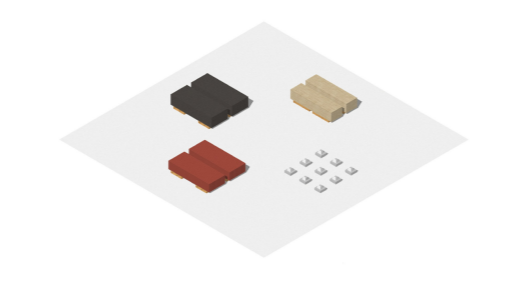
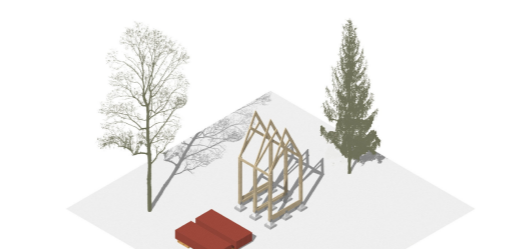


Aallonharja

MATERIALS
 The chosen structure for Aallonharja is ecologically and economically sustainable. The materials are light, easy to build on-site and natural. The untreated timber as a main structural material is the most common Finnish renewable material, while also being cost-efficient and easily transported to the construction sites. In addition to timber, wood-based insulation and wood fiber windboards are used to provide comfortable weather protection and give sturdiness to the structure. The foundations are adaptable. Ready-made concrete pilings are used in order to raise the structure from the ground and allow animal life to flow through, while the concrete portions provide firmness to the floating cabins. Thus, the foundations do not need any heavy digging and can be reused later on. Completely recyclable profiled steel is used for the roof.



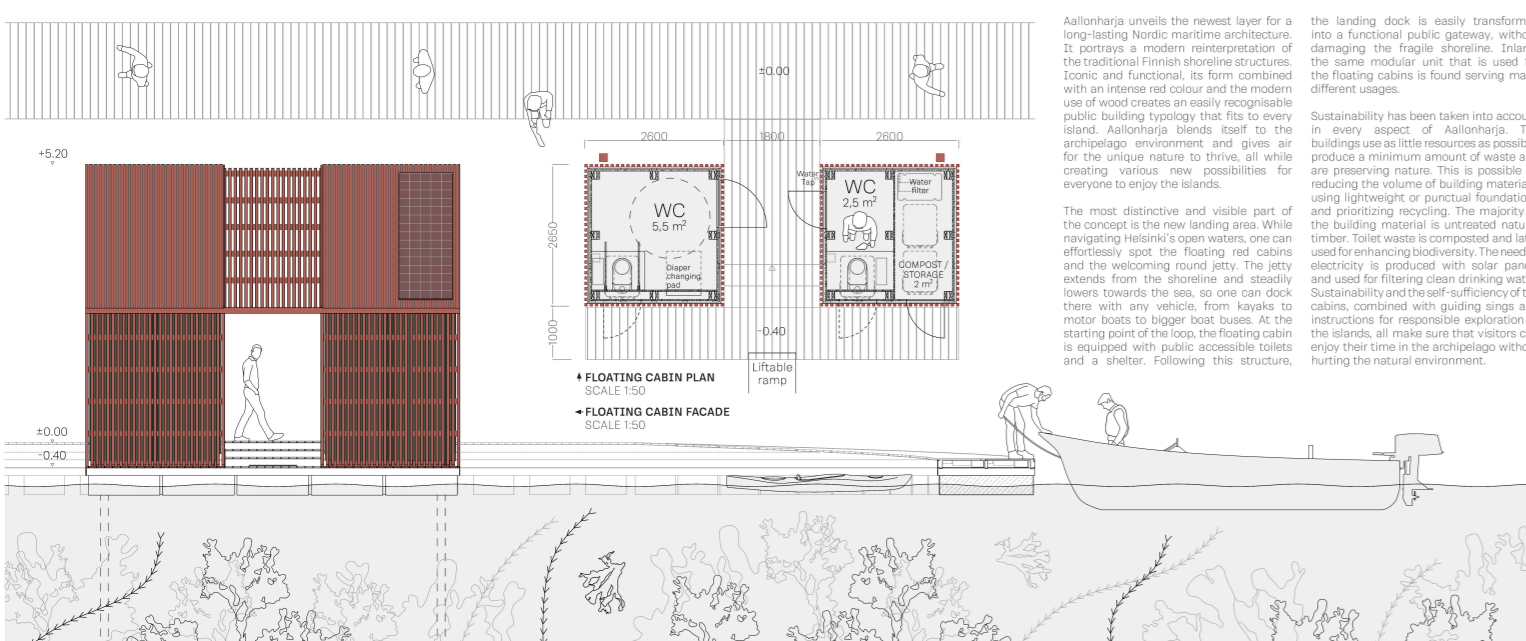
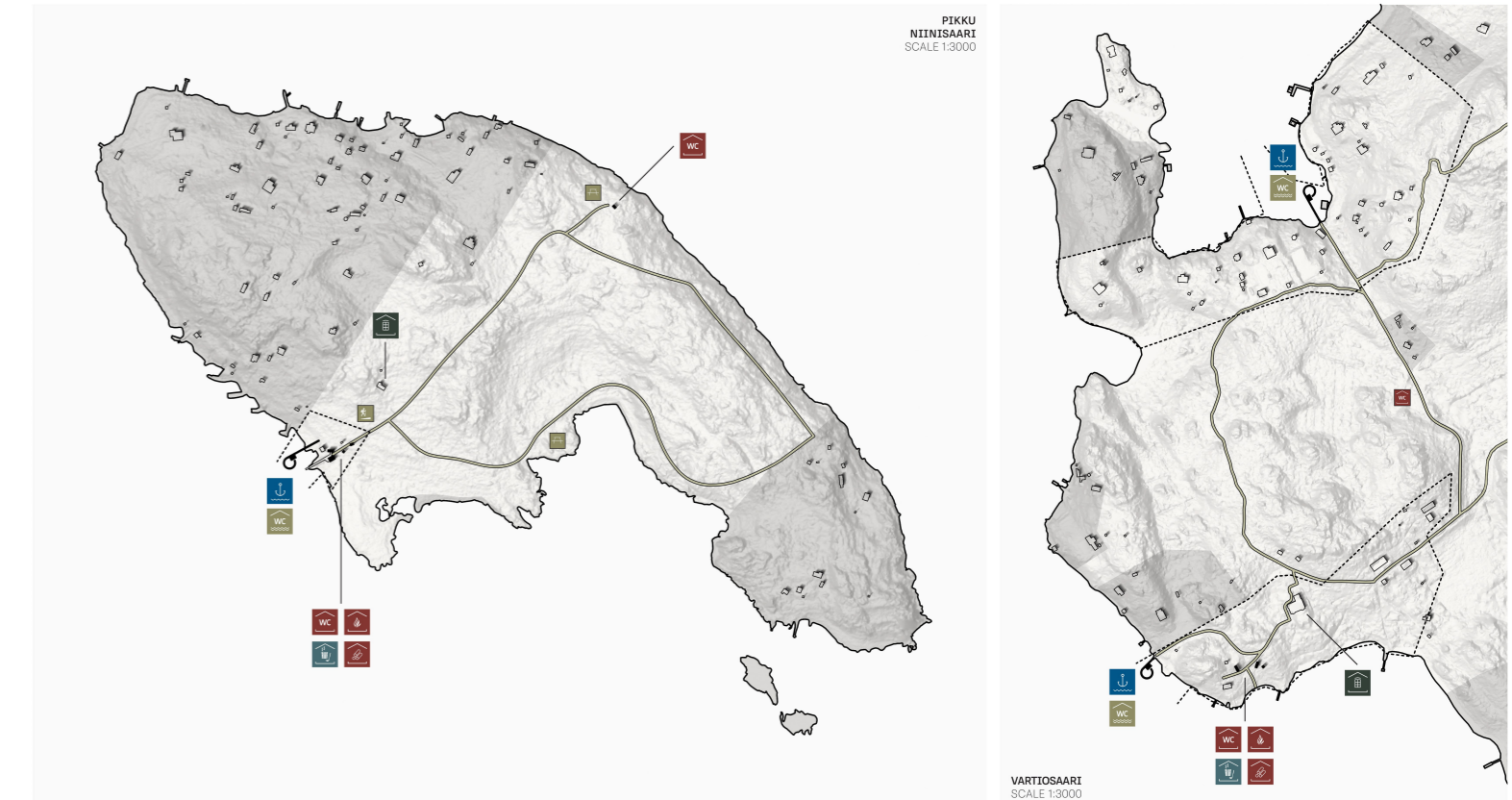
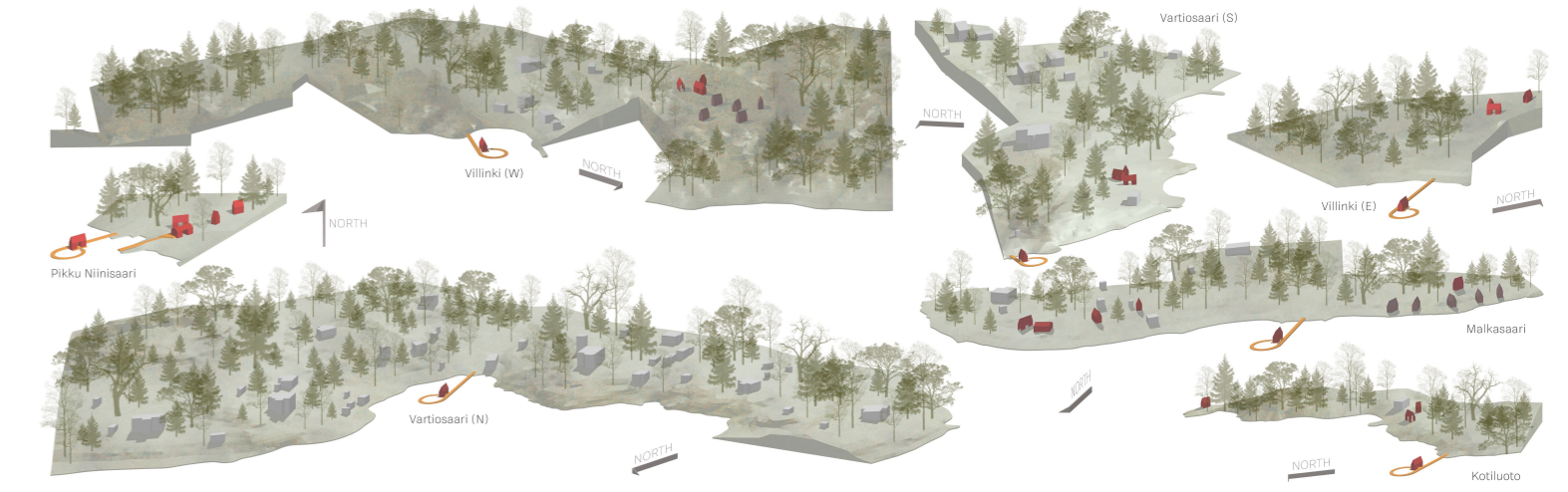
