

BATHING BY THE HORIZON

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TABLE OF CONTENTS

PROJECT PREMISE AND TOPICS	7
PREMISE FOR THIS PROJECT	8
TOPICS OF THIS PROJECT	9
THESIS	10
PROJECT LOCATION: ÖXARFJÖRÐUR, NE ICELAND	13
ÖXARFJÖRÐUR SETTLEMENTS	16
DESTINATIONS AND TOURISM IN ÖXARFJÖRÐUR	18
GEOLOGICAL ACTIVITY IN ICELAND	22
GEOLOGICAL FEATURES OF ÖXARFJÖRÐUR	24
LANDSCAPE CHARACTER OF ÖXARFJÖRÐUR	29
A PORTRAIT OF ICELANDIC NATURE	45
A READING OF LANDSCAPES	67
TERRITORIES OF URBANISM: PROJECTS THAT DESCRIBE	68
PROJECTS THAT DESCRIBE	69
THE EXPERIENCE OF LANDSCAPE: BEHAVIOUR AND ENVIRONMENT	74
ELEMENTS OF VISUAL DESIGN IN THE LANDSCAPE	80
FORM AND FABRIC IN LANDSCAPE ARCHITECTURE	94
SUMMARY AND DISCUSSION OF LANDSCAPE READING	110
BATHING IN ICELAND	119
EVALUATION OF POTENTIAL SITES AND SITE SELECTION	135
POTENTIAL SITES FOR THERMAL BATHS	136
LÓN	139
KELDUNES	149
KÓPASKER	159
BUÐLUNGAHÖFN	169
REFERENCE PROJECTS AND INSPIRATION	189
ALVARO SIZA'S POOL ON THE BEACH	190
OCEAN-SIDE POOLS	200
COASTAL PATH PUNTA PITE, CHILE	206
HUTS FOR CHANGING ROOMS	210
LIST OF REFERENCES	214

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PROJECT PREMISE AND TOPICS

PREMISE FOR THIS PROJECT

Öxarfjörður is a small community in NE Iceland which has been facing severe population decline in the last decades and largely sits outside of the tourism routes in the country. The community is in search of opportunities to attract more visitors to the area and to help turn this population trend around.

Iceland is a geologically active area as it sits on the boundary between the North-American and Eurasian tectonic plates. This means that the magma from the Earth's core is not so far from the bottom of ones feet when in Iceland. The boundary of the tectonic plates runs right through Öxarfjörður, resulting in a rich resource of geothermal water running through fissures in the bedrock. This resource is underused but there is interest among the locals to use it to create a bathing area.

Bathing in natural hot springs is an age old practice in Iceland though it was not until the 20th century that the concept of public swimming pools really took off and today you will find such pools all over the country.

The task of this project is to select a site within Öxarfjörður for a bathing area and to develop a design proposals of pools where the landscape character and qualities of the site guide the design process.

TOPICS OF THE PROJECT

In order to identify the most interesting site for a bathing area within Öxarfjörður the first task was to identify the components which build the landscape, how their composition inspires feeling of ease and/or anxiety and how design projects can be used to highlight and describe the landscape in which they sit. The next step was to build a portrait of the Icelandic nature and which aspects of the landscape give it its character. This was done by looking at subjects of landscape paintings by Icelandic painters and descriptions in literature.

Subsequently, combine the understanding from the first part and use the conclusions to understand and evaluate potential sites for a bathing area in Öxarfjörður. The result of this part is the selected site to develop the bathing area.

The final part of the project is the development of the bathing area. The qualities of the landscape of Öxarfjörður were used as a guide for the design process. The outcome of the design process is a series of pools along the coastline where the landscape can be appreciated from the vantage point of the pool.

THESIS

Humans have a tendency to influence their environment in a profound way with implementations of varying shapes and sizes. The premise of these implementations are quite often driven by the economical engine which fuels society. When implementing something like a bathing area in a place like Öxarfjörður, the economical benefits are dependent on the success of the project. The success of the project is fundamentally dependent on the right location of the bathing area and that the design of the area is true to its surroundings, it is based on the qualities of the landscape and highlights these qualities.

At first glance, the landscape of Öxarfjörður is not what would be called spectacular, its beauty is more subdued. Fundamental is to understand the landscape, its composition and its qualities, identify which characteristics and experiences can be had and identify design character which is site specific and built on the character of the landscape.

Landscape architecture has the tools to understand and evaluate the landscape composition of a region, in addition the landscape architect has the design skills to translate the understanding of the region's qualities into a site specific design project.

This project aims to use the fundamental tools of landscape architecture to ensure that the site selection and design of the bathing area will be a success and will add value to the Öxarfjörður area as a whole.

A grayscale landscape photograph showing a calm sea in the foreground and a cloudy sky above. The horizon line is visible, separating the water from the sky. The clouds are soft and layered, creating a sense of depth and atmosphere. The overall tone is muted and serene.

A READING OF LANDSCAPES

TERRITORIES OF URBANSIM: PROJECTS THAT DESCRIBE

Written by Paola Viganó, an architect and urbanist, professor in Urban Theory and Urban Design at the EPFL (Lausanne) and at Università IUAV of Venice. The following is an excerpt from her book.

PROJECTS THAT DESCRIBE

In chapter 3 of her book, *Projects that describe* Viganó illustrates projects *"that subject their rules and the mechanisms of their construction to the description of the place, the time and the society in which they exist."*¹ She claims that attempts at description is to try to reconstruct the world by de-constructing, cancel out or promoting some characteristics of the environment. Descriptive and representative projects do not attempt to change or deny the characteristics of the landscape, they expose and represent the irregularities of the world. Practices and economies equipped with different rationalities can be revealed by examining the physical and material composition of the territory.

One of the project Viganó discusses is a cemetery park in the Belgian city of Kortrijk. The descriptive elements of the project are revealed through three sections which reveal the shape of the terrain and, by doing so, reveal its geographical and morphological character.

One section is a concrete wall, crossed by a horizontal line of light which indicates the entrance to the park. The wall sits on the existing levels, follows the topography without modifying it in any way. The wall counters the main path which descends to the base of the valley. It exposes the form of the sloping stone and a grass plaza.

The second section is a regular rhythm of steps that divide the level difference from the road above and the bottom of the valley below, within which the cemetery park is situated. This regularity opposes the irregularity of the slope. The grassy surfaces either sit below the steps or rise above.

The third section is twofold, an inclusion and relief. One part is an incision in the ground which guides the

1 (Viganó, 2016, p. 172)

eye down to the bottom of the valley, maintaining the sight lines. It divides the space without separating the two parts of it. A soft bend in the terrain represents the relief. It hides the cemetery from view from those arriving from the west along the road.

To conclude: *"The three sections and the whole cemetery confirm the descriptive capacity of the project to reveal a place, to produce new knowledge through a descriptive operation."*¹

Another project discussed in the book is a plan for San Francisco by Daniel Burnham published in 1905. The plan connects sets of spaces in a fashion quite radical for the time. Texts, photographs of landscapes, perspectives and maps are used to drag out the forms of the city's territory. The Outer Boulevard is constructed and narrated through a panorama where physical and social characteristics of the city are revealed. The panorama is used as the basis of the design and *"the plan becomes a tool of discovery of the Pacific Ocean, the Laguna country and the 'superb natural scenery' of San Francisco"*.²

In the last part of the chapter, Viganó borrows the concept of four families of descriptive approaches, which exist between context (nature) and autonomy, from a study by Anna Ottani Cavina on the neo-classical city.

First is *'projects ajustés sur la nature'*. This refers to the process of *'erasure and synthesis'* where changes have been made. Inconsistencies serve as clues of what was before but has been lost and perhaps is important to find again. The artist/architect/urbanist's role is to unearth these clues of what was before.



Cemetery park in the Belgian city of Kortrijk where the subdued Flemish landscape is revealed through landscape design. Photo from the website of Studio Associato Bernardo Secchi Paola Viganò.

1 (Viganó, 2016, p. 175)

2 (Viganó, 2016, p. 183)

The next family is projects '*composé sur nature*'. '*Compose*' refers to the possibility to manipulate the "materials named, found and re-utilized in different contexts".¹ Projects discussed to demonstrate this are for example Bernard Tschumi's Parc de Villette and Rem Koolhaas' Kunsthal of Rotterdam where: "A choice is made of '*les composantes*' that are most significant in the contemporary landscape, and they are re-utilized with just slightly different compositions inside new projects. (...). Tschumi's Parc de Villette and Koolhaas' Kunsthal of Rotterdam, this process of taking apart and putting back together crosses the scales to the point of involving the choice of materials, drawn from what we normally see and touch. (...) These are not so much humble as normal and modest, ordinary and, in a certain sense, banal materials, faithfully lifted from reality and re-composed as if the contemporary context had been formulated through them, not in the sense of imitation but in that of representation and awareness. In the background lies the possible autonomy of the single element, the idea of heterogeneity as value and therefore the possibilities offered by deconstruction."²

Families three and four are '*portrait projects*' and the '*projects d'après nature*'. The former refers to projects that try to express the experience or sentiment of a place through the lens of the artist/architect/urbanist. The latter refers to "imitative projects that share a mimetic, acritical stance regarding reality or history."³

These four families, though differently, take on the "descriptive dimension of the project as a privileged vantage point".⁴

To sum up, Viganó claims projects can act as a tool of description, representation and interpretation of the traces which are left as places and societies evolve. As descriptive projects, '*micro-histories*' can be unearthed and "allow us to take stock of recognizable individualities. Through the narrative, they structure the description(...)"¹

1 (Viganó, 2016, p. 185)

2 (Viganó, 2016, p. 185)

3 (Viganó, 2016, p. 186)

4 (Viganó, 2016, p. 186)

1 (Viganó, 2016, p. 186)

THE EXPERIENCE OF LANDSCAPE:
BEHAVIOUR AND ENVIRONMENT

Published in 1975 and written by Jay Appleton (1919-2015), a British geographer and poet. The following text is an excerpt from chapter 3 of his book.

In his book, Appleton discusses different kinds of behaviour which seems to be common among animals, man included, though he does mention the danger of comparing man and animals too closely. These behaviours include '*shelter-seeking*' which indicates that animals search for environments where their needs can be met while avoiding environments which could prove dangerous. '*Investigatory*' or '*exploratory*' behaviour is a behaviour which will allow the animals to find environments which meet their needs. Different species of animals have different preferences in terms of attractive environments, ideally the animals will inhabit an environment '*which affords opportunities for satisfying all the requirements peculiar to their species. Places which afford such opportunities and which are commonly occupied by such creatures we call 'habitats'*'.¹

Appleton quotes Harold F. Searles, who stated that man '*is constantly seeking to refresh his association with this biological background, for instance through recreational activities and through his interests in such things as gardens and gardening, nature haunts, pets, zoos, landscape in movies, in painting, in literature and in dreams.*'²

One of the theories Appleton discusses is the habitat theory. Habitat theory revolves around '*the ability of a place to satisfy all our biological needs.*'³. It postulates that humans have an instinctive ability to be '*immediately and spontaneously aware of their physical environment; if they experience pleasure and satisfaction from such an environment when it seems to be conducive to the realization of their biological needs and a sense of anxiety and dissatisfaction when it does not, how can we analyse those properties of an environment which are capable of producing this effect?*'⁴ The theory suggests that a person's aesthetic appreciation of a landscape

1 (Appleton, 1975, p. 64)

2 (Appleton, 1975, p. 67)

3 (Appleton, 1975, p. 70)

4 (Appleton, 1975, p. 68)

is based on an intuitive sense of whether an environment is well suited for survival or not, based on the components of the landscape. An important factor is *'this elementary relationship between man and his perceived environment is the perceived ability to utilize the environment to ensure one's survival in alliance with other people, with other species of animals and with those inorganic forces of nature which used to be poetically called 'the elements'.*¹

According to the habitat theory, the man's relationship with the landscape is essentially the same as the relationship between a species of animal and its habitat. The aesthetic appreciation humans have for their environment is a reaction to the environment as a habitat, an environment *'which affords the opportunity for achieving our simple biological needs'*.² Normally humans are not burdened by the need to ensure the specie's survival in a particular place and thus are able to enjoy the satisfaction based on *'the perception of a biologically favourable environment without uncomfortably exposing ourselves to the hazards against which this surroundings would protect us in a 'state of nature'.*³

Prospect-refuge theory is a condensed version of the habitat theory. It discusses a creature's attitude towards its environment while preoccupied in hunting, escaping, shelter-seeking and exploring. The prospect-refuge theory revolves around the aesthetic value people experience when they can see *without being seen* while the habitat theory revolves around the ability of a place to meet all of man's biological needs.

A hunter will seek to catch its prey before it can reach a safe place. To prevent the prey from reaching safety the hunter will have to get as close as possible before being noticed. On the other hand, the escaping creature will have to ensure it can reach a place of safety before the hunter can approach too close, it will have to position itself where ambush is impossible. In both instances the ability to see without being seen is vital to fulfil the task, whether it be to catch or to escape.

1 (Appleton, 1975, p. 69)

2 (Appleton, 1975, p. 70)

3 (Appleton, 1975, p. 70)

A creature in the pursuit of shelter is not preoccupied by the threat of a predator, the concern is threats from inanimate sources; wind, rain, heat etc. A shelter from a hunter and from inanimate objects are often the same. An exploring creature is in the process of familiarising itself with its environment so in any given situation *'it can act from a basis of information and not of ignorance.'*¹

Activities which could be framed as *primitive* show that seeing and hiding *'have a unique complementary role to play'*². The environment perceived as aesthetically pleasing will need to convey the possibility to protect oneself from danger, the possibility to *see without being seen*. If the chance to see without being seen is possible *'anxiety is set aside and relaxation is possible. Where they are absent anxiety continues and there is no relaxation.'*³

The possibility to see Appleton calls *prospect* while the opportunity to hide he calls *refuge*. The aesthetic value of *to see without being seen* is more limited than habitat theory's aesthetic value of an environment's ability to meet all of man's biological needs. The prospect-refuge theory postulates that the ability to see without being seen is a vital step to meet our biological needs so *'the capacity of an environment to ensure the achievement of this becomes a more immediate source of aesthetic satisfaction.'*⁴

To see and not to be seen may seem as opposites, *'to see' is clearly not the same as 'not to be seen'*⁵ but Appleton states *'the concepts of prospect and refuge are antagonistic only in tactical terms'*.⁶ Prospect and refuge work together in the context of the environment, *'a landscape which affords both good opportunity to see and a good opportunity to hide is aesthetically more satisfying than one which affords neither, but again weakness in prospect or in refuge may be compensated*

1 (Appleton, 1975, p. 71)

2 (Appleton, 1975, p. 71)

3 (Appleton, 1975, p. 71)

4 (Appleton, 1975, p. 73)

5 (Appleton, 1975, p. 73)

6 (Appleton, 1975, p. 73)

*for by strength in the other.'*¹

When the strategic value of an environment is no longer necessary for survival, the aesthetic value is still based on the same composition of the landscape. The composition of objects which symbolize prospect or refuge can vary, giving high to low value in either prospect or refuge. The arrangement of symbols which indicate prospect or refuge qualities are the basis of the landscape composition. As an example Appleton mentions trees as objects, collectively create another object, a wood. The spaces between the trees or wood have refuge or prospect qualities. Generally speaking, humans seem to be *'sensitive to aesthetic stimuli arising from prospect and refuge elements combined in varying proportions, individuals may display preferences for the 'prospect' or 'refuge' components.'*²

1 (Appleton, 1975, p. 74)

2 (Appleton, 1975, p. 74)

ELEMENTS OF VISUAL DESIGN IN THE LANDSCAPE

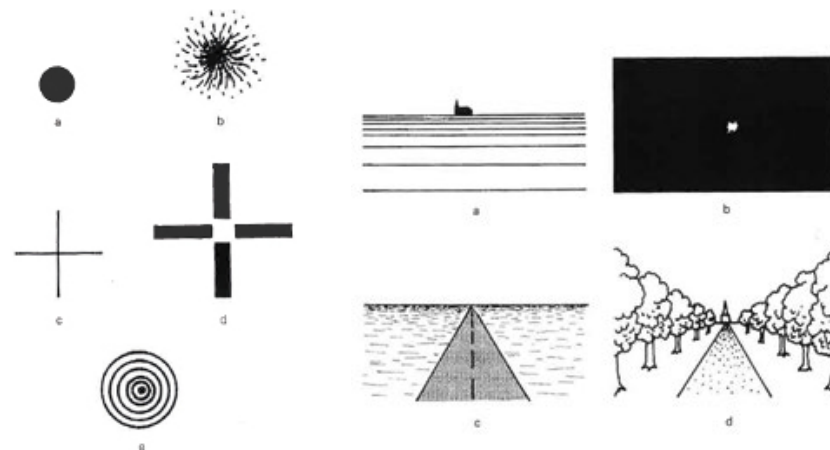
Written by Simon Bell, professor at Estonian University of Life Sciences and associate director, OPENspace, Edinburgh College of Art.

In his book Bell describes definitions of visual elements in the landscape. The definitions are in two categories; basic elements and variables. The basic elements; point, line, plane and volume, which simply mark a "position in space, one dimension, two dimensions and three dimensions respectively".¹ Following are definitions from the book, in the authors words.

¹ (Bell, 2004, p. 19)

BASIC ELEMENTS

Text and images extracted from *Elements of visual design in the landscape*, p. 20 - 35.



Point

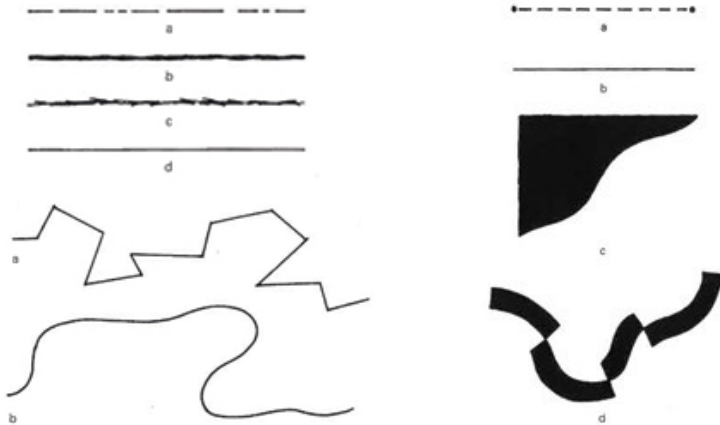
A point marks a position in space.

Small objects can be seen as points.

Point features can be associated with assertions of power or ownership and can be symbolic in all kinds of ways.

A point is non-dimensional but requires some dimension to attract the attention.¹

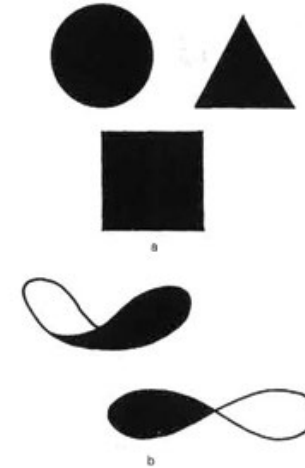
¹ (Bell, 2004, p. 20)



Line

Extending a point in one direction creates a line.
 Lines can be implied by the location of points.
 Lines can be imaginary yet still exert influence.
 Edges of planes can be seen as lines.
 Lines can have their own properties.
 Natural lines are common and important in the landscape.
 Man-made lines are also numerous.
 Lines as boundaries are used extensively.
 Lines can act as defining elements in architecture.
 Lines can be clean, fuzzy, irregular or discontinuous.¹

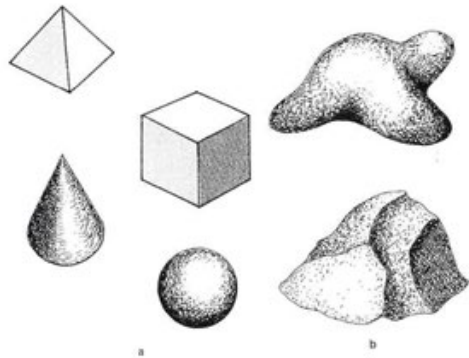
¹ (Bell, 2004, p. 20-21)



Plane

A one dimensional line is extended to produce a two dimensional plane.
 Planes can be flat, curved or twisted.
 Planes can be implied as well as real.
 Planes in different positions may enclose space.
 Naturally perfect planes are few.
 Faces of built forms are planes.
 Planes can be used as media for other treatment.
 Planes can be used for their inherent qualities such as reflections.
 Of itself it has no depth or thickness, only length and width.
 They need not be continuous nor real, they may be implied.¹

¹ (Bell, 2004, p. 25)



Volume

Volume is the three dimensional extension of a two dimensional plane.

Volume can be solid or open.

Solid volumes can be geometric or irregular.

Buildings, landforms, trees and woods are all solid volumes - mass in space.

Open volumes are defined by planes or other solid volumes to create enclosed space.

Interiors of buildings, deep valleys and the space beneath the forest canopy are all open volumes.¹

1 (Bell, 2004, p. 28)

VARIABLES

Text and images extracted from Elements of visual design in the landscape, p. 39-88.

Number

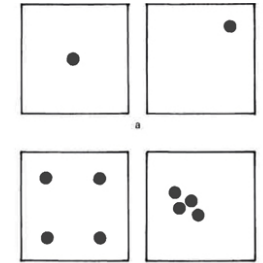
Elements exist in isolation or as one of a number.

Greater numbers usually mean more complexity.

Number is expressed in different ways.

Ambiguity may exist in what comprises number.

Ratios and series of numbers can be found.¹



Position

Three primary positions - horizontal, diagonal and vertical.

Points are positioned with respect to the space they occupy.

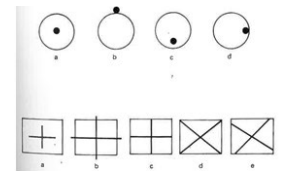
Lines can cause visual forces and tension depending on how they are positioned.

Planes may begin to interlock or overlap.

The position of planes may interlock with landform.

Building positions can be related to each other, to the landform or to other features.

Non-visual reasons for position still influence visual pattern and structure.²



1 (Bell, 2004, p. 39)

2 (Bell, 2004, p. 42)

Direction

Elements may be positioned according to a certain direction.

The shape of an element may imply direction.

Lines in a landscape may produce a sense of direction and invite the observer into the composition.

Natural elements show direction according to forces such as wind and waves.¹



Size

Size concerns the dimension of elements.

Extremes include tall/short, big/small, wide/narrow, shallow/deep.

Size depends for its definition on a system of measurements, which may be derived from many sources.

Large, tall or deep forms are impressive and have been used to exert power.

Smaller forms may be valued for their low impact.

Plants and animals are limited in size owing to genetic and environmental factors.²



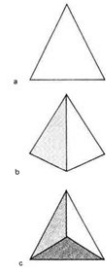
Orientation

Orientation is a combination of position and direction.

Orientation literally means 'facing east'.

Three types of orientation: compass direction, relative to ground plane, relative to viewer.

Disorientation may be the aim of a design and carry symbolism with it.¹



Shape (form)

Shape is one of the most important variables.

Lines, planes and volumes have shape.

Shapes range from simple and geometric to organic and complex.

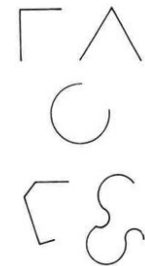
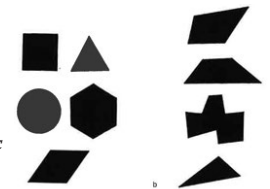
Complexity of shapes is important for design in unity.

Natural shapes are usually irregular but some are geometric at a small scale.

Plants, especially trees, display a wide range of shape and form.

Buildings are more commonly composed of geometric forms but organic designs can be found.

Geometric and organic forms can be mixed to produce interesting effects.²



1 (Bell, 2004, p. 46)

2 (Bell, 2004, p. 51)

1 (Bell, 2004, p. 49)

2 (Bell, 2004, p. 53-54)

Interval

The spacing between elements can be an integral part of a design.

Intervals can be equal or variable, irregular or regular.

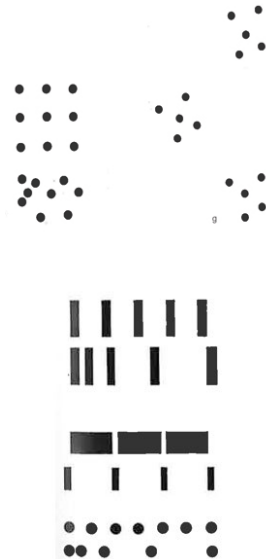
Complex patterns of mixed intervals occur at varying scales.

Interval can produce formal or informal patterns.

Interval is a useful variable in design.

Regular intervals are found in the layout in many towns and cities.

Buildings are often designed and constructed according to a grid of regular intervals.¹

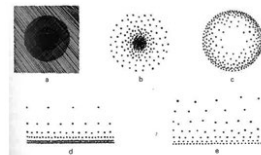


Density

Density is related to interval and texture.

Gradations of density are common in transitional zones between land use or vegetation.

Urban landscapes show density patterns related to function.²



Texture

Texture is related to interval.

Texture depends on the sizes of the elements and the intervals between them.

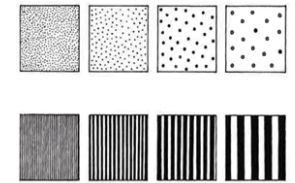
Texture is relative, ranging from fine to coarse.

Texture varies when seen at different distances enabling several textures to coexist simultaneously.

Plants have different textures both in their constituent parts and in their whole appearance.

Land use patterns show a range of textures and grain.

Built-up areas can also be seen as textures at particular viewing distances.¹



¹ (Bell, 2004, p. 60)

² (Bell, 2004, p. 69)

¹ (Bell, 2004, p. 63-64)

Time

All objects or landscapes change over time.

Time is marked in relation to natural cycles, the universe and [peoples] lives.

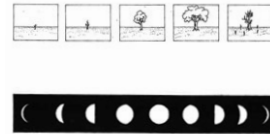
Time can be registered as cyclical or progressive.

