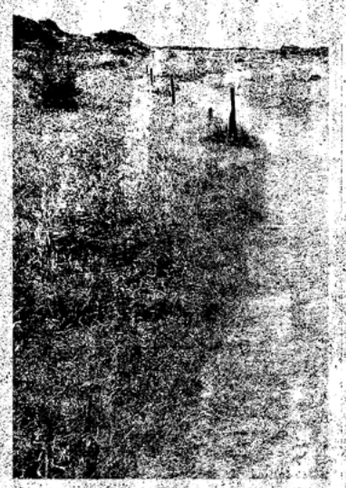
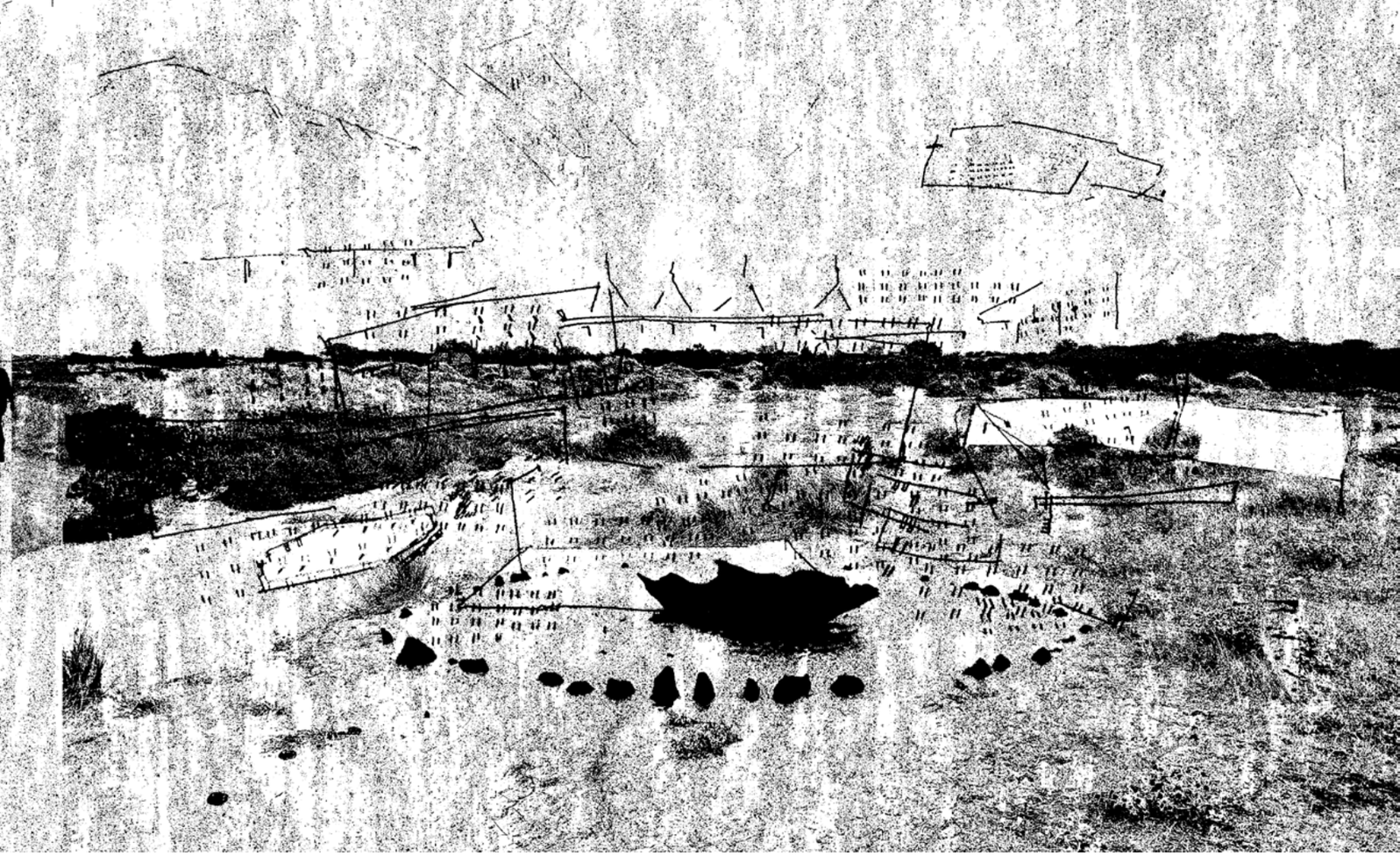


Druids lead fight
save Seahenge
from the diggers



THROUGH THE CRACKS

a new home for Seahenge

MArch Dissertation - Thomas Conradie - 2023

Cover image front and back: Collage of the excavation from and returning to its original context. Images include: Biddick, 1998: online. Walters, 1998: online. Photographs and drawings by the author.

THROUGH THE CRACKS

Architecture as clearing in an exhibition for the remains of Seahenge outside Holme-next-the-sea, Norfolk, UK.

Masters of Architecture Thesis | M.Arch
This dissertation is submitted in partial fulfilment of the requirements for the Masters of Architecture Degree. Department of Architecture, Faculty of Natural and Agricultural Sciences, University of the Free State, South Africa.

Thomas Conradie
Student number: 2017021987
Email: thomasconradiejnr@gmail.com
Date of submission: 11 October 2023
Supervisors: Prof. J.D Smit, P. Smit, K. Du Preez

Declaration of original authorship

The work contained in this dissertation has not been previously submitted to meet requirements for an award at this or any other institution of higher education. To the best of my knowledge, this dissertation contains no material previously published or written by another person except where due reference is made.

Contents

Abstract

Museum architecture acts as medium between the viewer and exhibition, influencing the interpretation thereof. The preserved remains of Seahenge are currently housed in a manner not conducive to productive interaction with the structure. Existing museum typologies often mediate social context, landscape, artefact, and user, but not to the degree of sensitivity required to house Seahenge in an appropriate setting within its nuanced landscape and history. The museum is viewed, not as podium to present on or shelter against elements, but as a revelation of the truth set to work in Seahenge. A design for a new museum to house Seahenge stemmed out of various precedent studies, conceptual and theoretical explorations. The resultant design challenges the standard typology of the museum and showcases the relevance of Martin Heidegger's concept of 'the clearing' within architecture engaging with landscape and artefact.

Keywords: Seahenge, Holme-next-the-sea, Museum, The Clearing

Introduction

Every day, we are presented with things. Useful things, beautiful things, out of place things. All of whom reveal themselves to us in different ways. Both the environment surrounding us and attitude within us greatly affect how we perceive these things. This becoming all the more complicated when you are the one to design these surroundings and resulting atmospheres. The *thing* at the centre of this thesis is Seahenge, an excavated bronze age artefact exhibited in the English city of Kings Lynn. For the purposes of the thesis, this is not Seahenge's final destination, for it yearns to return to its original context. This thesis investigates how architecture can mediate this artefact and the context it is returning to. How may a suitable architecture look that houses such a subdued and subtle object within a complex and equally subtle landscape? How can architecture as *Clearing*, something revealing both the qualities of the site and the artefact, lead to an appropriate museum for Seahenge?

Seahenge, its prehistoric history, and modern excavation will be discussed. The insufficiencies with the current exhibition, and possible solutions will be discussed within the context of a theoretical stance. Our ontological relationship to things will be investigated through the Heideggerian concept of *the Clearing.* This will inform how we may view Seahenge, its exhibition and the architecture surrounding it. Seeing it as a clearing through which we may interact with entities other than ourselves. As result of this investigation, a complete design will be presented for an exhibition that can house the remains of Seahenge. Allowing future generations to better understand and appreciate this ancient and mysterious artefact.

-Snettisham

This is the Wash it seems -
a last exhalation
of the dying land, or something
the sea's been working on
for ages: sketching it in,
rubbing it out,
redoing and redoing it,
never satisfied.

Look at you, all wrapped up,
hat and scarf and
gloves, and those wild eyes
made weak by medication
and hopes confounded so
so many times.
Never this thin before.
Going slowly, in this
flattest part of England,
going slowly downhill.

The birds rise
like a handful of rain
thrown upward,

and the Great Twitcher
in the sky misses
nothing. His fondness
for sparrows is well known.

(Callin, n.d: online)

1. Introducing the Site and the Artefact

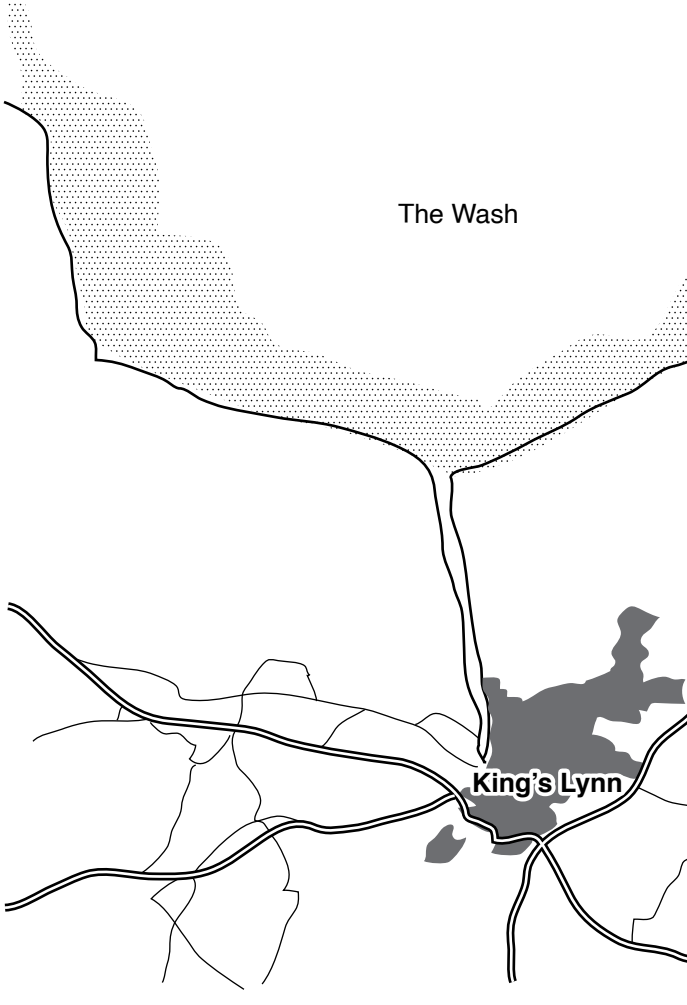


Figure 1.1: Holme in relation to The Wash and King's Lynn, the location of the current Seahenge exhibition (Author, 2023).


Holme-next-
the-sea
Hunstanton
Snettisham

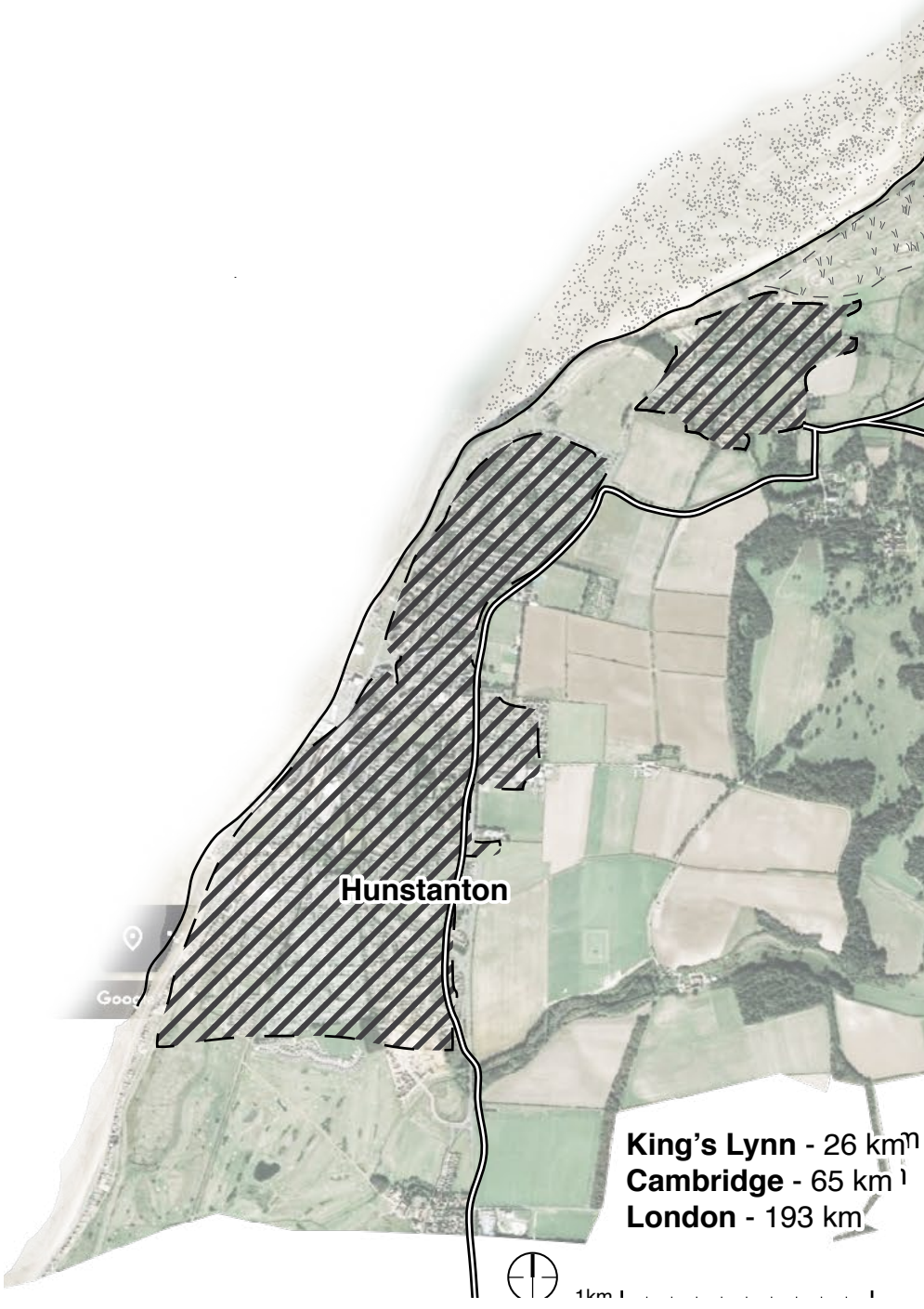


Figure 1.2: Original location of Seahenge in realtion to nearby town, Holme (Author, 2023).


Original
Seahenge Location
Second
Henge
Visitors'
Centre
see page 27
Holme Dunes
National Reserve
Hunstanton
Golf Course
Holme-next-the-sea
1999
Recreation
Thornham

Holme-next-the-Sea (or simply Holme) is a small coastal village located in Norfolk, United Kingdom. It is positioned along the southern extremities of the North Sea and is frequently exposed to storms from the north (Fig 1.1 -1.2). A good description of the area can be obtained from David Callin's poem titled after a neighbouring town, 'Snettisham' (see page 2). The area is characterised by its gently undulating grassy landscape and expansive beaches. The abovementioned seasonal storms often shift dunes and sand, the shifting sand resulting in changes in the landscape from season to season, or as Callin describes it as "rubbing", "sketching" and "redoing". Inland from these beaches are dunes and salt marshes, which are occasionally flooded during unusually vicious storms (Fig 1.3 -1.4). This combination of dune grass and ample water bodies has resulted in prime breeding grounds for several species of migratory birds. As a result, many nature reserves have been established along the coast, aiming to protect these ecologically sensitive grounds.

Through much turmoil and countless hours of travel, I managed to visit the area during the summer of 2022. I stayed in King's Lynn, the largest town about 30 km from Holme, in a typical English bed and breakfast. On my first day after arrival, I took a bus to Thornham, a neighbouring town to the east of the Holme Dunes Reserve. It was a cloudy day with a constant cool draught, ensuring it never got too hot. Once the anticipation of finally visiting the area had worn off, I started enjoying the landscape around me and gently strolled the 2 km or so to the Holme Dune Reserve's existing visitor centre. Every now and again I would cross a sluice gate, designed to control the incoming tide and preserve the sensitive nesting area. All around me were warning signs to keep one's dog on a leash and to stay on the path at all times. After passing through a pine grove planted sometime in the 1900's, I reached the beach and was utterly amazed. The beaches I knew when I was growing up were essentially short stretches of coarse sand before a thunderous shore break that varied only slightly between tides. However, this beach was something else altogether. Beyond the dunes, the landscape gave way to a flat silty beach that extended for about 100 metres towards a tranquil dam-like ocean in the distance. I assumed that this must have been low tide. This was also my first encounter with peat beds, partly decomposed prehistoric plant material which forms in waterlogged conditions. This sticky, muddy substance stuck its head out of the fine silty sand along an intermittent barrier running along the coastline. I soon reached a gap amongst the peat beds, which I reckoned might easily have been the site of discovery two decades earlier of an archaeological structure erected for unknown purposes, some four millennia ago.

Figure 1.3: Entrance to beach closest to the original location of Seahenge (Author, 2022).

Figure 1.4: The adjacent Holme Dunes Reserve (Author, 2022).

1.1. Discovery and excavation

Holme 1, or 'Seahenge' as it is more popularly known, is a Late Bronze Age structure built around 2050 BCE, which was discovered in 1998 by John Lorimer, a local resident, while crabbing in the low tide waters on the beach of Holme-next-the-Sea. His initial discovery was not the henge itself, but rather a bronze axe head buried in the sand. After successive visits to the discovery site of the axe, a very different figure altogether began to emerge from the peat. Although easily dismissed as a preserved tree stump common in the area, it was wholly separated from the peat bed, thus discounting this explanation. Presently the sands eroded further and another, smaller stump appeared, a few feet from the initial stump and then another next to it. And then another. A circle became visible as the peat chunks and sand gradually were washed away with the tide. Neither John Lorimer, nor the local archaeologists who came to inspect at John's request, were any wiser regarding the meaning of this mysterious find (Pryor, 2008: xxiv-xxvii). Once the strangeness and possible significance of the discovery had been determined by archaeologists from nearby counties, the decision was hastily made to remove the artefact from the beach before winter storms would bury it beneath the sand once more. Eventually, it was revealed that the discovery entailed an intact oval-shaped structure of 55 split timber logs, planted upright symmetrically around a central, upturned tree stump (Fig 1.5 -1.7).

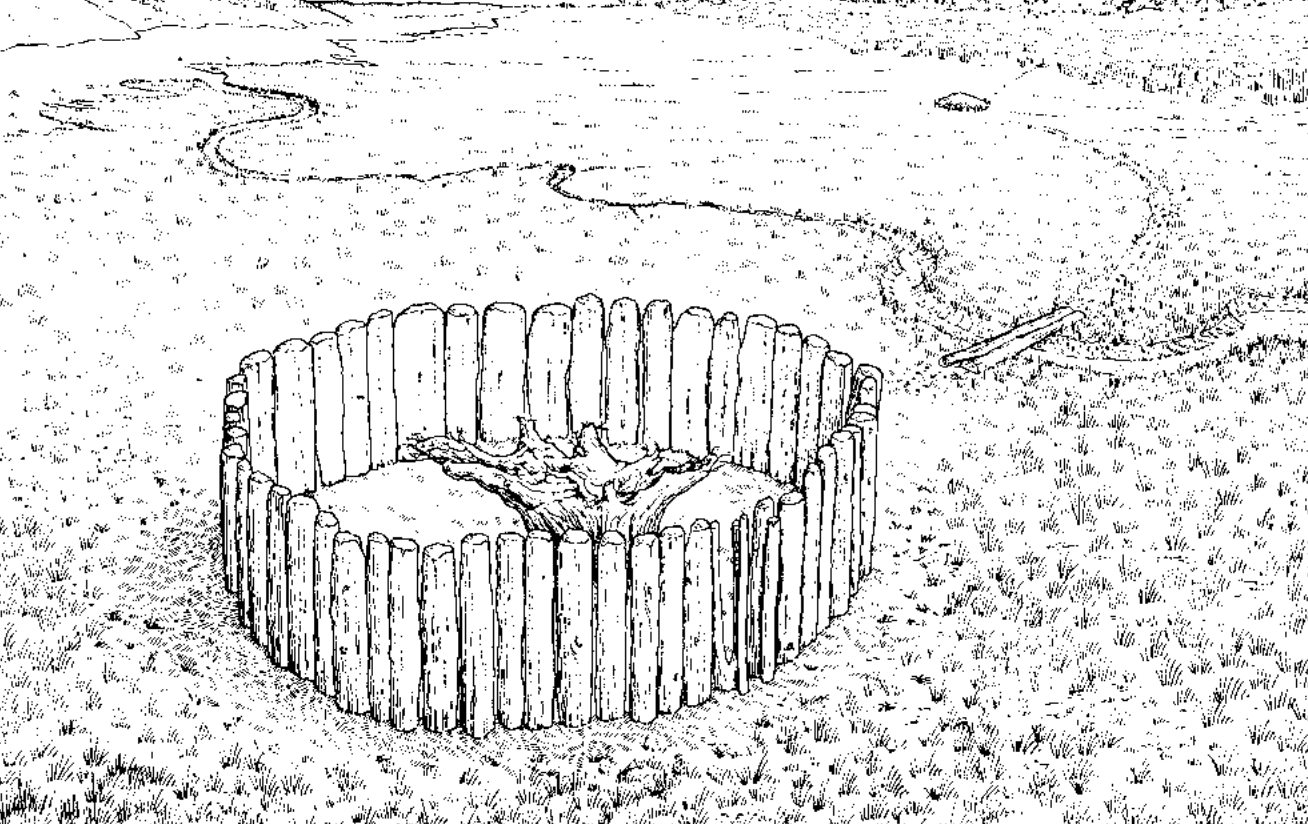
Apart from the archaeologists, another group soon took interest in the excavation – those opposed to it. Neo-pagans, Druids, and New Age communities all frequently disturbed the excavation. The Pagans and Druids were open to communication and generally let the archaeologist do their work. Sometimes they held small ceremonies at the site (Fig.1.5) as a send-off for a monument they viewed to be on a place of great importance (Pryor, 2008: 257). The New Age communities however were more hostile and frequently halted excavations by either occupying the timbers or shovelling sand back into trenches dug by the team.

Some local residents also opposed the removal at a town meeting held with the archaeologists after the excavations had begun. They objected either out of disbelief that the timber was in any real danger, or out of fear that it would be permanently stored at the processing plant at Flag Fen outside Norfolk. During these meetings, some local residents mentioned that they had known about the circle for some

Figure 1.5: A group of neo-pagans at the site of the excavation (Howarth, 1999)

Figure 1.6: The central stump being excavated with public onlookers and police surveillance (Biddick, 2016: online)

Figure 1.7: Seahenge during excavation (PictureEsk, 1999: online)



time before John Lorimer's discovery and would prefer it to remain in its original place (Raikes & Graham, 1999: Documentary).

After an interrupted and highly publicised excavation (Fig 1.6 and 1.8), the timbers were sent for preservation and analysis at the Flag Fen centre outside Norfolk. A combination of dendrochronological and carbon dating placed the felling of the timbers at 2050 BC. The timbers were most likely locally sourced, and were erected shortly thereafter (Bernan, Taylor et al, 2003: 33-35). Over 50 different types of axe marks were found in the collection of timbers – suggesting that at least 50 individuals would have worked on the construction and erection of the circle (Bernan, Taylor et al, 2003: 2). The timbers have been returned to Norfolk and are currently exhibited in the King's Lynn Museum, some 31 km from the original site (see Section 2.1 for a discussion of the museum).

Although the timbers were found on a sandy beach, this only recently became beach due to the continuous erosion of the coastline over millennia. The coastline used to be much deeper into the sea when the circle was erected, which originally was located in a grassy marsh similar to that found just inland from the beach. This loss of coastline means that other possible structures that might have provided context for the understanding of Seahenge, would have been lost to deeper waters. However, a similar, larger structure was found 100 m east of Seahenge. This second structure, dubbed Holme II, is less complete, with many of the surrounding timbers missing. Partly because of this, and due to the objection against Seahenge's removal, it was decided to leave Holme II undisturbed in the sand.

1.2. The structure

The structure of Holme I forms an irregular circle with a diameter of 6.78 m at its widest point. The posts around the circumference of the roughly oval shape are largely cleft tree trunks, with the remaining bark facing outwards. After millennia of erosion, the timbers were shortened to an average length of 1 meter and diameter of 0.3 m. Although their original length is impossible to determine, considering the timber available at the time and the depth at which they would have had to be planted, the completed structure probably stood at an adult height above the surrounding ground, roughly at 2 m (Brennand & Taylor, 2003: 66). Fig 1.9 shows an artist's rendition of the structure before the timbers

Figure 1.8: Image taken during the excavation (Eastern Daily Press, 1999, Online)

Figure 1.9: Artist's impression of the original context and shape of circle (Dobson in Brennand & Taylor, 2003: 67)

had eroded, but also before the coastline had risen and the surrounding area was still marshland. The central tree stump was debarked prior to planting (Brennand & Taylor, 2003: 14) and this, combined with the cleft faces of the surrounding timbers all facing inwards, created a purified atmosphere within the henge. While the timbers did fit snugly along their bases, the natural shape of the logs meant that the structure most likely did not completely obscure the outside world when you entered it. With gaps in the wood offering views to the outside from within and vice versa. Entry was gained through a branched log that acted as a narrow doorway while still supporting its neighbouring timbers.

The original purpose of this structure is still unknown. The nearby Holme II has a clearly discernible altar at its centre, for some ceremonial items to be placed upon. The upturned tree stump of Seahenge, however, provides fewer clues as to its purpose. The common interpretation of a permanent burial structure is undermined by the absence of any human remains or artefacts found at the site, and archaeologists are still inconclusive as to a definitive purpose.

1.3. Public sentiment

Since the excavation, many in the local community and those of Pagan and Druid beliefs have maintained their original conviction against the removal of the timbers. Many of them hold the view that leaving the structure undisturbed, to be possibly destroyed, would be the most appropriate decision. As summarised best at the time by Purves: "Seahenge inspires a sense of mystery which it will lose, once in a museum." (Purves quoted in Wood, 2002: 49). English Heritage and the Norfolk Archaeological Unit started off on a bad foot, both by starting the excavation before consulting the community and in a symbolically damaging act of extracting large samples from several timbers with chainsaws. An act that even archaeologists admit, left the central oak stump feeling "desecrated" (Pryor 2008: 250). Aside from the dendrochronological evidence gained from these samples, the sentiment exists that little other knowledge was gained from excavation, rather than leaving the logs in place. Archaeologists, of course, would disagree. A wealth of knowledge regarding construction, felling,

woodworking, pottery, and rope-making has been gained that would otherwise not have been available, had the structure remained standing.

Wood (2002) supports the common Pagan attitude that land is sacred regardless of its content. He extends this sanctity to Seahenge, purely on the basis of its link to the past. He writes that "modern perceptions of sanctity are valid, regardless of the original purpose of an ancient monument". A point of contention between the Pagans and the Archaeological communities, with the latter prioritising ancient and indigenous notions of sanctity.

Today, the tension remains, as Wood poetically puts it:

> Like a tooth pulled or a favourite ring lost, there was a gap, a nakedness in the north-western corner of the county. Over time, the wound has healed, but the process would have been aided by the return of the timbers to their original site. Even burying them nearby, as had been proposed, would have gone some way towards restitution (Wood, 2002: 50).

1.4. Site as liminal

The key to the allure that Seahenge held for the local residents and Pagans of the area, was its transient nature. Here at the edge of the world, this ancient artefact shimmers in and out of existence with the tides and storms. This transience extends to the entire coastline. When traversing the walkways that run parallel to the coast, one is constantly inhabiting the liminal, a threshold between land and ocean.

As described by Pryor, "[i]t's the lurking ominous presence of the sea which helps give the place such a special atmosphere" (2008: 252). The sea is ever-present, but one is decidedly not at the beach. The marshes extend inland but are interrupted by river mouths and dry patches of land. On a micro scale, the proposed site is located in a morphological liminality, between two dunes that separate the inland from the beach, and topologically between nature and civilisation. A contrast emphasised by the direct connection to the Hunstanton golf course. When walking along the footpath from the east, this would represent the end of one's immersion in nature. When walking the larger Peddar's Way (a hiking route dating from at least the Roman

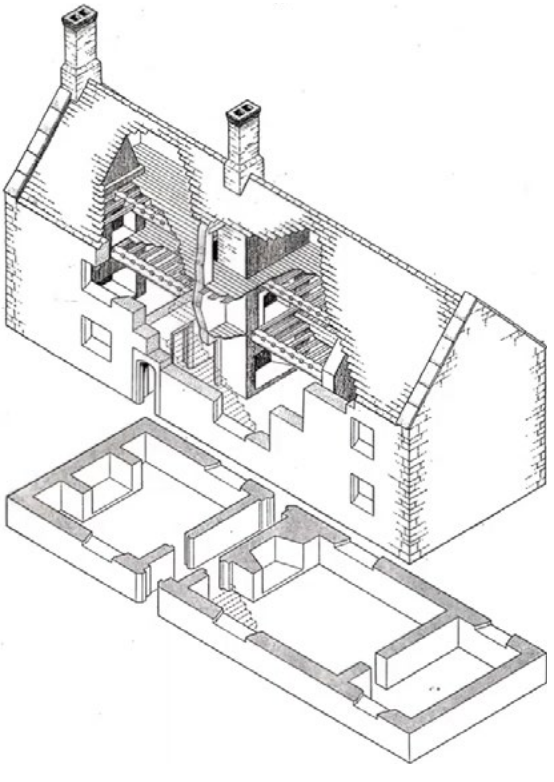
Figure 1.10: The church tower and various cottages in Holme (Author, 2022)

period), this would be a greater moment of transition. The route passes Seahenge shortly after reaching the coast. Considering the age of the route, Seahenge may have been a significant milestone along the route.

The region is prone to flooding and therefore temporally liminal. Neither belonging to the sea nor the land. Various attempts have been made to control the flooding, especially of the nearby golf course, but these attempts have ultimately been in vain. The coastline is actively eroding (Pryor, 2008: 253) and could be shaped differently in the future.

Figure 1.11: Sluice gate in the adjacent Holme Dunes Nature Reserve (Author, 2022).

Figure 1.12: A WWII Spigot on the beach. These spigots would have machine guns attached to the metal pin for free rotation (Author, 2022).



1.5. Architecture of the region

Holme itself is composed of vernacular cottages, with its most prominent architectural feature being the 15th century church tower (Fig 1.10), visible from the proposed site. Cottages are constructed from local stone, including clunch, carstone, and flint. Windows, doors and external corners of walls are reinforced with brick quoins, a construction method typical of the region (Williamson, 2022: online).

Norfolk is rich in stone for construction. Although ample, the stone is generally of poor quality and requires brickwork support at corners, around windows and doors. Thatched roofs are commonplace in the county, with pantile roofs more common along the coast. Williamson (2022: online) infers from their steep pitch, that most of the 17th century tile roofs were originally reed thatched roofs sourced from the area. Although Norfolk is primarily known for its plastered timber-frame constructions, the vernacular cottages of Holme are invariably built from flint beach pebbles and shaped carstone. These stone buildings are shaped similarly to their timber counterparts, in rectangular floor plans with gabled roofs and multiple chimneys. Historically, the houses were centred around the hearth, with small rooms and minimal internal circulation, with a single small timber window or dormer window punctured into each room (see Fig 1.13). Some contemporary examples are scattered among these original cottages, all of which have attempted to respond to the brick and tile material palette, with varying degrees of success.

Timber construction is prevalent in this region. It is often used to clad extruded bay or dormer windows in cottages. Singles are a common cladding method for contemporary construction and utilitarian architecture in the form of boat sheds (see Fig 1.10).

The nature reserve features some industrial architecture, including sluices to control tidal flooding (Fig 1.11) and remnant WW2 artefacts, including a spigot on the beach directly adjacent to the site (Fig 1.12).

1.6. Contemporary examples within the landscape

The large number of nature reserves has led to ample buildings in the area, geared towards tourism. Most of these draw on the natural and built context, incorporating materials such as timber shingles, vertical

Figure 1.13: A section of a typical half passage house in northern Norfolk, the same county as Holme-next-the-Sea. (Mercer In: Williamson, 2022: online)

Sutton Hoo Viewing Platform
Nissen Richards Studio
Suffolk, UK
2021

Lookout at Holkham
FCB Studios
Norfolk
2018

Parrinder Hide
Haysom Ward Miller
Norfolk
2010

panelling, small glass openings, and minimal use of concrete. The following examples create places within an expansive and varying landscape:

Figure 1.14: Elevation of Viewing Platform (Gardner, 2019: online)

Figure 1.15: Walkway on to tower with timber balustrade (Gardner, 2019: online)

1.6.1. Sutton Hoo platform

The Sutton Hoo timber viewing platform in Suffolk, UK, is located on an inland site where many archaeological excavations have occurred (see Fig 1.14 -1.15). It creates a place of significance through vertical hierarchy, and provides views of the various excavation sites. The inclusion of the tower within the historical landscape acts as a definitive frame for interpreting the various layers of history (see Section 2.3.3 for a further exploration of frames).

1.6.2. Lookout at Holkham

The Lookout at Holkham is located 18 km from Holme and creates a viewing area by utilising a circular plan that fans out towards the landscape (see Fig 1.16 -1.17). It also demonstrates the possibility of breaking free from the vernacular example of small windows piercing into dark interiors and the possibility of covered exterior spaces. Note that in all of these examples, exterior spaces are used sparingly, since weather conditions frequently restrict their usage throughout the year.

Figure 1.16: Approach to Lookout (FCB Studios, 2019: online)

Figure 1.17: Covered seating area (FCB Studios, 2019: online)

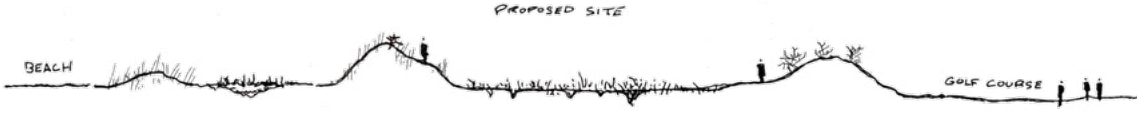
1.6.3. Parrinder Hide

The construction of this birdwatching hide on the adjacent Titchwell Marsh in Norfolk, UK, illustrates the difficulties of construction in this region. High winds restricted an already limited construction programme, which was required to fit within the 3 months between bird breeding seasons. Ground conditions prohibited access to any heavy vehicles. This necessitated the incorporation of prefabrication into the construction of the building (Hartman, 2011: online). The design layout of the complex (see Fig 1.18 -1.19) points towards the vernacular tradition of grouping several buildings around a common courtyard, which "creates a sense of place and an invitation to pause on an otherwise linear landform" (Hartman, 2011: online).

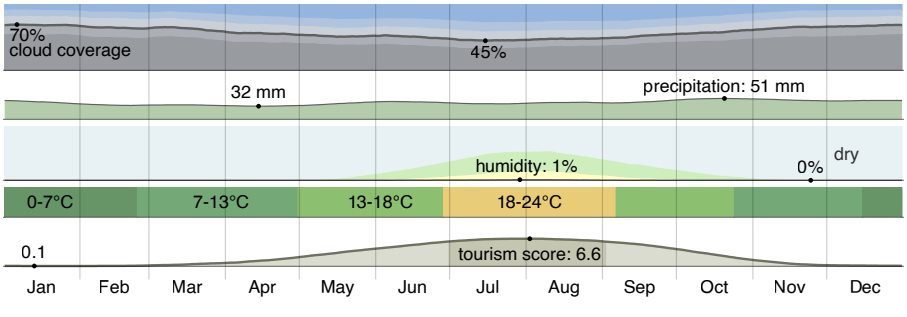
Figure 1.18: View of Parinder Hide from opposite the lake, with weathering already showing on timber shingles (Haysom Ward Miller, 2011: online)

Figure 1.19: Aerial view of complex shortly after construction (Page, 2011: online)


see page 24
1:2000


PROPOSED SITE
BEACH
GOLF COURSE

Not to scale


70%
cloud coverage
45%
32 mm
precipitation: 51 mm
humidity: 1%
0%
dry
0-7°C
7-13°C
13-18°C
18-24°C
0.1
tourism score: 6.6
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

1.7. Proposed Site

The new site chosen for a museum dedicated to the remains of Seahenge, is situated within 100m from the original discovery location and on a similar terrain to that on which archaeologists theorise that Seahenge was originally constructed– namely grassy dry land close to the ocean (see Fig 1.20 -1.25). The site in question borders Holme itself, the Hunstanton Golf Course, and the western boundary of Holme Dunes National Reserve (Fig 1.24). It is situated between a series of dunes (See site section in Fig 1.21), with the beach within earshot. Various footpaths encircle the site, the most prominent of which being the connection path between the beach and Holme itself, to which the site is directly adjacent.

1.7.1. Weather and Site conditions

Typical of the area, Holme has a temperate climate with short, comfortable, and partly cloudy summers, during which beachgoers enjoy the long sandy beaches of the area. Winters are long, very cold, windy, and mostly cloudy (Fig 1.23). Temperatures vary between 2°C and 20°C throughout the year, and is rarely below -2°C or above 25°C (Weather Spark, 2016: online). Despite these seemingly unpleasant conditions, avid birdwatchers frequently brave the cold to watch migratory birds in the many nature reserves, of which Holme Dunes Natural Reserve is one.

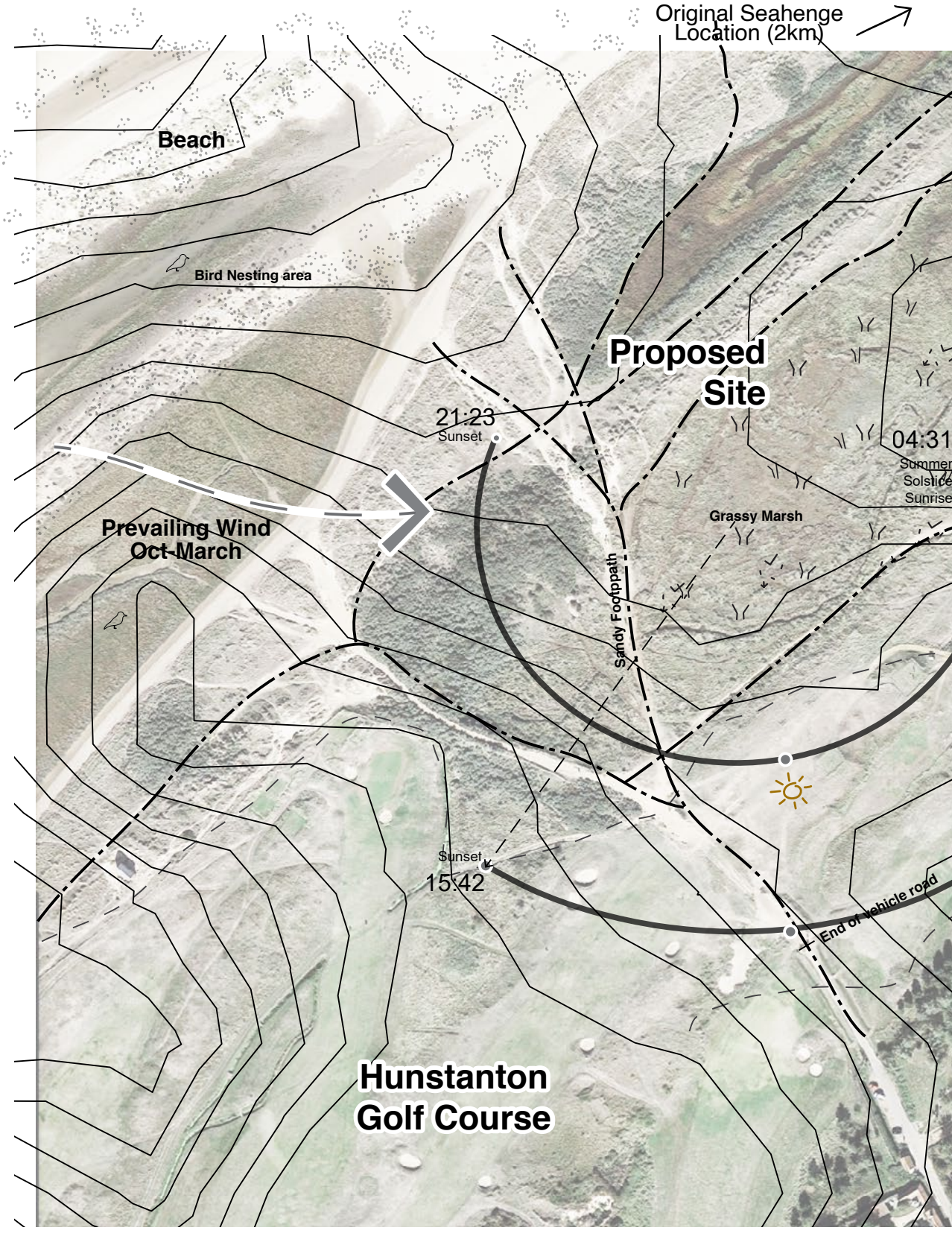
The site itself is covered with grass and small shrubs, with larger trees along the edge of Holme. Between the village and the beach are a series of small dunes and salt marshes. This area is occasionally flooded, most notably in 2015, when parts of the adjacent golf course and several homes were flooded by a storm blowing in from the sea. Beyond the dunes, a flat beach stretches for roughly 50 m before giving way to a tranquil waveless sea.

