

PORTFOLIO

PATSON KEALTHEGILE

4th year

2nd semester

University of Botswana



SITE ANALYSIS

SEGODITSHANE RIVER

POLLUTION

revitalisation of the river by naturally cleaning grey water to the flow of the river during the dry season and also to promote life or wild life in the river system .

WILDLIFE



FLOODING MAP

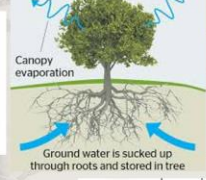
- NORMAL RIVER FLOW
- FLOODED AREA DURING THE RAINY SEASON
- 1.45 MM IN SUMMER
- 1MM IN WINTER

flooding caused by urban expansion which led to cutting more trees which help guide the water in the ground and the rain water storm system which increase the water flow

- DURING THE DRY SEASON (WINTER)

SOLUTIONS

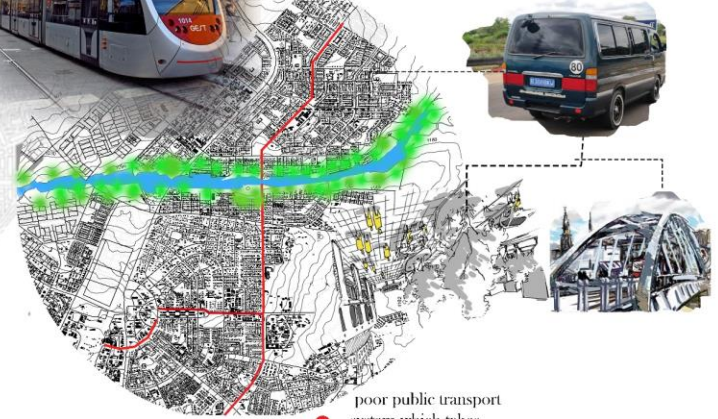
How trees reduce flooding



Animals from Gaborone reserve provide an opportunity for gaming viewing when designing take inconsideration the wild life

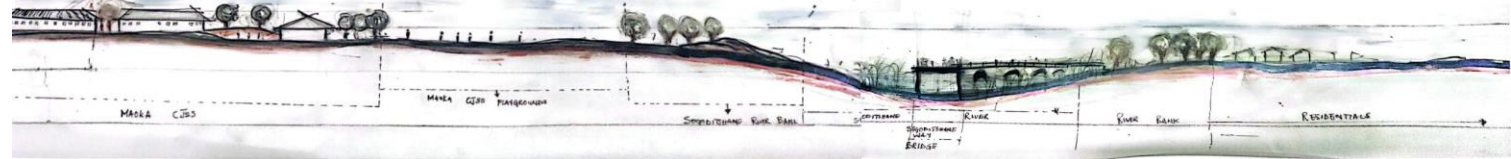


public schools which have play grounds adjusent to the schools and this gives an opportunity for improving the playgrounds and incorporate it with the ecosystem and environmental



poor public transport system which takes longer time to deliver people .

suggestions use of trams ,acomodation of bicycle and walking



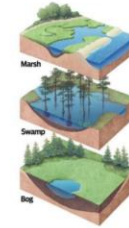
STRATEGY



bridge for connecting the spaces in the design and linking the community to the design and the ecosystem



natural grey water treatment system to continue the water flow in the river to the design and the ecosystem



creating swamps or wetlands as retention points for flood water during the wet season . encouraging ecological biodiversity .



fisheries or aquaculture where fish can be bred for consumption and for selling .



creating wild life observation points or decks



mangroo plantations they provide protection for the soil around the river bank preventing flooding



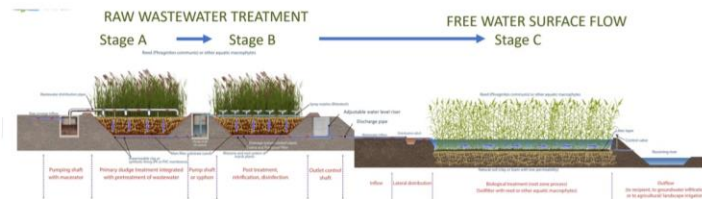
mono rail system to reduce traffic congestion along the segodishane way



