

MILKY

Bio-luminescent Rooftop in Maunsell Army Sea Forts

SEAS

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Maunsell Army Sea Fort, atlasobscura.com 2013
photo credits: Steve Cadman

INTRODUCTION

With this project I am intended to propose the interspatial modification between the towers of Red Sands Forts in England. This modification is coming along through a mesh roof, hanging from their terraces, destined to be the main protagonist bringing behind it a new destination of use and the small spatial modifications.

This massive ephemeral installation creates an immersive experience showing the wind patterns through light.

This roof is based on bio-lighting design, showed through the transparency of the tubes coming down vertically from the net with the same material.

My aim is to express the possible revitalization of abandoned buildings through the art's touch, which is able to give its positive effects not through the materials or structure directly but the consequences that it can bring with its presence towards its concrete maintenance from its users and everyone. In this revival of the towers the attention will be focused unavoidably to the bioluminescence technology, pushing the design boundaries further and inspiring designers who will get to acknowledge about this project.

This roof will be a "physically" involving element which will provoke emotions and create a place among the towers, giving it quality and defining it with the realization of the patterns of wind, which is one of the main protagonists of the project site, through this spectacular natural phenomena.

Persuaded from this strength point and imagining this presence as highly inspiring to the potential temporary inhabitants of these structures, my first function proposal is the one of a design studio where a small group of people can work on various projects, from bio-lighting to any kind of handicraft product design.

This function is the first kick-starter of the life in the towers, that in my opinion is connected in a deeper way with the lighting roof, in case there is belief from designers that they are worth to be worked and lived in, during a short time for certain projects to have a different experience and learn how to maintain a bio-lighting roof.

In this process I wanted to report in the drawings, the explanation of the spatial division, distribution, the relation between the roof and the towers, the technique and the "show" of the roof, visualizations about how I imagined this space to be after my intervention and also three new scenarios that might happen when bringing this art piece to the Forts in case there is no interest and funding for the workshops.

Scenarios, that actually might happen before and after the design workshop function. In the former case they might help in gathering more and more attention to the site attracting new investments, as long as not privatizing, making it possible for the towers to be tooled enough to host in accomodation and work the designers.

In the latter case they can be the functions continuing to exist after or in case they can't be tooled for lack of investments.

This project is either a comment about the site and the different functions it has been place for, either an - idea provocative - theoretical project that maybe is unusual and hard to be built but willing to "push" the observer architect towards a "why not" question in the future building thinking way.

WHAT IS BIOLUMINESCENCE

As it is expressed from its name, this event is the miraculous light visions in nature, from the body of certain organisms that can vary from animals until sea plants. It occurs widely in marine vertebrates and invertebrates, as well as in some fungi, microorganisms including some bioluminescent bacteria and terrestrial invertebrates such as fireflies.

Images from the Pacific Ocean islands and some parts of European seas with the very neat and strong blue coloured waves in dark skies are very famous and spectacular to watch ([image 1](#)).

These can create in the thousands of kilometres long coastal areas of the ocean the milky seas effect, sometimes even bright and large enough to be visible from satellites in orbit above the Earth (on the right).

It is a pleasant feeling to contemplate them flow with the waves carried with a rythmical movement and light up gradually.

The most frequently encountered bioluminescent organisms may be the dinoflagellates present in the surface layers of the sea, which are responsible for the sparkling phosphorescence sometimes seen at night in disturbed waters.

“Milky Sea” has long been a subject of folklore within the sailing world where sailors and canoers are surprised from the enlightenment of the water on the surface of their boats and on the water that is disturbed from their rowing movement and from the heading of their sails.

At times is possible to see their light, just by walking on a beach with a high concentration of these bacteria, leaving track of fluorescent glow on the sand and even under the feet.



So how are these caused?

Bioluminescence may be generated by symbiotic organisms carried within a larger organism. It's about energy. The excess of the chemical energy obtained via food is released in form of heat. With the same logic, in dinoflagellates this can be released also as light.

These organisms can glow in complete darkness thanks to a unique component called "luciferin".

Scientists think milky seas are produced by bioluminescent bacteria on the surface of the ocean. Millions of bacteria must be present for milky seas to form, and conditions must be right for the bacteria to have enough chemicals to light up.

The visible blue light is produced for the following purposes:

- Adaptation
- Defence mechanism
- Hunt nutrition prey

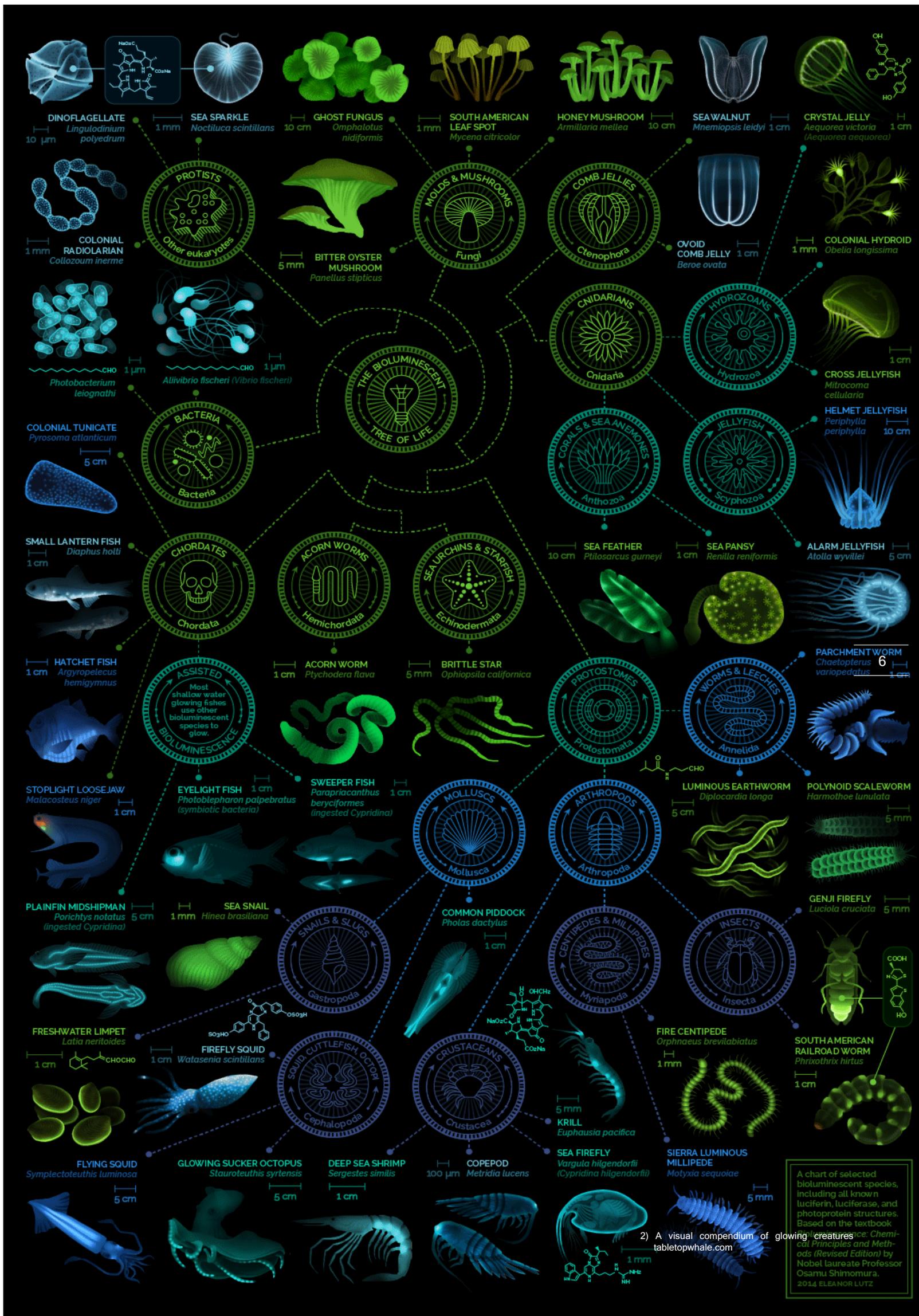
Dinoflagellates (image 2) produce light in order to have some advantages in their natural habitat as in the first case above where in order to keep their population number at a constant level or higher, they try to attract mates for reproduction. Once they have this group of co-inhabitants they have to develop a defence mechanism which happens always through illumination, that is released when sensing movement of a potential predator. The latter one will get confused from the pulsing light and discouraged to approach the dinoflagellate. If this light is still not irregular is supposed to attract other smaller organisms that will try to reach out for it, instead, creating the ideal situation for its entrapment.

These presences are mainly felt through the movement sensors present in their DNA. When in proximity of another presence that might respond to any of these alerts of the organism the sea water transmits the movement signals to these that light up flowing into this famous circumstance. This water movement can be caused by anything such as from a boat passing by, a wave breaking or someone throwing rocks into the water.

In order for this process to happen there are three elements that basically have to be present and these are:

- Luciferin (the protein that is the main protagonist of the light production)
- Luciferase (the unique necessary enzyme in assistance of the reaction)
- Oxygen

It is important to highlight the fact that bioluminescence is different from fluorescence. Fluorescent organisms, such as butterflies that have fluorescent markings on their wings, would not glow in complete darkness since they only glow in the presence of an external light source. This comparison is important to put a precondition before the next chapter when I will report all the potential "bio-lighting" experimentations going on through in the technology researches addressed for a new sustainable lighting system.



REFLECTIONS ON DESIGN POSSIBILITIES

The analysis of the lighting metabolisms of the dinoflagellates is important in aim of a potential usage of the same mechanism in other situations outside of nature. If it is possible to have light without electricity with a more magical result, it is an urge for designers and architects to explore new boundaries. Indeed the different projects and researches have already been initialized.

I would love to report here some examples that helped me throughout my project's thinking.

In France, a company called Glowee, decided in 2016 to substitute the public light installations as for in shop targeting and street lamps with this new method. In their experiments they are using a bacteria called "Aliivibrio Fischeri" as a platform where to inject the necessary proteins for luminescence. They are still on the study process recruiting volunteer researchers to be able to overcome the limit of the short lasting of the light.

Ascus Laboratory is still experimenting about the possibilities of bioluminescence usage as well creating funky designs and offering a year round programme of workshops, that gives artists, scientists and members of the public, the opportunity to connect together and create projects.

The Dutch lighting and design company Philips has begun exploring the possibilities of bioluminescence producing experimental biolight through bacteria fed with methane gas and composted material. Always in sight of a completely auto-sustainable free-standing micro-home.

However architecture always brings up a thinking challenge to propose a totally new provoking question to answer to, even where sustainability cannot give direct guarantees. Therefore it is my duty now to shift the focus to the design side of this new technology, chiefly due to the direction of my project.

The Dutch designer Daan Roosegaarde's team is looking towards bioluminescent jellies to merge with plants turning trees into glowing street lights. This method as many others is only in theory yet, thus they are producing other installations that are not technically bioluminescent but in intention to promote the same theory of sensor lighting for a major interaction with the user of the architectural space. One project on this line that inspired me mostly is called "Dune". (image 3).

7

This is the public interactive installation that interacts with human behaviour. This hybrid of nature and technology is composed of large amounts of fibres that brighten according to the sounds and motions of passing visitors. It is situated in several contexts;

DUNE 4.1 as a public pedestrian way in Maastunnel, commissioned by Rotterdam City of Architecture, DUNE 4.2 which is situated on the Maas River in Rotterdam (NL) and uses less than 60 watts of energy and finally DUNE X, an interactive landscape of light placed in the Dogleg tunnel on the occasion of the 18th Art Biennale of Sydney.

Within these settings, Rotterdam citizens can enjoy their walk of light. Encouraging the belief that we can learn from nature and apply it into architecture with a light-hearted behaviour and a good intention looking to a space feeling.



MAUNSELL SEA FORTS

The project site is in Thames Estuary, in England, in open seas, at the Shivering Sands Forts. (illustration 4)

These were built for defense during the WWII from a civil engineer called Guy Maunsell, who gave the name to a series of other anti-aircraft towers just like these ones, always in the same location, of which only Redsands Fort is left standing besides these ones.

They consist of seven towers surrounding a central command tower, connected to it through narrow steel catwalks.