Figure 1.20: Chosen site for museum (Author adapted from Google, 2023: online)

Figure 1.21: Section across site showing combination of dunes, beach and golf course in relation to the site (Author, 2023)

Figure 1.22: Weather conditions of site (Weather Spark, 2016: online)

Figure 1.23: (Next Page) View from footpath looking east towards proposed site (Author, 2023)


Original Seahenge
Location (2km)
Beach
Bird Nesting area
Proposed
Site
21:23
Sunset
04:31
Summer
Solstice
Sunrise
Grassy Marsh
Prevailing Wind
Oct-March
Sandy Footpath
Sunset
15:42
End of vehicle road
Hunstanton
Golf Course

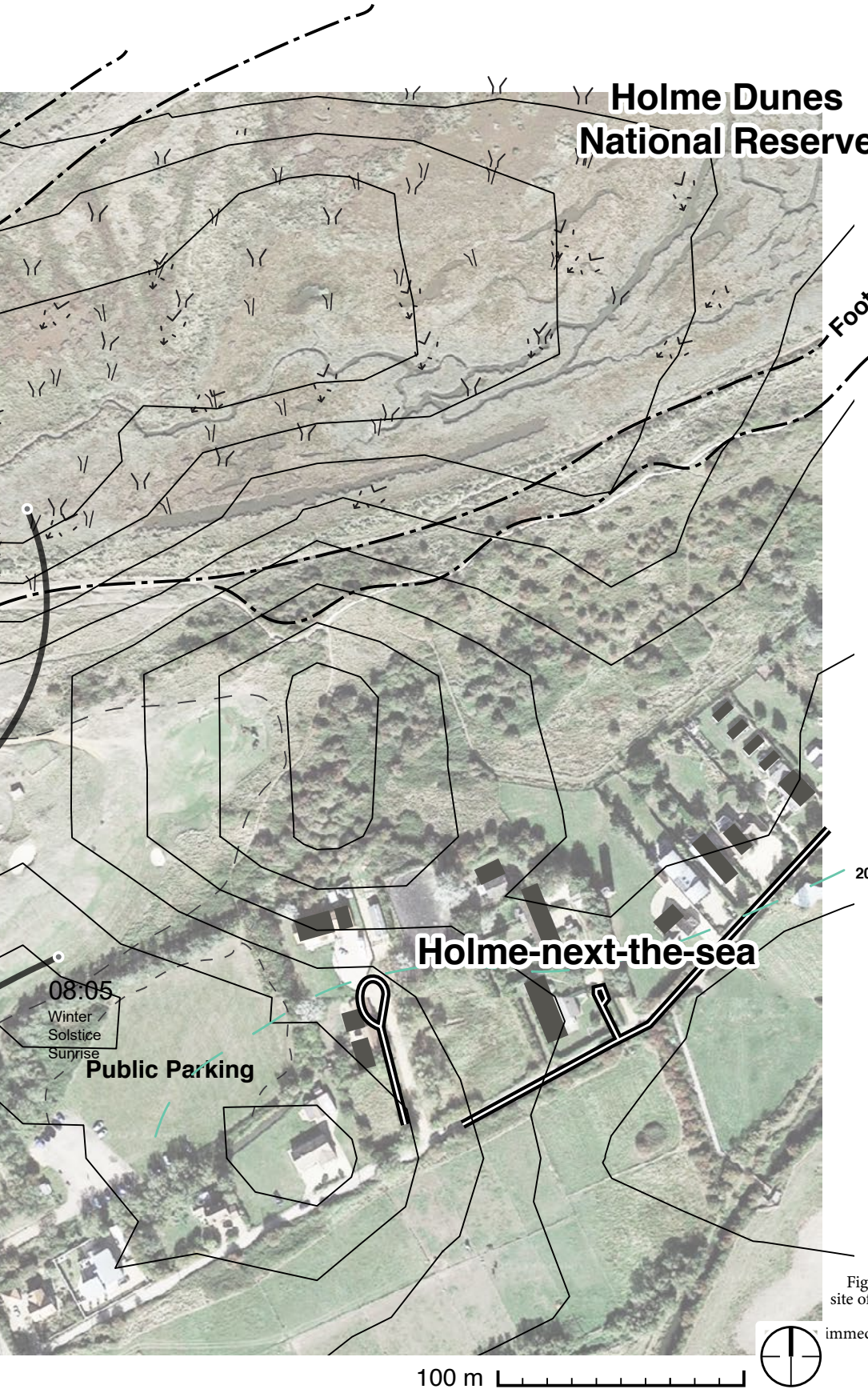


Figure 1.24: Proposed site of the new Seahenge visitor Centre and immediate surroundings. (Author, 2023)

1.7.2. Site Interpretation

Key to the formal analysis of the site was a passage from Bachelard's *The Poetics of Space* (1964): "When I relive dynamically the road that "climbed" the hill, I am quite sure that the road itself had muscles, or rather, counter-muscles". Which guided my thoughts towards viewing the site as a collection of paths – specifically walkable paths, each with its own character. What followed was an interpretive drawing (Fig 1.25 -1.26) harking back to my experience of the site and walking the different footpaths. Inspired by David Callin's poem at the start of this chapter, this landscape is continually written, rewritten, and erased.

Viewed through this lens, the site is an expanse, with moments of detail and momentary intensity strewn along the journey. The vastness thereof is immediately accessible, yet reveals much detail upon closer examination. Any proposed building will slot into this montage, being first seen as part of the whole and then further inspected individually within that context. This singular linear progression takes place within a larger cyclical timeframe, where one may return to the same footpaths time and time again, and to the transient landscape itself which is written and erased over and over again by storms and floods.

Figure 1.25: Site montage of different views on the beach where Seahenge was found (Author, 2023)

The question to be answered here is where any new building would fit into this cyclical and simultaneously linear timescale (see Fig 1.27). At the end of the linear progression – namely the history of Seahenge, it finds itself within larger cyclical timescales which it also has to respect. This includes flooding, rising sea levels and different seasons.

The ancient artefact is elevated from this, since it already has stood the test of time. Although not unaltered by this cyclic repetition, it was fading away slowly through nature (Fig 1.28), before being ripped away suddenly by humans. In the most distant circle of time, the artefact will now be imperfectly returned to its original context. Re-entering the cycle of seasons and years.

1.8. Conclusion

This chapter has introduced Seahenge, its history to date, and the context in which it has found itself, both culturally and physically. Understanding the discovery site and its environment is important in establishing the atmosphere and context within

Figure 1.26: Site montage of different views on while walking along the footpaths (Author, 2023)

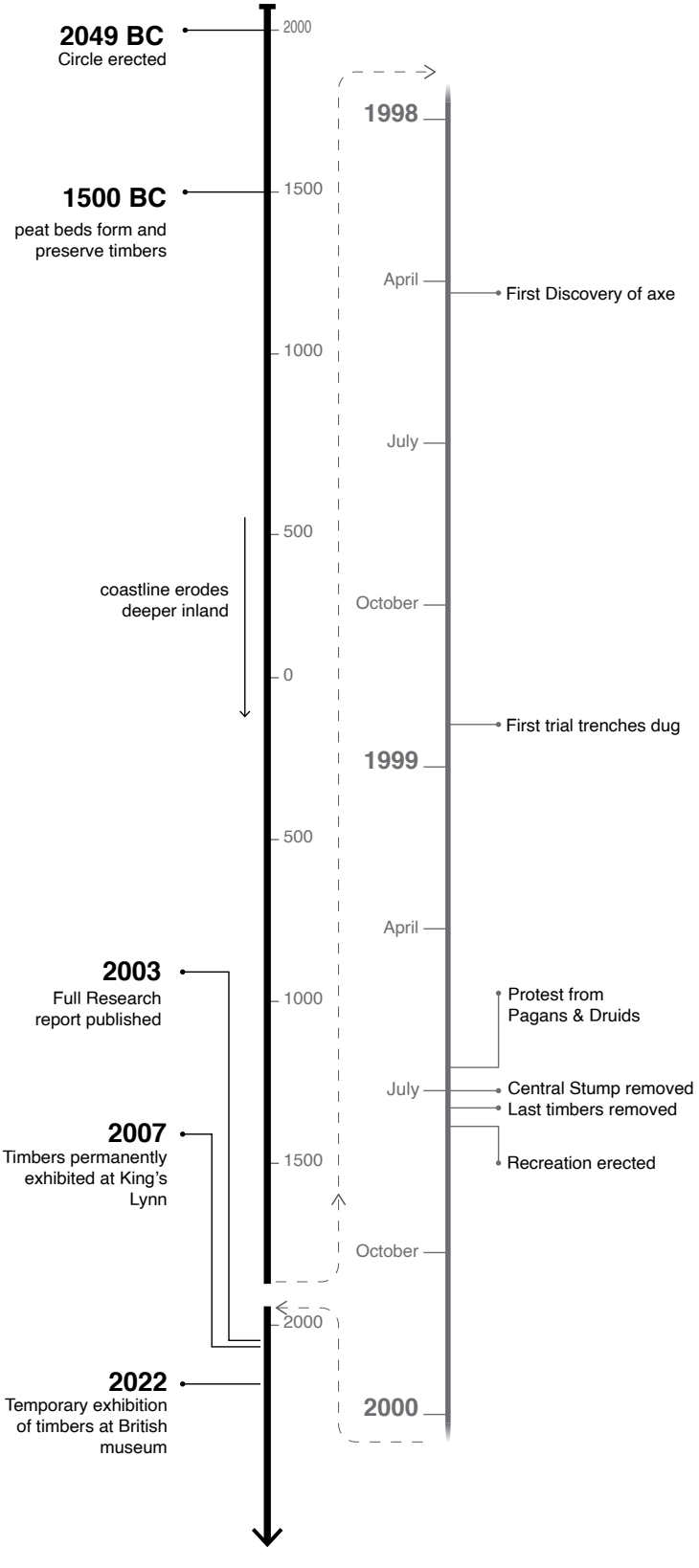
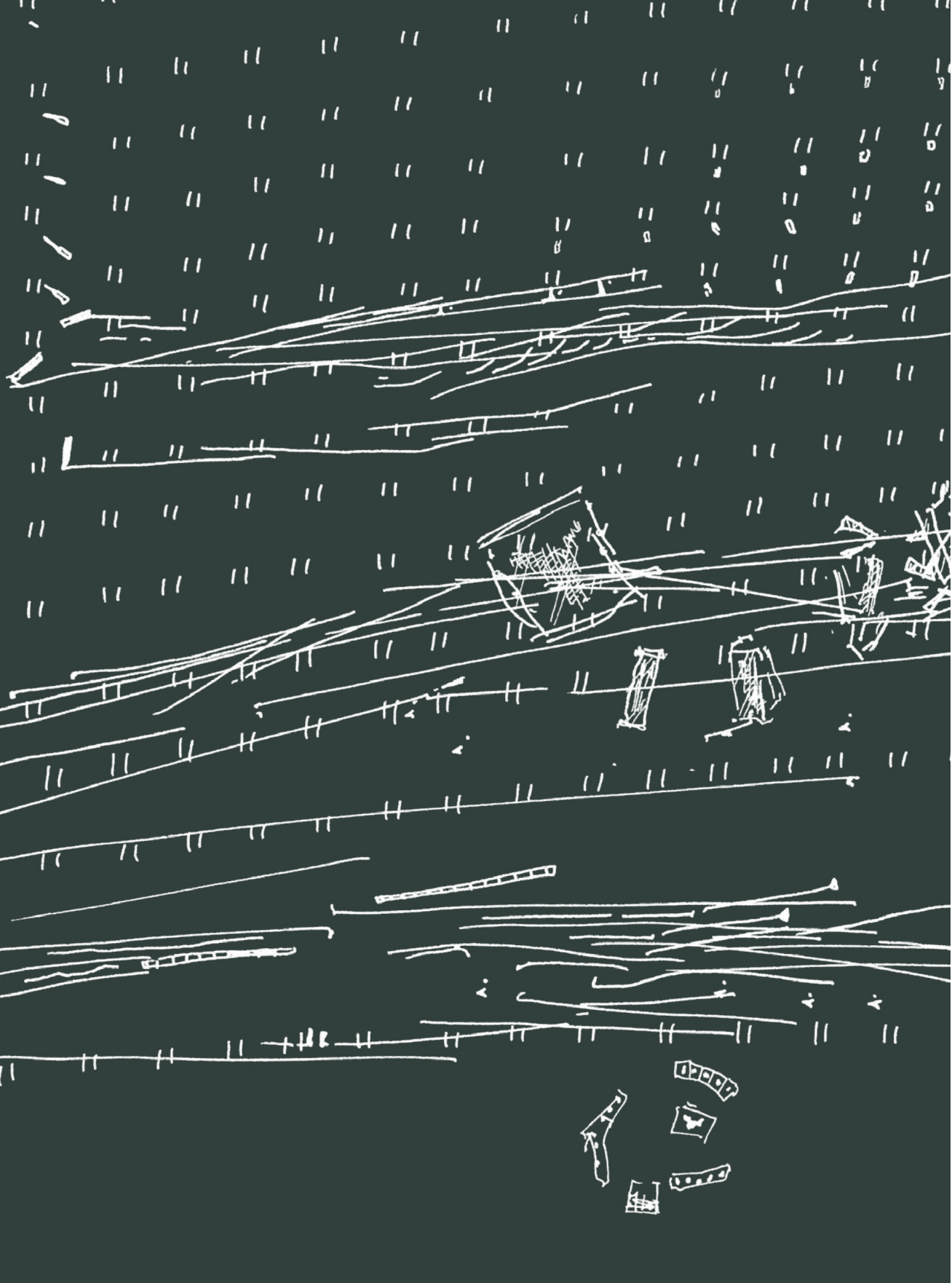


Figure 1.27: Timeline of formation, burial, excavation and exhibition of Seahenge (Author: 2023).

which any further exploration and creative endeavours will take place. Aside from this proposed site being within its landscape, as opposed to its current urban location, it is important to illustrate the complexity of the landscape and to emphasise the sensitivity required to design appropriate architecture. The next chapter discusses the problematic issues surrounding Seahenge and its current exhibition, and identifies methods for creating an architectural solution.

Figure 1.28: Snapshots of *Losing Seahenge* (Graham, 1999: Film Video).



2. The problem and a way to the solution

After the events described in the previous chapter, its discovery and excavation, Seahenge has been exhibited at the Lynn Museum. However, this story yearns for a proper conclusion, or at least a new era for the artefact. This chapter will venture into the problem that this thesis will aim to solve. As vague and clear as it may be, Seahenge requires a new home, since its current home is proving wholly insufficient. The journey towards an appropriate home started with the broadest possible creative endeavour - a touchstone - in which the essence of the intention was defined. The three concepts delved deeper into this general essence to find ideas that could be translated into architecture.

Figure 2.1: Combination of drawings done for concepts no. 1 & 3. Inspired by archaeological field drawings in Pryor (2008). The main drawing contrasts the regularity of measurement with the irregularity of ancient artefacts. This contrast is seen in the attempts to house Seahenge in display boxes (Author, 2023).

2.1. The current museum

The preserved timbers are currently situated in the Lynn Museum (Fig 2.4). The museum is housed in the former Union Baptist Chapel and contains exhibits of the region throughout various historical periods. The most prominent of its displays are the original Seahenge timbers, excavated in 1999. Unfortunately, in its current form, the exhibition fails to do justice to honouring the timbers as a Heideggerian *work*. Only half of the timbers are displayed in individual display cases, and the central upturned tree stump has been removed from its original configuration. The central stump is displayed in a separate LED-lit glass case against one wall of the exhibition space (Fig 2.2 – 2.3). This segregation of the artefacts causes the timbers not to be seen as a single entity, but as loose archaeological objects. No different to the nearby display case holding various arrowheads and stone tools found in the same location.

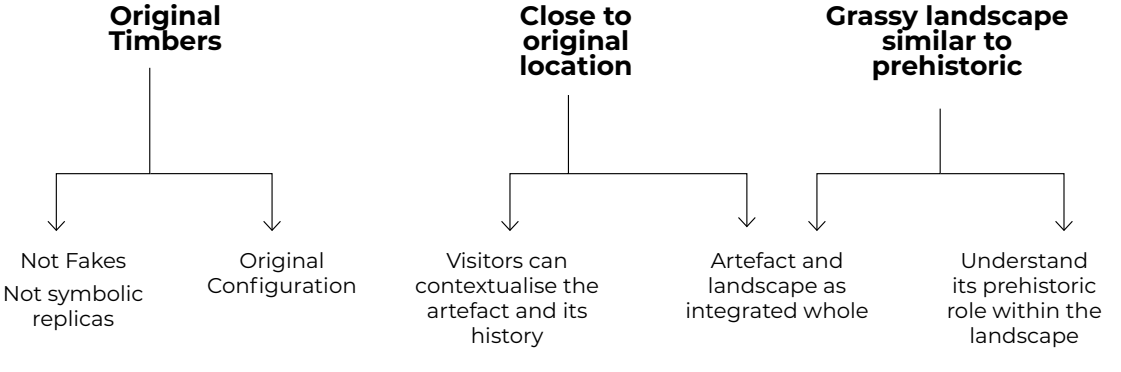
However, the museum staff and archaeologists are not to blame for the reduction of the prehistoric timbers to mere objects. It was a necessary step for their material survival. Nobody would have been able to experience the original timbers at all, had the extensive, albeit invasive restoration work not been carried out. Exhibition of the Seahenge timbers in King's Lynn was an indispensable step to ensure that public opinion remained on the side of the archaeologists, since they had been anxious that the timbers should remain in the area when they were removed for restoration (The Mystery of Seahenge, 1999: Documentary). But unfortunately, an equally important survival – of the circle as a "work revealing truth" (Heidegger, 1971:38) – has not been addressed here. Therefore, now that the original timbers have been materially preserved, the journey of Seahenge's logs ought to progress to a next stop, where it can "[bring] them into affiliation with the truth happening in the work." (Heidegger, 1971:66). Frequent reference will be made to Martin Heidegger, and in particular to his 1967 essay *The Origin of the Work of Art*. This essay, along with further theoretical explorations, will be discussed in depth in the next chapter.

Figure 2.2: Display of timbers in Lynn museum (The Heritage Trust, 2013: online)

Figure 2.3: The Central stump exhibited at King's Lynn (Author, 2022)

Figure 2.4: Lynn Museum exterior with its contemporary extention (Norfolk Local Guide, n.d.: online)

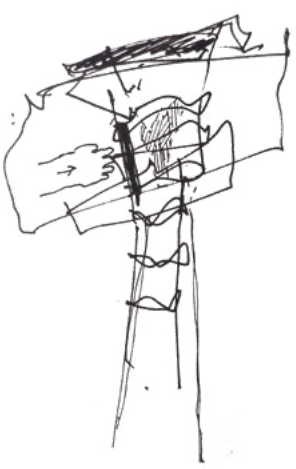
Figure 2.5: Proposed location for a new exhibition of Seahenge within the landscape near Holme (Author, 2022).

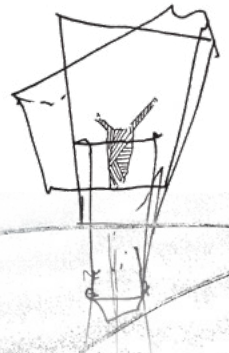


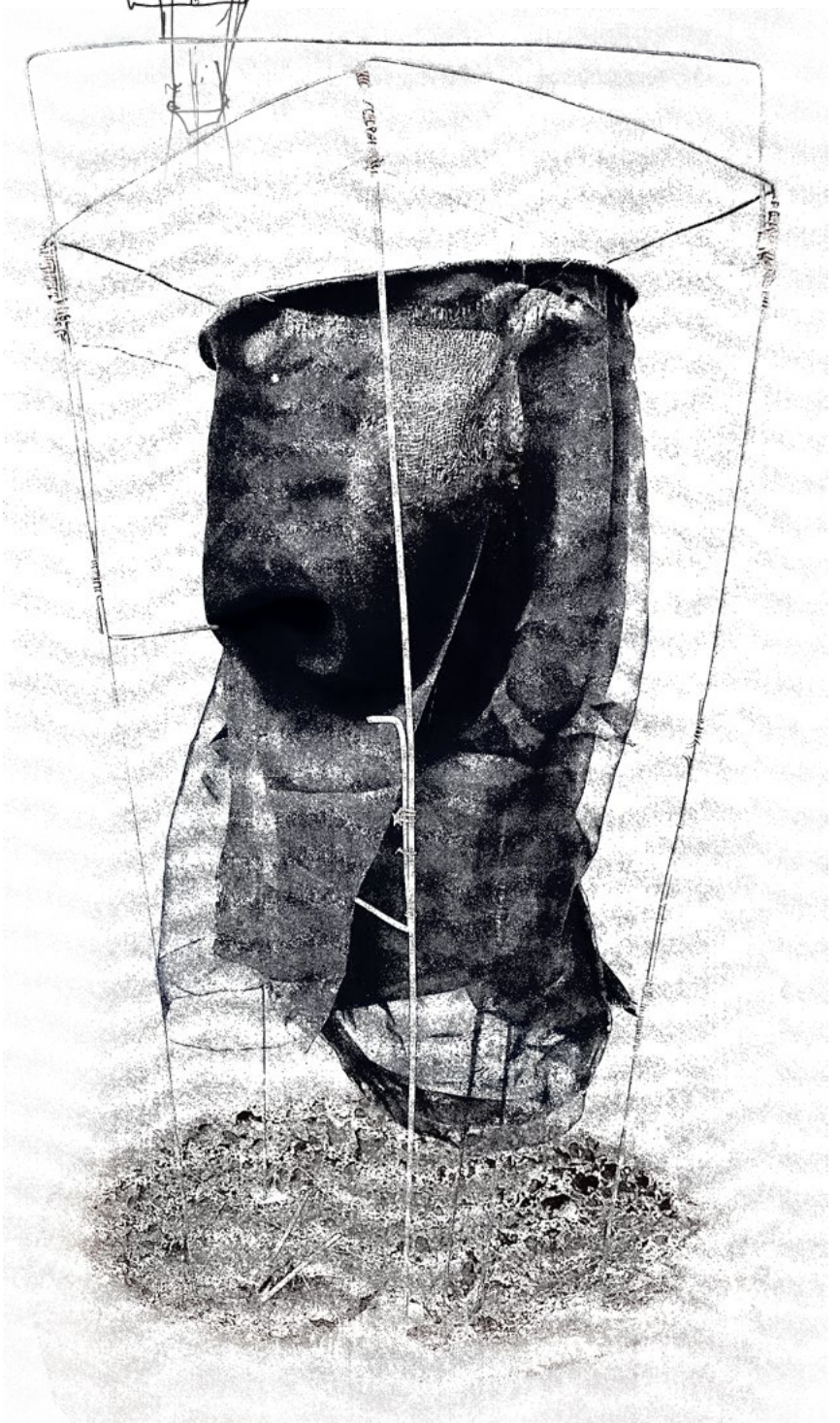
2.2. A new museum

This thesis proposes a new museum for a novel exhibition of the Seahenge timbers. Aiming to address the shortcomings of the current museum, the new museum will exhibit the original timbers in a manner that allows the user to experience this prehistoric structure closer to its original context. This new museum will be located closer to the original location between the village Holme and the beach where it was originally found, and within walking distance of the original location. The new exhibition will not be located at the precise site of excavation on the Holme beach itself, but rather in the marsh further inland (Fig 2.6), which is more representative of the original context of the era when the structure was erected. While the practical considerations are somewhat less when building in the marsh versus on the beach, it will still require some adjustments to ensure that the artefact can withstand the weather conditions, and also to minimise the impact of a structure being built on the ecologically sensitive areas.

Figure 2.6: Wet conditions typical of the proposed site (Author, 2022)







2.3. Touchstone

Figure 2.7: (Left) Initial sketches of the Touchstone (Author, 2023)

An artwork - when viewed like Heidegger did, as an unconcealed (unveiled) moment of truth – is only effective once we remove ourselves from our commonplace routine and enter into what is disclosed by the work. In its current state however, Seahenge is exhibited in an almost commercialised sphere of familiarity and connoisseurship. With the result that one no longer reaches the essence, the work's own being, but only a recollection of it.

The aim of the Touchstone was to address this disparity between the exhibition and the nature of the artefacts. To experience the artefact within this structure, one would have to feel within the fabric, interacting with it on its own terms. The aim of the Touchstone, and ultimately of the new museum, is not an interpretation regarding the artefact. On the contrary, the Touchstone revels in the uncertainty connected with Seahenge, by hiding the artefact from view. Instead, it focusses on the meeting between two entities from which the truth may be revealed. The senses of touch and sight are placeholders for how we currently interact with the artefact – visually - and how the object itself invites engagement - touch. In the novel design, a new museum should transport the visitor through different senses into the world that is created by the ambience of the artefact.

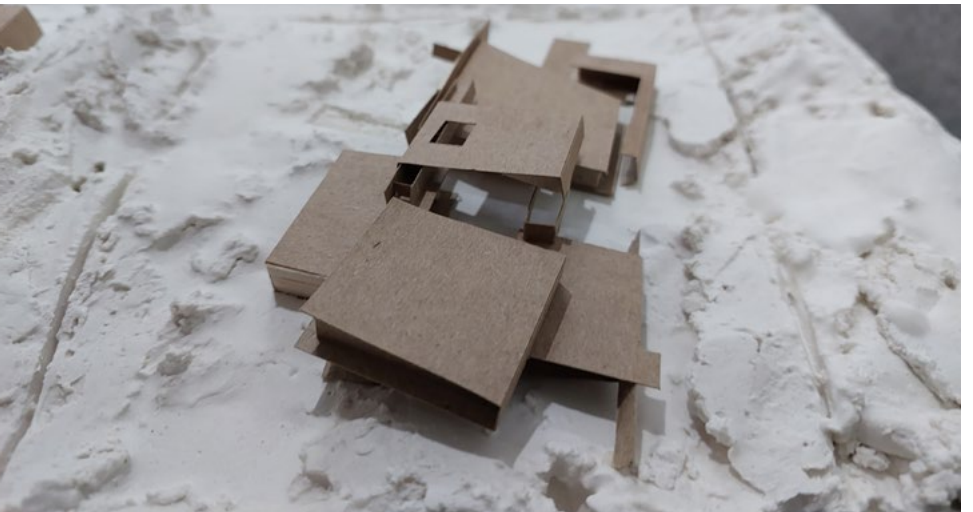
The structure that will be concealing and revealing this artefact, is suspended from, and rooted in an archaeological site from where both the ancient knowledge and the original artefact originate. In an archaeological excavation site, you are opening up a veil to reveal entities. By scratching away at the surface, slowly the artefact as a whole becomes revealed to you, and you are entering The Clearing. This is not a singular, momentary event with a clear and definable goal. Rather, we are transported to an opening where we may perhaps experience such contact, but with no guarantee of clear and reconcilable discoveries.

In an ironic twist, the process of creating the Touchstone was a Clearing in itself. I started with the piece of wood and a vague drawing (Fig 2.7 -2.8). Working with the wire and plaster informed much of the design during the later design process. Although the central idea remained much the same: namely the interaction with something you cannot see. The assembly and form of the structure gave way to an unplanned metaphor of the archaeological site of Seahenge, rooting this entire process.

Figure 2.8: Touchstone Model (Author, 2023)

Concept 1:
Reattached
Footing

Concept 2:
Screens as
Choreographer

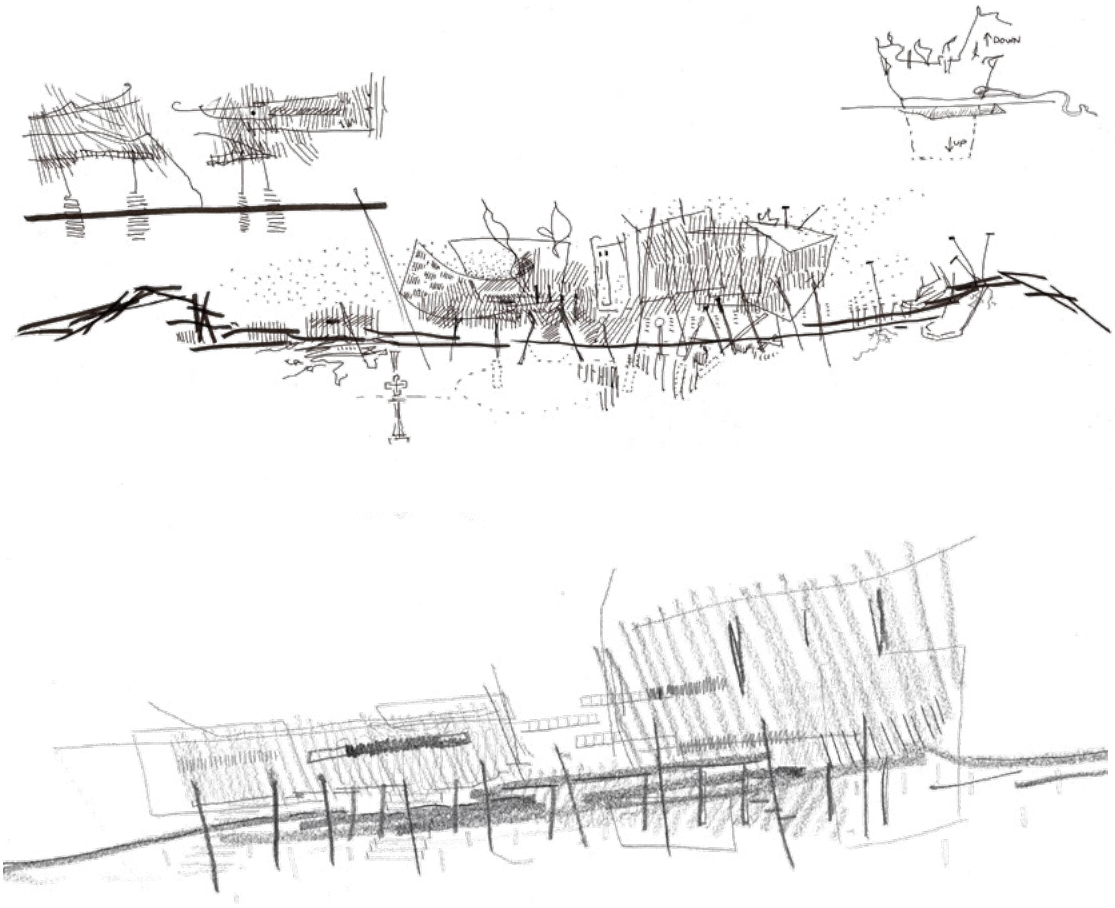


Concept 3: Frames
of Interpretation.

2.4. Concepts

The three Concepts explored the impact of the Touchstone on the different touchpoints of the project. The artefact and the landscape, the user and the landscape, and the user and the artefact were all considered in relation to the Touchstone. How a building might play a role in these relationships, is explored through specific building elements: footing, screen, and frame. Therefore, a series of three A2 drawings were done for each Concept (Fig 2.10-2.12), progressing from vague and non-representational to more direct and spatial. A model was built for each Concept, on bases that resembled the landscape at different scales (Fig 2.9); these models were built without much prior planning, relying much on intuitive creative creation.

Figure 2.9: Models of three concepts done as reflection on drawing explorations and their architectural possibility. (Author, 2023)


DOWN
UP

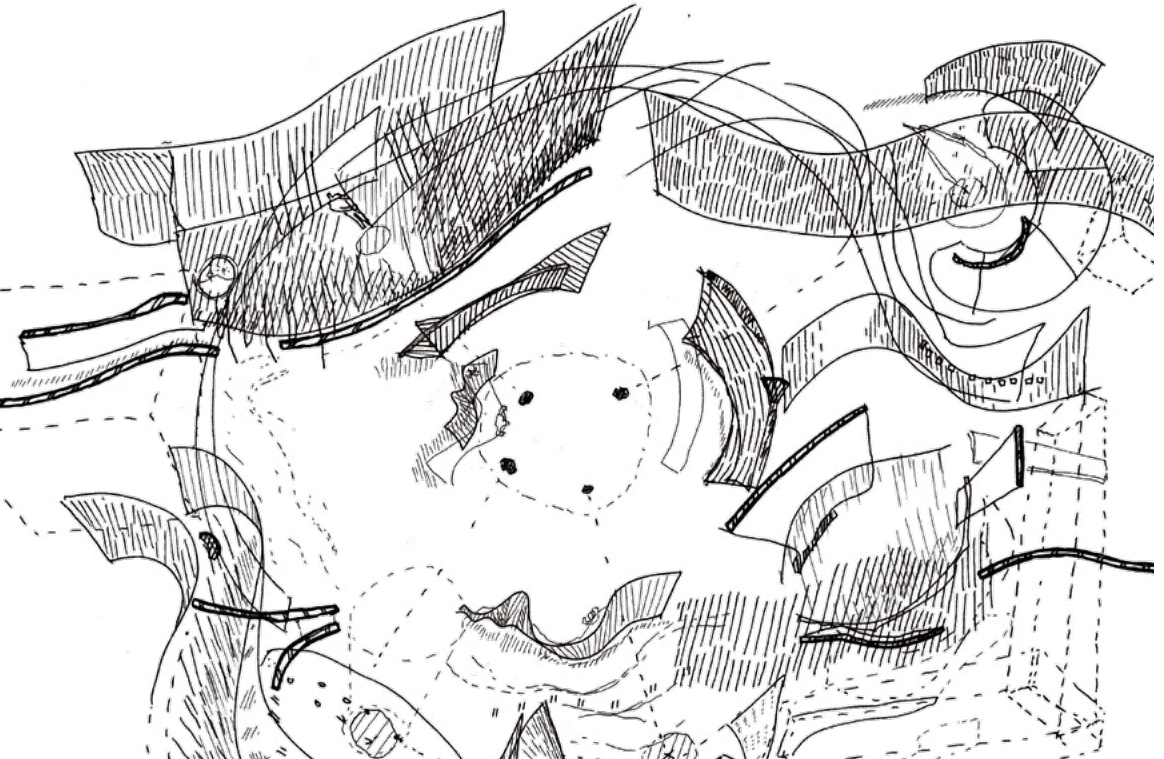
2.4.1. Concept 1: Reattached Footing

Contrary to the modernist museum, which aims to display relics detached from their context and sterilised into a digestible standard of presentation, the proposed new home for Seahenge will aim to reattach it to its original context. It must be conceded that this reattachment can never be perfect – since the timbers exhibited in their new house and old context will be irreparably different from their original position thousands of years ago. For practical reasons – that of being indoors, first decayed and then restored, but also due to the differing context. Now exhibited as something presented to be seen, the mere act of constructing a shelter for it will focus attention on it and exalt it above its surroundings. Something altogether different from its original context, instead of forming part of a ritualistic landscape as in its prehistoric setting (see Section 4.1).

Figure 2.10: Development of Concept 1 chronologically and in deacreasing abstraction. (Author, 2023)

Concept 1 of the proposed design focuses on the relationship between the site and the artefact and its shelter. The artefact will be reattached to its original context. 'Attached' is used here as opposed to inserted or grafted – to imply an obvious addition. Whichever form the shelter may take, the attached foundation will always be obvious in its imposition. But the aim of the shelter and nature of the artefact are ultimately true to the site. The stitching together of a ripped cloth.

Key words: mediation, grounding, unmonumental



2.4.2. Concept 2: Screens as Choreographer

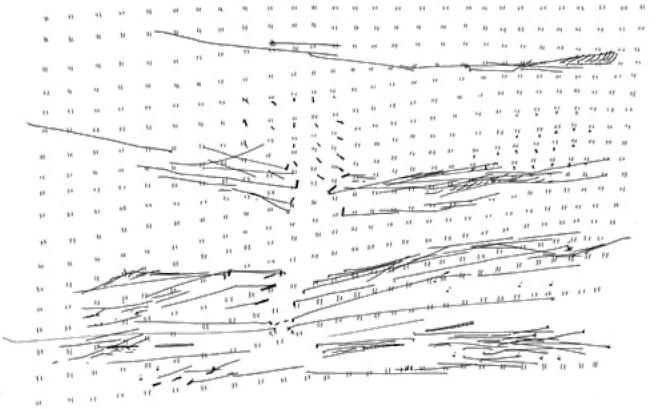
Within both archaeology and the exhibition of its artefacts, the body of the participant, whether the archaeologist or viewer, forms an integral part of the process.

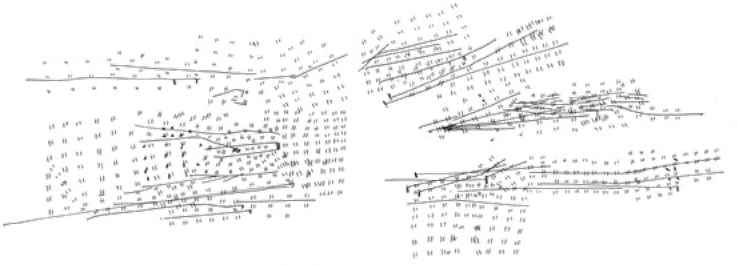
Integral to a circular space is the centre point. The abstract point from which the entire spatial composition is viewed and to which everything within the space is related. While inside the reconstruction of Seahenge done shortly after the excavation, the archaeologists and volunteers present couldn't help but notice the effect it had on visitors. The entire shelter focuses towards the central point, where the upturned tree stump is displayed as a undeniable but still unexplained symbol of intentionality.

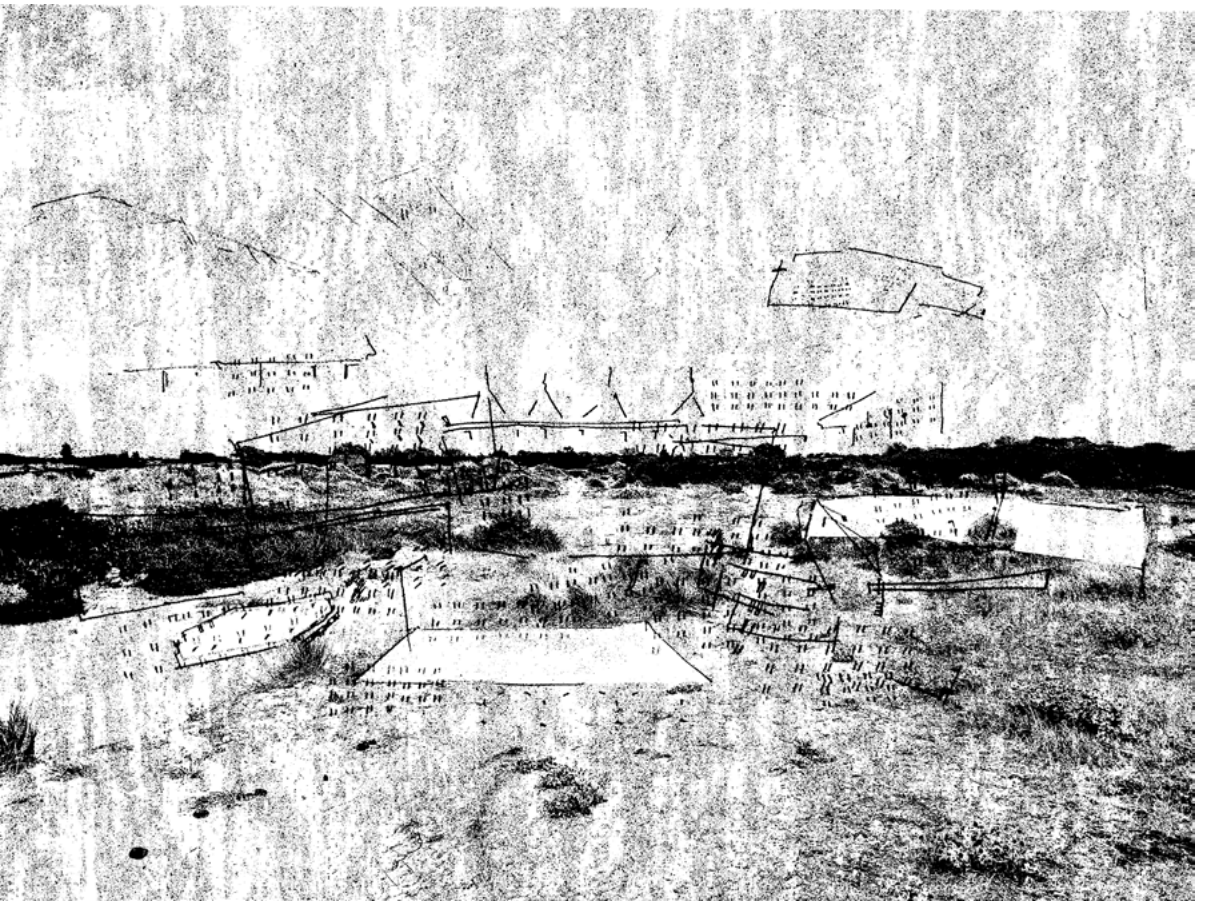
Edgworth remarks how, upon entering a roman cistern "[he] was forced into similar positions and postures as those who must have used this as an entrance in ancient times" (2013: 38). Architecture has a similar effect. Certain actions and postures are almost enforced by a building's dimensions and interior space, and this becomes a commonality between all users of a building. Both the artefact and the building where it is housed guides bodily movement, but the building's design process should be aware of the implications of the architecture and, in turn, the effect this can have on the interpretation of the artefact. For example, approaching the artefact head-on through a long, narrowing corridor, has a different observed effect on the user, than meandering routes that split into side-branches allowing visitors to find their own route to the artefact.

Key words: implicit instruction, limitation and facilitation, embodiment

Figure 2.11: Development of Concept 2 with an initial drawing and follow-up aiming to make it more concrete. (Author, 2023)







2.4.3. Concept 3: Frames of Interpretation

Seahenge's history is one of interrupted interpretation. Its excavation, conservation, and exhibition at Lynn Museum cement it in a current understanding and deny any alternatives.

Edgworth's description of The Clearing also takes the form of The Clearing within a timeframe. An archaeological excavation site has a definite opening and closing date. It is only within this timeframe that interaction and disclosure of physical evidence is possible. Similarly, due to cultural and social circumstances, the interpretation of a given artefact also has only one narrow window of opportunity at a time, which is only possible while the artefact is still active in the public consciousness.

A new home for Seahenge will continue along this process, allowing for new interpretations to be generated. Interpretation is not seen here merely as the final product reached at the end of the time period, when the site will either again be concealed by nature, or when the artefact will fade from public consciousness. Rather, interpretation is seen as a voyage (Edgeworth, 2013: 41) that unfolds between a beginning and an end date.

"This is of an understanding of architecture as 'frames within frames'. In this broader sense, there are the modules of structural space-frames, and the use of walls, floors and roofs to frame volume. In this latter context, framing becomes building— representing the container in which human activities are played out" (Porter, 2004: 66).

Keywords: Continuation of meaning making, bilateral interpretation, assembled coherence.

Figure 2.12: Development of Concept 3. From the abstract idea of interpretation and working towards more physical frames to guide it. (Author, 2023)

2.5. Research Question

The above exploration led to the formulation of the research question of this thesis: How can architecture as a Clearing exhibit Seahenge in a manner that honours its original context and allows for further interpretation in a new context, through reattachment, choreographing and framing?

The research question can be divided into subsections as follows:

- "how can architecture as a Clearing": the theoretical focus of this thesis
- "exhibit Seahenge in a manner that honours its original context and allows for interpretation in a new context": the aim of the proposed design
- "through reattachment, choreographing and framing": the three Concepts used to develop this design.

2.6. Conclusion

The development of the Touchstone acted as a canvas on which to express the intent and scope of the project. It gave way to the three Concepts: footings, screens and frames. The opportunity to reflect on the process already suggested possible theoretical avenues to explore further and knowing this, these theoretical ideas already began to develop within the three Concepts.

The concepts assisted in the identification of some of the theoretical terms – The Clearing (see section 3.1) and embodiment (section 3.3). Within the initial design response, the relevance of the Concepts was disregarded at first (See section 5.1), but soon their relevance and direct architectural application became fruitful in the design process and were continually referred to. The spirit and form captured within them during an intuitive and autonomous creative process, was continually reintroduced into the design to ensure that the final product reflected these dynamics. Within the next chapter, some of the theoretical terms that have emerged from this exploration, will be discussed. A discussion that aims to illustrate these terms beyond the explorations already undertaken.

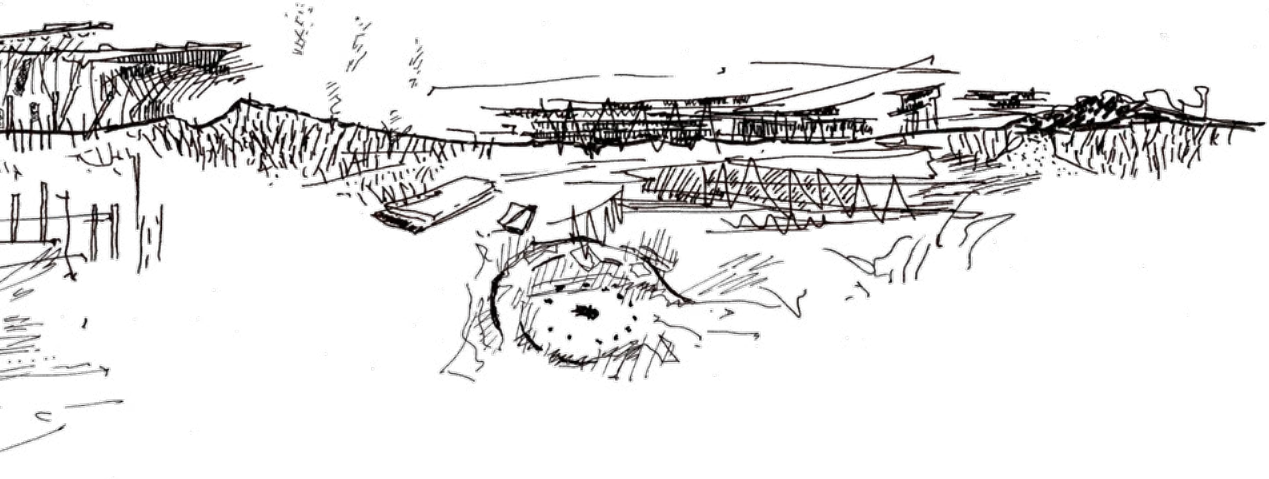
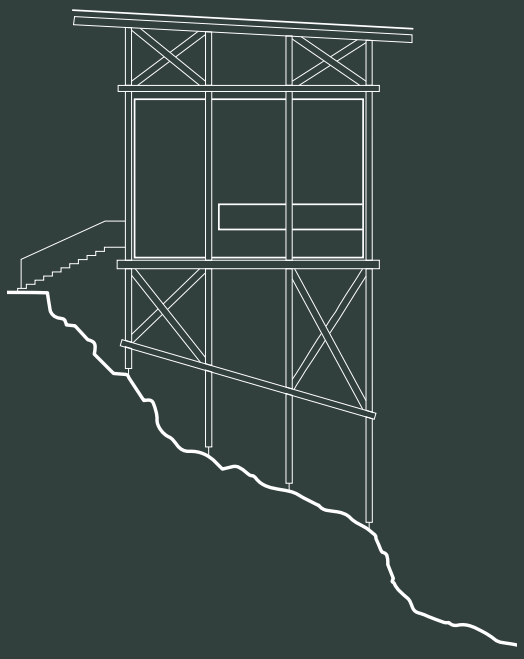


Figure 2.13: Journey of the timbers back to their original context, with the accompanying architecture along the way. Drawing done as part of concept 1. (Author, 2023)



As soon as the thrust into the extraordinary is parried and captured by the sphere of familiarity and connoisseurship, the art business has begun. Even a painstaking handing on of works to posterity, all scientific efforts to regain them, no longer reach the work's own being, but only a recollection of it.