outdoor public spaces to encourage interaction with nature

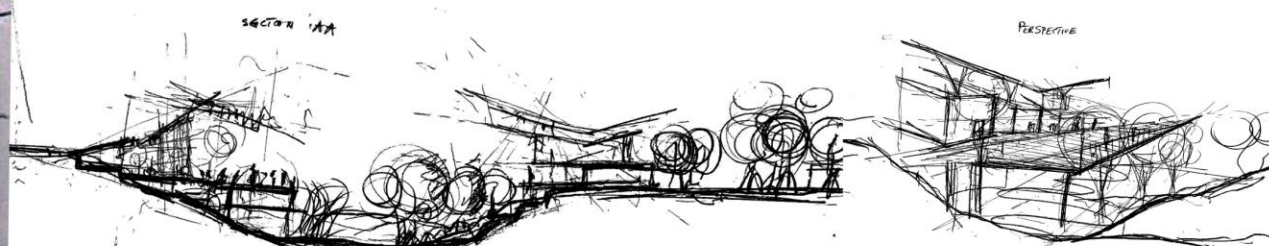
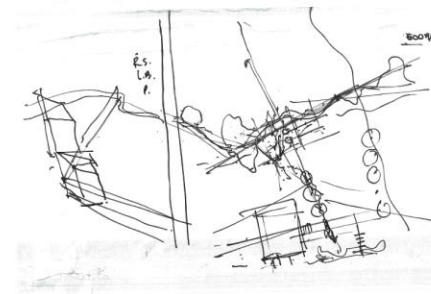
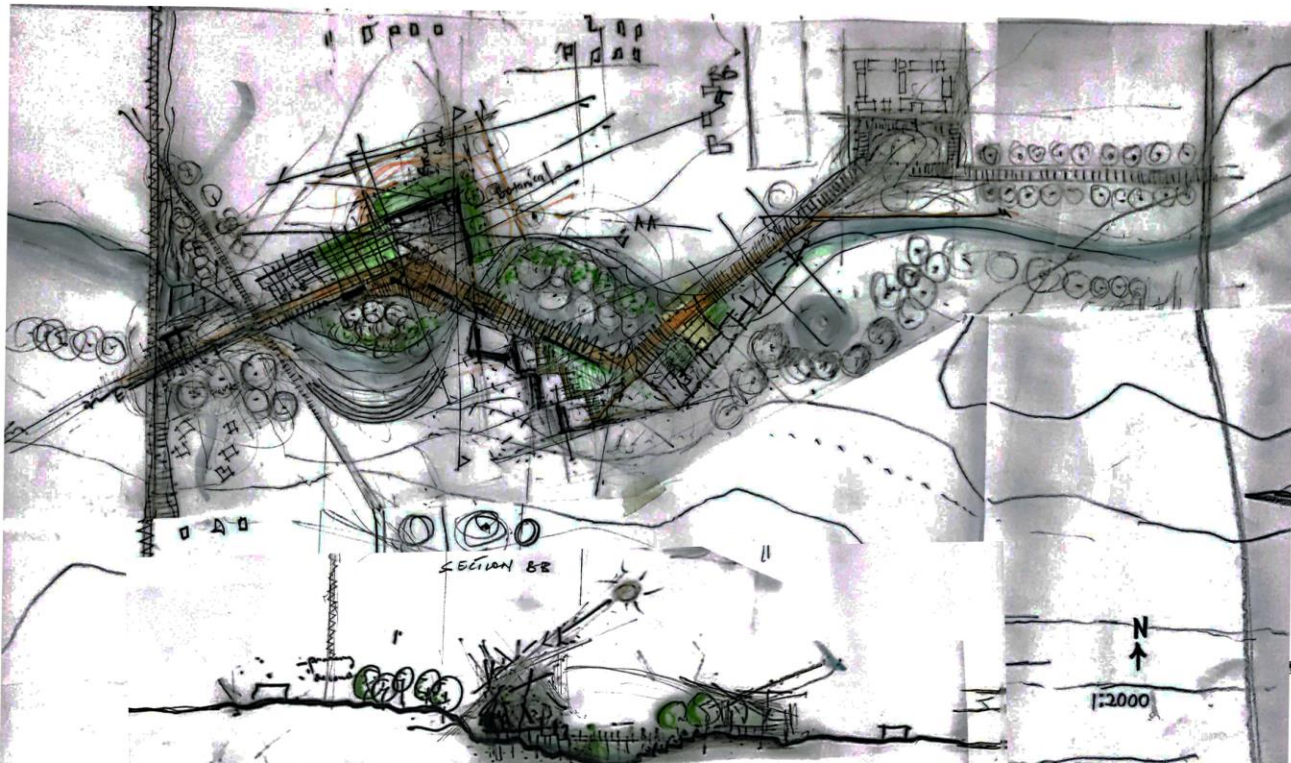
