

Shingle House, Dungeness, Kent

DESIGN RESEARCH

19.06.11

Northern Office for Research & Design

Prof Alan Pert

GENERAL DESCRIPTION

1.0

NORD were approached to design and coordinate the building of a four bedroom holiday home at Dungeness in Kent. The client, Living-Architecture is described as a 'social enterprise', building holiday homes by selected architecture firms with the aim to "allow people to experience what it is like to live, eat and sleep in a space designed by an outstanding architectural practice". Five such homes have so far been commissioned across the south of England and these are currently at various stages of completion.

NORD's completed building, coined Shingle House after the predominance of the material on the external envelope, forms a black silhouette against the wide, flat expanse of the shingle beach on which it sits. The house follows the form of the pre-existing house and outbuildings which occupied the site until recently.

Dungeness is a place without walls or fences, It's Britain's only desert, a shingle wasteland punctuated by strange plants and even stranger human interventions. It is home to a peculiar assortment of buildings and activities, from tiny fishermen's huts to a giant nuclear power station by way of lighthouses and a miniature steam railway. Once considered the back of beyond, it was a place of squatter communities. Today it is borderline fashionable, a nature reserve and a conservation area. In this surreal landscape the silence is broken only by the changing patterns of the weather and the waves breaking on the shingle coastline.

STATEMENT OF SIGNIFICANCE**2.0**

The Shingle House is sited on one of the most sensitive, unusual and poetic landscapes in England, on the shingle beach of Dungeness. The house forms one of a exemplar group of houses commissioned by Living Architecture (www.living-architecture.co.uk) who are a social enterprise dedicated to the promotion and enjoyment of world-class modern architecture. Living Architecture, was started by philosopher, Alain de Botton who is the creative director. Alain de Botton had the idea for Living Architecture while writing a book about architecture and he has particular responsibility for identifying the selected architects. NORD were invited to compete against a shortlist of world-class, international architects to design the house at Dungeness, which was one of the first sites chosen for the launch of Living Architecture. The houses are currently focused in the UK and are available to rent for holidays all year round.

Living Architecture was started from a desire to shift perceptions of modern architecture. They wanted to "allow people to experience what it is like to live, eat and sleep in a space designed by an outstanding architectural practice". "While there are examples of great modern buildings in Britain, they tend to be in places that one passes through (eg. airports, museums, offices) and the few modern houses that exist are almost all in private hands and cannot be visited". The shingle house is as such very different to a typical architect designed house, which is exclusive to the owners and instead the shingle house is being exposed to a changing audience of critics and users all year round. At the end of 2012 the shingle house celebrated its second birthday, with 99% occupancy and 90% of occupants completing a positive survey.

Living Architecture sees itself, first and foremost, as an educational body, dedicated to enhancing the appreciation of architecture, "We are making available a standard of house unusual for the UK rental market (where the ancient cottage has until now been the norm), with the best of contemporary materials and technologies".

Living Architecture now plans to add to their portfolio with one property every year being designed by a world-class architect. As one of the original group of five the shingle house is distinctive and growing in significance.

The house has been featured in over 20 lectures given by Alan Pert and Living Architecture since 2010. These include lectures in the UK, Europe and the Asia Pacific. The house formed part of London Architecture Week in 2010, Grand Designs Live 2011 and has been featured in an extensive range of architecture publications, online design journals, books as well as, Architecture Research Quarterly (arq), which only publishes cutting-edge work and reviews of significant buildings. The Architects Journal and Building Design Magazine have both published detailed technical reviews of the house and the house has been featured on television as part of the RIBA Awards in 2011. Blueprint Magazine included the house as part of the April 2012 feature on NORD. Highly acclaimed writer Steve Rose is currently working on a book of the first five houses. The success of the house has led to the commission of a new portfolio of significant projects for NORD.

As well as designing the house NORD also designed the full range of wooden door handles, taps, concrete kitchen, brass sinks, concrete fireplace, wooden hanging pegs, pigmented concrete bath and pigmented concrete basin. NORD used a distinctive palette of materials and worked with a carefully selected group of manufacturers in the prototyping of these elements. NORD also designed a range of bespoke bedroom furniture for the house working with Award-winning furniture artist, John Galvin to produce these pieces. Wallpaper Magazine as such commissioned NORD to include the Shingle House furniture (Purple Heart Collection) in its 'Hand Made' collection at the Brioni HQ in Milan during the Salone in April 2011. The Purple Heart collection was also featured in the August 2011 edition of Wallpaper magazine. The collection was part of Wallpapers curation of craftsmen, manufactures and designers collaborating to create handmade pieces.

RESEARCH QUESTION

3.0

What is the appropriate built response to the specific site context of Dungeness when applied to the given building type?

CONTEXT & RESEARCH METHODS

4.0

Arrival

I stood on top of the shifting shingle ridge between the English channel and a collection of what first appeared as small unremarkable buildings, soaking wet and with my back to the prevailing wind as I tried to get my bearings. A group of bird watchers had taken refuge each behind their own shed while frantically scribbling in their logbooks. After a night on the sleeper from Glasgow, a train ride, and a bus journey, I then have to trudge across the shingles. I gave up on the umbrella which was heading back the way I had come, I give up on navigating with a phone that had lost reception and while trying to avoid stepping on strange plant life I finally come across the precarious sign advertising the 'smoke house'. Once inside the porch of the fisherman's cottage I feel I have arrived but also escaped.

Jim Moate had a small one and a half storey cottage, twenty by twenty-three feet, built as a single room and bed recess, the kitchen had been added in later years as a lean-to. The walls were thin and the only weight came from the central fireplace, which was also a shrine of small brass ornaments. This was a very introverted world completely shut off from the bleak exterior. There had been a 'smoke hole' or 'herring hang' at Dungeness for hundreds of years, ever since the fishermen who lived there started preserving their catches for their families. Pearl Cottage, the 270-year-old house where Jim Moate had lived and worked was being sold on as Jim was retiring.

Topography

In Derek Jarman's own record of how his garden evolved, from its beginnings in 1985 to the day of his death in 1994 he makes reference to the sheltered corner between the original structure and the 'lean-to' kitchen at the rear of the house. This is an outdoor space where he finds shelter from the coastal winds and a space, which he identifies for the planting of a fig tree.

Derek Jarman created his own garden in the flat, bleak expanse of shingle that faces the nuclear power station in Dungeness, Kent and the fig tree growing in this sheltered corner of his plot is symbolic of the continued battle between landscape and climate. This man made garden is a unique sight as Dungeness is one of the few areas in lowland Britain where natural plant communities have been little modified by man's traditional management.

Dungeness is a site of international importance for coastal geomorphology, both as the largest cusped shingle foreland in Britain (Britain's only desert) and as an integral part of a system of barrier beaches extending 40Km from Fairlight to Hythe. These beaches reflect some 5000 years of coastal development and provide an exceptional record of Holocene coastal changes.

Despite adverse climatic conditions, with temperature extremes, exposure to wind and salt spray, and frequent drought Dungeness is still home to some 600 species of plants with flora on the shingle ridges unique within a British context. Dungeness is a key British shingle site, both in terms of the range of botanical communities and the large area of vegetated shingle.

The uniqueness of this coastal landscape attracts a diverse group of visitors; researchers, scientists, botanists and bird watchers (Dungeness is famous as a bird migration study point) are attracted by this natural ecology and as such the opportunity to design a holiday/study home for a group of visually intrigued individuals fascinated by the surrounding ecosystem and looking for a place to retreat from this landscape and store their visual apparatus (binoculars, tripods, cameras, Digiscope and magnifiers) was one where we would adopt similar techniques of observation to help log and sketch our findings. Our Dungeness sketchbook is similar to the birdwatchers 'logbook', systematic records of daily observations with detailed notes and a record of essential data such as date, locations, and weather as well as notes of conversations with fellow 'twitchers'. These notes and observations become our archeology of ideas, which inform the design of the buildings on the site.

Archeology

Dungeness is an unfamiliar landscape, a power station next to a lighthouse on a shingle beach with a fishing community, a miniature steam railway, an assortment of sheds, bird watchers and rare species of plants. The act of designing often leads with an intuitive response to a site or a brief but at Dungeness I found myself metaphorically dismantling the place in order to understand why and how things came to exist, then rebuilding them as thoughts and ideas. The dismantling of the place begins with observations and assumptions, records of personal experiences; drawings, notes, photographs, like an archeologist collecting fragments of the past for clues to a previous life I try to unravel the story of Dungeness with anticipation of adding to that story.

On encountering Dungeness for the very first time there is an unnerving uncertainty about the place. The ramshackle nature of the buildings scattered across the shingle appear vulnerable both to the weather and to the constantly shifting shingle landscape. You wonder if the place could ever be remade. Ruskin wrote to his friend, the painter George Richmond that "The rate at which Venice is going is about that of a lump of sugar in hot tea," and as such Ruskin set about clambering over the stones of Venice, measuring tape in hand meticulously recording every detail before the city was lost to the lagoon for ever. Ruskin set out to write the city's story stone by stone and he successfully captures the character of Venice through his obsessive recordings of its scars, decay and craft.

Dungeness requires the same forensic rigour before the character of the place is lost to changing patterns of weather, landscape, settlement and social change. Dungeness appears unintentional and deliberate at the same time. Within the 1986 Conservation Plan it is described as a 'Frozen Mobile Settlement' in reference to the unplanned and uncontrolled nature of much of the buildings found parked on the shingle prior to the planning act of 1946. This 'accidental architecture' occurred in the earliest days as the lightweight homes for the herring fishermen and then in the pre-war years as train carriages bought as holiday homes and literally moved across the shingle.