Their organization reflects a perfect machinery functioning reminding somehow the Futurism, a -war idealizing-art movement that in the WWI period showed belief and affection to the machines, conferring to it the priority comparing to the human life; according to this movement, machines were more organized and "perfect", able to give the most fruitful future with their production skills. These towers built in the world war occasion, prove the machinery dream via the materials of the constructions, entirely in steel that remind the ones of the artillery, but especially for the plan distribution that is really concise to its specific circulations and functions, working just like a well-structured factory.

During the WWII period these forts, together with many others in the European seas belonging to other nations as well, served as enemy war planes shooting points as a better defense for the ports, standing far from land and they were composed of seven towers until when the farthest called "The Nore Army Fort" was highly damaged from a trade ship during a foggy day, making it necessary to be dismantled. After the end of the second world war they were destined to several different "unusual" functions, related to their structure and position.

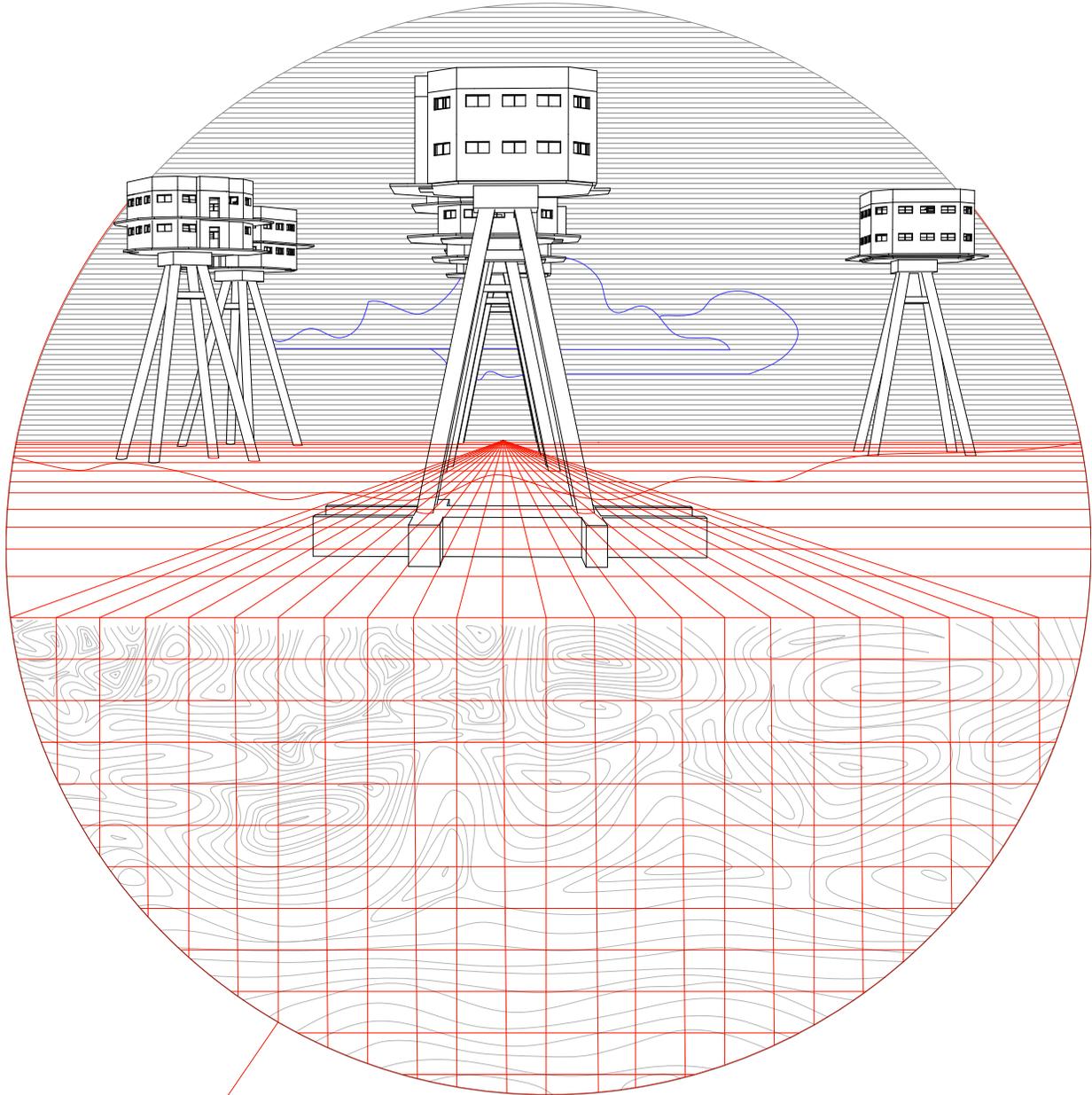
9

In the 1960s and 70s, the remaining abandoned forts were famously taken over as pirate radio stations. In 1964, Screaming Lord Sutch set up Radio Sutch in one of the towers at Shivering Sands. Sutch soon became bored with the project and sold the station to his manager Reginald Calvert who renamed the station Radio City and expanded operations into all of the five towers that remained connected. Calvert's killing in a dispute over the station's ownership contributed to the Government passing legislation against the pirates in 1967. In the following years another radio station was based in the Forts, called King Radio, a name that celebrated the very long span of waves it could transmit for.

Although the different disputes with The London Port Authorities regarding the disruptions of their signals because of the closeby radio stations. made it for them impossible to keep being active in years, which so had to come to an end.

Subsequently in 2005, the artist Stephen Turner, spent 36 days of solitude in his artistic exploration choosing this bleak location, to reflect about isolation. It is available online the blog where a journalist wrote the descriptions he had taken notes of during his stay in the Red Sands.

Nowadays there are several projects going on, either among students either publicly online for crowd - funding regarding this place, which covers a large field of different proposals from luxurious SPA/hotel to astronomical observatory. The fundings, though, help greatly to stay alive right now through small maintenances trying to organize from time to time different activities such as spray painting the walls for artists and sets for film-making.



4) "see Maunsell Army Sea Forts", bucketlist127.com



5) "maunsell abandoned sea forts", image from WWII
thehive.files.wordpress.com / 2015

6) image from "artist's vlog", seafort.org



7) Turner with the Forts behind him, once his experience is over
assets.londonist.com

8) Image from the "radio station times", bobleroi.uk



9) Paul Elvey from Eric Jay Archive, ex army electrical engineer and dj at Radio Sutch, bobleroi.uk

10) some adventurers during their visit to the forts, oneinchdreams.com



11) Street artists want to paint Kent's WWII Redsand Sea Forts - Tomo Taka, thespaces.com

LETTERS TO STEPHEN TURNER

Public opinion about the Forts

I would like to report here some letters written to the artist Turner, whose activity became famous nearby in England. Over one hundred messages were received, whilst he was on the Seafort, for him to read on his return and were a starting point for a discussion forum that was hosted by Kent County Council (close to Canterbury, south-east England).

These messages were meaningful to me to read during the development of my concept since they reflect the popularity of these towers seeming to be unknown and forgotten.

From those lines their admiration and strong curiosity towards these gigantic structures barely visible in the horizon, comes out and they appear in interest to go and explore them just as the artist is doing.

I was impressed by the similarity of thoughts I had by myself when I first discovered about them and I was already shaping them in my mind in different materials, forms and functions at the same time. All of them actually, I found, have something in common which is the wish to reconsider them in a certain manner so that it can be publicly reached and used to feel the sensation of these mysterious war machines which are still kept intact and in good shape.

Admirations for some tv series' cuts as mentions of their popularity, to remind to the artist that he was staying in a precious unique place or also flowery descriptions of similar landscapes with towers and stormy weather to recall the poetics of his stay.

Finally with these letters I wanted to prove their significance and potentiality to keep existing among us, standing to the common belief.

"Ever since I was a child, I have been enthralled by the sea forts. I grew up in Westgate on Sea, and on a clear day, I could see the forts, and as a child, I would be full of questions...what are they? What do they look like? What's on them? Therefore, was thrilled when I read that you were undertaking a project based on isolation and the affect it can have a person.

I now live in Margate...on top of Fort Hill, and again, on a clear day, I can see the forts from my kitchen window. On quite a few occasions, during your vigil, I have stood at my window and been able to view the mysterious forts. To therefore, have a glimpse of life out there is answering many questions...and even though I am not envious of your isolation...I must confess to being slightly envious of the time you are spending out there."

Rob Carrick

" I am fascinated by this project - last night myself, some friends their kids and 'Eddie' the dog watched from Reculver Towers as a storm passed over the site - a gap in the clouds let the sun flood momentarily through the angry clouds in the near darkness as though the area over the forts was being lit up like a stage for the fork lightning to focus on...The kids faces were a picture when we finally told them there was a man staying on one of the towers - on his own - out there in the sea in the storm..."

Paul Aldous - Artist and Designer

"It was a wonderful project and I am jealous that you managed to get 'on board'. For some reason the Sea-forts seem to have a hold on the imagination like a natural wonder, or like a piece of art akin to the Angel Of The North.

I hope that at least one of these magnificent, awe inspiring structures is saved. One day hopefully I can step on board also!"

16

"Thanks for communicating what seems to be a sad, beautiful, romantic, and nostalgic but tough experience in an alien but strangely familiar environment. I've been up on Tankerton Slopes several times recently, looking out at the forts and the wind turbines, but unfortunately I didn't realise you were 'in residence'.

Your stay was also somehow reminiscent of what DitchMonkey is doing - a city worker who has abandoned home and possessions to live in the open countryside (not even a tent!) while still working in the city - to raise money for the Woodland Trust."

SITE OFFERS

In the concept development of this project there were few elements worth of consideration as the site's strength points, hard to find at the same time anywhere else.

Maunsell Sea Forts' position and structure is somewhat particular that makes of it a unique place to create powerful scenarios and architecture, turning their state of decay from a dangerous unapproachable place into the sight of a new architectural boundary' s exploration.

As explained in the forts' description, the six towers are built directly on open seas.

Water represents a crucial presence with its proximity but also as the main base of these buildings. The sea has a vaste life as reference elements in terms of bioluminescence. It is not certain if in the surrounding areas there is a high density of these organisms, although there have been so far many sightings from fishermen of "glow in the dark" events around the Scottish Sea Area. With transportation system through boats and field trips, the organisms and nutrients can be supplied for this proposal. Moreover, bioluminescence which can depend on many bacterias' system to function, can be studied strictly in marine organisms' methabolism using local material and creating an important connection to the project's site.

London, Thames estuary and especially off coastal areas are really windy.

The air blasts are not all the time considered a positive element when it comes to a static architecture and not considering energy production through it. Although, due to its strong temperament it can potentially be the main ingredient to a project if enrolled as its necessary promoter.

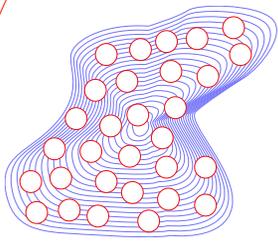
17 The forts are isolated from the land and other buildings on the sea around.

Besides the distance from the other forts and from the English shores is not relevantly high, this site is completely detached from any other sight and lights. This element is important since one of the most interesting connotates to make this place authentic. This way the sky becomes influential on the towers of the Maunsell Forts, and weather permitting, the clear skies are as impressive as the ones in deserts and mountains.

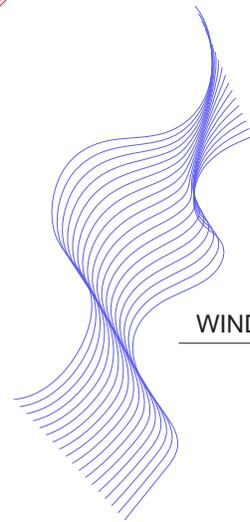
Finally the gap in between these towers, in their existing distribution, creates an ideal condition for the elements above.

The buildings of the Maunsell Forts are by a modest size, disposed with long distances among each other. Therefore a micro-ambient and climate is not created in order to lose one of the site advantages mentioned above. The emptiness allows new design possibilities creating all a connection in between and adding innovation without changing the initial design.

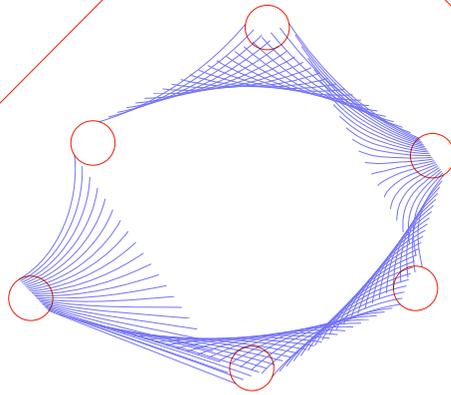
SEA



ISOLATION



WIND



INTERMEDIARY SPACE

WIND CHIME CONCEPT

The project's basic conductor line is the example of the wind chimes.

