



KALINAGO RESILIENT HOUSING

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ABSTRACT

(1) In the years before Hurricane Maria hit Dominica with devastating force in September 2017, and the extensive damage it wrought on the Kalinago Territory and other parts of the Caribbean, the indigenous society of the Kalinago were often considered to be living as one of the poorest societies in the western hemisphere on the Atlantic side of the Caribbean's "Nature Island." Yet the Kalinago people within their Territory are relatively healthy and may also in many ways be one of the most resilient people on Earth — with a plan and the initiative to become one of the most sustainable territories by embracing appropriate low carbon, green development under intensifying conditions of climate change. However, they still suffer as an occupied people with a low quality of life materially and a low functional life capacity in comparison to modern developed world standards. Even in relation to the norms on the economically underdeveloped island of Dominica, the Kalinago struggle with subjugation and prejudice. One of the central challenges for the Kalinago now as they build up the Kalinago Resilience Network is to understand their vulnerabilities amidst the strengths that have allowed them to survive in a rapidly changing world being shaped by unsustainable development, rapid climate changes, and other exponential global changes.

SWOT ANALYSIS & MASTERPLAN

STRENGTHS

- RICH AGRICULTURE
- AGROPHARMA MEDICINE
- NATURAL RESOURCES
- RESILIENT RESIDENTS
- LAND EMPLOYMENT
- LUMBAR
- SOLAR POWER
- ECOTOURISM
- VACANT LAND
- CLEAN WATER