The shingle house forms part of this research, it is an artefact and like an archeological find it is a recording of a past life and an object loaded with memories. The research involved stripping back the existing fisherman's cottage while at the same time beginning to laboriously record the place and structures through photographs, models, drawings and measurements. Only closer inspection over time the random structures become things of beauty, by virtue of the care and attention lavished on them by those who built them for the purpose they served. These Buildings became objects of study photographed in various ways and they begin to tell the story of Dungeness, constructed by local inhabitants mostly without planning permission or architectural instruction and using available, second hand or found materials in some cases the former railway carriages can be picked out from the functional add-on's and lean-to's. Dungeness's constructions are all different, each one is unique to the hand that made it and their defining features are in the details, which convey skill and craft in some cases and functional necessity in others. Aesthetic considerations though seem to have played little part in their construction. On the other hand there is a

whole series of features, based on functional requirement, which the individual constructions have in common; the distance between neighbours and lack of defined boundary, the traditional 'hut' form, the door within the roof gable accessed by a ladder or steep steps (net loft), the painted chimney, the porch, the painted window frames, the use of timber construction, the functional add-on (kitchen, wc), the vulnerability and the blackness. I refer to this as the common language of Dungeness.

I was asked by a member of staff on returning from my first visit to Dungeness if the smoke house could be preserved. This was not an easy question to answer and the assessment of the condition of the existing buildings was only one factor to consider if the removal of these structures was to be technically diagnosed. My first impressions of the plot was of a collection of dilapidated buildings requiring emergency propping but reverence for the past demands that we should consider the contribution these buildings have made to the settlement pattern of Dungeness. It is also worth noting that Planners only allow redevelopment of shacks providing something original remains. This is obvious in some cases where the original railway carriages are retained. In our case it is somewhat more questionable as to what could and should be kept. The origins of the site became the question to be investigated if we were to fully explore preservation as a method of reinvention. The technical standards also bring with them their own acts of visual and functional vandalism when inappropriately applied to an existing building as well as the challenge of what constitutes a habitable structure as we progress towards a low carbon future. As we studied the detailed photographic records of the existing buildings like a surgeon assessing a fractured leg it did not take too long for our prognosis to suggest the need to construct new. No physical prop or prosthetic aid will reinvent these structures as a habitable dwelling for the 21st Century.

Nathan Coley in his work 'I don't have another land' (2002) transferred the melancholy of loss connected to the bombing of Marks & Spencers in Manchester in 1997 by covering a large-scale replica model of the modernist building in a dense layer of matt black pigment. Coley uses the blackened skeleton of the building as a reminder of the vulnerability of architecture while at the same time he illustrates how architecture itself can embody

powerful ideas. The modernist structure was an integral part of the identity of the city making it a perfect target of political demands. The blackness of Coleys construct swallows up all the light in the gallery space reducing the building to a powerful memory of what once occupied the site.

This approach was adopted by NORD as an early experiment and realised as a prototype. As if to capture the decision to demolish we made a model of the existing buildings and stained them black as a monument to the loss of the structures on the site. Similar to Nathan Coleys objects our prototype suddenly shifted away from the representation of existing buildings on a site and instead became a monument to architectural development or a memorial to loss. The blackness suddenly reinforced the significance of the four adjacent structures and instead of representing decay they were reinvented as bold abstracted geometries acknowledging the past life of the site. This blackening of the model suddenly grouped our site in the context of a number of other black buildings and objects to be found in and around the beach: The Lighthouse, Derek Jarman's House (Prospect Cottage), Garage Cottage, Simon Condors black rubber house and black tarred fishing boats.

The blackness of Dungeness was then systematically recorded at each visit as we observed and collected references beyond the study of the 80 dwellings including sheds, huts, garages, storage containers and boats. Notes from our logbook refer to a discussion with Jim Moate when he recalled the technique fishermen used to 'tar' the boats. Pine-Tar kilns would be constructed and the tar used as a protective coating for the boats and for nets. Leftover tar was used to coat the shacks and cottages and as such this technique and application has created its own vernacular. This simple application of a protective coating to guard against the weather while preserving the lightweight timber skins has created a family of associated structures, which form a strong visual identity across the settlement. Charred, tarred & painted, the blackness becomes a protective layer and through its familiarity across a range of objects and structures creates a type of coastal camouflage.

We had arrived at a decision to preserve the footprint of the existing buildings on the site. We had also arrived at a decision to use a single material and colour for the skin of the

building. The plan, section profile, form and materiality of the cottage, smokery, shop and boat store would be traced and then tested through drawings as we applied the programmatic requirements for a 4-bedroom holiday home. Using technological advancements and modern day structural methods we were able to transform these simple geometries into defined domestic spaces, each responding to the footprint and volume available but also to specific views and environmental conditions. The familiar approach of a functional add-on is celebrated through the creation of a space to sleep, a space to bathe and a space to eat. Connecting these daily routines are spaces to live, work, rest or play. The spaces between the buildings become spaces to shelter; the entrance is an inverted porch, while a courtyard uses the adjacent gables as wind breaks in acknowledgement of Jarman's space for growing his fig tree. The chimney is the only element to break with tradition, rather than painted to match the building it is left self-coloured marking its independence materially, structurally and functionally. The chimney forms part of the common language of Dungeness but its importance as choosing not to paint it heightens the heart of the home.

Strangely Familiar

This paper is not intended as a descriptive piece of text detailing the interior layout of rooms and their associated spatial intricacies. Rather this paper traces the variety of sources of inspiration and thoughts, which articulate ideas. At Dungeness there was not one single idea, which shaped our response and this paper attempts to give an insight into the observations and details of every day experiences, which shape our built environment. Decisions on form, materiality, typology and context have been rigorously examined resulting in a building firmly rooted in the past but also technically innovative.

AIMS & OBJECTIVES

5.0

The central objective of the research was to answer the question written above (What is the appropriate built response to the specific site context of Dungeness when applied to the given building type?).

Some of the analysis required to answer this question has been outlined, whereupon a variety of outcomes are produced, for example in exposing the process by which existing structures on the site have acquired a particular meaning and in the analysis of what that meaning might be. The application of a protective coating to guard against the weather, while preserving the lightweight timber skins of many of the aforementioned structures, has created an associated family, forming a strong visual identity across the settlement. Charred, tarred & painted, the blackness becomes a protective layer and through its familiarity across a range of objects and structures creates a simple and functional vernacular.

DISSEMINATION

6.0

10.12.10, Anne Ashworth, The Times – Bricks & Mortar, 'Mind the gap in the year ahead'
(Review of Shingle House design within national daily broadsheet by property correspondent critic)

02.2011, Edwin Heathcote, Icon, The Shingle House
(Review of Shingle House design within national monthly design magazine by architecture critic)

26.09.10 The Observer: New Review, Did the earth move for you?, Rowan Moore
(Review of Shingle House design within national Sunday broadsheet by architecture critic)

10.05.10, Robert Booth, Guardian, Author homes in on modernism for the masses
<http://www.guardian.co.uk/artanddesign/2010/may/09/alain-de-botton-modernist-houses>
(Review of Shingle House design on news website by news reporter and former editor of Building Design Magazine)

24.09.10 Times: Bricks & Mortar, Holiday homes go out on a limb, Tom Dyckhoff
(Review of Shingle House design within national broadsheet by architecture critic)

19.06.10, Phyllis Richardson, FT Weekend- House & Home, Architect-designed accessibility
(Review of Shingle House design within national Weekend broadsheet by architecture critic)

29.8.10, Alice Fisher, Observer, 'Hot List' - interesting things to look out for this Autumn
Winter (Review of Shingle House design in national Sunday broadsheet by Style Editor)

01/02.2011 Homes and Interiors Scotland, Gillian Welsh
(Review of Shingle House design within national consumer magazine)

03.2011 Country and Town House, The Architecture of Happiness, Sophie Grove
(Review of Shingle House design within national consumer magazine)

03.2011 Coast, A very modern holiday home, Claire Barrett
(Review of Shingle House design within national consumer magazine)

16.04.11 The Scottish Herald: The Herald Magazine, Home is where the art is, Teddy Jamieson (Review of Shingle House design within national broadsheet)

Winter 2010, The Quarterly, Feature and Interview with Alain de Botton.
(Interview with Shingle House Client within national lifestyle magazine)

04.2010 Architects Datafile, What is Living Architecture?
(Review of the Living Architecture project (of which Shingle House is a part) within trade magazine)

03.12.10, Building Design, Nord offers shingle life, Oliver Wainwright
(News item and description of Shingle House design within national industry periodical)

04.02.11, Building Design, Living on the edge, Oliver Wainwright
(Review of Shingle House design in national industry periodical)

03.2011 Grand designs News: Get a Room,
(News item on Shingle House in national design magazine)

03.2011 Monocle, Briefing: Shingles only,
(News item on Shingle House in national design magazine)

International

14.4.10, Knack Weekend, Belgium, Eilandjes van schoonheid
(News item on Shingle House in Belgian lifestyle magazine)

06.11.10, Leonora Sartori, D de la Repubblica, 'Basta cottage!'
(News item on Living Architecture in Italian lifestyle magazine)

01.12.10, Alexander Runte visiting house on 1 Dec.- Sueddetutsche Zeitung
(News item on Shingle House in German newspaper)

13.01.11, Tomas Niederberghaus, Die Zeit, 'Urlaub am Abgrund'
(News item on Living Architecture in German newspaper)

15.01.11 Das Magazin, Ferien mal ganz anders, Von Finn Canonica
(News item on Living Architecture in German magazine)

20.02.11, Alexandra Goebel, Architecturist, Blog-Germany, 'Schwarze Dachschindeln'
<http://www.architektourist.de/2011/02/20/schwarze-dachschindeln/>
(News item on Living Architecture in German travel magazine)

03.2011, Alice Ravera, AtCasa.Corriere.it, Italy, Il Nuovo Cottage
(News item on Shingle House in Italian lifestyle magazine)

04.03.11 South China Morning Post, Manor in the works, Jo Baker
(News item on Living Architecture in Chinese newspaper)

10.03.11 Time, English Country Goes Rock n Roll, Jo Baker
(News item on Living Architecture in US weekly news magazine)

Spring 2011, Mini International, Avant Garde Architecture – holidays on the edge, Alexander Runte, (News item on Living Architecture on company promotional lifestyle website)

ESTEEM INDICATORS

7.0

RIBA award 2011 and subsequent Manser Medal Longlisting

(Architect's professional body annual awards, judged by a selected jury and assessed through submission of materials and site visit)

Scottish Design awards 2011 - Winner Best Residential

(Annual awards, judged by a selected jury and assessed through submission of materials)

DEVELOPMENT WORK AND PHOTOGRAPHS ON COMPLETION**8.0**

The following pages show exemplar diagrams, sketches, working models, drawings and other developmental imagery which formed the basis of the research behind the completed output. Photographs of the completed building follow.

