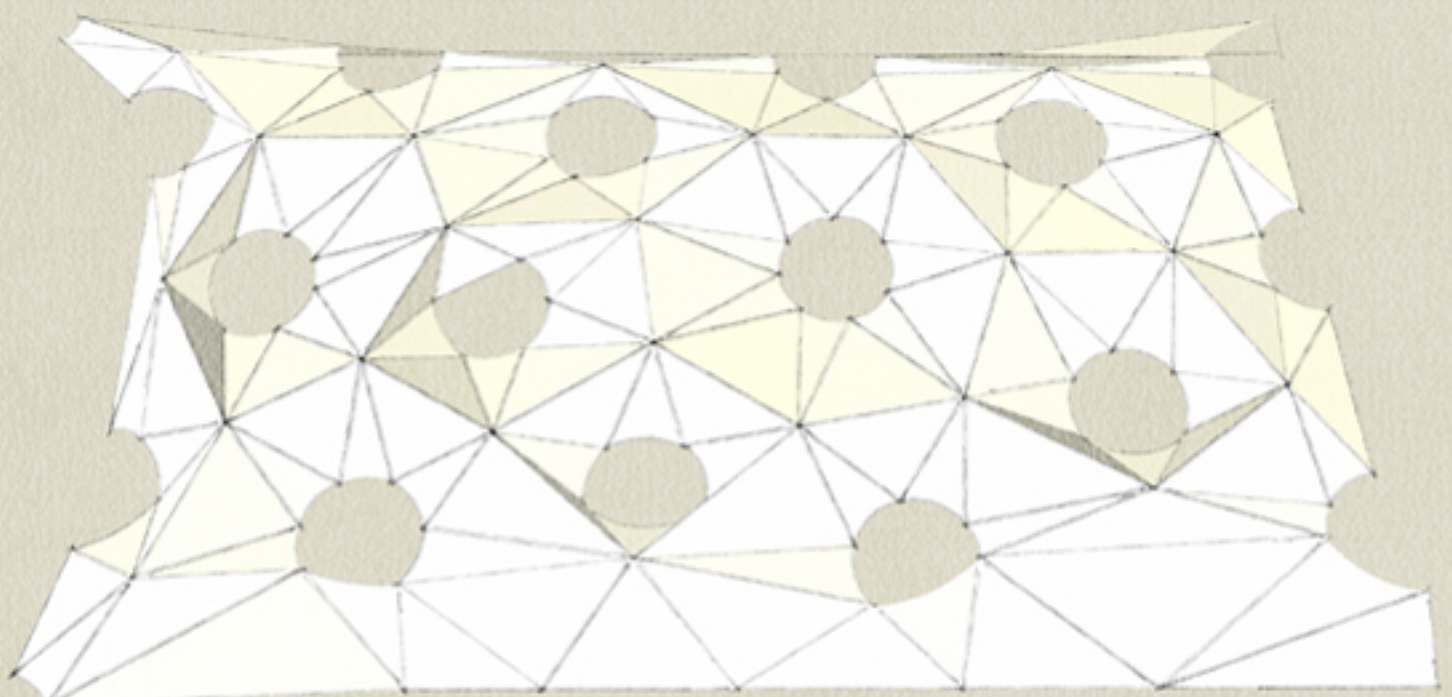


PORT WATERFALL

Architectural approach was to create a multipurpose attraction center within the project area aimed at sea transportation, touristic and domestic targets. Due to location advantages near seaside and to keep alive historical memories of shipyard background of the project land, the approach was developed on a port with energy productive concept. Port Waterfall where includes cruise parking side, passenger's welcoming hall covered with waterfall garden park and a sightseeing platform that provides a large view observation area to tourists and locals addresses the public directly. Also pedestrian, bicycle ways and green zones were designed on all open sides of project area.

Port Waterfall was simply designed as a connection of five independent layers from bottom to top named orderly as cistern (underground), drop columns, sightseeing platform, pools and roof. All structures were engaged energy production and ecological system in the terms of land art generation. All required technical facilities for electricity generation were located underground for aesthetic concern and visitor's safety.