(Heidegger, 1971: 66)

3. Ontology of Exhibiting

The previous chapter already alluded to a theoretical position within the Touchstone and Concepts. To better understand these three Concepts and to further explore their application in a design proposal, this chapter introduces the concept of The Clearing and the connection between archaeology and architecture.

In order for a building to display an artefact appropriately, the question is raised on how the appropriate environment for an artefact can be discerned. What would the suitable setting include and require for Seahenge to be exhibited more appropriately than at the Lynn Museum?

Three concurrent processes occur within an effective exhibition: The building itself acting as work within its landscape, the user entering into a dialogue with the remains of the artefact which continues to be reinterpreted in the present, and finally the artefact acting as work within the landscape. All three of these processes will now be discussed concurrently.

Figure 3.1: Adapted elevation of the Allmannajuvet Zinc Mine Museum (Author, 2023)

3.1. Introducing the clearing

Before its discovery in 1998, the existence of Seahenge was largely unknown. While some locals claim to have known of its existence, it has shimmered in and out of visibility, being concealed beneath the beach sand, for most of modern history. Upon discovery, it was thrust violently into the public consciousness. That which was unknown, was suddenly knowable. The archaeologists, druids, neo-pagans, and the locals on the beach, all stood at the veil. Some scratching at it, some stabbing, and some shovelling sand back over it.

On several levels, the concept of 'The Clearing' is applicable here: between "Clearing" the artefact which is physically hidden, and "Clearing" what we need to shed ourselves to truly experience the artefact. The German phenomenologist, Martin Heidegger, introduces the concept of 'The Clearing' in his work *The Origin of the Work of Art* (2001). 'Clearing', translated from the German *Lichtung,* is described as an open place "in the midst of being as a whole" (Heidegger quoted in Edgeworth, 2006: online). Heidegger uses the older connotation of the German word, that of a clearing in a forest where the foliage density is lighter, and sunlight reaches the forest floor. This connotation of the word points to his understanding of it as a place where light is shed on something, an enlightenment, its experience becoming possible.

While developing this concept, Heidegger stretched the metaphor of the forest clearing to its limits, and 'The Clearing' became more than just a physical place that was stationary and without agency (Edgeworth, 2006: online). It describes how we as human beings, 'always-already thrown into the world', gain passage to beings that we ourselves are not (Heidegger quoted in Edgeworth, 2006: online). While the forest metaphor should not be taken too literally, it remains useful in describing the diffuse nature of this perceptual opening. The edges where perception might momentarily clear up are not well defined, and the cleared opening itself might not be drastically clearer than the rest of the forest (Edgeworth, 2006: online).

As described, 'The Clearing' originally had many physical connotations (as in a forest), however restricting it to merely an analogy of scraping away sand from something buried as in Seahenge, would diminish its implications. Fig 3.2 is an interpretation of the non-physical aspects of 'The Clearing', where the concealment is not literal but an ontological rule of nature.

3.2. Seahenge as 'Work'

While the concept of 'The Clearing' applies to archaeology and the process of mere information gathering, Heidegger originally discussed it within a very specific context. 'The Clearing', the entities revealed, and the process of concealing take on very specific forms, namely, the artwork and the earth.

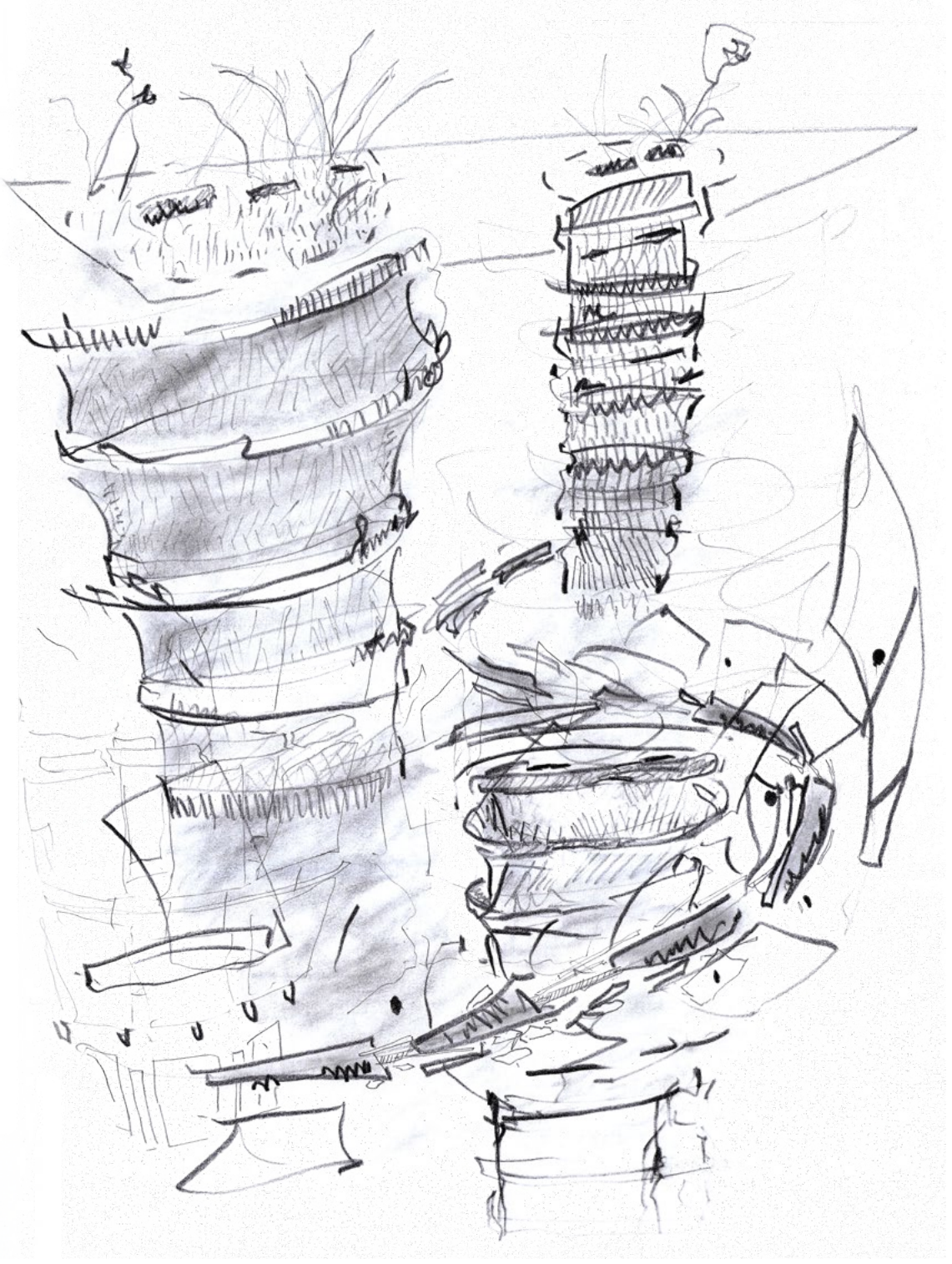
The investigation of exhibiting Seahenge in a more appropriate way, is more relatable to the exhibition of a work of art, than exhibiting a mere archaeological find. Heidegger distinguishes between mere objects – rocks, pieces of wood, bricks, tools *ready at hand*, and works of art. He draws this distinction to illustrate how we, as phenomenological beings, interact differently with each of them.

Despite its long-forgotten origins, possible ritualistic, and thus, functional use, this thesis argues that the remains of Seahenge should not be considered as a utilitarian item – "a tool" from which its ultimate essence is accessible through use, but **rather as a "work"** of art in which truth is unconcealed when allowed to yield itself in its createdness (Anderson, 2012: 74).

The 'work' opens up a world. Within the work "an entity emerges into the *unconcealedness* of its being" (Heidegger, 1971: 35). Viewing a work through its material composition, inadequately explains our experience thereof. We must consider the truth that the work sets into work (Heidegger, 1971: 38). What this 'truth' is for Seahenge, will be examined later in this chapter.

As concluded in the previous chapter, the setting of an exhibition should be in tune with the atmosphere surrounding the work. Using the language of Heidegger, we can then expand this requirement: Exhibition becomes concerned with presenting the work in a manner that will allow it to continue its strife, fitted into the rift between world and earth. The same holds true for preservation, which is no longer concerned with merely the material survival of the object: but with preserving this strife within the rift.

This 'rift' bears some explanation. Heidegger sees the earth as self-dependant, effortless, and untiring. The earth, however, denies any penetration. While Heidegger uses the example of a stone and a colour, a more relevant example may better illuminate the rift. The fragility of the Holme's Dunes resists rational analysis. If you were to take a shovel to it, all you would be left with, is a shovelful of dirt. If you were to draw a



map of the dunes and over time, you would only be left with a numerical description. The true lightness of the dunes withdraws instantly. The dunes, the rocks, the colours etc. form part of The Earth. Opposite to all of this, Heidegger places the World. It is the ever "non-objective to which we are subject as long as the paths of birth and death [...] keep us transported into being." (Heidegger, 1971: 43). The world rests upon the earth, striving to surmount it, striving to open it. The earth is ever-concealing, resisting opening. It is within this strife, that the work creates a rift. It creates a world, but sets forth the earth, it instigates this striving.

It is through the work, that the qualities of the earth are presented beyond mere numerical description. Through the paintings of Colin Moore (Fig 3.4), the vastness of the beach is opened up for observation. It is through Seahenge's steadfastness that the lightness of the dunes, the ephemerality of the beach, and the harshness of the storms are unconcealed. That which the earth untiringly conceals. Without these works, the true nature of the earth will remain concealed.

Figure 3.2: The non-physical aspects of The Clearing, as established by Heidegger (Author, 2023)

3.3. Body as medium

As has been established, within the Heideggerian *work* an entity emerges into the *unconcealedness* of being. The question arises as to how and when these completely separate entities become apparent to us. Mearleau-Ponty viewed one's own body as the most prominent opening through which we can experience other entities (1964: 5). The material world – the *thingly* nature as Heidegger would name it – are not merely relations between different points in an objective space. Rather, "they are relations between these points and a central perspective – our body" (Mearleau-Ponty, 1964: 5). The Heideggerian *truth* unconcealed by the work is not held and circumscribed by our minds, but shows "through and envelops us" (see Fig 3.3).

Archaeologist Edgeworth echoed this in the context of archaeology, mentioning how often one is situated within whatever structure one is excavating, be it a ditch, a burrow or posthole (2013: 37). Similarly, Seahenge is uniquely, a habitable structure inside the circle of logs. Space, and our bodily experience thereof, becomes part of the work.

Perhaps the most illuminating part of the excavation of Seahenge was not the removal of the timbers, but the recreation of the circle built by the Time Team crew, aided by the archaeologists overseeing the dig. The reconstruction was constructed over several days using authentic methods of splitting the wood and hoisting the central stump into the hole using honeycomb rope. When standing within the reconstruction. Francis Pryor couldn't help but notice the effect the structure had on the people standing around it. Outside they would chatter and converse over a cup of coffee, but once entering the circle, the mood would turn reflective and quiet (Raikes & Johnston, 1999: Documentary). Tony Robinson, the presenter of the documentary, remarked that the circle felt empty, as if something ought to have been on top of the upturned stump (Raikes & Johnston, 1999: Documentary). This knowledge was certainly only obtainable through his bodily interaction with the circle. Moving around within it.

On an immediate scale, it is now clear that Seahenge should be exhibited in its original configuration, to again reveal the entity that is unconcealed and is experienced through one's bodily interaction. Its larger impact on the landscape should also be considered. Unfortunately, this is where the recreation erected shortly after the excavation falls short – since it was constructed in the middle of an apple grove a short distance

Figure 3.3: Interpretive drawing of passage from *The 'Sensation' as a Unit of Experience* (Author, 2023)

away. Seahenge, located on a liminal barrier between sea and land, and alongside historic footpaths, used to be something you **passed by** more often than you **entered.** This quality is completely lost with the recreation.

The exhibition of Seahenge and the building housing it, can only reveal the unconcealed truth of Seahenge, by both allowing the relationship of the work and the landscape, and by allowing authentic interaction through the body to allow for continued interpretation.

3.4. Seahenge as truth setting into work

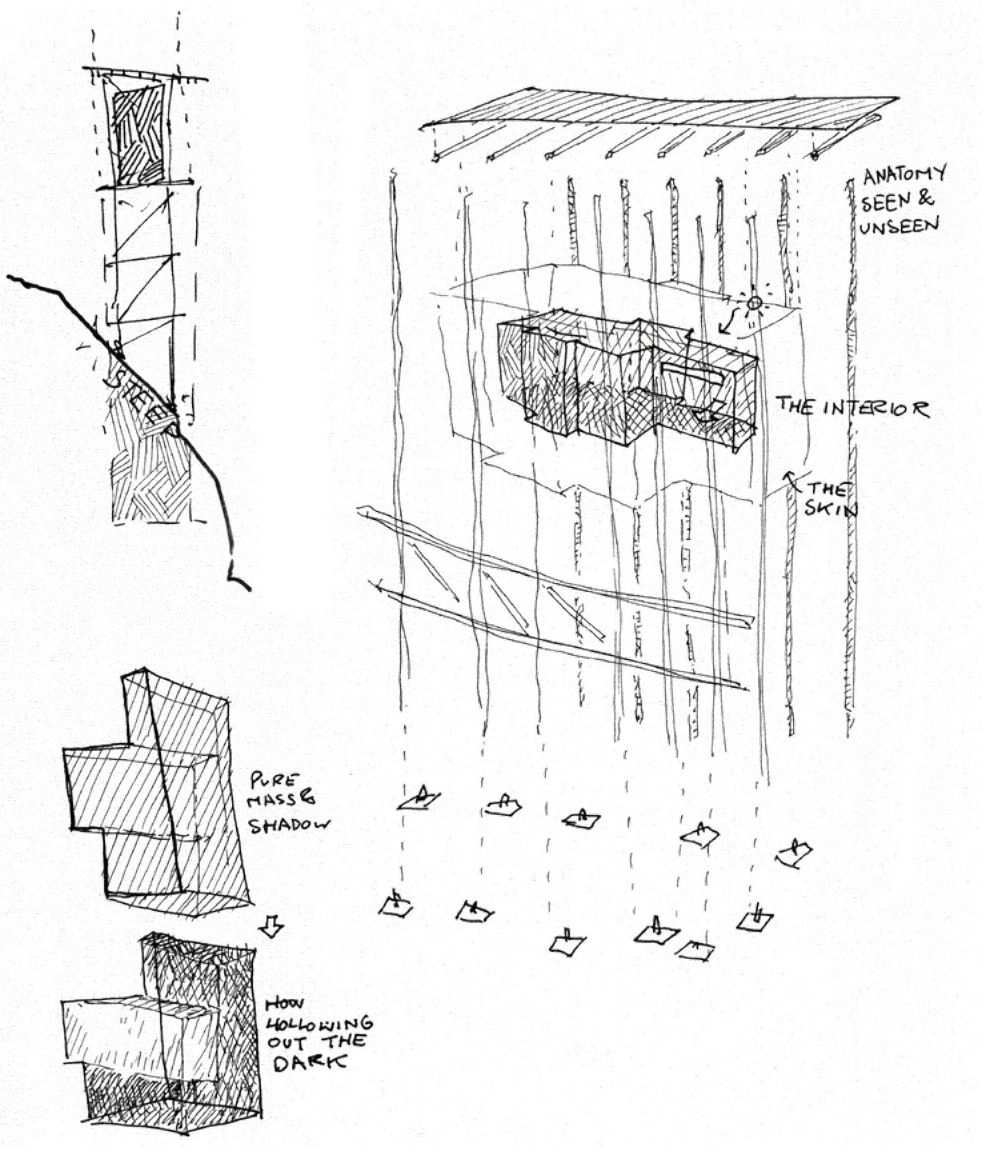
Seahenge on its own, much like the Greek Temple discussed by Heidegger, "portrays nothing" (1971: 40). There are no carvings to a deity, no inscriptions to be deciphered. This does not prevent it from *unconcealing* truth. It stands at the edge of the inhabitable world, on the boundary between land and sea. The steadfastness and constancy of the work contrasts with the continually changing nature of the tides and dunes. It illuminates the edge of the world.

Seahenge, as well as most prehistoric ritual sites found across Britain, occupied liminal spaces within a landscape (Pryor, 2008: 140). These prehsotric sites that dealt with, or to some degree involved, death, involved rituals that occur outside our everyday spaces of society and at the edges of our perceived world; possibly the motivation for Seahenge's original placement near the ocean. Adding a liminal between the physical and spiritual.

Seahenge exemplifies the expanse of the landscape by creating an interior within the enclosed circle of its timbers. It forms a liminal between its exterior and interior, between constancy and transience. In its steadfastness, it illuminates the washing away of the ever-changing tide.

Figure 3.4: *Holkham Tidepools* depicting the Norfolk coastline, Linocut art print (Moore, 2020)

Allmannajuvet Zinc Mine Museum
Peter Zumthor
Sauda, Norway
2016



3.5. Zumthor and the rift

In the introduction to *Atmospheres* (2006) by Swiss architect Peter Zumthor, Ehlert writes, almost as if quoting Heidegger: "There is an exchange between [his] buildings and their surroundings. An attentiveness. An enrichment" (2006: 7). In his own words: "the physical substance of what is built has to resonate with the physical substance

Figure 3.5: One of the buildings perched on the side of a road (Amoretti, 2017: online)

Figure 3.6: Analysis drawing of the principles present in the different buildings (Author, 2023)

of the area" (Zumthor quoted in Slessor, 2017: online). His project for a Zinc Mine Museum in Norway, is a prime example of this 'resonance' between building and its surrounding. The different masses of the smaller blocks of the building, are positioned to bring out the qualities of the landscape. In Figure 3.5 the steepness of the rock would have been obscured, had the block not so delicately been balanced on it.

In *Atmospheres,* Zumthor lists various practical considerations that he employs during the design process. Differing between the very literal - "the compatibility of materials" (2006: 22) and the more ephemeral – "the magic of the real" (2006: 18). Between the different considerations and various nostalgic stories by the author, a description is drawn up. A description of the rift in the strife. To see these smaller blocks of buildings as a collection of 'Clearings' – each revealing something about the landscape. In particular, in his description of "the body of architecture", he sees these buildings that "collect things in the world, different materials and combines them to create space" (see Fig 3.6), as having its own body, its own anatomy and skin covering it (2006: 23). He describes his approach to light, as starting with 'pure mass of shadow and then, afterwards, putting light in, as if you were hollowing out the darkness" (2006: 57).

These descriptions might not further elaborate on Heidegger's analogous and mystical description of the clearing, but they begin to paint a picture of everything on this side of 'The Clearing'. That which gives form to the cleared opening, and prevents it from collapsing on its own weight. That which fixes truth in a 'figure', which Heidegger viewed as the "structure in whose shape the rift composes and submits itself" (1971: 62). In the shaping of earth into form, Heidegger warns against the danger of "misusing the earth as matter". Keep in mind that here is not meant earth merely as soil or rock, but all unformed materials – all the 'things' collected by Zumthor. Rather, we should use it in a manner that "sets it free to be nothing but itself".

Zumthor echoes this attunement towards the inherent qualities and 'identity' of things, to make use of *earth*. This 'use' is approached sensitively, as shown in his attitude to not "use it up".

> Materials are endless. Take a stone, you can saw it, grind it, drill into it, split it or polish it – it will become a different thing each time. Then take tiny amounts of the same stone, or huge amounts, and it will turn into something else again. Then hold it up to different light – different

again. There are a thousand different possibilities in one material alone. (2006: 24)

From the above quote the link is clear between Zumthor's practical and poetic approach to architecture, and Heidegger's ontological views. Zumthor's thinking behind his buildings illuminates how this ontological view may practically inspire the design process.

3.6. Conclusion

The theoretical investigation presented in this chapter has had varying relations to . The Concept development – already being a form of architecture – gestured towards a specific theory. Delving into Heidegger's ontology left architecture momentarily behind but established the necessary theoretical framework. The discussion returned to architecture by viewing Zumthor and his work through this framework concluding that the building can reveal latent qualities of its surroundings and artefacts displayed within. Therefore, creating an exhibition of Seahenge requires an understanding of the original prehistoric Seahenge, that is inseparable from an understanding of the landscape in which it was originally situated. Both of these, understanding both the artefact and its surroundings, are granted to us by understanding how entities other than ourselves are concealed and unconcealed from our experience.

While poetically charged and craftily assembled, the design of the Allmannajuvet Zinc Mine Museum in Norway did not require certain planning considerations that will be vital for a new exhibition of Seahenge. The next chapter will investigate these planning considerations for a new Seahenge museum, in the context of two precedents as examples, examining the relationship of these precedents to their landscape, as well as to the artefacts they are housing.

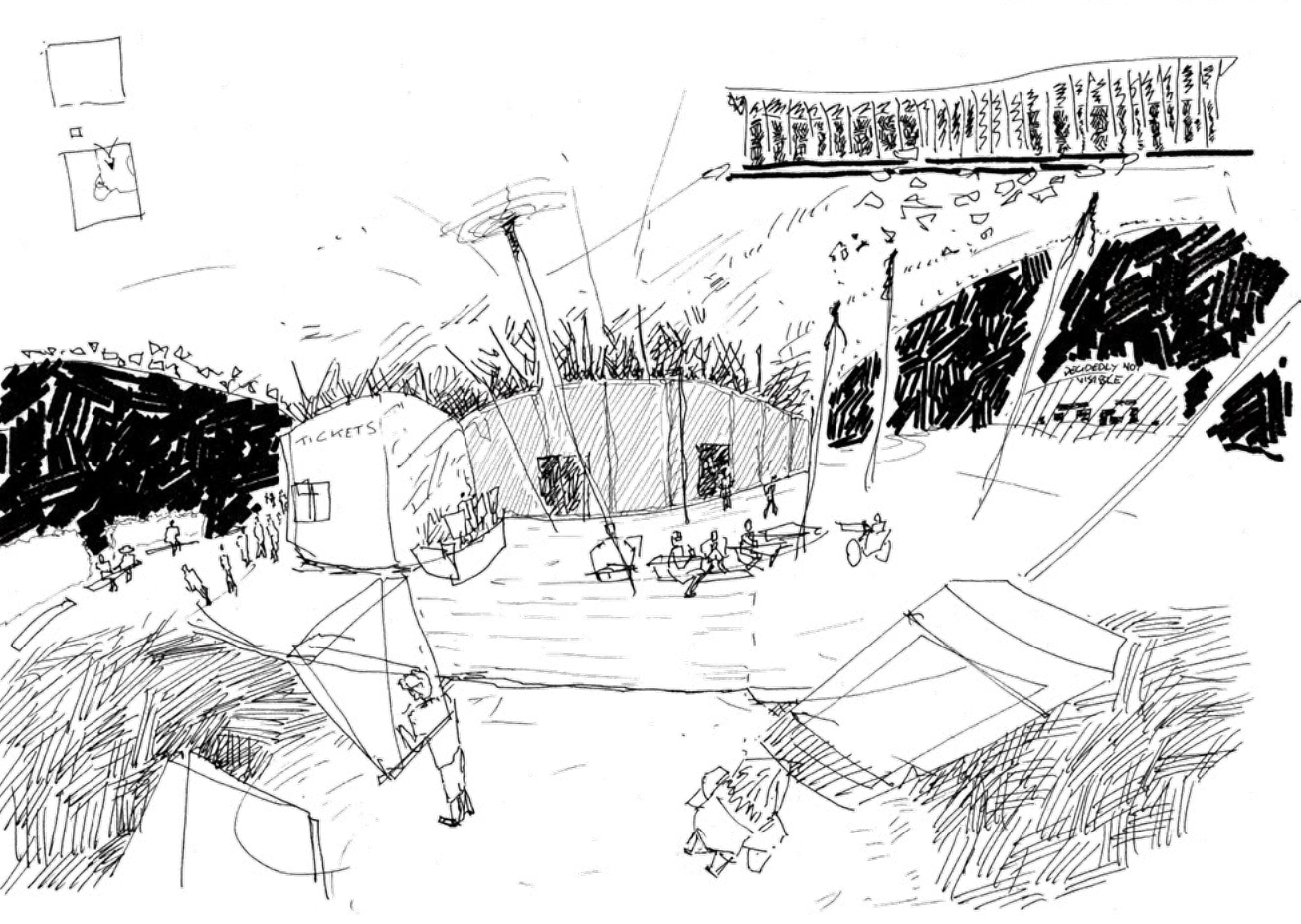
4. Precedent Studies

This chapter aims to evaluate the design and visitor experience of both the Mary Rose Museum and the Stonehenge Visitor Centre, within the theoretical stance established in the previous chapter. While the study of Zumthor's Zinc Mine Museum in the previous chapter has proven insightful, it provides little in the realm of formal program and organisation of what this project ultimately should become, namely a tourist destination. To better understand this context, two buildings have been chosen as precedents. Both of these will be analysed in terms of their functional success and their interaction within their historical context. The first one, the Stonehenge Visitor Centre posits itself as a prelude to one of the most famous prehistoric monuments in the world. The second one, the Mary Rose Museum houses the fragile remains of a sixteenth century ship, housing and protecting its remains from the elements.

The design of the new proposed Seahenge exhibition finds itself between two opposing forces, allowing the artefact to tell its story uninhibited, but also protecting it from the elements. In the words of Martin Heidegger, to "yield ourselves to the undisguised presence of the thing" (1971: 25) but still to ensure the continued material survival of the thing. Stonehenge Visitors Centre (Fig 4.2 -4.3) abandons the prospect of entering into dialogue with the artefact entirely. Mary Rose Museum (Fig 4.1), on the other hand encloses the artefact, preserving dialogue with the artefact's context.

Figure 4.1: Interior display area of Mary Rose museum showing remains of the "Mary Rose" flagship of King Henry VIII (Perkins&Will, 2013: online).

Figure 4.2: Approach to Stonehenge visitor center, showing the road and buses that lead to the stones (Author, 2021).


TICKETS
DELIBERATELY NOT VISIBLE

4.1. Stonehenge visitors centre

Throughout his book on Seahenge, Pryor (2005) discusses the interaction between prehistoric sites and the landscapes in which they are located. He notes that sites rarely existed in isolation and formed part of larger *ritualistic landscapes* (155). These landscapes were used by several generations of humans and that single sites, like Stonehenge, represent merely an episode within a larger story. Any building erected in relation to these sites, must be considered as a further entry into an existing landscape.

Prior to visiting the site of Seahenge, I also visited Stonehenge and its visitor centre. It was designed by Denton Corker & Marshall and completed in 2013. Upon arrival, I briefly walked through the centre before heading to the Stones by shuttle – some 2 km away. The Stones themselves are stunning. The layout of the route and the seemingly informal rope balustrades makes you feel very close to the Stones. It was a beautiful day, allowing me to spend my time circling the stones before returning.

After the journey back to the Stonehenge visitors centre, one is shuffled through the gift shop and then left to walk through the exhibition area. To its disadvantage, I had visited the Castelvecchio Museum in Verona, northern Italy, earlier in the trip and my expectations concerning exhibition and layout, were high. Unfortunately, the Stonehenge centre did not live up to that same standard. I found myself jolting between the various exhibition panels, struggling to follow whatever narrative they were trying to convey with the chosen exhibits.

The interior of the gift shop and dining hall, although cramped, was designed well enough. On a par with any airport lounge or art museum cafeteria. The connection between these separate spaces was at times akward, with each space merely spilling out into the covered hallway. Figure 4.4 is an interpretation of the hallway between the two main building masses, namely the cafeteria with the gift shop, and the exhibition itself. Stonehenge is located directly in line with the corridor and could have been made a focal point, anchoring the flow towards it. Without direction however, this corridor becomes aimless, with visitors randomly moving back and forth.

Figure 4.3: Approach towards the ticket booth (Author, 2022)

Figure 4.4: Analysis of corridor space between boxes (Author, 2023)

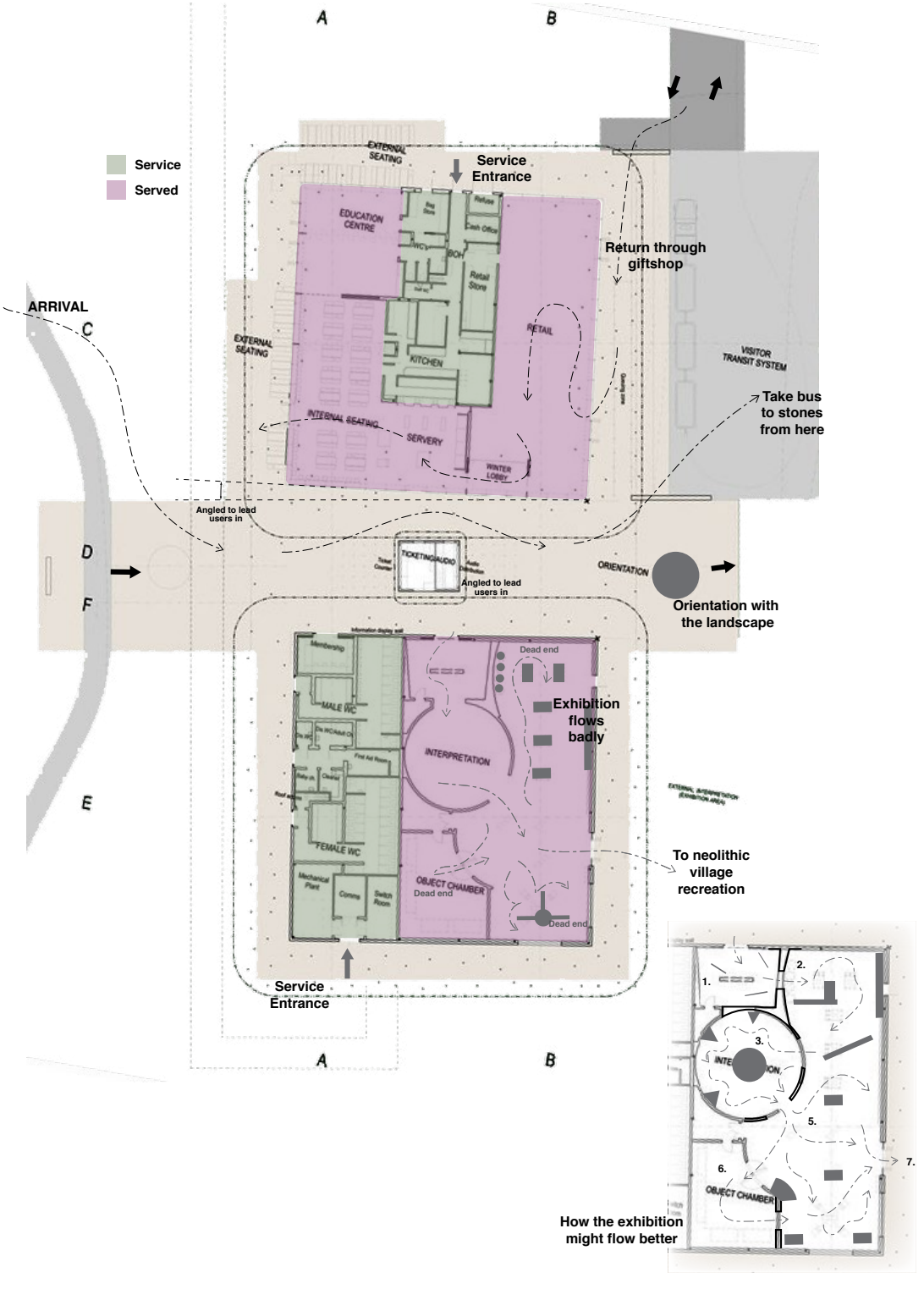


Figure 4.5: Analysis of Plan (Author, 2023) adapted from (Denton Corker Marshall, 2013: online)

Figure 4.6: Approach when returning to the visitor centre back from the stones (Author, 2022)

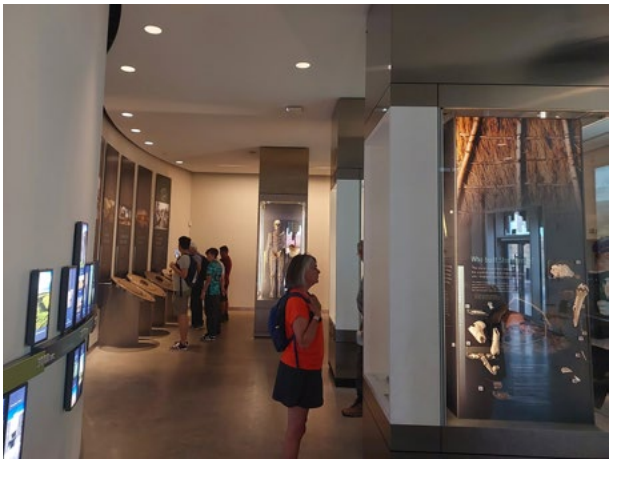


Figure 4.7: Dead end in exhibition area (Author, 2022)

Figure 4.8: The building as prelude to artefact (Author, 2023)

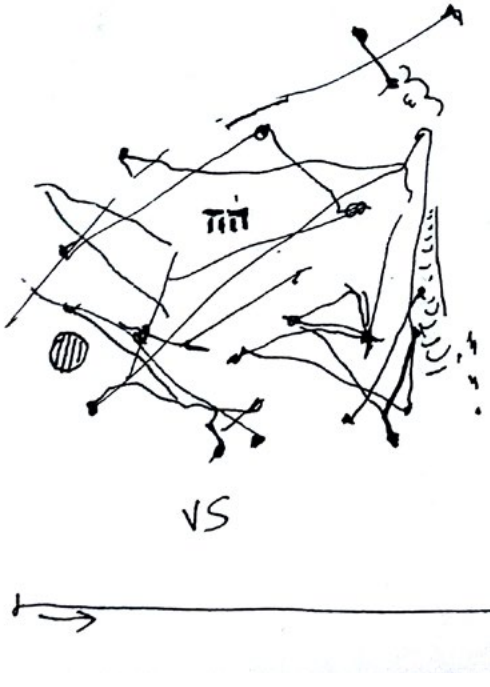


Figure 4.9: The artefact fits into a larger network of sites and events and is not a singular imposition in the landscape, frozen in time (Author, 2023)

Figure 4.10: The building should relate to this larger network of site, fitting into the larger context and not standing itself, as an imposition (Author, 2023)

Figure 4.11: With the result of the building being aimless and without focus (Author, 2023)

4.1.1. Contrasting with the original

The inspiration of Stonehenge granted the architects a clear sense of monumentality and simplicity. This is evident in their early concept drawings. Unfortunately, this did not translate into technical resolution (see the articulation between column and roof in Fig 4.6) or transitional spaces. Something that admittedly, Stonehenge itself doesn't overtly offer. The critic, Rowan Moore, also points this out: "The design suffers only from nerviness – mannerisms such as serrated heads to door openings, random angles on the steel struts, and pixelated perforations at the edge of the roof – which feels wrong so close to something as purposeful (if also apparently purposeless) as Stonehenge. They should have had the courage to be simpler." (Moore, 2013: online) Nonetheless, Moore also does have some positive comments: that the three distinct boxes result in the different spaces to be "offered but not imposed on [the visitor]" as can become an issue with a visitors centre/museum typology. A comment by Moore which offered clear advice for the proposed design of this thesis.

4.1.2. The original included as implication

The architect's motivation for removing the centre from view when standing at the Stones "is based on the idea that it is a prelude to the stones, and its architectural form and character should in no way diminish their visual impact, sense of timeless strength and powerful sculptural composition," (Marshall quoted in Frearson, 2013b: Online).

While a building as a prelude can offer an interesting dialogue, yet to hide this partner in the dialogue is to run the risk of having no discernible focus. An architectural conversation takes place only implicitly in the memory of the visitor. Therefore, without the conversation partner's presence, the detailing in the centre seems arbitrary. In the words of Moore (2013: online), the architects "should have had the courage to be simpler".

An exhibition proposed for Seahenge, inherently avoids this problem to some extent. Since, by bringing the timbers back to its original site, human action can no longer be incidental or implied. Instead, the question now becomes: how can architecture interact with an artefact which seemingly requires to be maintained? In order to find a possible answer, a much more sensitive artefact will now be investigated.

4.2. Mary Rose Museum

The design of the Mary Rose Museum in Plymouth, UK, completed by Wilkinson Eyre in 2013, faced a strikingly similar brief to that of Seahenge. It also houses historic timbers salvaged from the sea in a manner that aims to honour their original setting and feel (Fig 4.1). The timbers in question were the remains of a sixteenth-century warship the Mary Rose, flagship of King Henry VIII (Frearson, 2013a: online).

The interior, designed by Perkins & Will, places the remains of the hull in their original formation and creates an atmosphere around the timbers, that recreates the experience before the ship sank. The dark interior, void of daylight, with small, pierced windows and narrow walkways, is specifically designed to emulate the feeling of being inside the original hull of the ship (Frearson, 2013: online).

The exterior clearly resembles the hull of a Tudor ship of British royalty, reinforced by the visual comparison with the HMS Victory that stands opposite. However, the museum building is unclear as to what exactly is housed inside. The relationship between the interior and exterior is both obvious and unexpected when one finds only half a ship inside. Unlike Stonehenge, I feel that both the building and the artefact of the Mary Rose are enhanced due to the synergy between the two. Whereas with Stonehenge such a dialogue is avoided, and when building and artefact of Stonehenge are viewed as a pair, this relationship and lack of synergy diminishes the quality of both.

The Mary Rose features a strong monolithic design that can overpower the very fragile artefact within. But to the detriment of this monolith, its auxiliary functions fail to support its clarity. The restaurant, restrooms and gift shop, described by Wainwright (2013) as "boxy limpets", are attached to the sides of the oval floor plan. Inserting an entrance into the elegant Tudor 'hull' seemed a major challenge, causing the architects to opt for an inconspicuous puncture in one of these "limpets".

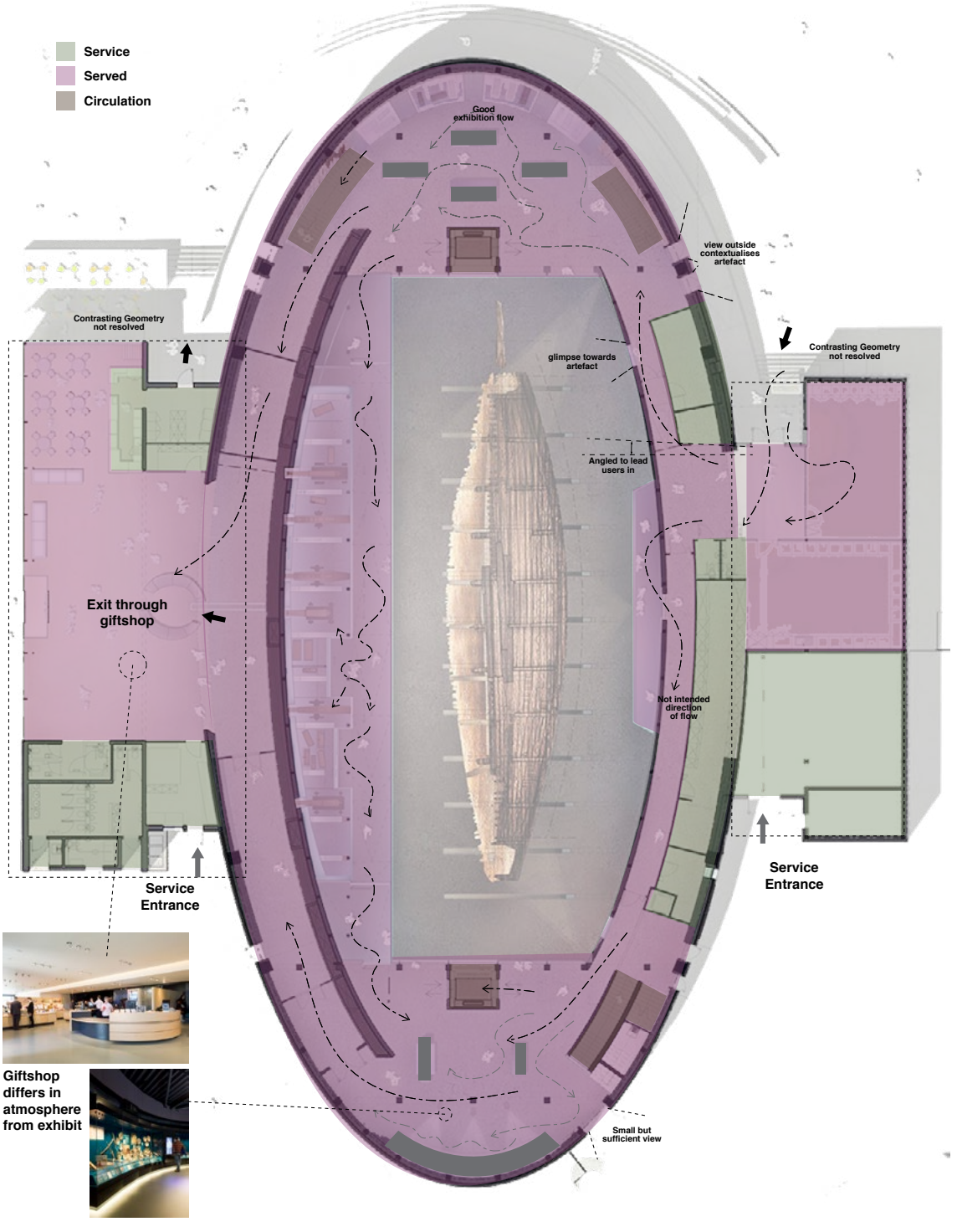


Figure 4.12: Analysis of Plan (Author, 2023) adapted from (Perkins&Will, 2016: online)

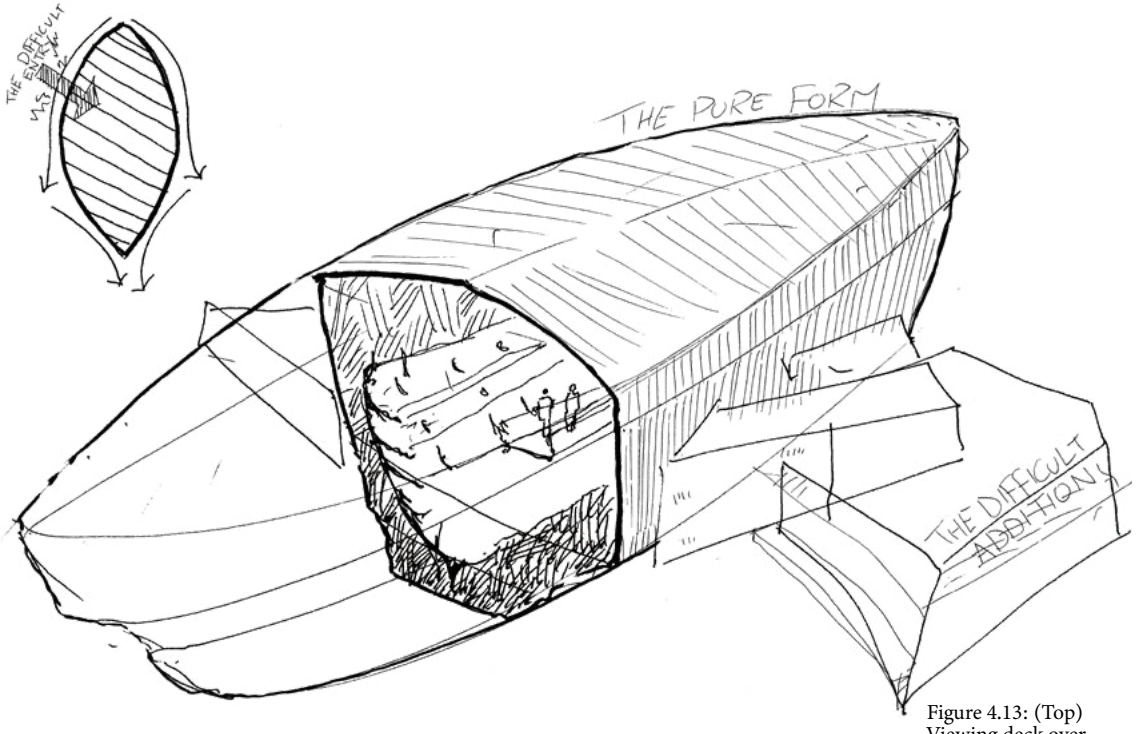


Figure 4.13: (Top) Viewing deck over the harbour (Chivers In: Frearson, 2013a: online).