Landscape



Aerial and satellite imagery of Dungeness site, used as part of analysis of site context including information such as density of conurbations, major landscape features, topography, climate, dwelling spacing and orientation etc.



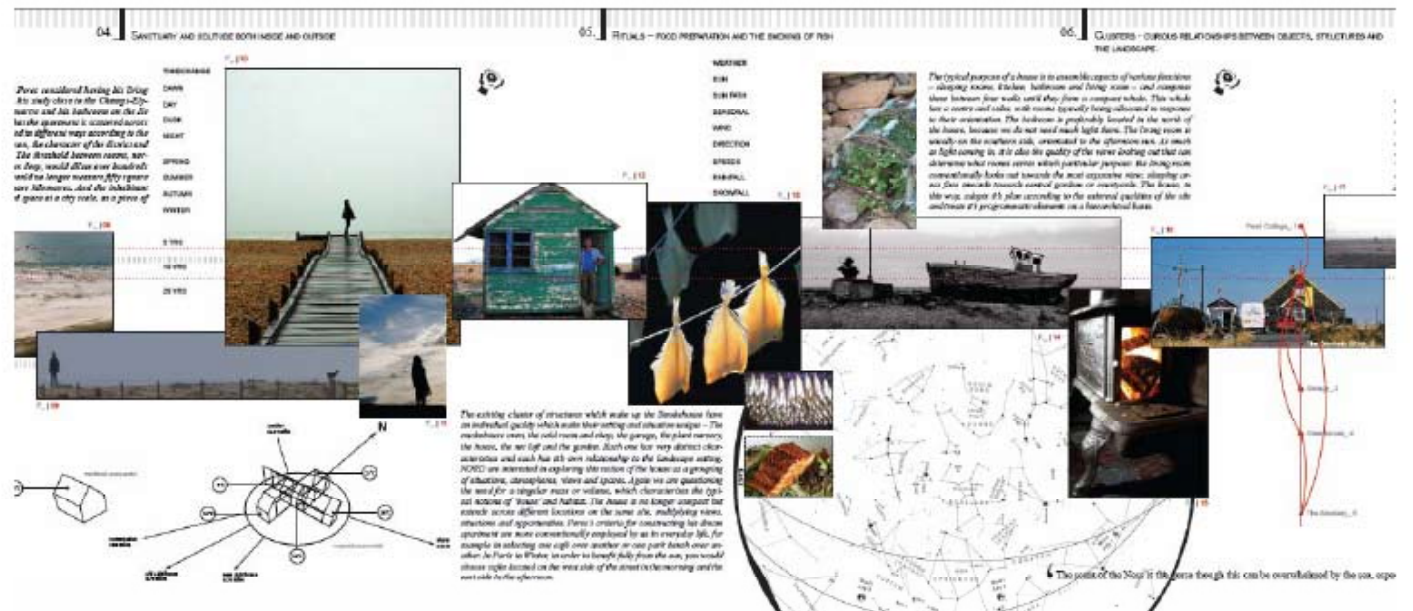
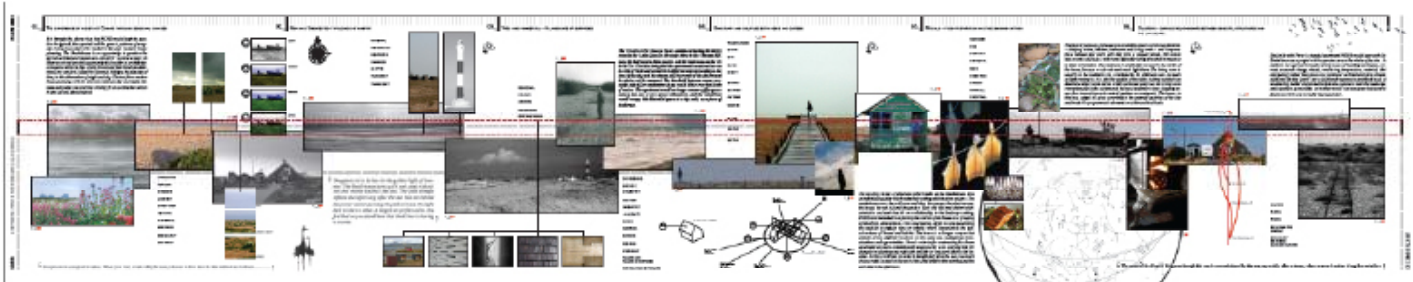
Photographic record of existing site. Analysis of existing building typologies and density as well as exploration of landscape, vegetation, climate etc.

Landscape



Photographic record of existing buildings. Further analysis of existing building typologies, detailing and materials.

Landscape



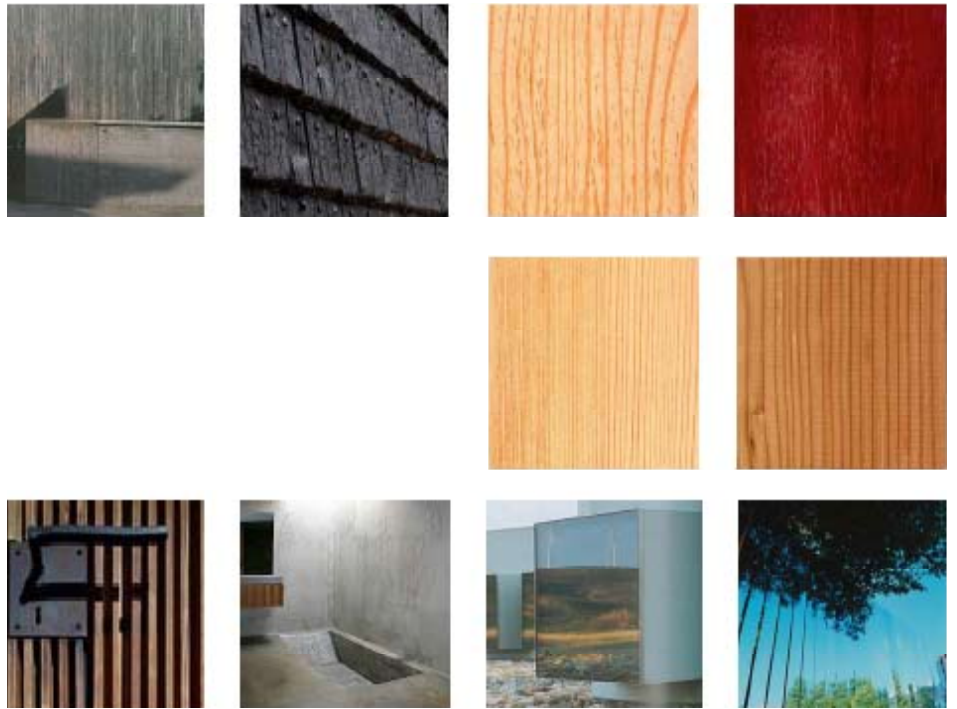
Site analysis specifically relating to time, including tidal information, astronomical survey, sun-path and daily rituals (fishing, casting off, landing a catch), meteorology etc.

Landscape



Precedent study of analogous projects and project details, providing thorough understanding of successful formal devices (eg. framing of views, detailing, material selection etc)

References



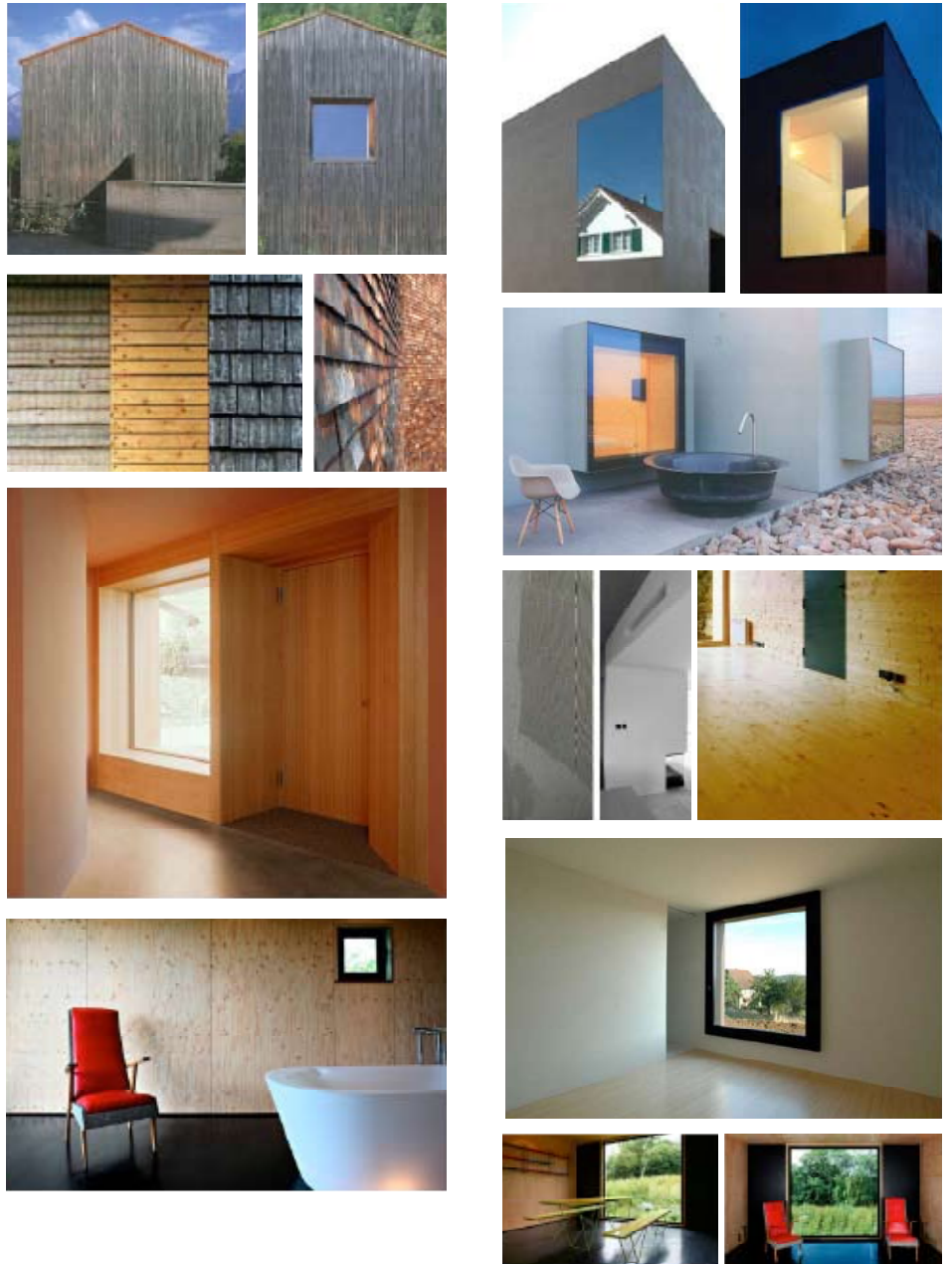
Precedent study of analogous projects and project details, providing thorough understanding of successful formal devices (eg. framing of views, detailing, material selection etc)
Study of materials for suitability