Change occurs over variable time intervals.

Seasons are one of the more important ways of dividing time.

The life spans of humans, animals and plants are other registers of time.

Time is also involved in motion and a moving observers position.¹



Light

[People] need light in order to perceive the environment.

Light sources can be natural or artificial.

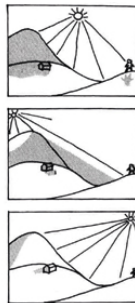
The amount, quality and direction of light are important.

Natural light contains all visible wavelengths.

Light can be ambient or direct.

Colour is dependent on light.

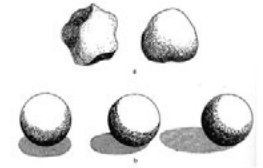
Light quality involves the strength of the light and clarity of the



atmosphere and is one important variable.

Lighting direction is the other variable, whether side, back, front or top lit.

Artificial light gives complete control over any desired effects.¹



Colour

There are several methods of organizing and describing colour.

A colour circle is a good arrangement to show the relationships between colours.

Colours are further described by hue, lightness and saturation.

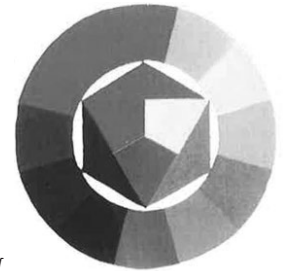
Certain colours can also be described as warm or cool, advancing or receding while blueness is associated with distance.

Dark colours seem to occupy less space than light colours and seem heavier.

Landscapes tend to be associated with a particular limited range of colours, helping to give them local identity.

Colours found in the landscape may be used to create a palette for colouring man-made structures.

Large structures may be visually detached from the earth by using paler sky tones.²



¹ (Bell, 2004, p. 77)

¹ (Bell, 2004, p. 80)

² (Bell, 2004, p. 71-72)

Visual force

Sensations of movement can be present in static images or objects.

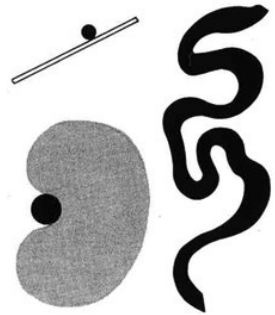
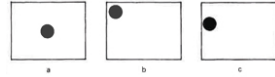
The position of elements and their shapes can suggest an illusion of visual movement or force.

The action of visual forces can be contradictory or complementary.

Visual forces are ever-present in landforms - running down ridges and convexities and up valleys and concavities.

Shapes or lines superimposed on the landscape interact with visual forces in the landform.

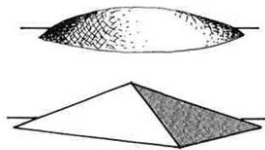
Compatible shapes corresponding to visual force will produce a more resolved, unified result.¹



Visual inertia

Clear objects may not show visual force, they may suggest inertness.

Heavy, ultra-stable, horizontal forms seem most inert.²



¹ (Bell, 2004, p. 82-83)

² (Bell, 2004, p. 87)

FORM AND FABRIC IN LANDSCAPE ARCHITECTURE

Written by Catherine Dee, an artist, landscape architect and senior lecturer at University of Sheffield, Department of Landscape Architecture. In her book Dee categorizes the landscape components as landscape fabric, spaces, paths, edges, foci, threshold and detail. Following is an excerpt from her book.

LANDSCAPE FABRIC

The components of the 'landscape fabric' and the material which landscape architects have at their disposal are water, topography, vegetation and processed substances. The frame, within which these components exist and which encloses the work of the landscape architect, is composed of local climate, local hydrology, local geology and geomorphology, local soils, local vegetation, local air, local fauna and local ecosystems. In short; "*Landscapes are a part of natural systems which support life.*"¹ Landscape architecture however does not only exist in the 'natural' world of these components, it exists in "*the context of people's cultural, social, political, economic and environmental needs.*"²

Landscape architecture spans many scales and has many different factors to consider. It considers regional landscapes where natural and semi-natural systems, agriculture, settlement, transport, climate and culture are important design considerations. Responsiveness is another factor, towards people, nature and to places. In addition the designer needs to understand natural processes/systems and have the ability to respond by protecting, enhancing, adapting or restoring these. Understanding what places are, have been or might be is another consideration of the landscape architect. The designers responsibility is to use this as a tool to create an original design.

All places contain layers of history and much of the natural processes take place over a long period of time, time in which landscapes often become meaningful to local people. Thus a *tabula rasa* approach is almost always inappropriate as it dismisses what has been there before. In view of this and in terms of sustainability, recycling what is already on site is usually more appropriate.

1 (Dee, 2010, p. 7)

2 (Dee, 2010, p. 9)

Other design considerations include robustness, mystery, legibility, complexity and coherence. A robust landscape provides for diverse interpretation and use, legible landscape is one where it is easy to read and understand the environment. Peoples' ability to read the landscape "requires a certain degree of unity of form, elements and detail."¹ Related to legibility is coherence which describes the order of elements and how well the landscape fabric links together. Mystery invites for discovery and engagement with the landscape. Complexity describes how complex/simple and rich/poor the landscape components are.

Diversity without coherence in the landscape implies chaos and thus can be felt as alienating. Diversity which fluently links together creates the sense of unity and thus wholeness and integration. Wholeness includes a sense of completeness and integration which is a fundamental element of successful landscape design.

1 (Dee, 2010, p. 18)

SPACES

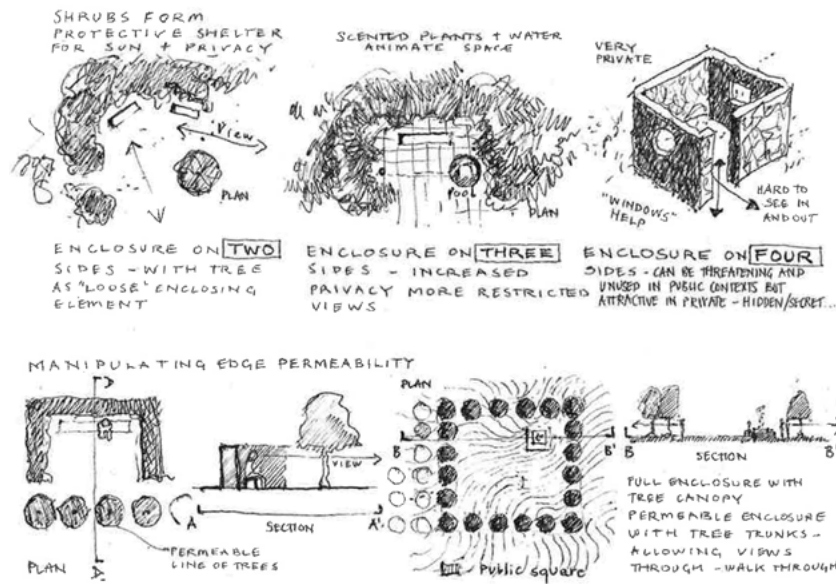


Image from Form and Fabric in landscape architecture, p. 42.

Space can be defined as:

...an area of land enclosed, defined or adopted by people for human purposes.

...a medium and concept of landscape architecture.

...a place for outdoor activities.

...an enclosure.

...the 'opposite' of form or mass.¹

A space is three dimensionally defined by, what Dee calls, the ground plane, wall or vertical planes and the sky plane. The scale of a space is relative to the perceived size of a human, the landscape and emotional effect of which the space evokes.

Main types of spaces are vegetation spaces, built spaces and water spaces.

¹ (Dee, 2010, p. 33)

PATHS

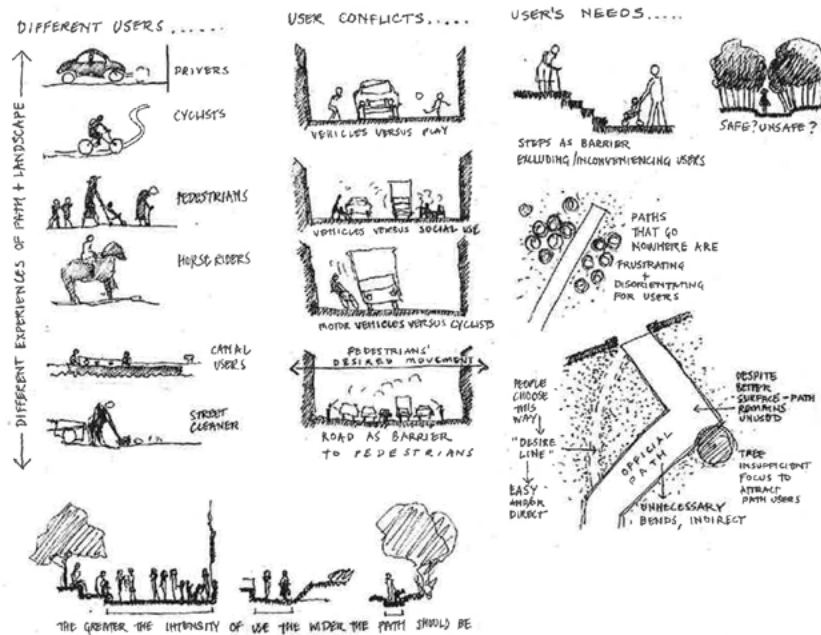


Image from *Form and Fabric in landscape architecture*, p. 84.

Paths can be defined as:

...linear landscape spaces for travel.

...linking forms that create networks of circulation in the landscape.

...linear surface areas.¹

Spaces and paths are fundamental structural elements of the landscape. Linear spaces can be both path and space at the same time.

Paths allow for movement within and between places, they can be social and recreational places. Movement along a path in the landscape is a journey through changing views, sounds, scents, temperature and light. It is an experience where space-time relationships can be felt.

Paths are not only for the movement of people but also for species of flora and fauna to spread out. They are also often tightly linked with Foci (see p. 54) as endpoints or incidents in sequences. As geometric, linear forms, a path can become axis connected to order, power and control but organically formed paths are seen as natural elements. Controlled views and protection from the elements will generate an entertaining and comfortable path along an edge (see p. 51).

Main types of paths are topographic paths, vegetation paths, built paths and water paths.

¹ (Dee, 2010, p. 82)

EDGES

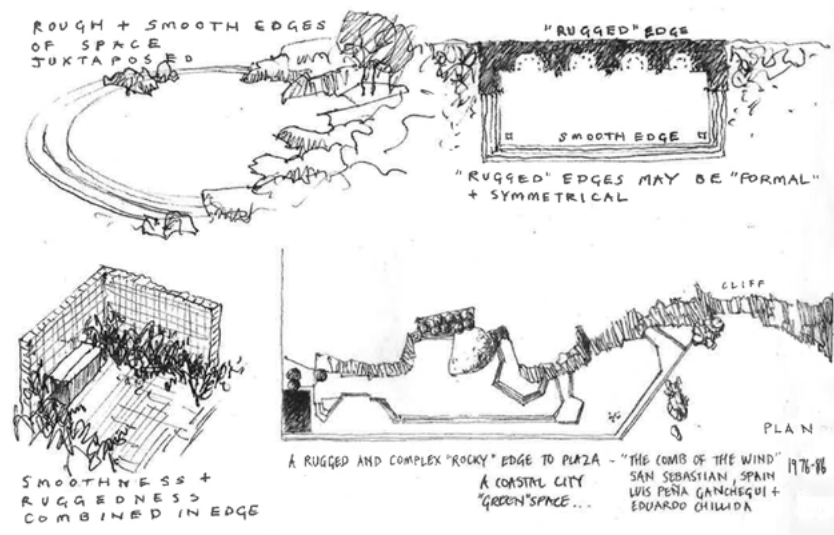


Image from *Form and Fabric in landscape architecture*, p. 84.

An edge can be defined as:

...the linear interface between two spaces or regions of a landscape that have different functions and/or physical character.

...a thickened permeable 'wall' plane.

...a transitional or 'in-between' linear zone.

...a seam of 'interlock' in landscape.

...an ecotone.

...a boundary.

...a horizon.¹

Edges are the elements of transition between different spaces, they "can be seen as 'hybrid' spaces that are neither mass nor space but are both simultaneously."² Edges can have significant meaning in regards of experiences and culture, they provide platforms for varied uses for people and so tend to be vibrant places for social activities.

An edge can be a connecting element between buildings and the landscape, where the two overlap. Edges can also refer to the transitional zone between different landscape types, patterns and/or habitats, which do not have clear boundaries.

Edges can be 'rugged', which has high interlocking abilities, or they can be 'smooth' where the boundary is clear cut and often visually much more dramatic. Edges can also interlock as gradients, allowing spaces to seamlessly fuse together.

Edges can be topographic edges, vegetation edges, built edges and waters edge.

1 (Dee, 2010, p. 116)

2 (Dee, 2010, p. 117)

FOCI

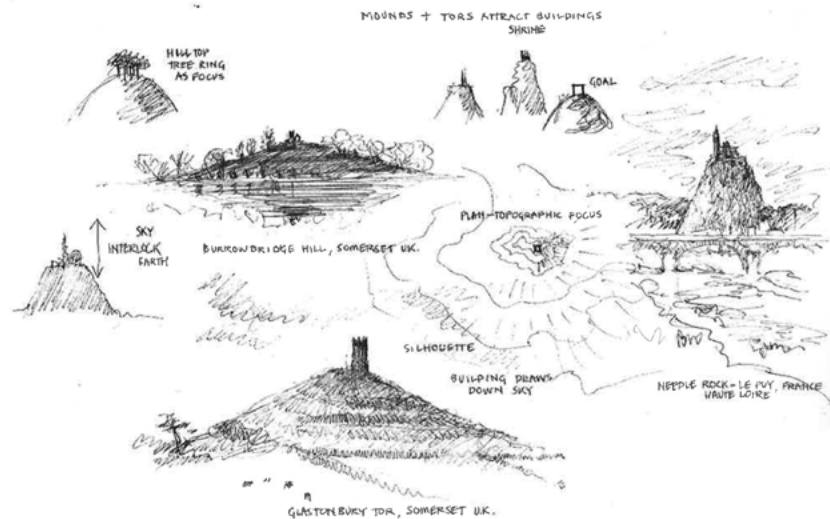


Image from *Form and Fabric in landscape architecture*, p. 150.

A focus/foci can be described as:

...a form or centralised group of forms (often vertical) that contrast(s) with the surrounding landscape.

...a landscape form which assists orientation.

...a form that marks a place of spiritual, cultural or social significance attracting people and becoming a destination and gathering point.

...an 'event' in the landscape.¹

Foci are visually dominant elements in the landscape, they stand out from their environment and attract people. Strongly linked to spaces and paths. They can be natural forms or inserted objects, such as a building, but either way they are given some kind of importance by people, whether it be i.e. as elements of cultural importance or for orientation in the landscape.

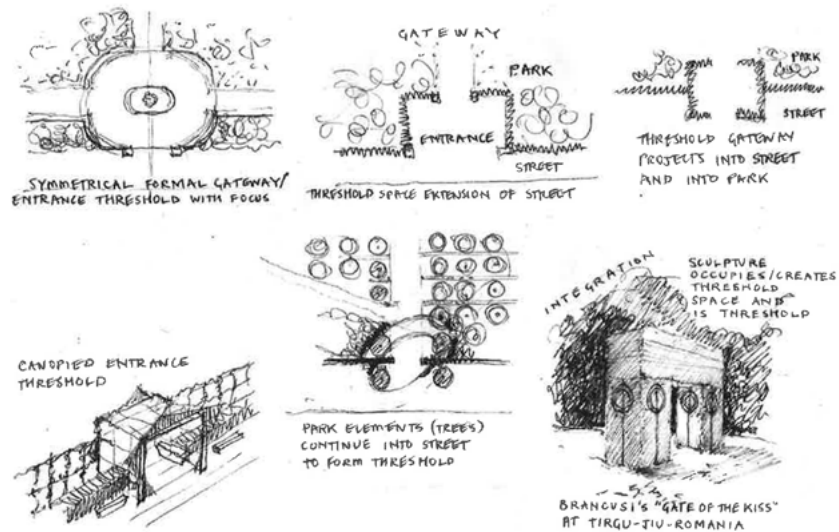
Focus elements are often centrepieces of a space. They drag people towards these spaces and create natural meeting places.

Hidden foci are uncommon as their character as focus points means that in their essence, they are visible objects. In some instances however, the landscape can provide opportunities for surprising foci, such as springs, hollows and subterranean tombs.

Foci can be topographic, vegetation foci, built or water foci.

¹ (Dee, 2010, p. 145)

THRESHOLD

Image from *Form and Fabric in landscape architecture*, p. 172.

A threshold can be defined as:

...a small transitional space between larger spaces or paths.

...an 'in between' place.

...a space on an edge.

...a landscape form that visually links one place with another.

...an entrance place or gateway.

...a place of ending or beginning, rest and anticipation.¹

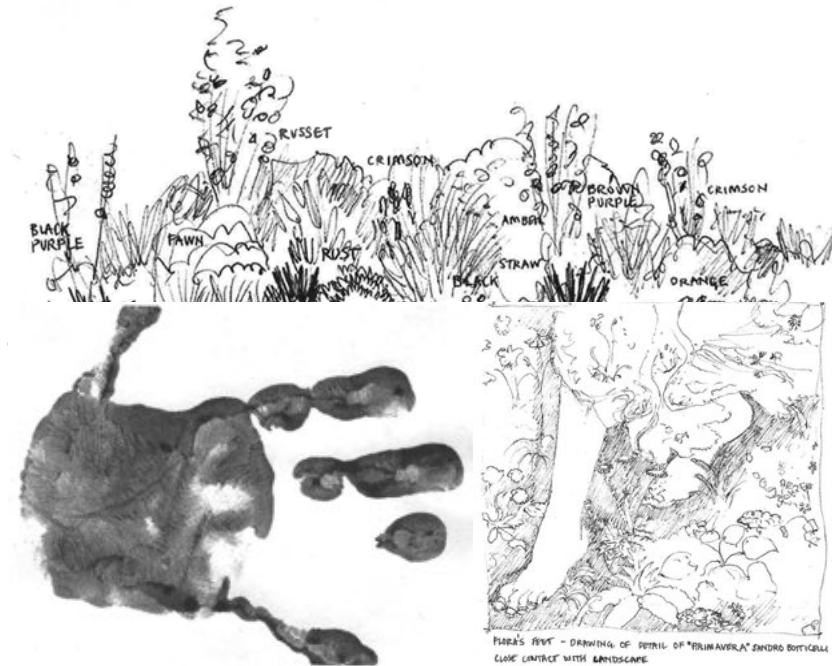
Similar to edges, thresholds 'knit' the landscape fabric together but different from edges, they are 'centred' spaces, rather than linear. They are relatively small spaces which rest in between larger spaces and are intermediary spaces from one to the next, where people sit, rest, anticipate, arrive or leave. In short, where people are acclimatised to changes in the landscape. Thresholds connect visually and physically the place left behind and the place being entered. A space that differentiates itself from the dominant character of the landscape can be viewed as a threshold as it differs from the overall spacial experience of the larger spaces. Frames or windows often act as visual thresholds as they provide a visual link between different spaces.

Thresholds are often 'in between' places without an official function but are adopted by people in a recreational or social capacity.

Thresholds can be topographic thresholds, vegetation thresholds, built or water thresholds.

¹ (Dee, 2010, p. 170)

DETAIL



Detail refers to:

...elements providing 'immediate' or 'close-up' sensory experience of landscape.

...small-scale (smaller than people) structural components of landscape.

...surface texture, pattern, colour and light.

...furniture.¹

Distances in the landscape change the perception of it, often significantly. Peoples impressions and appreciation of the elements change. Closeness such as being able to touch, manipulate or interact with the landscape elements let people *feel part of a place*. Designers should not underestimate the effect of integrating sight, sounds, smell, feeling and taste into landscape designs as the senses combine to help people to *make sense of places*.

The experience of moving through the landscape is improved by the detail of pattern colour, texture and light, which Dee claims to be fundamental abstract elements of design.²

Patterns and texture create diversity and unity, allow people to identify or create order. Texture, colour and light share a strong link as the character of both texture and colour corresponds to changes in light. As design considerations these are important as landscape architecture operates within the frame of 'climatic' light of the sun, cloud, mist and rain.

Details can be earth and rock detail, vegetation detail, built or water detail.

1 (Dee, 2010, p. 189)

2 (Dee, 2010. p. 192)

SUMMARY AND DISCUSSION OF LANDSCAPE READING

To summarize, we can see that there are two paths which these texts take; Bell and Dee aim to break down the components of the landscape and try to make sense of the complexity of it, while Viganó and Appleton take the overall composition of the landscape which generates certain qualities.

Bell's and Dee's books we can summarize thus: The basic components are point, line, plane and volume. They build spaces, paths, edges, thresholds and foci. Number, position, direction, orientation, size, shape, interval, texture, density, colour, time and light create details which generates the landscape character. The composition of the landscape components construct the character of the landscape fabric.

The landscape fabric can possess qualities which will evoke feeling of exposure, enclosure, belonging etc; in short, the landscape will generate the feeling of 'seeing without being seen', people feel at ease, or it does not so people feel uneasy. These qualities can be manipulated through design to promote a feeling of ease. Subdued qualities of the landscape can also be highlighted through design, as Viganó discusses in her book. The visitor will leave with new knowledge of the area and hopefully more appreciation of the landscape. The designer must be well acquainted with the landscape and understand the landscape components to be able to notice which qualities can and should be revealed.

As discussed earlier, through literature and landscape paintings in Iceland we can identify certain characteristics which stand out; the long sightlines over the landscape, the roughness and robustness of the land, the power of the weather, the majestic power of the nature which erupts, shakes and shifts. There is no illusion about who is in control, it is not the human but rather the natural forces, which have inspired stories



and left people in Iceland in awe through a millennia.

The natural elements are extremely prominent in Iceland and should always be considered when discussing landscape design projects. Natural elements refer here to weather, seasonal changes and geological processes. Frequent weather changes and seasonal changes are highly present in people's everyday lives, much more than the geological processes. Strong winds where it seems as though the world will be swept out to sea are common, daylight hours are long in the summer and short in the winter, snowy ground turns the land into a black and white world while vegetation and colour take over during the summer. The sky's colour-spectrum paints the land while the low angle of the sun causes shadows which draw the outlines of the land. The geological forces make their presence known every once in a while but the everyday signs of these forces are the black volcanic rocks and sand and the geothermal water resources which Icelanders are highly dependent on.

A distinct character of the Icelandic landscape are the wide, open views. As a consequence planes and lines become significant design considerations. The plane is a fundamental landscape component where horizontality is a prominent landscape character and, along with sight-lines, should be at the base of both site evaluation and design. Volumes will also have a big impact on the landscape and thus are important to consider.

The plane is where activities can take place, they can mark a location where elements could be most prominent. Sightlines which can be taken advantage of should be observed as well as whether any volumes in the landscape create visual stimuli or overshadow the surroundings. What experiences can be had on the site and does the site offer opportunities to experience the power of the Icelandic nature? Does it let the visitor feel exposed to these powers without being exposed to danger as the prospect-refuge theory describes? Will the design project become a focus element on the site and does it have the potential to be a point which will provide a platform to take in the landscape? What elements on the site could be highlighted through a design



Natural and man-made lines in the Icelandic nature. A road follows the topography to reach over a mountain-pass in north-west of the country.

project?

The task of this project is to identify the most suitable location for a bathing area within Öxarfjörður and designing the bathing area itself. In the site selection phase, these questions are in the forefront of the evaluation of each potential site. Later, when the site selection has been made, the findings and discussions of this chapter will be used as guidelines for the design.



Wide, open views are common in Iceland and are arguably one of its biggest assets.



The Icelandic nature is vulnerable when it comes to built elements placed in the landscape so the responsibility of the designer is high.

A grayscale landscape photograph showing a calm sea in the foreground, a hazy horizon line, and a sky filled with soft, layered clouds. The overall mood is serene and quiet.

A PORTRAIT OF ICELANDIC NATURE



SUMMER NIGHT; RED-THROATED DIVERS BY RIVER THJÓRSÁ

Jón Stefánsson 1929

Copyright: National Gallery of Iceland

A summer night where the midnight sun lights up the landscape and highlights its calmness.

The light and colour spectrum of the northern sky, the sheer beauty and the relieve it offers after long, dark winter days inspire hope and awe in people's minds.

In an island in the middle of the North-Atlantic, calm weathers are a refuge in between storms.

BATHING BY THE HORIZON



A PORTRAIT OF ICELANDIC NATURE





Landscape and weather are an eternally linked elements of the Icelandic nature, one does not exist without the other. Though the calmness between the storms is highly appreciated, the powerful winds and the forces they unleash inspire awe.

LOFSÖNGUR

(Claus Frimann)

Líti eg um loftin blá
 skýin sem sigla fram silfurglitaðan boga,
 háltungls gullnu hornin á,
 herinn stjarna, þann tindrandi loga,
 þrungna þrumu heimkynnið
 þar sem að skruggan skæð skeykur dunandi hamar,
 rekur fjalli högg á hlið,
 hittir skóginn og stórviðu lamar.
 .,: Þú ert mikill! hrópa eg hátt.
 Himnaguð! eg sé þinn mátt,
 fyrir þinni hægri hönd
 hnigur auðmjúk í duftið min önd. .,:

Líti' eg langt um útbönd höf
 hvar eð skjót skipamergð skundar vængjuðum húnum,
 sökku dúpt í sjávargróf,
 sést svo aftur á aldanna brúnum,
 hvar eð sé eg sverðfiskinn,
 hnúðurbak, hrosshvelið hart við stökkulinn glíma,
 hvar eð flögurflokkurinn
 ferðast réttum á vegi og tíma.
 .,: Þú ert mikill! hrópa eg hátt.
 Hafsins guð! eg sé þinn mátt,
 sjór og hvað þar inni er
 órækt vitni um guðóm þinn ber. .,:

Líti' eg liljum skrydda jörð,
 skoði eg skóg og strönd, skoði' eg dali og fjöllin,
 skoði' eg bugðubreyttan fjörð,
 breiðar elfur og vatnsbunuföllin,
 skoði' eg skepnufjöld ótal
 allt frá þeim ormi sem undir duftinu skriður,
 yfir féð í fögrum dal
 fjær til himins þar beinfleyg örn líður.
 .,: Þú ert mikill! hrópa eg hátt.
 Heimsins guð! eg sé þinn mátt!
 Lofið, himnar, haf og jörð,
 hann hvurs mætti þið af eruð gjörð. .,;

- Jónas Hallgrímsson

A hail for the god of the skies, the clouds, moon and the stars, the home of thunderous power of the winds. The protagonist calls upon the god of the ocean, the powerful waves which hold the fate of the ships which travel the seas and life-giving treasure the ocean gives. Finally he calls upon the god of the earth, the landscape which yields crops, the animals which grace the earth, the rivers and waterfalls. Mighty is the power of this god of oceans, skies and earth.