These are composed of tubes, rods, bells that dance with the wind. Their gradual uplifting movement is synchronized with the wind, and it is the cause of the sound that is harmonical with a certain rhythm and ordinally dense with all the chimes simultaneously with different timing.

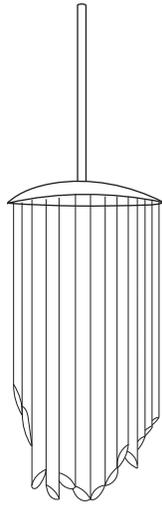
Percussion instruments are struck according to the random effects of the wind blowing and different interesting chance based melodies are made up with breeze.

Wind chimes' sensitivity is high enough to the wind that it make is possible to be used to observe changes in wind direction, depending on where they are hung when they commence to sound.

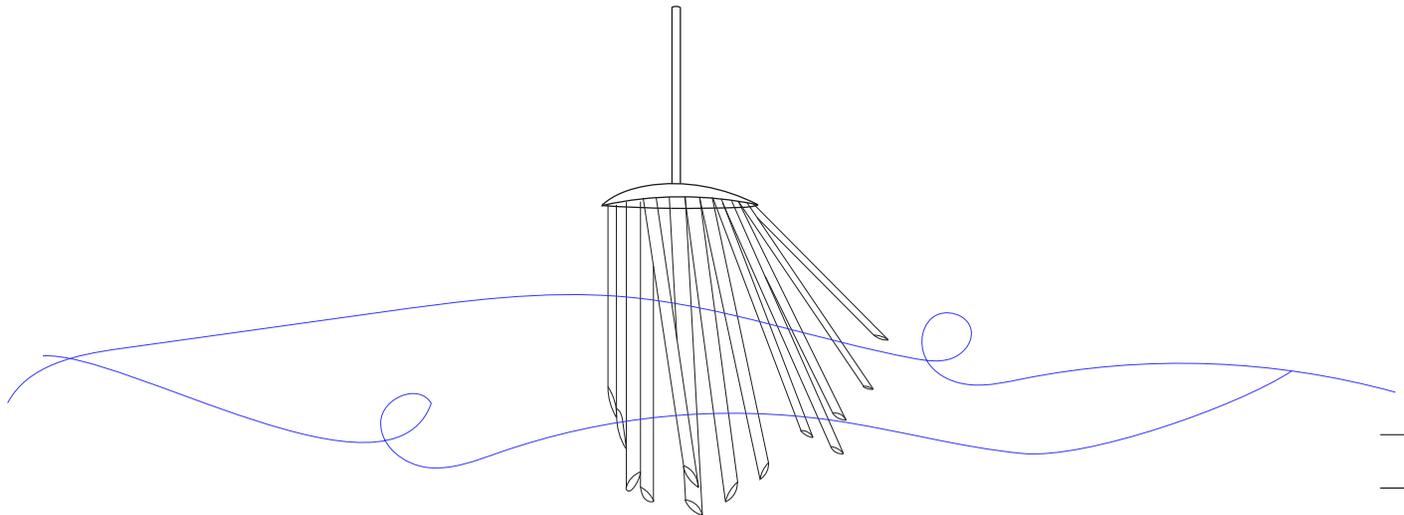
Learning from this mechanism, the bioluminescent roof that will go to cover and connect the space in between the towers, has a similar functioning and it will be constituted of thin tubes hanging from a grid of the same material, free to oscillate with wind. These will be possibly of the same material as the grid which they are a continuity of, and both must be as light as possible to allow an easy and flexible movement. The more this latter will be relevant the more there will be chance to reach the bioluminescence event in the bulbs of these tubes, where there is the DNA of the dinoflagellate organisms with necessary proteins and enzymes.

As to wrap it up, the only difference is that the wind movement will cause the biolighting organisms' DNA elements, sense the movement of the tubes they are in, powering the tubes rather than sound the soothing "clinks".

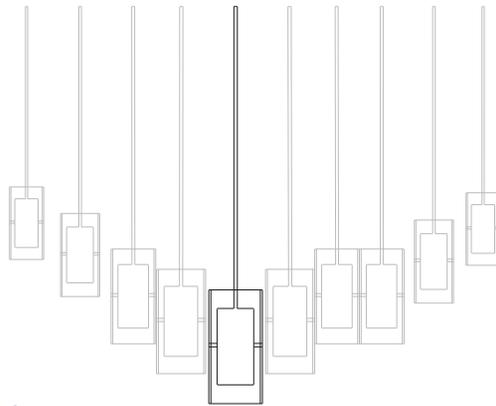
Once it is possible to have the genetic codification of the dinoflagellates to inject into possible construction materials, it will be enough to only have light and transparent materials to entrap them in.



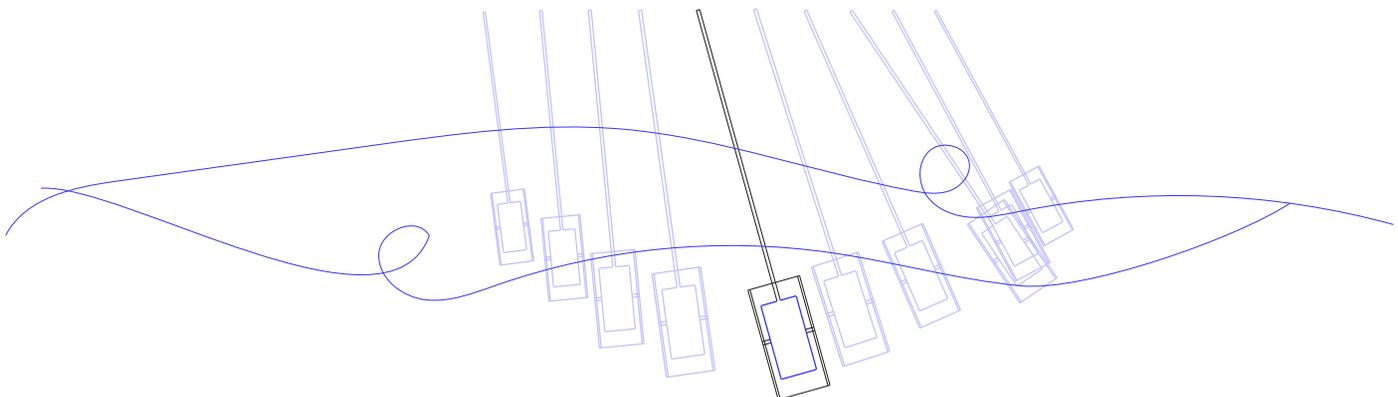
Wind chimes



Gradual uplifting of the chimes and sound production



Plastic tubes with bioluminescent nuclei



Gradual uplifting of the tubes and light production

PROGRAMME

With my project I am bringing a proposal of a common research - facility area with short-term "common living" residence spaces included, to designers studying shapes about bioluminescence and common lighting, who will be witness to the realization of their project, where their ideas will become alive. Although the work spaces are open to any kind of design, since under the same connecting line of the art field and possibility to get visual enthusiasm from the rooftop.

The space I ideated as a first proposal as kick-starter to the site-life, is an innovative design workshop in which they create a personal bio based light object. The process is dedicated to old craftsmanship, but is entirely new because of finding new lighting design application. Clients can choose their preferences and takeaway their own design visiting the factory or order online.

As to diversificate their studio site from any other will be the fact that they will be able to learn the bio-lighting process seeing it by its observation as live maintenance where the luminescence variations will be observable, depending on the substances injected to the net, as for their combination and their density, but leading and studying new projects as well keeping their inspirations up thanks to the installation that characterizes the towers.

Besides the objects created do not have to be on the same line as bio-lighting's one, the workshop will still be connected to the rooftop from the creative feeling that will summon the productivity atmosphere.

The amount of people can vary from time to time depending on how far will the news about the rooftop will have reached around overseas and the designers will be singular, a couple or groups of people who will be interested in renting the spaces to work together for certain companies and why not, non professionals willing to work there in isolation from their everyday life, as co-working space and to be in company of skilled architects inside the same offices.

The rooftop will create a unitary space feeling among the towers, grouping up the different co-workers and researchers thanks to a common superior layer. This latter will bring significance to the atmosphere reminding of the milky way impersonated via sea substances able to illuminate -(it is not a casuality that this phenomena is called "milky seas").

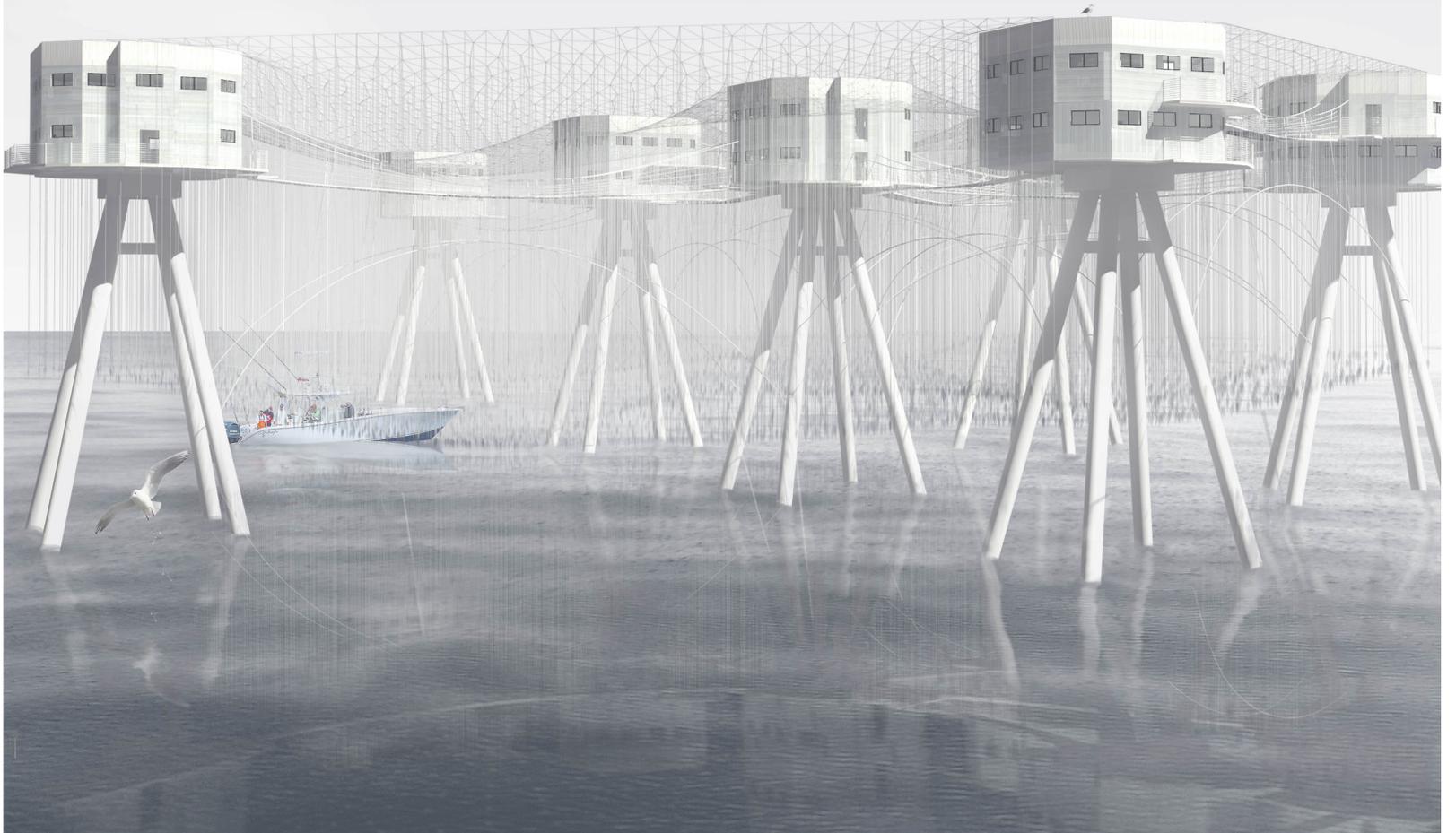
21

The space created will be a "place non place", a term given by Marc Auge where the place in question won't have a personal feeling but it will have a common meaning recognized from everyone, who will evolve their existence around. As a result it will become a cross-roads of human relations.