Figure 4.14: (Bottom) Analytical section and diagrams (Author, 2023)

One of the most insightful lessons learned from the study of the Mary Rose Museum came from the way in which the artefact itself was supported. Purpose-made timber joists were positioned between the curved ship and the orthogonal framework to support its fragile timberwork. Here lies a small lesson in the housing of an artefact. As a concession between a required order and the variation of non-architecture, a mediating element with variable configurations can create a compelling space but is also able to respond more closely to any irregular shape of an artefact (Fig 4.16 is a visual interpretation of this idea in an orthogonal view).

Figure 4.15: Connection between the artefact and support structure (Perkins&Will, 2016: online).

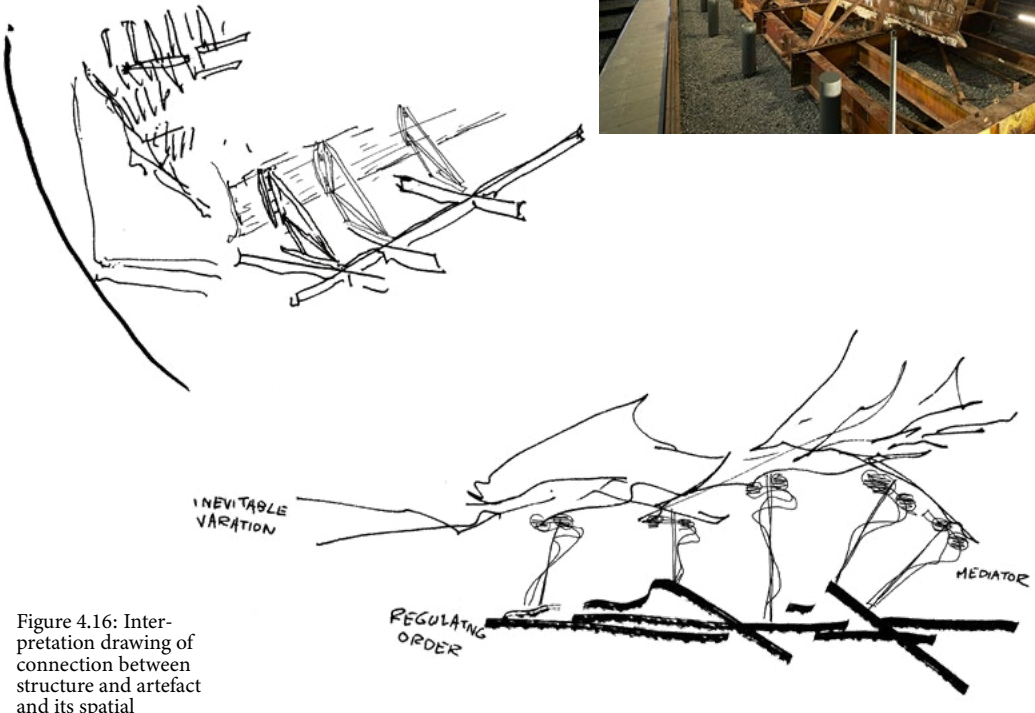


Figure 4.16: Interpretation drawing of connection between structure and artefact and its spatial possibilities (Author, 2023).

Solar Boat Musuem
Kamal el-Mallakh
Giza - Lower Egypt
1985

4.2.1. Another approach to a reclaimed boat

The Kufu Solar Ship Museum near the foot of the Pyramid of Giza in Egypt, demonstrates another different approach to another boat also reclaimed from the sea. Ample windows create an exterior feeling of the outside world inside the museum. Thereby also recreating the atmosphere of the solar ship's original use some 4500 years ago.

The exterior of the Solar Boat Museum (Fig 4.17) is more subdued in colour and form than the Mary Rose Museum. Its reduced functional plan circumvents the 'limpet' problem, but that's not the main point. The important point here is that it is neither the immersive dark exhibit of the Mary Rose, nor the fully lit, desert sand-tinted enclosure of the Solar Ship, but rather a specific atmosphere that draws the visitor into the world created by the artefact. This also should be the aim of a new Seahenge exhibition.

The dimly lit interior was a tempting option for exhibiting the timbers of Seahenge at King's Lynn Museum – their elusive quality will be greatly enhanced, and the inconclusive nature of their use exemplified thereby. However, this does not illustrate or inspire the original feeling of being within the circle of the henge. As described by one of the archaeologists when standing inside the reconstruction at King's Lynn Museum, its interior was likened to "a fenced-in area. Its almost like a prison, except you can see to the outside." He continued: "From the outside, you can see the stump just through the slots" The reconstruction was also described by another who related it to the feeling of standing within an empty church with no one else. (Raikes & Graham, 1999: Documentary). Whereas the Mary Rose Museum created an appropriate atmosphere by replicating the dark interior of a ship, a new exhibition for Seahenge will do so by recreating this sense of fenced in sacredness.

4.2.2. Appropriate for whom?

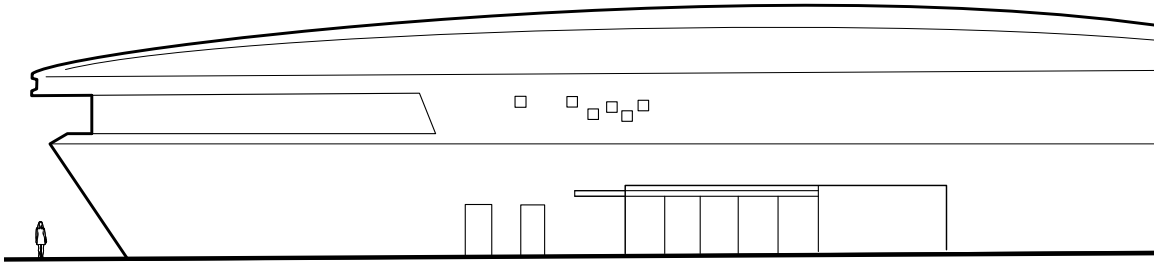
As has been established by now, the proposed new Seahenge museum should instead house the artefact in a setting appropriate to its prehistoric origins. Up until now, only the perspectives of the archaeologists who worked on its reconstruction at King's Lynn Museum, and their conception of its original setting have been considered. The question arises, which is closer to the truth revealed by Seahenge? The archaeologists' interpretation of fenced-in sacredness when standing in the recreation done after the excavation, or the interpretation of those opposed to excavation of the

Figure 4.17: Photos of the Solar ship before being relocated to the Grand Egyptian Museum in 2021 (Kalpana, 2021: online).

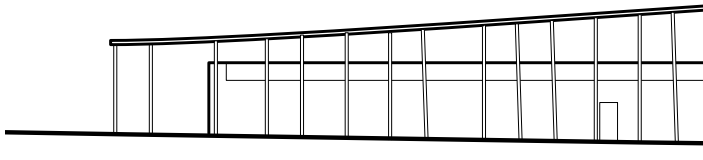
transient timbers within an ephemeral beach landscape. The exhibition will make no decision towards legitimacy of interpretation, merely aiming to present the artefact in a manner authentic to its prehistoric context. The decision is however taken, to not bury the timbers back in the beach. While some Neo-Pagans and Druids proposed this, this will not allow any further understanding or interpretation of the artefact.

4.3. Conclusion

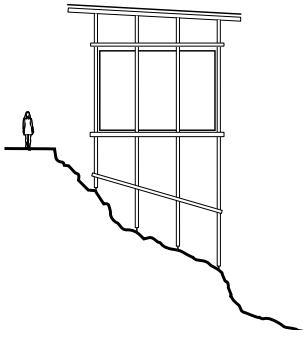
With its rich and multifaceted history, Great Britain has no shortage of interpretations of the archaeological museum typology. The discussion of the above two precedents is highly relevant to the discussion of a novel exhibition proposed for Seahenge in this thesis. Varying successes of the above examples have influenced the goals of



Mary Rose Museum



Stonehenge Visitors Centre



Allmannajuvet Zinc Mine Museum

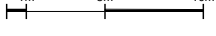
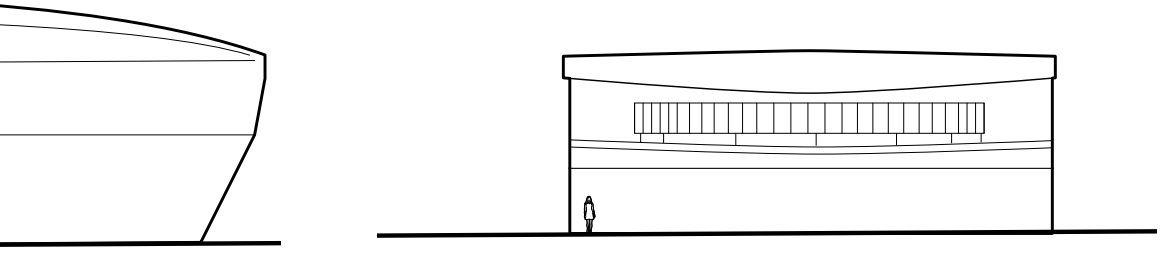


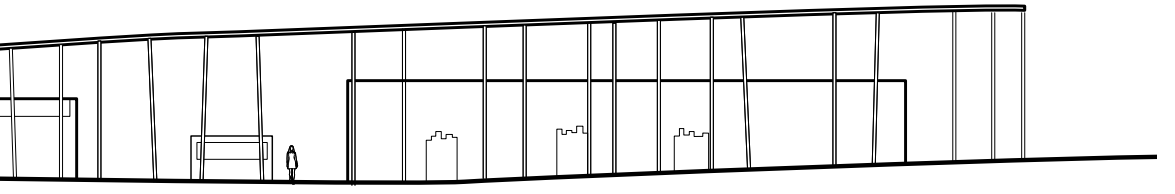
Figure 4.18: Comparison of scale between various precedents discussed, and Seahenge and Stonehenge themselves (Author, 2023).

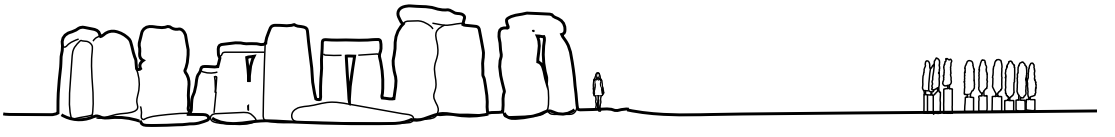
the design: Creating an atmosphere or ambience to interact with but not overwhelm the artefact, seamless progression of spaces, attention to layout of the exhibits to accommodate the flow of users. Amongst all these examples, an assumption seems to have crept into the discussion which initially steered the design process into the wrong direction (see Section 5.1). Due to various practical constraints, these investigated museums resemble a formal 'complex'. Contrast this with the discussion of the Allmannajuvet Zinc Mine Museum in Norway (in Section 3.5), whose program might be less suited to an exhibition for Seahenge, but whose poetic sensibilities should not be ignored during the design process.

In formulating an appropriate and sensitive approach to designing a new exhibition for Seahenge, the various influences and explorations of other museums discussed so far have been considered and taken into account. The traces of these, along with the development of the design itself, will be examined in the next chapter.



Kufu Solar Ship Musuem





Stonehenge

Seahenge

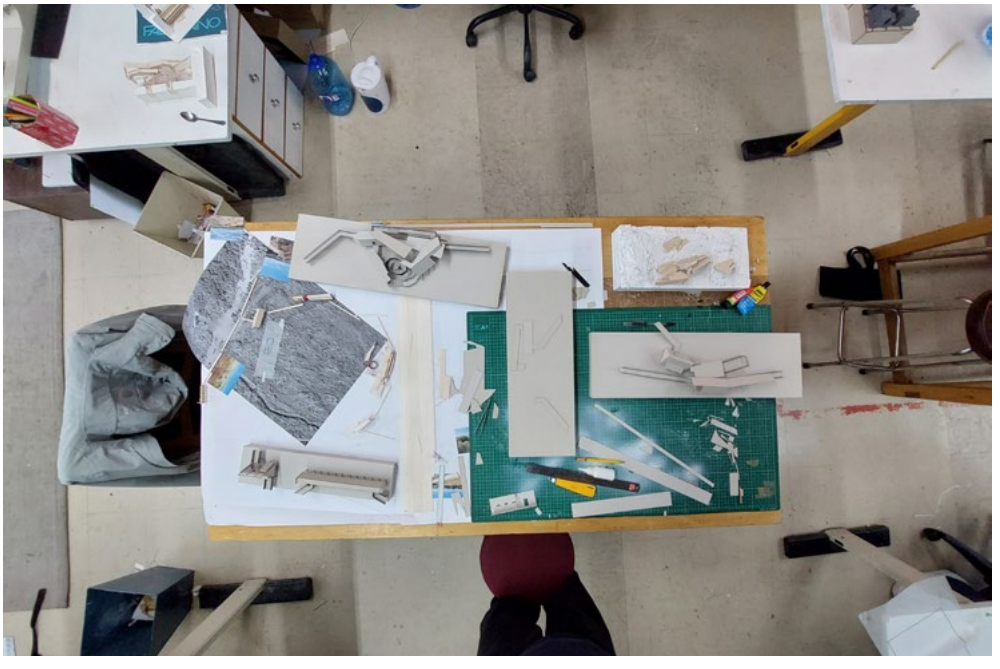


Figure 5.1: The design process at work (Author, 2023).

5. Design Development

The previous chapters have established the problematic central to this thesis, explored the influences of the design process by looking at examples of various buildings, and showcased the conceptual explorations that were created as a starting point for solving this problem. This chapter uses these explorations to develop the layout, form, and positioning within the landscape of Seahenge’s new exhibition. Throughout the design process, the various concepts were continually referenced to test the validity of design choices within the theoretical framework. Various iterations of models and freehand drawings were created (Fig 5.3 -5.8) in search of appropriate form giving and massing to eventually arrive at the preliminary scheme presented at the end of this chapter.

Grounding the journey

- C Cafe
- G Gift Shop
- A Amenities

Original Context

- T Exhibition of original timbers
- E Exhibition of other artefacts
- R Boardwalk rest stops

Original Location

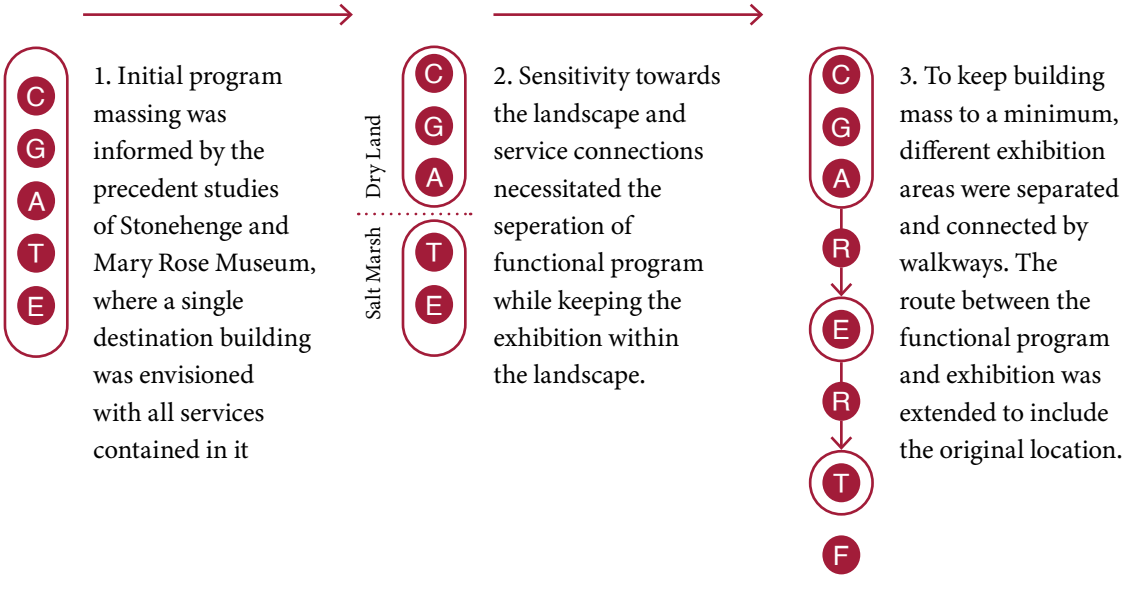
- F Folly

Figure 5.2: Division of program between the town of Holme, original context and original location of Seahenge (Author, 2023).

5.1. Program

Without a fixed site boundary, the extent, the scale, placement, and composition of the program was up for debate at the start of the design process. The option an enclosed contained complex was attractive after analysing the two main precedents as examples: the Mary Rose and Stonehenge Visitor Centres. However, considering the landscape and nature of the Stonehenge artefact, this idea was rejected. Instead, as seen from the study of the Allmannajuvet Zinc Mine Museum (Section 3.5), a narrative is created across various smaller buildings within the landscape. One that both contextualises the content being exhibited and also recreates the atmosphere in which these artefacts were originally found. The program has therefore been devised as a journey between three points (Fig 5.2). Different buildings are strung along a footpath that will connect the town Holme, the display of the original Seahenge timbers within their original context (a salt marsh) and a folly situated on the original site where the structure was excavated. See the diagram below for the Development of this programme during the design process.

Development of program



concept 1 drawing

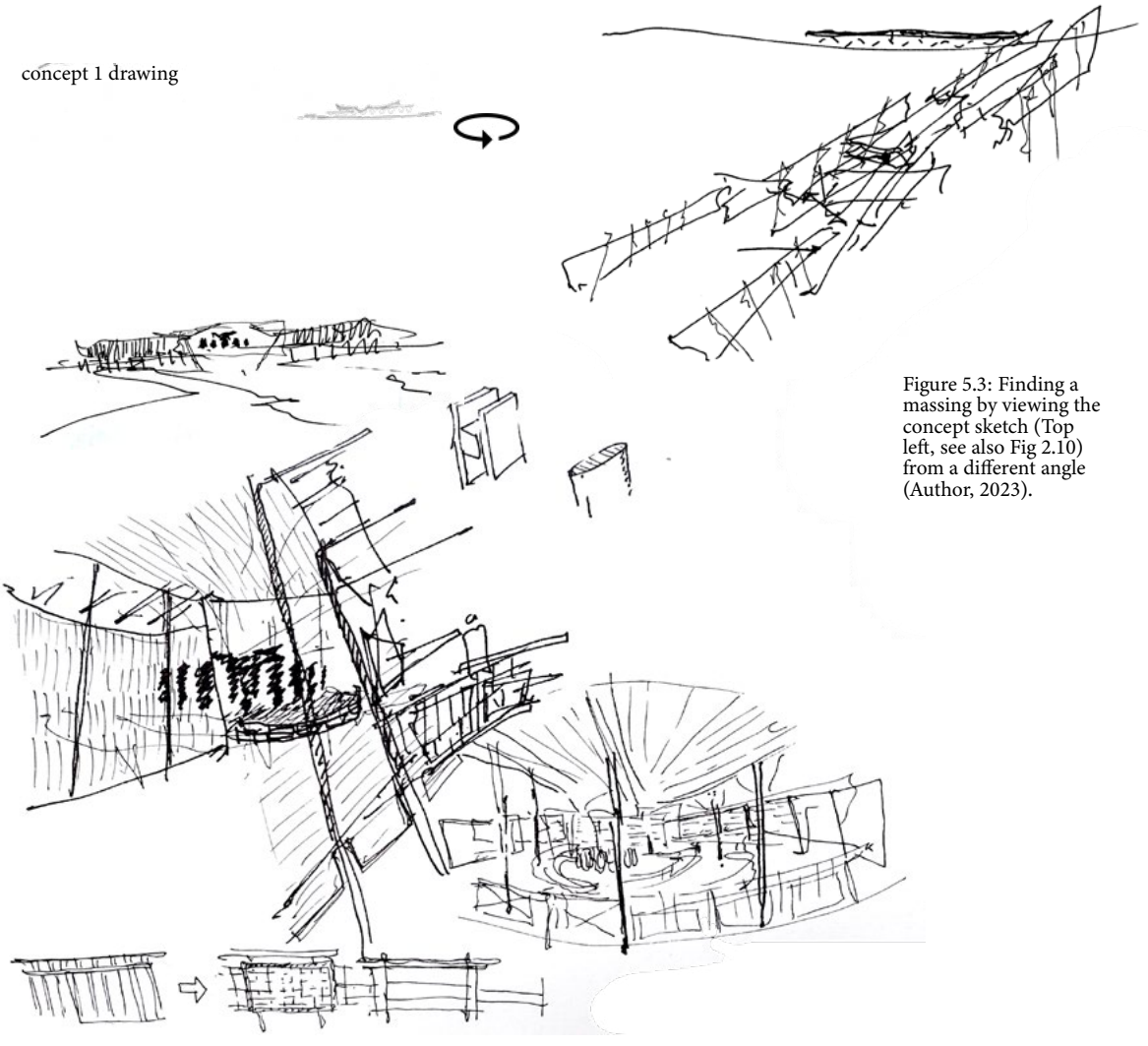


Figure 5.3: Finding a massing by viewing the concept sketch (Top left, see also Fig 2.10) from a different angle (Author, 2023).

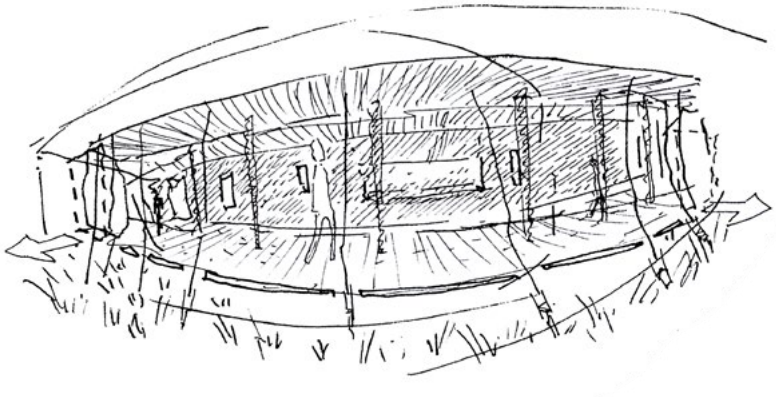
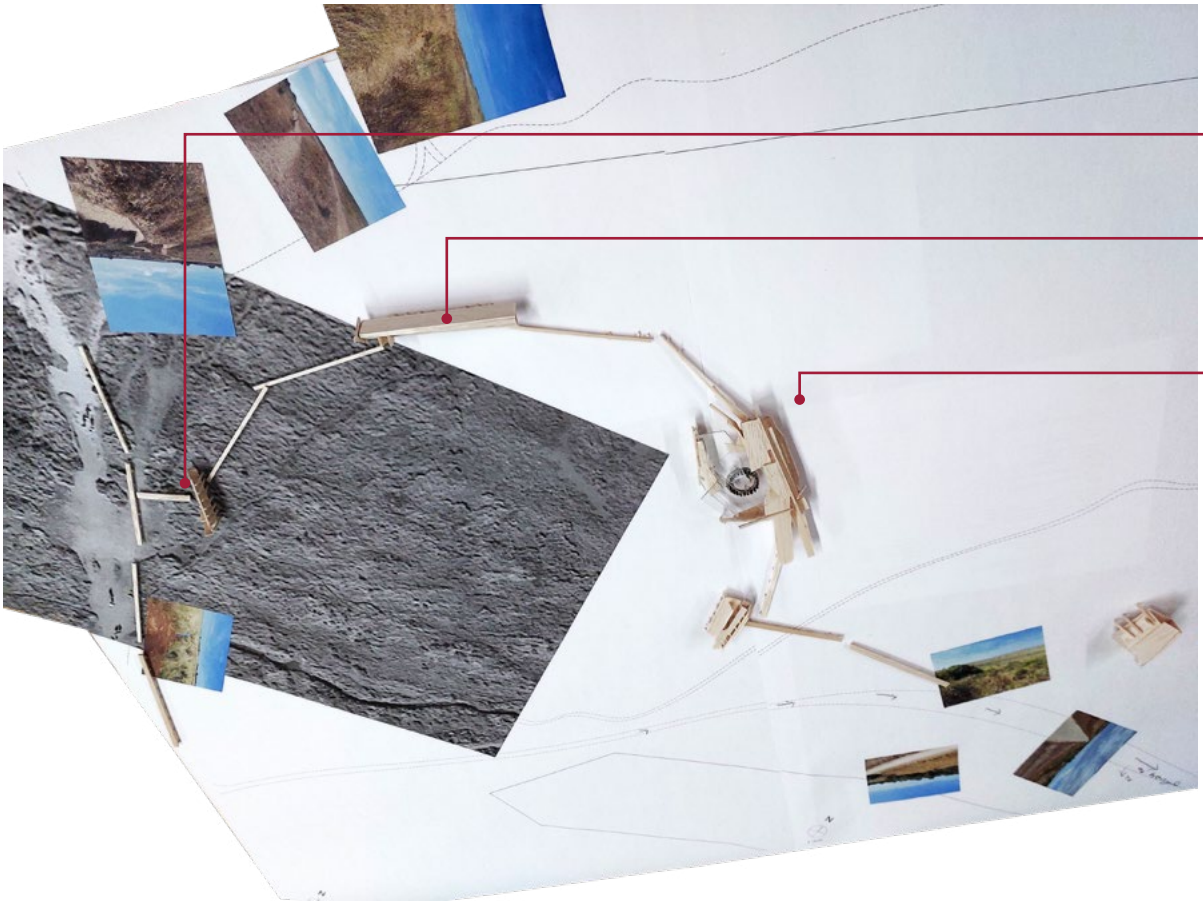


Figure 5.4: Initial Visualisation of different areas within the exhibition route (Author, 2023).

5.2. Process

Out of the three concepts, Concept 1, titled 'Reattached Footing', proved the most fruitful for further development. The model and drawings created as part of this concept, guided the first array of massing models (Fig 5.6). Due to the sensitivity of the site, both on an environmental and morphological level, the detailing of the building's footing and positioning on undisturbed soil was developed in parallel. This was explored through several large-scale section models (Fig 5.5).

Figure 5.5: Large scale detail explorations to find relation between landscape and building (Author, 2023).

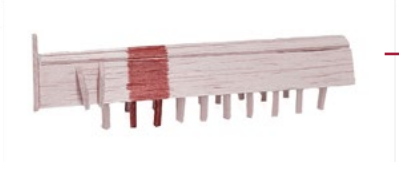


Small-scale models were iterated until suitable forms were achieved. These were then developed into a series of 1:100 scale models (Fig 5.7, 5.8). A circular arrangement was decided upon to allow for the exhibition of the original Seahenge timbers to be visible along the route. This circular route branches off from a proposed boardwalk that runs between the town and the beach (see Fig 5.9 for process plan). Ideally, this route can be used by both public beachgoers and visitors to the exhibition.

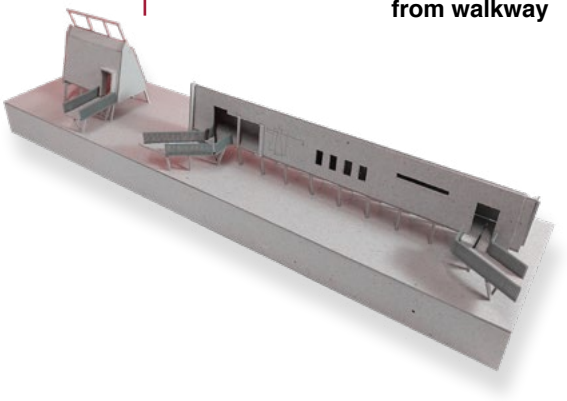
Figure 5.6: Models experimenting with form and placement on site (Author, 2023)



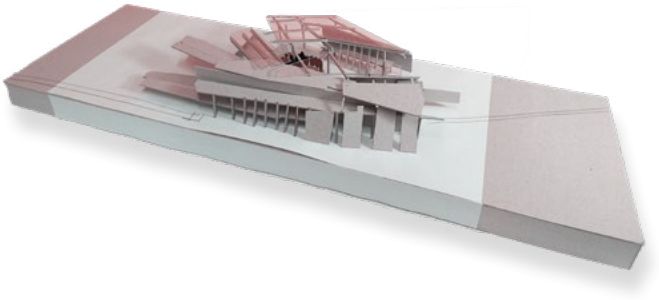




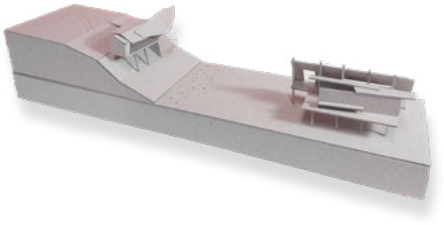

Blend in with branch off from walkway



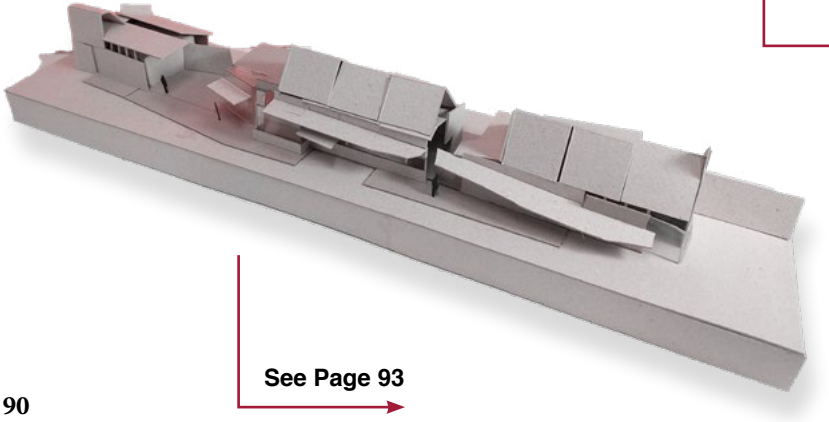
Include language used in the rest of the pavilions



Remove transparent roof



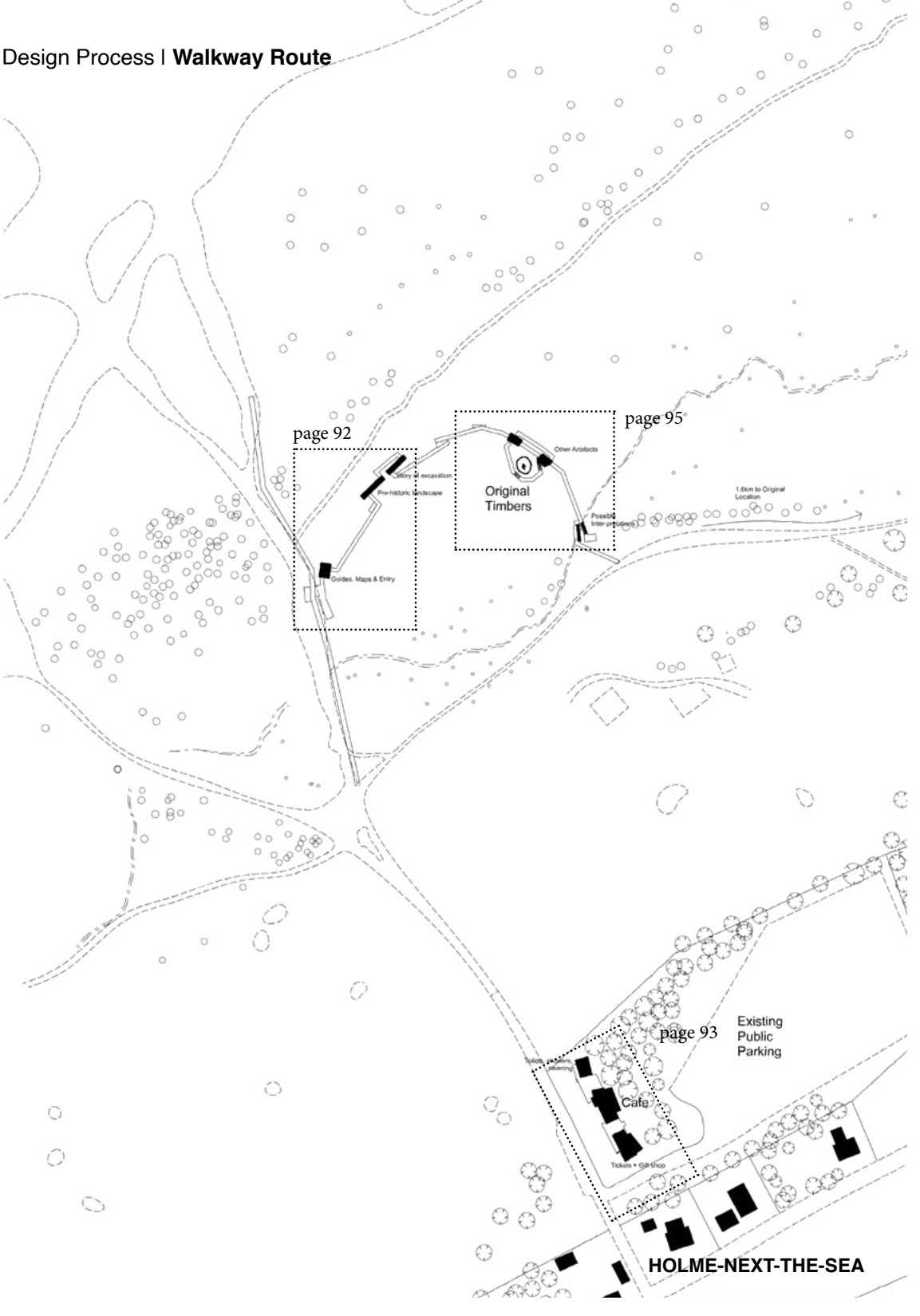
Adapt into extention of previous pavilion



See Page 93

Figure 5.7: Second iteration Models (Author, 2023)

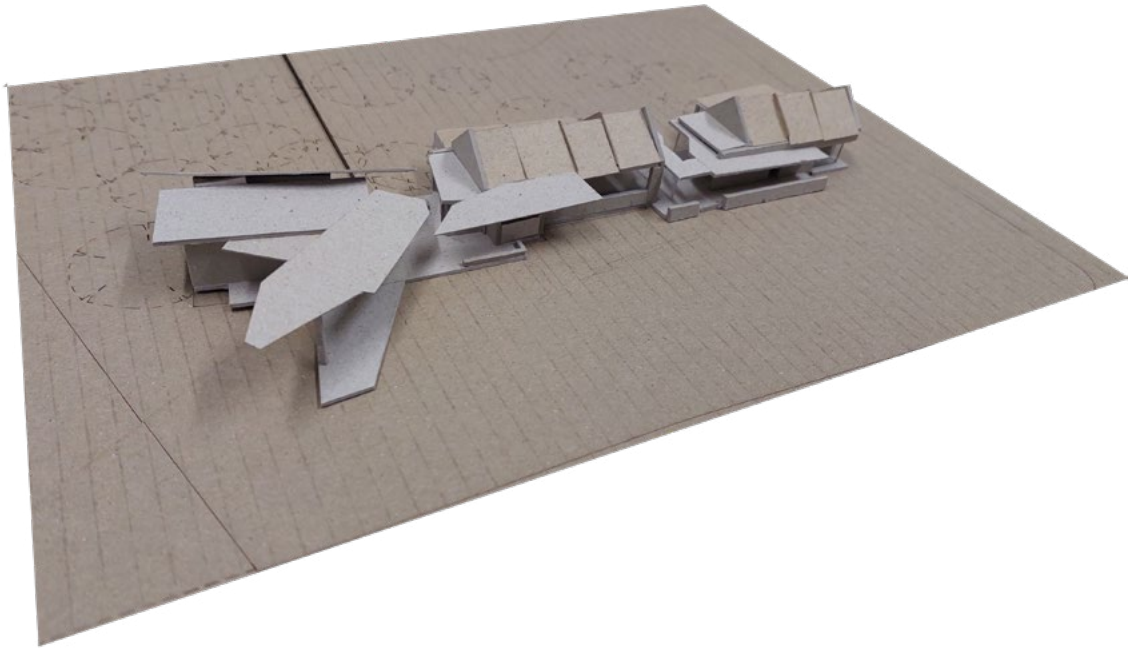
Figure 5.8: Third iteration models (Author, 2023)

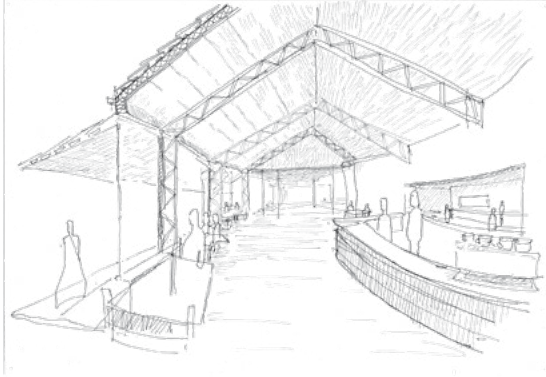

page 92
page 95
Other Artefacts
Original Timbers
1.6km to Original Location
Pre-historic landscape
Goldes, Maps & Entry
page 93
Existing Public Parking
Cafe
Tickets + Gift Shop
HOLME-NEXT-THE-SEA

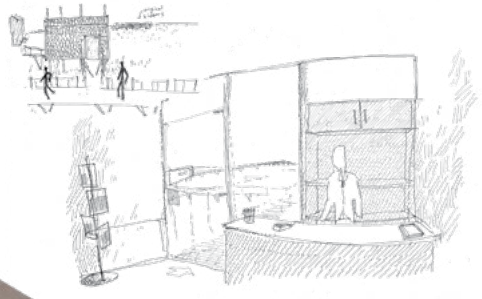
A Gift Shop (Fig 10) anchors the scheme at the edge of the village Holme. This building contains logistical and service requirements for the cleaning and maintenance of the exhibition Pavilions. The Pavilions themselves are largely unstaffed and do not have any wet services or storage for cleaning supplies. By concentrating these maintenance functions in the building of the gift shop and café minimises the massing of the exhibition and its subsequent impact on the site. See the following pages for plans of the Pavilions.

Figure 5.9: (Left) Gift shop and pavilions in relation to Holme (Author, 2023).

Figure 5.10: (Below) Process plan and Perspectives of gift shop and cafe building (Author, 2023).







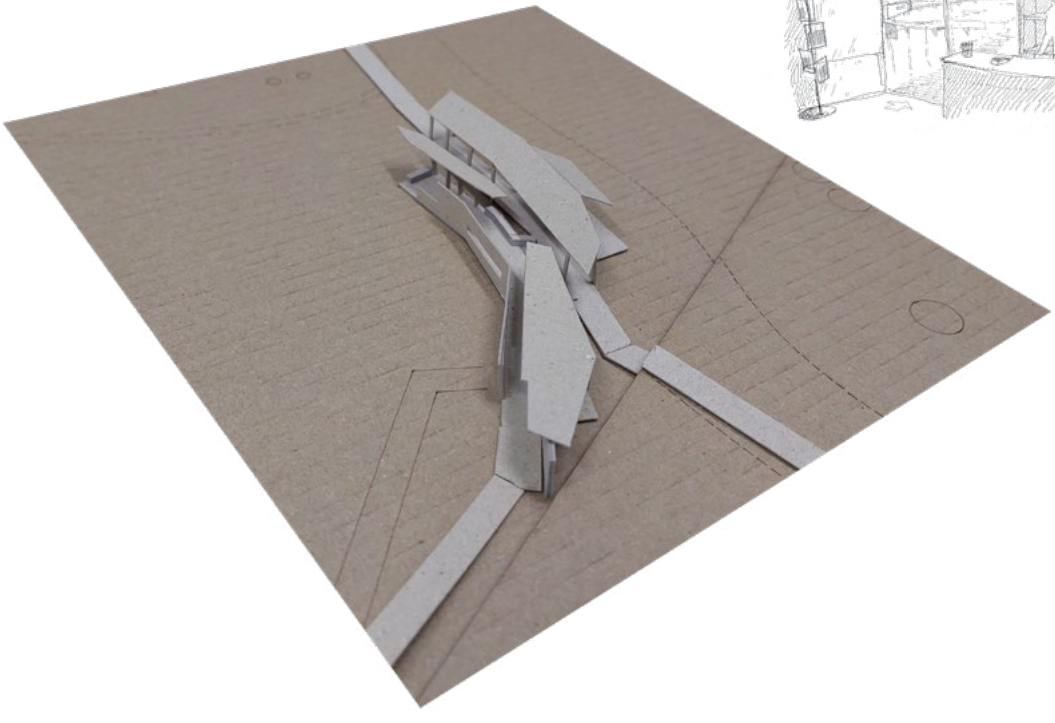


Figure 5.11: Process models and perspectives of Pavilions 1&2 (Author, 2023).