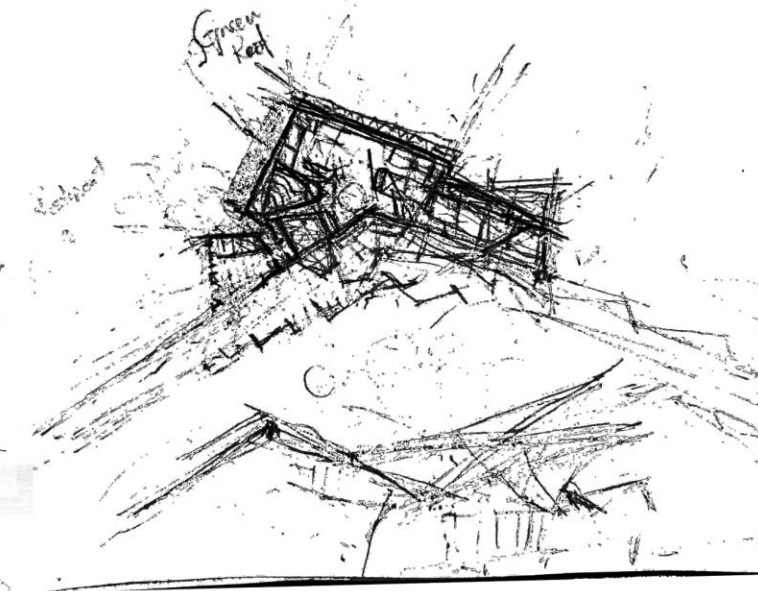
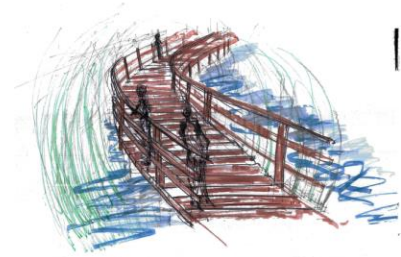
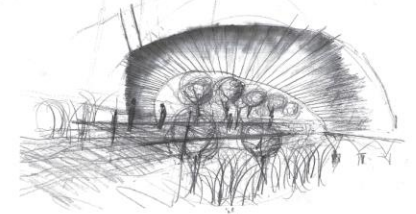
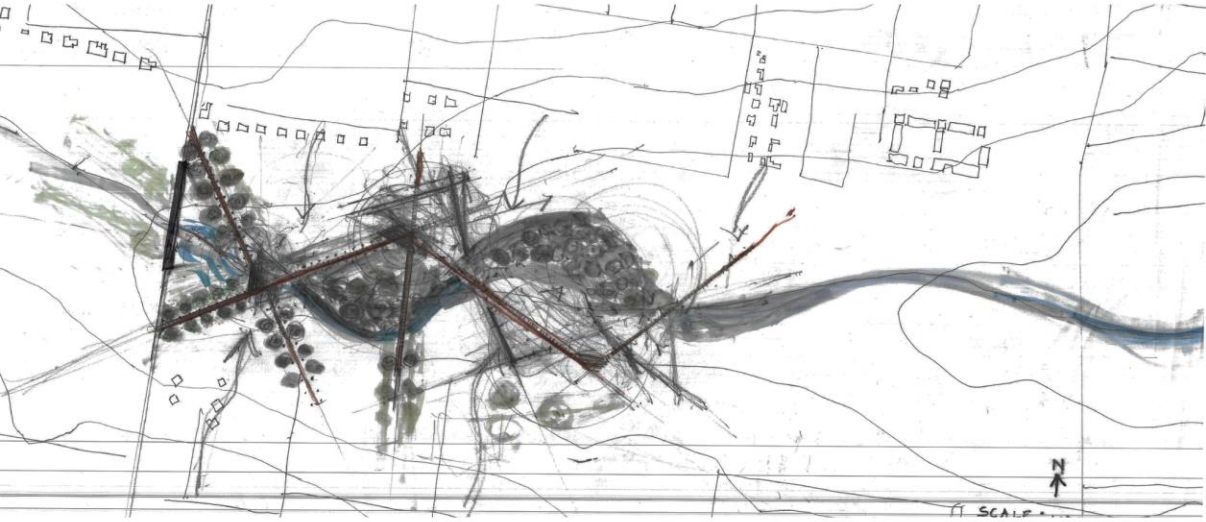