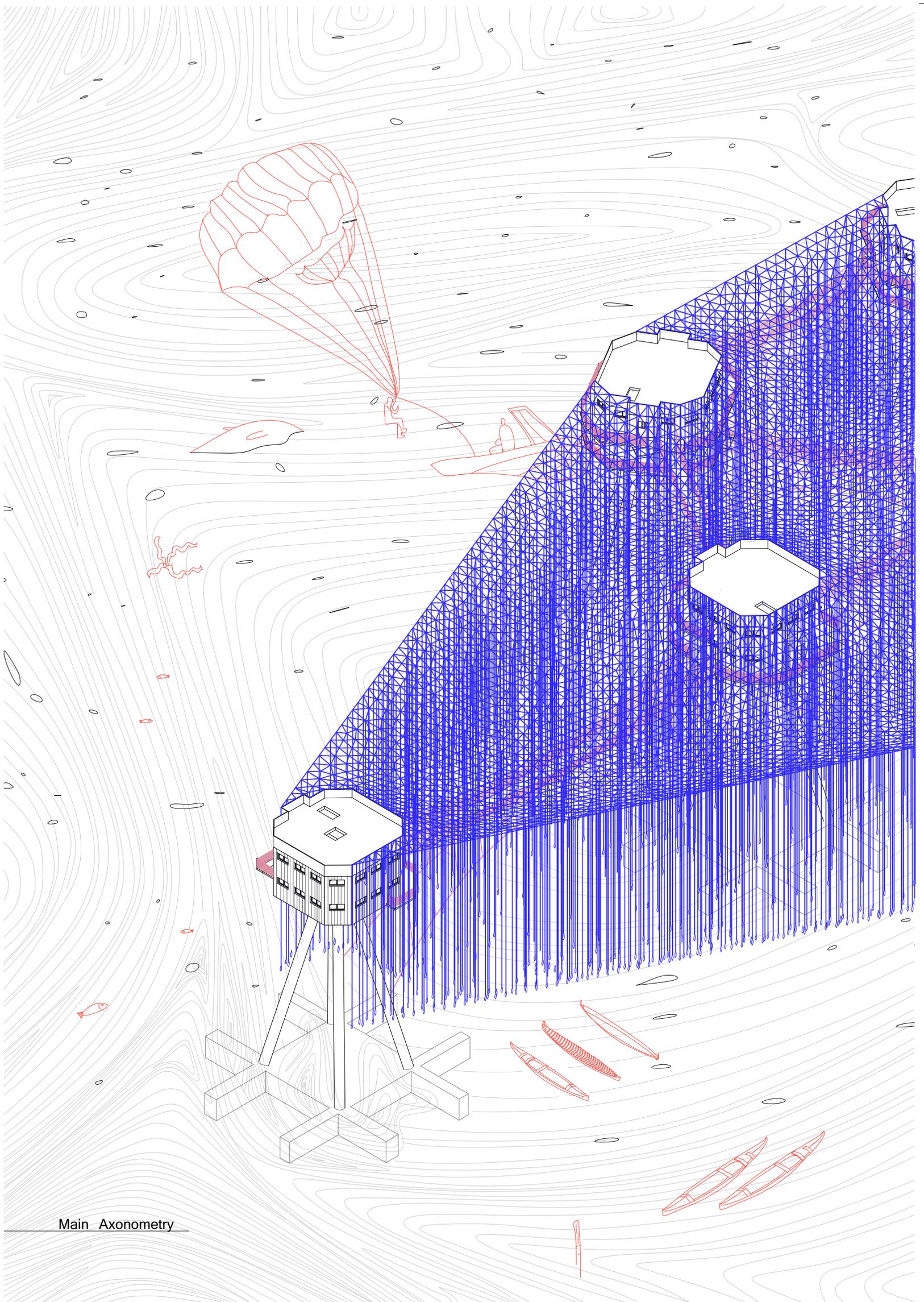
This project is that journey, stay, where the experiments are not in software edition anymore, intended as theoretical drawings, but in the real physicality of the project. The work of art is when these journeys come together. They are not photography, or movie pieces. As all the other art pieces this rooftop is not predisposed to be bought or possessed but to be free and of everyone's at the same time. It is destined to be observed, lived and maintained from the users independently from the destination of use the towers will have.

It will exist for everybody.

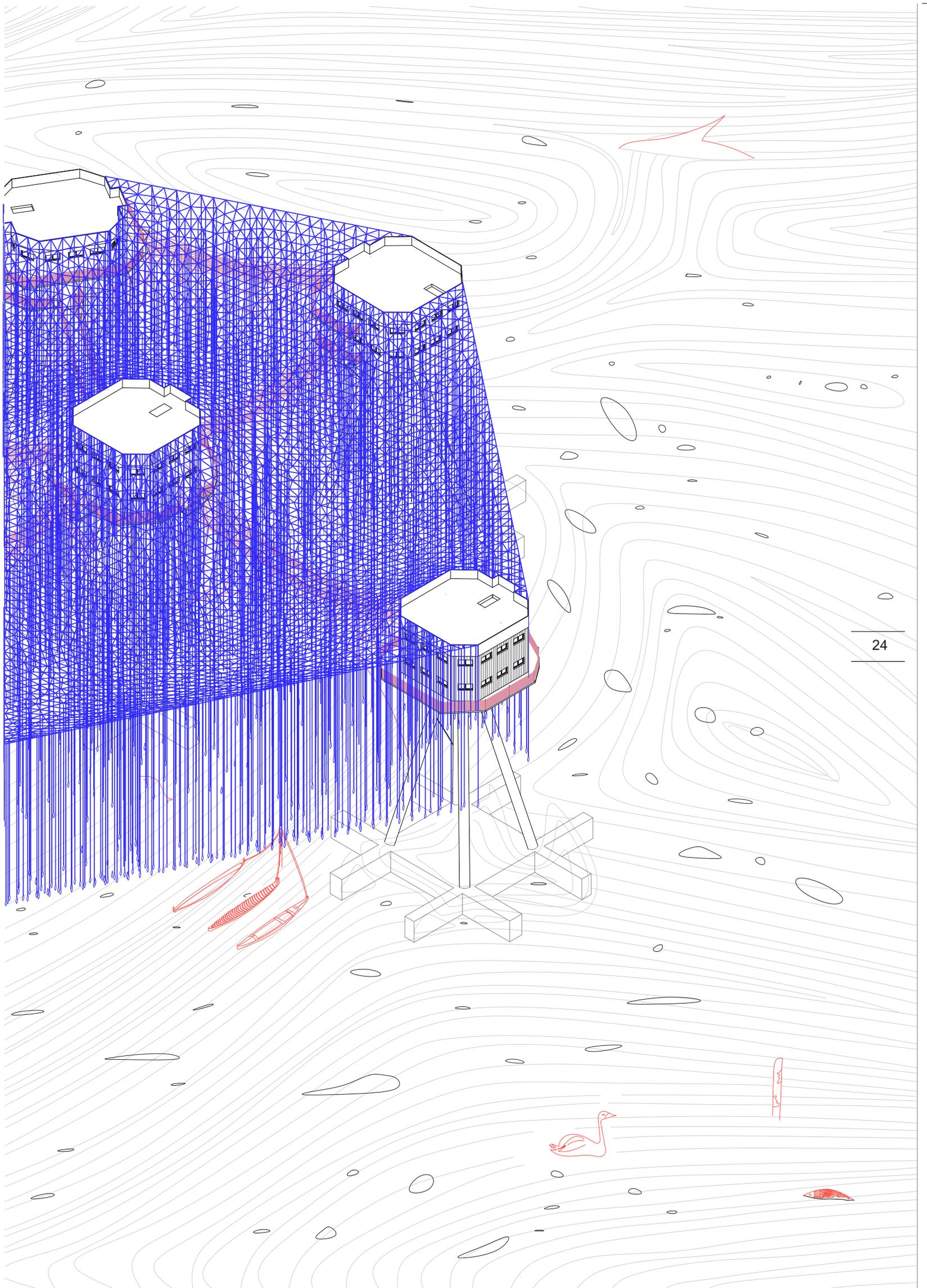
Its existence will be very unique in timing and place and non replicable anywhere else as an art is designated to be.



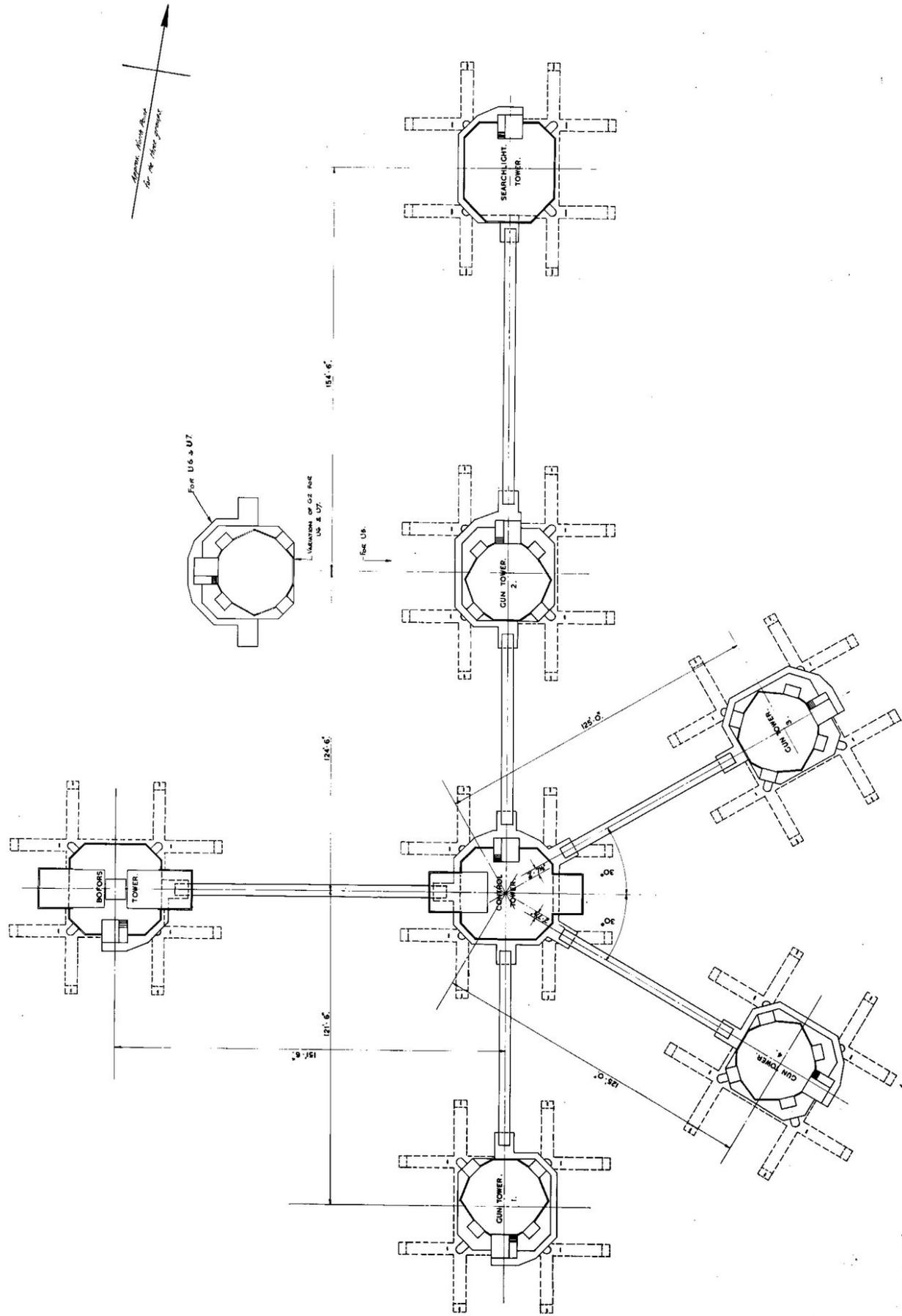
AXONOMETRY



Main Axonometry



JOB NO. AD/99055/WO. GENERAL PLAN.