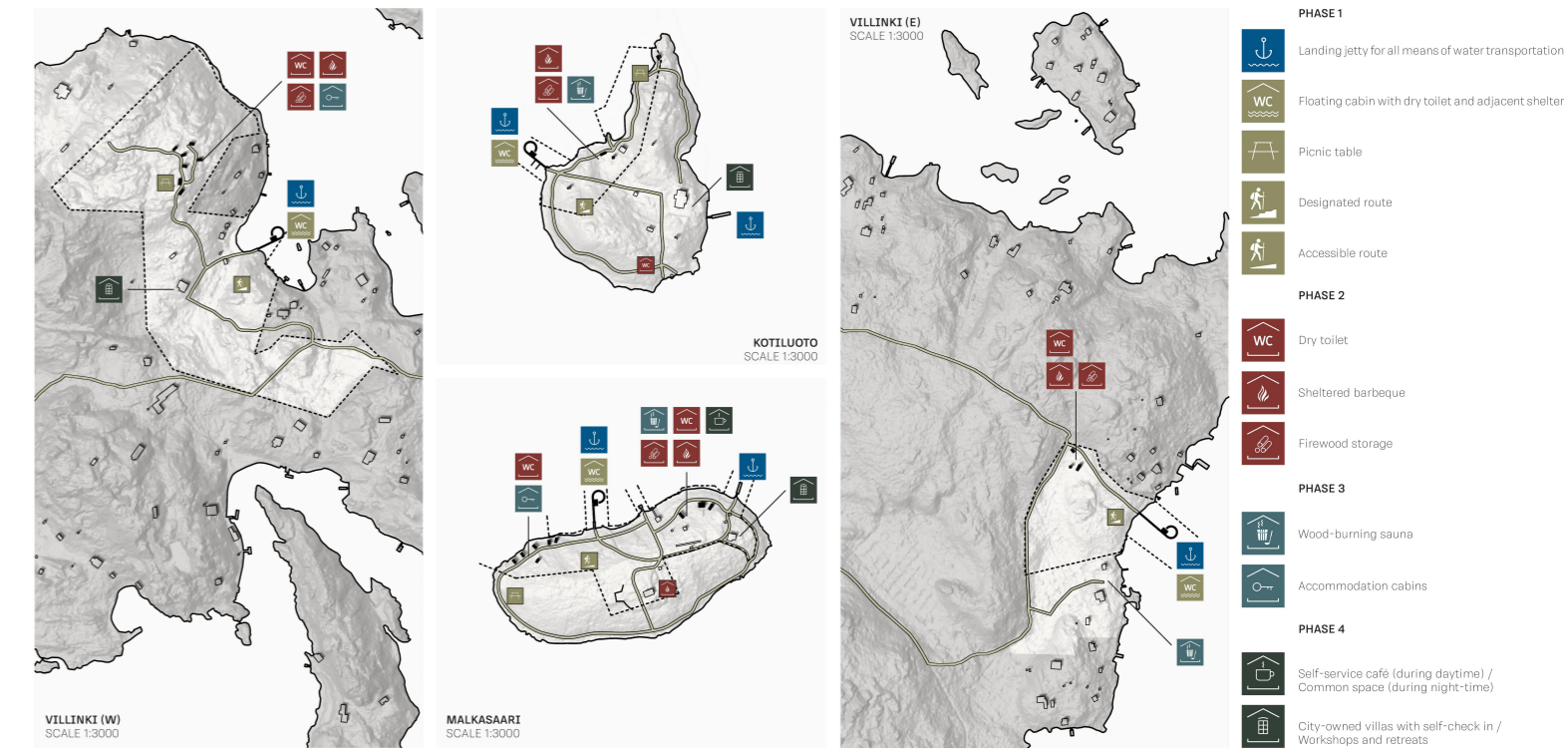
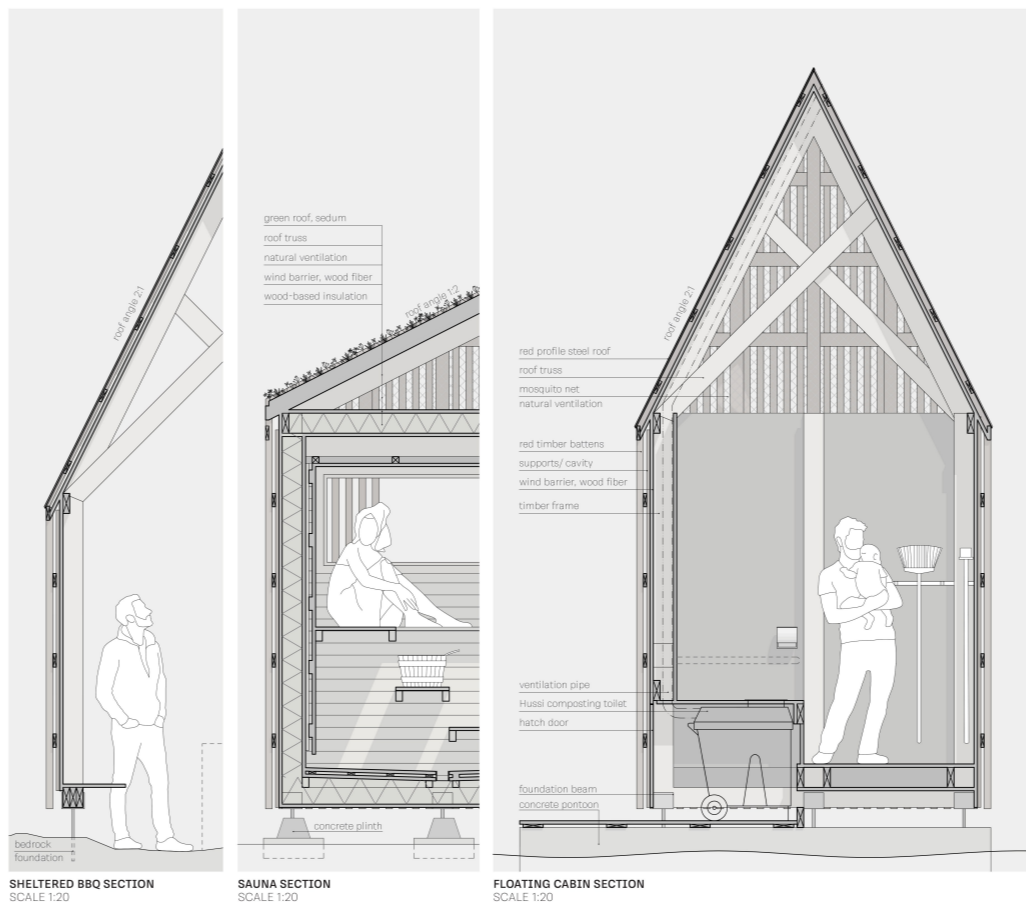
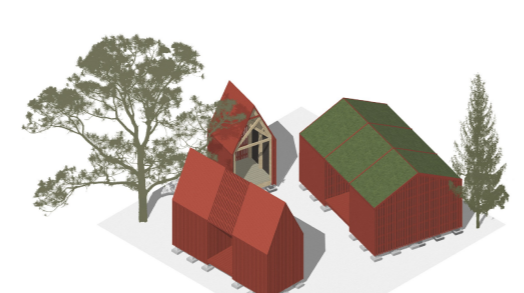
FRAMES
 The building is designed according to widely used dimensions, in order to minimise material loss and make the construction process faster. The main width and depth of the frame is 2.4x2.4 meters, which is equivalent to two factory-slipped windboards assembled together. The height of the building is 2.7 meters plus the 2.4 meters high gable roof. These dimensions create one modular frame that can be easily multiplied and combined. All of the structure materials are lightweight and easy to work with, so that the frame can be built anywhere by hand and without the need of heavy machinery. The timber elements are lifted and assembled on-site, thus making the building of the cabins possible even with volunteer help amongst willing Helsinki residents.



BUILDINGS
 By combining the frames, different buildings and services can be created flexibly. For example, having two modular frames together, an accommodation unit that fits beds for two can be achieved. Saunas