bamboo plantation around the main approach area



landscape features such as pedestrain walkways and benches along the river to provide a moment of pause

DESIGN DIARY



MASTER PLAN



Pedestrian bridge that connects sides of the river with design



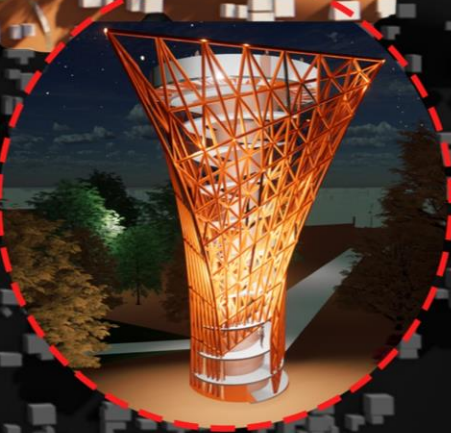
a community park to engage the community with the design



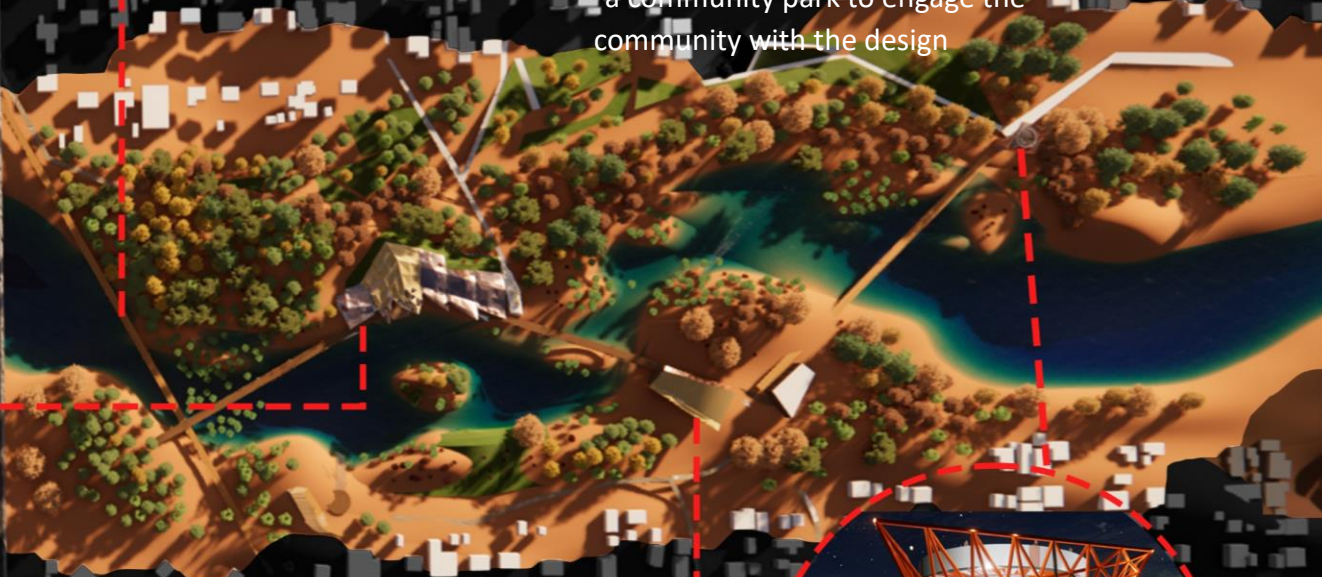
Ecological research center



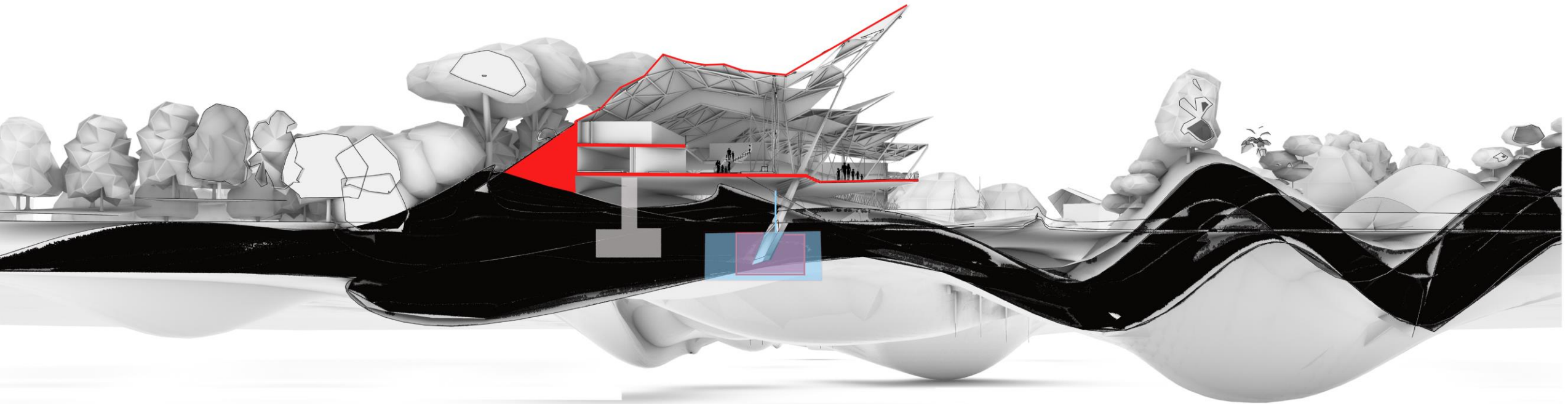
Student accommodation



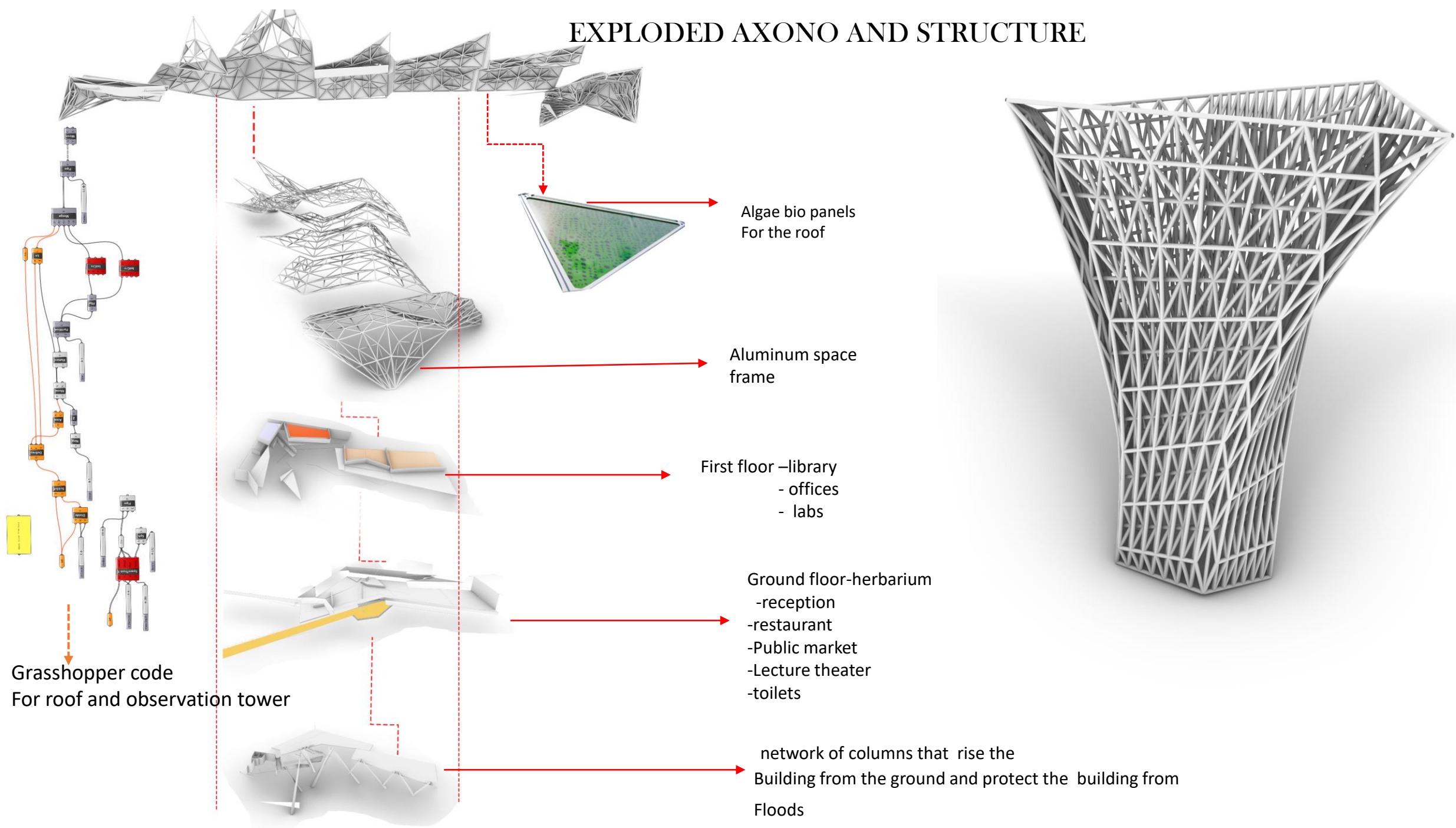