RÖÐULL BROSTI, RANN AÐ NÆTURHVÍLU

Röðull brosti, rann að næturhvílu
 Ránar til og fögrum sjónum brá
 undan léttri utanbakkaskýlu
 - aldan beið þar guðinn studdist á. -
 Horfðu tindar himinljósi viður,
 helgur roði' um snjóvgar kinnar flaug.
 Íslands verndarengill farinn niður,
 Ingólfs gleymda stóð á kempuhaug.

Hreyfðist land af helgum snortið fótum;
 hné þá sól um öldugarðsins bak.
 Stormkast undan Snæfells köldu rótum
 stólpaský að vesturáttu rak.
 Ljós var horfið, hrikti' í dægurgrindum,
 hrímköld nótt um stjörnuhvolfið ók,
 byrg oss! fel oss! brast í jökultindum,
 byrg oss! fel oss! ströndin endurtók.

Allt var kyrrt - frá utanfjarðargrunni
 einstök vakin bára stundum hvein.
 Rödd er heyrð í rökkurhálfimmunni,
 rödd sem hrærði klakabundinn stein.
 Hún kvað margt um horfinn þjóðaranda,
 hreystibrest og kveifarlíf og neyð.
 Hræddist Ísland - heyrði búinn vanda,
 harmastöfum barna sinna kveið.

Rann þá dagur, reis af austurstraumum
 röðulskin og norðar held'r en fyrr.
 Fjör kom nýtt í fætur máttarnaumum,
 fýstist enginn lengur sitja kyrr.
 Hvur er gnýr sem gegnum loftið hleypur!
 - Garðarseyjar losna festarbönd -
 „föruk nú og fyrir norðan Greipur
 felumst undir Grænlands jökulströnd!“

- Jónas Hallgrímsson

The ocean is calm while the sun sets at the horizon but as the light disappears the wind picks up, the clouds gather and the ocean becomes a threatening force. As the daylight returns, so does the calmness, the fishermen relax and live to see another day.



EIRÍKSJÖKULL

Jón Stefánsson 1920

Copyright: National Gallery of Iceland

Icelandic landscapes are robust, naked wide and open. Views are a common theme in Icelandic landscape painting. The nakedness of the landscape reveals its robustness, it's ruggedness. In this harsh landscape the nation has survived through a millennia, it has moulded the nations psyche.



The Icelandic landscape is open and sightlines are often wide and long. Due to this openness interventions in the landscape require careful consideration. They often become highly visible and have the potential to alter the landscape composition, either to the better by revealing some aspects of the landscape or to the worse when they clash unfavourably with their environment.



SKJALDBREIÐUR Í GRAFNINGI

Jóhannes S. Kjarval 1962

Copyright: Reykjavík Art Museum

The ground is rough and rugged in Iceland, volcanic rocks, hardy vegetation and lava fields make up the landscape fabric. The Icelandic nature is tough, it's rough and it requires stamina to survive.

MÓÐURÁST

Fýkur yfir hæðir og frostkaldan mel,
í fjallinu dunar, en komið er él,
snjóskýin þjóta svo ótt og ótt;
auganu hverfur um heldimma nótt
vegur á klakanum kalda.

Hvur er in grátna sem gengur um hjarn,
götunnar leitar, og sofandi barn
hylur í faðmi og frostinu ver,
fögur í tárur, en mátturinn þverr -
hún orkar ei áfram að halda.

„Sonur minn góði! þú sefur í værð,
sérð ei né skilur þá hörmunga stærð
sem að þér ógnar og á dynja fer;
eillífi guðssonur! hjálpaðu mér
saklausa barninu“ að bjarga.

Sonur minn bliðasti! sofðu nú rótt;
sofa vil eg líka þá skelfingarnótt;
sofðu! ég hjúkra og hlífi þér vel;
hjúkrar þér móðir, svo grimasta él
má ekki fjörinu farga.“

Fýkur yfir hæðir og frostkalda leið,
fannburðinn eykur um miðnæturskeið;
snjóskýjabólstrunum blásvörtu frá
beljandi vindur um hauður og lá
í dimmuni þunglega þýtur.

Svo, þegar dagur úr dökkvanum rís,
dauð er hún fundin á kolbláum ís;
snjóhvíta fannblæju lagði' yfir lík
líknandi vetur - en miskunnarrík
sól móti sveininum lítur.

Því að hann lifir og brosir og býr
bjargandi móður í skjólinu hlýr,
reifaður klæðnaði brúðar - sem bjó
barninu værðir, og lágt undir snjó
fölnuð í frostinu sefur.

Neisti guðs líknsemdar ljómandi skær,
lífinu bestan er unaðinn fær,
móðurást bliðasta! börnunum háð,
blessi þig jafnan og eflí þitt ráð
guð, sem að ávöxtinn gefur.

- Jónas Hallgrímsson

A traveller loses her way in the white and cold world of the winter landscape. The cold seeps in and drains her of energy while she shelters her infant son. After a cold night the sun returns, lights up the world and the face of the sleeping child.

This battle for survival through the cold and harsh weathers and the relief which the sun and calmness bring are the forces which have moulded the Icelandic psyche and respect for the nature.



NÁTTTRÖLLIÐ Á GLUGGANUM

Ásgrímur Jónsson, 1905

Copyright: National Gallery of Iceland

Superstition is a big part of the history of Iceland. The darkness, the weather, the seismic activity stirred up people's imagination where all kinds of creatures were thought to be responsible for what was happening. Many stories are testament of this and though superstition is not the norm today, people are still vary and will not disturb these creatures, just in case.





BATHING IN ICELAND



Photo by Daniel Rúnarsson

Bathing in natural hot springs is an age old practice in Iceland though it wasn't until the 20th century that the concept of public swimming pools really took off. Today more or less every village and town has a public swimming pool as well as there are numerous pools in the rural areas of Iceland.

For a large part of Icelanders a visit to the neighbourhood swimming pool is an essential part of life's routine and as Örn D. Jónsson states in his article Good clean fun, 'a community without proper public bathing facility, including a hot tub, is considered incomplete'.¹ In the same article he discusses the importance of the public swimming pools in Iceland as the society sought to orient itself in the post WW2 world, where modernization of the society was happening fast. He states: 'The traditional rural culture with a strong civil society lost its traits of a closely knit community. The swimming pool and the hot tub emerged as the institutions that fulfilled the need for the lost sense of community.'² In other words, the close knit community spirit changed as Iceland was modernised but the spirit lived on in the bathing culture of the public swimming pools.

1 (Jónsson, 2010)

2 Jónsson, 2010)



"Locals of various backgrounds used the pool's hot tubs for their daily meeting place. The hot tub concept was imitated all over the country to become one of the most frequented locations for social get-togethers in the country in less than two decades, comparable to the Parisian café, the English pub, the Mediterranean church plaza, the ancient Turkish Hammam, the Japanese Sento, or, closer to home, the Finnish sauna."

- Örn D. Jónsson



Photo from Iceland Geothermal

SNORRALAUG

Snorralaug dates back to the 13th century though there are stories of a pool at the site dating further back. The pool was reconstructed in 1858, 1959 and 2004. The pool is 4m in diameter and 0,7-1,0m deep. This pool is the model from which most hot pools in public swimming pools in Iceland are made after.



Photo from blog.tripcreator.com

SELJAVALLALAUG

Seljavallalaug was built in 1923 and the main purpose was for people to learn how to swim. The pool is a rectangular form, built into the hillside. Three sides are concrete walls while the hill itself is the fourth side. The warm water flows directly from the hillside into the pool. A small building for changing rooms sits by the southern side of the pool. The pool sits in a narrow valley below the volcano Eyjafjallajökull and the drama of the

landscape gets exaggerated when the simplicity and geometric form of the pool is there to contrast the forms made by the natural processes.

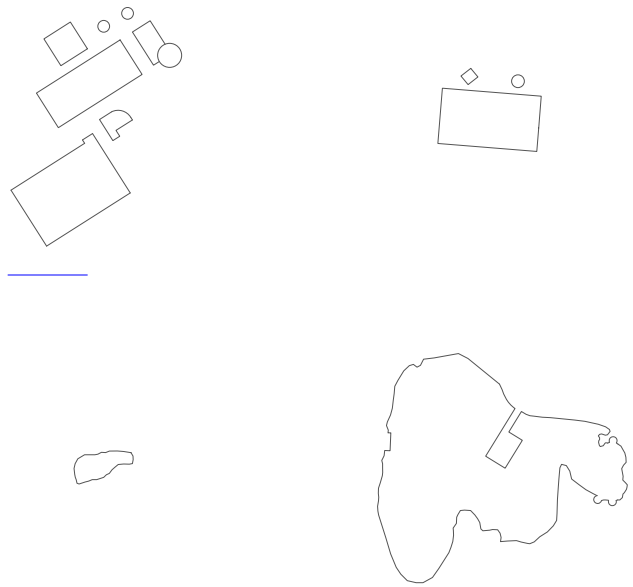


Photo from www.northiceland.is

HOFSLAUG

Hofsós is a small village in north Iceland. In 2010 a new public swimming pool was inaugurated and it has become a big attraction for the area. The design of the pool is very simple, a 25m long rectangular pool and a small hot pool, also rectangular. What is remarkable about this pool is its position in the landscape. The coastline is a steep hill and the pool sits on top of this hill. The pool is oriented towards the horizon so the experience is of swimming

towards the horizon. The whole fjord is a part of the landscape of the pool.



The most common form of public pools in a urban setting is a rectangular swimming pool and one or more circular hot pools. Rural pools often follow the same formula while the size of the pool often depends on the environment it is located in. Pools in lager towns sometimes have two swimming pools, usually 25m long, and a variety of pools for relaxation or play. The rural pools often vary in length and have maximum two hot pool.

Pools in a more natural setting most often have a organic form and the size of the pool depends on the size of the hotspring, the effort put into the original pool, the closeness to human habitation among other things.

Given the resource of geothermal water in Öxarfjörður, combined with the strong culture of bathing in Iceland, a bathing area in Öxarfjörður has the potential to become a place where locals and visitors gather. The question is to what extent the bathing area has a place in the heart of people who frequent the area. This relies on many factors, one of those is the location and design of the bathing area. This project aims to build on the character of Öxarfjörður to provide a bathing experience which will be unique for the site.



PROJECT LOCATION

The location of the project is in Öxarfjörður, a part of Norðurþing municipality in north-east Iceland. The municipality has roughly 3000 inhabitants¹ but in 2017 roughly 300 people lived in the Öxarfjörður area. Population decline has been considerable in recent years, with 30% reduction in population numbers over the last 15 years. Very few individuals in the age bracket 25-44 years old remain, which in turn results in dwindling numbers of young children.²

Öxarfjörður is a part of a governmental program aimed to support vulnerable communities in Iceland. Connected to that program there is a search for opportunities to generate activities in the area which could be beneficial socially and economically for the community.

1 (Hagstofa Íslands, 2017a)

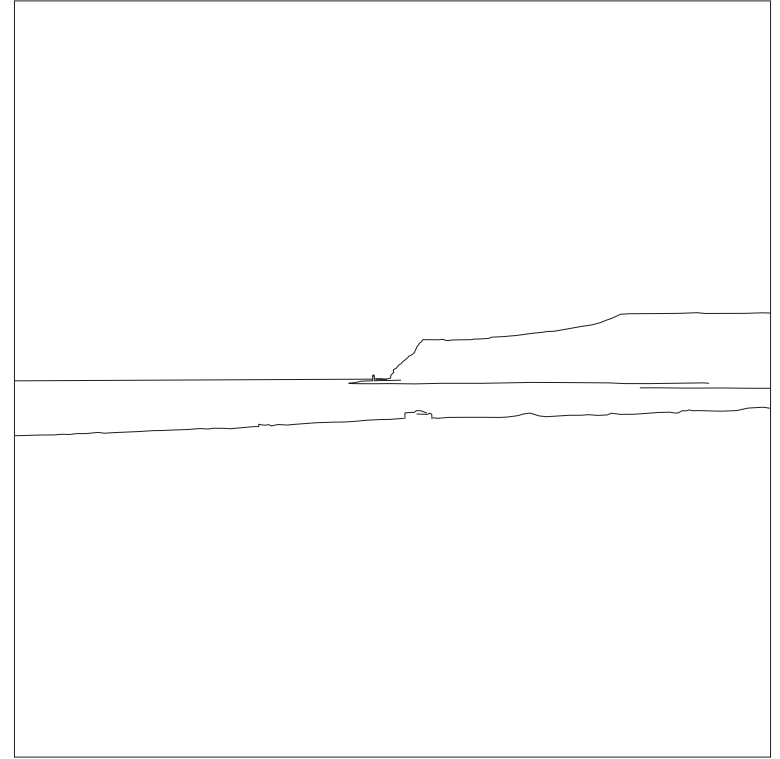
2 (Öxarfjörður í sókn, no date)

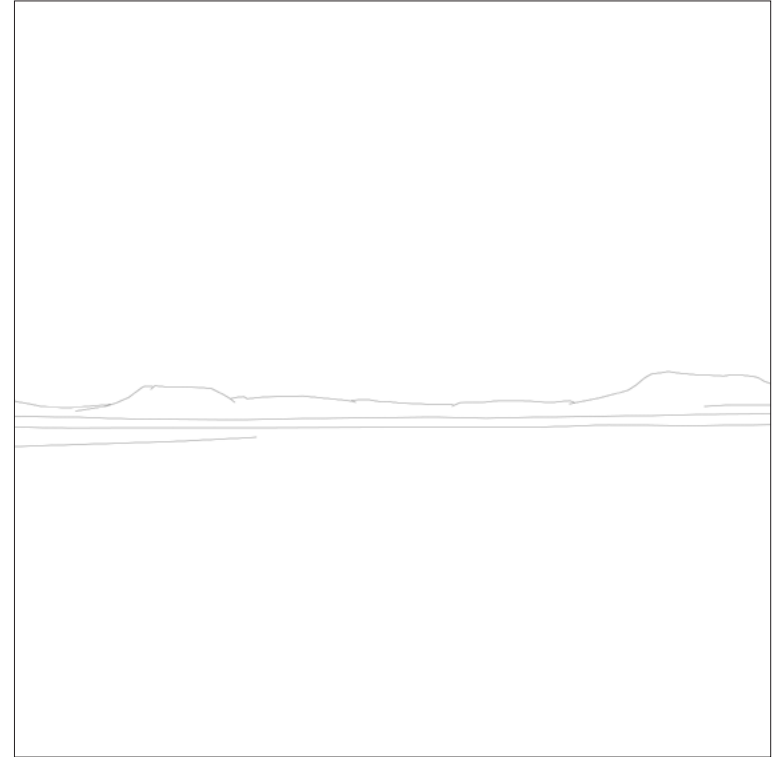
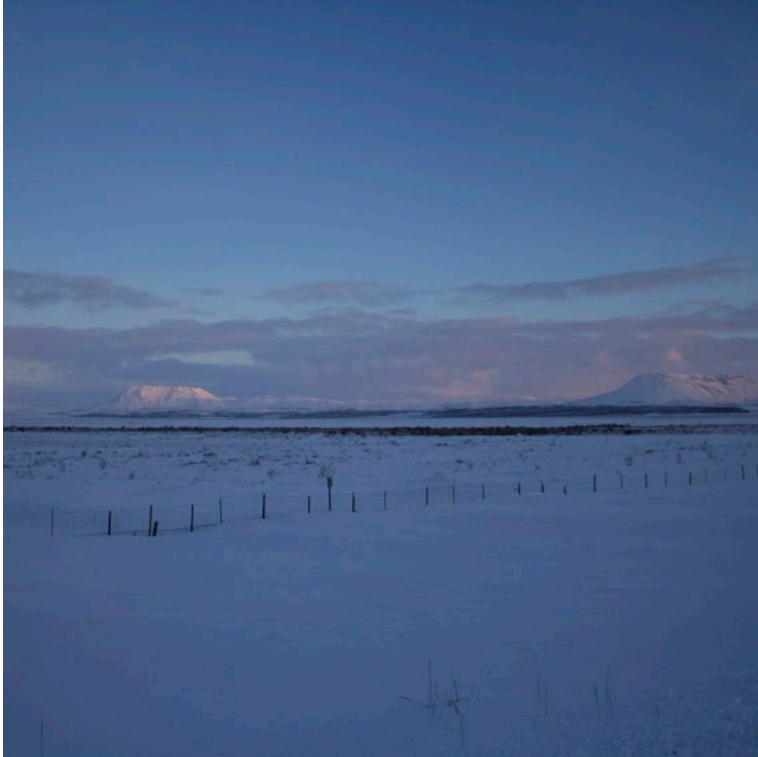


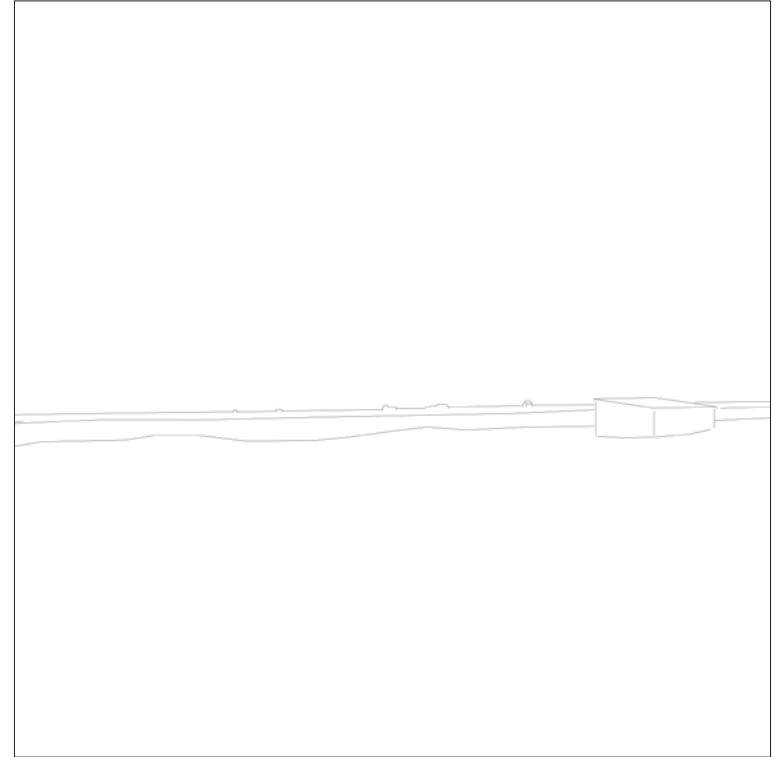
BATHING BY THE HORIZON



LANDSCAPE CHARACTER OF ÖXARFJÖRDUR









The horizon and horizontality of the landscape of Öxarfjörður are its most distinctive feature along with the feeling of being at the edge of the inhabitable world. It is a place where the power of the nature can be felt on the skin, where it is possible to let go of the everyday stress and let it be blown out to sea by the wind, past the horizon and out of existence.

BATHING BY THE HORIZON

LANDSCAPE CHARACTER OF ÖXARFJÖRDUR



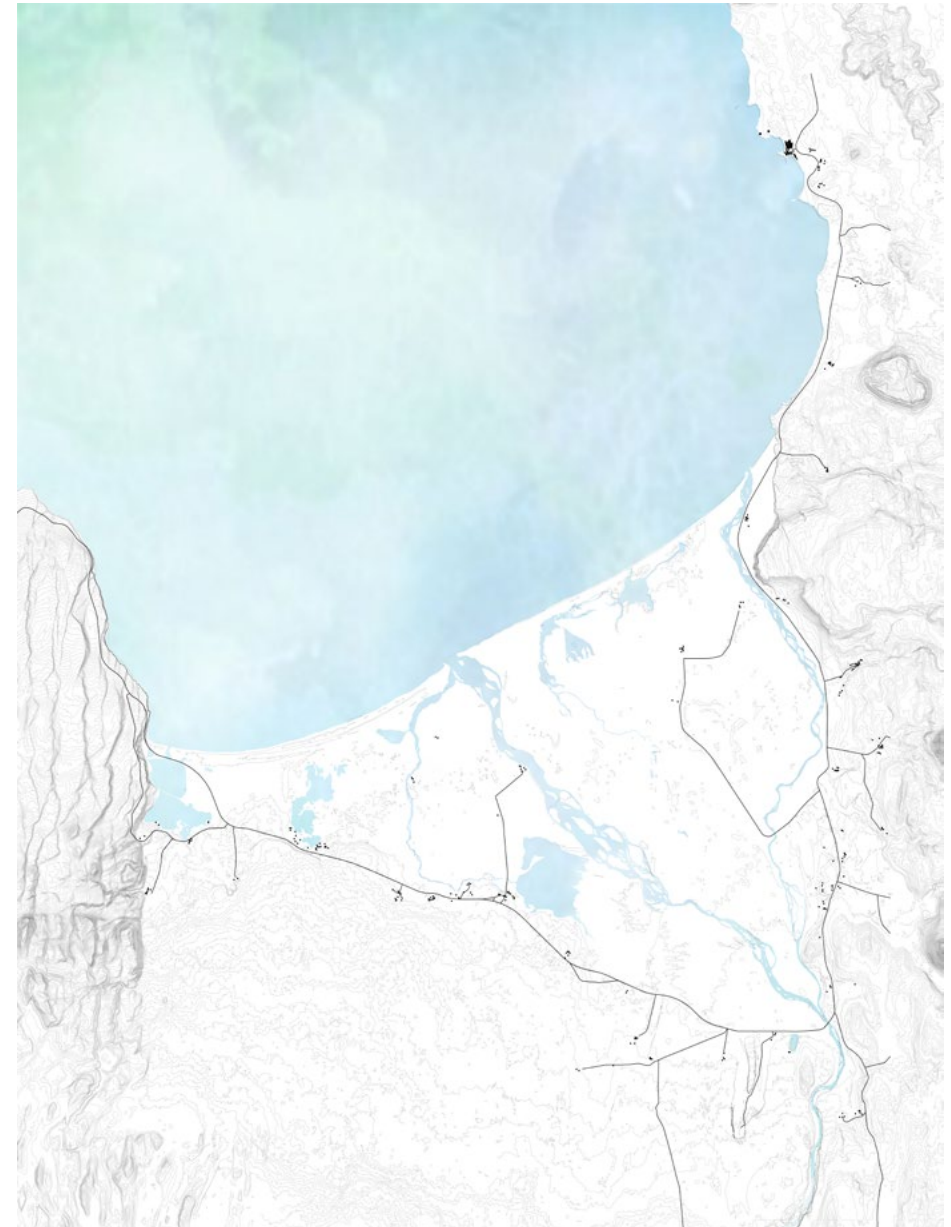


ÖXARFJÖRÐUR SETTLEMENTS

As stated earlier roughly 300 people called Öxarfjörður home in 2017 but population numbers have been dwindling for some time.¹ Kópasker, a small village sits at the eastern side of the fjord where just over 100 people reside.²

1 (Öxarfjörður í sókn, no date)

2 (Hagstofa Íslands, 2017b)



DESTINATIONS AND TOURISM IN ÖXARFJÖRÐUR

Ásbyrgi is a horseshoe-shaped canyon, 3,5 km long and 1 km wide with cliffs up-to 100m high. The canyon was formed during catastrophic floods, first one which took place 8-10 thousand years ago and another about 3.000 years ago. The floods were caused by glacier bursts in the river Jökulsá á Fjöllum from the Vatnajökull icecap. Since then the riverbed has moved eastward and today the river runs beside the canyon. Though science has found this to be the way the canyon was formed, the legend says it was formed when Sleipnir, the eight legged horse belonging to the Norse god Odin, put its foot down as it ran past.¹

The canyon is the most visited site in Öxarfjörður. According to statistics from the Icelandic tourist board, in 2017 over 400.000 tourists visited Ásbyrgi². Conversations with Öxarfjörður locals have shown that they do feel that the flow of visitors is, for the most part, limited to the road 85 from the west to Ásbyrgi and road 864 to the south. This leaves the rest of the area outside the reach of economic potential of tourism. Statistics from the Icelandic Tourist Board support this as the area north of this boundary only had around 50.000 visitors in 2017.³

1 (Vatnajökulsþjóðgarður, n.d.)

2 (Ferðamálastofa, n.d.)

3 (Ferðamálastofa, n.d.)



GEOLOGICAL ACTIVITY IN ICELAND

The Mid-Atlantic Ridge divides the Atlantic ocean in two, between the North American and Eurasian tectonic plates. Iceland is a geologically active island as sits on this boundary, half on the N-American plate and half on the Eurasian plate. The plates move away from each other at a speed of roughly 2 cm a year.

The plate boundary runs through the country from the south-west to the north-east and along the boarder is where the geological activity is most active.

