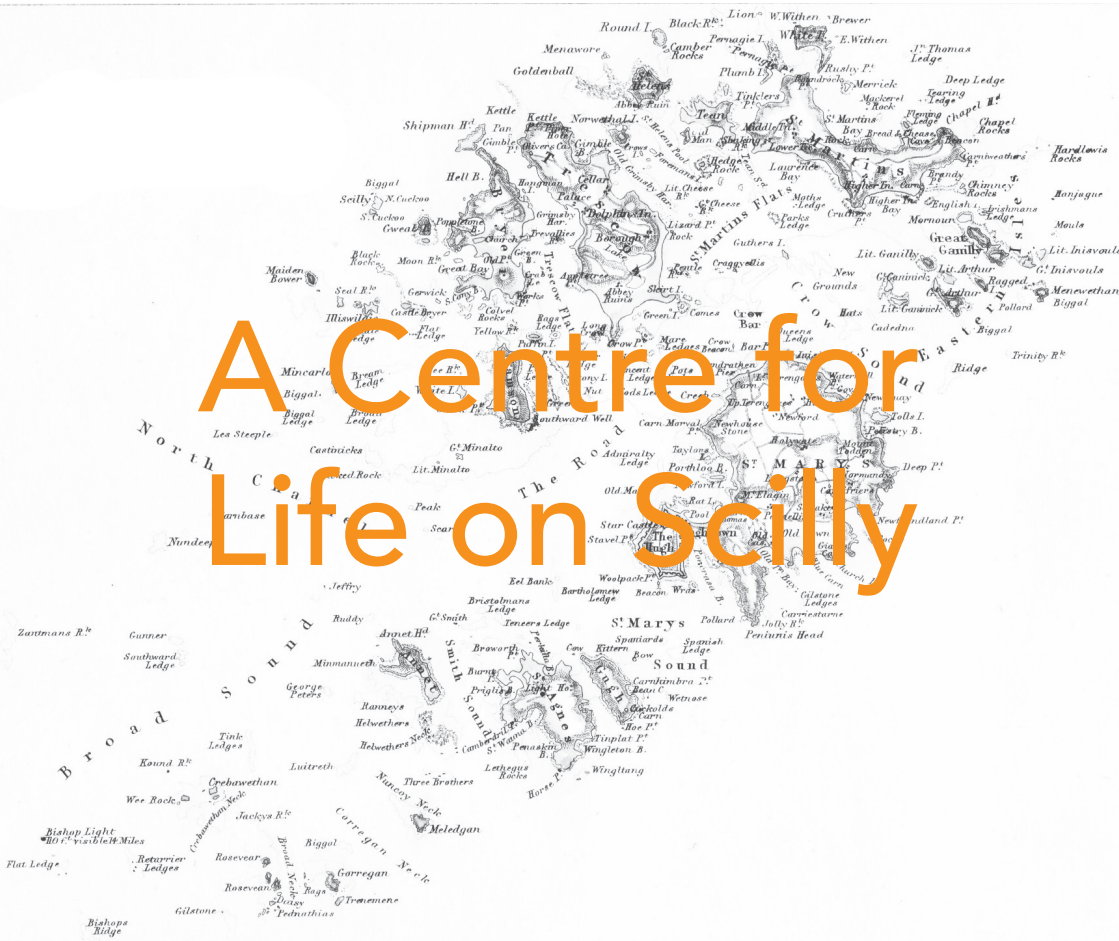
A Centre for
Life on Scilly

This report documents the process and outcomes of the first stage of a collaboration between Creative Islands and Falmouth University BA(hons) Architecture to consider future cultural, educational, visitor and community facilities on the Isles of Scilly. The work, produced by students as part of their degree course should not be seen as proposals but instead represents ideas, speculations and future possibilities.

This report has been compiled by Toby Carr, Module Leader, Senior Lecturer, Falmouth University using a selection of student work from the BA(hons) Architecture course 2019/2020. Creative Islands is one of the Arts Council funded Cultural Destinations Projects and is overseen by the Islands' Partnership on the Isles of Scilly.