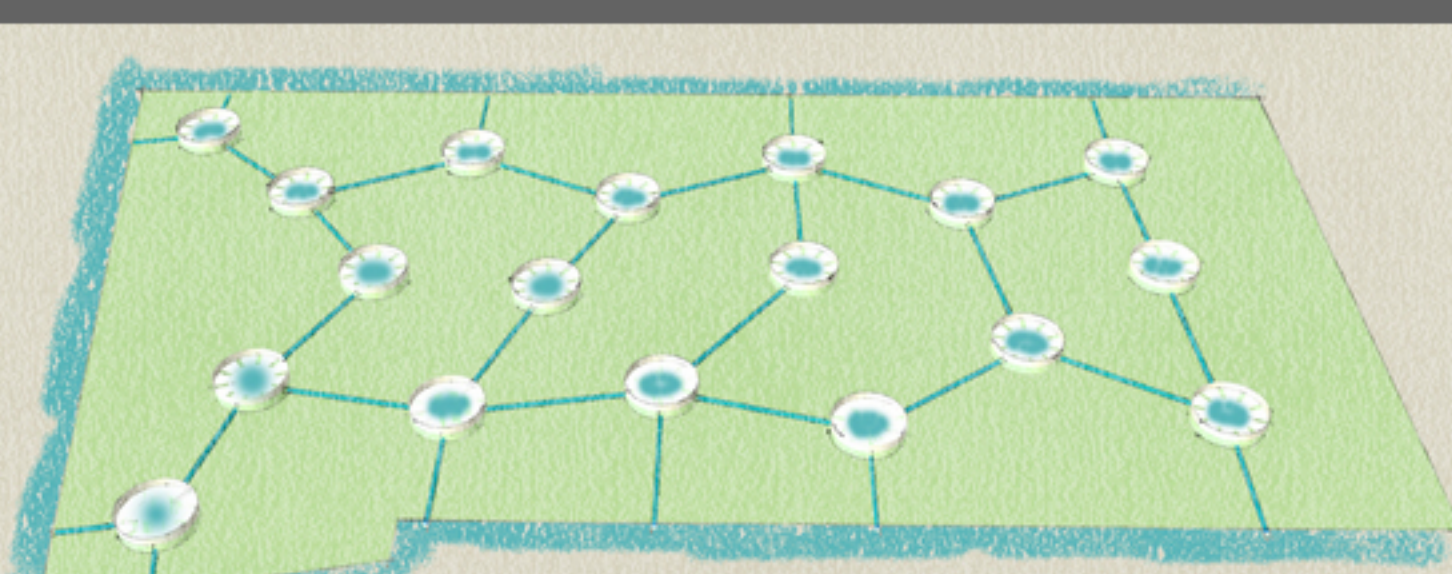
Roof and side covers are designed with several parts of triangular pieces. Each piece is proposed as canvas roof which was designed portion of organic photovoltaic (OPV) sheets due to flexibility of OPV materials. Triangular OPV pieces are connected to each and placed on the top with a slope towards the pools. Therefore water from precipitation is also stored in the system.



Sightseeing platform is designed 3m width and 16m above from the zero level. The platform is extended along east to west and north to south nearly 640 m lengths. Several waterfalls are supplied via water pumps and flowing from the platform to the ground. Due to lack of natural waterfall around Denmark, the effects of artificial waterfall combined with Garden Park caused solicit contemplation from viewers at the first moment.



18 Drop columns are designed above the zero level. Each column is 3m diameter and 31m height. External cover of columns is shaped as asymmetrical cone from larger bottom to narrower top. The cover is selected for plant growing surface and providing enough maintenance space to installed pipes on columns.



The cistern layer works based upon communicating vessels principle. Each chamber in the cistern layer is connected to each and sea with several 1m diameter sized PE pipes. Cistern layer has 18 circular chambers where below is reservoir and above is mechanical room.