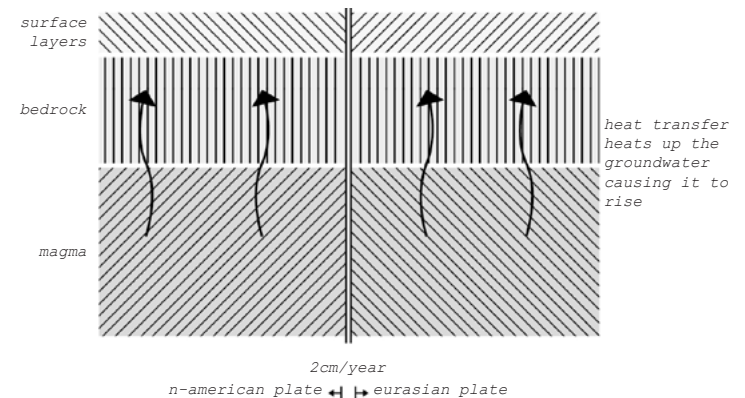
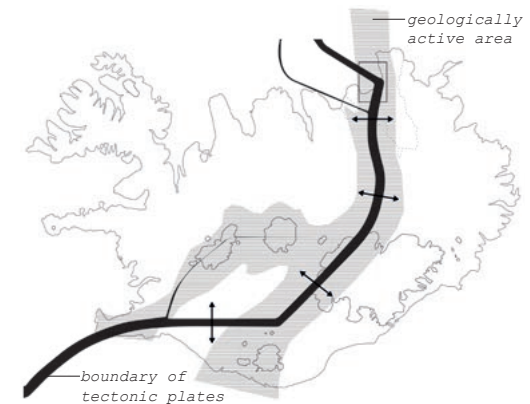
Due to this geological features, geothermal water is a rich resource in Iceland. The processes which produce geothermal water occur when groundwater deep in the bedrock is heated by magma from the earth's core. Due to convection the hot water rises towards the surface where it either penetrates the surface in hot springs or it runs through fissures in the bedrock.¹

Geotherm: The change in temperature with depth in the earth.

Geothermal region: A region of current or recent volcanism in which magma or very hot rock heats up groundwater, which may discharge at the surface in the form of hot springs and/or geysers.²

1 (Jónsson & Pétursson, 2004)

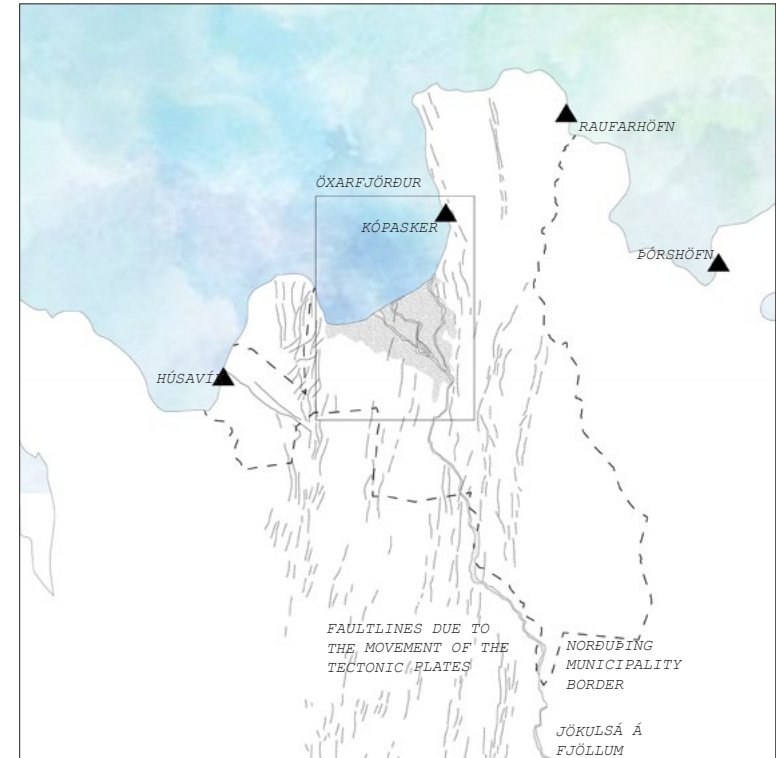
2 (Marshak, 2010)



GEOLOGICAL FEATURES OF ÖXARFJÖRÐUR

The boundary of the tectonic plates runs right through Öxarfjörður which results in a rich resource of geothermal water in the area's bedrock. For the most part, Öxarfjörður's geothermal water runs through the bedrock and does not penetrate the surface. Today, the resource is only partly utilized, its main use is for fish farming and district heating.¹

¹ (Öxarfjörður í Sókn, no date)



Öxarfjörður is a relatively short and wide fjord, roughly 25 km in diameter.

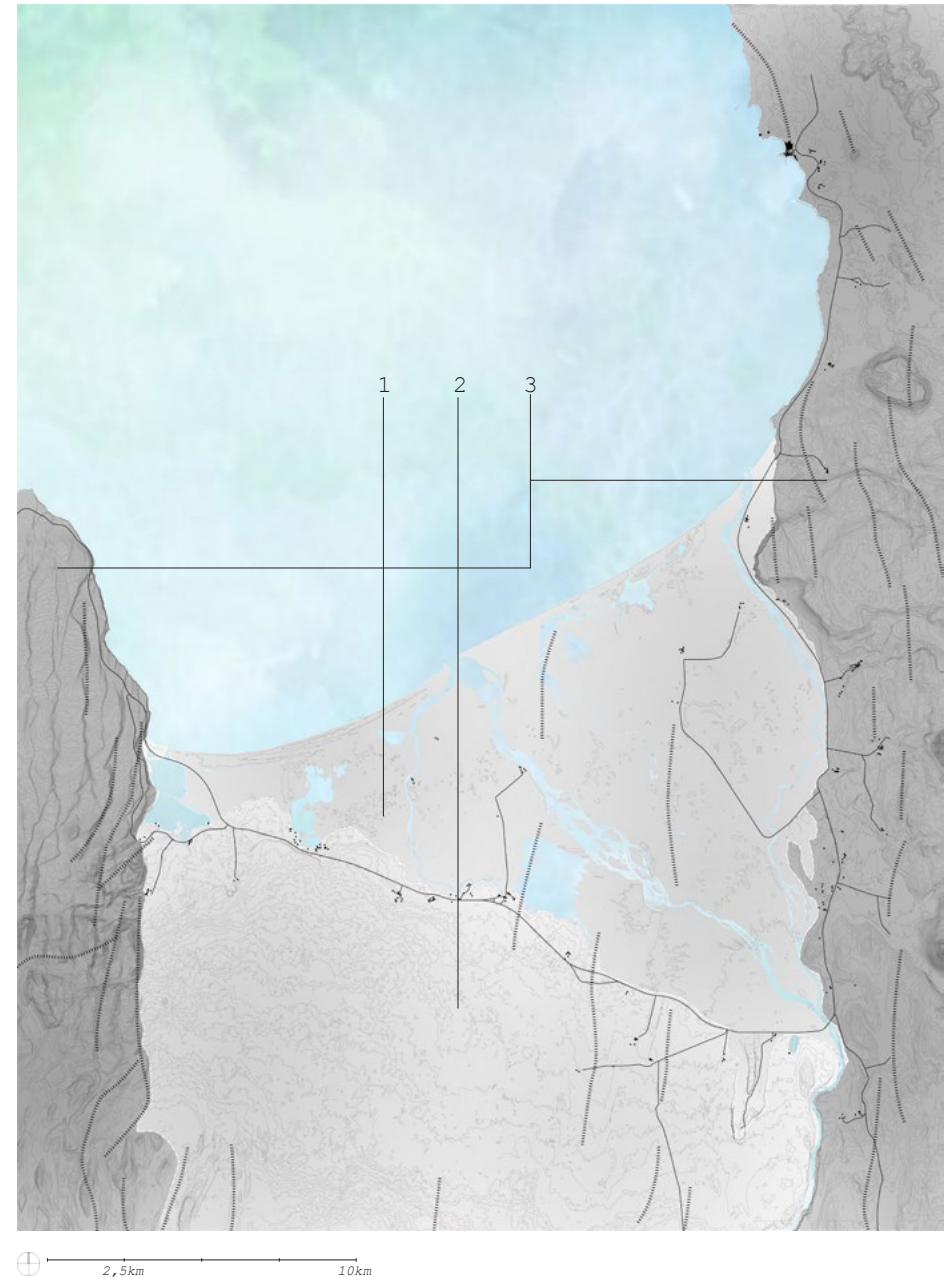
The land is made of essentially three dominant geological layers; 1)holocene sediments, 2)post-glacial, prehistoric, basic and intermediate lavas, older than, AD 871 and 3)basic and intermediate hyaloclastite, pillow lava and associated sediments, dated from upper Pleistocene, older than 0.8 million years.¹ The third layer creates a frame for the fjord and valley while layer 2 flows down from the inland to the sediments layer. The settlements of Öxarfjörður follow for the most part the boundary between the three layers. (see settlements map p. 23)

Numerous faultlines are in the bedrock, mostly in a southwest-northeast direction.²

The landscape is quite horizontal and the dominant plane is holocene sediments layer. These sediments are largely from the glacier river, Jökulsá á Fjöllum. A distinctive geological feature is the Ásbyrgi canyon (see p. 26-27).

¹ (Jóhannesson, 2014)

² (Jóhannesson, 2014)



A grayscale landscape photograph showing a vast, flat plain extending to the horizon. The sky is filled with soft, layered clouds, creating a diffused light across the scene. The overall tone is muted and atmospheric.

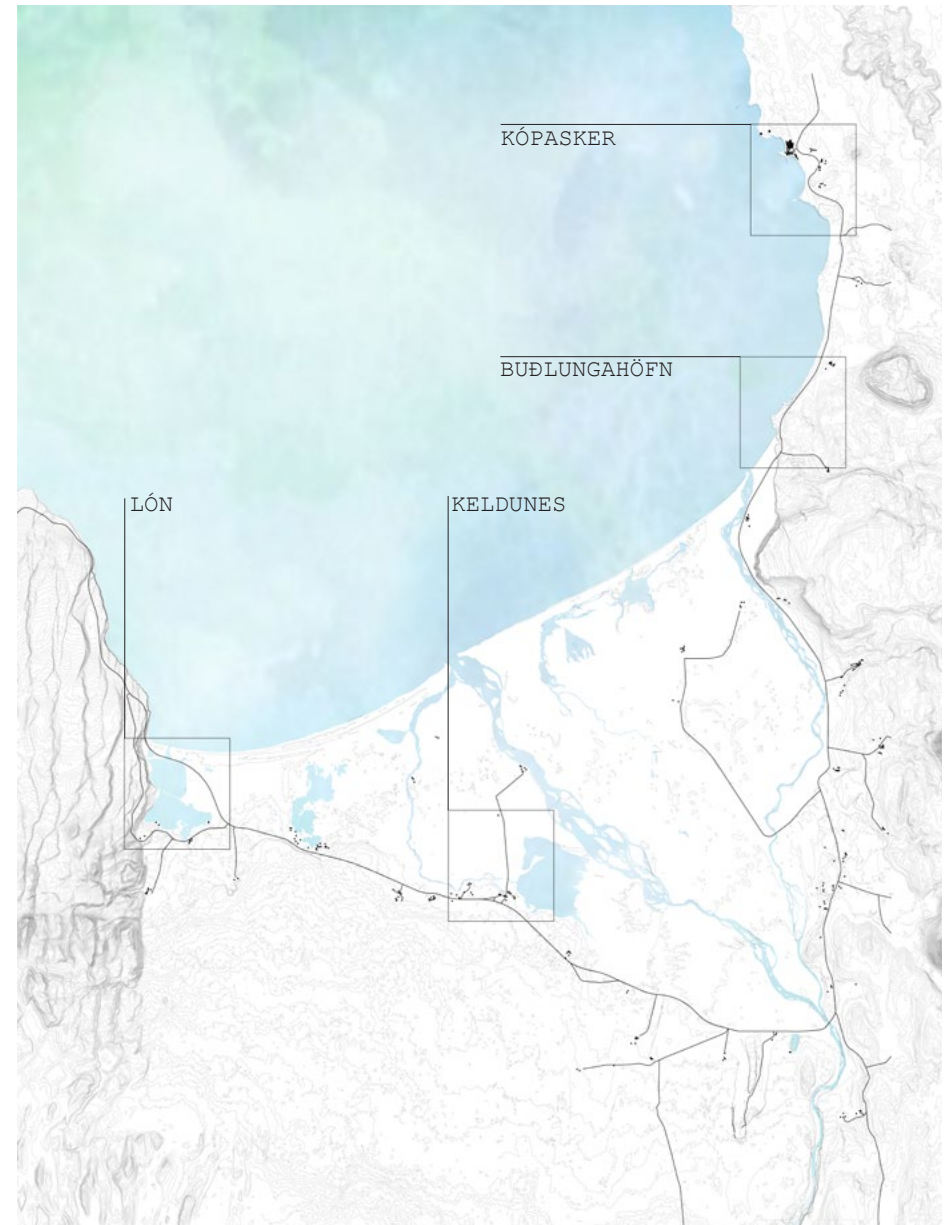
SELECTING THE SITE

POTENTIAL SITES FOR THERMAL BATHS

These four potential sites are suitable locations for interventions using geothermal water, based on the findings of a survey carried out by an association of locals. The evaluation criteria in that survey includes accessibility to geothermal water sources, infrastructure access, closeness to interesting landscape features, vulnerability to natural disasters, closeness to services and potential synergy effect which would benefit the community as a whole.¹

The following pages evaluate each of the four sites with the goal of identifying which one is most interesting for further developing this project.

¹ Communications with Kristján Þ. Halldórsson and Charlotta Englund.





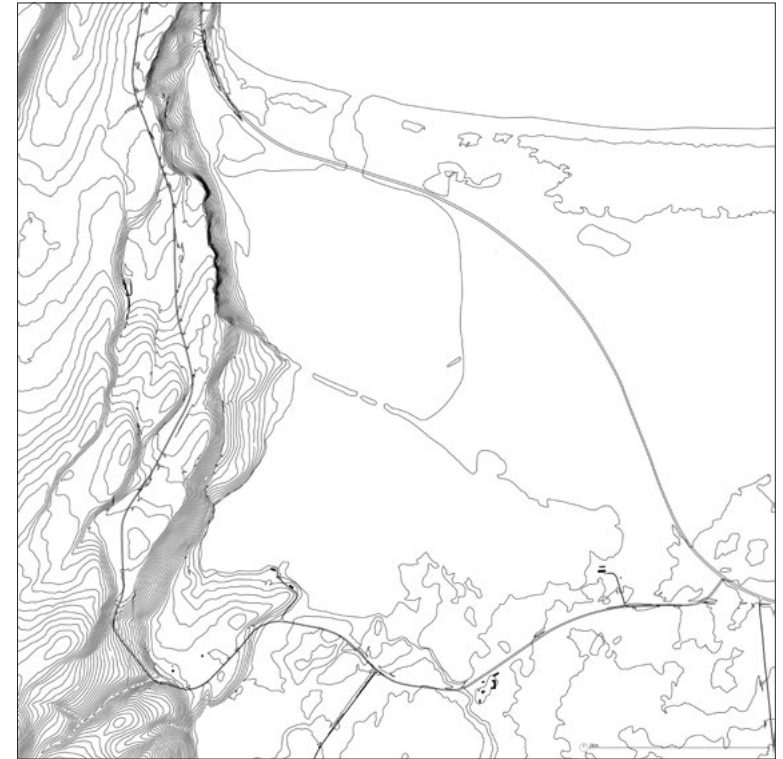
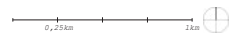
LÓN

N 66°5'28.724"

W 16°53'50.337"



Aerial photo from Norøping municipality



The lake at Lón is it's most noticeable landscape feature, a definite focus element in the area which is fitting since the 'lón' means lake in Icelandic.

On a calm day the lake has great mirror effect while wind will create waves on the surface, cold will cause the surface to freeze etc. This characteristic has great potential in terms of experiencing the extremes in the Icelandic weather.

This location is extremely horizontal for the most part but a low mountain range creates a frame towards the west.





The landscape is very open towards north, east and south but sightlines are not very prominent.

Lines in the landscape create subtle diversity in the landscape fabric and create edges between different surface materials, i.e. black sand and low vegetation.



This is the westernmost site of the potential sites. It is within the area where the bulk of tourists to Öxarfjörður travel.



The site has existing functions, both in traditional farming and fish-farming. These activities are located at the boarder of different geological layers.

SUMMARY FOR LÓN

The landscape is open and views are wide with long sightlines and the lake has great potential as a interesting focus element to experience the Icelandic nature. The site has a frame in the form of the low mountain range to the west but the scale of the framing is to large for it to provide the feeling of a sheltered landscape. There is a potential for topographic shelter at the western and southern edges of the lake where different geological layers meet but the serenity of the landscape experience would be disturbed by the activities which are located there. The mountain range, even though it is low can still cast considerable shadow for a large part of the year. This site will not drag visitors out of the most frequently travelled route through the area as it is located at the route.



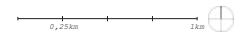
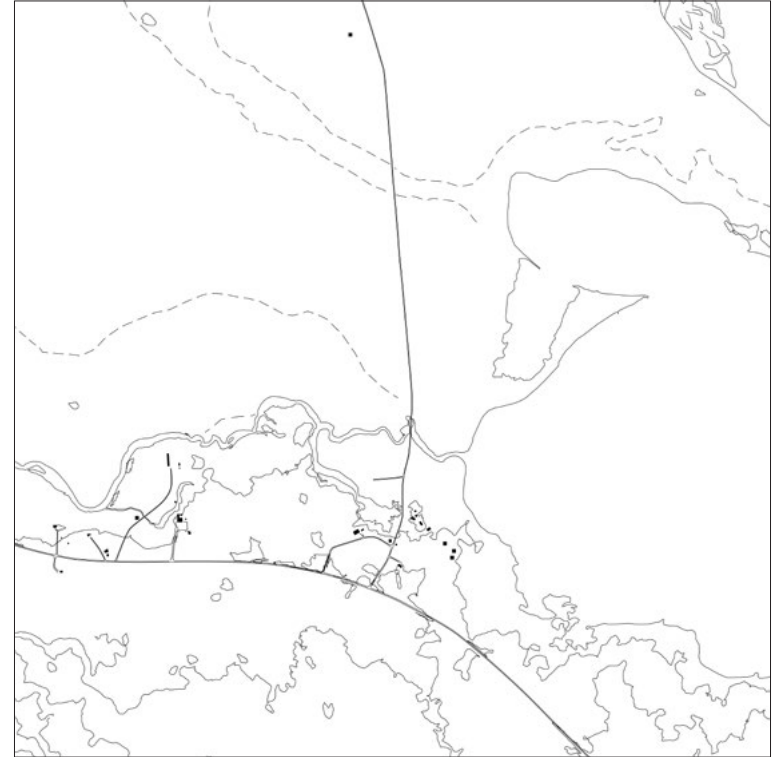
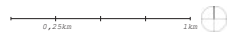
KELDUNES

N 66°4'45.636"

W 16°40'33.142"



Areal photo from Norðuping municipality





At Keldunes water and land offer interesting interaction but this interaction is in close proximity to the farmhouses which occupy the site. The interplay of farming, land and water has an interesting character which do not need further interventions in terms of experiences to be had.



The topography at Keldunes is extremely horizontal and open in all directions. It offers many options in terms of sightlines and views but severely lacks options of refuge and shelter. The openness also provides many opportunities to experience the harshness of the Icelandic weather, perhaps too much for a bathing area to be attractive year round.



Keldunes lays within the boareder of the main tourist route within Öxarfjörður.



The Keldunes site is a flat plane for the most part, located at the boarder between the plane of the Holocene sediments and the post-glacial, prehistoric lavas. Dry riverbeds create irregular paths in the landscape while the roads are distinctive lines with a clear direction.

The settlements are located at the edge between the geological layers.

SUMMARY FOR KELDUNES

The Keldunes site is rich in prospect due to the horizontality of the landscape but the main places where real refuge qualities are present are either by the existing settlements and thus a bathing area would be overshadowed, or by dry riverbeds which are potential floodplains so the bathing area would be in danger in case of floods.

The existing functions on the site are mostly farming and salmon fishing. These activities bring life and activities to the area so it is not in need of further generators of activities. It is also within the boundary of where visitors travel and would not benefit the community in terms of expanding the flow of people.

The existing activities reduce the serenity of the landscape experience and there is little chance of truly experiencing the feeling of being at the outskirts of the inhabitable world.



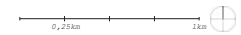
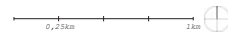
KÓPASKER

N 66°18'8.261"

W 16°26'51.293"



Aerial photo from Noröping municipality





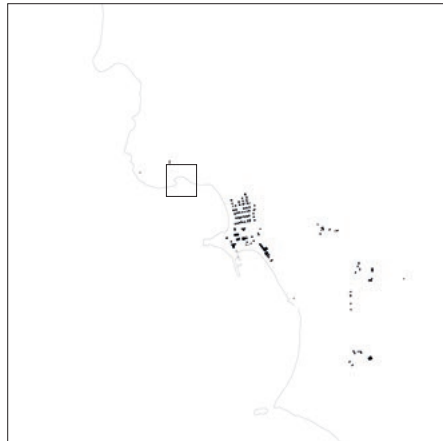
The exact location within the Kópasker site is a small creek called Grímshöfn. It is south facing and thus receives plenty of sun exposure. Views from the creek are wide and open towards the south but quite restricted in other directions. The site has some, but limited shelter/refuge properties



The creek has potential for sea bathing which is a good way to interact directly with the elements of the Icelandic nature.



Kópasker lays outside of the most frequently travelled route in the area so this site has the potential to extend the visiting area.



The closeness to the village is both an advantage and a disadvantage. The village ensures that potentially interested bathers are near by but the existing activities can also easily overshadow the bathing area.

SUMMARY FOR KÓPASKER

The proximity to the ocean is a great potential to experience the power of the Icelandic nature and the possibility of sea bathing gives the option to feel the Atlantic ocean on ones own skin. The southern views and exposure to sunlight are a big advantage but the views towards other directions are very limited.

The proximity to the village will reduce the serenity of the landscape experience and the possibility to experience the 'edge of the world' feeling is absent when so close to the village.

Placing the bathing area at Kópasker would drag visitors further into the area and thus has great potential for beneficial synergy effect.



Selected site for the bathing area

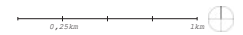
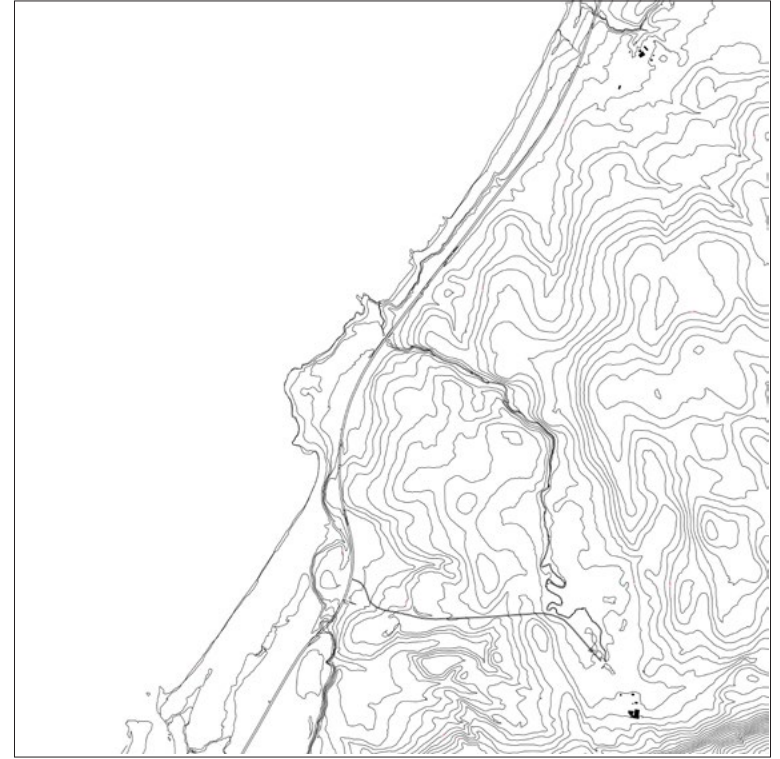
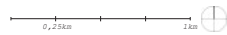
BUÐLUNGAHÖFN

N 66°13'14.383"

W 16°27'28.306"

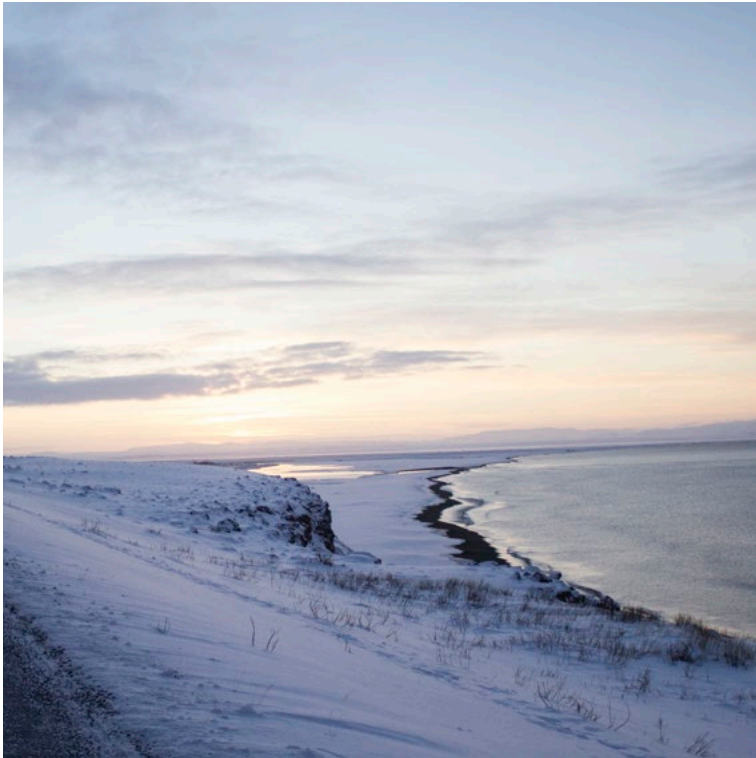


Aerial photo from Noröping municipality





The horizon is a clear focus on the site and the landscape experience creates a strong feeling of being at the edge of the inhabitable world, where the unknown lays beyond the horizon.