WEAKNESSES

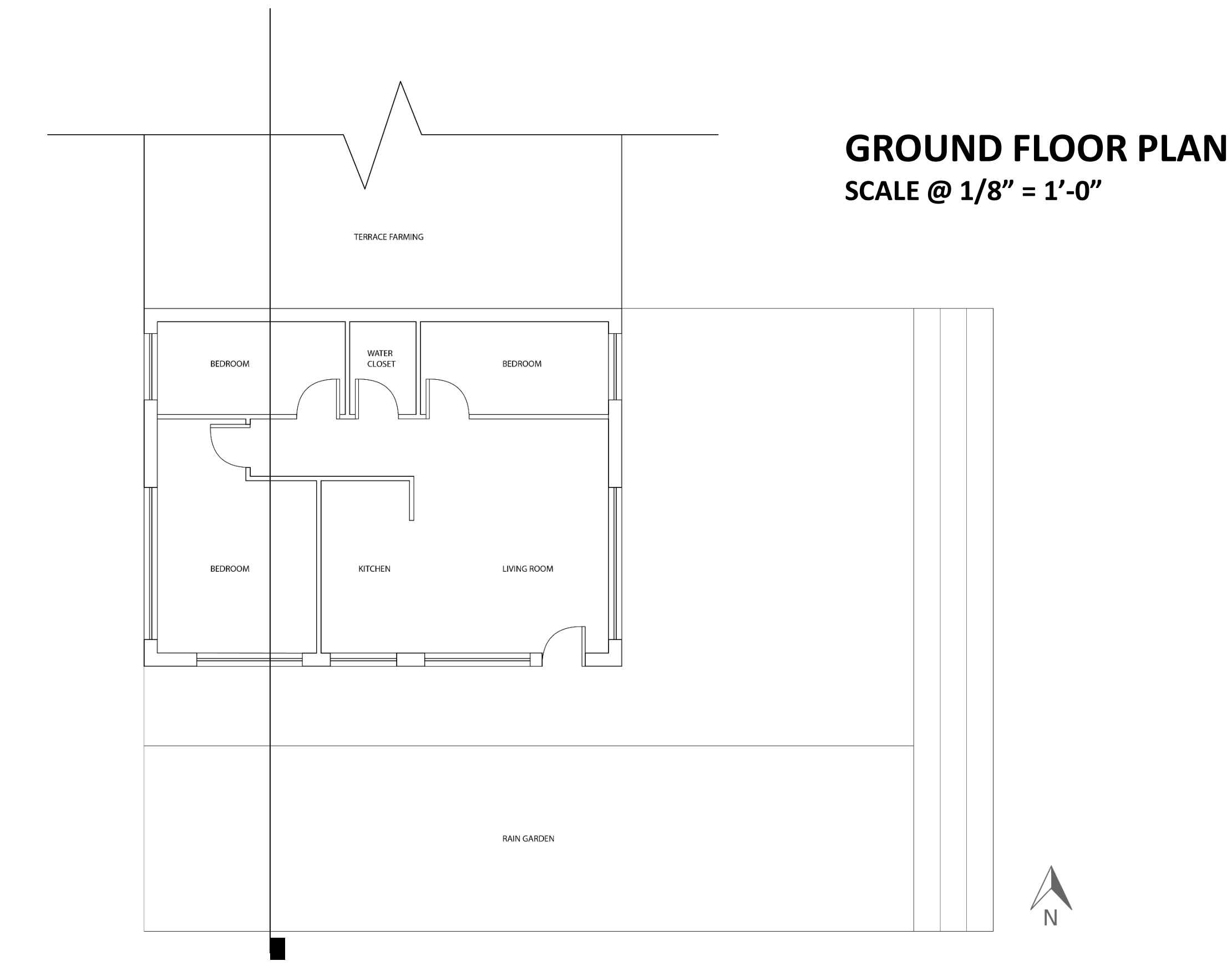
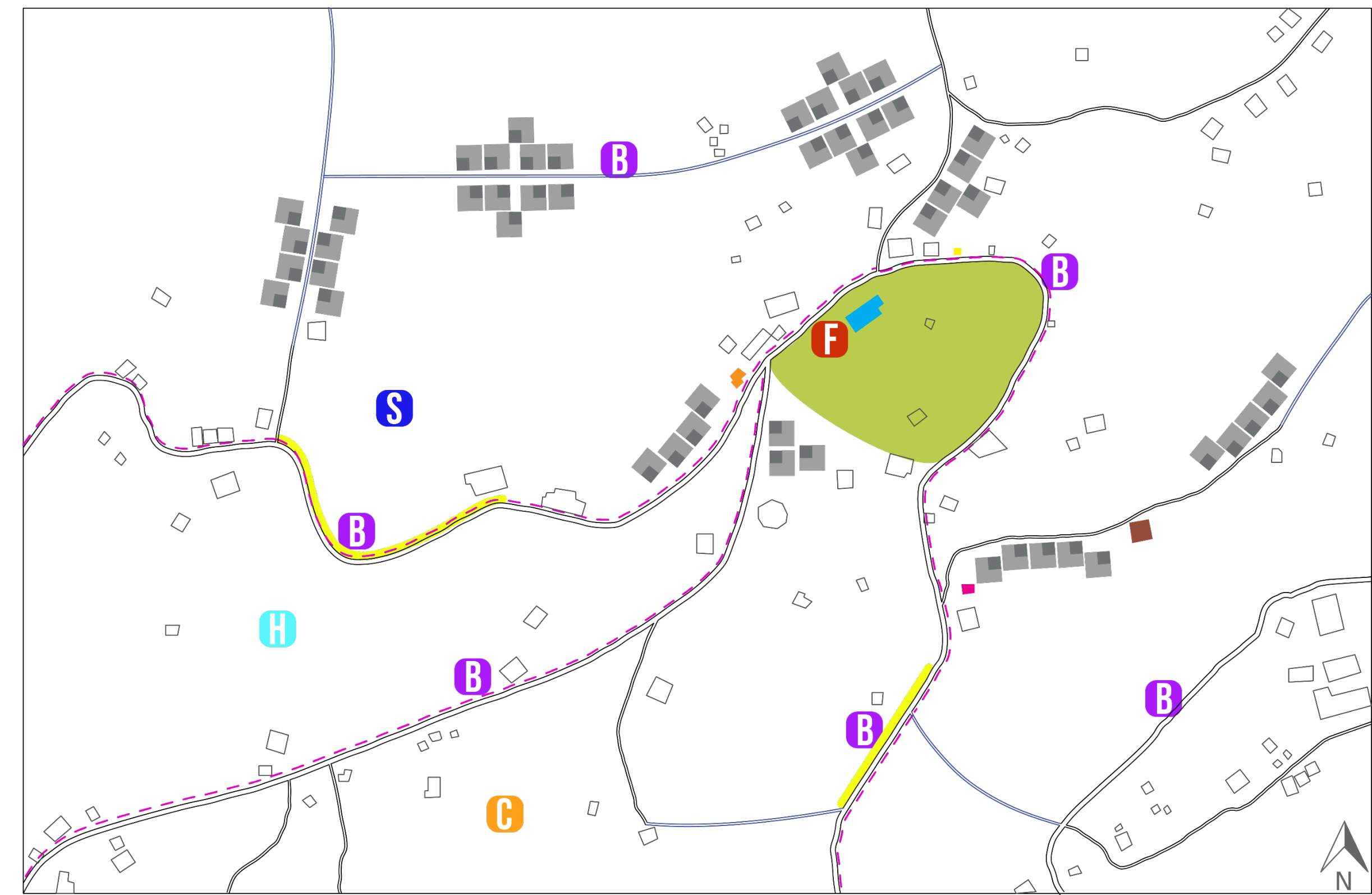
- ISOLATION
- PREJUDICE
- UNEMPLOYMENT
- MOUNTAINOUS TERRAIN
- PUBLIC TRANSPORTATION
- SOCIAL SERVICES
- HURRICANE DAMAGE
- LOW QUALITY OF LIFE
- ELECTRICITY
- LOW INCOME