References



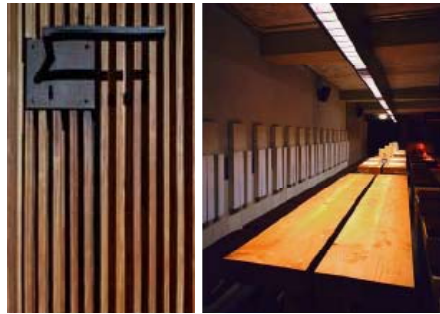
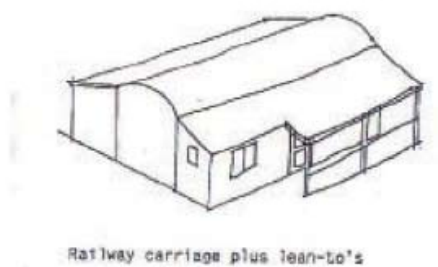
Precedent study of analogous projects and project details, providing better understanding of successful formal devices (eg. framing of views, detailing, material selection etc)

References



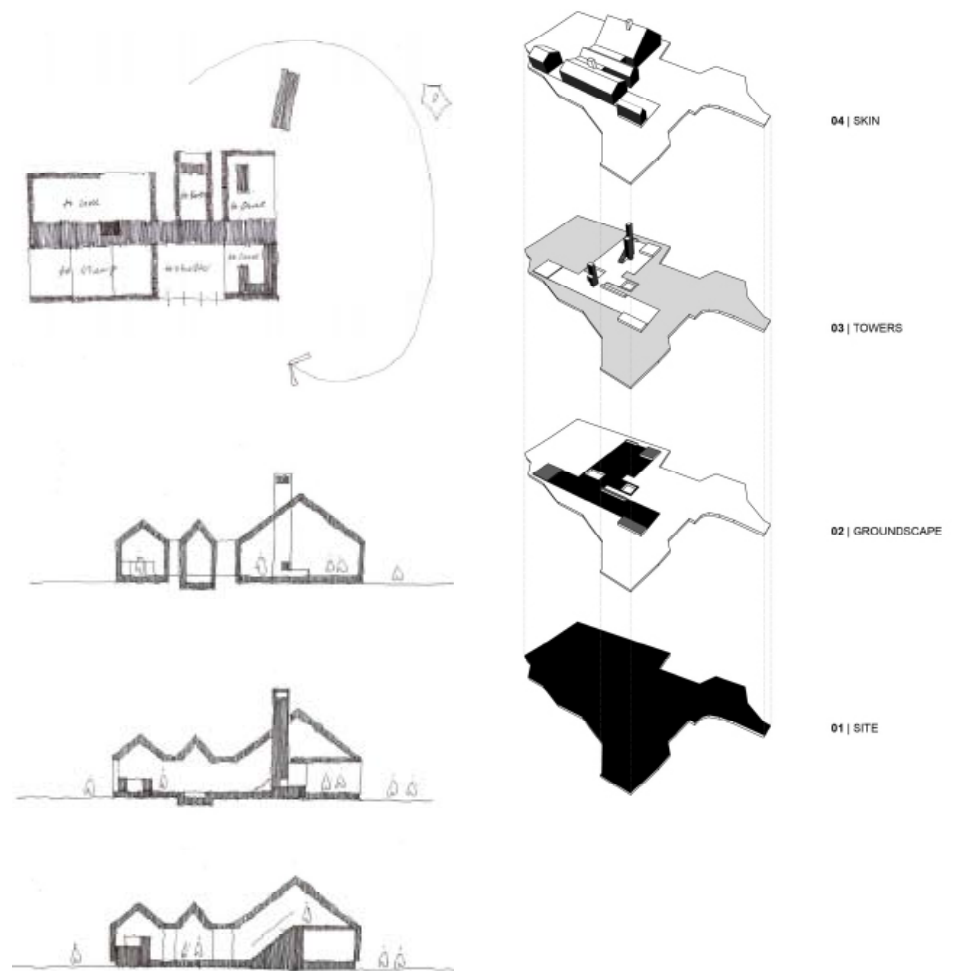
Precedent study of analogous projects and project details, providing better understanding of successful formal devices (eg. framing of views, detailing, material selection etc)

References



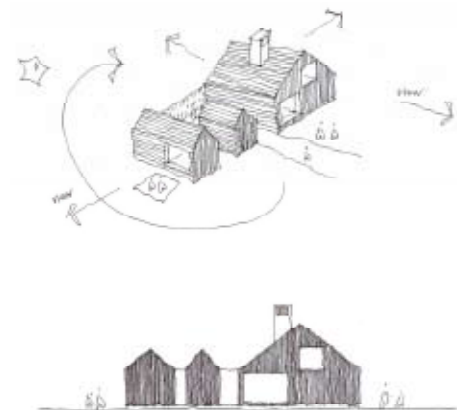
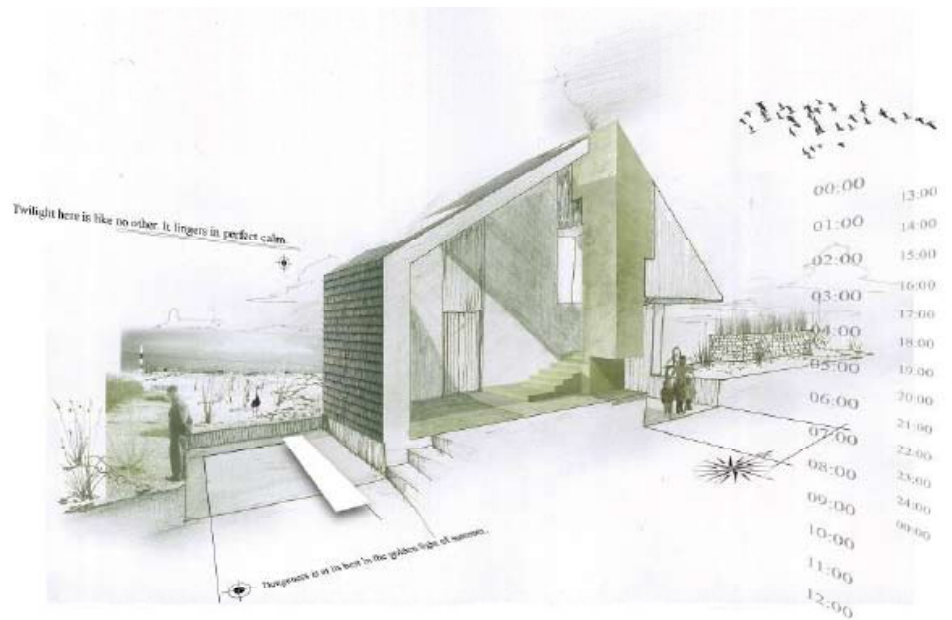
Analysis of housing typologies specific to Dungeness (above left). Study of appropriate materials and detailing including functional items such as pegs, light switches etc in relation to the material and history/semiotics of each and how this might relate to the agreed approach to the execution of the project

Sketches / Diagrams



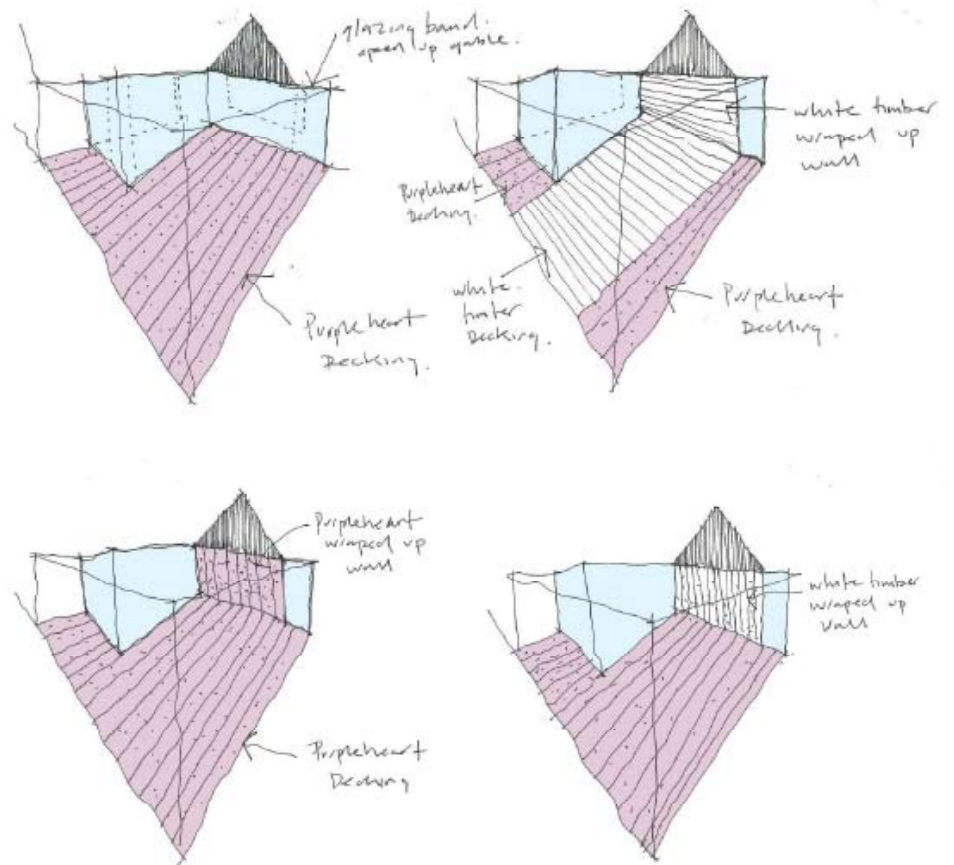
Diagrammatic study relating to conceptual approach - distillation of design intent for reference at all project stages; analogous to a Control Sample.