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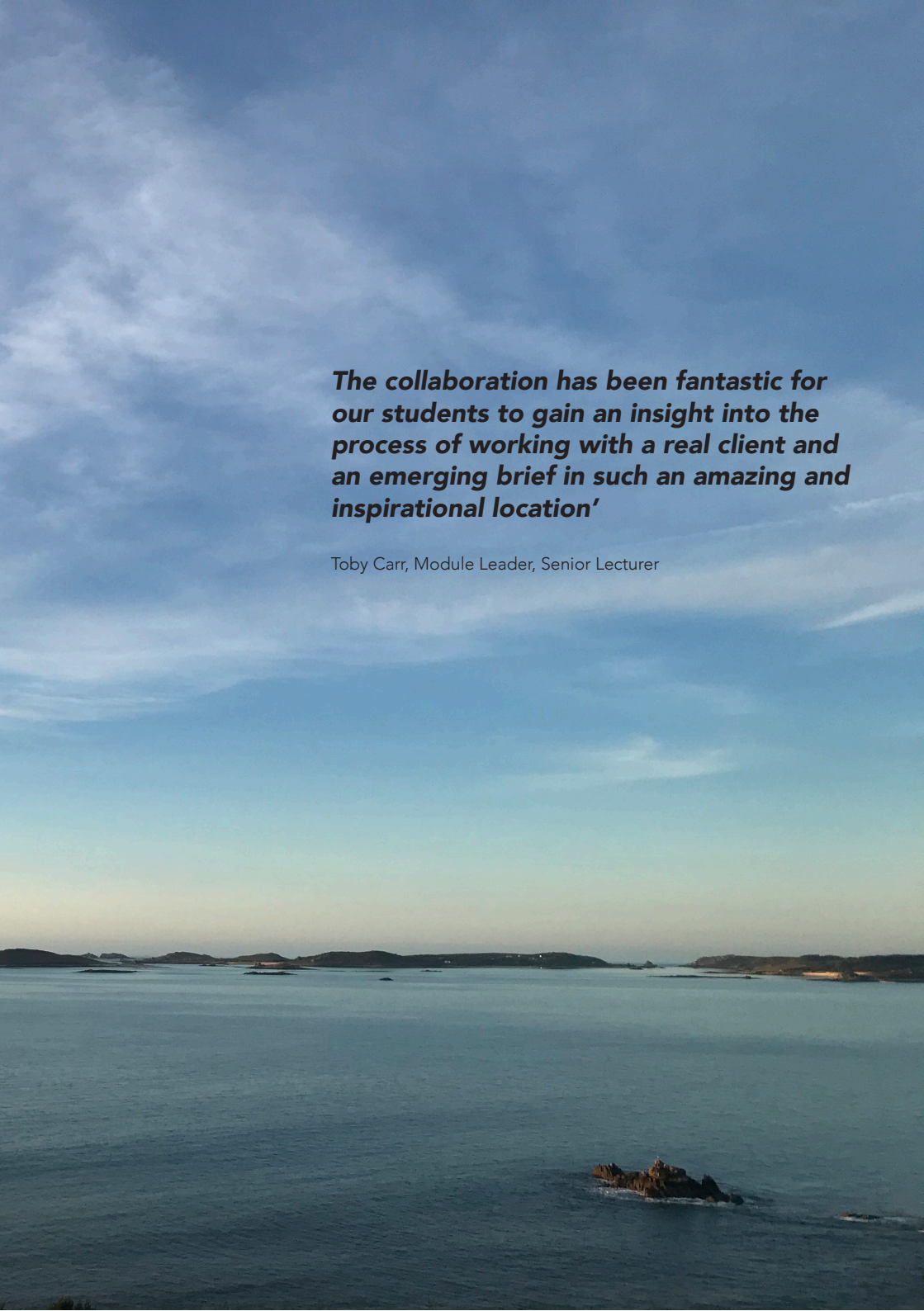
Contents



The collaboration has been fantastic for our students to gain an insight into the process of working with a real client and an emerging brief in such an amazing and inspirational location'

Toby Carr, Module Leader, Senior Lecturer

Introduction

Students from the BA(hons) Architecture course at Falmouth University have been working in collaboration with the Creative Islands team on the Isles of Scilly to research and develop ideas for 'A Centre for Life on Scilly'. This project, which is very much at the concept stage, has provided a starting point to explore how a new home for the Isles of Scilly Museum could incorporate additional space for cultural and environmental activity, aimed at both visitors and residents. The unique, eclectic and much loved museum is currently closed to the public and needs rehousing.