Observation tower



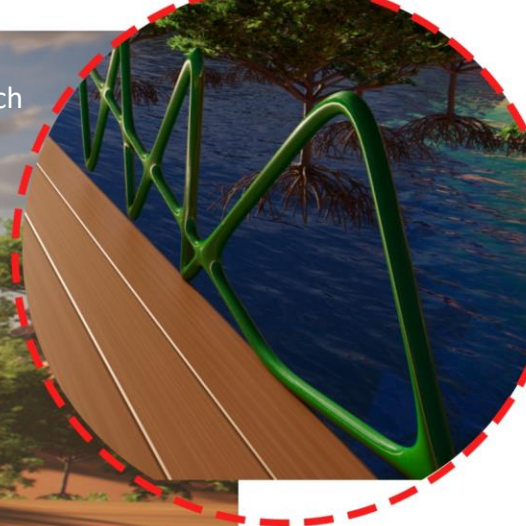
SECTIONS



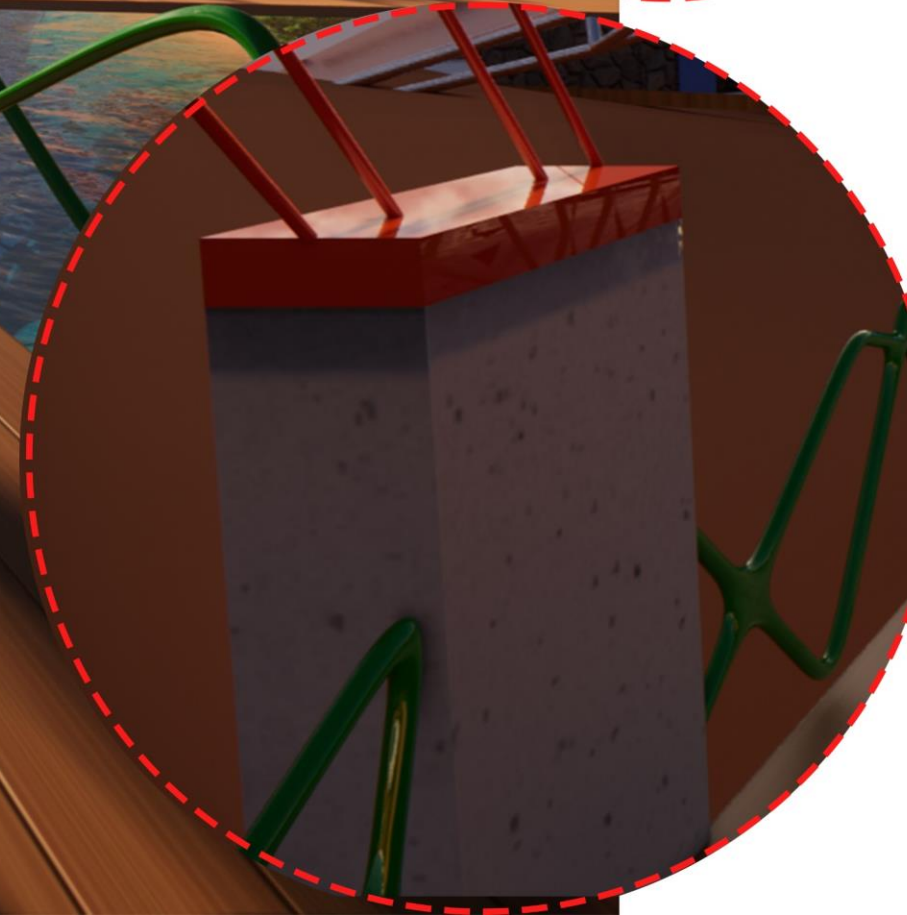
EXPLODED AXONO AND STRUCTURE



The rails on the bridge contain algae which produces electricity for the building



Bridge connections



RENDERS