Sketches / Diagrams



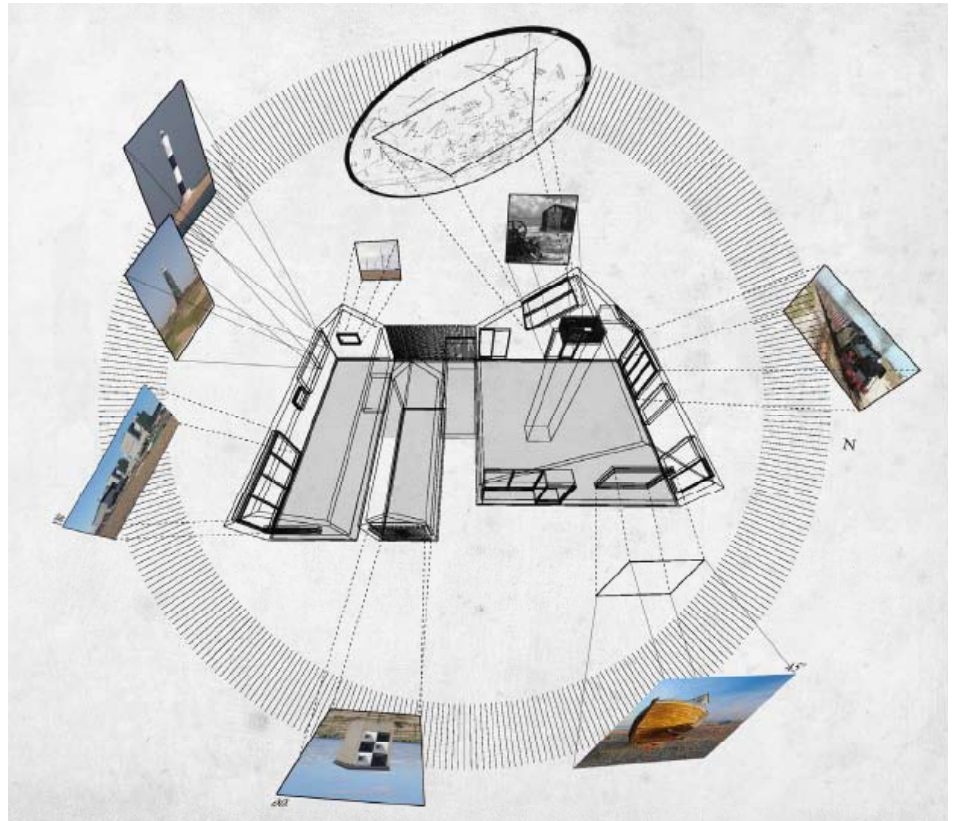
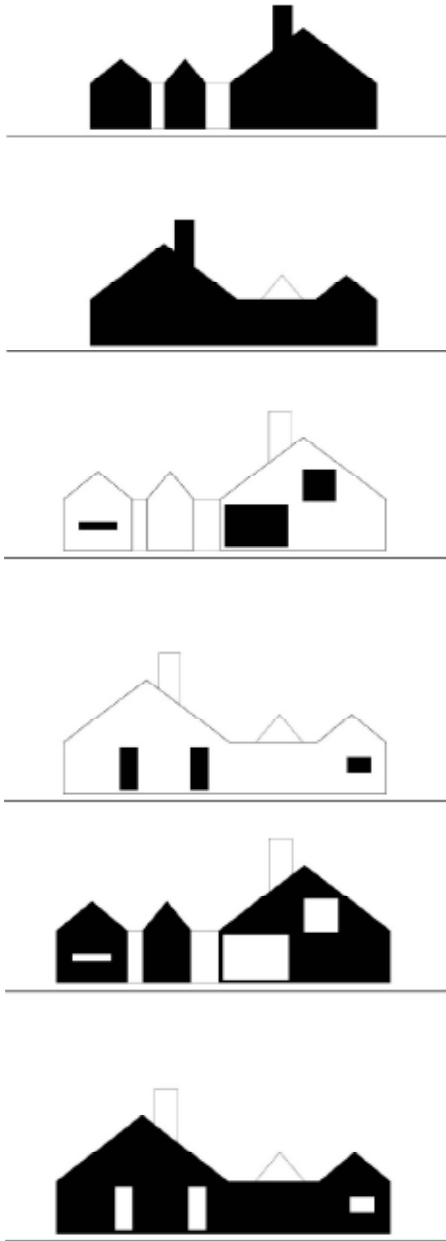
Additional chronology based analysis (top) and further diagrams relating to sun-path and silhouette (below)

Sketches / Diagrams



Detail sketch of material treatment to study effects of a various approaches

Sketches / Diagrams

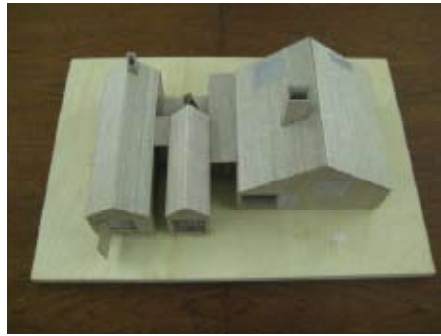


Solid/void studies (left) considering effect of aperture position and scale as well as treatment of silhouette.

Analysis of framed views and house orientation (top right)

Nolli Plan of Dungeness and Shingle house (bottom right), studying positive and negative spaces and relationship of dwellings to one another and the wider conurbation

Physical Modelling



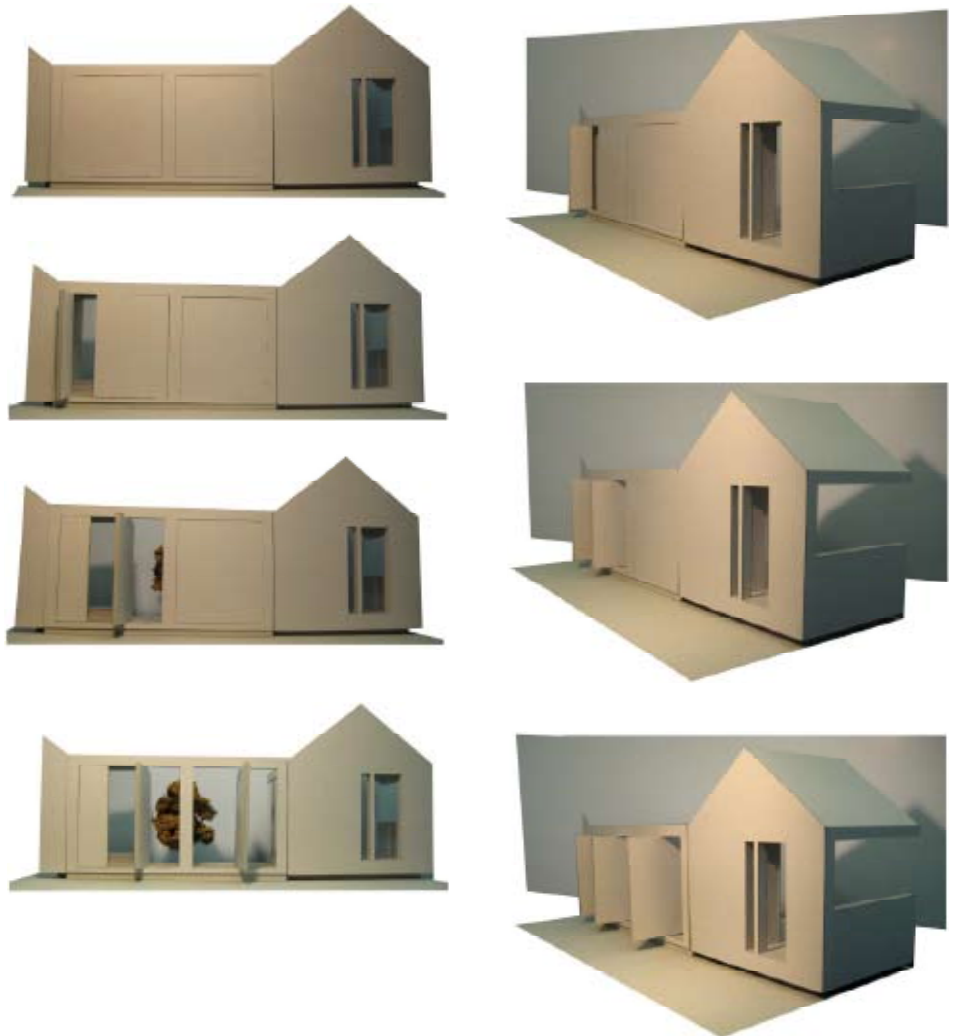
Physical models created for the study all aspects of built form including spacial relationships and quality as well as material considerations