A collaborative working approach is fundamental to the success of the project and the work with Falmouth University Architecture students is a brilliant example of this. They have responded to the challenges and sensitivities of a potential new site, including buildability, sustainable design and architectural quality to develop their ideas for new community and visitor experiences. The work embeds ideas in a real place and social context to create new and innovative proposals for what a multi-use building like this could do and be. The student work will help to inform initial conversations about the project as well as being a catalyst for discussions around future development.

Course Leader, Tom Ebdon said "Live projects such as this, are fundamental to the way we teach Architecture at Falmouth. This project is a great example of the mutual benefit these types of experiences bring. The students have learnt vital skills that they need for the next steps of their careers and the client has embarked on a research and design journey to help bring their project closer to reality"

'There is a phenomenal amount of very creative work exhibited and it gives us a tremendous helping of food for thought'

Jeremy Brown and Tammy Bedford, Creative Islands.


Round I.
Black Rk.
Lion
W. Withen
Brewer
White I.
E. Withen
Menawore
Camber Rocks
Pernagie I.
Pernagie Pt.
Goldenball
St. Helens
Plumb I.
Rushy Pt.
Roundrock Pt.
Merrick
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Mackerel Rock
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Plat Ledge
Vincent Ledge
Pots Ledge
Pendrathen Pier
Watermill
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E. Terengoves
Carn
Cove
White I.
Nut
Cods Ledge
Creeb
Up Terengoves
Holvear
Shirk Pt.
Green I.
Newford
Southward Well
Carn Morval Pt.
Newhouse Stone
The Road
Gt. Minalto
Taylors I.
Holyvale
Mount Todden
Admiralty Ledge
Lit. Minalto
Porthloo B.
St. MARYS
Longstone
Normandy
Newford I.
Old Man
Carnfriers
Mc. Elagin
Peak
Rat I.
Sallakey
Pool
Carn Thomas
Permellin
Sear
Star Castle
Stavel Pt.
The Hugh
Hugh Town
Old Cas.
Old Town
Giants Cas.
Church
Porthcressa B.
Old Tn. Bay
Blue Carn
Church Pt.
Woolpack Pt.
Eel Bank
Bartholomew Ledge
Beacon
Wras
Bristolmans Ledge
Gilstone Ledges
Gt. Smith
Carriestarne
Teneers Ledge
St. Marys
Pollard
Jolly Rk.
Peninnis Head
Spaniards
Spanish Ledge
Smith
Broworth Pt.
Cow
Kittern
Porth Killier B.
Bow
Sound
Annet
Burnt I.
Gugh
Carnhimbra Pt.
Priglis B.
Light Ho.
St. Agnes
Bean C.
Wetnose
Cuckolds Carn