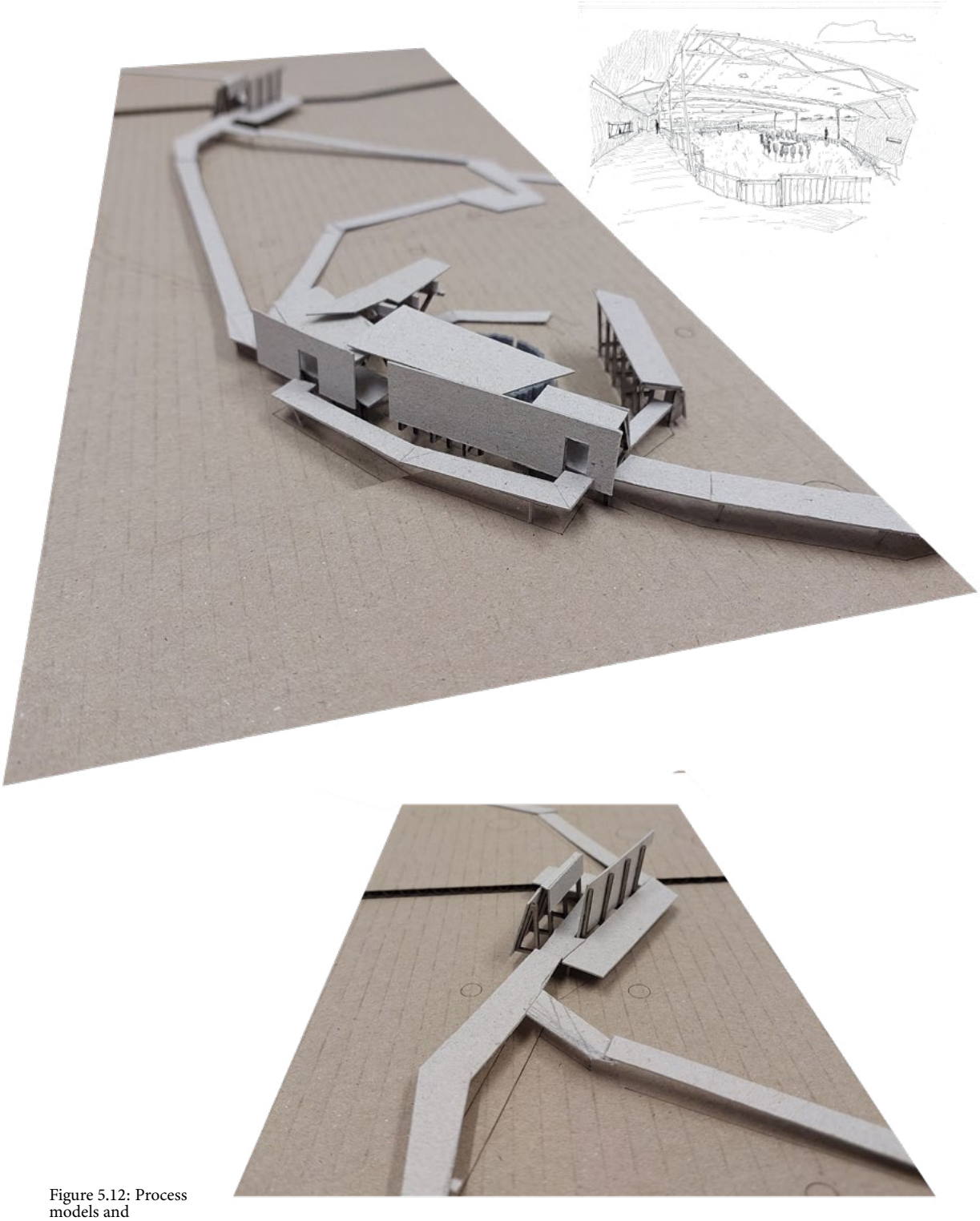
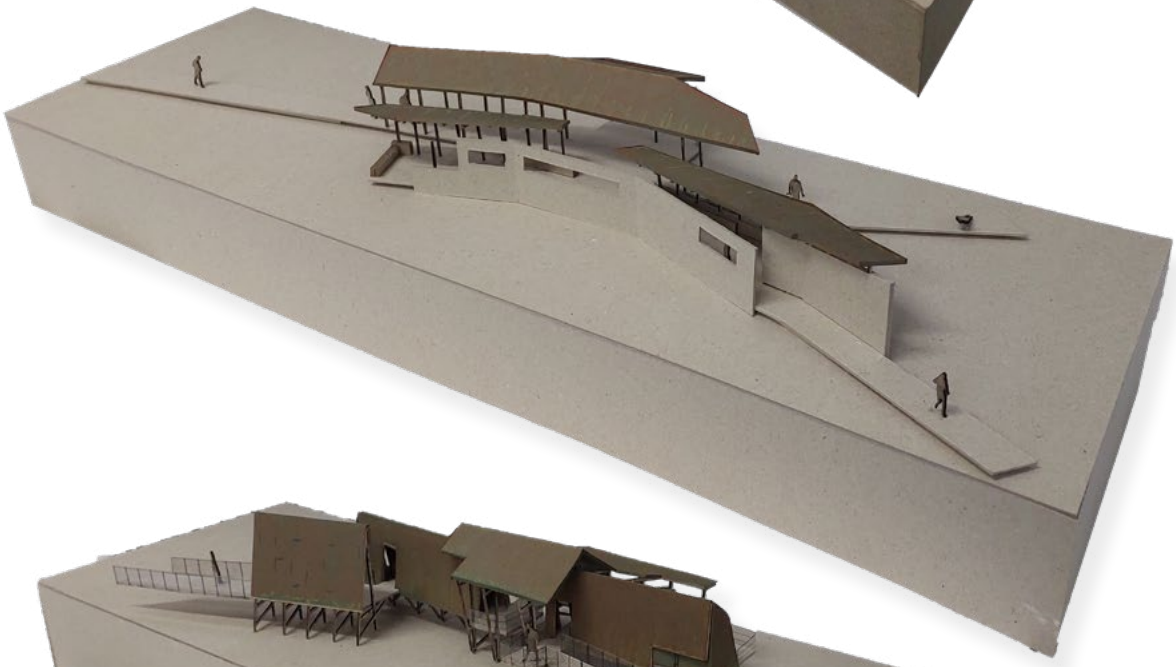
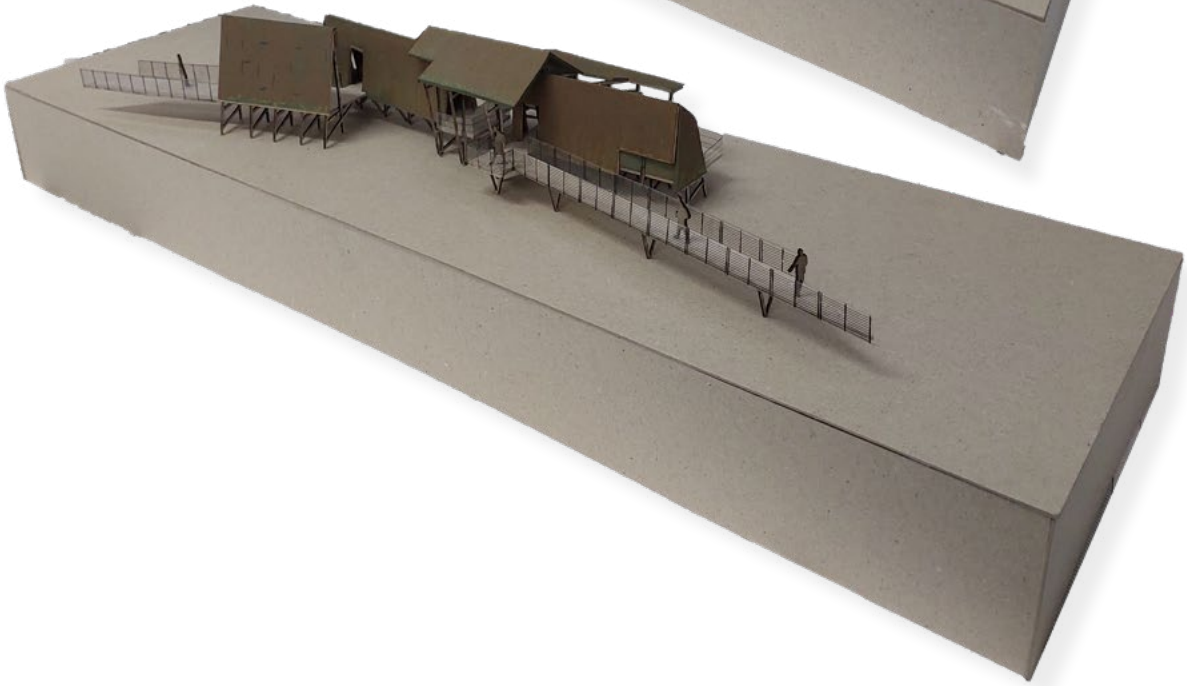
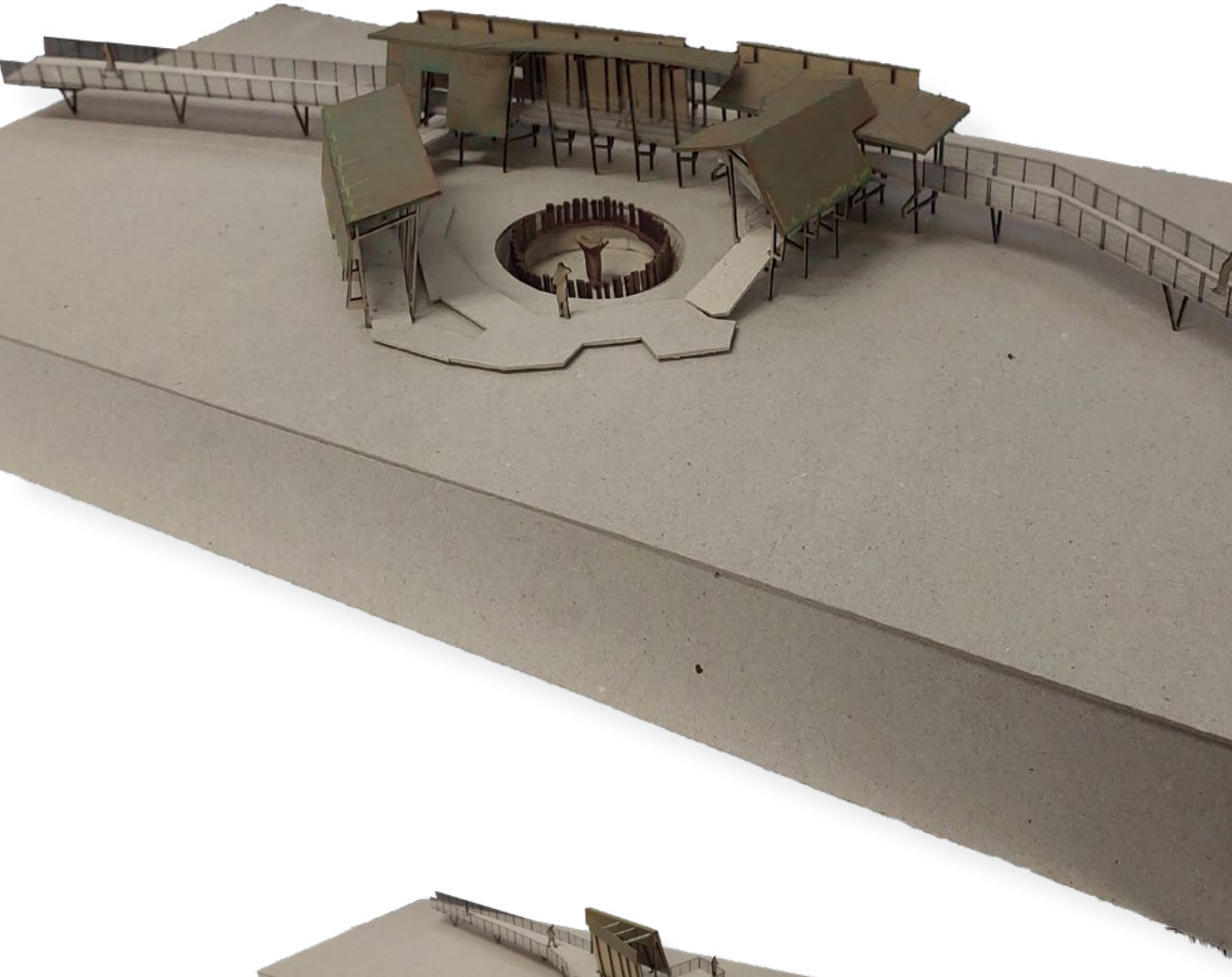
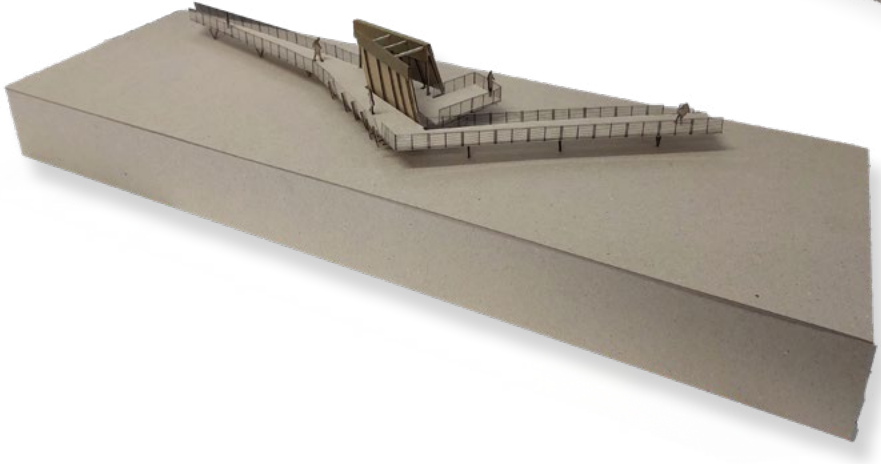


Figure 5.12: Process models and perspectives of Pavilions 3&4 (Author, 2023).





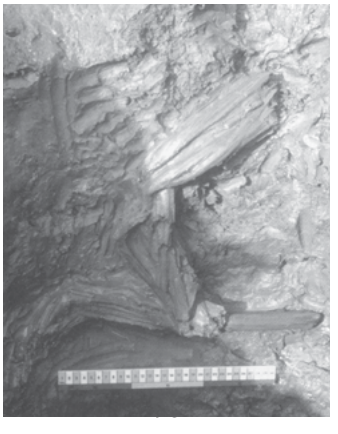


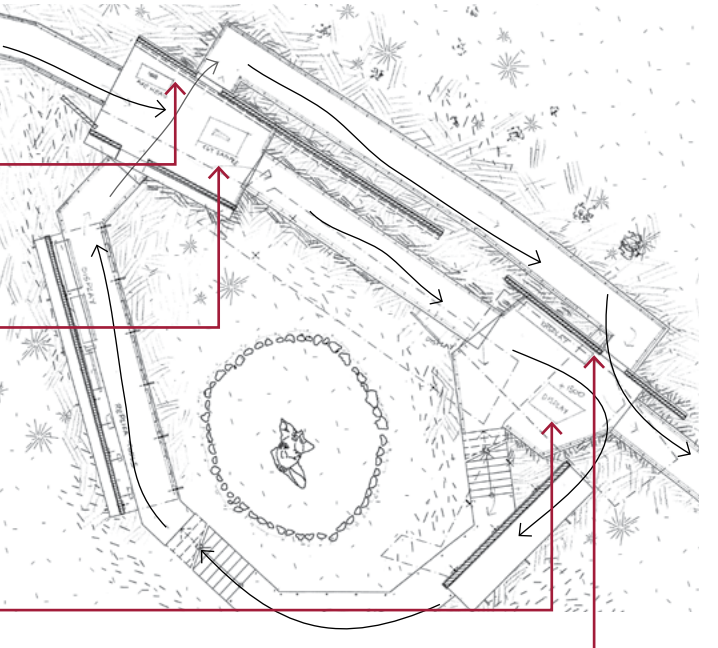


5.2.1. Exhibition and narrative

Each Pavilion along the walkway route will exhibit specific artefacts and information to immerse the visitor in the context of Seahenge. Some specific artefacts are already positioned within the narrative along this prominent promenade, whereas other displays will be more broadly themed. For these, the specific artefacts on display will be curated in collaboration with the Lynn Museum and local archaeologists.

Displays areas range from indoor cases, outdoor weatherproof boxes, and a replica of Holme II placed outside the gift shop as a prelude to the journey along the promenade.





Within Pavilion 4, where the original Seahenge timbers is exhibited, other artefacts of particular significance from the excavation will also be exhibited. These include the bronze axe head found by John Lorimer, which led to the discovery of the structure, samples taken by chainsaw from the in-situ timbers, and the original honeysuckle rope which was found attached to the central tree stump.

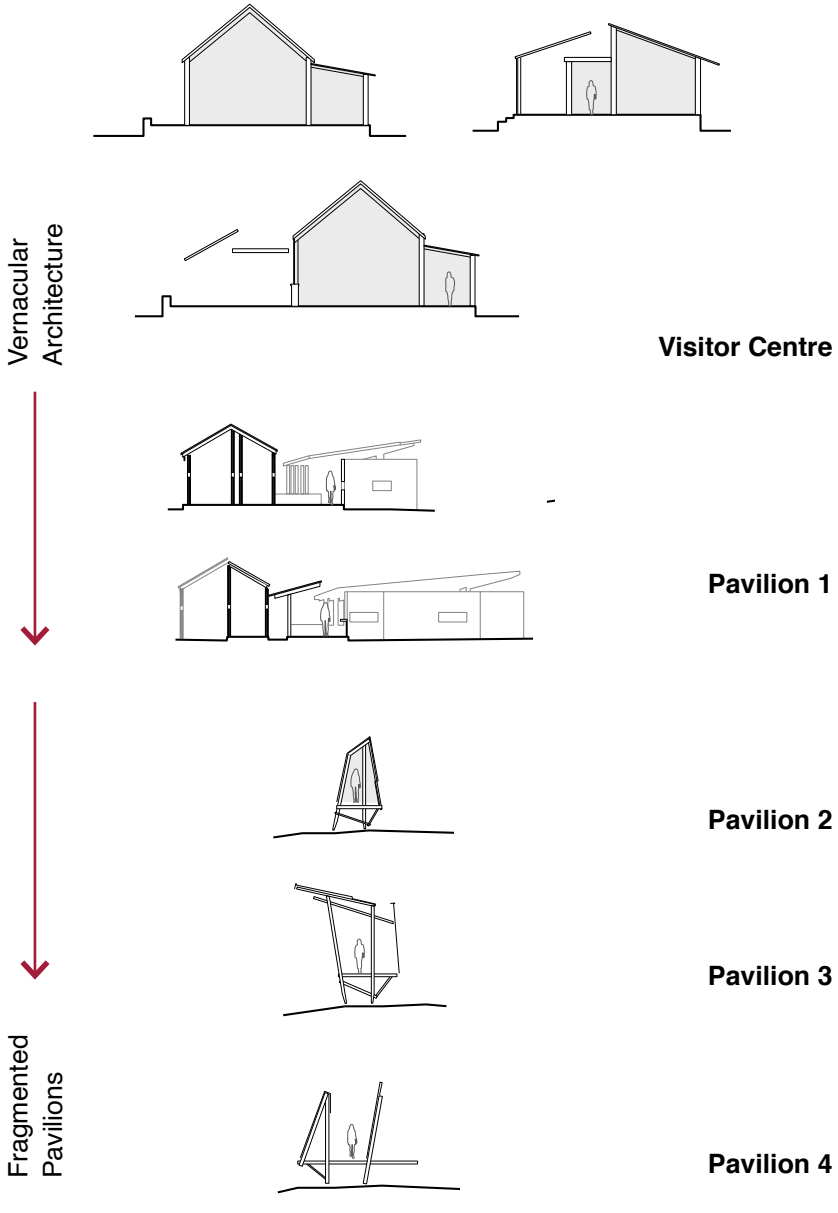


Figure 5.13: **Axe heads** at current Seahenge Exhibit (Author, 2022).

Figure 5.14: **Samples cut** from timbers at current Seahenge Exhibit (Author, 2022).

Figure 5.15: In-situ **honeysuckle rope** (Brennand, Taylor et al. 2002: 31).

Figure 5.16: Small selection of **woodworking debris** found during excavation (Brennand, Taylor et al. 2003: 20).

Figure 5.17: (This Page) Evolution of morphology along the route to the original location (Author, 2023).

5.2.2. Response to conceptual explorations

In the preliminary design, both overt and unintentional traces of the three conceptual developments can be found. The model for **Concept 1**: "Reattached Footing", guided the form giving of all four exhibition Pavilions. The first iteration scale models were evaluated against the spatial qualities implicit in the concept model, and further iterations were adjusted to converge with, rather than diverge from, these qualities (See Fig 5.18).

Concept 2 was initially envisioned as guiding the user through an implicit exploration of different aspects of the exhibition in a dance-like

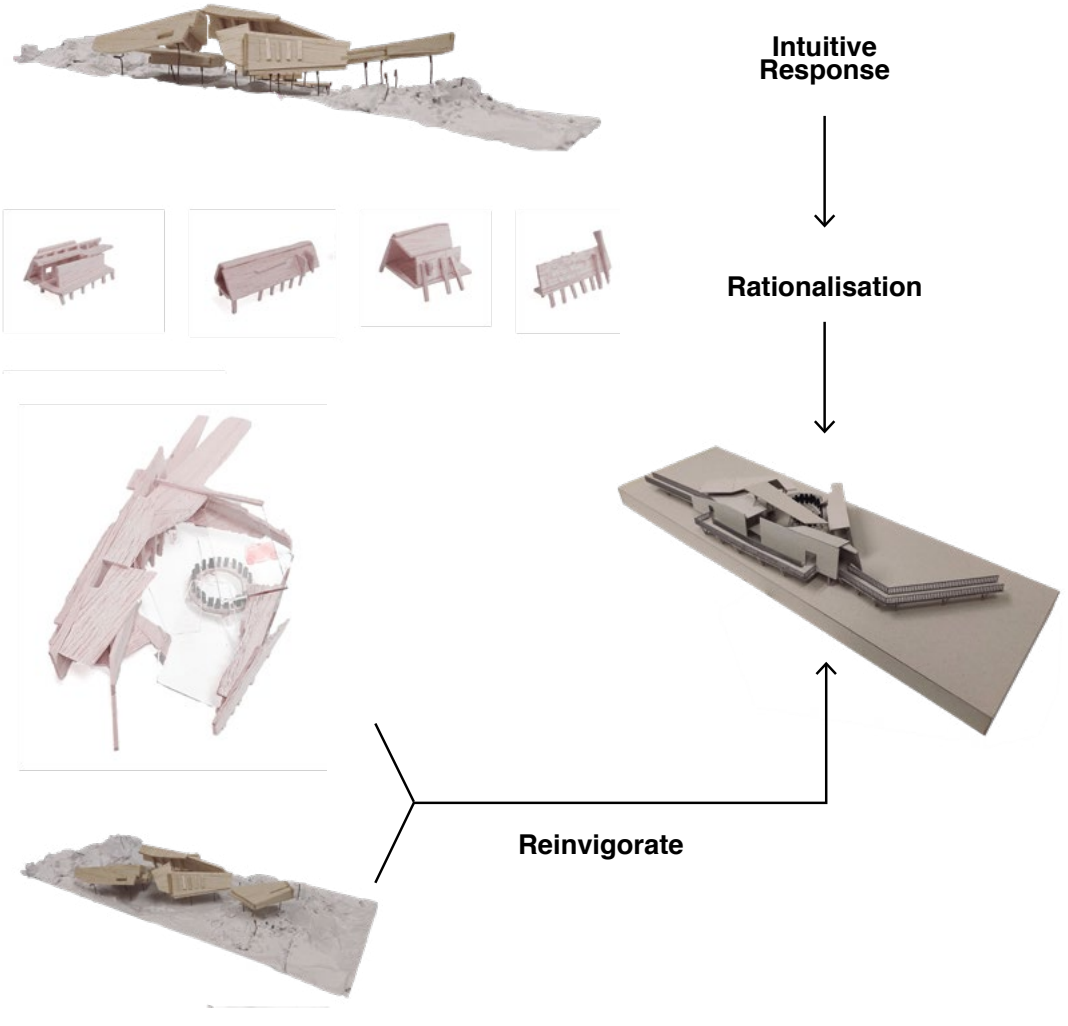
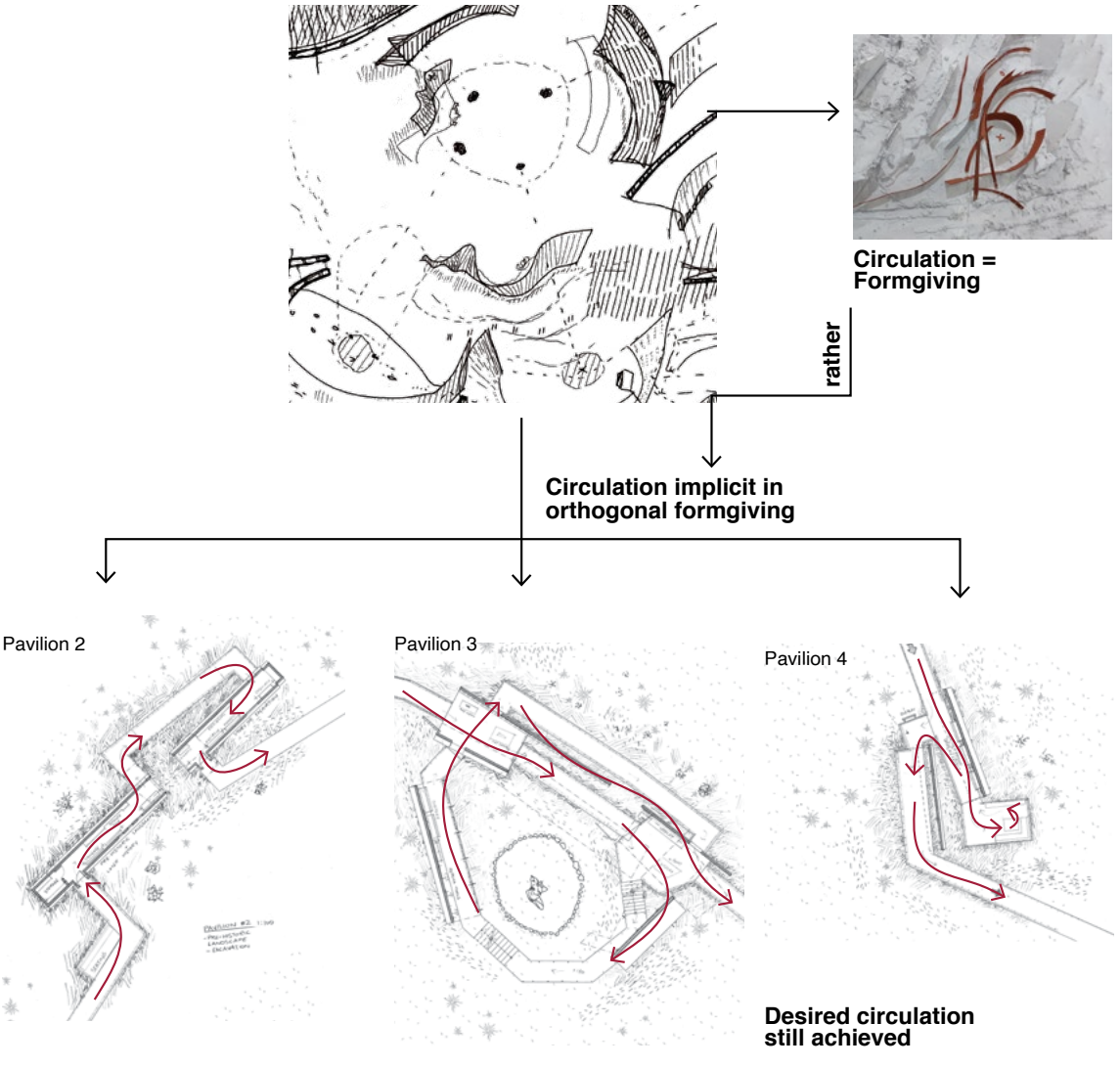


Figure 5.18: Interplay between concept 1 model (reattached footing) and scale models during design process (Author, 2023).

fashion. Gradually, a circular motif began to emerge and was further cemented by the concept model. While Concept 1 guided the form giving of the Pavilions, the circulation between them unintentionally achieved an effect that already was suggested in **Concept 2**: "Screens as Choreographer", albeit not within circular forms. In tandem with this "there and back again" circulation, which weaves the user through different exhibitions, a secondary motif developed: intentional openings. This secondary motif is discussed in the next subsection.

Figure 5.19: Differing interpretations of concept 2 drawings (Screens as Choreographer) within the concept model and design development (Author, 2023).



This weaving circulation achieves the effect of framing and then reframing spaces and views, as the user moves through the exhibition, as if viewing different "screens". Views are frequently directed towards Pavilion 4 and then obscured again as one passes through a Pavilion. This is reminiscent of the rationale behind **Concept 3**: "Frames of Interpretation". In this case, the similarity between the initial conceptual exploration and the eventual design is less apparent. Apart from the angular geometries visible in the drawings and then again in the plan, the visual explorations of Concept 3 merely illustrate the fact that the same hand was at work in both. Familiar angles and compositions are replicated within the same autonomous creative process.

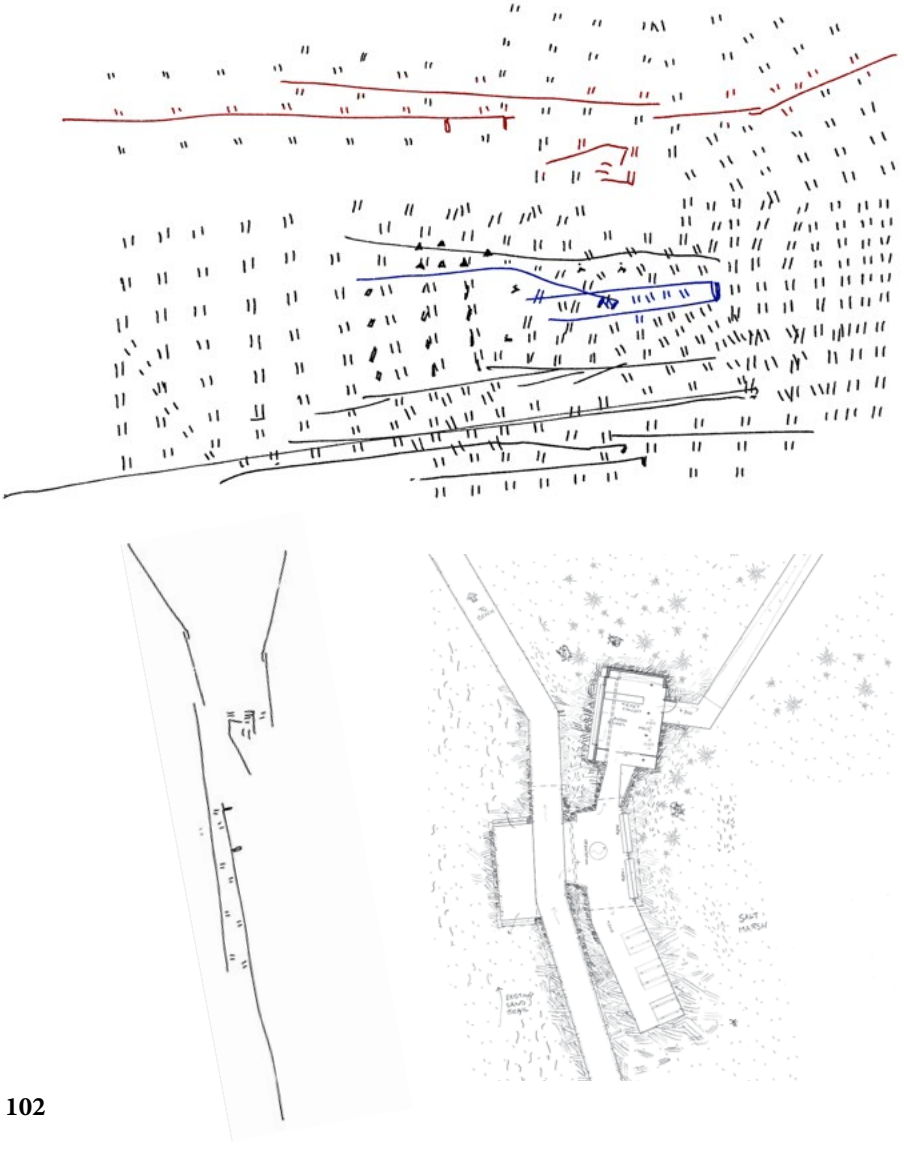


Figure 5.20: Sections of a drawing done for concept 3 (Frames of interpretation) highlighted to show similarity with eventual layout of pavilions (Author, 2023).

5.2.3. "Mind the Gap" as a motif

Seahenge, seen as 'empty' now that it has been removed, is a sentiment already expressed by Wood (2003) (see section 1.3). Although not referring to a physical clearing, Heidegger's 'Clearing' points to a revelation that occurs through or within an opening. Openings, clearings, separations, and gaps are all thematically relevant to Seahenge and its removal. This theme of "Mind the Gap" has provided fruitful inspiration for design choices.

On plan, different spaces are often separated slightly to force roundabout navigation. The detailing of display cabinets and the steel footings have also been inspired by this motif.

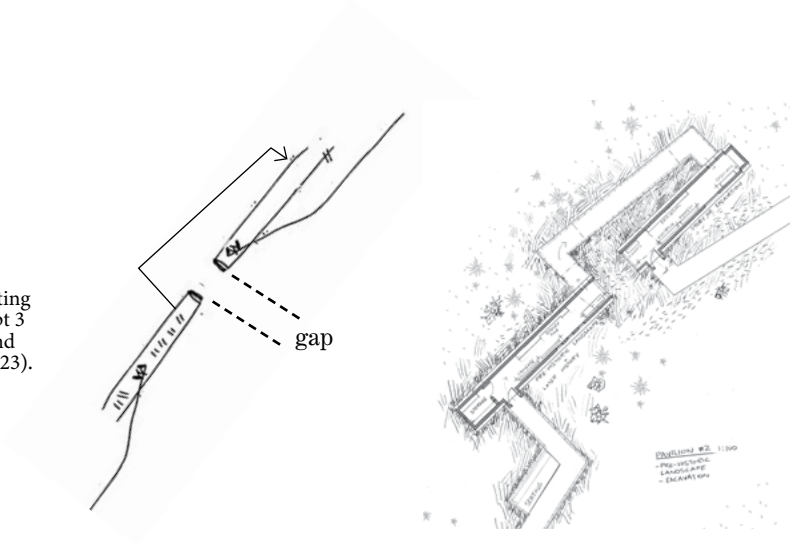


Figure 5.21: Plan of pavilion 2, highlighting influence of Concept 3 and instance of 'mind the gap' (Author, 2023).

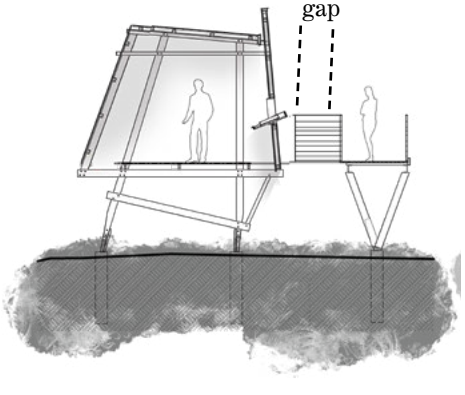


Figure 5.22: Section of pavilion 3, showing instance of 'mind the gap' (Author, 2023).

5.2.4. Display boxes

Each Pavilion will feature display boxes or cases that exhibit various archaeological artefacts, or information panels relating to the theme of the Pavilion. The boxes for Pavilions 2-4 are attached to or suspended from the structural timber frames and will have glass covering the contents. While mostly covered by walls and roofs, these cases are still waterproof to protect the displayed artefacts from wind-driven rain.

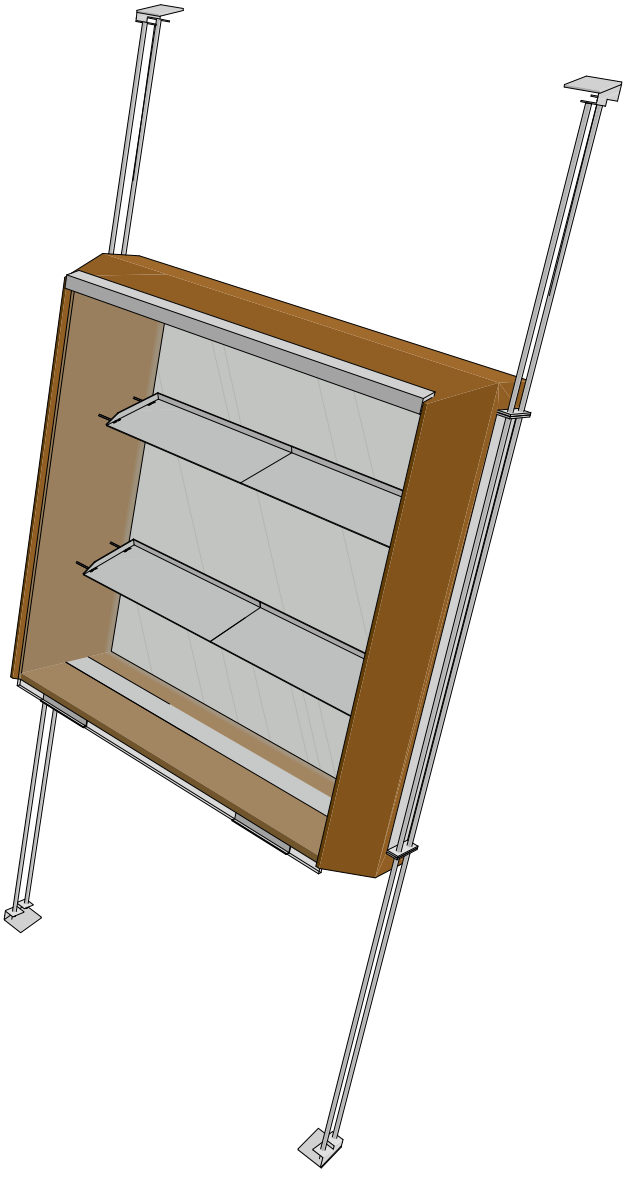
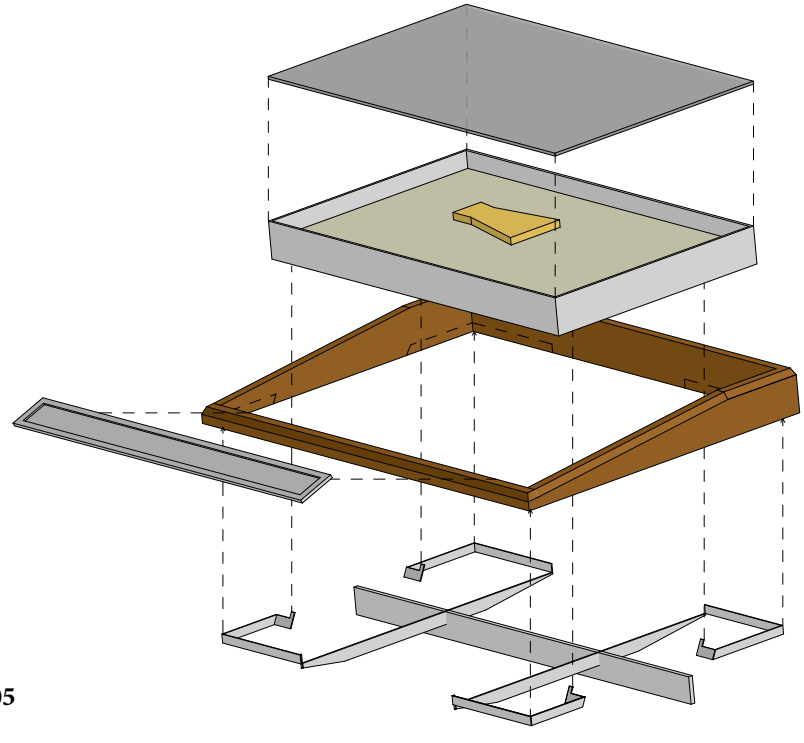


Figure 5.23: Display box to be installed in pavilion 3, see fig 5.44 for position of exhibition box (Author, 2023).

Figure 5.24: (Top) Display box exhibiting original axe discovered on the beach (Author, 2023).

Figure 5.25: (Right) Exploded axo of display box (Author, 2023).



5.3. Influence of precedent studies

5.3.1. Interaction with the artefact

In chapter 4, the two precedent studies, Mary Rose and Stonehenge, were placed on a continuum (Fig 5.21). Each building interacts with its respective artefacts in a different way. Throughout its design process, the exhibition for Seahenge shifted from the more restrictive end of the spectrum to an open and more relaxed interaction. Perspective drawings, created before the program was finalised, explored the possibility of a 'hull'-shape that fully protected the artefact. Here clues were taken from the Mary Rose Museum to have a form that was informed by the shape of the artefact itself. This avenue has been abandoned in favour of a fragmented building that allows less restricted views of the landscape.

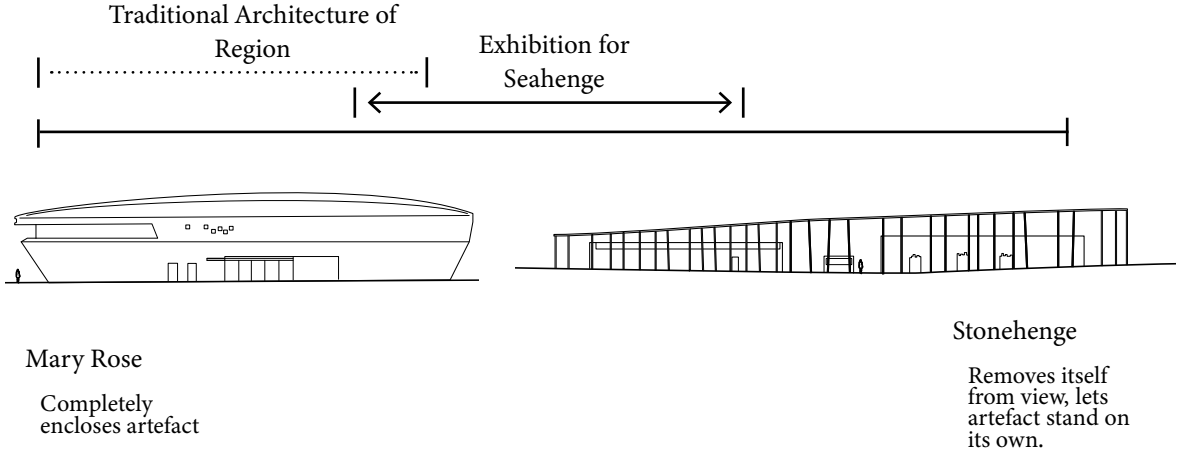


Figure 5.26: The two main precedents that were investigated, are placed on a continuum regarding their approach to the artefact they exhibit (Author, 2023).