DRG. NO. 848/41

Scale 1" = 16'

12) Roofplan, Maunsell Army Sea Forts (before intervention) during WWII
boblerei.co.uk

MILKY SEAS

Scale 1:300

ca. 22.5 mt. above sea level, first floor



A ↑

4. Wet workspace

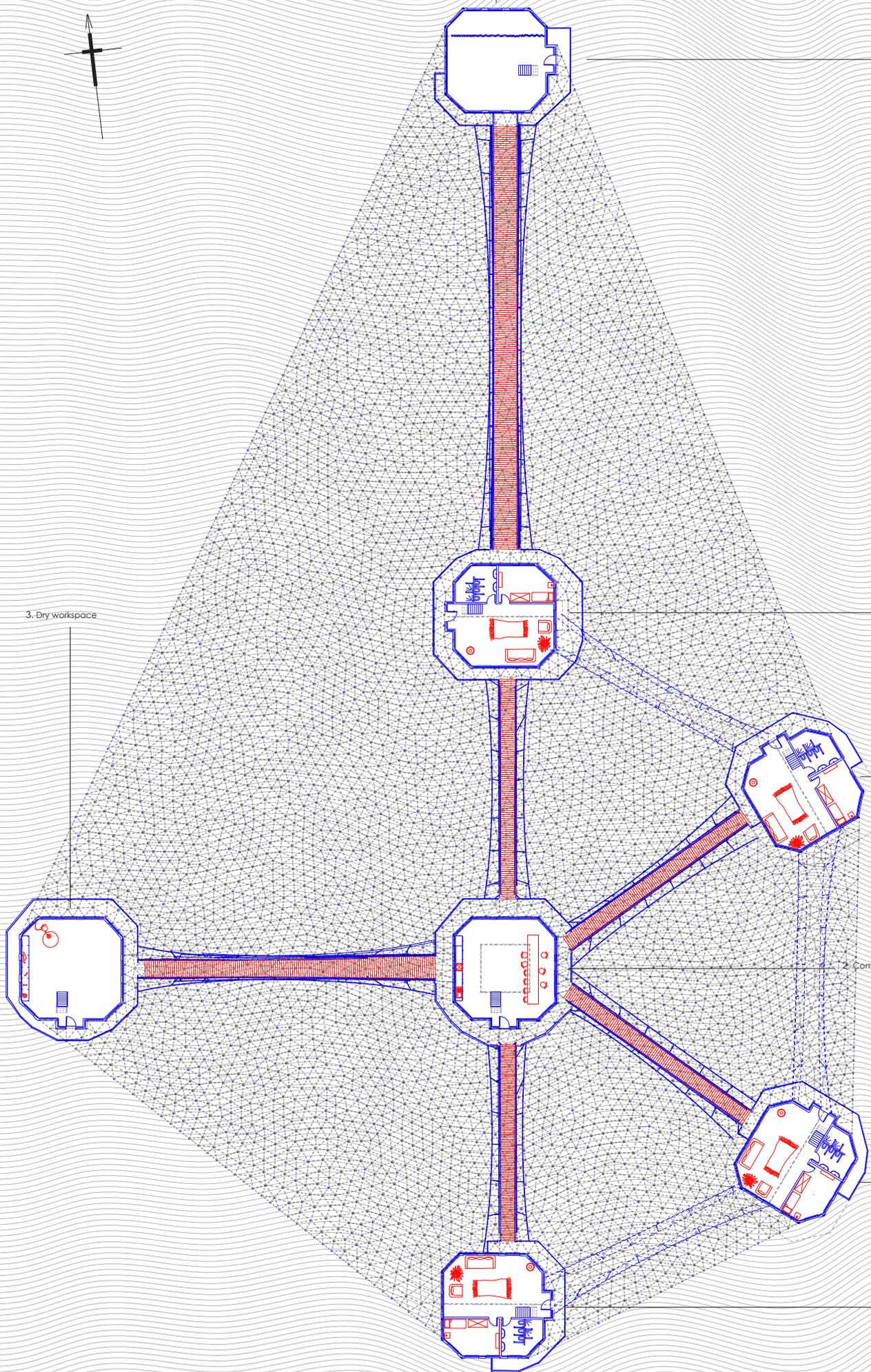
3. Dry workspace

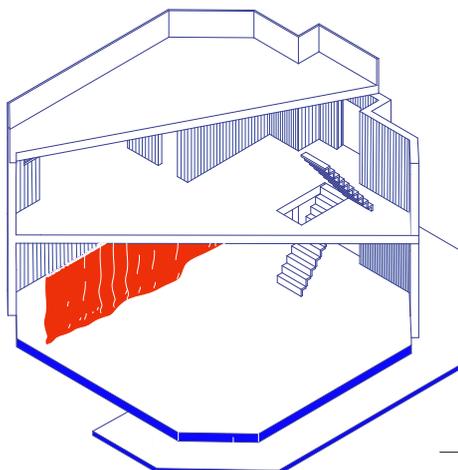
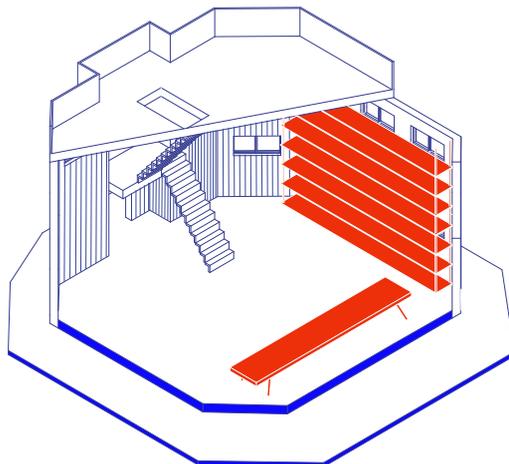
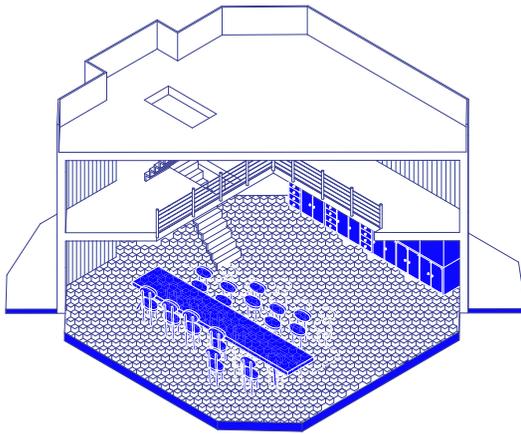
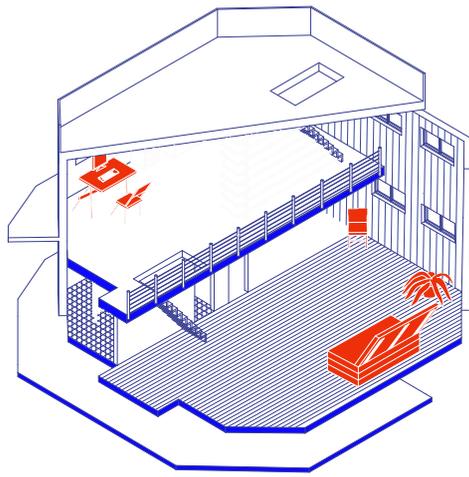
1. Living space