The site sits in between the ocean and road 85 - Norðausturvegur. The road sits on a hill so much of the site is invisible from the road.

The sloping topography ranging from east towards the seaside creates a frame for the site while views are wide and open towards other directions. This makes a strong prospect-refuge component.



The ground texture of the site is very diverse, ranging from smooth sandy beaches to vegetated planes to rough rocky beaches. The black basalt is a prominent, a hint at the geological forces at work beneath the surface. During the winter the snow and black basalt forge the illusion of a black and whiter world, which only a foreign object, such as a colourful jacket, can contrast. This accentuates the 'edge of the world' feeling the Öxarfjörður area inspires.



The power of the ocean and the allure of the horizon have a very strong presence on the site, the landscape experience has the potential of being intense, powerful and cleansing for mind and body.





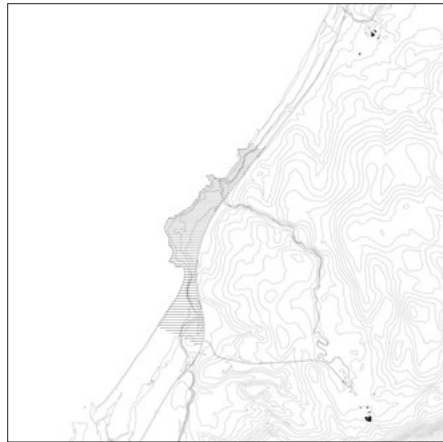
The shoreline is rough in some places. This roughness renders the processes and power of the elements highly visible and gives the opportunity to observe fleeting moments in the nature, such as the waves hitting the stones, dispersing the water.



The Buðlungahöfn site has a range of horizontal planes but the topography varies from almost entirely flat to steep hills and cliffs. The direction of the slopes varies and thus views are ever changing while travelling along the shore.



Buðlungahöfn sit outside of the most frequently visited tourist route in Öxarfjörður and thus can spread the economical benefits of tourism further.




The area allocated for the bathing area is defined by road 85 - Norðausturvegur and the coastline and is roughly 2km long.

SUMMARY FOR BUÐLUNGAHÖFN

This site's has a great value for experiencing the 'edge of the world' feeling since there are no existing functions exactly there and the varying views both towards the horizon at sea and towards the fjord. It also sits outside the normal tourist route so the potential to enlarge the scope of the visiting area and drag visitors further north.

At Buðlungahöfn is a potential to create a recreational area along the shoreline where the landscape and nature can really be experienced. The different textures of the ground, different aspects towards the horizon and views are potential qualities to be highlighted through design. There is great potential to be confronted by the power of the weather or to seek shelter from it and experience it from a distance. The interplay between the land and ocean can be observed and experienced, both upclose and from a distance.

The strong prospect-refuge elements render the landscape of Buðlungahöfn both intriguing and comforting, the prospect-refuge qualities are already there to work with in the design and don't need to be manufactured.



PROJECT PROCESS

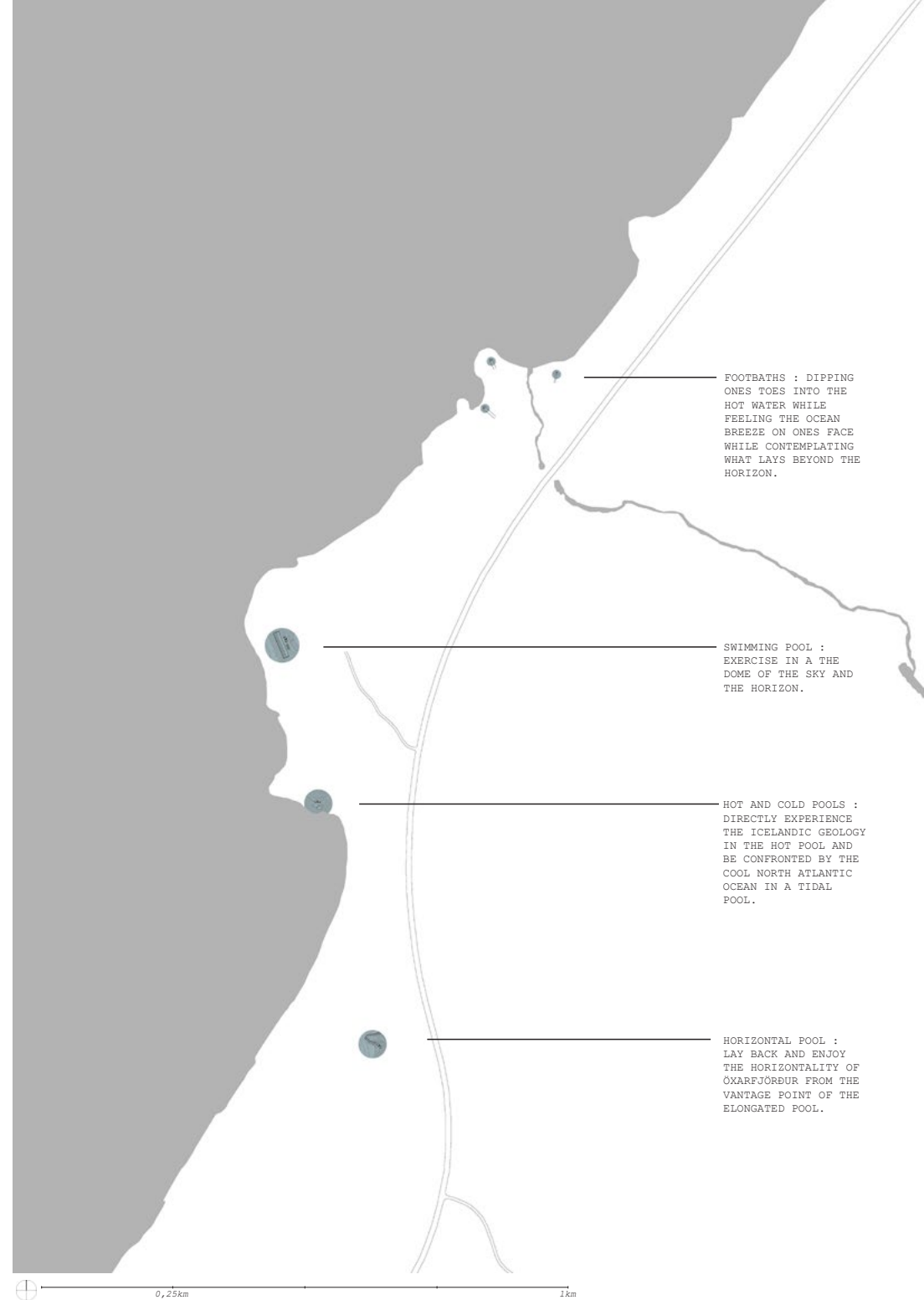
BATHING AT BUÐLUNGAHÖFN

The bathing area is roughly 2 km long stretch, defined by the shoreline to the west and the highway to the east. Along the stretch are 4 pool sites, each with its own character. A path connects the pool sites and access points to the area. The bathing area is a linear journey along the coastline, where the pools are destinations points along the way where the landscape of Öxarfjörður can be experienced from the vantage point of the pool.



2ND INTERRIM PRESENTATION

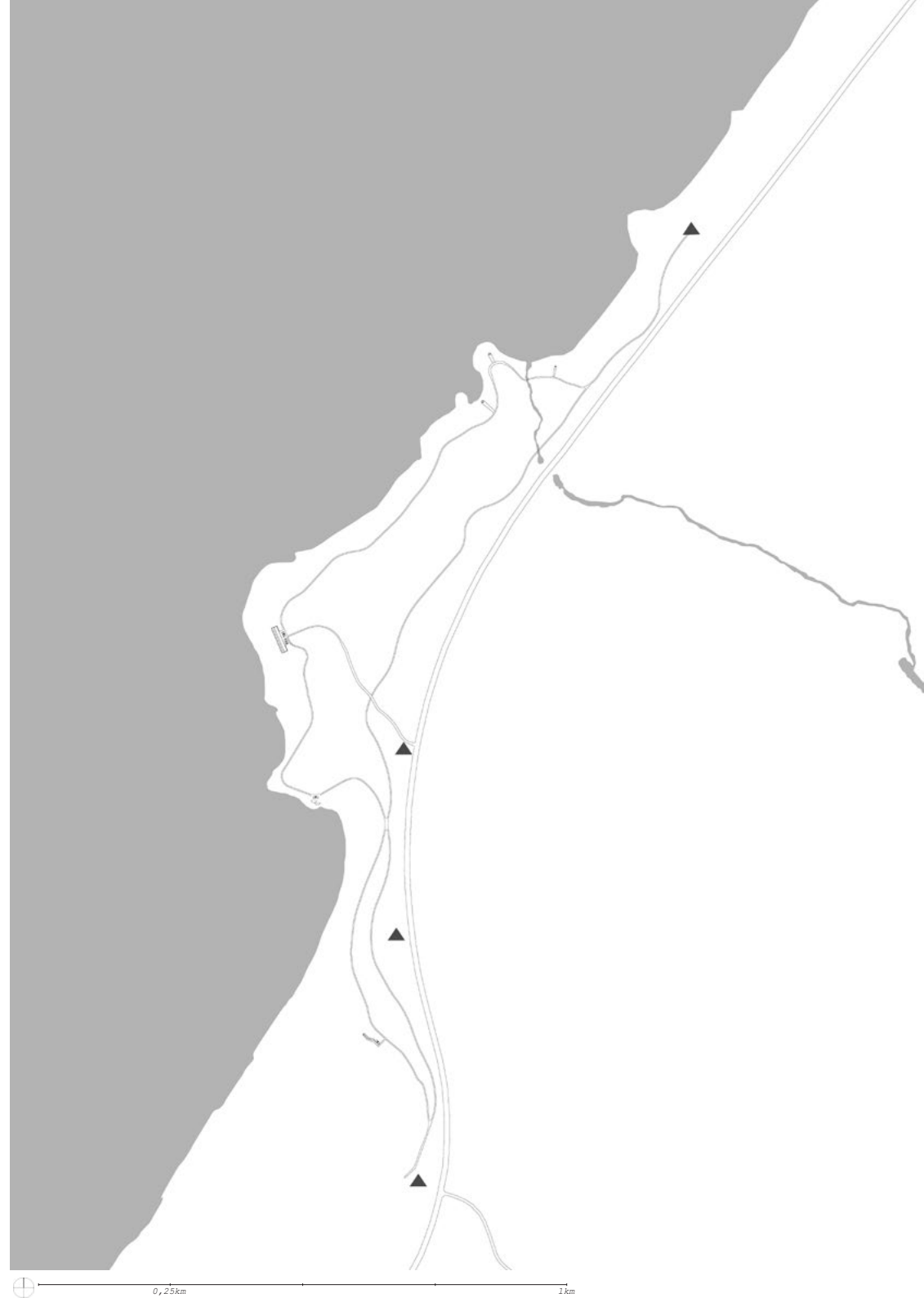
POOLS ARE DESTINATION
POINTS WITHIN THE AREA, 4
POOL SITES WHERE DIFFERENT
ASPECTS OF THE LANDSCAPE ARE
HIGHLIGHTED.

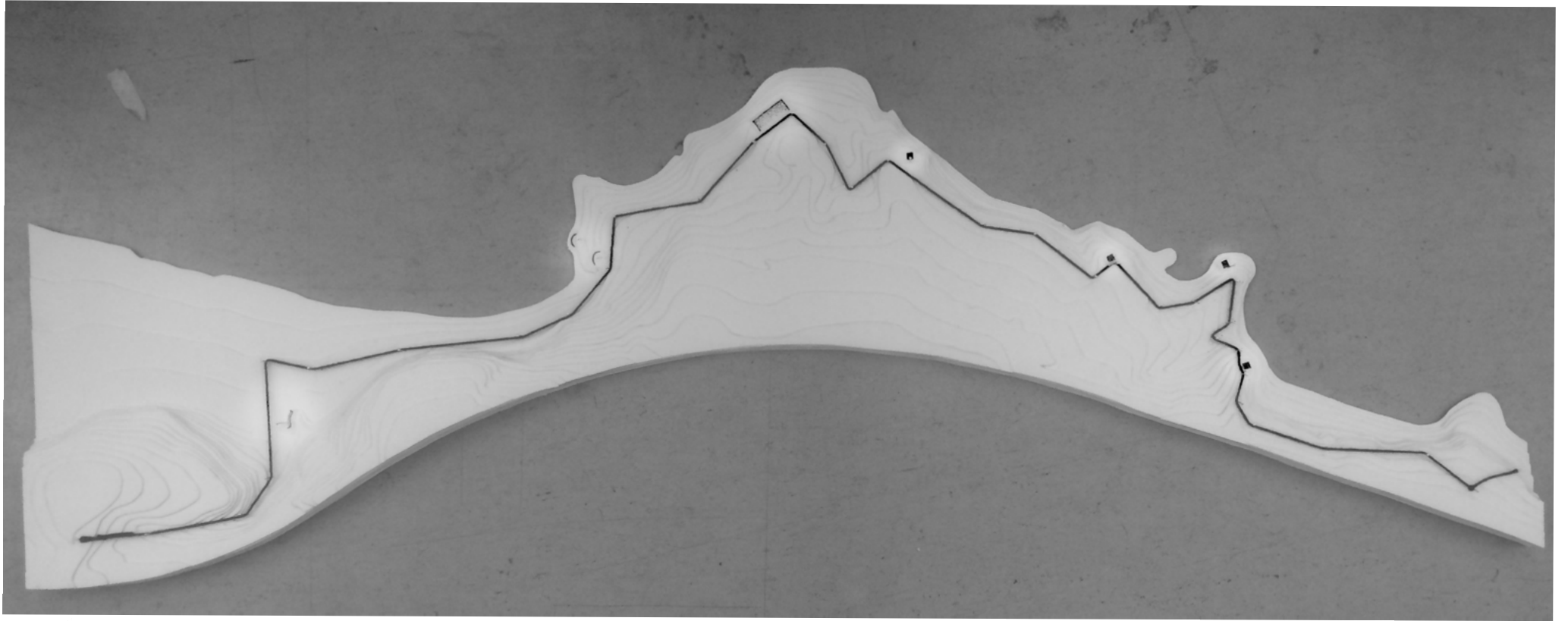


2ND INTERRIM PRESENTATION

PATHS CONNECT THE AREA INTERNALLY. THE PATHS ARE CONCRETE SLABS WHICH CUT A SECTION INTO THE TOPOGRAPHY, REVEALING SUBTLE CHANGES IN THE LAND.

THE MAJORITY OF VISITORS WILL ARRIVE BY CAR TO THE AREA. FOUR DISCRETE PARKING SITES, EACH ACCOMMODATING ONLY A FEW CARS PROVIDE ACCESS TO AREA.





THE POOL UNDER THE HILL

This pool hugs a small hill in the landscape which shelters the bather from the cold northern wind and the gaze of the path as it meanders towards the north and the next pools.

The changing rooms huts sit at a higher elevation from the pool which creates a visual distance between the huts and the pool. Also, at the same elevation as the huts is a viewing platform for those who want to enjoy the views but don't want to get into the pool.

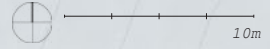




viewing platform

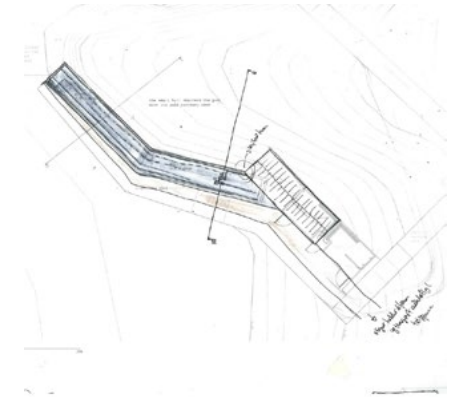
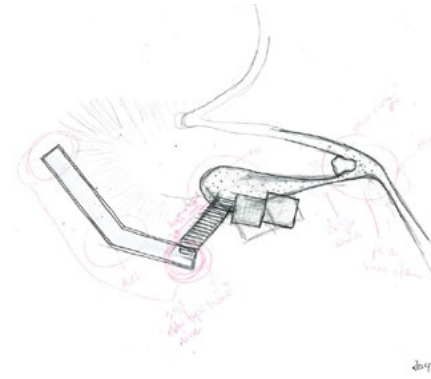
retention wall and seating

changing rooms

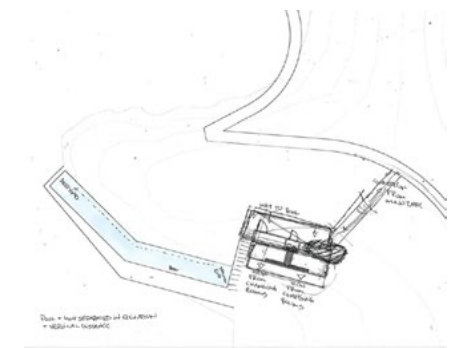
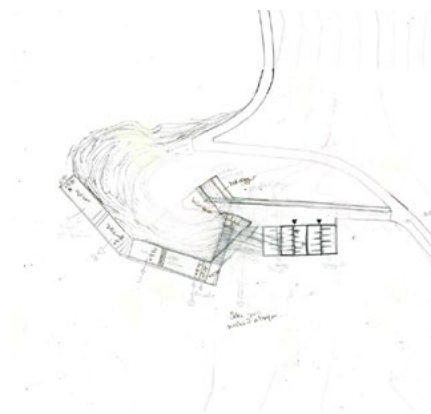




The Pool under the Hill

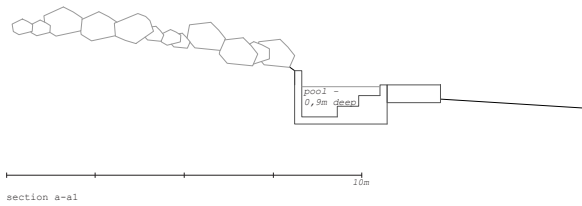
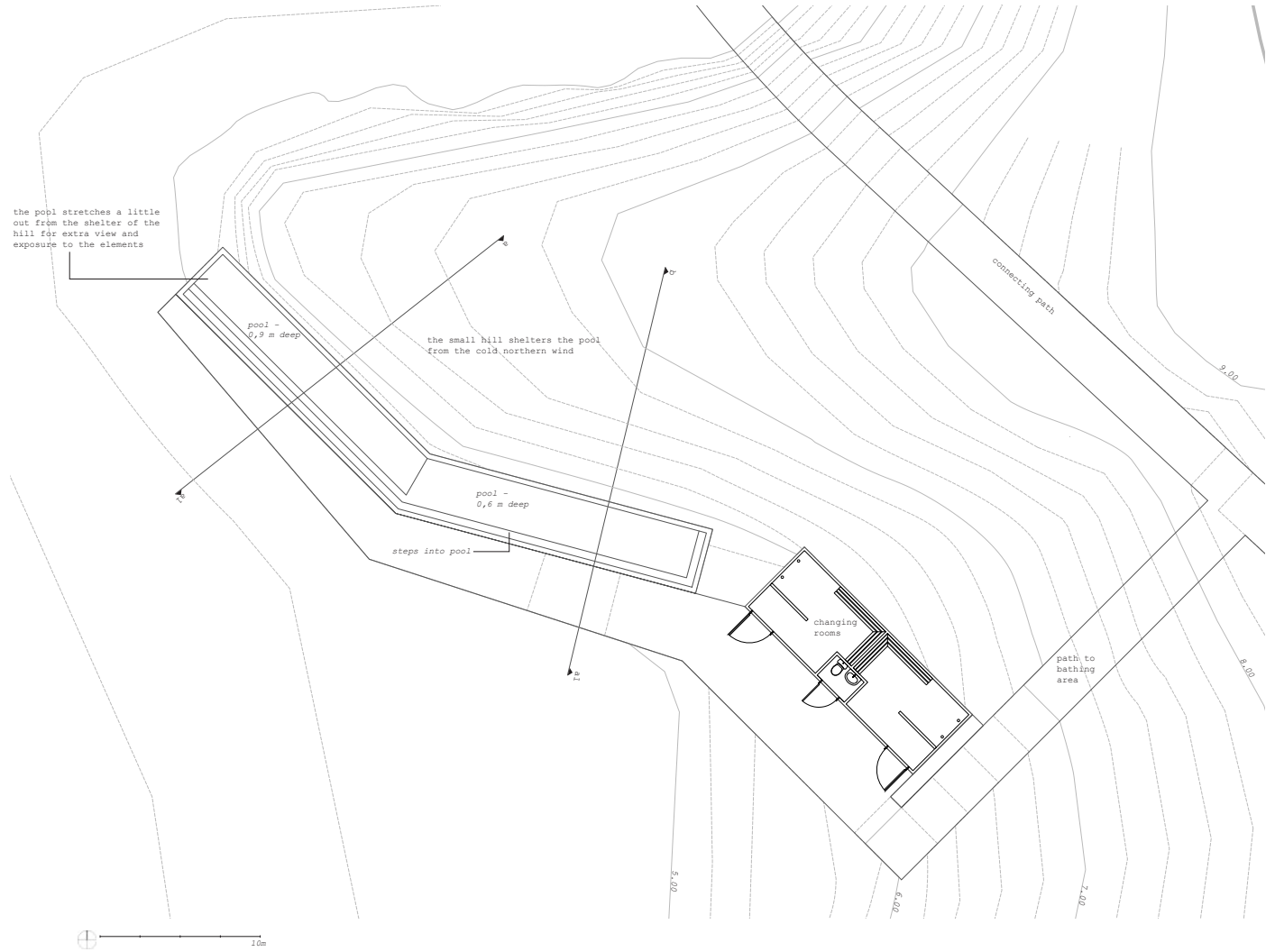


THE POOL UNDER THE HILL : PROCESS

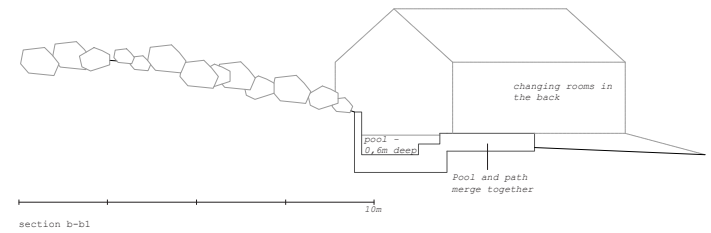


POOL 1

Elongated pool hugging a small hill in the landscape while providing panoramic views towards the fjord. The hill provides shelter from cold northern winds while views are open towards the south and west.



section a-a1

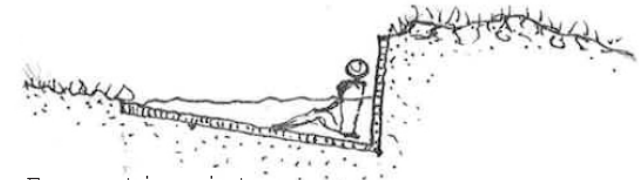
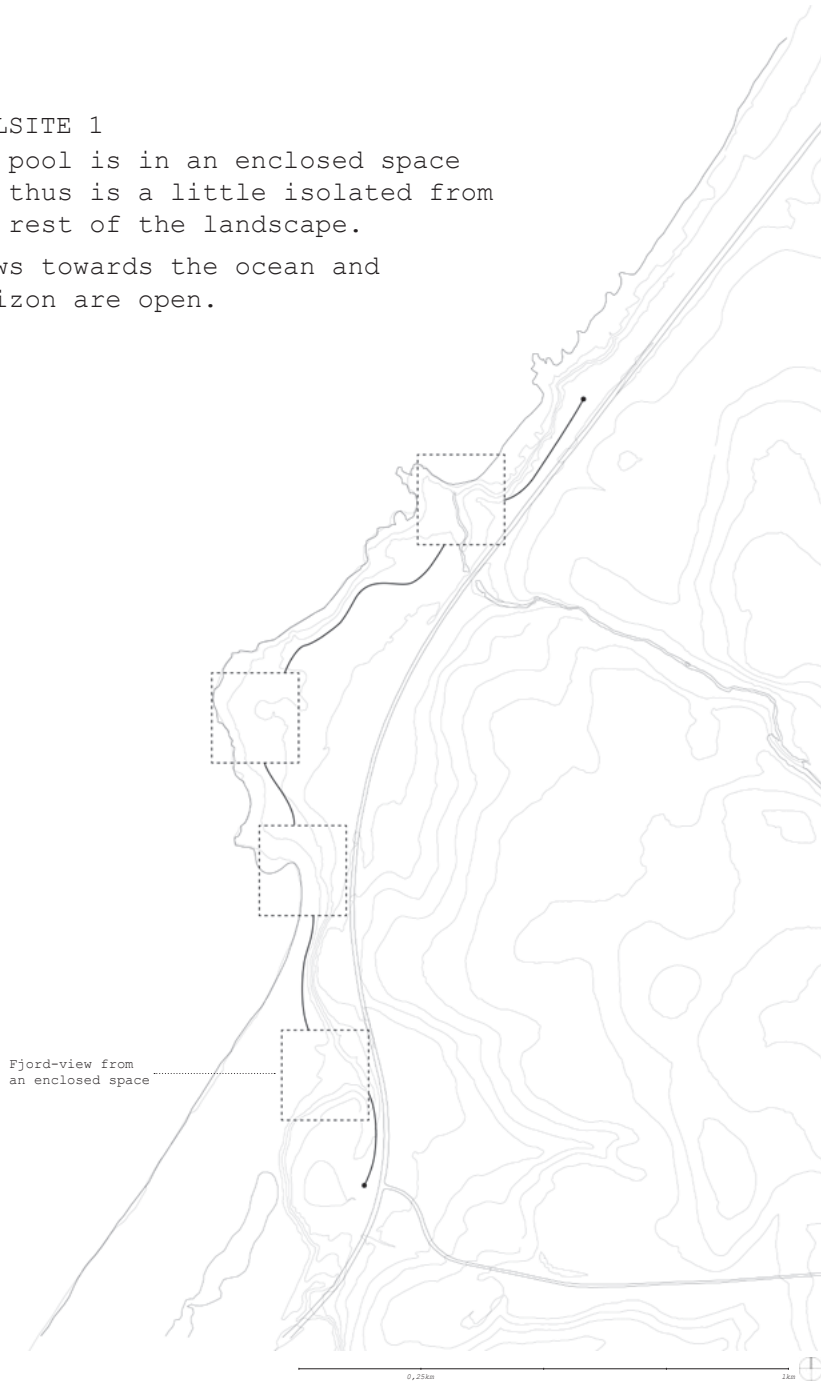


section b-b1

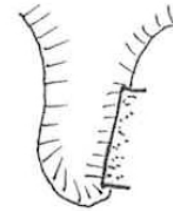
POOLSITE 1

The pool is in an enclosed space and thus is a little isolated from the rest of the landscape.