Section 1

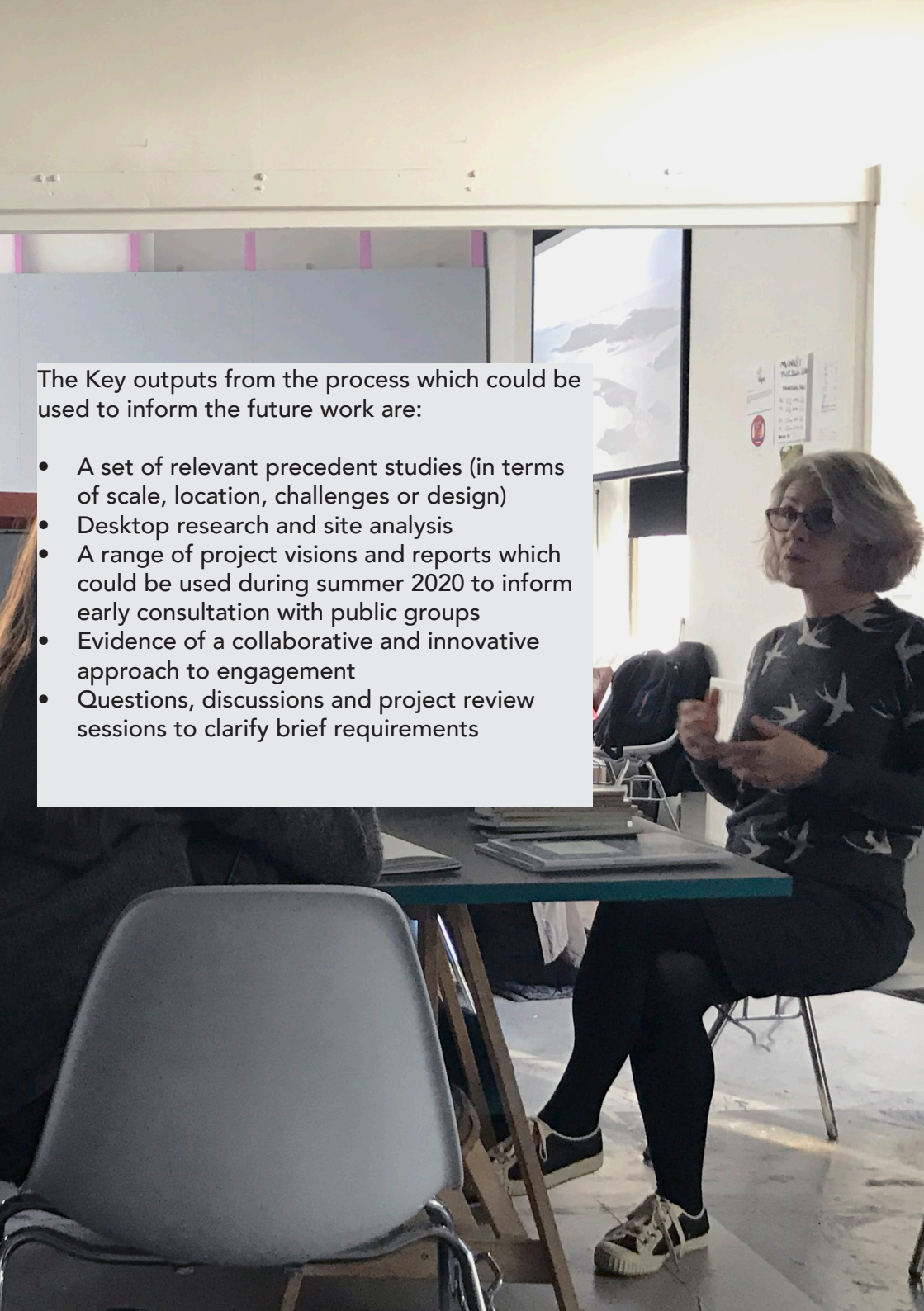
Working together

A Unique Collaboration

This project offered the opportunity for students to engage with real issues in a unique setting whilst also benefiting from the experience of working with a multifaceted client body. For Creative Islands it offered the chance to broaden their ideas on what the project could be and who it would be for.

The conversation started during a sympsium event on Scilly organised by Cultivator, the business development programme that supports the creative sector in Cornwall and the Isles of Scilly. This developed further and a meeting was held in December 2019 between the Creative Islands team and members of the teaching team on the BA(hons) Architecture course at Falmouth University. The principles of the collaboration were established, including the benefits for both parties, key dates, timescales and outputs. This led to a statement of intent and an outline programme agreed collectively. Following this, the student brief was developed along with a site visit by a member of the staff team, video briefing, interviews and photo survey of the proposed site.