26

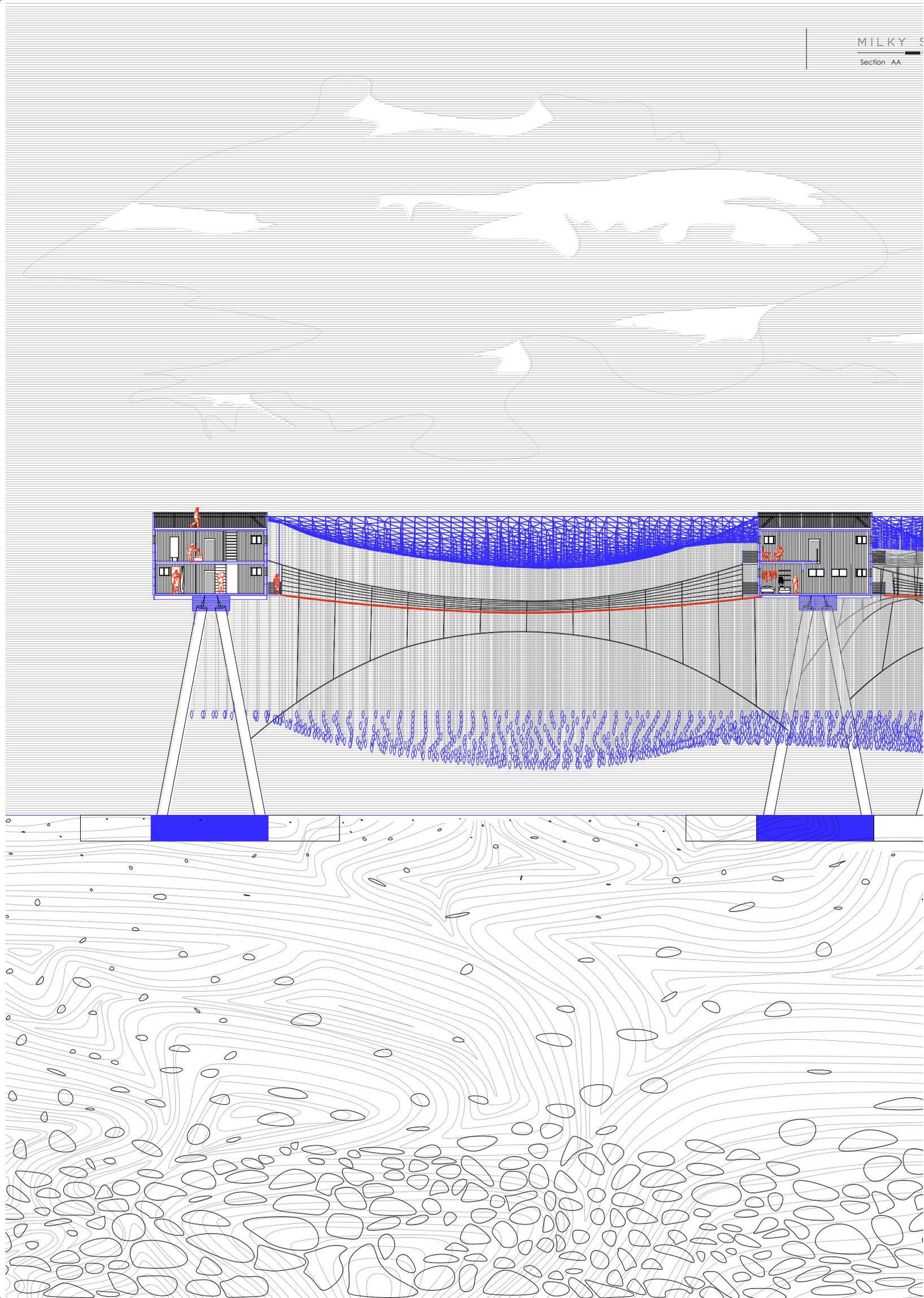
2. Common space with kitchen

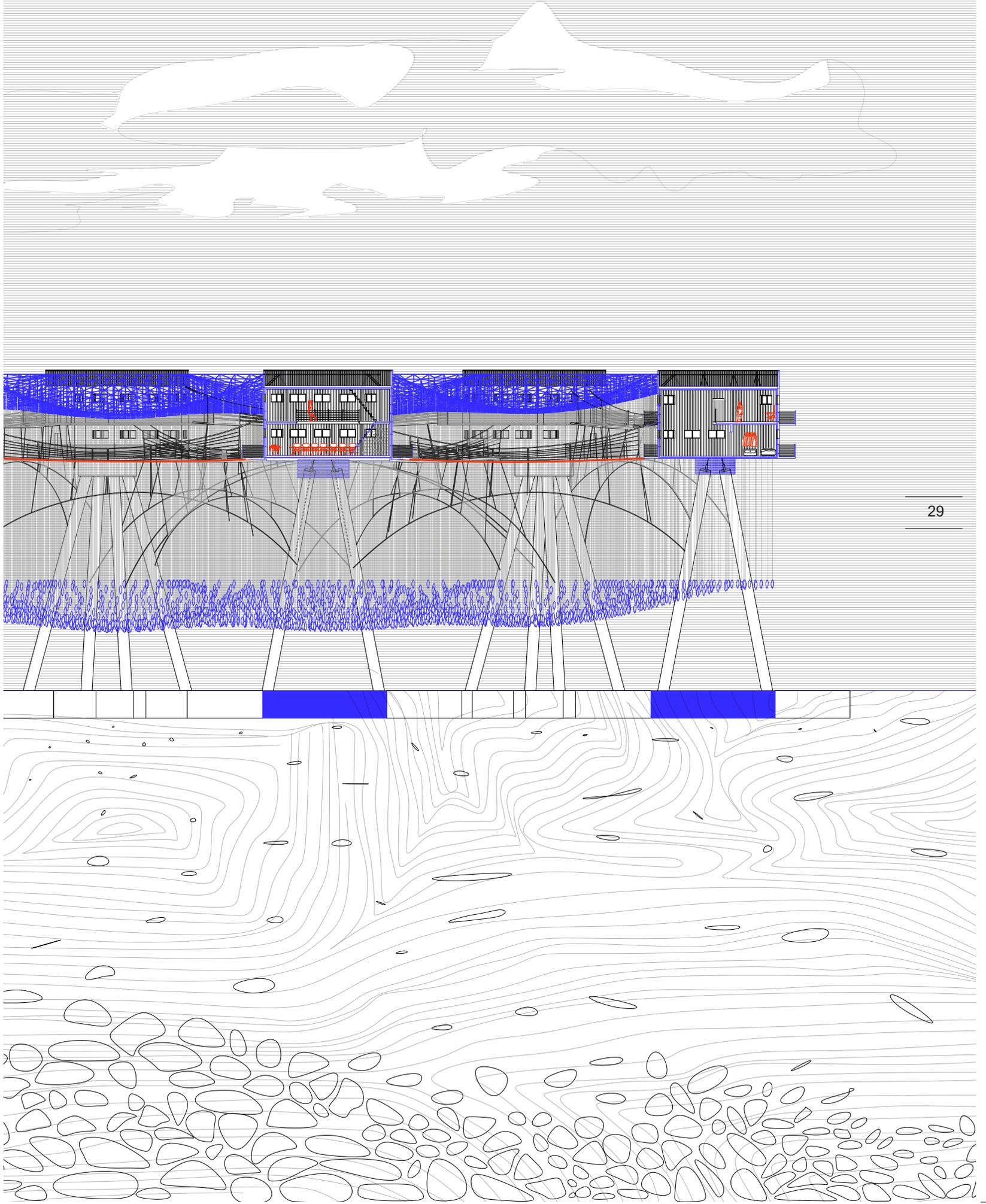
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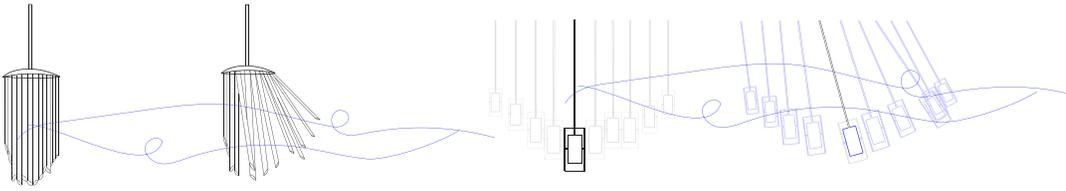




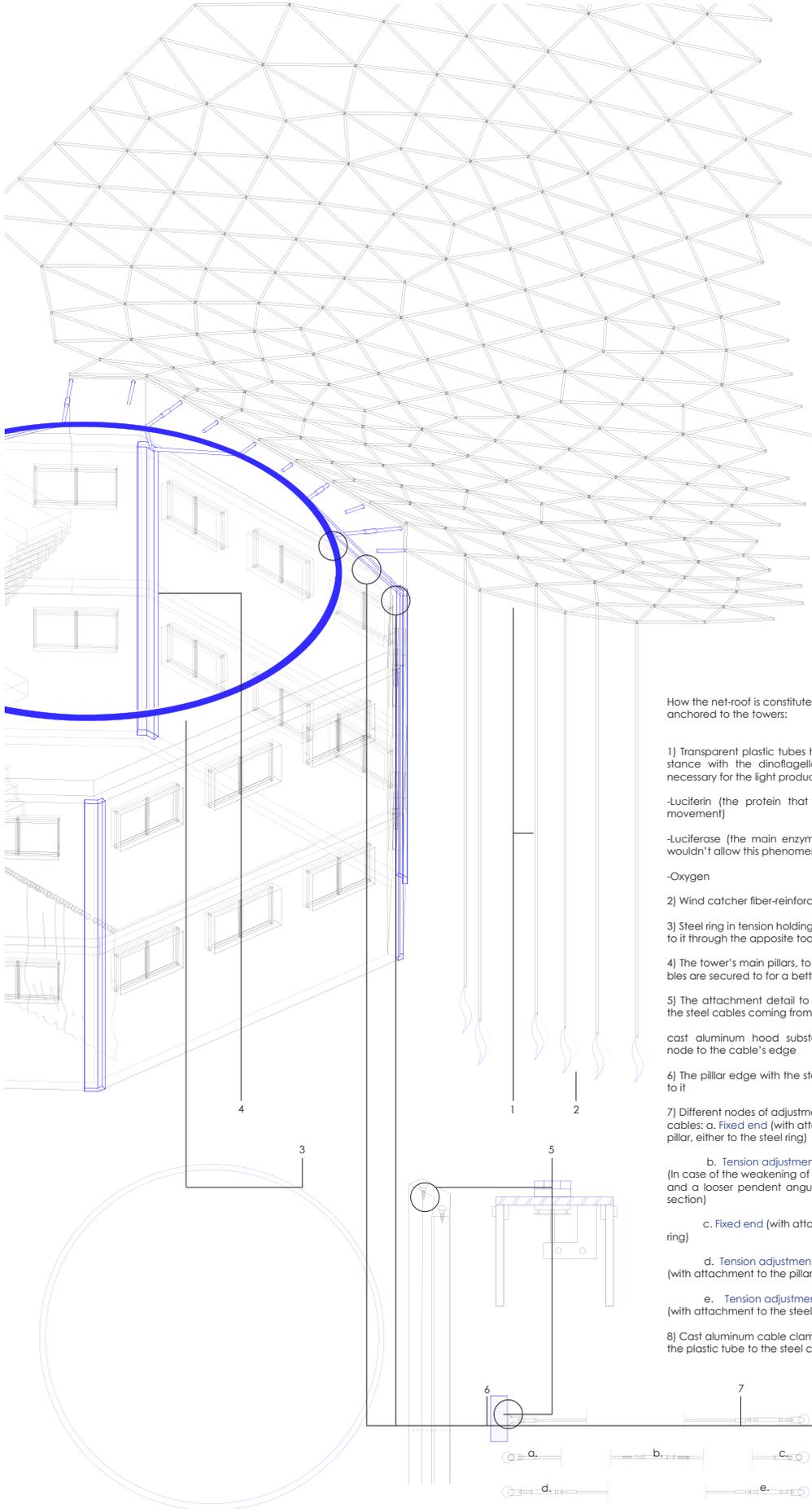
SECTION







The project's basic conductor line is the example of the wind chimes. These are composed of tubes, rods, bells that dance with the wind. Their gradual uplifting movement is synchronized with the wind, and it is the cause of the sound that is harmonical with a certain rhythm and ordinally dense with all the chimes simultaneously with different timing. The only difference is that the wind movement will cause the biolighting organisms' DNA elements, sense the movement of the tubes they are in, powering the tubes rather than sound the soothing "clinks".



How the net-roof is constituted and how it is anchored to the towers:

1) Transparent plastic tubes hosting plasma substance with the dinoflagellate DNA elements necessary for the light production such as:

-Luciferin (the protein that is sensitive to the movement)

-Luciferase (the main enzyme, whom absence wouldn't allow this phenomena)

-Oxygen

2) Wind catcher fiber-reinforced light fabrics

3) Steel ring in tension holding the tubes fastened to it through the apposite tools

4) The tower's main pillars, to which the steel cables are secured for a better grip

5) The attachment detail to the pillars edge, of the steel cables coming from the steel ring:

cast aluminum hood subsisting the internal node to the cable's edge

6) The pillar edge with the steel cable attached to it

7) Different nodes of adjustment along the steel cables: a. Fixed end (with attachment to the pillar, either to the steel ring)

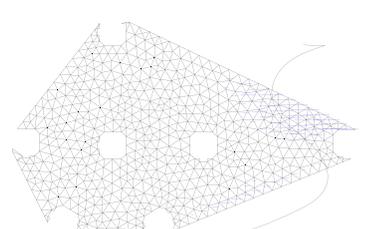
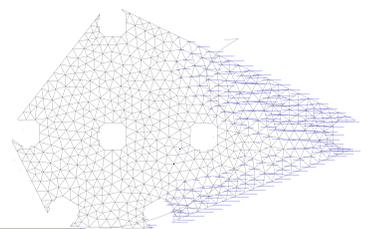
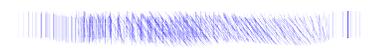
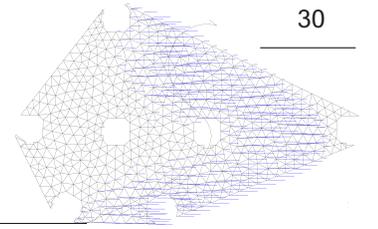
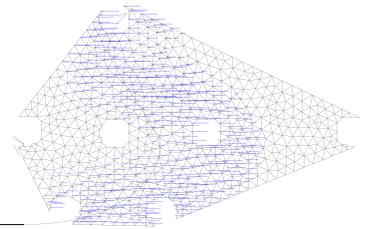
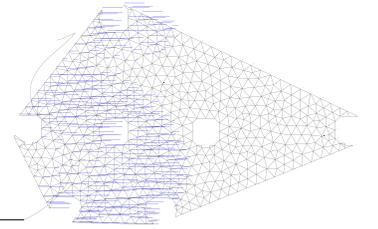
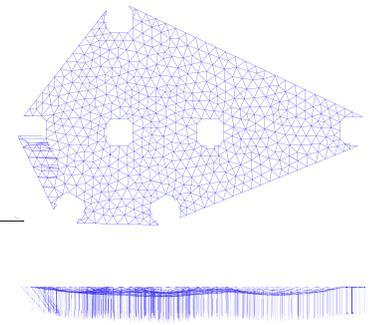
b. Tension adjustment fitting node (In case of the weakening of the tubes of the net and a looser pendent angulation of the net in section)

c. Fixed end (with attachment to the steel ring)

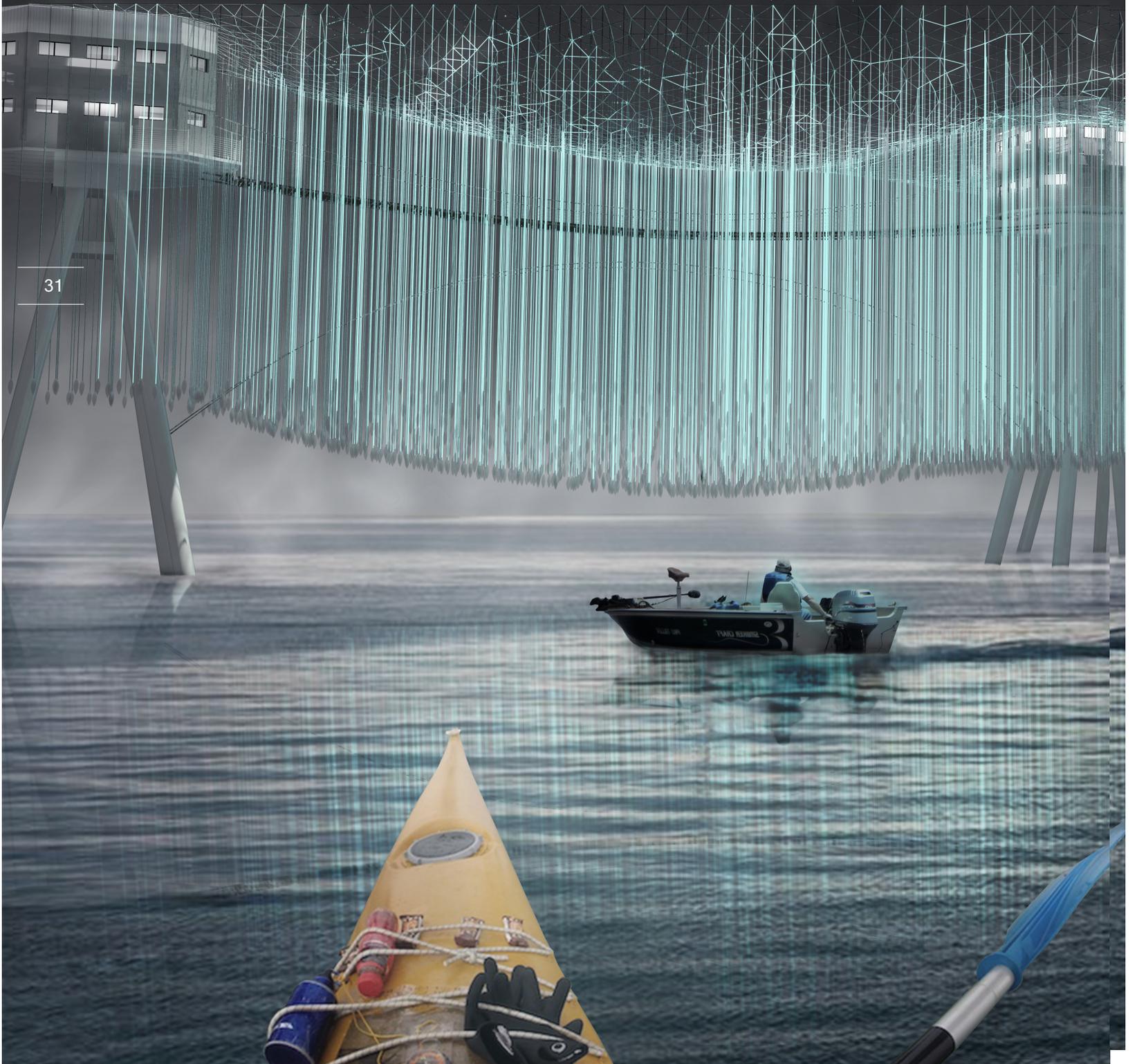
d. Tension adjustment fitting node (with attachment to the pillar)