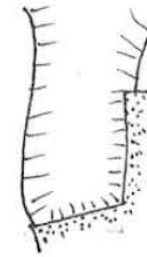
Views towards the ocean and horizon are open.



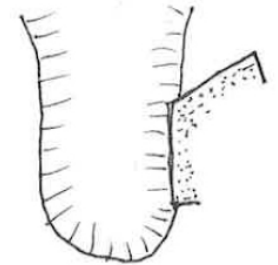
Excavation into the topography



simple excavation



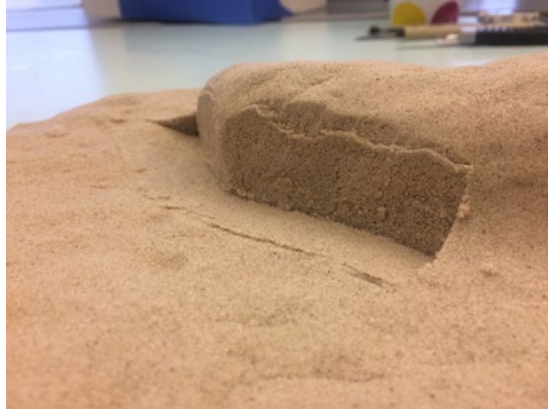
extroverted excavation



introverted excavation



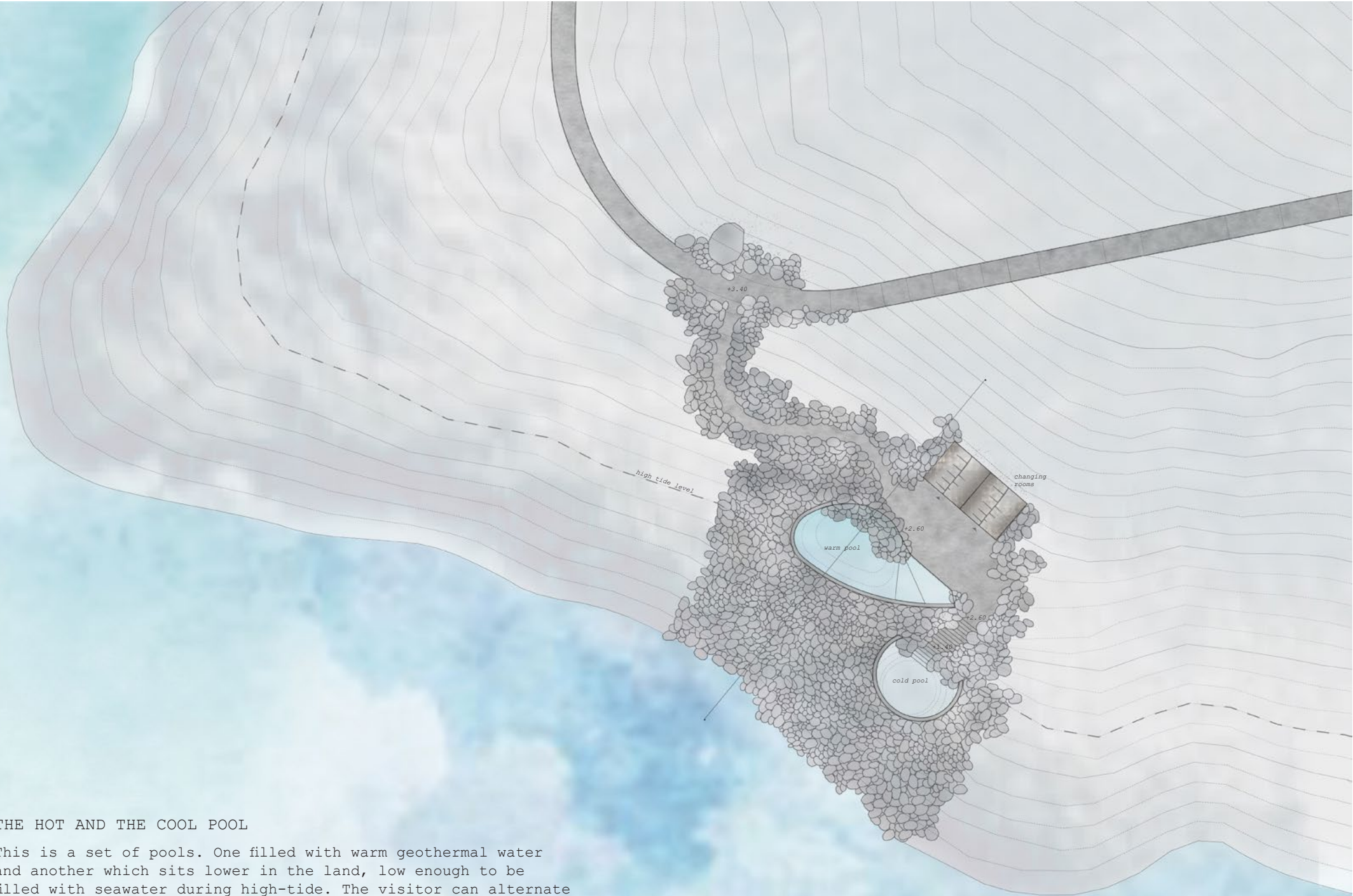
Long and narrow pool allows for horizontal views, either alone or in a group.



Extroverted
excavation



Introverted
excavation

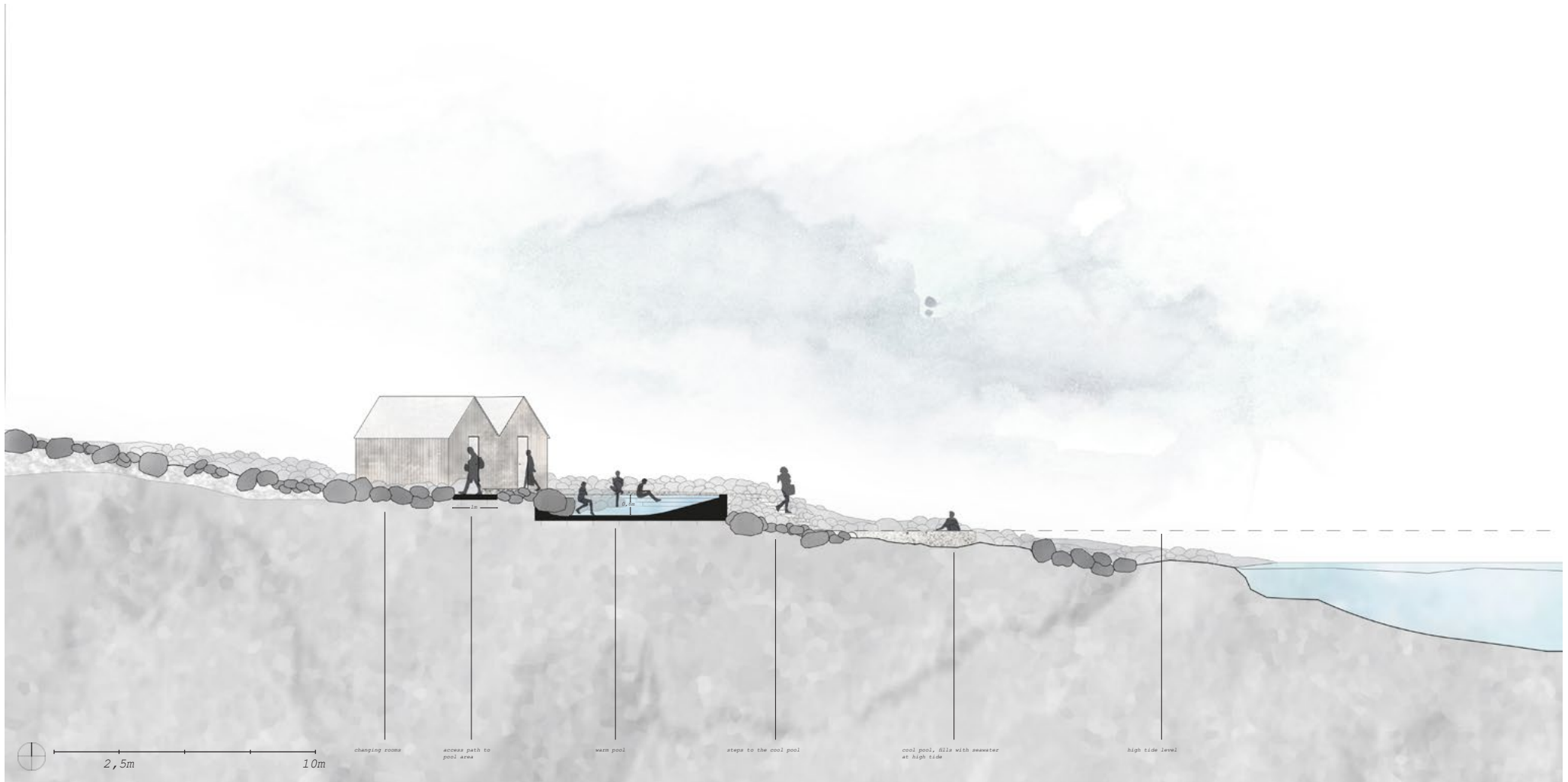


THE HOT AND THE COOL POOL

This is a set of pools. One filled with warm geothermal water and another which sits lower in the land, low enough to be filled with seawater during high-tide. The visitor can alternate between the to, feel on the skin heat produced by the geology below the earth's surface and the cold of the North Atlantic ocean, two opposites in the Icelandic nature.

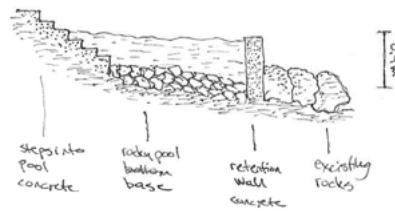
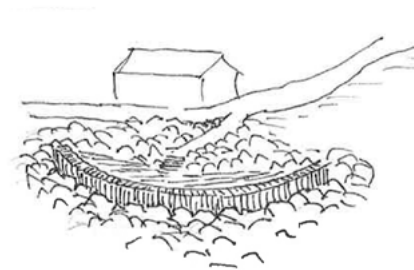
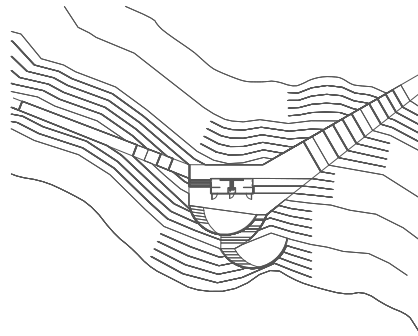
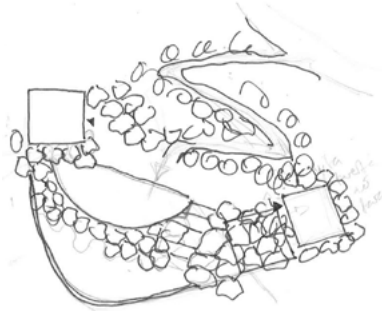
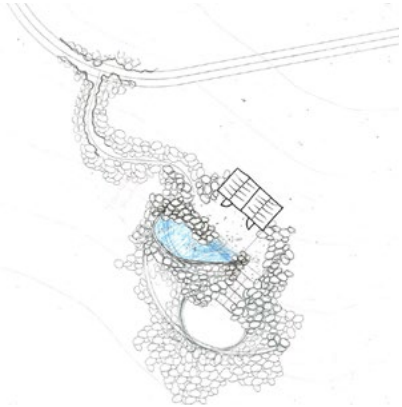


10m





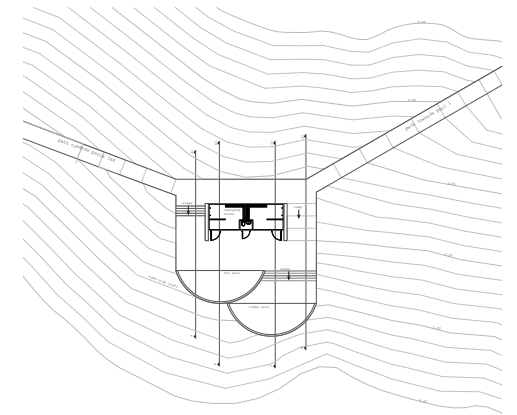
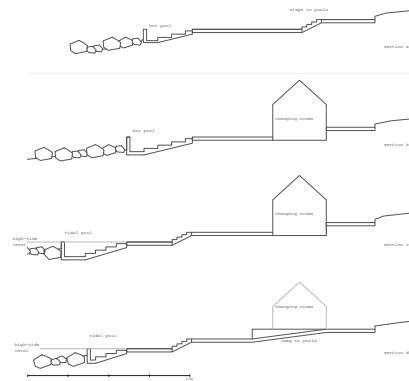
THE HOT AND THE COOL POOL : PROCESS



steps into pool concrete
 rocky pool bottom base
 retention wall concrete
 existing rocks

POOL 2

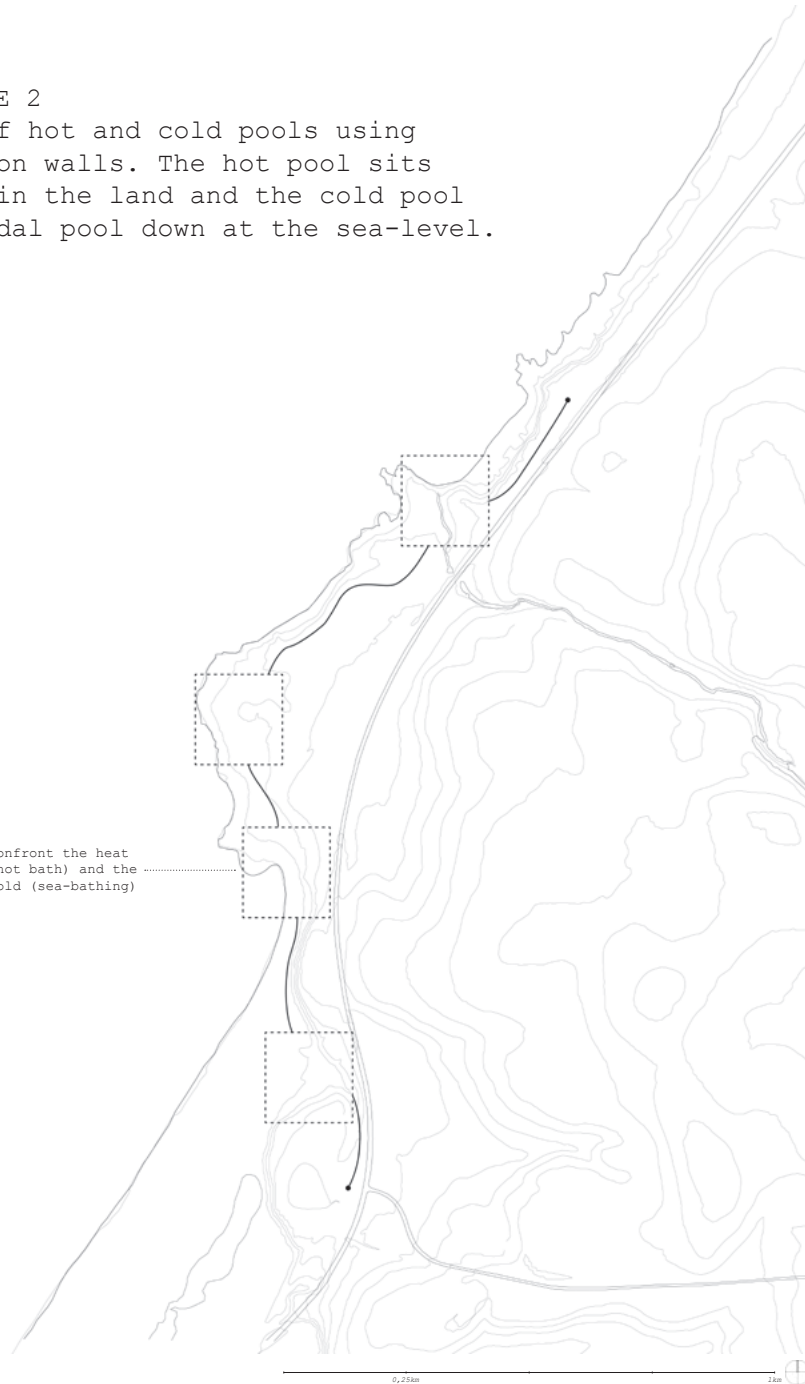
A set of pools, one pool with hot water and a tidal pool at a lower level. Here the visitor can feel the heat from the geology below their feet and the cold of the N. Atlantic ocean, two opposites of the Icelandic nature.



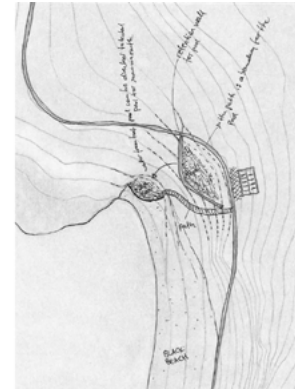
POOLSITE 2

A set of hot and cold pools using retention walls. The hot pool sits higher in the land and the cold pool is a tidal pool down at the sea-level.

Confront the heat (hot bath) and the cold (sea-bathing)



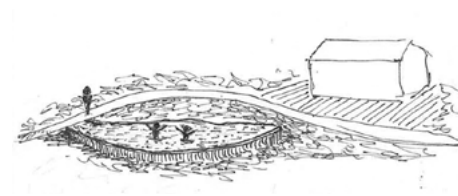
INITIAL SKETCHES AND INSPIRATION



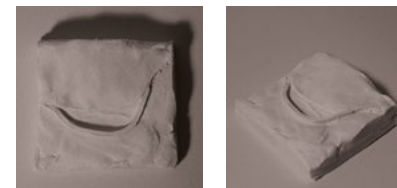
Two pools, one warm geothermal pool and one cold tidal pool.

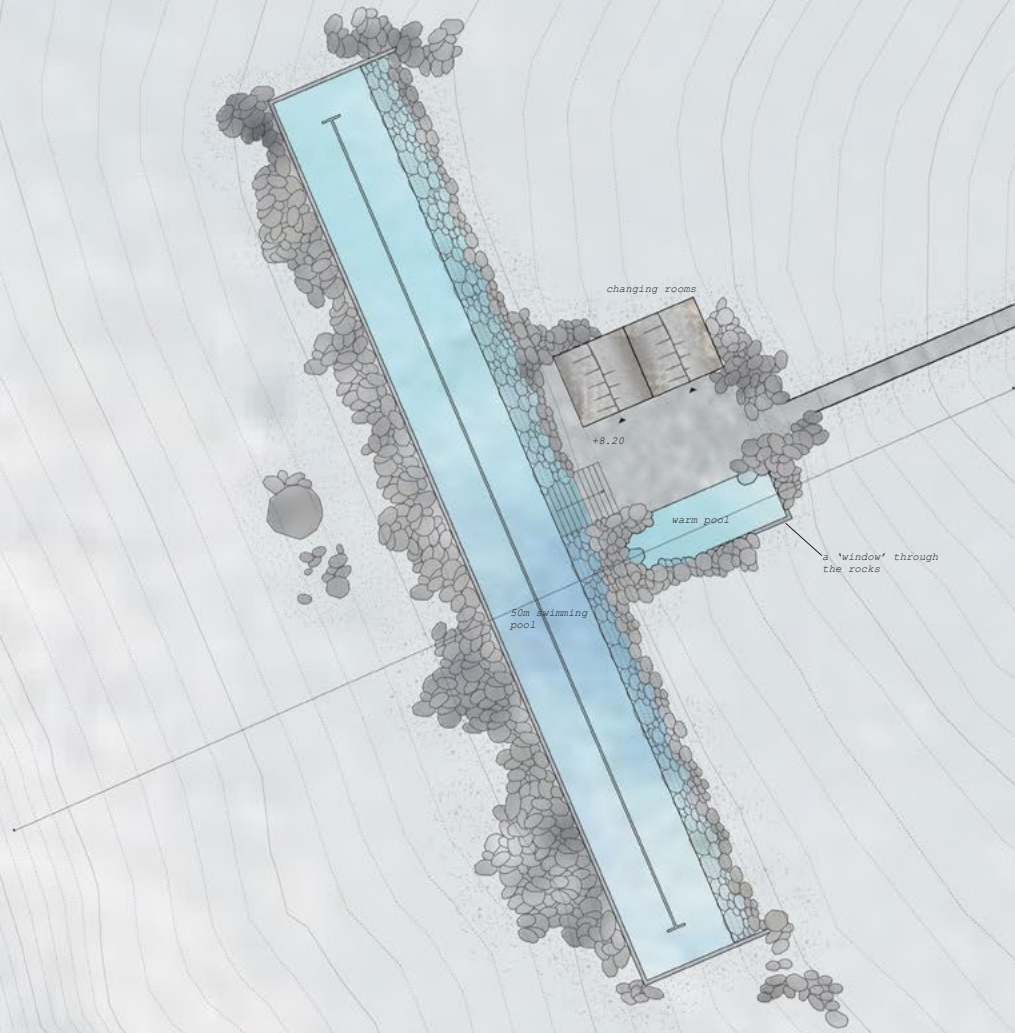


The pools are constructed as retention walls built into the topography.



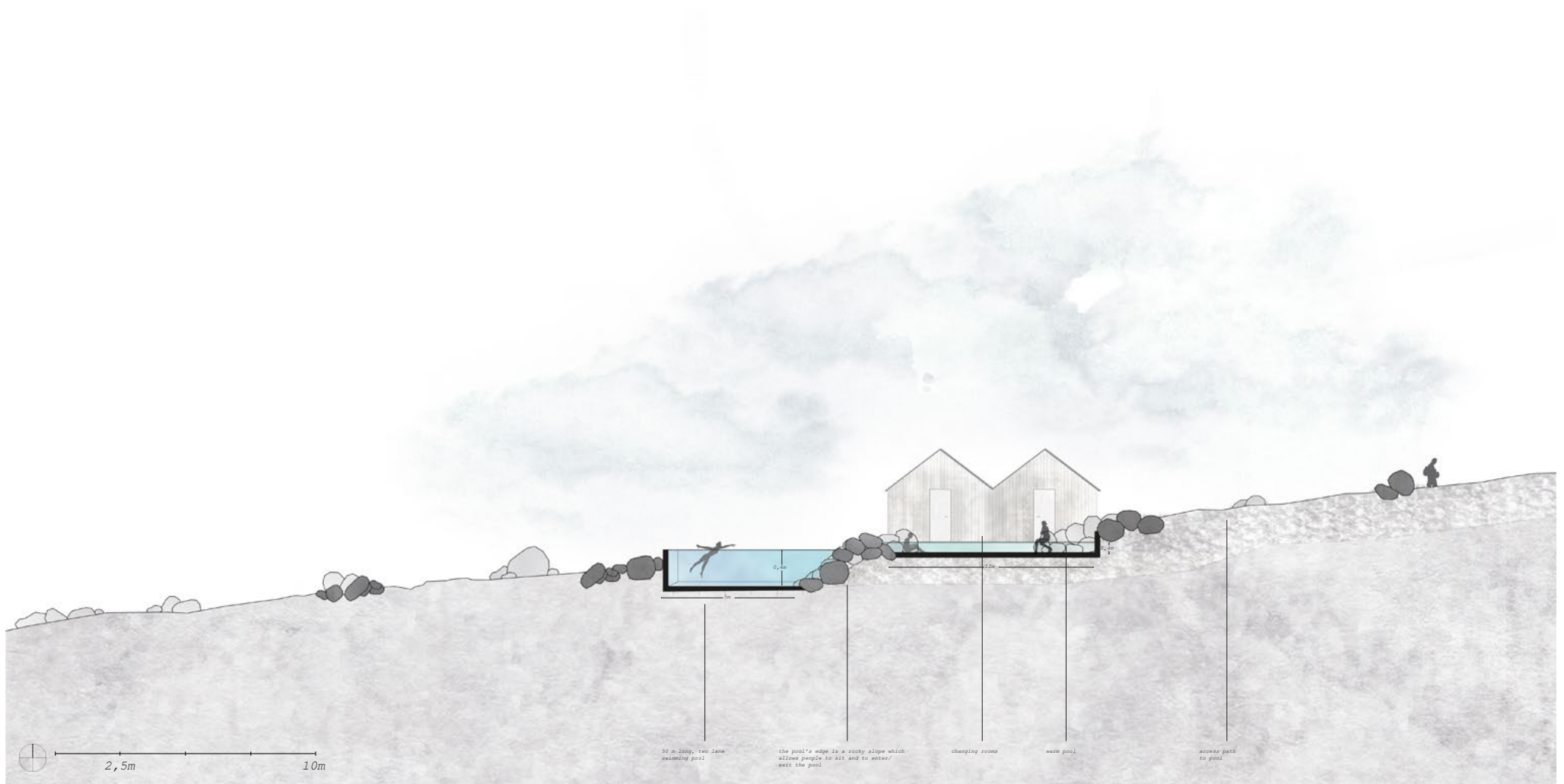
Pool, path and a small building for changing facilities.