can be created by combining 3x3 units together. Sheltered barbecues or storage cabins are obtained by opening up some exterior walls. After assembling the frames, the structure is covered with windboards and then clad with red timber slats. Wood based insulation is used if needed. The slatted facade helps in making the building more lightweight, as well as discouraging acts of vandalism by causing graffiti tags to be unreadable.



PHASES
 Construction is phased according to each island's needs. Firstly, the jetty and floating cabin are built for accessibility. Secondly, small scale buildings like barbecue shelters, firewood storages and toilets are built inland for daytime activities. During the third phase, self-service saunas and cabins for overnight accommodation are added. The fourth and last phase includes buildings that need staff, like cafes and kiosks. All of the buildings are organically placed in compact clusters according to each site's landscape. They are meant to mindfully meander around the natural environment. For example, an efficient cluster between the forest's trees is created by pairing up a sauna with a firewood storage unit and a toilet cabin.



Aallonharja unveils the newest layer for a long-lasting Nordic maritime architecture. It portrays a modern reinterpretation of the traditional Finnish shoreline structures. Iconic and functional, its form combined with an intense red colour and the modern use of wood creates an easily recognisable public building typology that fits to every island. Aallonharja blends itself to the archipelago environment and gives air for the unique nature to thrive, all while creating various new possibilities for everyone to enjoy the islands.

The most distinctive and visible part of the concept is the new landing area. While navigating Helsinki's open waters, one can effortlessly spot the floating red cabins and the welcoming round jetty. The jetty extends from the shoreline and steadily lowers towards the sea, so one can dock there with any vehicle, from kayaks to motor boats to bigger boat buses. At the starting point of the loop, the floating cabin is equipped with public accessible toilets and a shelter. Following this structure, the landing dock is easily transformed into a functional public gateway, without damaging the fragile shoreline. Inland, the same modular unit, that is used for the floating cabins is found serving many different usages.

Sustainability has been taken into account in every aspect of Aallonharja. The buildings use as little resources as possible, produce a minimum amount of waste and are preserving nature. This is possible by reducing the volume of building materials, using lightweight or punctual foundations and prioritizing recycling. The majority of the building material is untreated natural timber. Toilet waste is composted and later used for enhancing biodiversity. The needed electricity is produced with solar panels and used for filtering clean drinking water. Sustainability and the self-sufficiency of the cabins, combined with guiding signs and instructions for responsible exploration of the islands, all make sure that visitors can enjoy their time in the archipelago without hurting the natural environment.