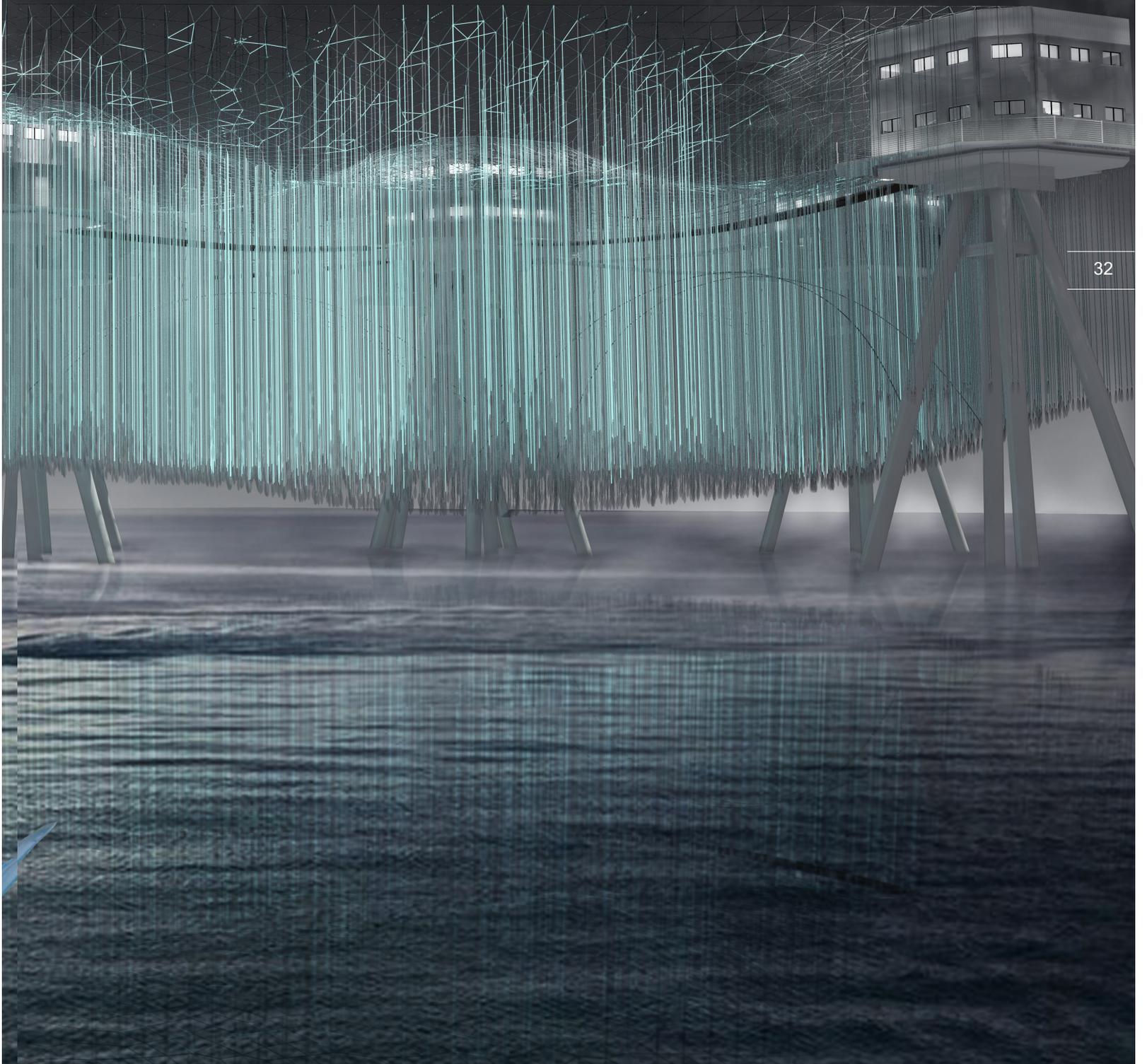
e. Tension adjustment fitting node (with attachment to the steel ring)

8) Cast aluminum cable clamps for fastening the plastic tube to the steel cable



The tubes' response to the wind's movement (the column above)





FUTURE CON

SIDERATIONS

I brought up here my personal reflection about the project's future, as no building is time-proof and most of the times the functions that we impose to places are not the ones that end up the most appropriate ones to the contemporary times or they are not those kept by people as their users. For many reasons the maintenance and the destination of use and the shape of the structures vary overall the years.

Although it is our profession to hope and see how much can endure one building under a certain pressure, care and administration. Possibly leaving new boundaries open for future incoming proposals and new "living-trials" since we are also supposed to judge the future analyzing the past.

Therefore this is how I brought some hypothetical future considerations of this theoretical proposal of mine as its causes and possible consequences to the Maunsell towers, via the presence of such rooftop. Scenarios that are positive to accept relatedly to the essence of my project, as a reason to my intervention in this specific place.

The position of the Forts do not allow for easily reachable everyday life tasked function areas. Therefore if the interest in creating isolated work groups that will decide to spend some time there will come less and there will not be money investment in it anymore, the forts can be place to give birth to new lives as long as they will require space flexibility such as not concerning a plan or structural modification, avoiding the requirement of big amounts of budget.

I decided to report three situations created in different cases, united from one common aspect which is the one of not being able to possess the Maunsell Forts from one private association. As I had already mentioned in prior the rooftop piece is meant to stay a common being and not private observable object in possess of privates as might be a hotel or restaurant.

35

One is the situation in which there is belief that the site is worth hosting a workcamp for young people. This is when this group is supposed to get engaged to environmental, cultural, artistic or social works together for a certain amount of time which is limited and short, generally going abroad from their hometowns to get to know new cultures and friends. An activity that is positively growing new teenage generations to have broader views in their educational and personal development.

These workcamps generally decide really low budgeted accomodation solutions renting / occupying for short time abandoned buildings close to the work places regarding whatever they might be. The participants are volunteers maintained in this camp for the basic needs in exchange of their "light" work.

This work, in Maunsell Sea Forts, can be about learning to maintain clean sea waters, learning how to analyze it, learning the biolighting by maintaining the roof, photography activity, fishing, camping and also repairing the structure of the forts (as much as their knowledge, skills and tools can permit naturally).



The Forts will become the literal translation of a lighting weeping willow on the sea as an oasis of spectacular illumination attracting the sailors, the visitor tourist boats being visible from distance better in the typical mist conditions of the site.

This exceptional situation and the particularity of the military nature of these structures that then will be hosting the lighting tubes could be able to create the ideal condition to represent an interesting isolated festival place that might regard either music either lights.

Festivals have the characteristics to be held in unusual places allowing a big number of crowds to gather together to celebrate a common point they are united from, awakening the feelings through the artistic provocation.

For example a food festival is an event celebrating food or drink. These often highlight the output of producers from a certain region and are willing to stimulate their fame and reliability.

In this case two kinds of festival that I considered potentially fitting this area are a Festival of Lights and also of Music. In both the situations. the participants will be able to camp in the towers with tents, without the requirement of more preparations, experiencing a different kind of sleep-over rather than in a park in greenery.

In the former scenery, there will be a celebration of bio-lighting in different colours, where actually the visitors will also be able to be included in its creation and maintenance. It will be sufficient to experiment with different substances coming from different organisms emitting colours different from blue. This could perhaps also invite new designs to be installed in this occasion, and change even the roof with another presence that can give a new interpretation to the site as an addition and continuation of the project after my initial proposal.

In the latter these above can still be included and be the main cause of the presence of music festival precisely in this site. Music festivals are already spread in really particular sites to be discovered and lived in community of different scales. A small one will be so invited to occupy the small spaces created from the seven buildings, perhaps a rooftop for music genre gathering around a small amount of people due to space limit.

The big distance and air weight in between these don't allow for the sound to travel good enough to be heard from the surrounding ones in case there could be more audience for only one stage playing on the central tower.

Therefore a small group will be so invited to listen to one in a small space created on only one of the seven buildings, perhaps one rooftop for one music genre, creating this way a mixture of 7 platforms to choose among for the participants.



- 3 - IN ABSENCE OF DESTINATION OF USE

Nowadays the Forts are occasionally visited by some people canoeing around them, willing to take rest in the towers before continuing their adventure open seas.

I came across in some blogs online the narration of group of friends taking the risk to sleep - over after their wonderful water trip, in one of the towers with little supplies on them, trying to get over the evening dinner fishing directly in the sea below.

They described in this blog their disapproval of monopolizing the towers from only one authority through money, privatizing it and trying to gain as much as possible from daily boat trips of curious tourists without for them neither to be able to enter in them, due to the lack of maintenance, besides they own all that amount of funds.

They appreciated instead the so called Project Red Sands, taking care of them with lacquering the wall every now and then to avoid the rust of the steel and substitution of the windows for a better isolation. A cure that proceeds slowly and steadily with respect to the initial design and to the towers in themselves.

They managed this way to spend their night in one of them under this project, in a good condition and they suggested it even to future hikers for a nice stayover during night passing to a new level of living and enjoy the sight.

These towers are really interesting for anyone to see and feel their striking scale and contemplate the powerful location of.

And after the different sceneries I hypotized I do believe they might host as they did in the case of these friends I mentioned above, new incomers willing to take at least a picture of them from close and prove they have been there to take a break from their trip and have a nice cold sip of beer standing on the rooftop and sigh meditating while looking at the infinite in front of them.

This event can happen anytime when the other sceneries are not in action but planned to become, exciting the occupant with the thought they are there before they start in the silence that precedes or follows the crowded population with a lot of noises.

The bio-lighting rooftop will accompany this contemplation and also spread the news that there is a new reason to visit them and take a better care of this place.



IN CONCLUSION

With this project I wanted to bring up to life the question about the relationship between architecture and art, or better enlighten architecture as art, since my intervention mainly regards the essence of the rooftop which is supposed to touch our deeper feelings and direct them into a certain dimension of our way of living the space.

Moreover it is of everyone's and so it is destined to be lived from all of us, as actual users of the towers, as occasional visitors, as short stayers, as fast passengers on a boat.

It can be removed at anytime if considered not relevant or maintainable anymore, and it can be built only there for the conditions presented, and only then, due to the contemporary interests falling onto the towers.

I found the perfect occasion to prove this aspect through the Red Sands Forts in the Thames Estuary zone in England, which from the beginning had nothing to do at all with arts. Consequently, when in absence of need of military reasons they attracted experimental artists - such as me as architect - to have a different use of them creating an interesting variation of them maintaining the cold plans and materials remaining from the world war, for always passionate but more human purposes considered in a universal key towards peace and not only nationally, as militants can be.

Many people have always taken interest in taking care of these forts to protect them, which actually never completely disappeared showing their engineering as solid and valid.