OPPORTUNITIES

- EMERGENCY SHELTERS
- CULTURAL CENTERS
- IMPROVED ROAD NETWORK
- PUBLIC TRANSPORTATION
- SCHOOLS
- WATER POWER
- GREEN TECHNOLOGIES
- ENHANCED SECURITY
- WALKING PATHS
- SUSTAINABLE INFRASTRUCTURES

THREATS

- CULTURAL IDENTITY
- POLITICAL CONFLICT
- NATURAL DISASTERS
- LACK OF SOCIAL SUPPORT
- UNBUILDABLE TERRAIN



(2) Former house damaged by Hurricane Maria



(3) Current public transportation system



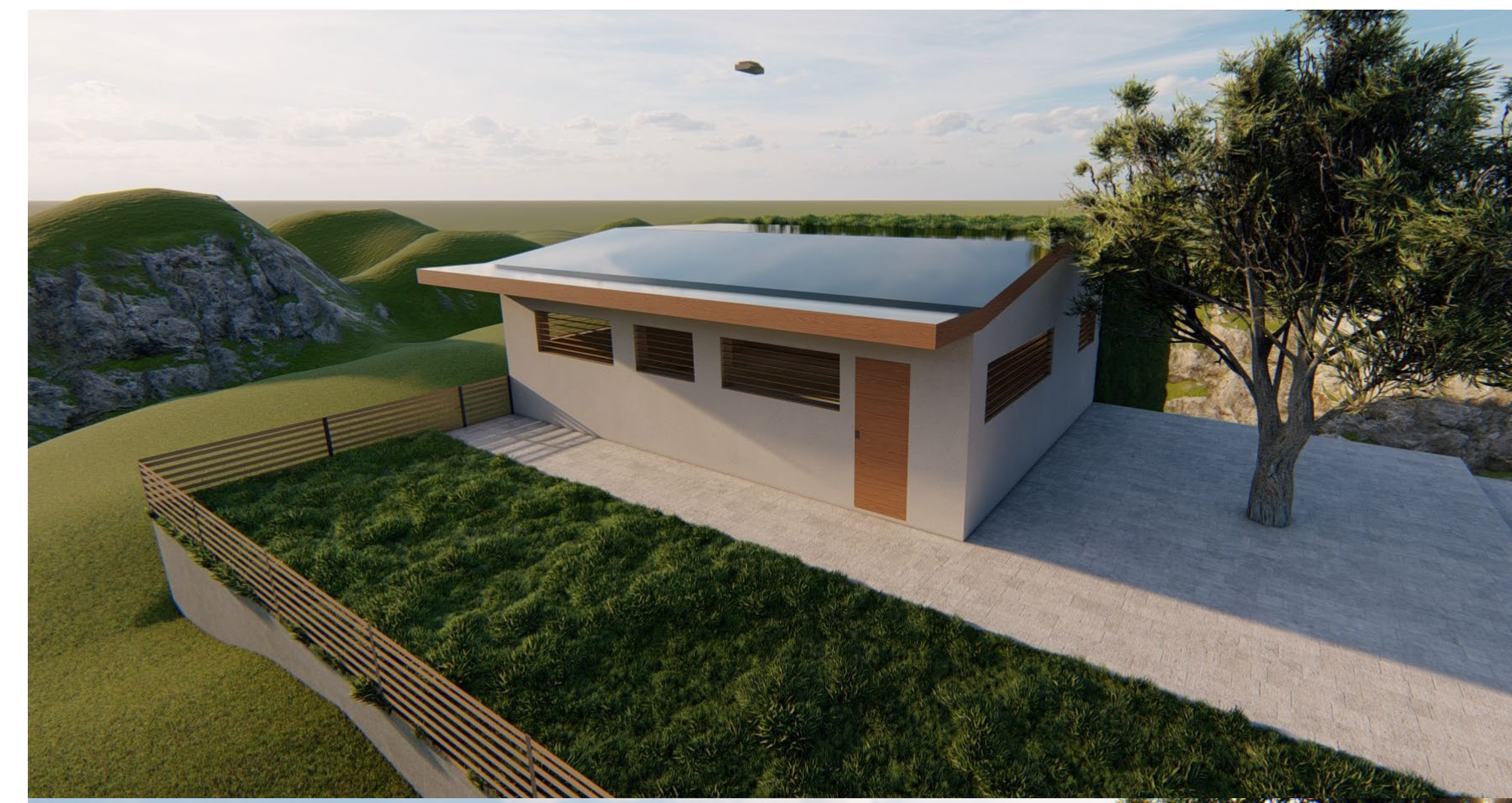
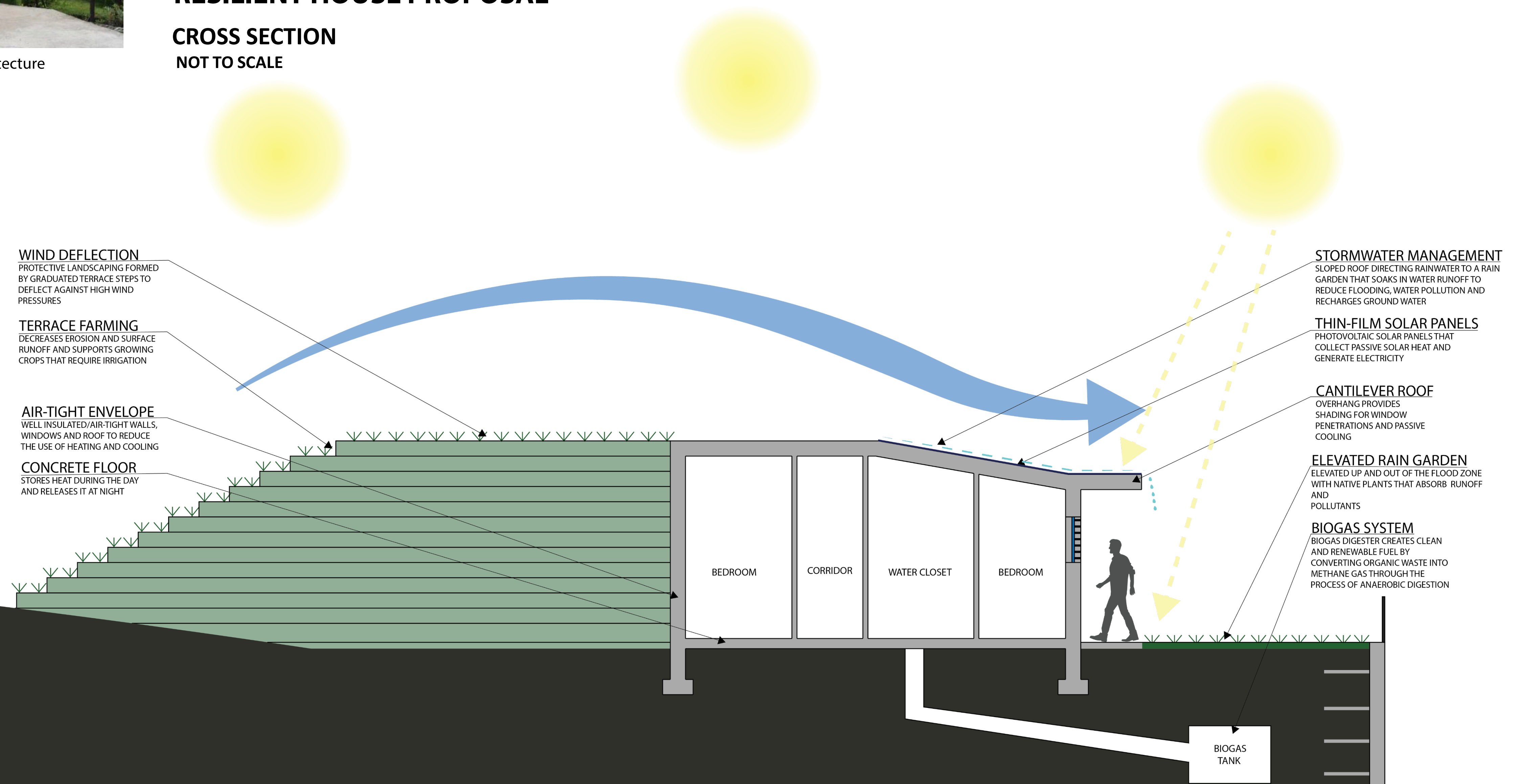
(4) Traditional vernacular architecture



(5) Contemporary vernacular architecture

RESILIENT HOUSE PROPOSAL

CROSS SECTION NOT TO SCALE



CONCLUSION

The Kalinago Territory was hit hard by hurricane Maria. The overwhelming majority, approximately 70% of homes were damaged or entirely destroyed by the hurricane. Water quality was hampered, transportation became difficult or impassable by the aftermath of roads being washed away, landslides and downed trees. When approaching design solutions to these challenges, and what we thought the Kalinago Territory would benefit from most, we decided on emergency resilient housing. More importantly, resilient housing that respects their current cultural fabric and life. Following the same typical geometric form most of their vernacular architecture consists of today and designing something that will keep them safe and are able to rebuild in the event of another natural disaster.

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