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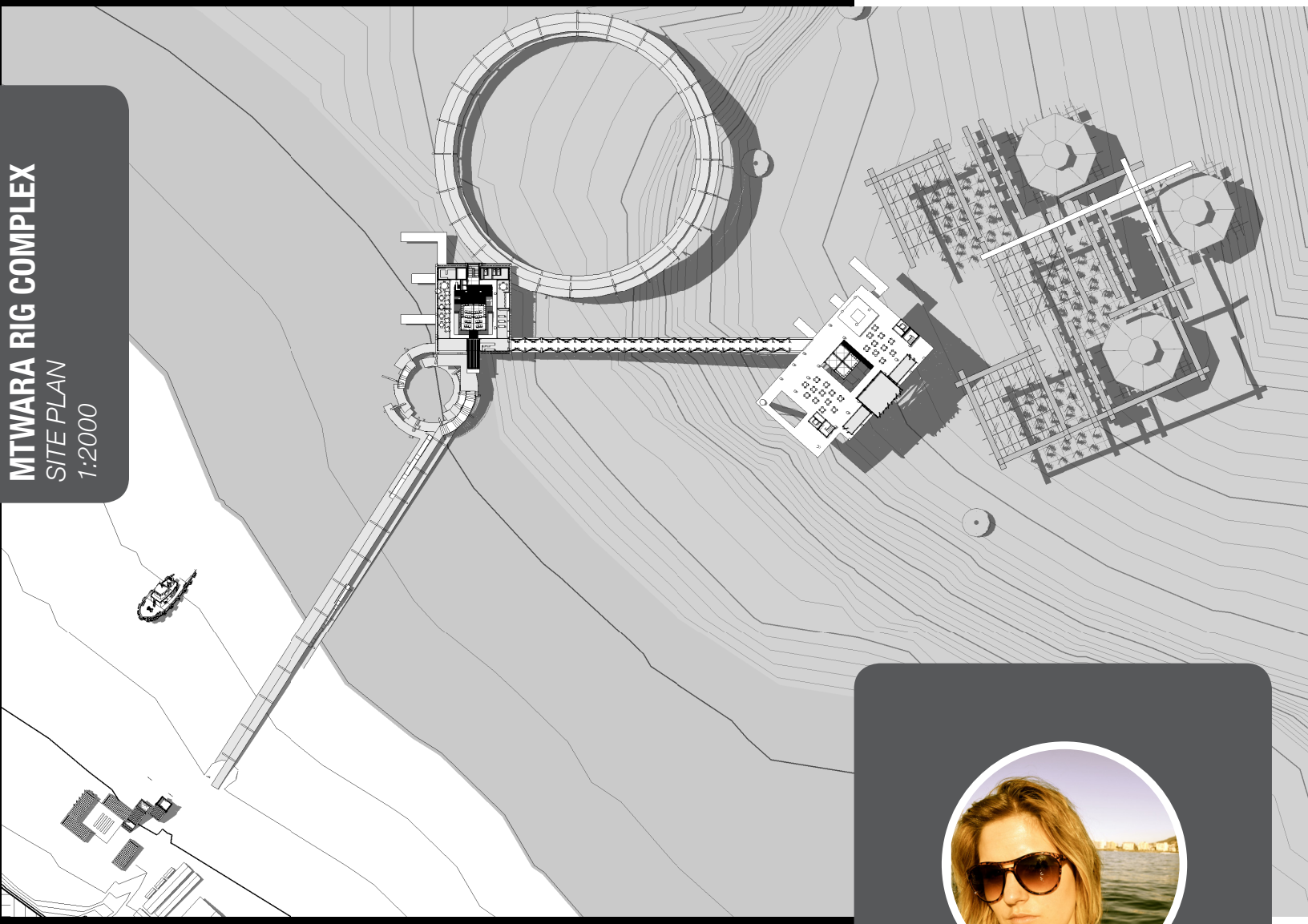
Idle Iron: Adaptive re-use of oil rigs into reef rehabilitation machines that decompose to form coral reef - Mtwara, Tanzania.

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MTWARA RIG COMPLEX
SITE PLAN
1:2000



I want to design a prototype where retired oil rigs of various types can be towed to nearby reef biodiversity areas under threat, converted into reef rehabilitators and researchers, community educators, and tourism friendly machines that will biodegrade over time to form artificial reefs.

The premise is to get the communities reliant on the reef to get involved by teaching sustainable fishing methods, showing that tourism is a sustainable and growing income, spreading the word via radio and education and thus stemming the damage on reefs.

During the reef's lifespan as a machine, certain parts will become obsolete, functions will be upgraded or found redundant, and these will be detached and sunk as artificial reef substrate, so the reef sinks over time, becoming more and more reef, and less and less rig. This continues until a point where the rig has served its purpose, is no longer functional and becomes another wreck off the shore of mtwara slowly biodegrading into a living reef.

This prototype will be adapted and become site specific, which is where the Mtwara area will be significant.

Program will be informed by the prototype, but adapted to suit climate and local requirement. Materials will also be site specific according to local practice and availability, but according to the prototype, will be of a bio-degradable nature, chosen for their rates of decomposition and will all be primarily chosen because they are good reef substrate.

This in essence generates a plan, rather than a building - it becomes a process that the locals can see unfold and get involved in, and translates into a machine rather than a stagnant piece of architecture.

IDLE IRON

Adaptive re-use of oil rigs into reef rehabilitation machines that decompose to form new coral reef

- MTWARA, Tanzania

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