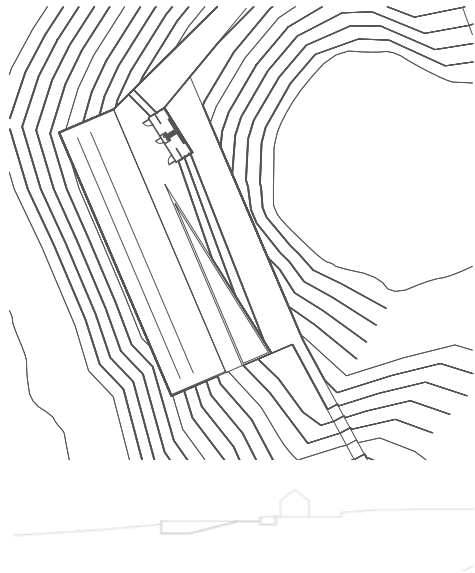
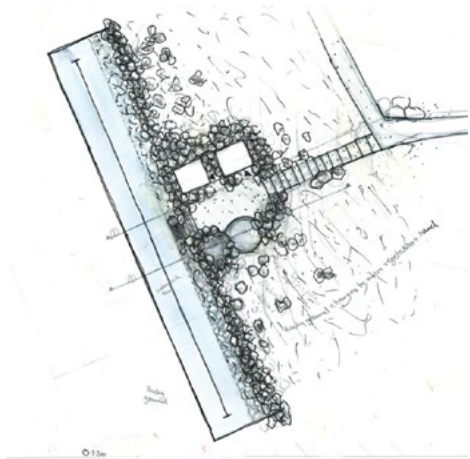


HORIZON SWIMMING POOL

This pool is for the swimming enthusiast, a 50m long pool for the workout and hot pool to relax afterwards. The orientation of the swimming pool is so when swimming towards the north, the swimmer is headed straight towards the horizon, the outer boarder of the habitable world. The hot pool sits within rocks in the land, enclosed and sheltered, a contrast to the exposed swimming pool.

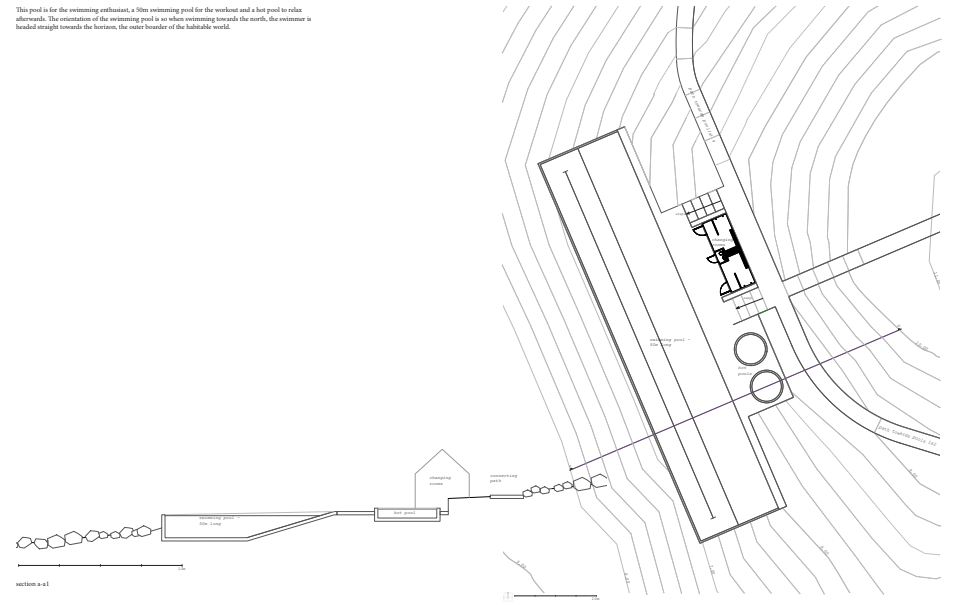






POOL 3

This pool is for the swimming enthusiast, a 50m swimming pool for the workout and a hot pool to relax afterwards. The orientation of the swimming pool is so when swimming towards the north, the swimmer is headed straight towards the horizon, the outer border of the habitable world.



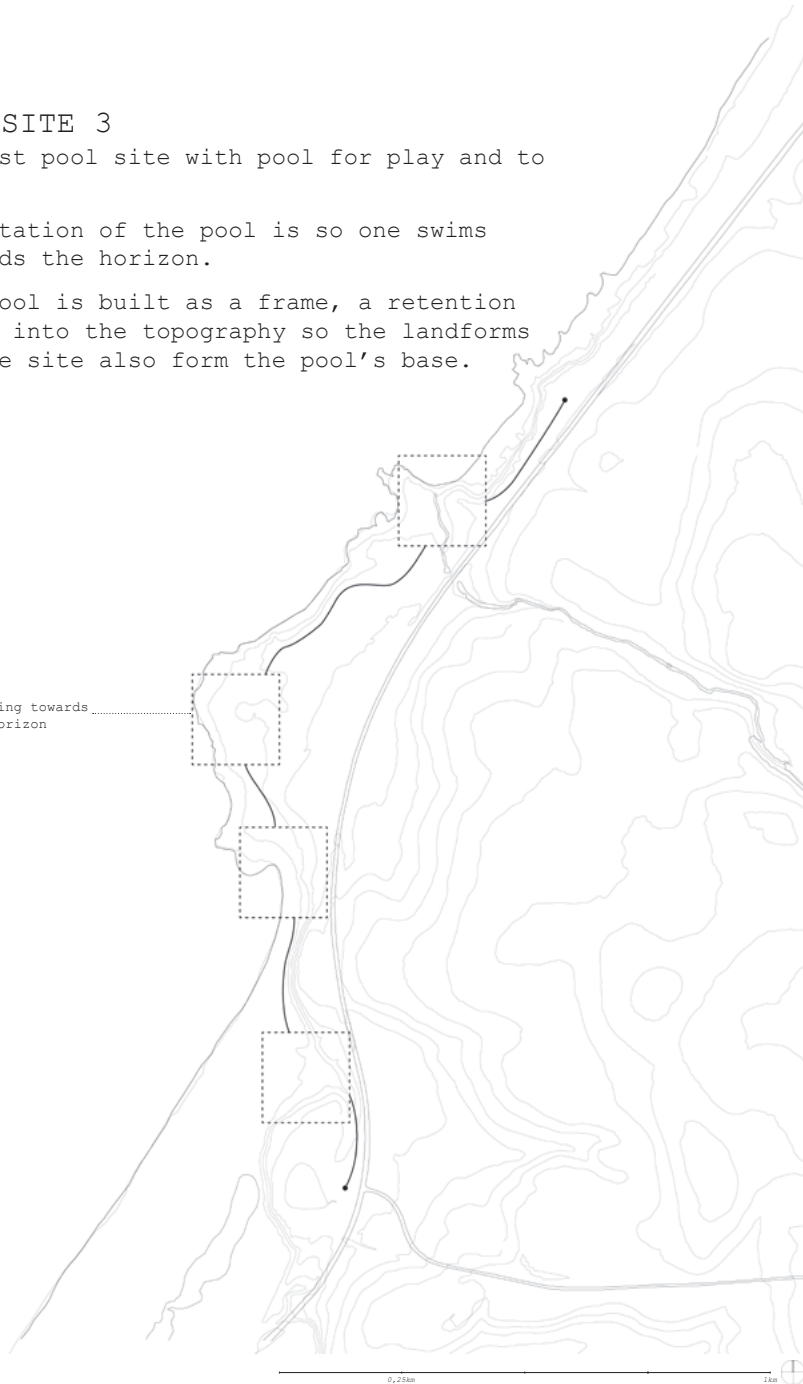
POOLSITE 3

Largest pool site with pool for play and to swim.

Orientation of the pool is so one swims towards the horizon.

The pool is built as a frame, a retention wall, into the topography so the landforms of the site also form the pool's base.

Swimming towards
the horizon



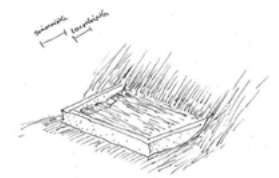
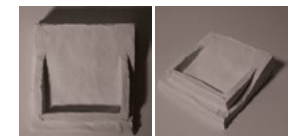
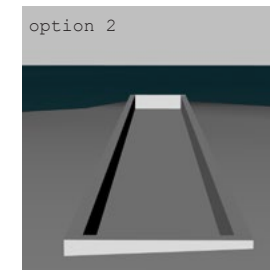
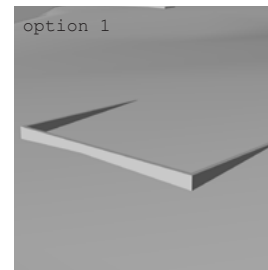
INITIAL SKETCHES AND INSPIRATION

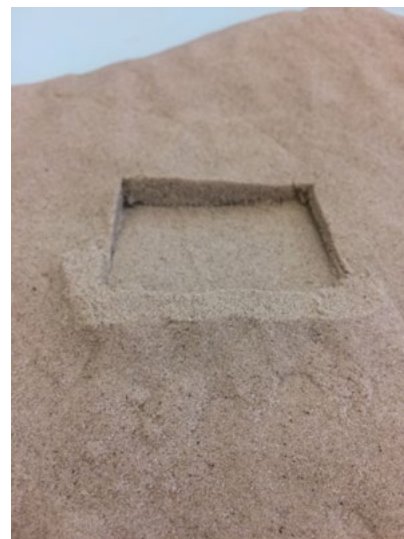
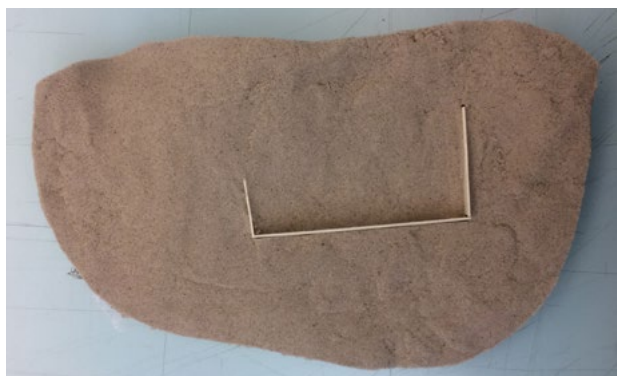
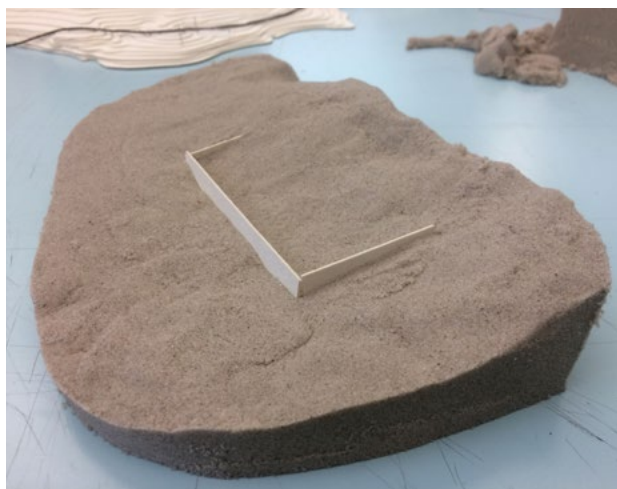
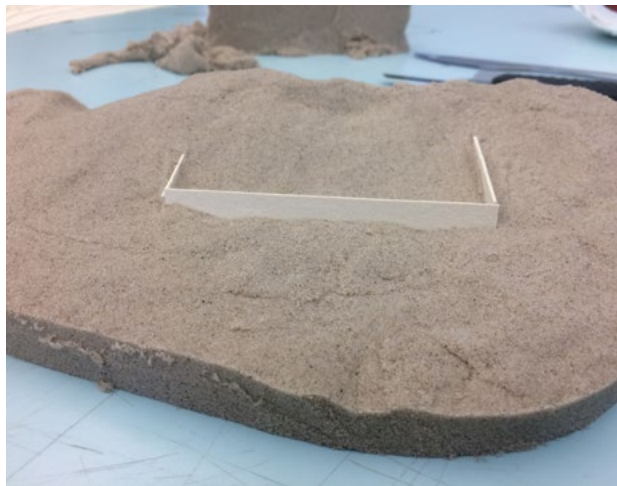


Hofsós swimming pool, Iceland: The landscape surrounding the pool is a part of the pool area. When swimming in the pool the fjord and horizon are in plane view and it seems as if one is swimming towards the islands in the fjord.



Seljavallalaug, Iceland & Pool on the beach by Alvaro Siza: The pools are built into the landscape, the structure it self is geometric which contrasts the organic forms of the landscape.

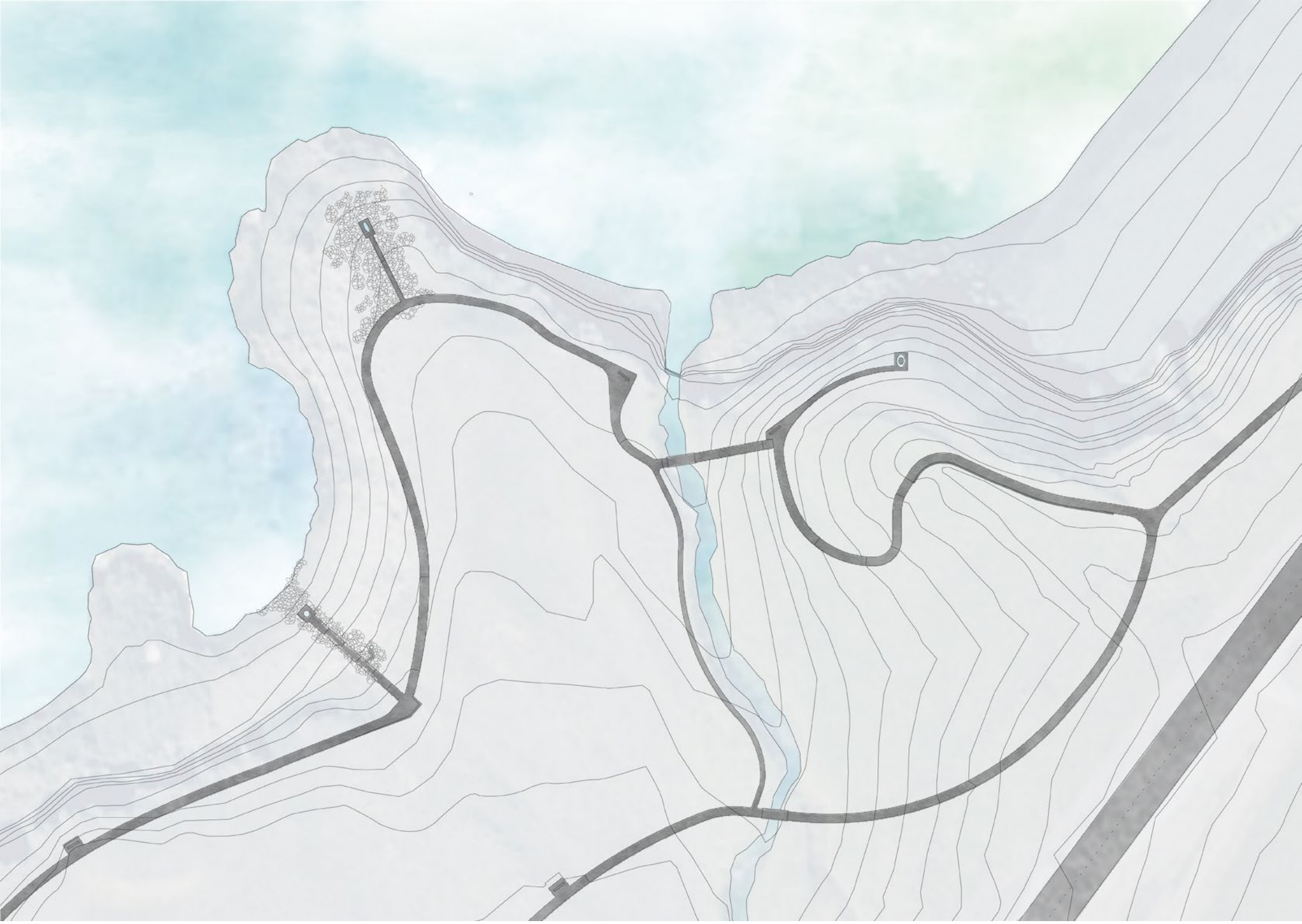




FOOTBATHS AT THE SHORE

Not everyone wants to submerge themselves in the warm water,
but still would like to feel the warm water on their skin while
taking in the views. Three footbaths along the shoreline meet
this need.

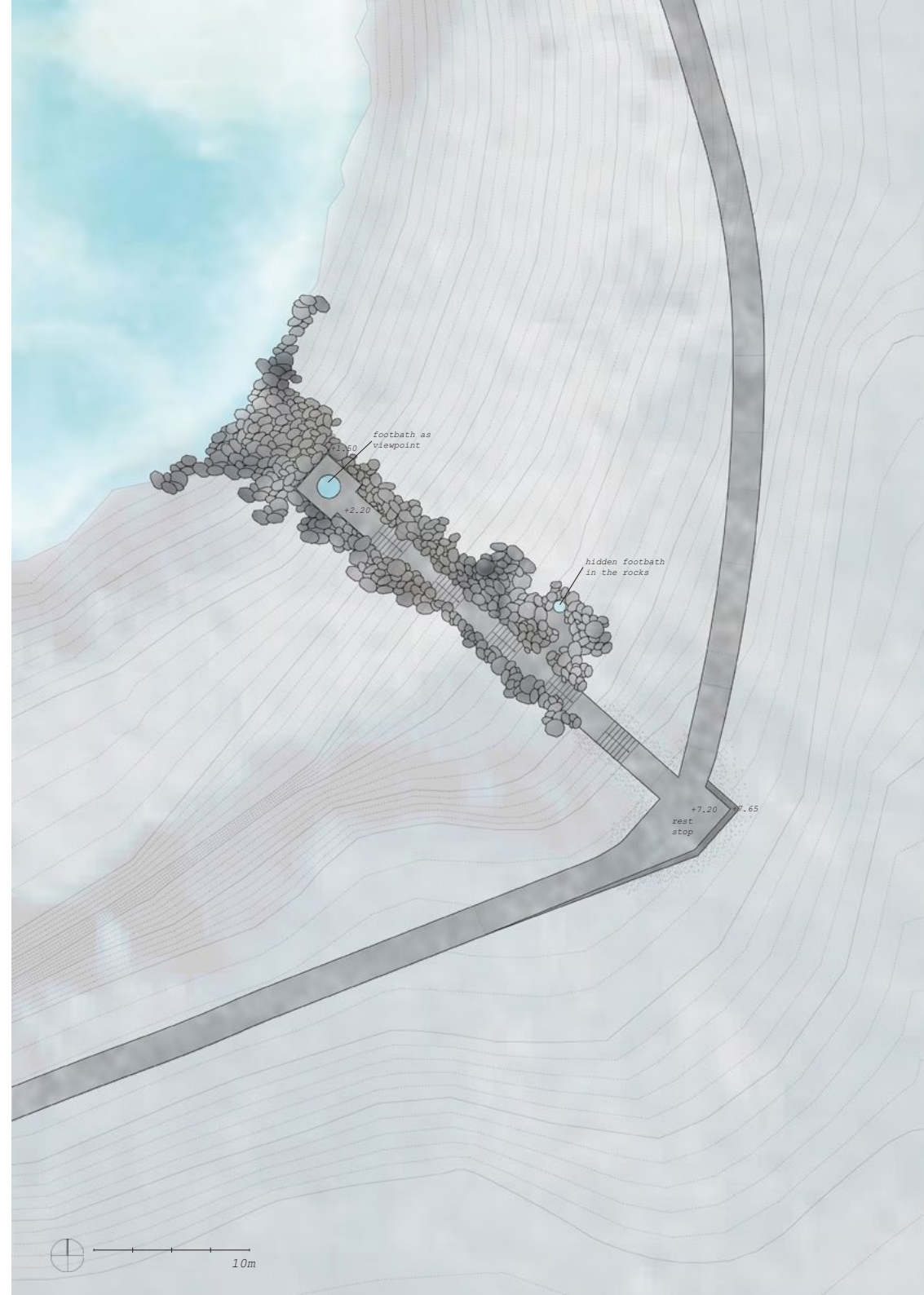






FOOTBATH IN THE TIDE

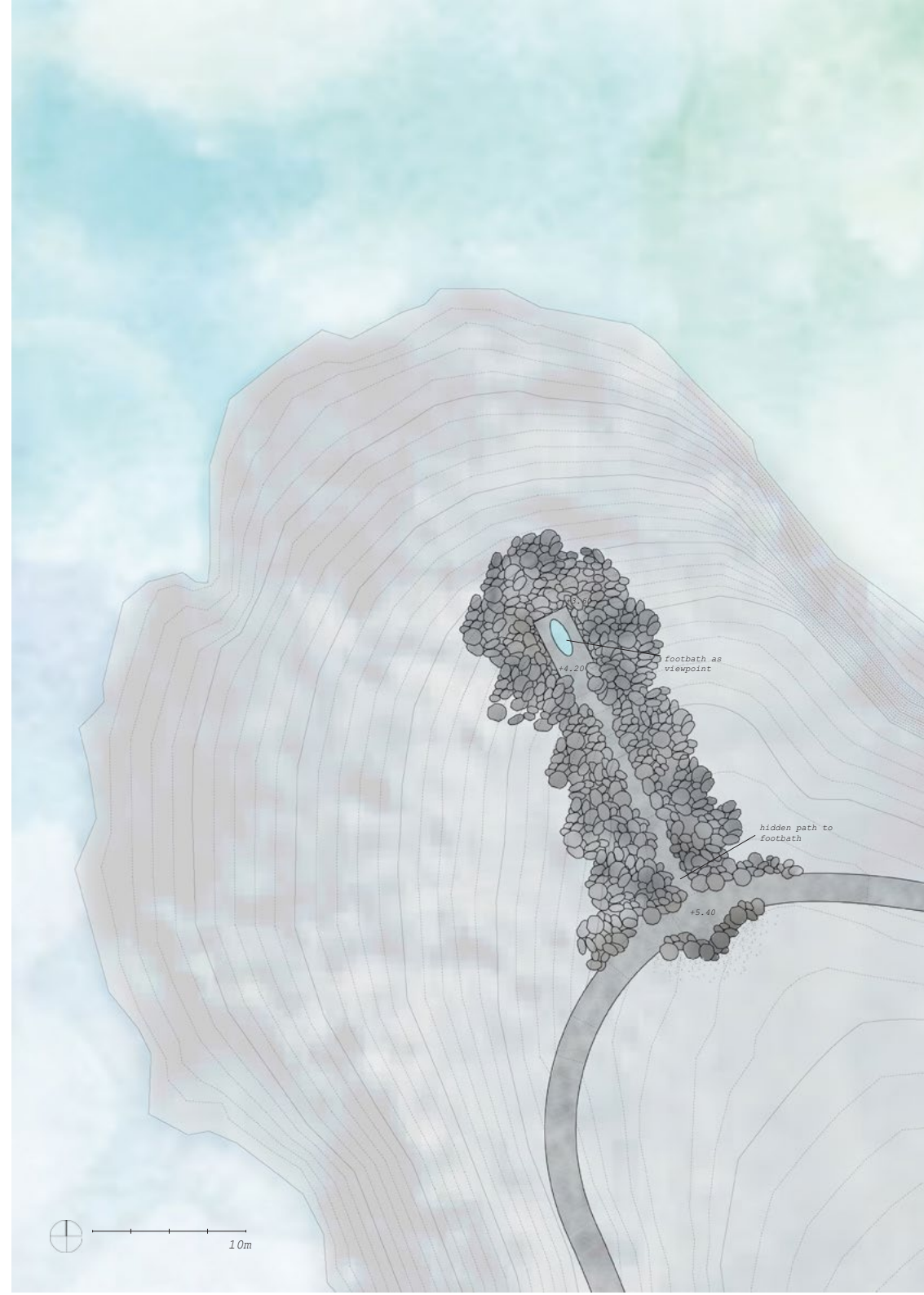
This footbath sits at the border of the high-tide so twice a day, the ocean surrounds the platform in which the footbath is carved. From there one can hear, smell and feel the spray of the waves on their skin, while being exposed to the views. Its circular form lets the visitors orient themselves to face different parts of the shore, be exposed to the wide views or turn towards the land, with the ocean to their back. On the way down to the bath, is a small pool, hidden in the rocks. Those who can find it can enjoy a the views and the warm water in peace and quiet.