Physical Modelling



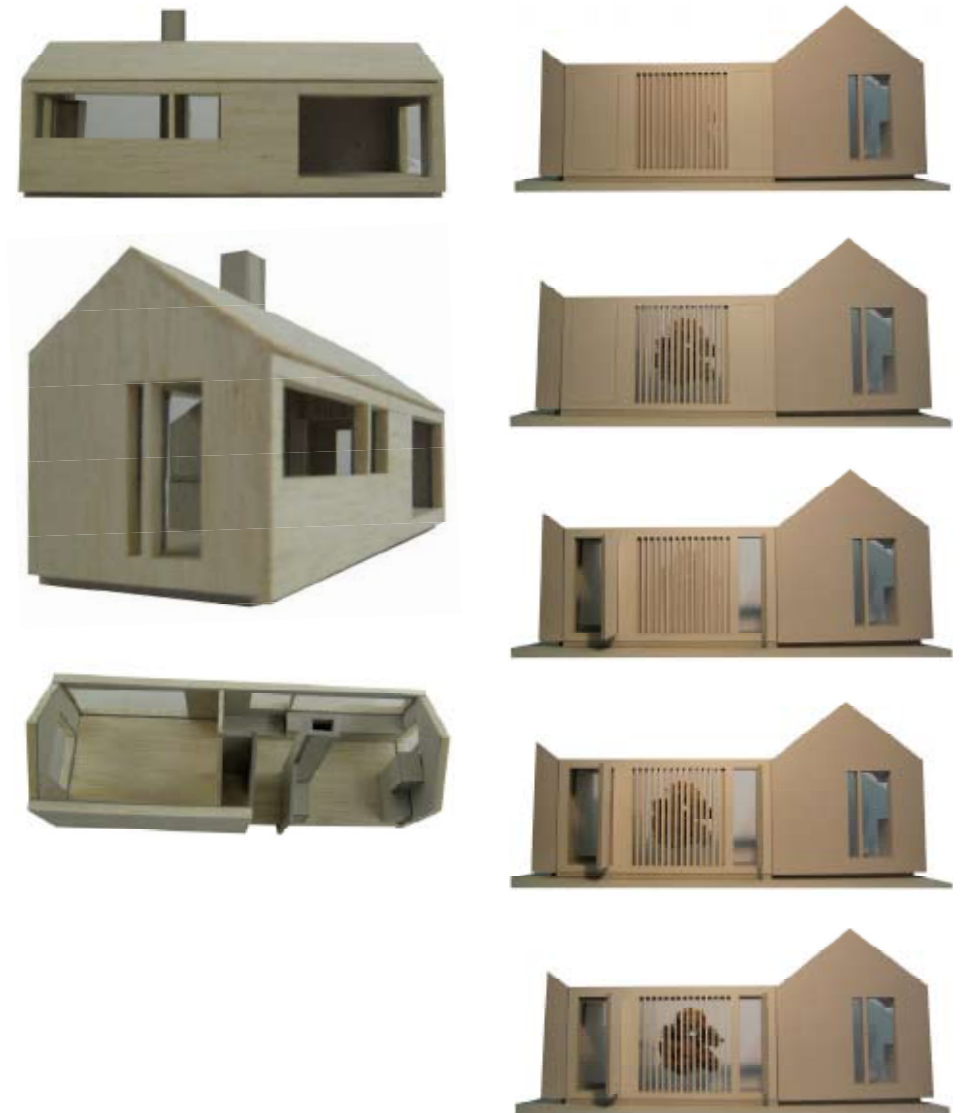
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Physical Modelling



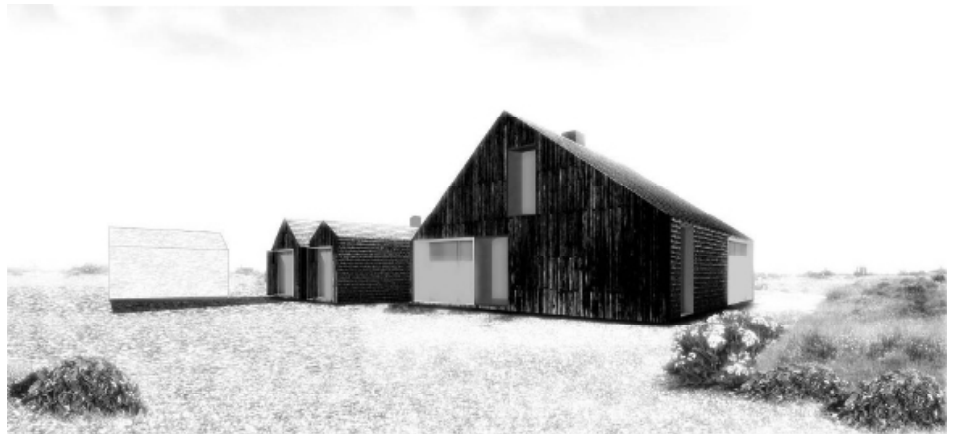
Model study for external openable screen

Physical Modelling



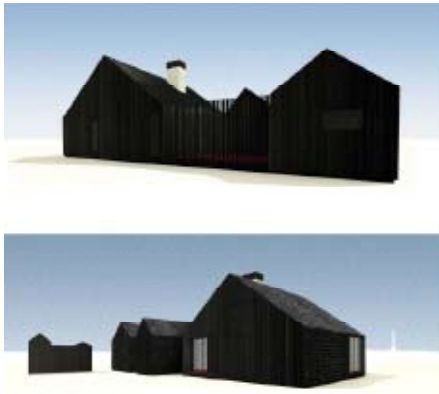
Physical models created for the study all aspects of built form including spacial relationships and quality as well as material considerations

Computer Modelling and Graphic Representation



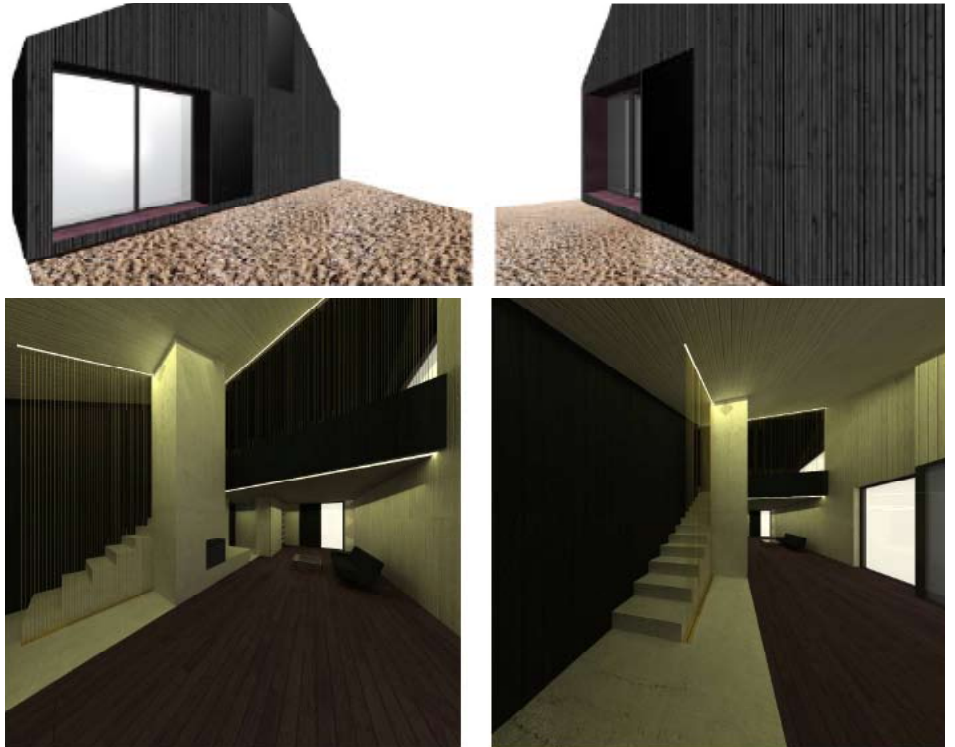
Graphic representation studying scheme in context

Computer Modelling and Graphic Representation



Graphic representation studying form and scheme in context from the perspective of external viewer

Computer Modelling and Graphic Representation



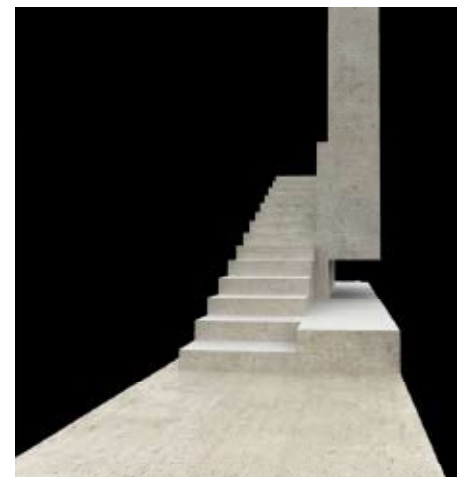
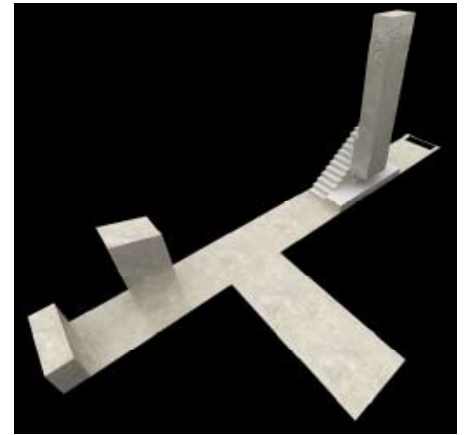
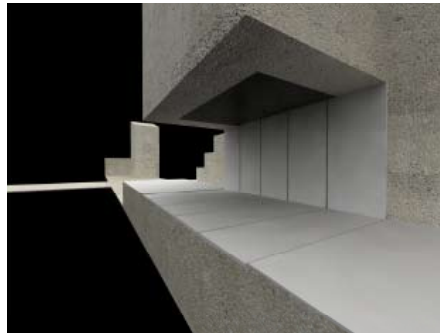
Computer modelling of details and spaces in order to study lighting, material use, spatial quality and proportion etc.

