperma robusta (10m*4m)
- ✓ Hesperis odorata (20m*10m)
- ✓ Salweenia malabarica (20m*10m)



URBAN STORM WATER MANAGEMENT

bioswales and riparian zones to maintain filtration with plants

several ecological practices intensified on the west side of the road: mangrove swamps, wet meadows, and rain gardens as the home and habitats of fine sediments of a large number of chemicals.

holding rainwater on the land

marshes in some corners around wetland where some aquatic species have their own habitats with very low part of global terrestrial carbon and biological productivity.

ECO WALK

around the main wetland with an elevated path type

reduced activity around the wetland

BUILT ENVIRONMENT concentrated on the east side in order to balance and meet the need for built environment.

reducing the pressure in the wetland and green area on the west side of the road

public institution buildings with small squares as active use areas

marketplace with a modular stand system contributed to other core aspects of the current retail counter, as flexibility and modularity

religious buildings to meet their religious needs

Connecting such a mixed use area consisting of commercial, religious, social, public and residential buildings with densely residential areas

pocket park as a connector between the mixed use and the residential area