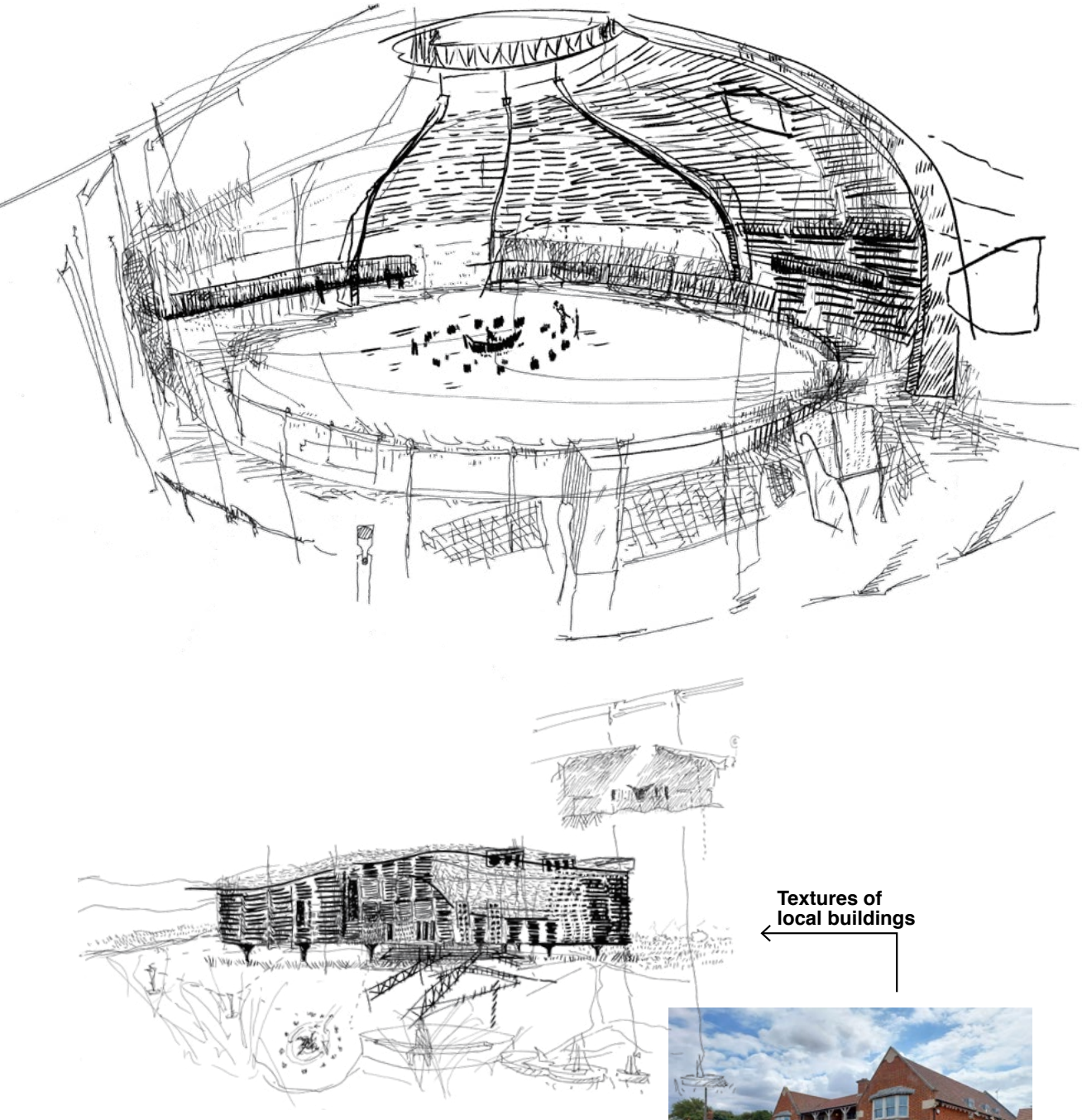


Figure 5.27: Exploration drawings experimenting with influence of Mary Rose Museum and local buildings (Author, 2023).

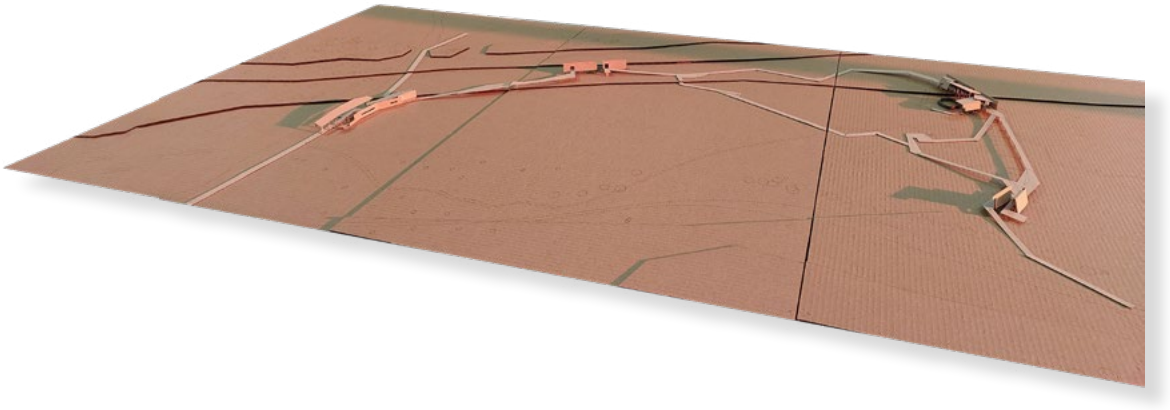


Figure 5.28: (Top) 1:200 process model with all the pavilions in relation to eachother. Walkways are also shown on their respective heights (Author, 2023).

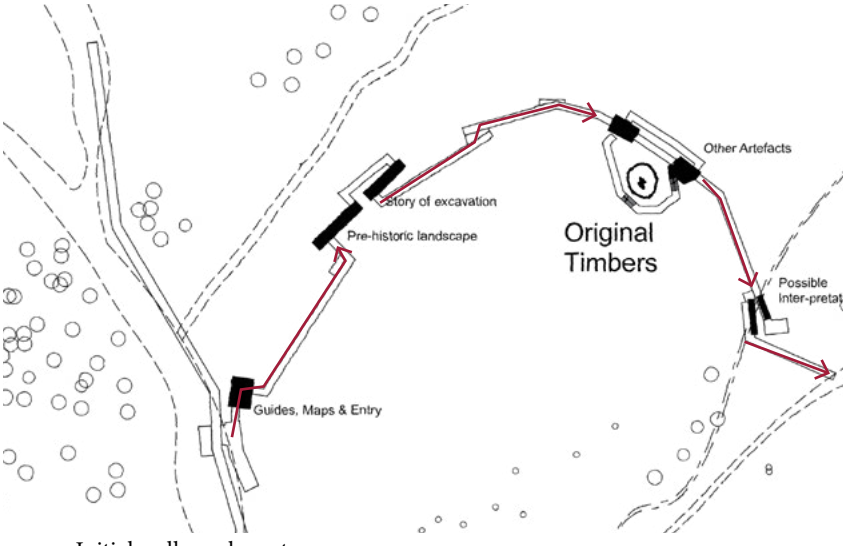
5.3.2. Walkway layout

A positive comment regarding the Stonehenge Visitor Centre, has informed the user experience of the walkway connecting the different pavilions. As discussed in section 4.1.1., the different boxes of the Centre are "offered but not imposed on [the visitor]". (Moore, 2013: online). This comment was considered and implemented after the initial layout ran in a simple loop, with each pavilion leading directly into the next. Within the final layout, several branches and alternative routes are included. This gives more agency to the visitors, including ample space for rest or pause along the route (see Fig 5.9).

5.4. Final Design

The Visitor Centre and its four Pavilions will each be discussed on the following pages. Their organisation, some 3D views, and spatial sections of each will be included.

Figure 5.29: (Next Page) Initial and final walkway layout. The final includes a branching route to grant visitor more agency in exploring the landscape (Author, 2023).



Initial walkway layout

Final walkway layout

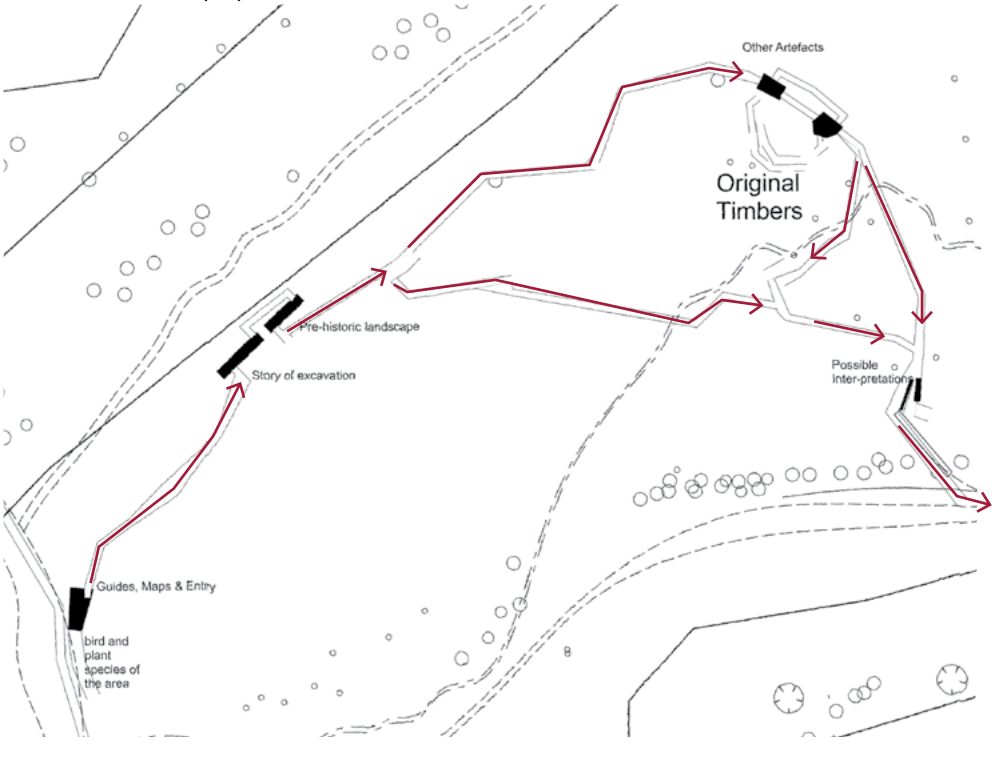


Figure 5.30: Preliminary layout of visitor centre and pavilions (Author, 2023).

Figure 5.31: Location within context of original exavation of Seahenge, 1999 Recreation and Holme Dunes Reserve (Author, 2023).

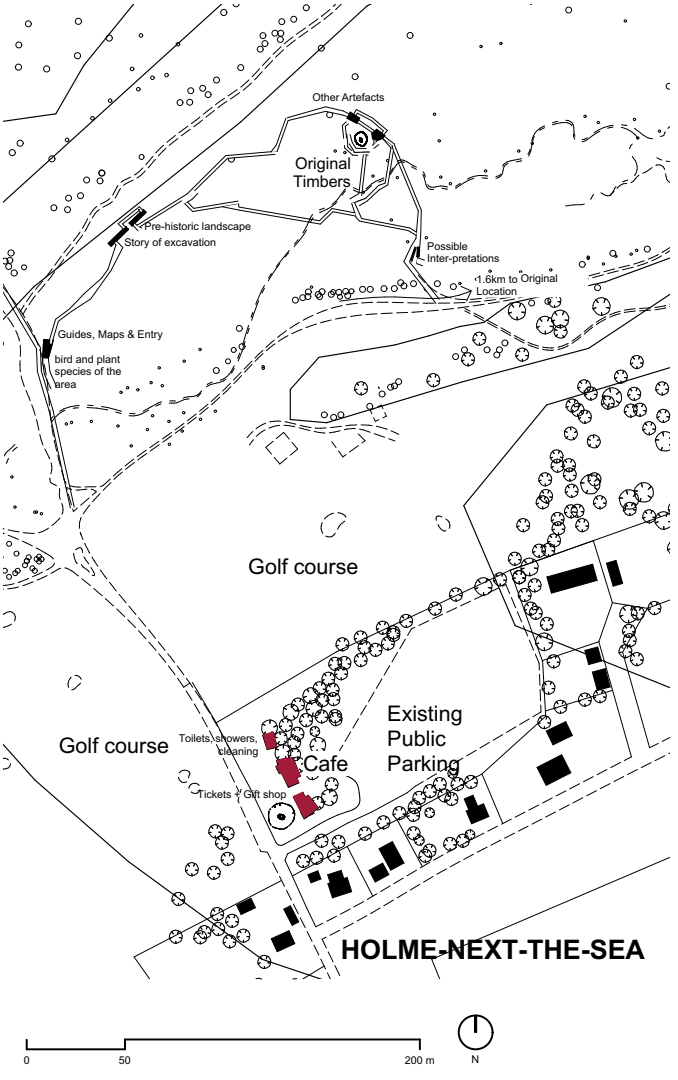
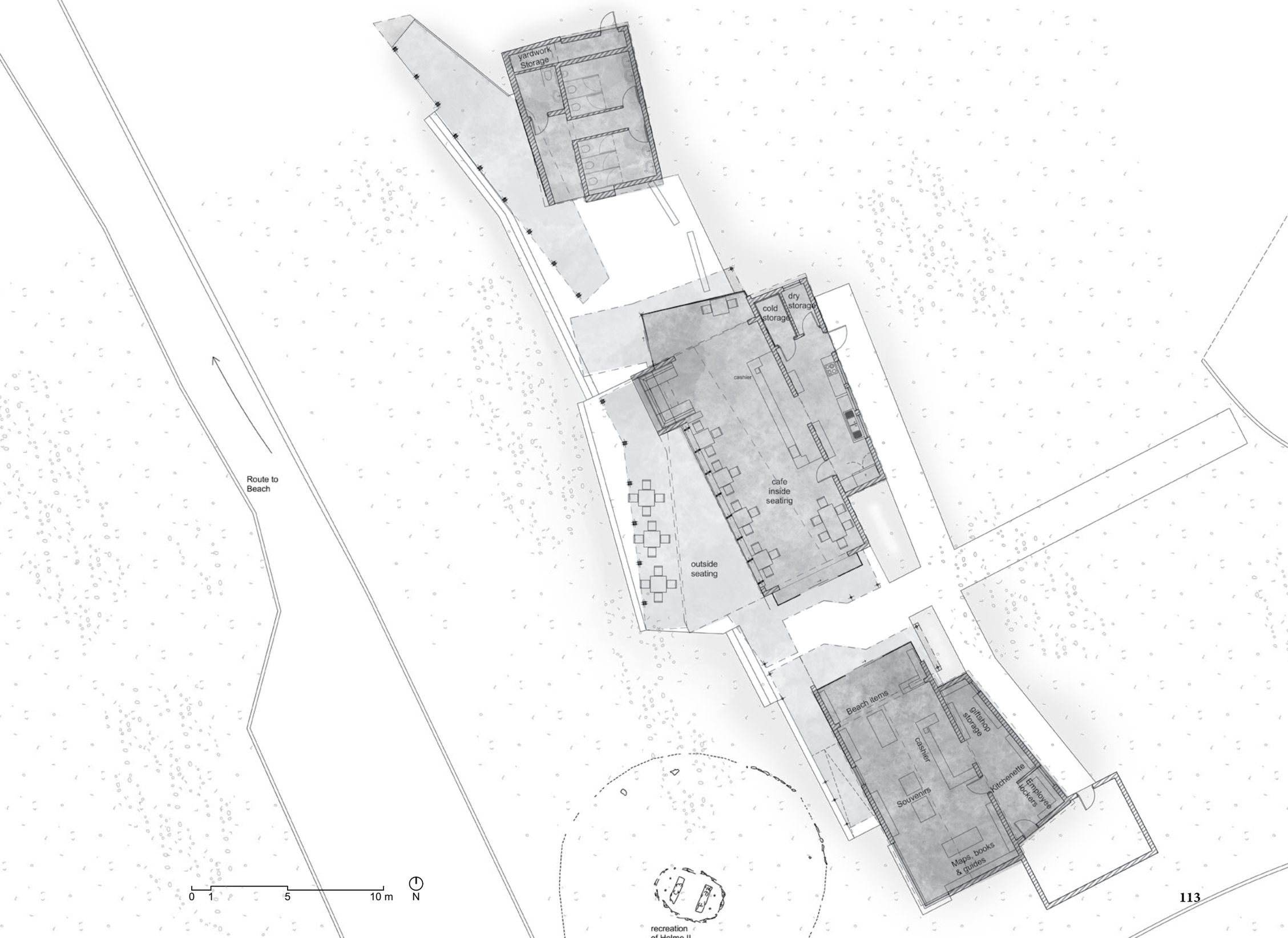
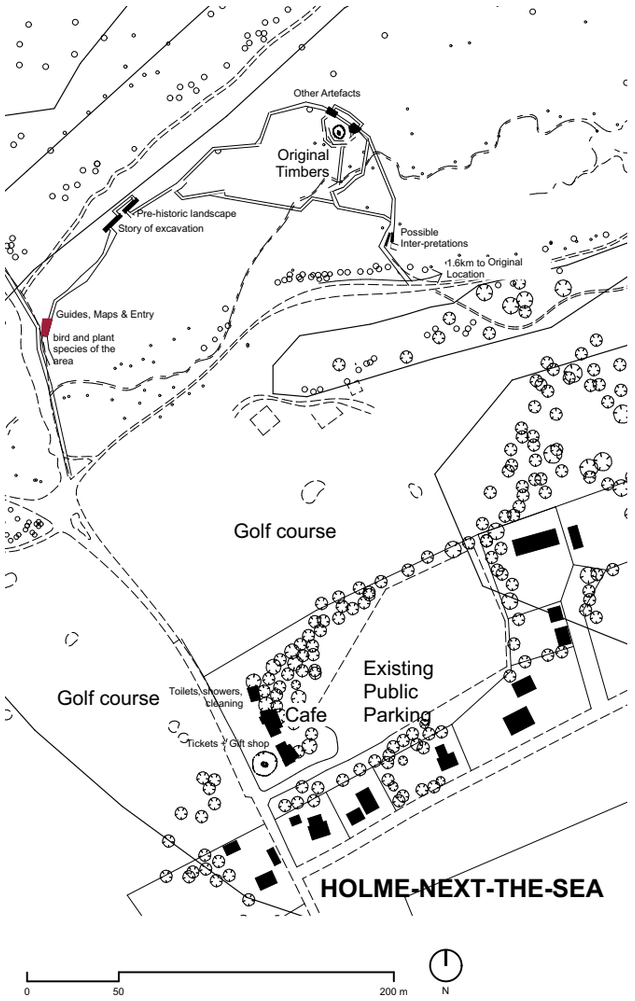
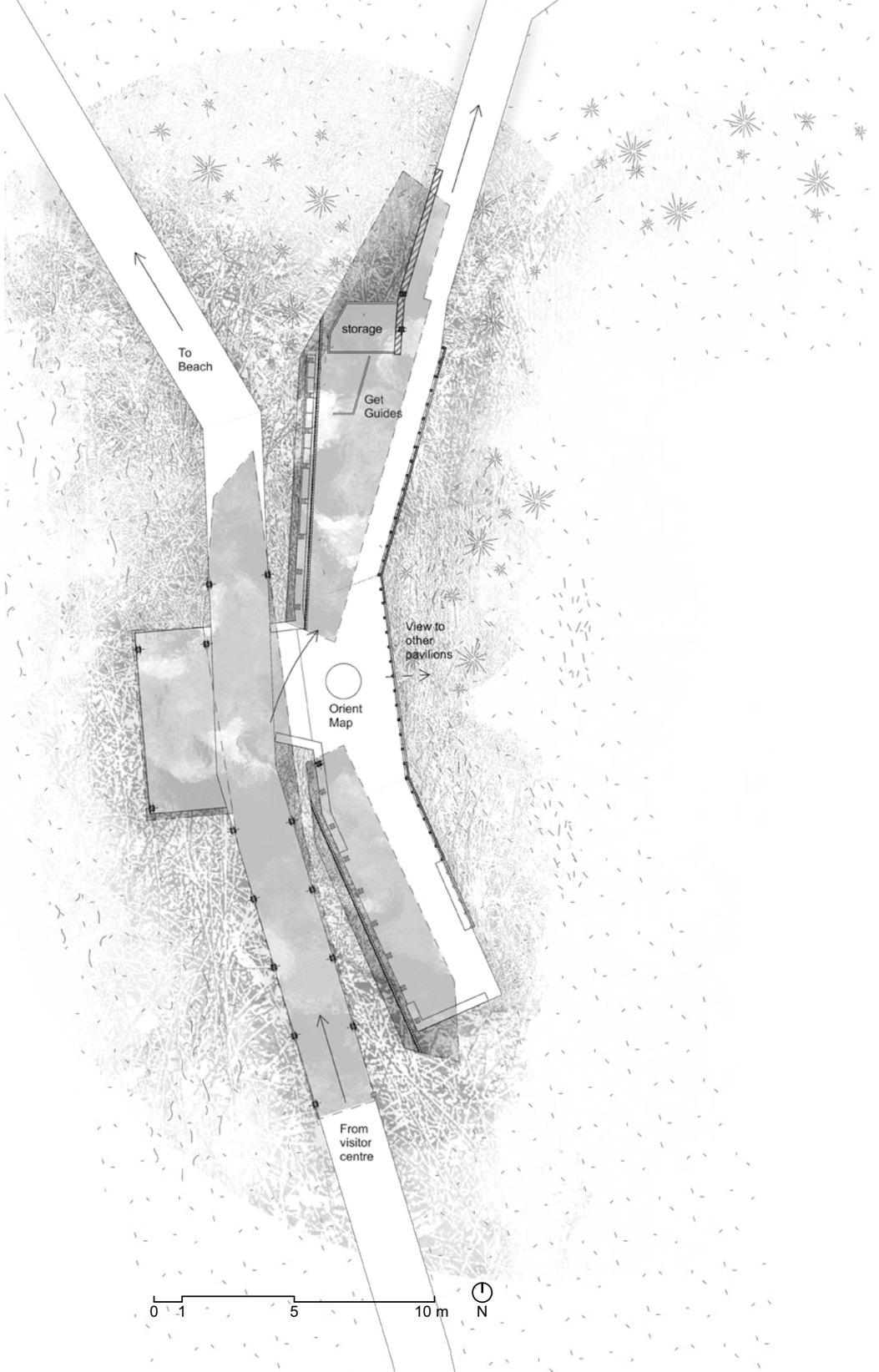


Figure 5.32: Preliminary plan of Visitor Centre (Author, 2023).


yardwork
Storage
dry
storage
cold
storage
cashier
cafe
inside
seating
outside
seating
Route to
Beach
Beach items
giftshop
storage
cashier
Kitchenette
Employee
lockers
Souvenirs
Maps, books
& guides
0 1 5 10 m
N
recreation


Other Artefacts
Original Timbers
Pre-historic landscape
Story of excavation
Possible Inter-pretations
1.6km to Original Location
Guides, Maps & Entry
bird and plant species of the area
Golf course
Golf course
Toilets, showers, cleaning
Cafe
Existing Public Parking
Tickets
Gift shop
HOLME-NEXT-THE-SEA
0
50
200 m
N


To Beach
storage
Get Guides
View to other pavilions
Orient Map
From visitor centre
0
1
5
10 m
N

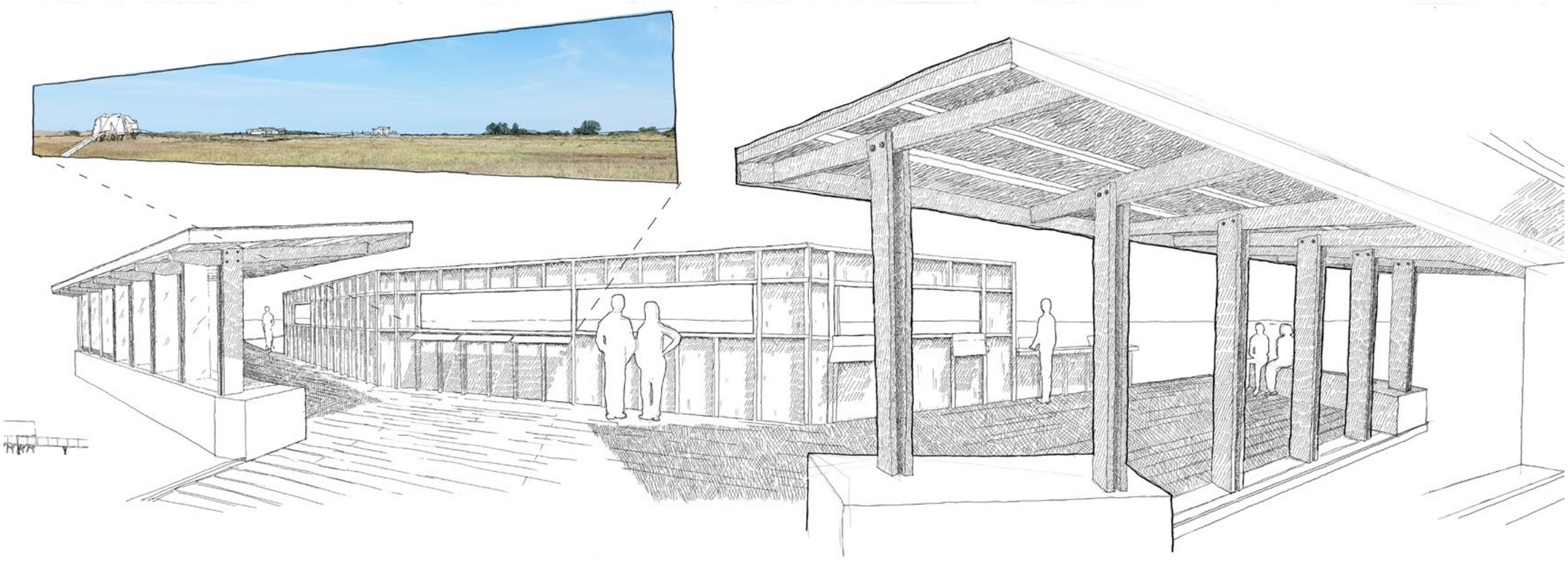
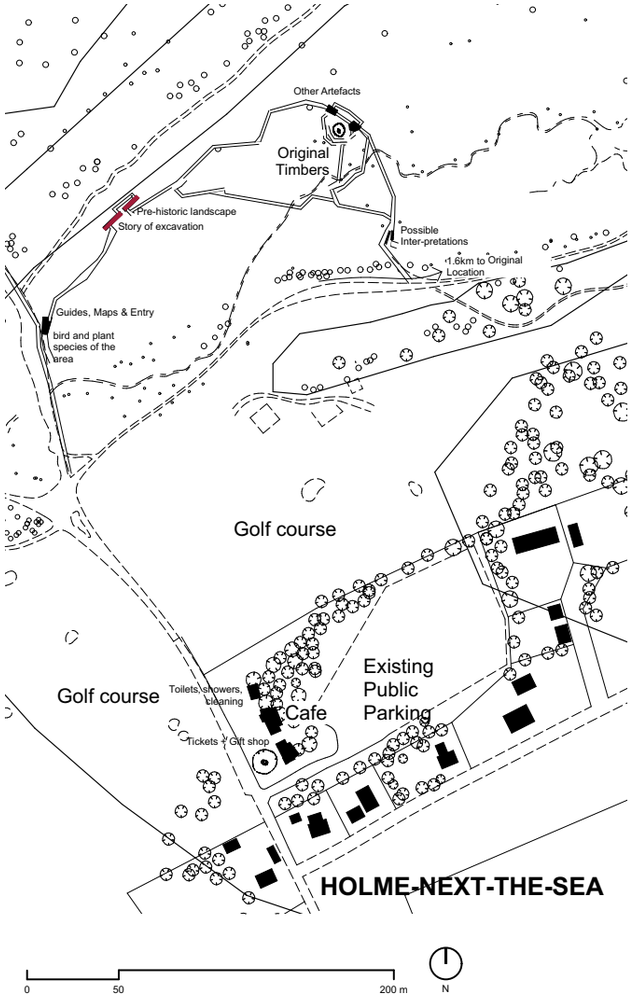
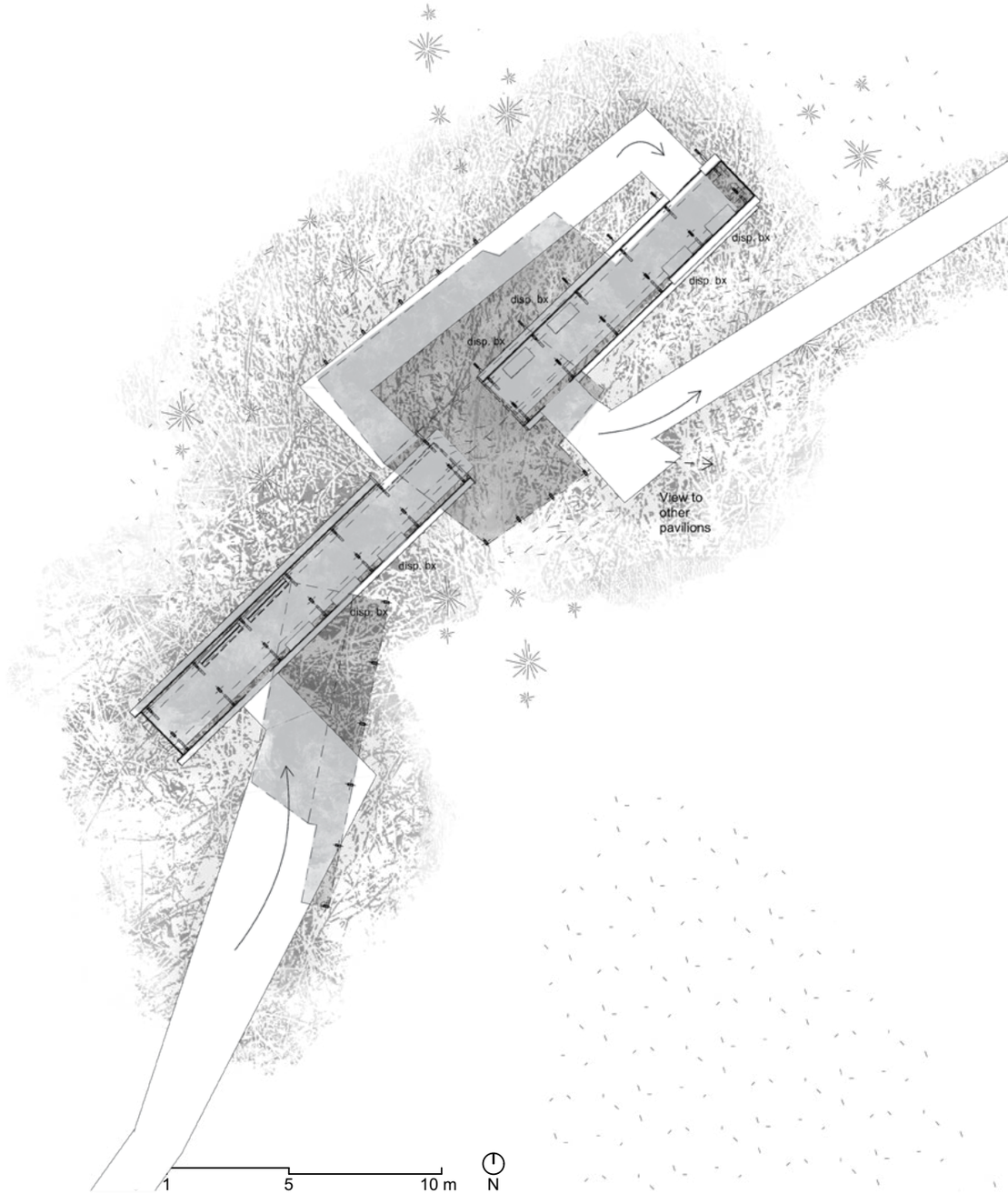


Figure 5.33: (Left) Preliminary plan of Pavilion 1 (Author, 2023).

Figure 5.34: (Right) View east from inside pavilion 1 towards pavilions 2-4 (Author, 2023).


Other Artefacts
Original Timbers
Pre-historic landscape
Story of excavation
Possible Inter-pretations
1.6km to Original Location
Guides, Maps & Entry
bird and plant species of the area
Golf course
Golf course
Toilets, showers, cleaning
Cafe
Existing Public Parking
Tickets
Gift shop
HOLME-NEXT-THE-SEA
0
50
200 m
N


disp. bx
disp. bx
disp. bx
disp. bx
disp. bx
disp. bx
View to other pavilions
1
5
10 m
N

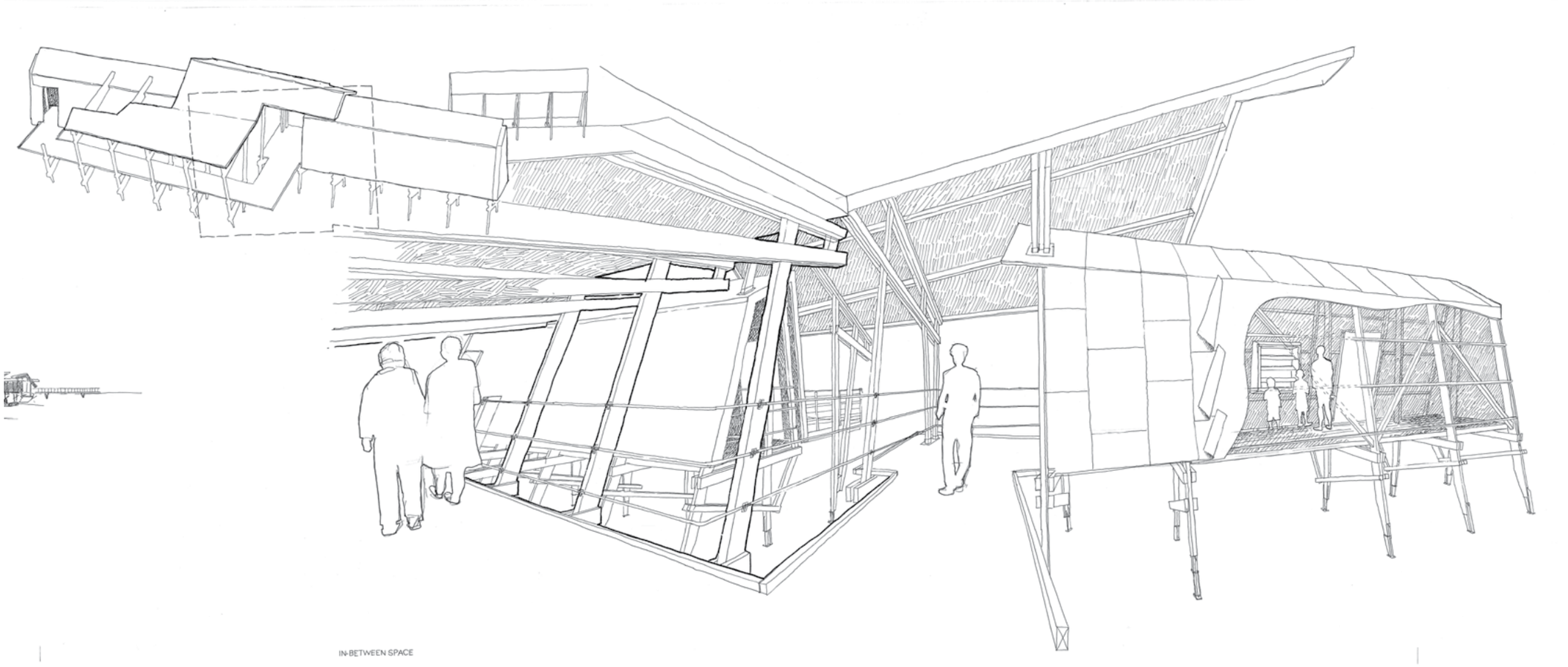
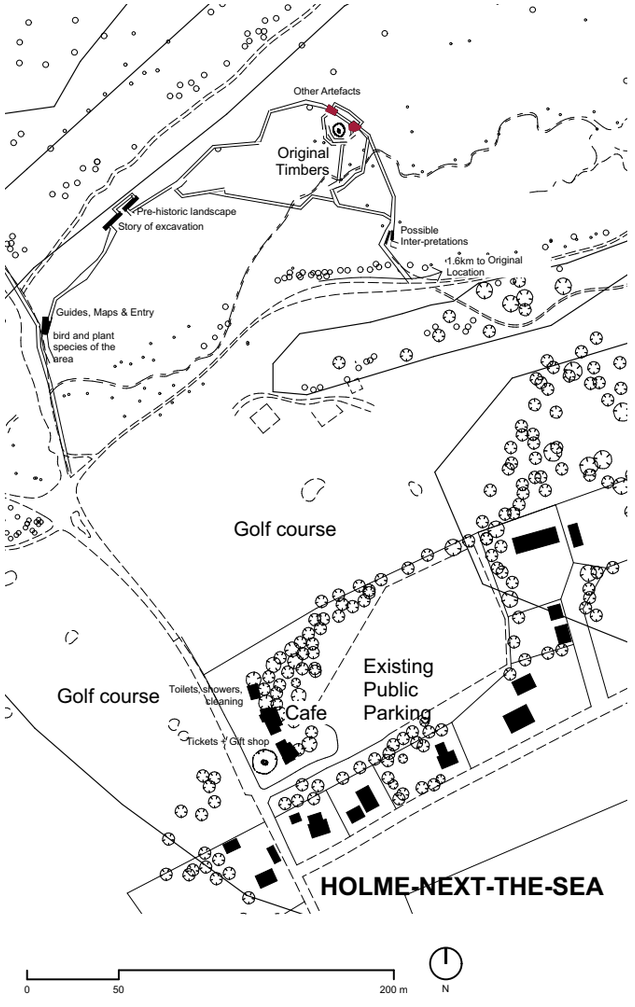


Figure 5.35: (Left) Preliminary plan of Pavilion 2 (Author, 2023).

Figure 5.36: (Right) View standing on walkway between the two main masses of pavilion 2 (Author, 2023).


Other Artefacts
Original Timbers
Pre-historic landscape
Story of excavation
Possible Inter-pretations
1.6km to Original Location
Guides, Maps & Entry
bird and plant species of the area
Golf course
Golf course
Toilets, showers, cleaning
Cafe
Existing Public Parking
Tickets
Gift shop
HOLME-NEXT-THE-SEA
0
50
200 m
N

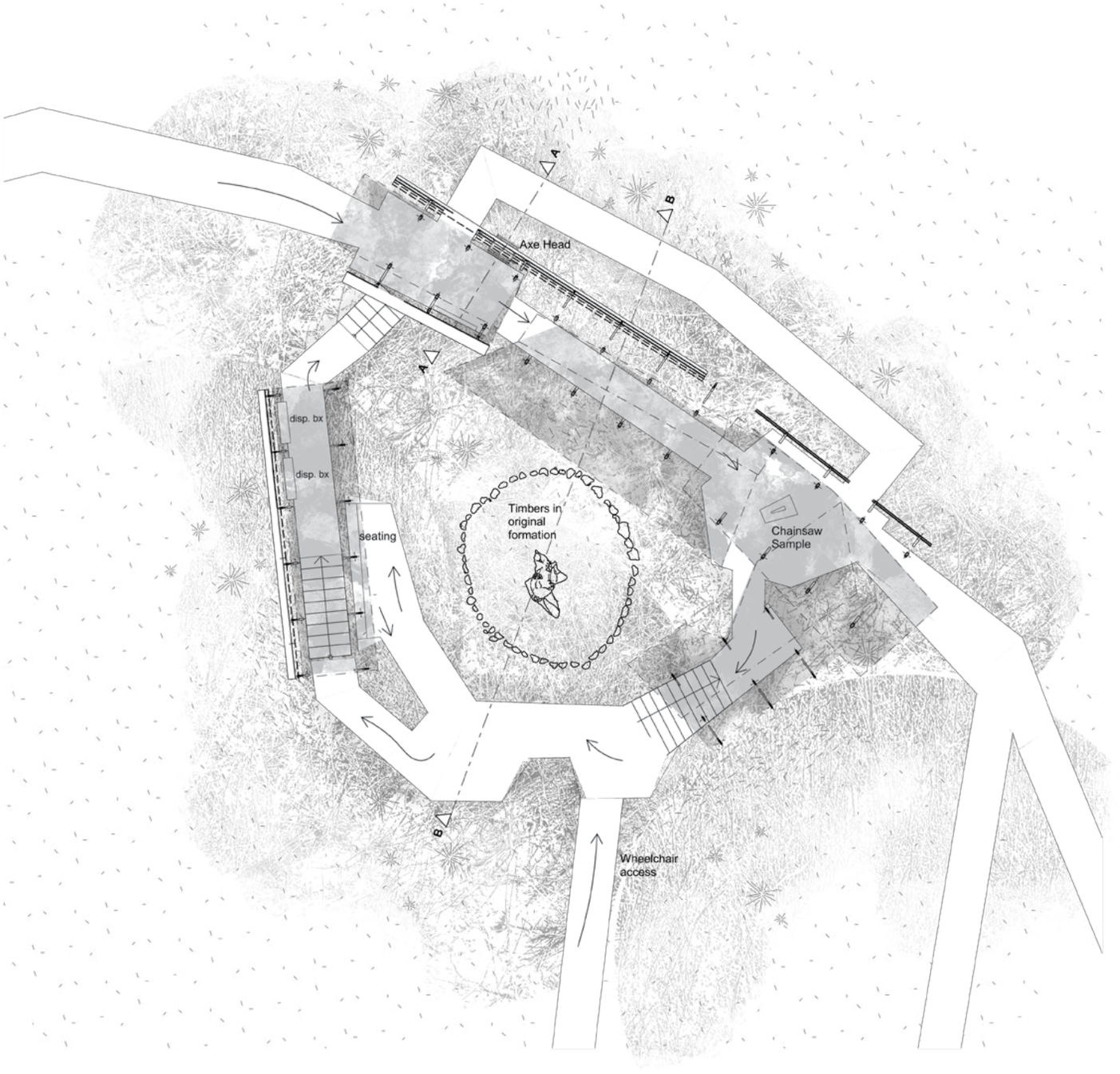

A
B
Axe Head
disp. bx
disp. bx
seating
Timbers in original formation
Chainsaw Sample
Wheelchair access
0
1
5
10 m
N

Figure 5.37: (Left) Preliminary plan of Pavilion 3 housing the original timbers of Seahenge (Author, 2023).

Figure 5.38: (Right) Pavilion 3 as seen from pavilion 4 (Author, 2023).

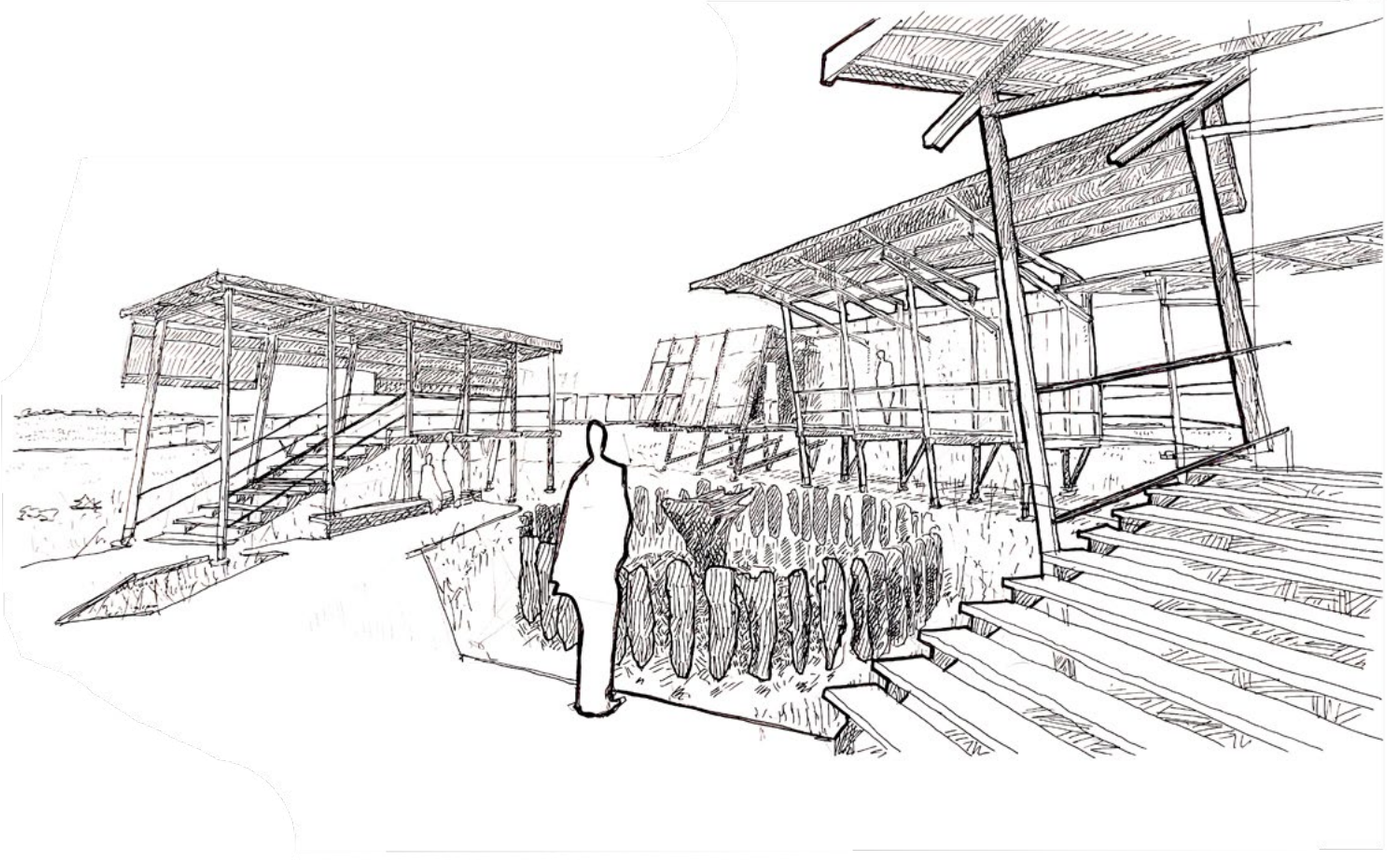


Figure 5.39: Walkway surrounding original timbers. Support structure of timbers not yet shown, see next page. (Author, 2023).