Computer Modelling and Graphic Representation



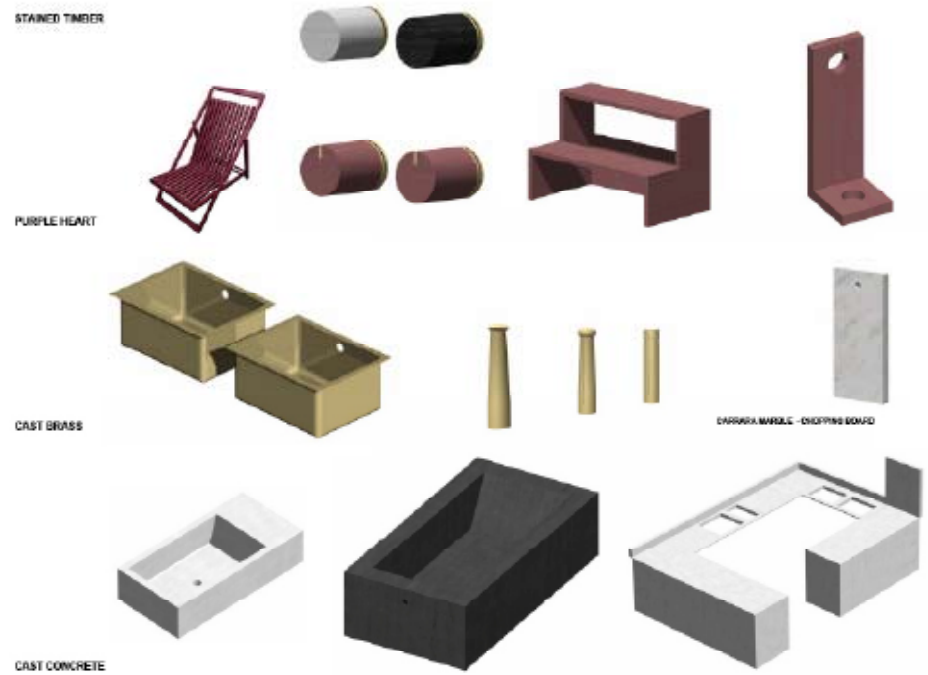
Computer modelling of spaces for the study of lighting, material use, spatial quality and proportion etc.

Computer Modelling and Graphic Representation



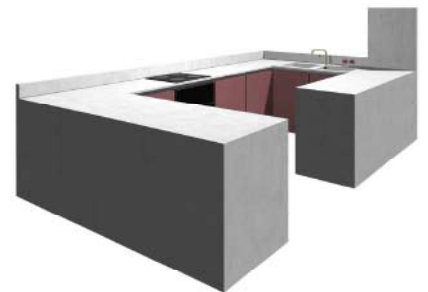
Computer modelling of central spine including stair and chimney, relating to scale, aggregates, form etc.

Computer Modelling and Graphic Representation



Computer modelling of key components

Computer Modelling and Graphic Representation



Computer modelling of spaces for the study of lighting, material use, spatial quality and proportion etc.

Computer Modelling and Graphic Representation

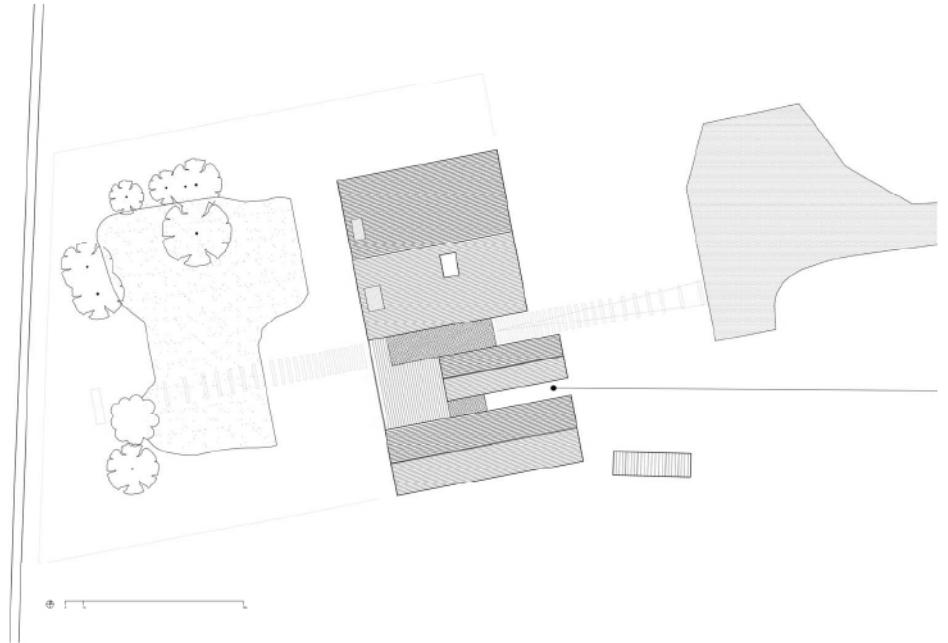


Computer modelling and representation of spaces for the study of lighting, material use, spatial quality and proportion, furniture elements etc

Drawings

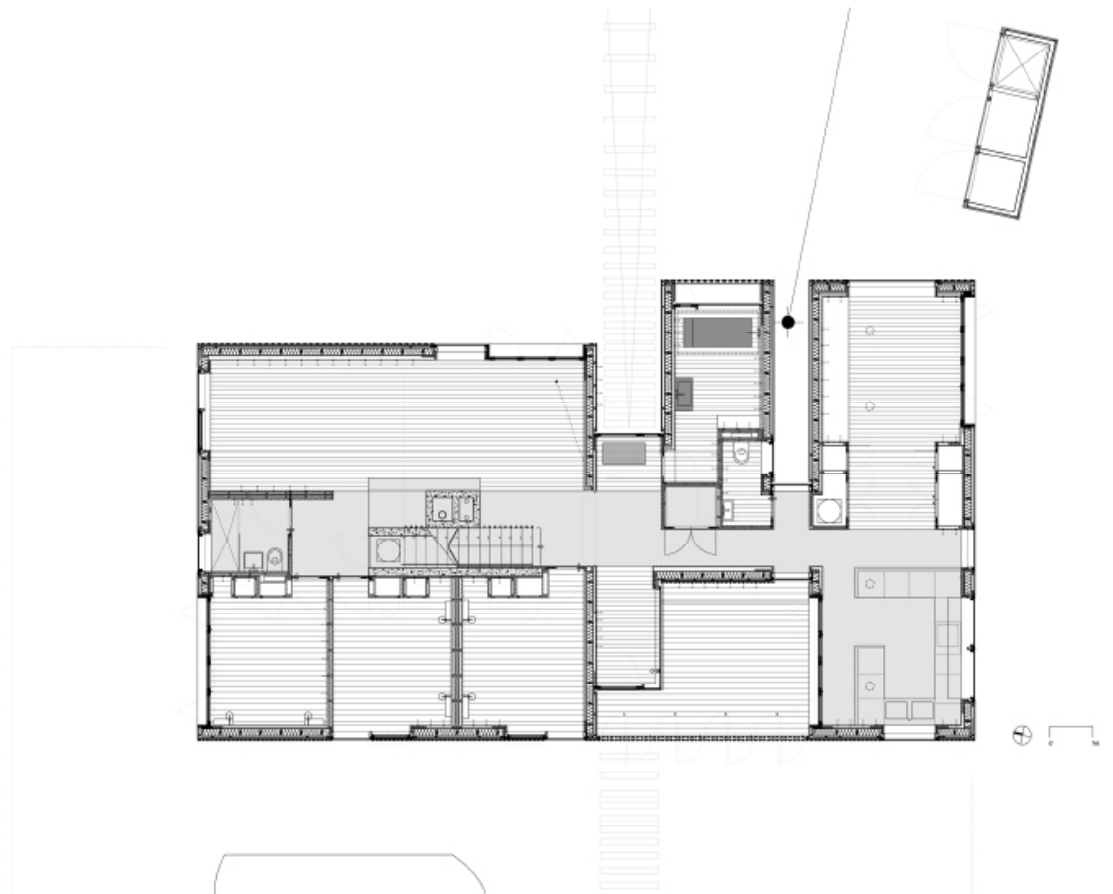


Location Plan

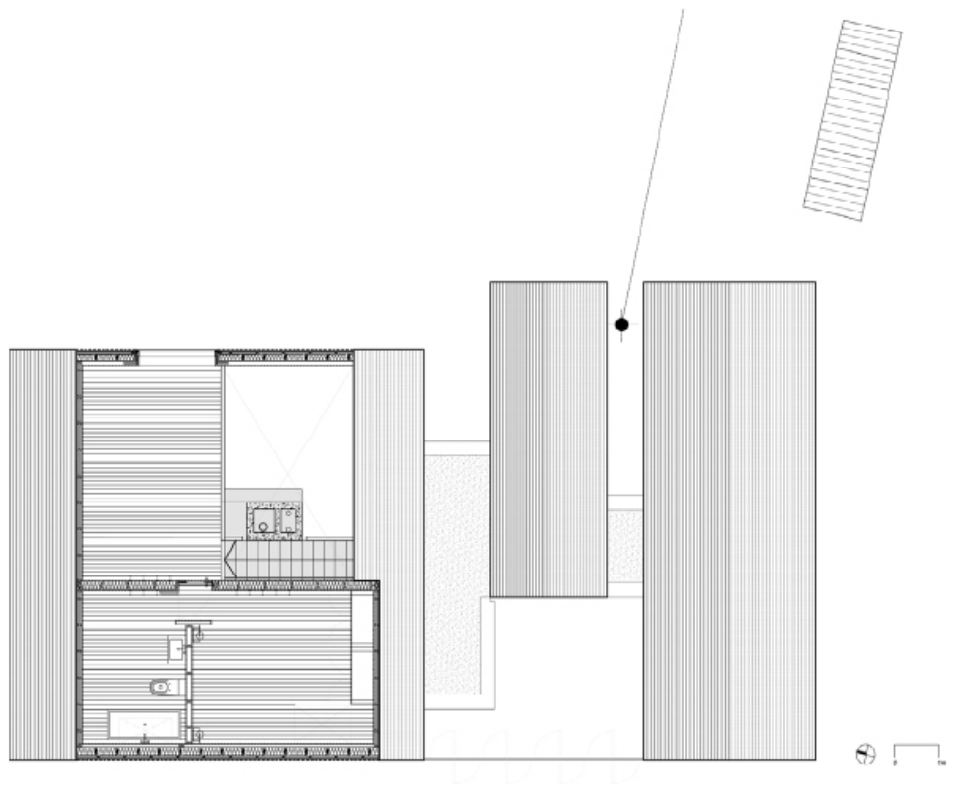


Site Plan Drawing - As Built

The drawing package becomes more complex and comprehensive through throughout the process and as a live document this package is constantly reviewed, revised and its scope extended. Up to the point of the final revision to each drawing (ordinarily towards then end of the building process) the drawings are both a record and key part of the design process, serving both to document and inform. Only through drawing are some issues brought to light, which may then necessitate a new drawing or revision. The completed package (including superseded drawings) is a record of this process.