The benefits that this type of partnership and project can have are numerous. Initial discussions covered how we would see the process working in real terms with the wider requirements of the student learning experience. This was broken down into what we as a staff team would be doing, what we would need Creative Islands to do and what the students would be doing. Key outputs that would be generated through the process were identified in order to inform future work. This was based on the scenario of a remote briefing initially and a visit and project review for the students on Scilly when the ferry started running in March.



The Key outputs from the process which could be used to inform the future work are:

- A set of relevant precedent studies (in terms of scale, location, challenges or design)
- Desktop research and site analysis
- A range of project visions and reports which could be used during summer 2020 to inform early consultation with public groups
- Evidence of a collaborative and innovative approach to engagement
- Questions, discussions and project review sessions to clarify brief requirements

The Learning Opportunity

In today's globally connected, peer to peer, de-centralised society we aim to create a learning and teaching environment that encourages the students to question the changing relationship between the architect and the 'user' and reconsider the practice of architecture within our contemporary professional context. As part of this approach we have developed a live-project structure that enables students to develop a design process though which they can gain valuable feedback from a community, while contributing to a dialogue about the potential for their design ideas to support the wider community's vision for their own neighbourhood.

This project formed the third year students Final Major Project, a 12 week project which supports the students in producing a comprehensive design proposal. The proposals will integrate a conceptual position with a resolved design. The completed projects will articulate the following:

- Regionally considered and nuanced design strategies, propositions and resolution.
- Material consideration developed into a tectonic study
- The personal design agenda and position of the student. This as opposed to generic design proposals.

What the student projects will offer:

- A Research phase to identify the challenges, analyse relevant precedents and re-formulate the design brief.
- Concept design proposals that attempt to rearticulate the main concerns of a brief and help user groups navigate the design process.
- Iterative design responses showing critical analysis of proposals.
- A range of models, drawings, documents, presentations and communication methods that can be used in a number of ways to help articulate the potential of the project.

'It has involved strategic and creative thinking to find innovative solutions to Island-specific problems, but has also been shaped by sensitivity to a small community, whilst considering the economic as well as social benefits the project could offer'

Kath Hawkins, Student

We look to work with partners to develop innovative projects together that meet the needs of the student experience and reflect the unique features of the BA(Hons) Architecture course at Falmouth University, these are:

• To teach and learn architecture through live projects delivered through participatory design processes.

• To reflect upon and engage with Critical Regionalism – a response to the unique place of Cornwall.

• Design Through Making – 1:1 hands-on making. Understanding the properties of materials and what they are capable of.

• Graduating students that have the ability to define and create critically strategic projects as well as the ability to challenge existing briefs to create architecture that excels in its inclusivity and relevance to the issues that face society today and in the future.

• A research culture that critically investigates the role of the architect in relation to participatory design, engagement and making.

• Exploration into the craft of architecture and the response that architecture can have to place.


POPULATION
TE PLAN
1:200

The Client Brief

Vision:

We are proposing to develop a 'Centre for Life on Scilly' with a dual purpose of creating a space for the human and environmental experience of Scilly to be explored by residents, visitors and researchers.

Purpose of the space
We envisage a space that has two purposes:

- A centre for the community and visitors to explore Scillonian history and culture through storytelling, theatre and art and provide a new, modern venue for the museum collection;
- A centre that provides a window into the terrestrial and marine environment, and an opportunity for people to study and protect it more effectively.

As an island location with a small population, our aim is to develop and build a centre with multiple functions that can be shared and integrated with each other. This approach will also help to ensure that the running of the centre can benefit from multiple funding streams, and visitors are able to enrich each other; breaking down the traditional perceptions of a museum, laboratory or classroom. Our aim is to create a multi-purpose centre for human heritage, with a design that encourages research, cultural events and museum exhibits to be integrated together and enable different users to share facilities and the overall management of the centre.