Figure 5.40: Pavilion 2 Approach (Author, 2023).

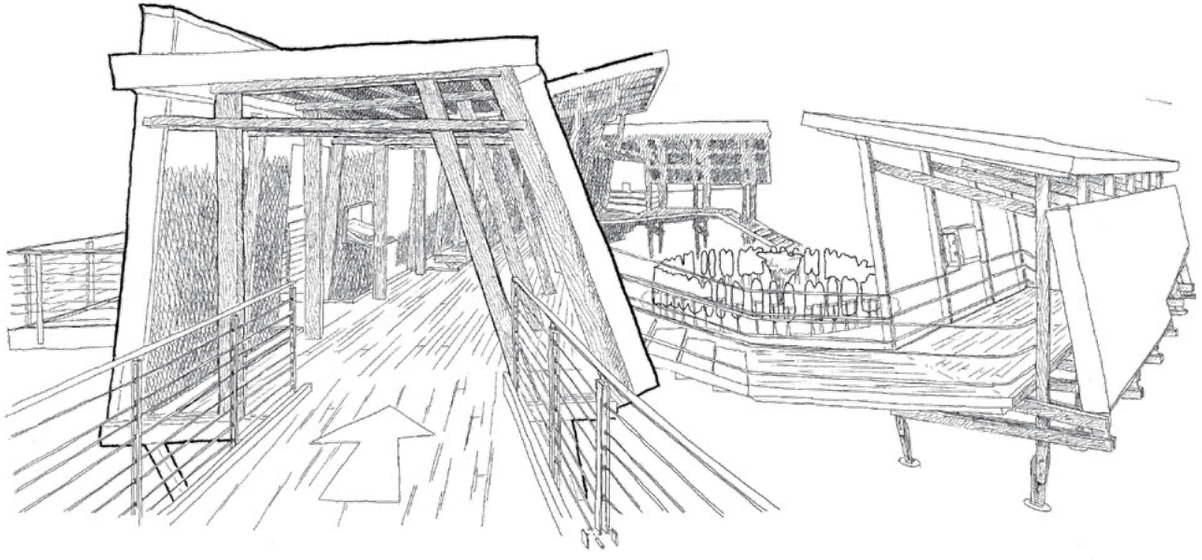
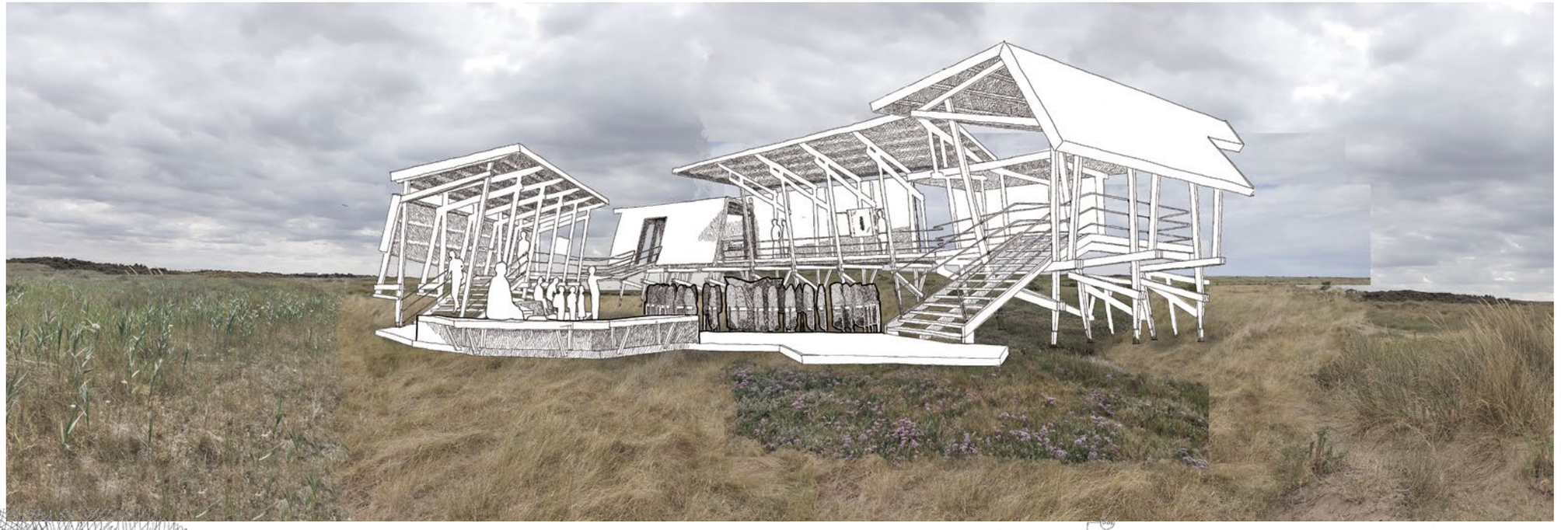
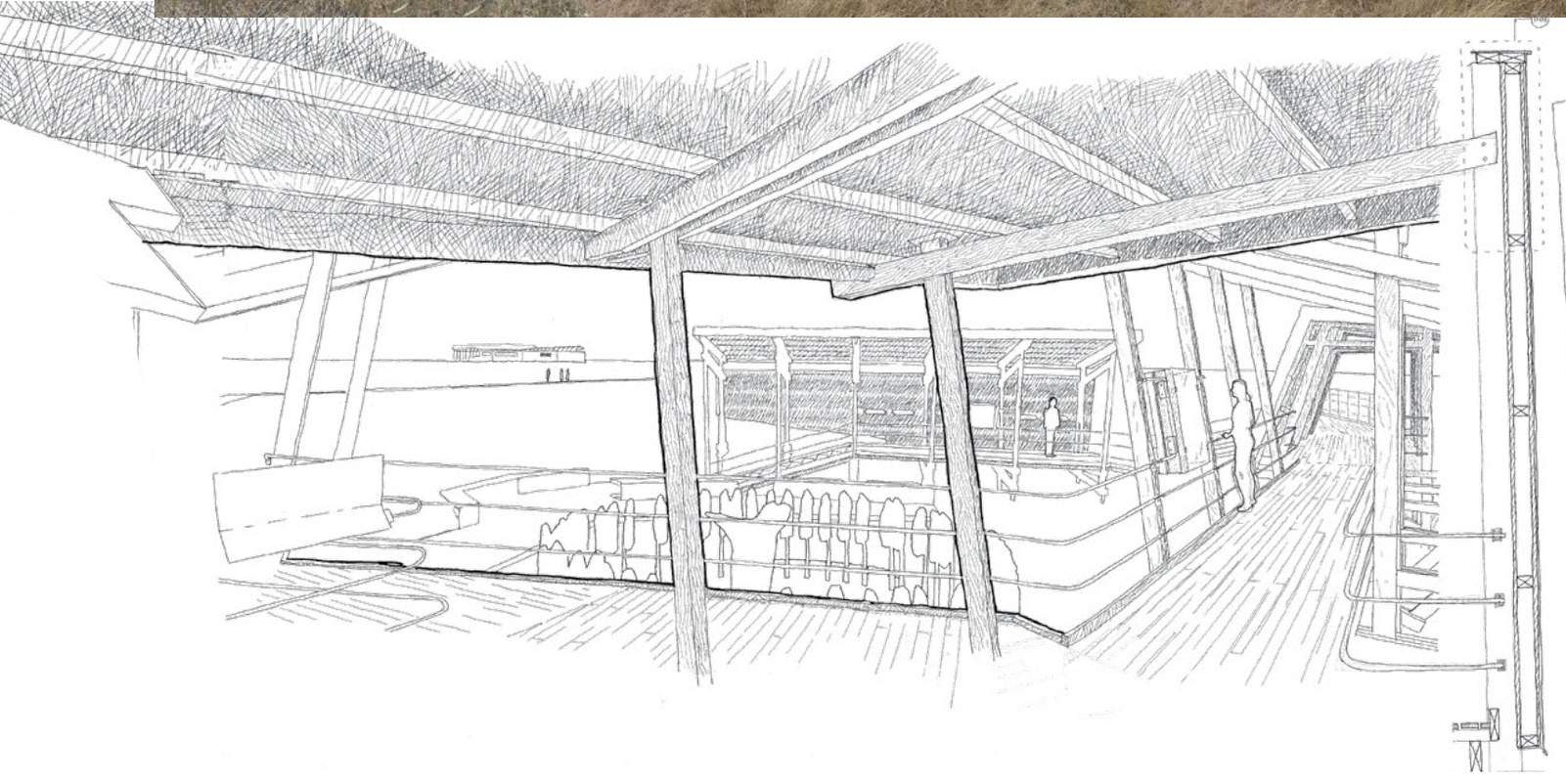
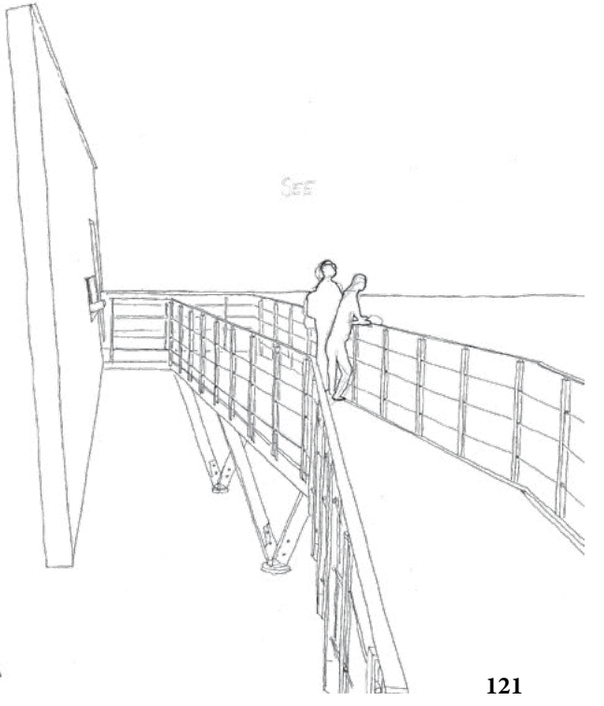
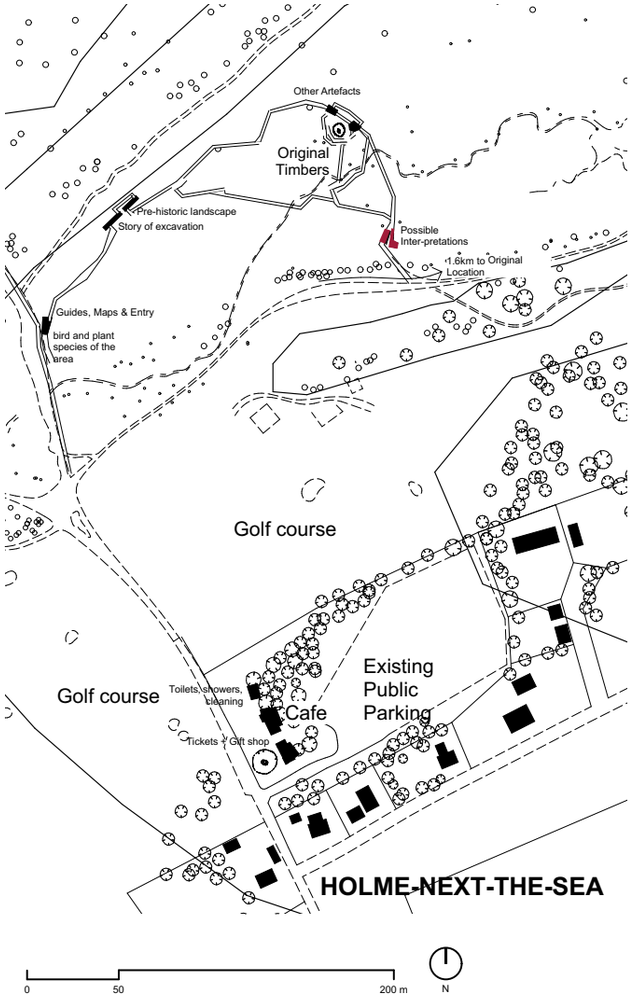


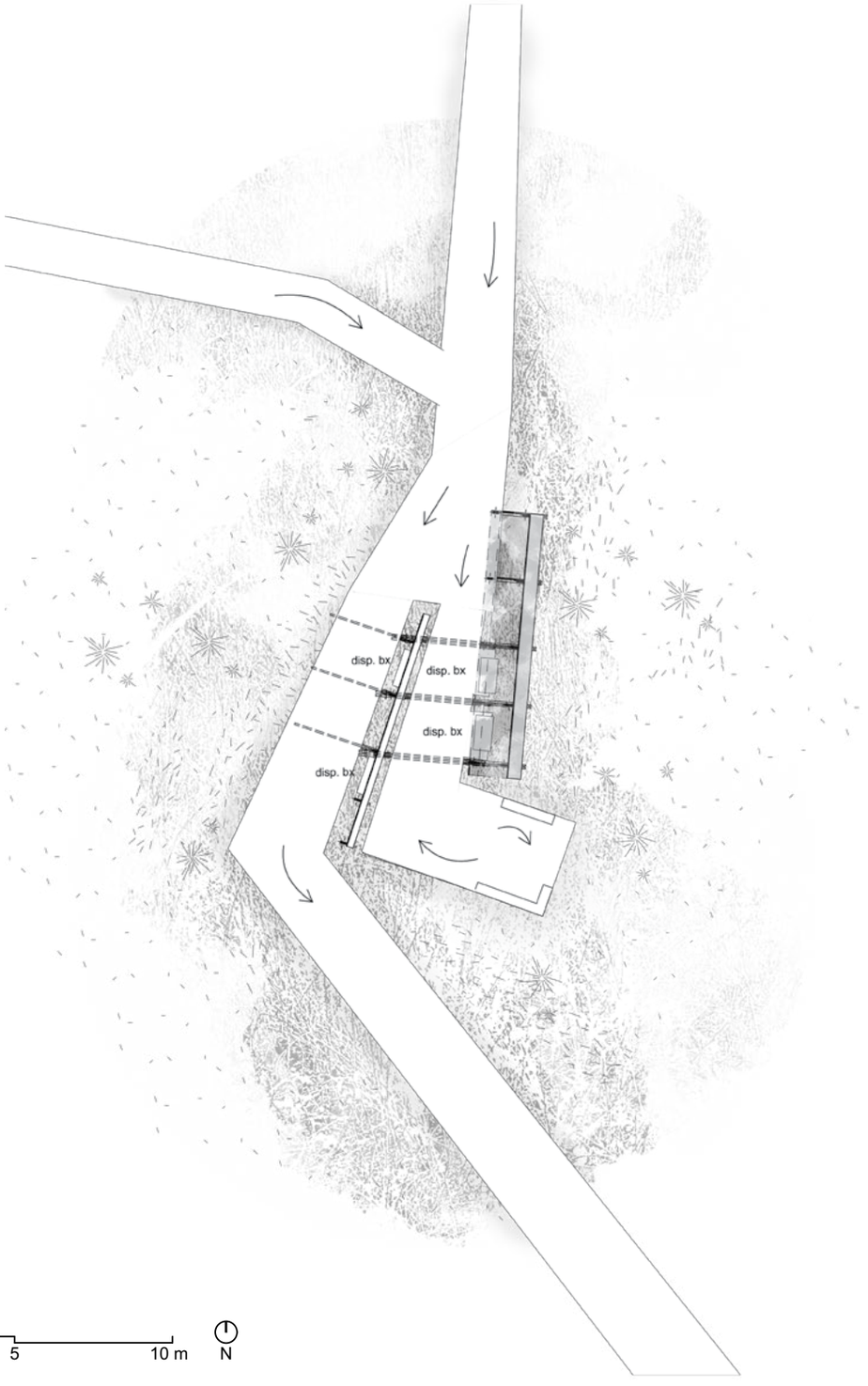
Figure 5.41: Pavilion 3 Approach (Author, 2023).








Other Artefacts
Original Timbers
Pre-historic landscape
Story of excavation
Possible Inter-pretations
1.6km to Original Location
Guides, Maps & Entry
bird and plant species of the area
Golf course
Golf course
Toilets, showers, cleaning
Cafe
Tickets
Gift shop
Existing Public Parking
HOLME-NEXT-THE-SEA
0
50
200 m
N


disp. bx
disp. bx
disp. bx
disp. bx
0
1
5
10 m
N

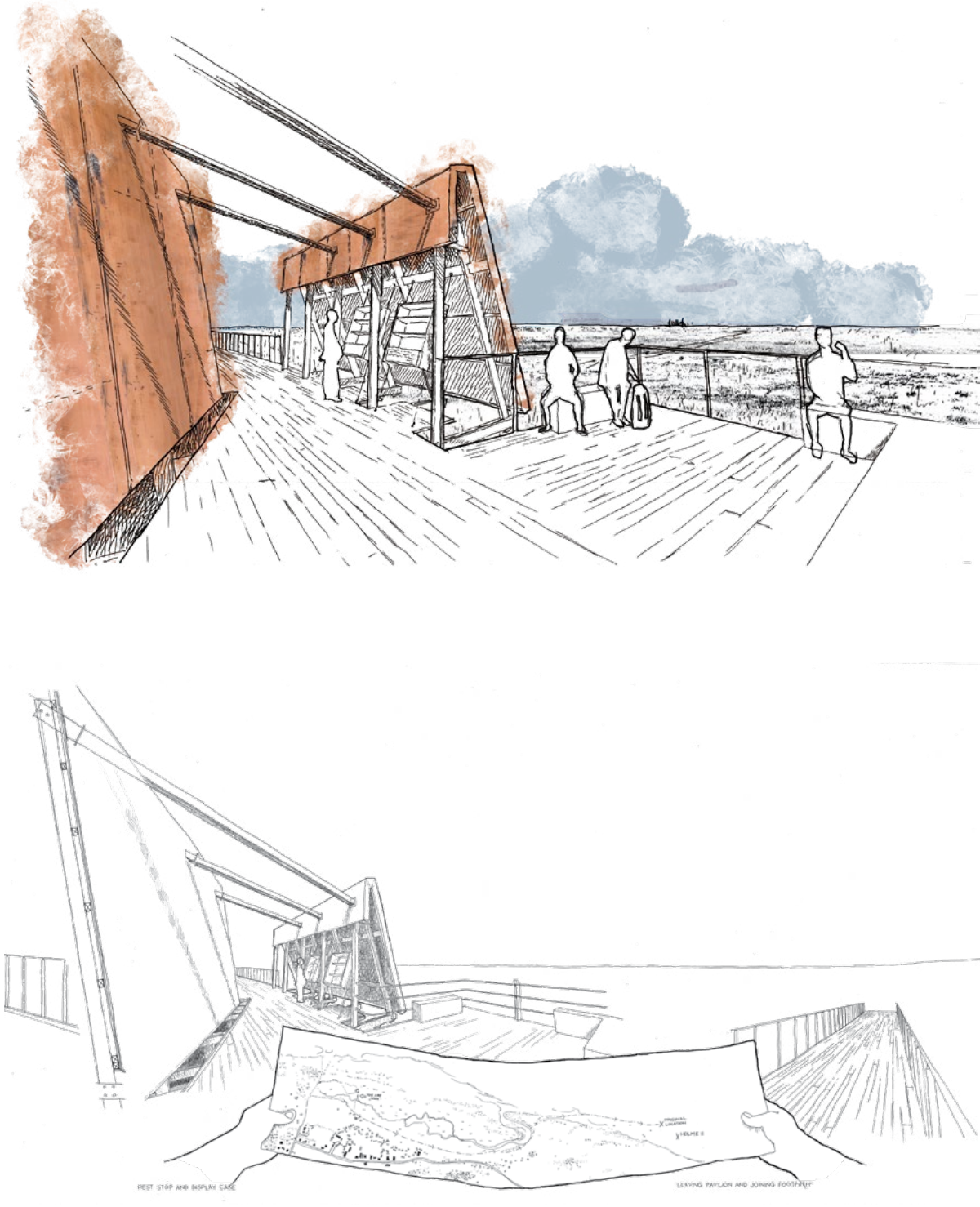
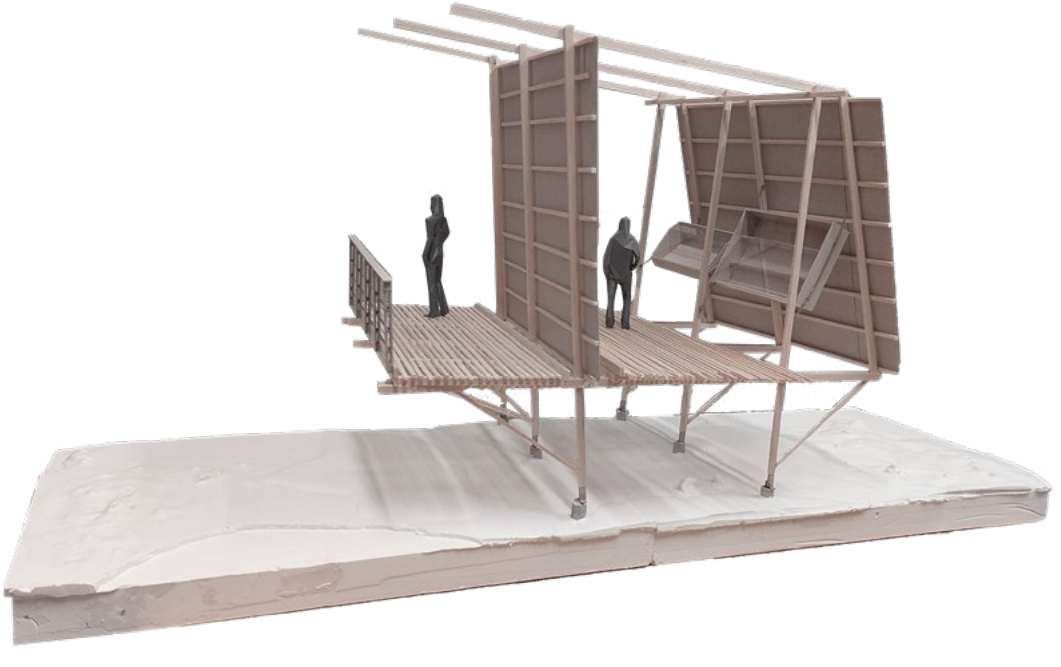


Figure 5.42: (Previous Page) Preliminary plan of Pavilion 4 (Author, 2023).

Figure 5.43: (Top) Rest area and exhibition boxes suspended from frames (Author, 2023).



6. Technical

Throughout this document, the central problematic of this thesis has risen: designing an appropriate setting for the remains of Seahenge. The solution to this has been discussed in the previous chapter and has been informed by investigations concerning the built environment in which it will be exhibited and the user experience viewing this exhibition. A central part of the solution is returning the timbers to their original context and allowing them to be viewed as part of the landscape. While solving shortcomings with the current exhibition of the timbers, this decision creates various challenges in the construction and detailing of the proposed structure.

This chapter explores the technical solutions to these challenges. The following sections will discuss informing factors and example buildings considered when formulating the final technical resolution. Full construction documentation is attached in annexure A.

Figure 6.1: (Top and bottom) Process section model of pavilion 4 of the new exhibition of Seahenge (Author, 2023).

6.1. Informing Factors

6.1.1. Conditions on site

As experienced during the construction of the nearby Parrinder Hide (see section 1.4.3), construction within the landscape has several challenges. Wet, sandy ground conditions and sensitive plant life prohibit access by large vehicles. Parrinder hide is situated on an artificial embankment between two lagoons which led to considerations made for the mating periods of the birds inhabiting these lagoons. The construction period was restricted to 3 months between mating seasons. The exhibition for Seahenge will be on ground conditions of both sandy dunes and occasionally flooded salt marsh. While construction time will not be as restricted as that with Parrinder hide, it should still be as quick as possible to prevent unnecessary disturbance to both plant and animal life.

The year-round rainfall and resulting risk for rust require all steel fittings to be premanufactured and bolted on site. Welding and cutting of steel on-site are avoided to prevent the need for additional galvanising.

High winds necessitate additional bracing of timber frames in the form of tensioned cables and additional timber beams attached directly to timber members,

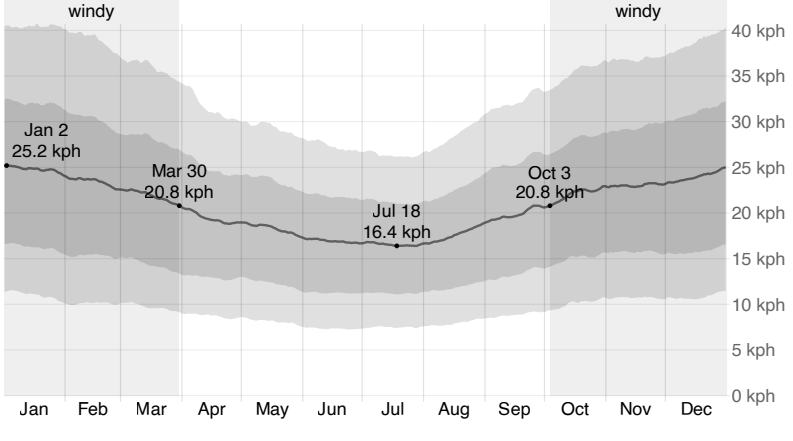


Figure 6.2: Average windspeed throughout year on site (Adapted from Weather Spark, 2016: online).

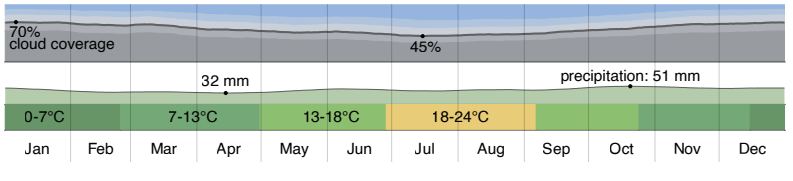


Figure 6.3: Cloud cover, percipitation and temperature of site (Adapted from Weather Spark, 2016: online).

The need for protection of plant life and protection from flood damage will require the building to be raised above natural ground level, supported by columns on small footings. To ensure that plant life on the surface receives enough sunlight and rainwater to survive, the building should be fragmented into small pieces to prevent large areas of shade underneath the buildings. Wet construction is minimised to footings where ground conditions permit. Dry construction is separated into sections to allow all materials to be carried either by hand or by a wheelbarrow, minimising the need for heavy machinery.

6.1.2. Low environmental impact foundations

Plant life and animal access requires the buildings footprint to be minimised. Throughout most of the pavilions, individual timber frames are supported on two small footings. Supported by helical or in-situ concrete pile foundations depending on the ground conditions.

Helical pile foundation is a metal pile inserted by rotating the shaft of the rectangular or cylindrical shaft. Evenly distributed helical plates then advance into the ground, pulling the shaft with

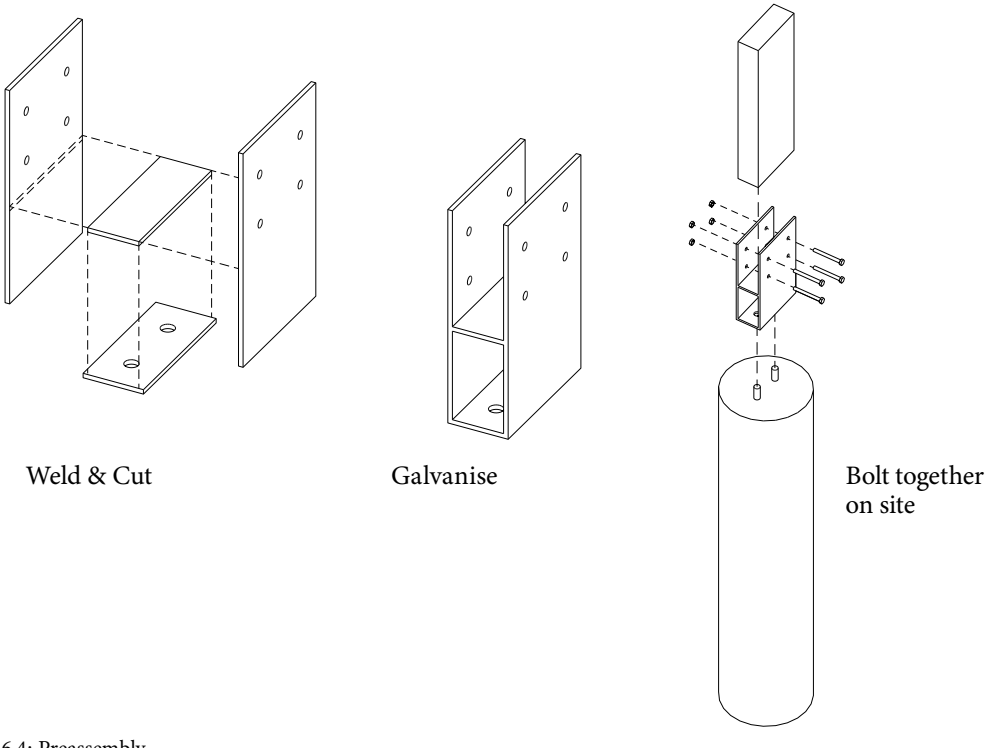
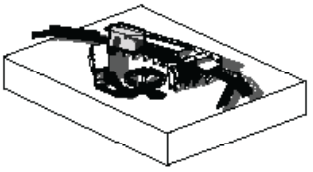
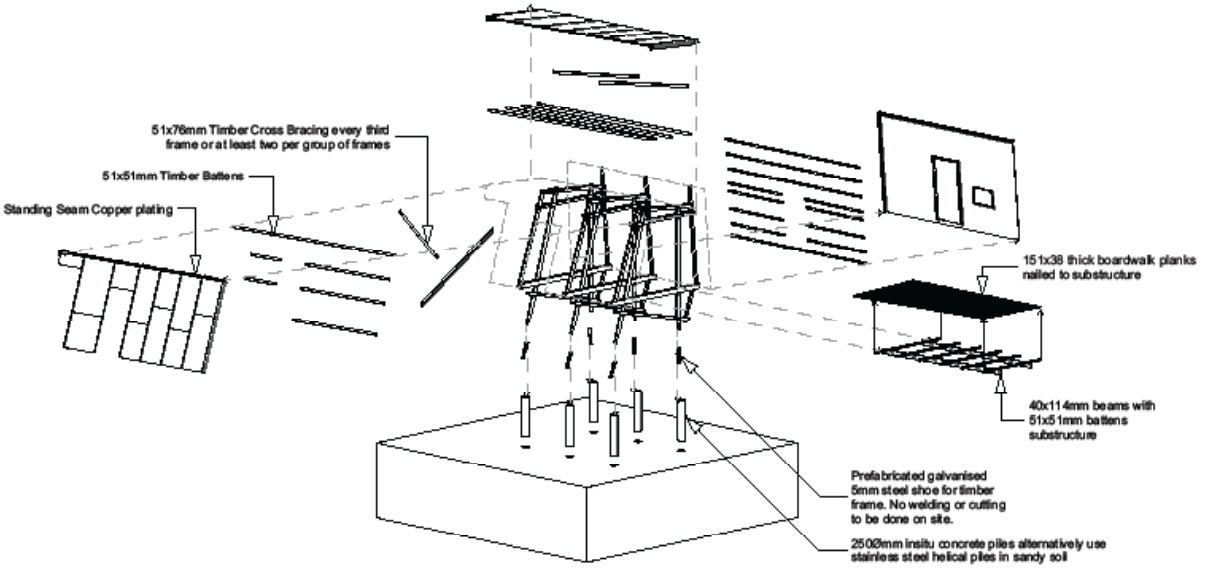


Figure 6.4: Preassembly of metal footings (Author, 2023)





Saltmarsh House
Niall McLaughlin Architects
Isle of Wight, UK
2023

it in an action similar to a wood screw. Multiple successive piles can be bolted together, driving the pile deeper into the soil.

6.1.3. Panelling and Prefabrication

A detailed design will be required so that all timber frames can be assembled in off-site facilities before on-site construction starts. Roof tiling and shingle panelling will be done on site with the tiles/shingles being transported to site in small batches to be attached by hand (figure 1 to the right)

6.1.4. Material usage

Surrounding the proposed site in the town of Holme, most of the houses are traditional cottages constructed out of flint and clunch walls, brick quons and steep clay tile roofs (See section 1.5 and figure 1.9). These materials are naturally occurring, and their use is well established in the area. Unfortunately, these cottages do not offer a useful typology for a museum for Seahenge. They are exclusively introverted, stereotomic structures that are rooted firmly in the ground, and require intensive excavations and wet construction. Timber construction, as used extensively in the proposed design is present in select cases in the region. Within the region, timber construction is mostly reserved for small bay windows, enclosed balconies, and sheds. While never to the tectonic nature employed in the proposed design, labour, knowledge, manufacturing, and building legislation clearly does exist for such construction.

Figure 6.5: Exploded Axonometric of typical pavilion construction (Author, 2023).

Timber cladding will be used on select walls throughout some of the pavilions. It acts as bottom barrier to a plywood roof substrate and freestanding wall construction in pavilion 1.

Copper plate has been chosen as the cladding for the exhibition pavilions. This choice was driven by its ageing characteristics, ageing together with the now exposed timbers of Seahenge, and for its unique colour that will fit well into the landscape. While most copper clad buildings have conventional roof substructures and resulting bulky roofs, Salt Marsh House (fig x) illustrates how a copper clad roof can be thin and lightweight while still supporting and displaying the material effectively.

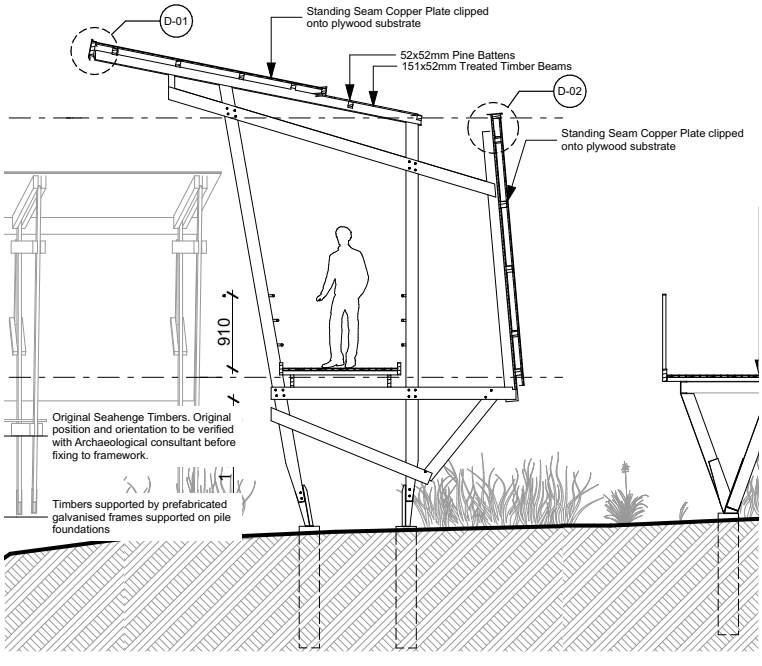
Figure 6.6: (Left) View towards lake. Both the roof and wall cladding are done with patinated copper sheeting (Kane, 2023: Online)

Figure 6.7: (Right) Section of Deck and dining area. The pre-fabricated steel grid hovers over an artificial ditch. (Niall McLaughlin Architects, 2023: Online)

6.2. Example buildings

6.2.1. Resolving timber frames

For the timber frames supporting the bulk of each pavilion, an of a building of similar size was sought, leaving the natural soil uninterrupted and allowing sunlight and rain to reach plants underneath. The Witches' memorial by Peter Zumthor achieves just this. Located along the edge of



the island town of Vardo, it is exposed to arguably worse weather conditions than the site of Seahenge. A rocky landscape allows for less intrusive and more frequent footings inserted into the ground than could be possible at Holme. The timber frames in the proposed design are spaced further apart and consist of deeper members to accommodate this change. The Witches' memorial features a single skin of corrugated sheeting over simple battens which would be impossible with standing seam copper plating. To account for the necessary substrate required in copper plating, the plating and plywood substrate is capped with soffits at all ends (see Detail 01).

Figure 6.8: Section 2 through Pavilion 3 at roughly the same scale as the Witches' Memorial section on the opposite page (Author, 2023).

Witches' memorial, Steilneset
Peter Zumthor
Vardo, Norway
2011

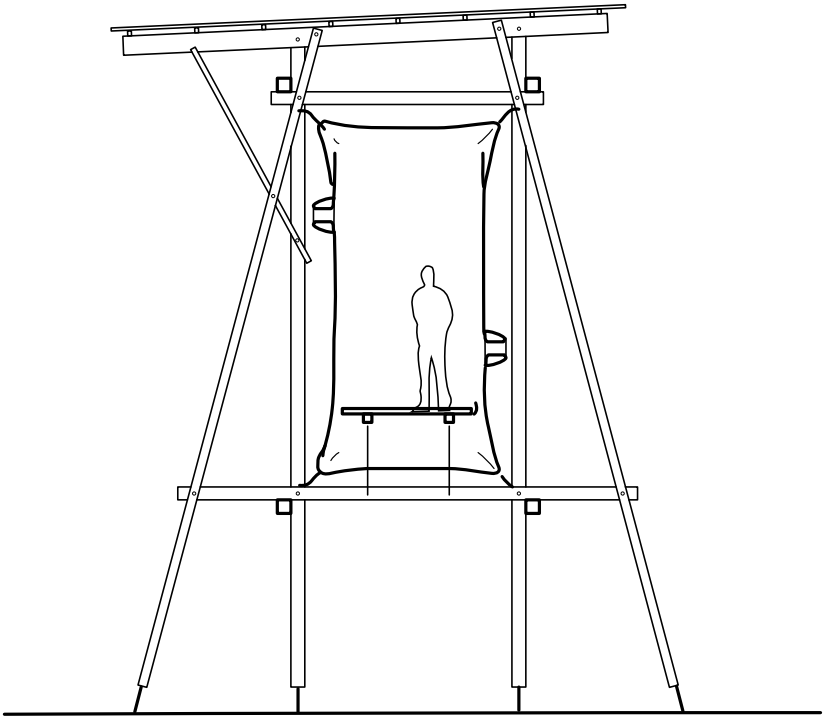


Figure 6.9: Typical section through the Witches' memorial (Adapted from Zumthor, 2011. Online).

Figure 6.10: Close-up of the timber frame and steel footings (Eggen, 2011. Online).

The connection between timber and the unspecified foundation of the Witches' memorial inspired the footings in the proposed design. By exaggerating the length of the metal shoes, the height above the natural ground level is accentuated. Timber elements are also distanced from rising water levels, or splash back from rain.

6.2.2. Foundations

The wind tower by MSA Gruff faced many of the same challenges due to its location, positioned on a dune right before the beach. The entire steel structure was prefabricated and erected on site within a day. Helical pile foundations were used to anchor it to the loose sand without excessive soil displacement.

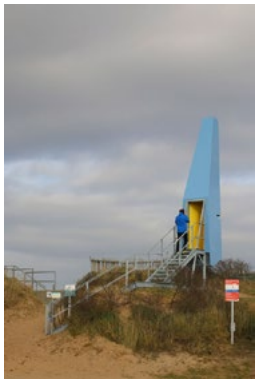
The Camp Graham sleeping pods show the possibility of concrete footings. Photos and sections show a realistic size of such footings for a structure larger than that of the proposed exhibition for Seahenge. When excavating by hand and pumping concrete from a central wet area, the environmental disturbance of these foundations can be minimised.

'Made of Sand'
Studio Weave
Honiton, UK
2022

Figure 6.11: (Left) Timber clad contemproary extention in the project 'made of sand' (Stephenson, 2022: online).

Figure 6.12: (Next Page) Section through cabin showing timber frame and insitu concrete footing (Weinstein Friedlein Architects, 2015: online).

Figure 6.13: (Next Page) Camp Graham cabins viewed from raised Walkway (Mark Herboth Photography, 2015: online).



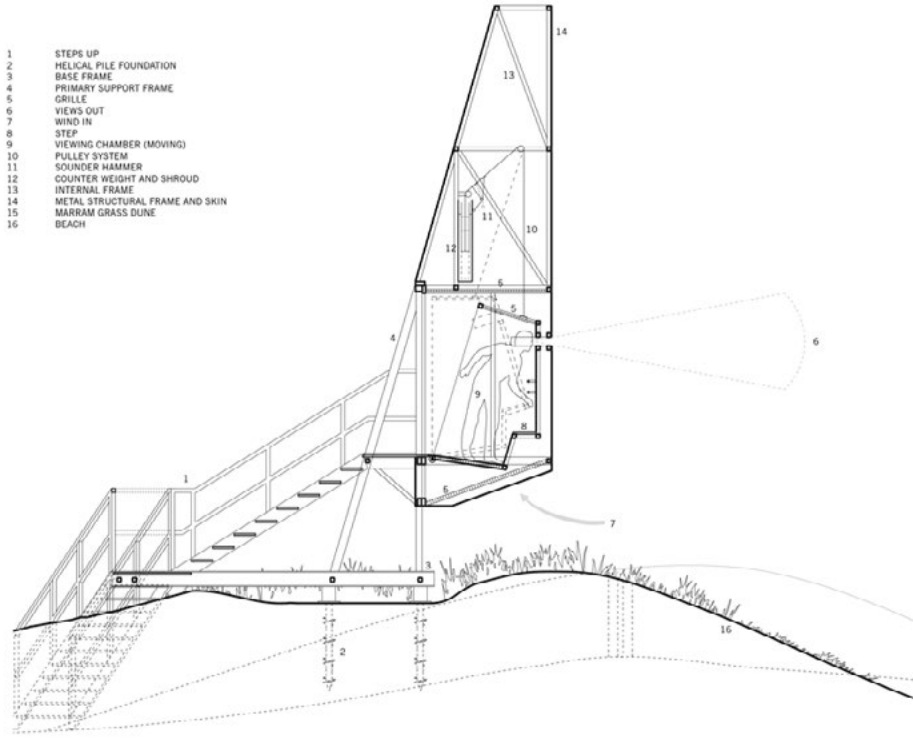
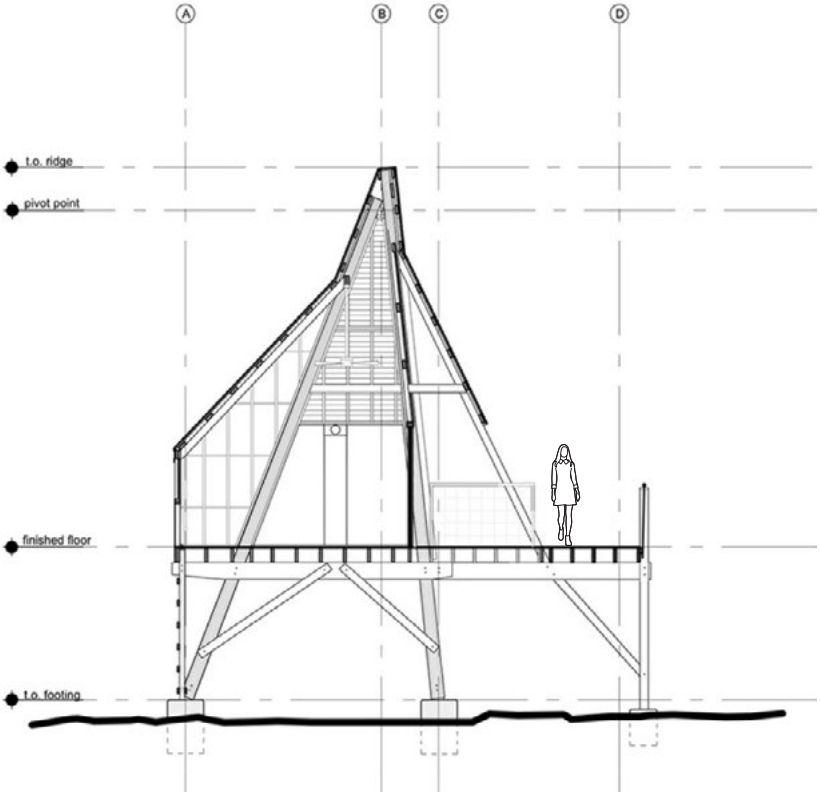


Figure 6.14: (Top) Positioning of tower on man-made dune (MSA Gruff, 2014: online).