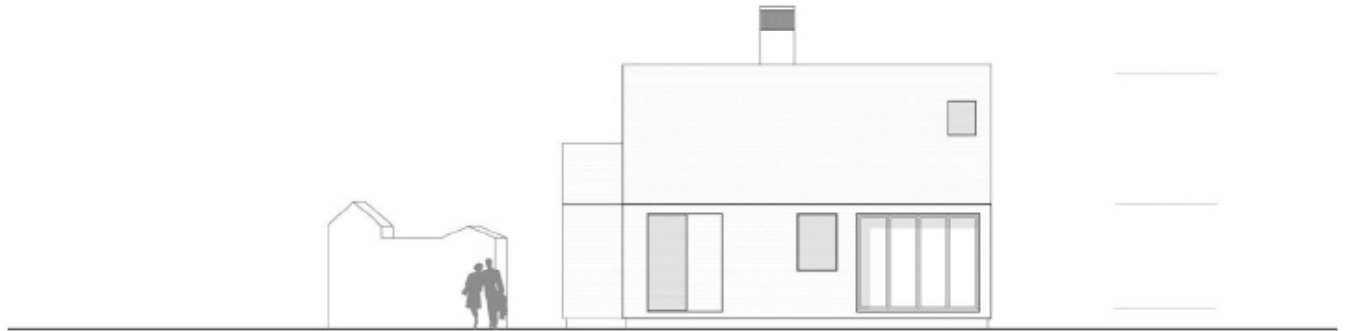
Ground Floor Plan Drawing - As Built



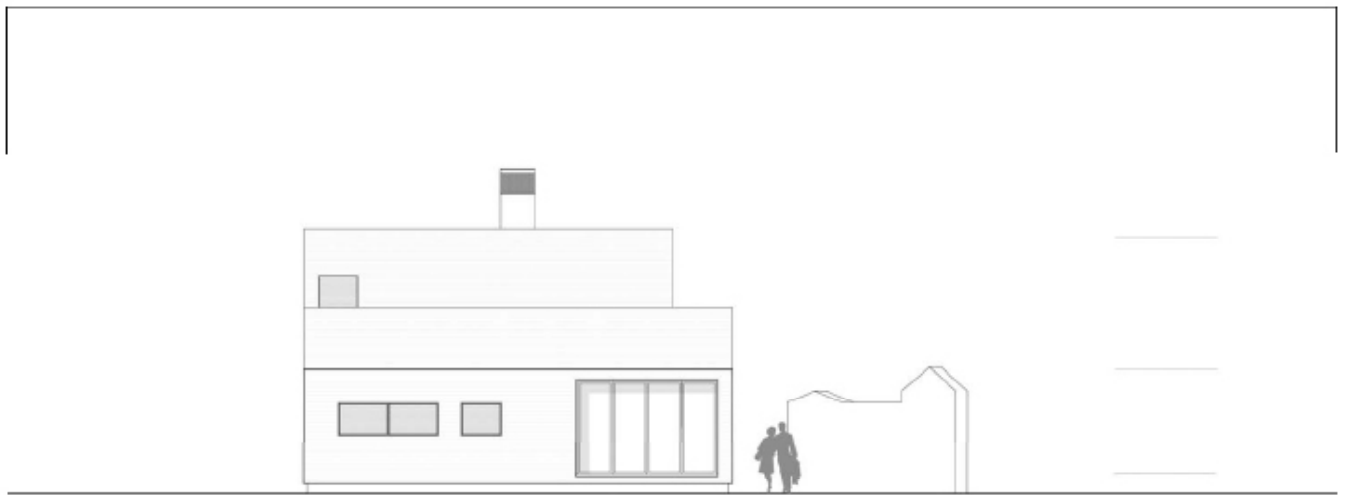
First Floor Plan Drawing - As Built



Elevation Drawings - As Built



0 5m
NORTH ELEVATION

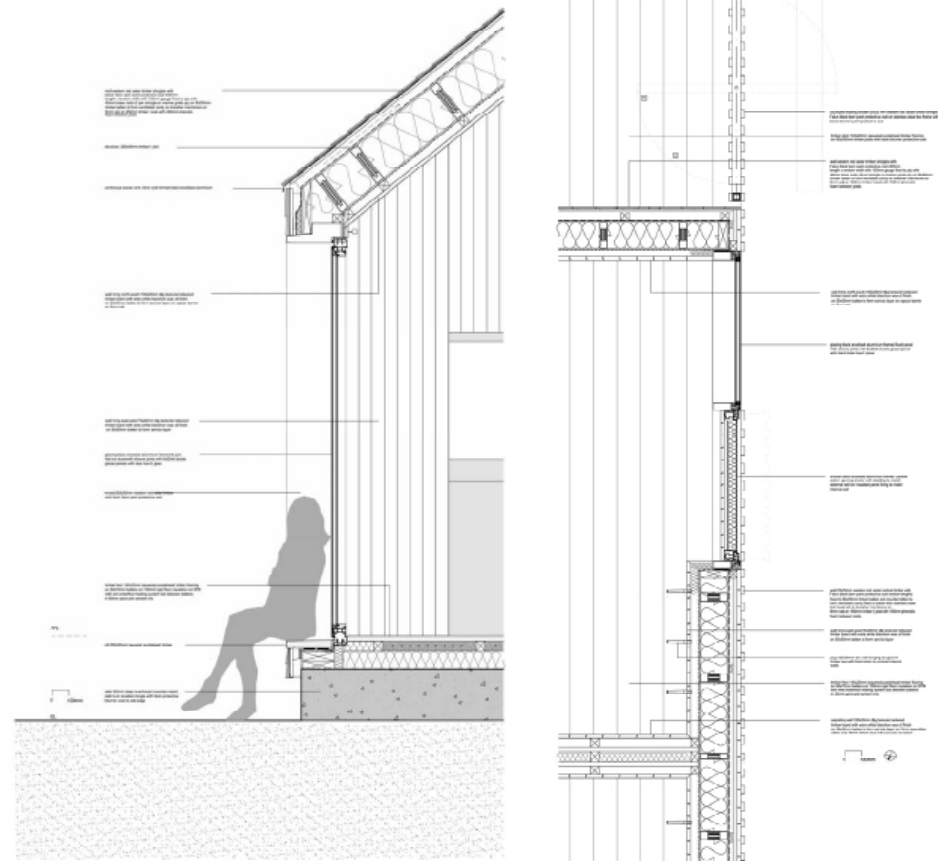


0 5m
SOUTH ELEVATION

Elevation Drawings - As Built



Section Drawings - As Built



Detail Sections - As Built



Completed house - photographic record of completed building



Completed house - photographic record of completed building



Completed house - photographic record of completed building

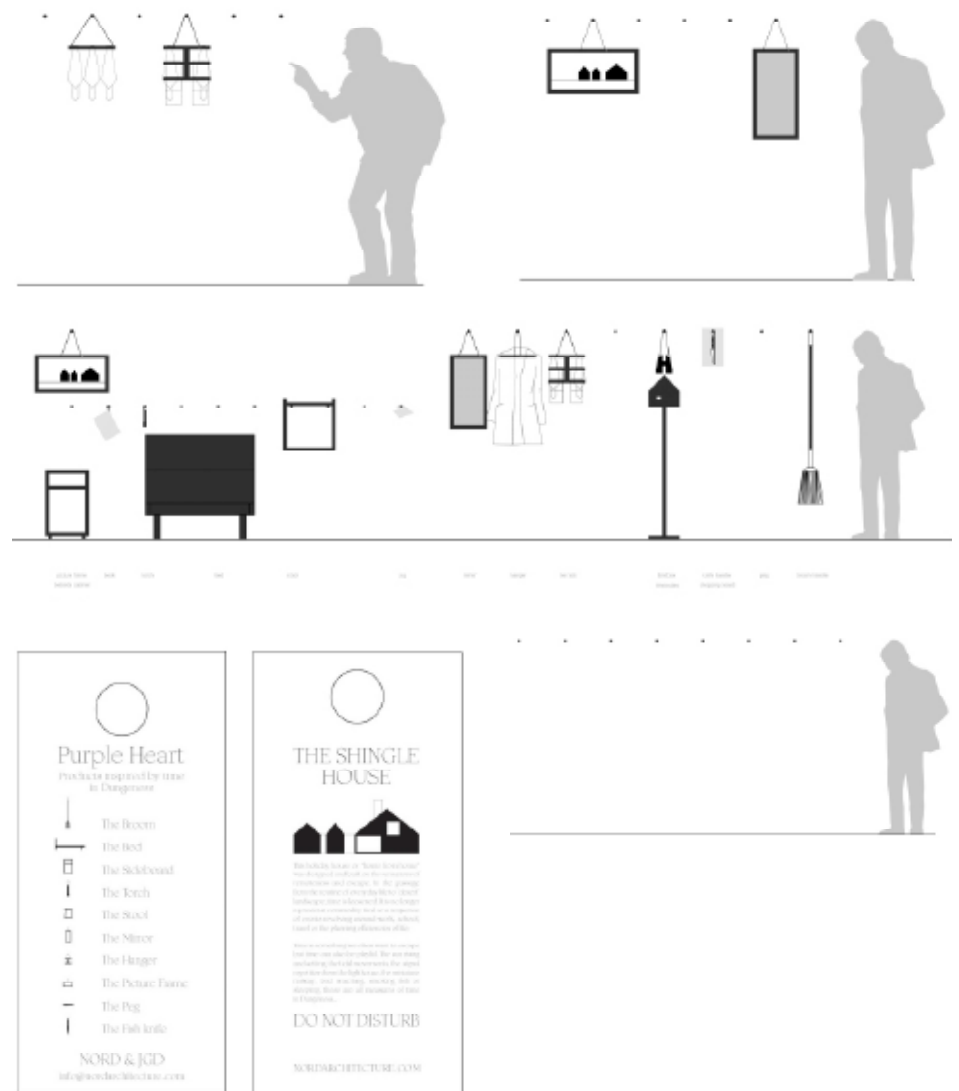


Completed house - photographic record of completed building



Completed house - photographic record of completed building

Purple Heart Furniture



Furniture and household items created for Shingle House, informed by the same principles outlined in the work carried out on the house

Purple Heart Furniture



Photographic record of completed Purple Heart pieces