Benefit to heritage in the Isles of Scilly
The Isles of Scilly stand out for its rich marine and terrestrial habitats and species. The islands also have a rich history

of settlements for over 4,000 years, from Viking to Normans, Middle Ages and the English Civil war with stories of trade, defence and subsistence. The islands are now a home for 2,200 people with an economy based around tourism, fishing and farming. The location of the islands off the south western tip of Cornwall and the low density of population means that there is rich marine and terrestrial wildlife, which themselves are a significant draw for visitors and researchers. All of these stories, from ancient to modern interweave and provide the context from which we can research and understand the future of the islands and the wider enviroment. Our aim is to create a richer, more integrated experience for researchers, visitors and residents to learn and share knowledge of the islands.

Why the Centre is needed

St Mary's, the principal island on the Isles of Scilly suffers from a lack of quality venue and spaces for outreach, engagement and

humanities, social science and scientific research. The building housing the museum has recently had to be permanently closed. The museum has an exceptional collection with compelling stories to tell, however there is currently nowhere to house the collection and thousands of important artefacts and records are currently under threat. The Centre would host researchers who would work to reinterpret the collections, bringing new compelling narratives about the social, economic and cultural life of the island to the fore, working with a collaborative, community led participatory approach.

Every year there are many cultural events across St Mary's – from folk and comedy festivals to one-act plays and evening talks and presentations, however, there are very few suitable halls and certainly none with modern audio-visual, lighting and seating. The islands are visited by over 120,000 visitors a year, yet there are no covered attractions or activities. Finally, the islands have significant marine environmental interest and potential for marine oceanographic and ecological research; but the islands lack the necessary facilities and accommodation to enable researchers to work here.

The partnership

The current partnership comprises: The Isles of Scilly Wildlife Trust, The

Islands' Partnership, Isles of Scilly Museum and Exeter University. Supporting partners include The Duchy of Cornwall, Council of the Isles of Scilly and the Eden Project. The group have held three meetings over the last six months, and spent the intervening period developing a project vision. We have held initial discussions with the landowner (Duchy of Cornwall) and have identified a potential site at Carn Thomas where a Primary School was formerly located (the existing building is still present, but is disused).


SCILLY SELF CATERING

Space Requirements

	Museum	Cultural Centre	Research Centre	Wildlife Trust
Toilets	Required	required	Required perhaps for day use	Required
Accommodation	Not required	desirable	Accommodation for up to 20 people with mixture of single rooms and small dormitories. Kitchen and bathrooms	Accommodation for up to 20 people with mixture of single rooms and small dormitories. Kitchen and bathrooms
Cloakroom	Lockers, rucksacks with capacity for 25	desirable	Not required	Not required
First Aid Room	With defibrillator. Qualified first aider on site	As required	As required	As required
Shop/Café	Vending machines, and sales of books and pamphlets	Café / Bar as hub for visitors and part of events	Likely that students and volunteers will use café	Sales of Trust goods, cafe should be a concession profits from which go to the running of the facility
Reception	Monitor and support visitors	Required - possible box office function / link to TIC	Limited use of reception - primarily for any visiting student groups (3-4 times a year)	Area to house a WT representative to promote the Trust, answer queries and welcome visitors
Conference / events studio	Up to 100 people, screen and AV features	Flexible studio theatre space - suggested 120 capacity	Will make use of conference room, but likely to be fairly rare	Will make use of conference room for talks
Offices	Office for building manager/curator	required	Shared office for building manager	Not required
Research room	Incorporating library. House valuable book and photo collections (must be lockable) Tables, chairs and shelving	Possible break out or workshop space might be useful	A shared workspace will be required for students which might be possible to integrate; no requirement for library	A shared workspace will be required for students which might be possible to integrate; no requirement for library
Archaeological depository	Office facilities and study area; suitable shelving and storage	Not required	Not required	Not required
Workshops	Conservation and exhibit preparation and general maintenance. Will require benches, shelving and other storage. 25 sq m	Possible overlap with studio theatre use	Making and repairing scientific equipment.	Not required
Classroom	Host school parties who visit museum. Desks, chairs and wall hooks for ruck sacks	Possible overlap with studio theatre use	Potential for classroom to be used for undergraduate lectures, other themed talks of visiting scientists (for smaller groups than events room)	Space for wet weather events and activities, such as crafts & storytelling
Exhibit Store room	Temperature and humidity controlled. Racks, cupboards. 20 sq m	Not required / shared	Not required	Not required
Exhibit display area	Temperature and humidity controlled room, integrated lighting. 700 sq m	Not required	Opportunity for marine related interpretation as part of museum and 'shop window' connection to research scientists. No specific vision of space.	Opportunity for interactive interpretation area to bring the natural world to life. Possible use of VR to interpret the underwater world which many are unable to access
Lighting and Sound control room	Not required	To support studio space	Not required	Not required
Dressing Rooms	Not required	2/3 spaces / capacity tbc	Not required	Not required
Storage	Not required	Space for technical kit	Not required	Not required