Figure 6.15: (Right) Section of wind tower showing helical pile foundations (MSA Gruff, 2014: online).

Wind Tower
MSA Gruff
Lincolnshire, UK
2014



Camp Graham
Weinstein Friedlein Architects
Henderson, USA
2015

6.3. Technical resolution

6.3.1. Assembly of exhibition pavilions

The main structure of the exhibition pavilions is assembled timber frames. Frames are generally aligned in linear grids, cross braced, and clad with copper plate fixed to a plywood substrate. To minimise construction time on site, timber elements are cut to size, labelled off site, and assembled into frames on site.

Frames are attached to footings by premanufactured galvanised steel fittings and bolted together.

All treatment of timber and galvanising of steel is done before construction, and prefabrication allows this waterproofing to stay intact without weak points caused by cutting or drilling on site. Most timber connections are done with bolts, minimising the need for screws or nails. Predrilled holes and bolts ensure accurate construction.

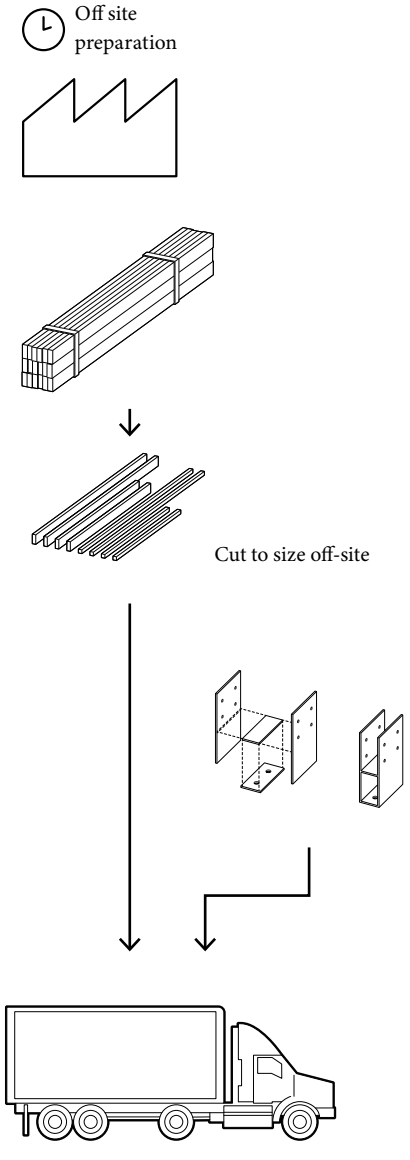
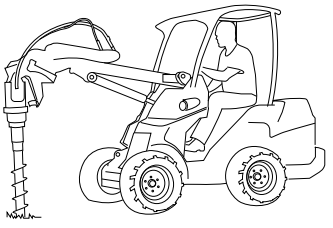
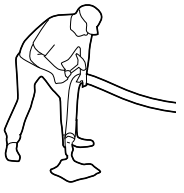


Figure 6.16: (Current and next page) Off-site manufacturing and on-site assembly of pavilions (Author, 2023).

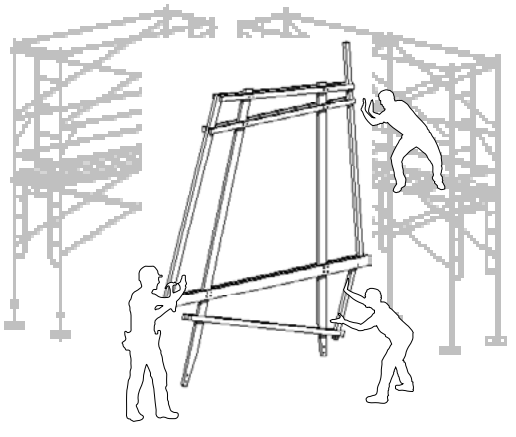
On-site time
minimised





Screw piles or insitu
foundations depending
on soil conditions

Assemble frame
1. Base column
2. top structure with
aid of scaffolding



Frames are assembled on site and not pre-assembled. While pre-assembled frames would have ensured accuracy and reduced construction time, physically moving the entire frame to site without heavy machinery proves difficult. On average the frames measure 3x5m with all horizontal connections consisting of two profiles of at least 51x114mm. This makes an entire frame too heavy and bulky to effectively move to site and not unnecessarily disturb plant life.

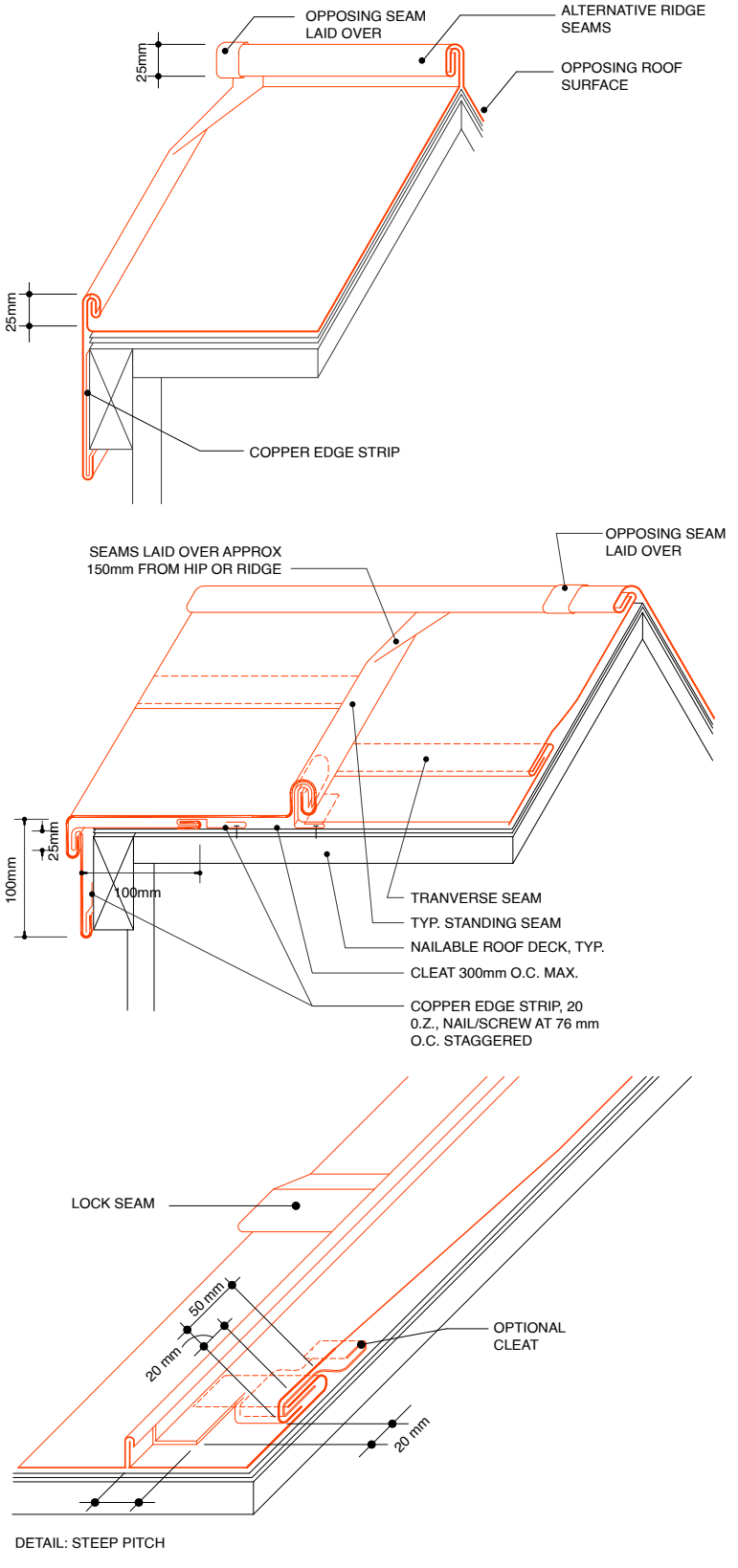


Figure 6.17: Standing seam copper details on roof ridge, gable, and surface (Converted to metric units from Copper Development Assoc. n.d.: online).

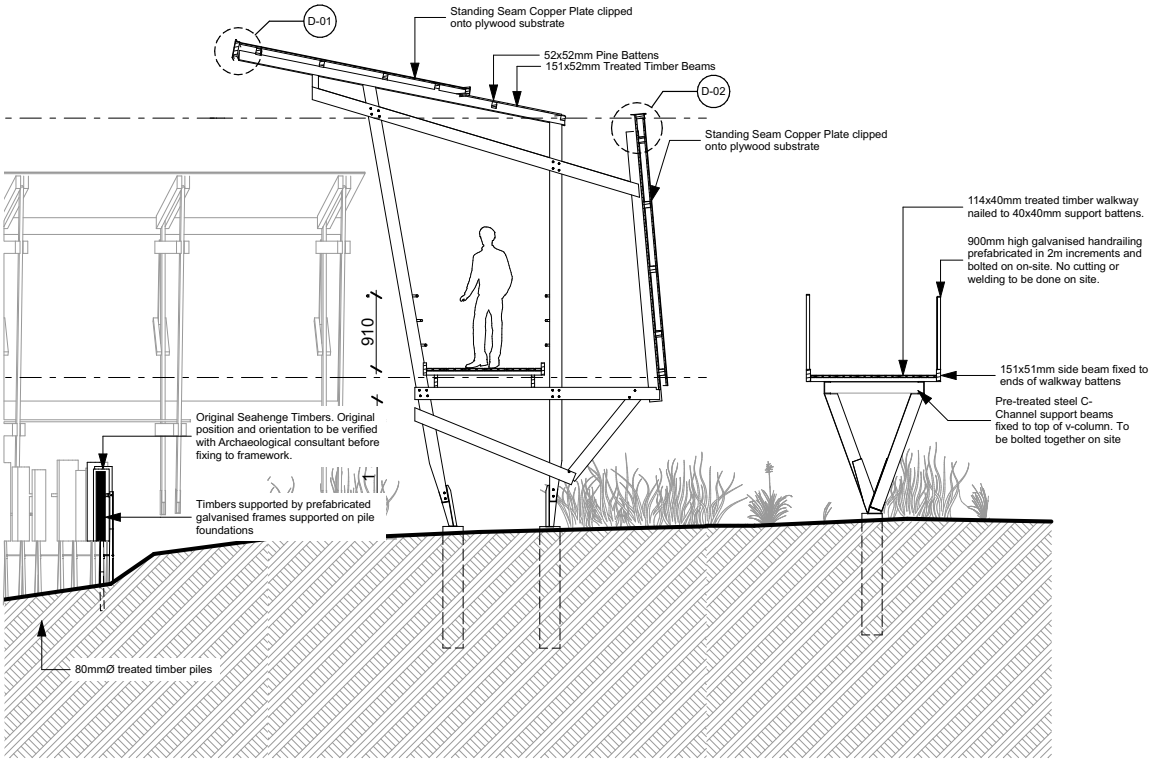
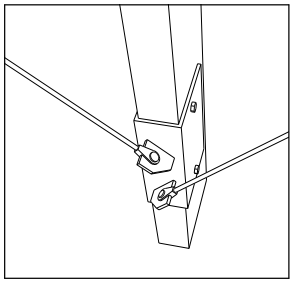
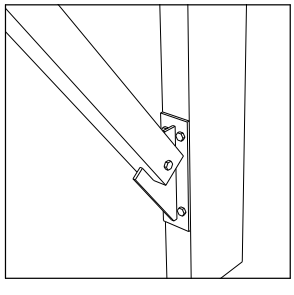


Figure 6.18: (Top) Section development and assembly details of Pavilion 3 (Author, 2023).

Figure 6.19: (Right) Different connection detail development (Author, 2023).

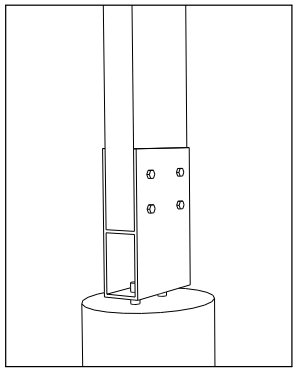
Cross Bracing to frame

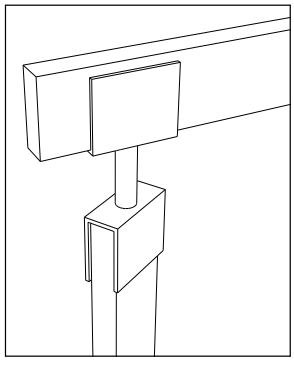




Frame members in line with each other.

Frame to foundation footing (developed further on next page)





Oblique connection between beam and column

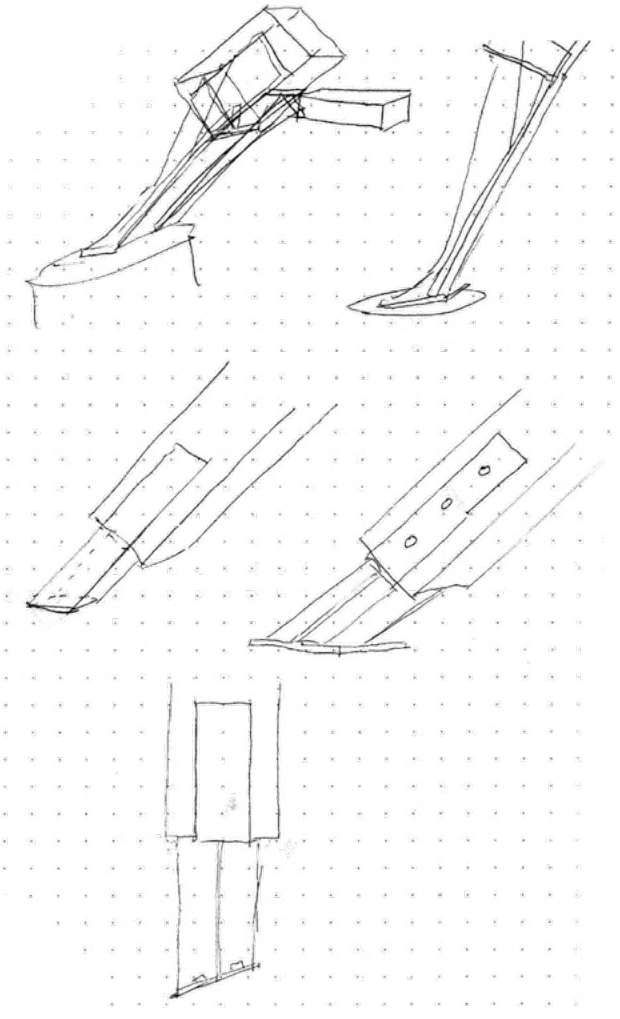
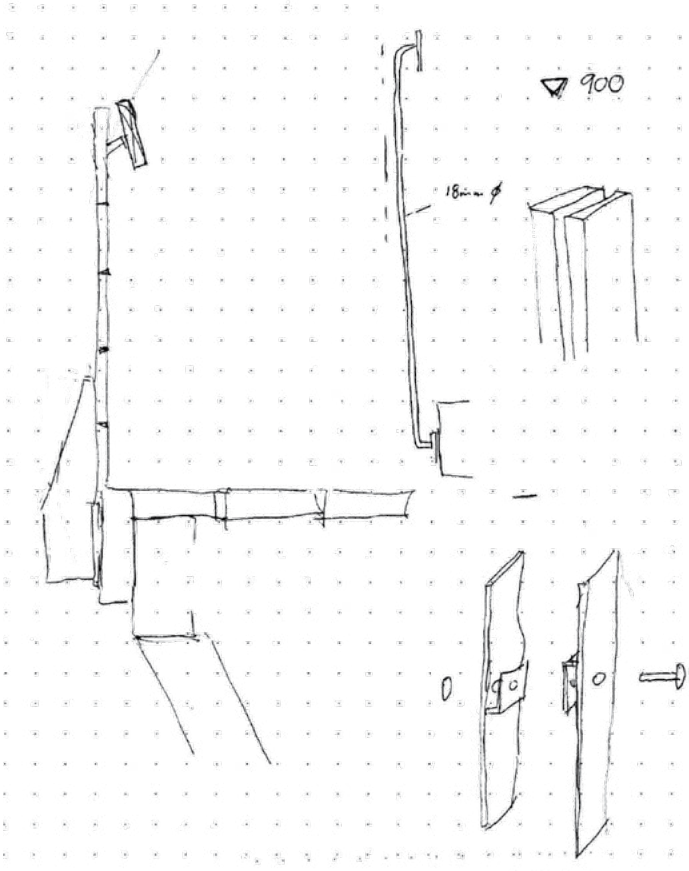
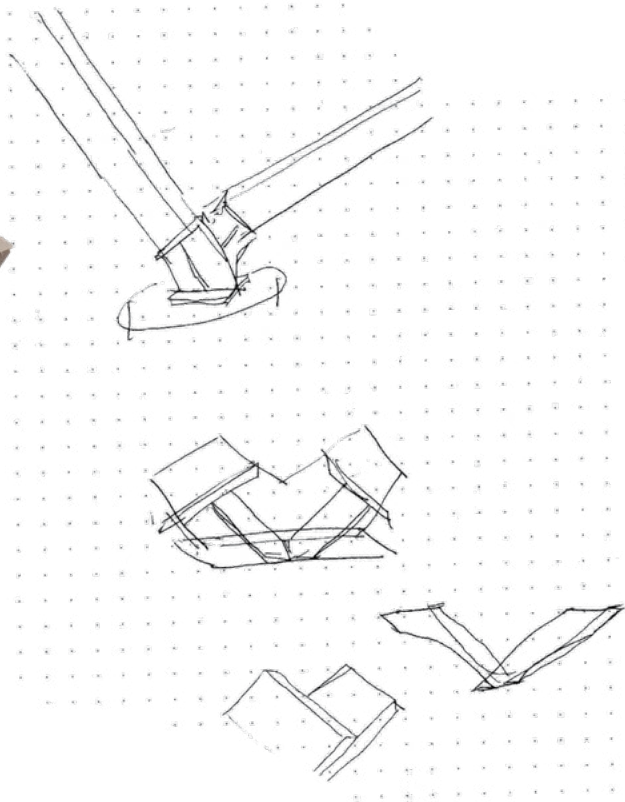


Figure 6.20: (This Page) Detail development and model of frame footing (Author, 2023).

Figure 6.21: (Next page) Detail development and model of walkway footing (Author, 2023).


900
18mm ϕ



6.3.2. Walkways

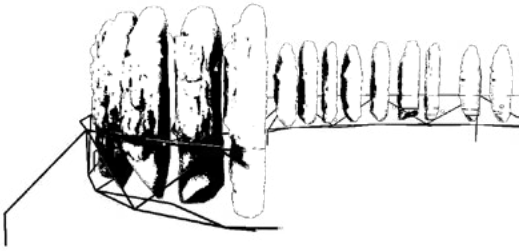
Walkways run on two heights: a boardwalk 300 mm above ground level and 1500 mm above ground level, in line with the floor height of the exhibition pavilions. The lower walkways will be constructed with a top-down approach, where preceding sections are built and used as access for piledrivers to insert piles for the next sections (fig X).

6.3.3. Exhibition of timbers

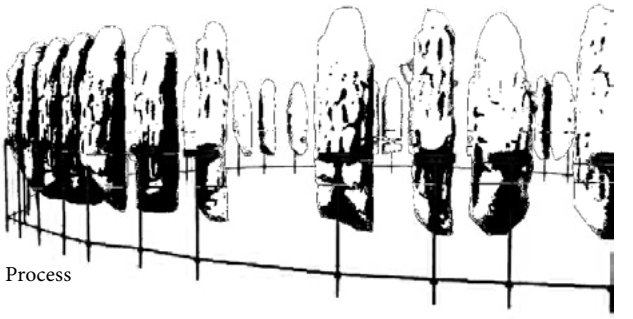
A bent metal structure supports the original timbers of Seahenge, anchored in smaller hand drive, treated timber piles. The structure is minimised to reduce visual impact. Their footings are situated in an artificial ditch to hide them from view within the landscape.

Figure 6.22: (Below) Development of support structure for original timbers (Author, 2023).

Figure 6.23: (Bottom of this page and next) Final design of timber supports (Author, 2023).

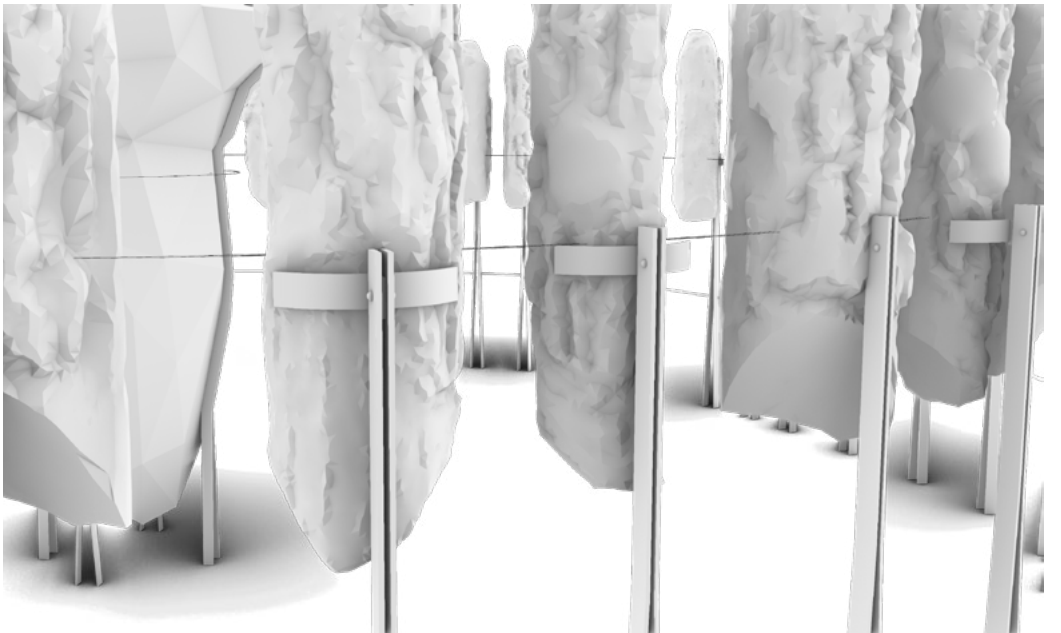


Process



Process

Final Fittings against orignal timbers



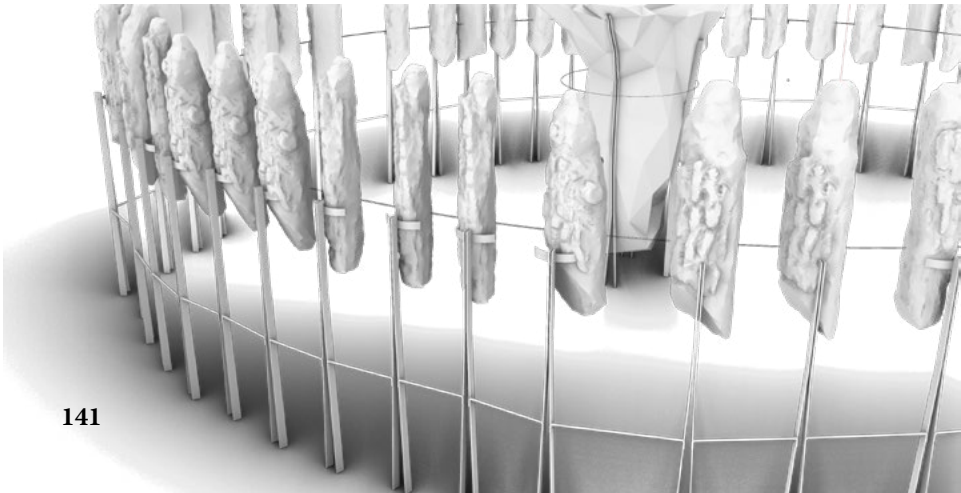
6.3.4. Circulation and Universal Access

The visitors' centre and all pavilions area wheelchair accessible. With the exception of the timber display area directly from pavilion 3, the timbers can however be reached from the lowered walkways (see fig X). The height difference between ground level and elevated walkways are mediated by steady incline ramps. The slight elevation of the floor slab at the visitors' centre is compensated for by a ramp at the giftshop.

Handrailings are minimised throughout the prevent obstructed view of the landscape. At 300mm height, the walkway has no handrailing. At 1500mm, a 900mm high railing is installed, but with minimal balusters. Within the pavilions, the handrailing spans between the structural frames and is not connected to the walkway to minimise the separation even further between the visitor and the timbers.

6.4. Conclusion

This chapter has discusses the various influences and reasoning behind the technical resolution of the design that has been set out in the previous chapter. The most technical component of the design – the exhibition pavilions – are devised as largely premanufactured and manually assembled buildings to lessen the burden of the construction process on the sensitive natural environment. Working with prefabrication restricts the design process, but also allows for more creative solutions to design problems that arise. The reasoning and motivation presented in this chapter, should be viewed in conjunction with annexure A: the final technical documentation. The various systems and approaches are implemented on specific details and assemblies within the design to showcase their viability within the project as a whole.



7. Conclusion

In the future, a rising tide, a changing social environment, or new archaeological discoveries may again upheave Seahenge, insisting that it finds a new home. For now, however, it will sit quietly within its copper-clad timber-framed exhibition in the grassy marsh just outside Holme-next-the-Sea. After its excavation, some argued that returning it and burying it at its original site on the beach would be an appropriate end for this primeval artefact. Perhaps a mere walkway to an unmarked mound concealing Seahenge, would have appeased some of the Neo Pagans and Druids. The exhibition detailed in this thesis, achieves more than merely presenting Seahenge on a podium and allowing the visitor to get as close as possible. In this proposed exhibition, visitors are immersed in the world of Seahenge. Piece by piece, they are granted glimpses at the timbers, and their preconceptions are challenged and suppressed, by first guiding them through the original Seahenge landscape. They are brought to a point where a sensitive assembly of walkways and footings brings together the informed visitor, the undisturbed landscape, and the preserved and uncovered artefact. The building becomes The Clearing.

Throughout his highly influential oeuvre, Heidegger covers many topics and themes. His influence within architectural theory is well established, encompassing many concepts for understanding the person, the site, and the act of creating. At Seahenge, where knowledge and understanding are stretched to their extremes, the building, and in turn, the architect becomes concerned with how much will be revealed to the visitor. 'The Clearing' becomes then, not merely one of many ways of understanding a building, but an integral part of its function. The new proposed exhibition for Seahenge reveals the complexity of the landscape surrounding it. Equally, it also stands back and allows Seahenge – a work of art – to reveal the transience of this particular part of the world in a way that is only accessible through this work of art.

Within the museum typology, a spectrum of approaches exists for mediating the building and the artefact with their possibly contradictory requirements. The proposed exhibition for Seahenge positions itself at the extreme by distancing itself from the artefact, allowing Seahenge uncontested space to speak for itself. The small scale of the Seahenge circle, combined with its need to be supported above the ground to prevent further erosion, necessitates a pedestal. A pedestal or platform to bring visitors within closest proximity, whilst still exerting its presence within the landscape.

Every day, we are presented with things. Within the proposed museum for Seahenge, a unique thing will be presented to the visitor. Within the circle of timbers, an attitude is created, and around them an ambience or atmosphere close to an open field is created. When viewing Seahenge in its new home, hopefully the visitors will experience an entity other than themselves, revealing the truth set to Work within this primeval artefact.

8. Reflection

As is increasingly the case in our bureaucratically controlled society, an action can hardly be taken without evaluation thereof. In some cases, one is not even granted the grace of a second party observer and is forced to do the evaluation of oneself, by oneself. As a final lure and switch of nomenclature, this is then called a reflection, as if its inclusion were for the benefit of the author. However I am writing this now, not only for the above reasons, but because I actually do have something I would like to say. I will take this opportunity to reflect on the process of creating this thesis and some lessons I have learned along the way about the practicalities of attempting this monumental task.

The hand forces the mind and body to remain focussed on a single point. In the case of drawing – the focus and thoughts are directed at the page. Many modern advances in architectural draughting and visualisation are continually pulling architects away from the page. The apparent advantage of Building Information Modeling technology (BIM), where any change to the design is reflected in all related drawings (the plan, perspective, elevation, section), forces the mind to then simultaneously consider all of these views when making a change. This stretches the mind too thinly, and every single thought is taxed that extra bit. To the extent that one seldom connects the creative process seamlessly with drawing up the design. On the contrary, the drawing hand continually feeds back to the brain in the form of proprioceptive evidence of the line just drawn. It is also immediately evident, how far from completion you are. Leaning back and viewing the page reveals all the progress made as well as possible empty corners awaiting new designs.

In comparison, BIM only offers snapshots of an unknowable abstract. Showing all the layers of all the drawings on a BIM floor plan is overwhelming and does not invite contemplation of possibilities. In my mind, it only invites the urge to organise and separate. The angles and motifs in this thesis would never have come into being, had the same

creative hand not cut them out of chipboard or drawn them on paper. Most of these are odd angles, 135 degrees or 113 degrees. Not that the computer is incapable of drawing such angles, but the slight pressure of BIM to rather choose common intervals of 45° or 30°, might have resulted in a more tamed design. Not even to mention the skew planes of my design, be they walls, roofs or walkways. I am thankful that I could first dream up any design and convince the computer to emulate it, rather than accepting the computer's suggestion from the outset.

During the design process, two processes occur: exploration and problem solving. The latter is comparable to wooden puzzle toys where you have to fit different shapes into the rectangle provided. As engaging as it is, especially to my brain, this process is reductive rather than productive. You are always left with an equal level, or less than what you started out with. During problem solving, the pieces do fit together, and the criteria are met – but you first need the pieces to begin with. The other process – exploration – is productive. It harvests from what is general (universal) and creates specific instances and variations. This exploration process occurs optimally when a certain part of my brain is turned off. Friends and colleagues would always advise me to 'not overthink' and I have never found it helpful. During this thesis, after the conceptual development, I repeatedly fell into the trap of moving to problem solving too soon. Exciting possibilities were discovered in the concept drawings, but transforming these into buildings, required a similarly explorative approach. Rather than

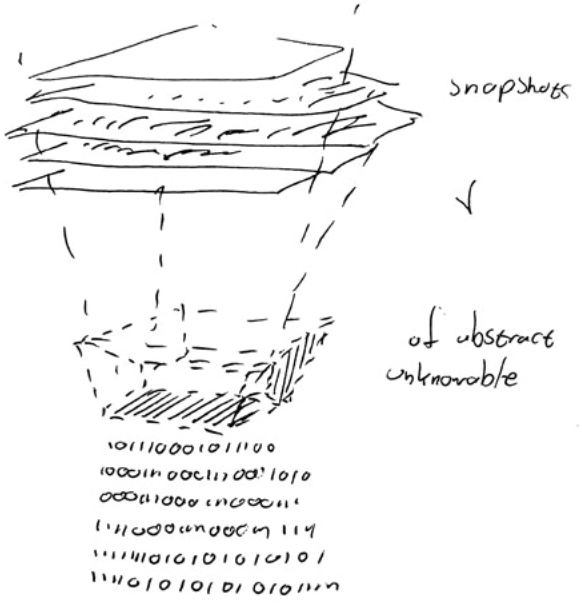


Figure 7.1: The reductive observation within digital Building Information Modeling (BIM) simultaneously reflecting all the layers of all related drawings (Author, 2023).

'not overthinking', I can now say that exploration entails accepting, for the time being, the contradictions, impossibilities and absences in the product.

'The Clearing' has been useful to me, not only in exploring archaeology and architecture and how they interact with each other. It has been an immensely helpful method for accessing creative flow. Through a rugged ritual – tea, music, nice paper, and sometimes even candlelight (thanks to my cubicle mates for putting up with my occasional antics), I enter a creative space where each drawn line gives way to the next. My pen disappears into usefulness, and through 'The Clearing', I experience an entity other than myself. Something within my thoughts regarding the thesis, in the music I am listening to, appears (emerges) on the paper. Something new which I feel I am encountering, rather than creating. But unfortunately, within a thesis, you cannot continually chase a creative high for 10 months, somewhere you have to produce a building. Switching between problem solving and creative exploration proved difficult at times. Model building was a happy compromise. It felt like I was busy with actual architecture. Each part of the model could be labelled very practically as a wall, roof, or floor, but simultaneously I was also accessing a creative process similar to creating the concept drawings. Only much later did I negotiate these created geometries with the computer to arrive at a digital 3D model. This in turn was drawn over again where I felt the digital representation was lacking.

It has been a productive year. My thanks go to Kobus, my supervisor, Jan and Petria, our programme leaders. Bianca, for her endless motivation, and Gabriela for an ever useful layman's opinion.

Sources Cited

Amoretti, A. 2017. Allmannajuvet Zinc Mine Museum. [online]. Available from:< https://www.architectural-review.com/buildings/allmannajuvet-zinc-mine-museum-in-norway-by-peter-zumthor-the-progeny-of-an-artist-architect> [Accessed 16 May 2023].

Anderson, TT. 2011. *Complicating Heidegger and the Truth of Architecture*. The Journal of Aesthetics and Art Criticism , WINTER 2011, Vol. 69, No. 1, SPECIAL ISSUE: The Aesthetics of Architecture: Philosophical Investigations into the Art of Building (WINTER 2011), pp. 69-79

Atelier Peter Zumthor. 2011. *Steilneset minnested, Vardø Heksekunst*. [online]. Available from:<https://old.arkitektur-n.no/prosjekter/steilneset-minnested-vardo> [Accessed 10 September 2023].

Bachelard, G. 1964. *The Poetics of Space*. New York: Penguin.

Biddick, K. 1998. *Excavation at Seahenge, Norfolk England*. [online]. ResearchGate. Available from:<https://www.researchgate.net/figure/Excavation-at-Seahenge-Norfolk-England-1998-Photograph-Newsprints-UK_fig8_315741641> [Accessed 23 Feb 2023].

Brennand, Taylor et al. 2003. The Survey and Excavation of a Bronze Age Timber Circle at Holme-next-the-Sea, Norfolk, 1998–9. *Proceedings of the Prehistoric Society*, Volume 69, 2003, pp. 1-84.

Callin, D. n.d. *Snettisham*. [Online] Available from <https://www.literarynorfolk.co.uk/Norfolk%20Poems/snettisham1.htm> Accessed on: 30 Jan 2023.

Copper Development Association. n.d. Architectural Details: Roofing Systems, Standing Seam. [online]. Available from:<https://www.copper.org/applications/architecture/arch_dhb/arch-details/roofing/standing_seam.php> [Accessed 08 August 2023].

Denton Corker Marshall, 2013. *Stonehenge Visitor Centre / Denton Corker Marshall*. [online]. Available from:< https://www.archdaily.com/461242/stonehenge-visitor-centre-denton-corker-marshall> [Accessed 23 Feb 2023].

Edgeworth, M. 2006. *The Clearing: Heidegger and Excavation*. [Online] Available from: < https://web.stanford.edu/group/archaeolog/cgi-bin/archaeolog/2006/09/01/the-clearing-heidegger-and-excavation/#:_:text=At%20the%20heart%20of%20Martin,a%20bringing%20into%20the%20light.> [Accessed on: 27 Jan 2023].

Edgeworth, M. 2013 *The clearing: archaeology's way of opening the world*. In Alfredo Gonzales Ruibal (ed.). Reclaiming Archaeology: Beyond the tropes of modernity. London: Routledge., 33-43

Eggen, E.A. 2011. *Steilneset minnested, Vardø Heksekunst*. [online]. Available from:<https://old.arkitektur-n.no/prosjekter/steilneset-minnested-vardo> [Accessed 10 September 2023].

FCB Studios. 2019. *The Lookout*. [online]. Available from:< https://fcbstudios.com/work/view/The-Lookout> [Accessed 06 June 2023].

Frearson, 2013a. *Mary Rose Museum by Wilkinson Eyre and Pringle Brandon Perkins+Will.* [online]. Dezeen. Available from:< https://www.dezeen.com/2013/05/30/mary-rose-museum-by-wilkinson-eyre-architects-and-pringle-brandon-perkinswill/> [Accessed 22 Feb 2023].

Frearson, 2013b. *Stonehenge Visitor Centre by Denton Corker Marshall opens tomorrow.* [online]. Dezeen. Available from:< https://www.dezeen.com/2013/12/17/stonehenge-visitor-centre-by-denton-corker-marshall-opens-tomorrow/> [Accessed 22 Feb 2023].

Gardner, G. 2019. *Sutton Hoo.* [online]. Available from:< https://www.nissenrichardsstudio.com/projects/sutton-hoo/> [Accessed 06 June 2023].

Graham, J.B. 1999. Losing Seahenge. Unpublished Video. [online]. Available from:< https://jamespgraham.com/project/losing-seahenge/> [Accessed 25 July 2023].

Haysom Ward Miller Architects. 2011. *Reception Hide Complex.* [online]. Available from:< https://www.ajbuildingslibrary.co.uk/projects/display/id/3907 > [Accessed 06 June 2023].

Heidegger, M. 1936. The origin of the work of art. Translated by Hofstadter, A. In: Hofstadter, A. (ed.). 2001. *Poetry, language, thought.* New York: Harper Perennial Modern Thought, pp. 15-86.

Howarth, R. 1999. Druids join hands around the center of Seahenge. Photograph (London, Alban Donohoe Picture Service)

Kane, N. 2023. *Niall McLaughlin Architects creates glasshouse-informed steel pavilion on the Isle of Wight*. [online]. Available from:< https://www.dezeen.com/2023/07/31/niall-mclaughlin-architects-saltmarsh-house-steel-glass-home-isle-of-wight/> [Accessed 10 September 2023].

Kalpana, K. 2021. *Giza Solar boat museum.* [online]. Available from:< https://alchetron.com/Giza-Solar-boat-museum#References> [Accessed 09 May 2023].

Mark Herboth Photography. 2015. *Camp Graham* [online]. Available from <https://www.archdaily.com/803171/camp-graham-weinstein-friedlein-architects> [Accessed 10 September 2023].

Merleau-Ponty M. 1962. *Phenomenology of Perception*. London: Routledge.

Merleau-Ponty, M. 1964. *The Primacy of perception*. Evanston, Northwest University Press.

Moore, R. 2013. *Stonehenge visitor centre review.* [online]. The Guardian. Available from:< https://www.theguardian.com/culture/2013/dec/15/stonehenge-visitor-centre-review> [Accessed 22 Feb 2023].

MSA Gruff. 2014. *Angular seaside tower by Gruff and MSA contains a viewing platform that moves underfoot.* [online]. Available from:< https://www.dezeen.com/2015/04/11/gruff-msa-wind-angular-tower-tilting-viewing-platform-england/> [Accessed 19 August 2023].

Niall McLaughlin Architects. 2023. *Niall McLaughlin Architects creates glasshouse-informed steel pavilion on the Isle of Wight.* [online]. Available from:< https://www.dezeen.com/2023/07/31/niall-mclaughlin-architects-saltmarsh-house-steel-glass-home-isle-of-wight/> [Accessed 10 September 2023].

Norfolk Local Guide. n.d. *9 Things to Do in Norfolk When it Rains*. [online]. Available from:<https://norfolklocalguide.co.uk/things-to-do-in-norfolk-when-it-rains/> [Accessed 24 July 2023].

Page, M. 2011. *Reception Hide Complex.* [online]. Available from:<https://www.ajbuildingslibrary.co.uk/projects/display/id/3907> [Accessed 06 June 2023].

Perkins&Will, 2016. *Mary Rose Museum*. [online]. Available from:< https://perkinswill.com/project/mary-rose-museum-2/> [Accessed 22 Feb 2023].

PictureEsk. 1999. *Holme Seahenge*. [online]. Flickr. Available from:<https://www.flickr.com/photos/22081583@N06/2149644050/in/photostream/> [Accessed 23 Feb 2023].

Porter, T. 2004. *Archispeak: An illustrated guide to architectural terms*. New York: Spon Press.

Pryor, F. 2008. *Seahenge: A quest for life and death in Bronze Age Britain.* London: Harper Perennial.

Raikes, S. & Johnston, G. *The Mystery of Seahenge, a Time Team Special*, 1999. Documentary. London: Channel 4.

Slessor, C. 2017. *Allmannajuvet Zinc Mine Museum in Norway by Peter Zumthor: 'The progeny of an artist-architect'*. [online]. Available from:< https://www.architectural-review.com/buildings/allmannajuvet-zinc-mine-museum-in-norway-by-peter-zumthor-the-progeny-of-an-artist-architect> [Accessed 16 May 2023].

Stephenson, 2022. Made of Sand Extension. Available from <https://www.archdaily.com/985719/made-of-sand-extension-studio-weave> [Accessed 10 September 2023].

The Heritage Trust. 2013. *The Seahenge Gallery, Lynn Museum.* [online]. Available from:< https://theheritagetrust.wordpress.com/2013/04/05/observations-at-the-seahenge-gallery-lynn-museum/> [Accessed 17 May 2023].

Walter, M. 1998. The first Brexit: Submerged landscapes of the North Sea and Channel. [online]. Available from:< https://www.theguardian.com/science/2017/apr/26/the-first-brexit-submerged-landscapes-of-the-north-sea-and-channel> [Accessed 4 September 2023].

Weinstein Friedlein Architects. 2015. *Camp Graham* [online]. Available from <https://www.archdaily.com/803171/camp-graham-weinstein-friedlein-architects> [Accessed 10 September 2023].

Wainwright, O. 2013. *Mary Rose museum is a pearl - pity about the limpets*. [online]. The Guardian. Available from:< https://www.theguardian.com/artanddesign/architecture-design-blog/2013/may/30/mary-rose-museum-architecture> [Accessed 22 Feb 2023].

Weather Spark. 2016. *Climate and Average Weather Year Round in Hunstanton* [online]. Available from:< https://weatherspark.com/y/45453/Average-Weather-in-Hunstanton-United-Kingdom-Year-Round> [Accessed 28 Feb 2023].

Williamson, T. 2022. *Norfolk's geology & landscape & its effect on the county's vernacular architecture* [online]. Available from:< https://www.youtube.com/watch?v=4rIgEslEEww> [Accessed 26 Feb 2023].

Zumthor, P. 2006. *Atmospheres: Architectural environments surrounding objects.* Basel, Birkhauser.