Considering in overall these intentions, it is possible to see that they vary a lot in methods and hopes and may lead to different results. The privatizing ones that might actually end up in more clear and immediate aesthetic appearances in my opinion risk not to last longer comparing to the ones that are willing to keep them public with small and slow interventions, involving everyone in social and environmental activities regarding the towers.

41

The formers are destined to finish one day for lack of money when activities quit and at the end they are not at the level to raise the public awareness about how to keep alive a building, meanwhile the latter ones create the right action of people that initializes their love towards them and raises new interests and proposals, keeping them far from solitude and oblivion.

It took my interest the fact that with this cold and industrial, future leaning, design, these forts still hosted many other romantic purposed people seeking for poetical dreams.

It seems it is possible to combine a well functioning plan with a contemplative life-style.

I do think using architecture from an artistic point of view would help not only this project - raising the belief, speaking in precision and small scale, in the bio-illumination and new design boundaries - but also in future, other buildings to be kept alive with different functions that may vary in time with people being cause and part of this change.



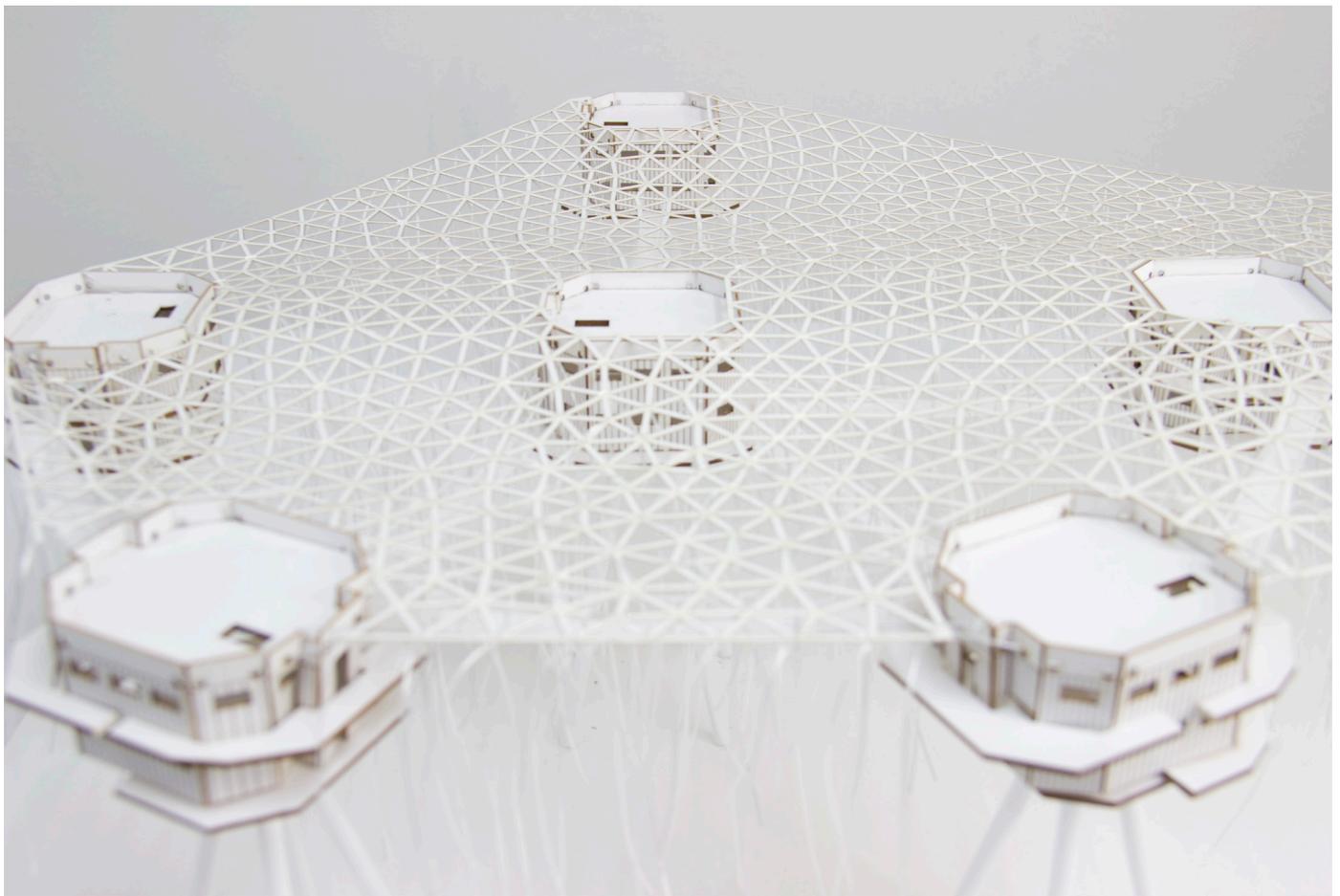
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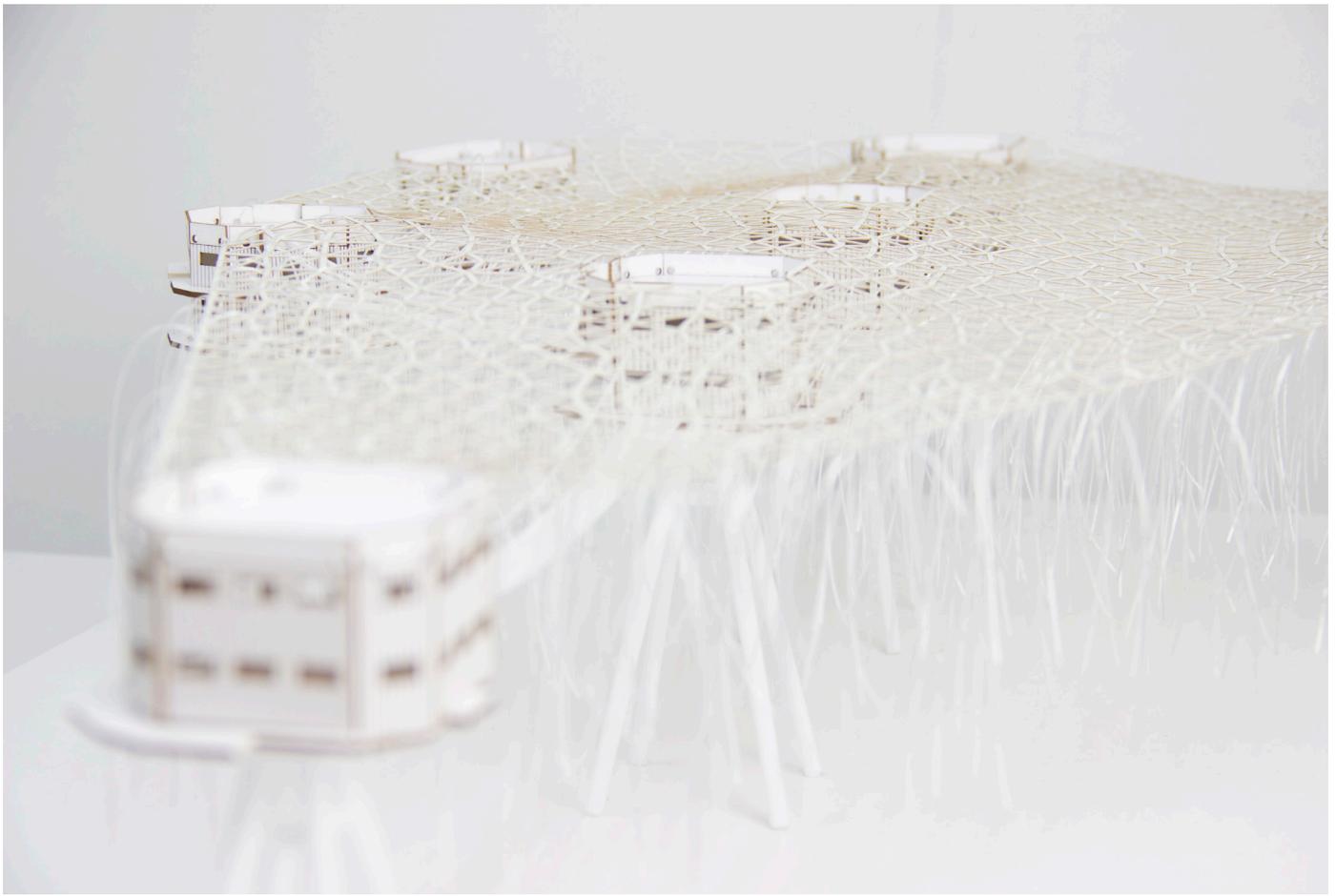


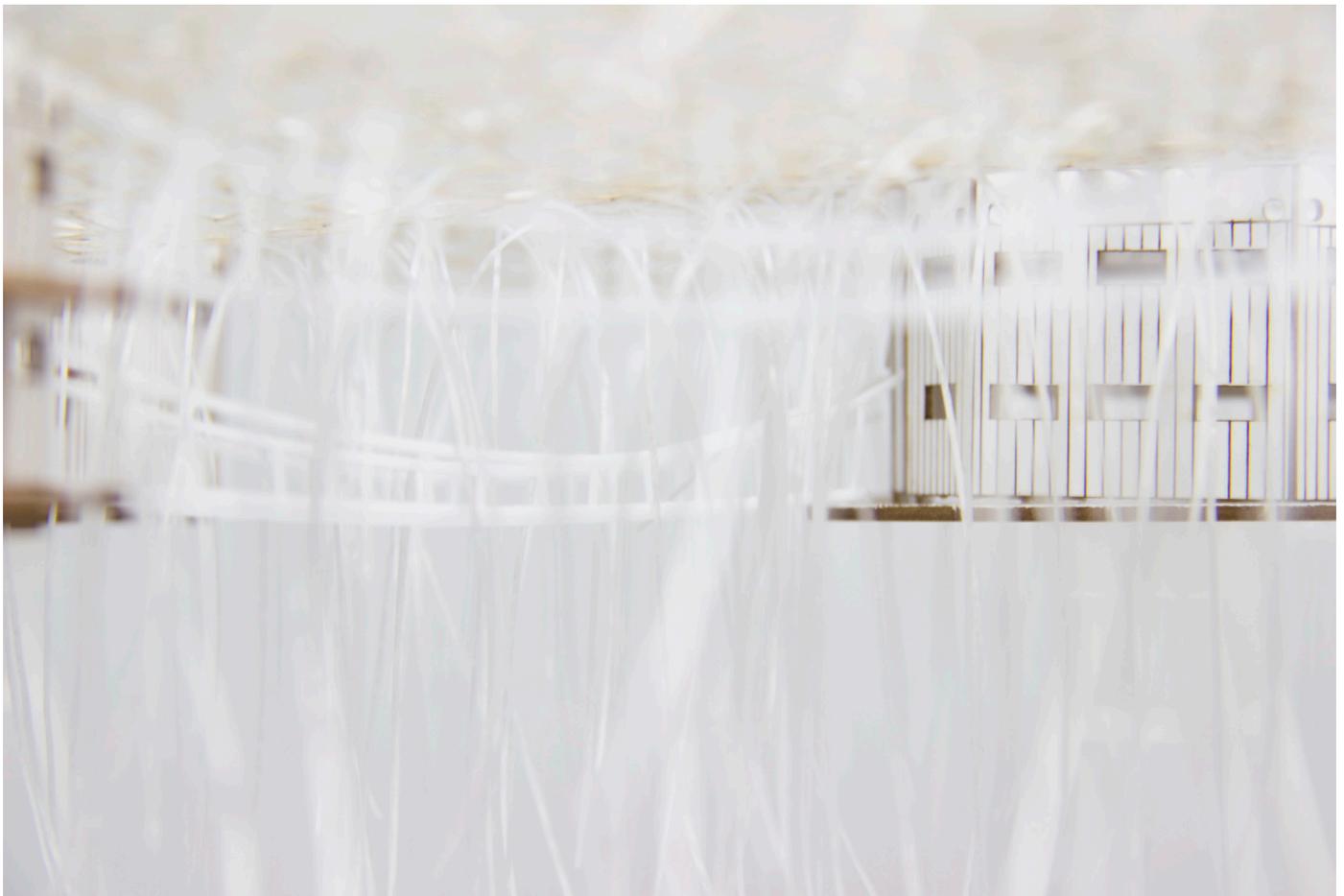


MILKY SEAS

Bioluminescent rooftop in Red Sands Forts, England
Inel Lisa Ogur - Advanced Architectural Design - Master Thesis
31 May 2017







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48

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Yours,

Lize.



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