The Museum Collection

The museum collection includes several items of national and international significance as well as artefacts documenting island life and family history. It is currently closed and the building has been condemned due to damage and spalling of the structural concrete. The museum building itself includes a number of residential units, located above the main exhibition spaces. At least one of these is in private ownership. The site itself is owned by the Council of The Isles of Scilly who are looking to obtain vacant possetion of the building for demolition.

The floor area of the current museum is 470m2 spread over two floors allowing for the central oval stair well which measures an additional 35m2. The lower floor has a height clearance of 2.5m and the upper floor has a height clearance of 3m. The central oval stair well has a clearance of 6m which is where the Klondyke gig with its sails is situated. Any build needs to consider the location of this large item (10m x 2.5m x 4.5m)

The 470m2 includes: Lobby and entrance stair well (built around a glazed model boat 2m cubed), office, kitchen, reception, small library, archaeological depository, workshop, toilet, and four storage cupboards. Display cabinets run around the perimeter of the building and 50% are built on top of storage units.

The list on the following page describes the main items exhibited in the museum at the time of closure in 2019.

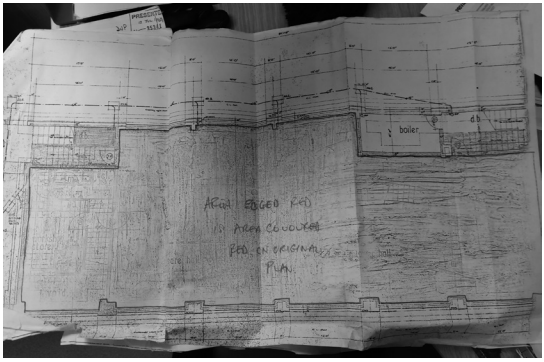
Many items are still inside the building, with no electricity or temperature control so are subject to damage. Some items have been stored in the nearby Enterprise Centre centre which forms a tempoary base for museum staff and the Scillonian family archive.

Below is a list of the main items in the current museum collection:

2 large cases of boat models
4 large cases of Archaeology including the hoard of British Romano brooches from Nornour and the Bryher sword
4 large cases of shipwreck finds (Colossus, Schiller, Bartholomew Ledge, Assocation, General)
Standalone items from wrecks 3 x chairs, 4 x cannons, 1 x bell, 1 x sideboard, 1 time long bench,
2 cases of world war 1 and 2 objects
I case of stamp collection
1 case of coin collection
I telephone box
I large case of Customs and Excise material
I large case on Pilots Gigs (Racing, Pilotage and life-saving)
Two large temporary photographic display cases (Flower farming, ship building)
Five large cases of natural history objects.
Lower dividing wall running across the museum filled with individually boxed stuffed birds.
2 x large case of lace clothes
1 x case dedicated to Harold Wilson
1 large case with BEA helicopter memorabilia and models
Simulations of a Scillonian Kitchen/bedroom and shop.
2 small cases plus glazed shelves containing Scillonian pottery, pewter ware and glass ware.
Art Gallery with approx. 50 valuable paintings/photographs.
I large case of photos and objects associated with the different Lighhouses

Other significant collections in storage are:

A collection of maps
A collection of flags
A collection of old photographs


boiler


FOOTPATH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The Student Brief

Whilst working within the parameters of the client brief and the very real challenges of a remote island setting, the student brief also needed to allow enough flexibility for creative exploration, experimentation and broad scale design thinking. It was also important to ensure that the scale, complexity and scope of the project would meet the requirements set by our professional bodies the Architect's Registration Board (ARB) and the Royal Institute of British Architects (RIBA) for an undergraduate student brief.