ROCKY BEACH FOOTBATH

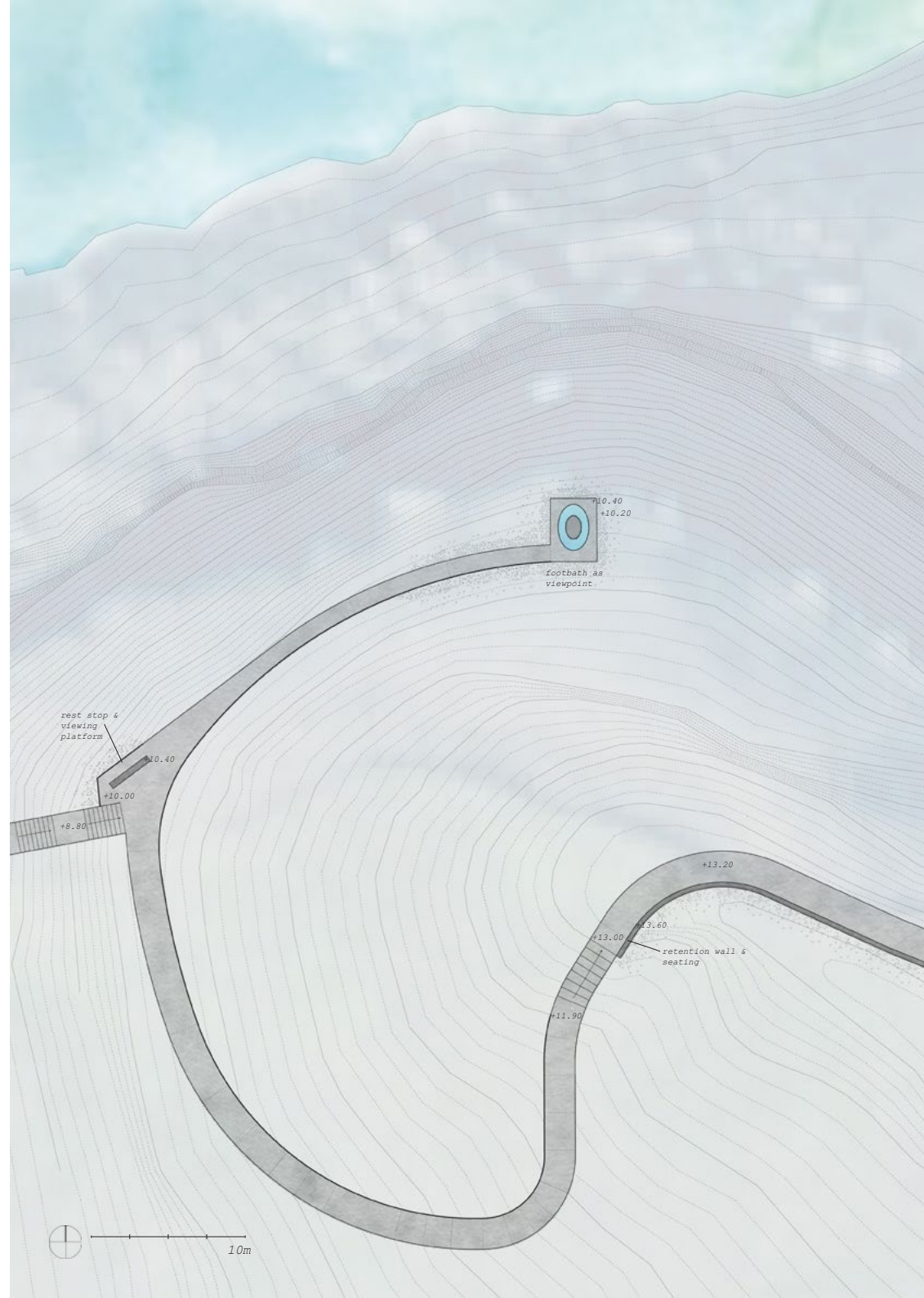
This footbath sits within the rocks on the beach, a bit high like a beacon on the shore. The path to the bath is slightly hidden within the rocks, a secret passage to the bath. The form of the bath itself is an ellipse which follows the form of the small headland on which the bath sits.





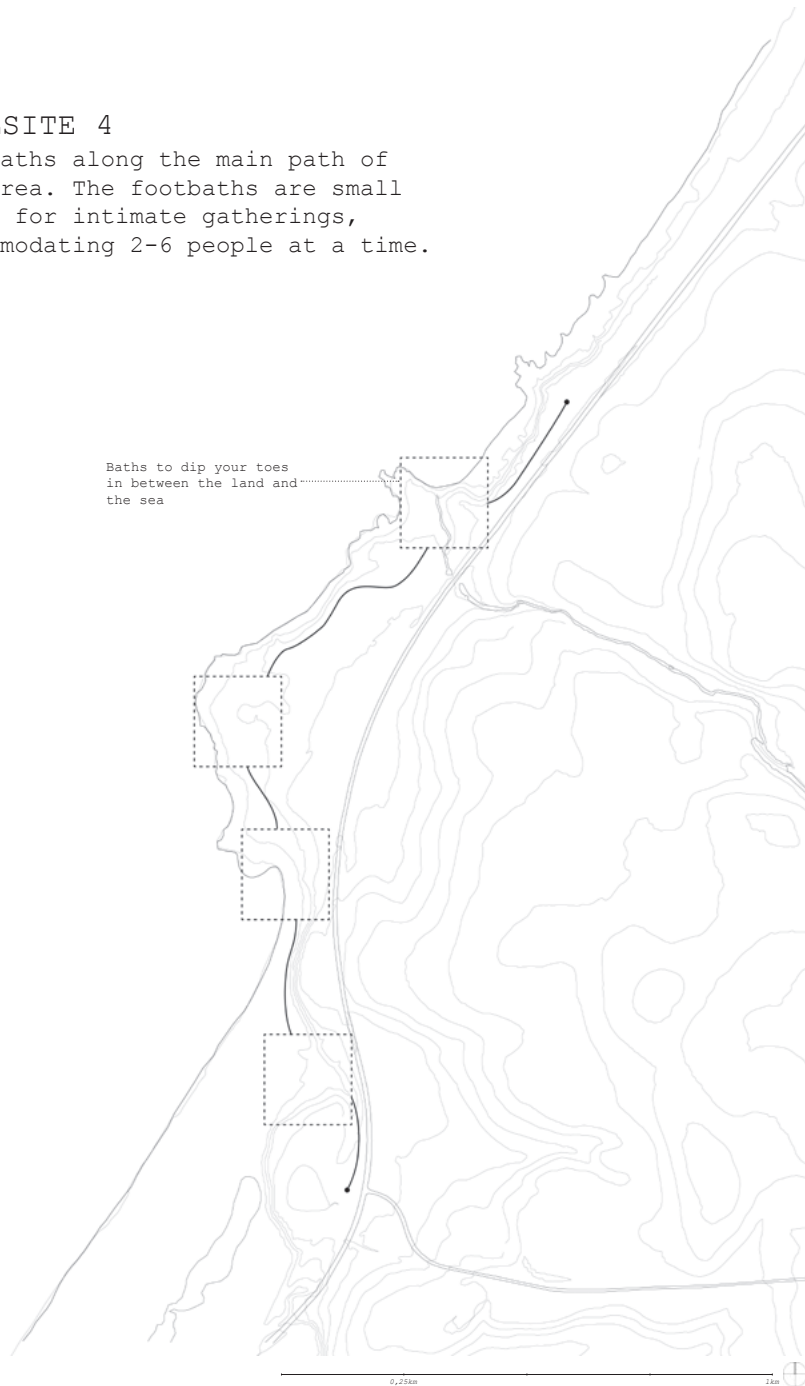
FOOTBATH ON THE HILL

This footbath sits above a small rock-face at the shore. As it sits high in the land, the views are unhindered towards a small waterfall to the south, a black sandy beach to the north and the horizon in between. The bath itself is a circle with the chance to sit in the middle, for a full circle views of the landscape.

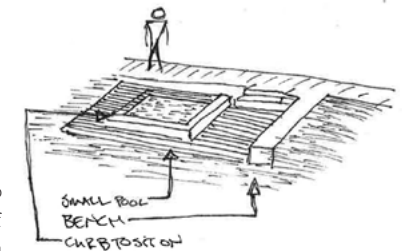


POOLSITE 4

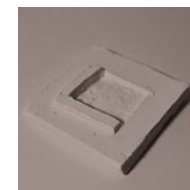
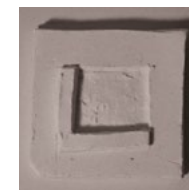
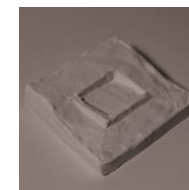
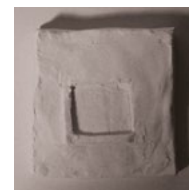
Footbaths along the main path of the area. The footbaths are small pools for intimate gatherings, accommodating 2-6 people at a time.

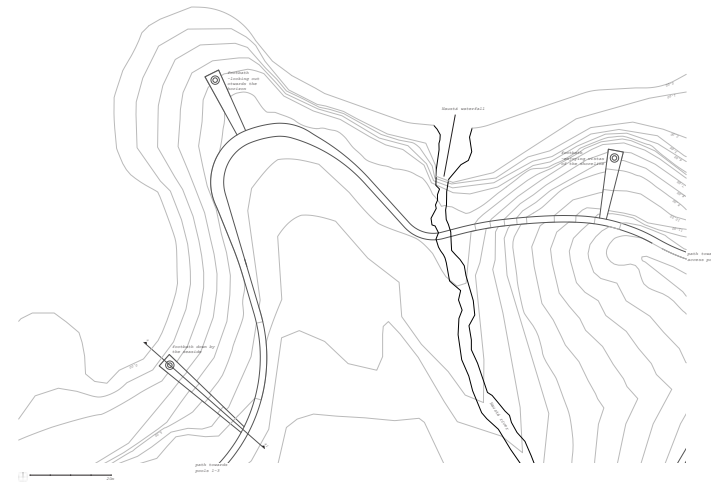
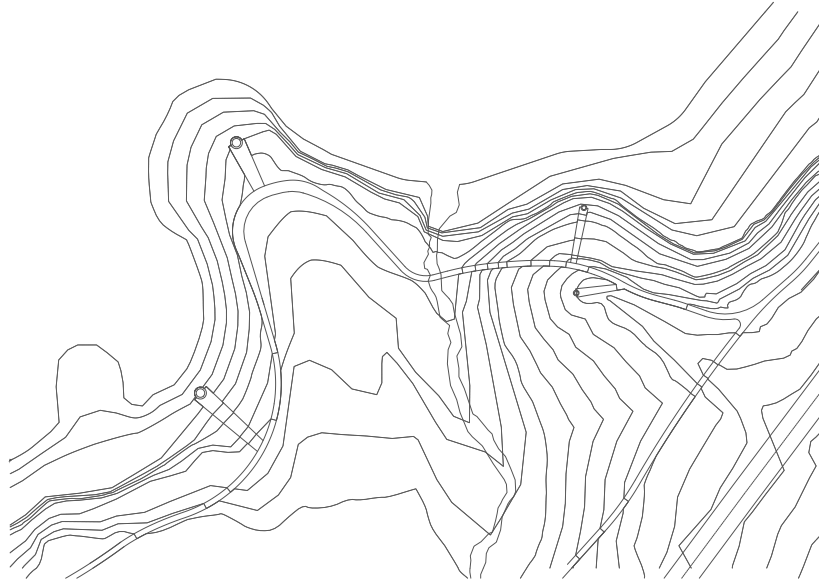


Small, circular pools are common through the history of Iceland. Their purpose was often both to wash and to contemplate while soaking in the hot water.



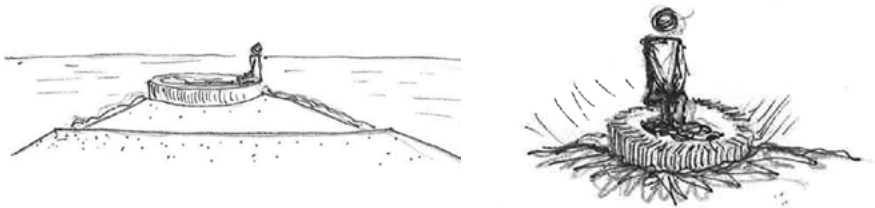
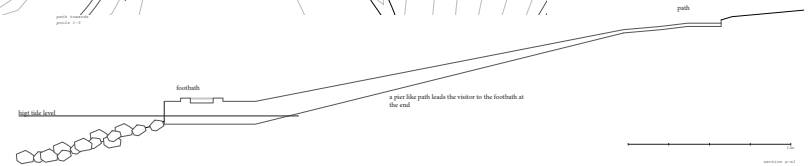
A pool site where it is possible to sit and relax with a small group of people while soaking ones feet in the warm water.





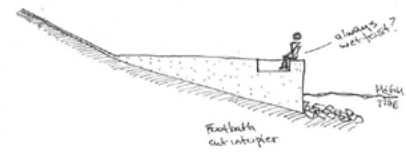
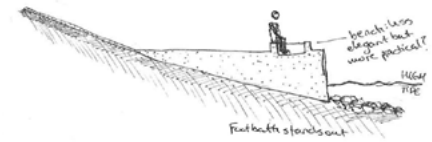
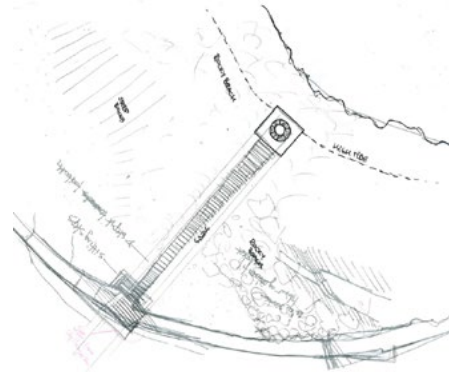
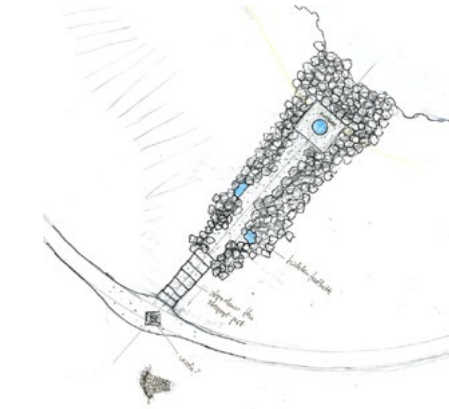
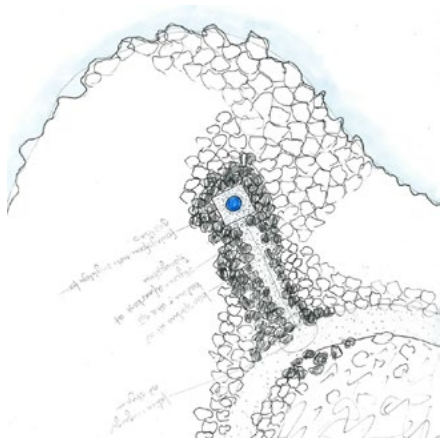
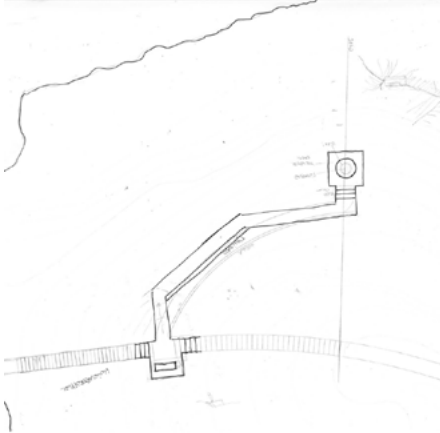
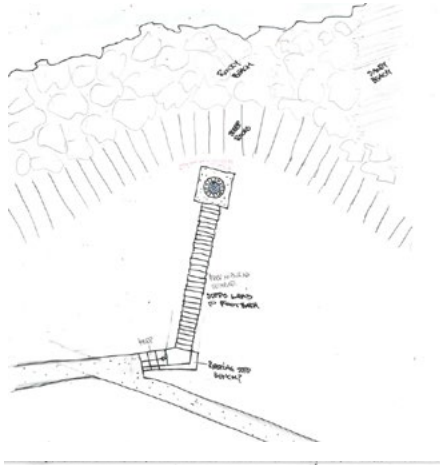
POOL(S) 4

Small pools intended as footbaths for small and intimate groups of people. The pools are at the end of a pier-like concrete path where the visitor approaches the pool and view from the platform of the pier.



Footbaths for intimate gatherings in the landscape. The footbaths are at the end of a sort of pier, a reference to the culture of fishing in Iceland.

SKETCHES





Footbaths concentrated around the Naustá river and waterfall.

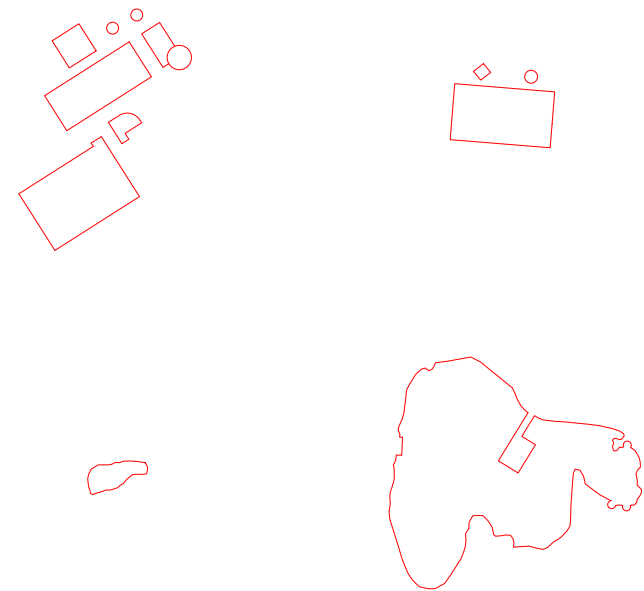


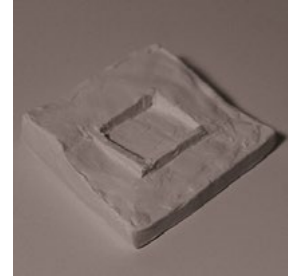
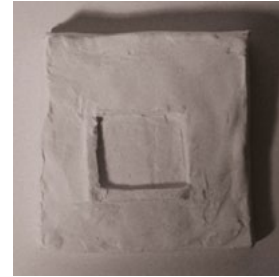
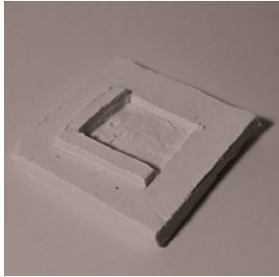
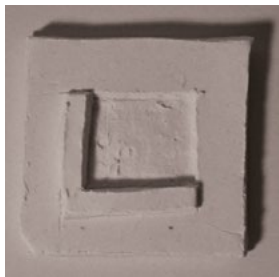
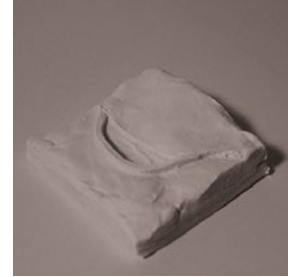
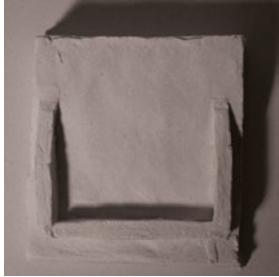
Footbaths spread out along the path between Naustá river and poolsite 3.

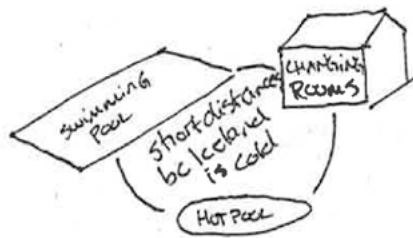
The basic form of the Icelandic swimming pool is 1-2 rectangular pools for swimming, 12m, 25m or 50m long.

Most pools have one or more hot tubs, most often 38-40°C and 41-42°C warm water.

'Natural' pools often have organic and irregular forms, where topographic features dictate the form. When a pool has been constructed around a hot spring source the form is most often circular or rectangular.

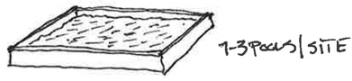




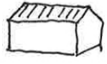


Cuts in the landscape: describes/reveals the nuances in the land

The paths which connect the bathing area internally are made of concrete and they create sections in the landscape, reveal the nuances in the topography. The height differences either create microclimatic sections where vegetation can take hold, drawing the outline of the concrete structure. In other parts the brink can serve as informal seating.



1-3 pools | SITE



Simple shed for changing facilities



PATH NEXT TO THE POOL AREA, CONNECTS THE SITES



Simple paving contrasts the existing ground condition.

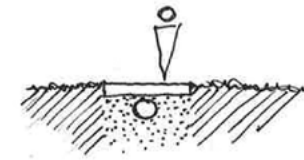
MATERIALS



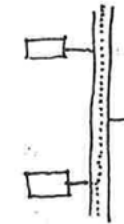
STEPA



BARA-ZAKN



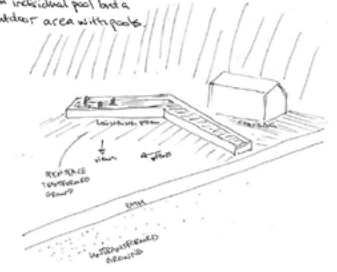
Connecting paths - hot water tube below



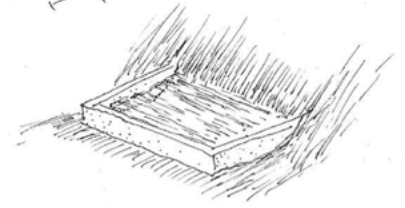
Pools next to the path.

Hitavaburlegain undir stígnum og tengir íti langarnar.

The project is not about an individual pool but a outdoor area with pools.

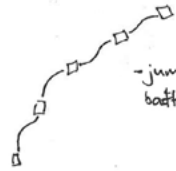


Swimming
→ Connections





jumping between pools

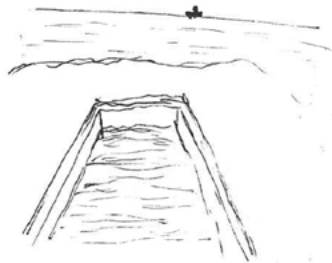
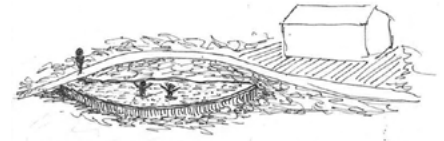
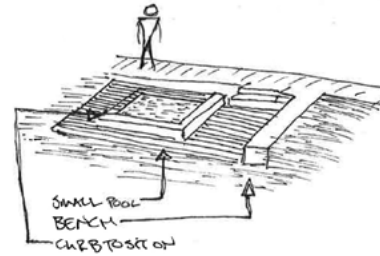


- jumping between bathing sites



Views to the horizon:
prospect

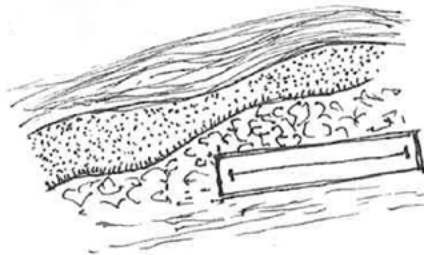
warmth
of the
pool:
refuge



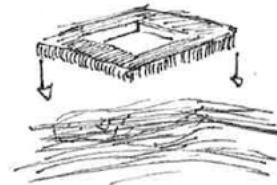
swim towards the horizon

Pool points due north, as a sign of direction.

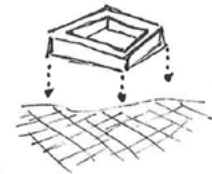
→ frokor þvert á landhallam



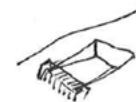
25m pool for swimming but only 2 lanes.



add a frame onto the land. The pool is not an excavation but in an addition.



FRAME PUT ONTO THE GROUND



Excavate + retention

INITIAL FORM TESTING



Smooth pool and frame, inserted on top of the ground. The smoothness of the pool contrasts the roughness of the ground.



Smooth pool frame, inserted on top of the ground. The pool's floor imitates the rough ground.



The ground and pool are a continuous fabric. The water plane of the pool becomes a focus element.



Excavation into a hill on one side and retention wall on the other.



Excavation and retention + amount of material to displace.



A traditional swimming pool in length but only 2 lanes to contradict the tradition.



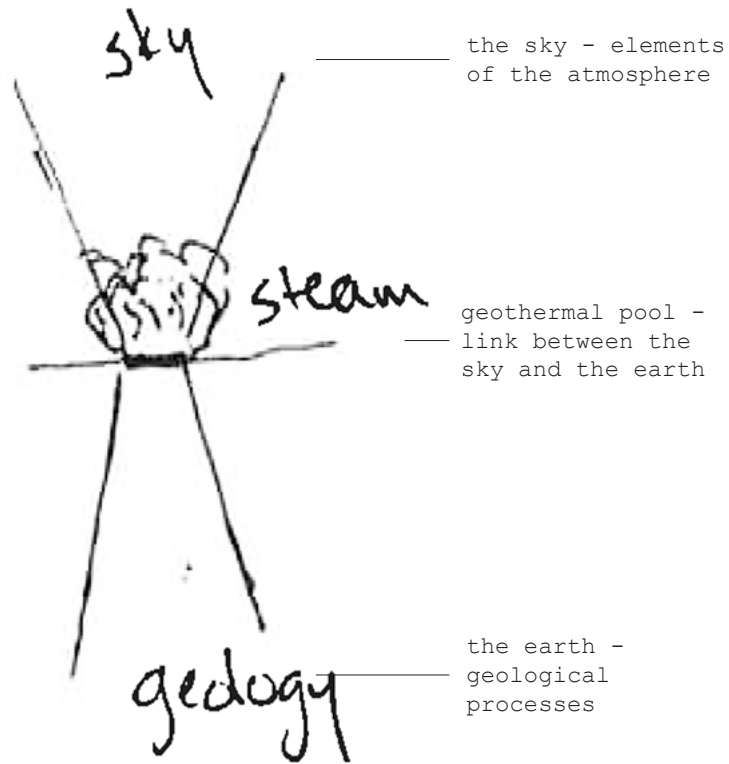
pool to stay in
active use

↓
feel the geo-
processes on
your own
skin



pool to observe
passive use

↓
mainly reveals
truth of the
landscape



The surface of the pool mirrors the sky, clouds and stars, it signals calm weather with its stillness and expresses the power of the wind in its swirling surface while the steam from the hot water hints at the geological processes hidden from view beneath the surface.

A grayscale landscape photograph showing a calm sea in the foreground and a cloudy sky above. The horizon line is visible in the middle of the frame. The clouds are soft and diffused, creating a serene and somewhat somber atmosphere. The water has a subtle texture of small ripples.

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[utgafur/fjoldi-ferdamanna/aaetladur-fjoldi-a-svaedum-og-stodum](https://www.ferdamalastofa.is/is/tolur-og-utgafur/fjoldi-ferdamanna/aaetladur-fjoldi-a-svaedum-og-stodum) (accessed 18 February 2018).

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