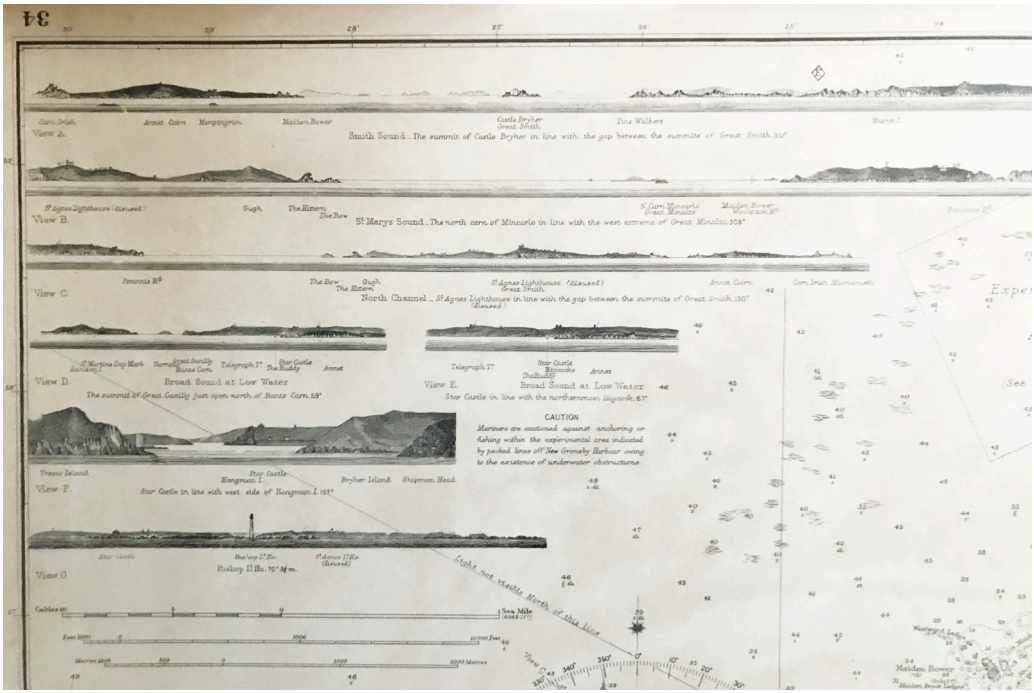
The land under consideration is a disused school site on the edge of Hugh Town at Carn Thomas, a prominent granite outcrop that forms a north facing promontory between the twin bays of town beach and Porth Mellon. The site is currently unoccupied with the existing school buildings set back from the road and surrounded by hard standing that sloped upwards from the roadside. To the north from an elevated level are expansive views across to the islands on Samson, Bryher and Tresco, to the east, views over Porth Mellon beach and agricultural land beyond, to the south, across the road is the site of the former secondary school, now demolished and relocated. This site is owned by the Council of the Isles of Scilly, is vacant with plans for affordable housing. To the west are views over the rooftops on adjacent building, the guest house at Mincarlo, towards the main town quay, harbour and Garrison Hill.

Despite being the largest and most populous settlement on the islands, Hugh Town has a rural village character. The site marks a transition point between the relative density of 2-3 storey buildings, terraced houses, shops and amenities towards more dispersed settlement, single storey with rooms in the roof, industrial and agricultural uses. This is particularly visible when the site is viewed from the water or from the town quay.

The site is owned by The Duchy of Cornwall

with a redline boundary running along the pavement edge, the rear of Mincarlo and around the coast of the promontory. This includes the leasehold of the lifeboat station and several other small titles including the gig sheds at Port Mellon. The existing buildings on the site are of varying quality ranging from poor quality 1970's additions, classroom and toilet blocks, to the more significant original school room dating from 1829, the first public school building in the UK, characterised by a small bell tower incorporated into the eastern gable. To the rear of the buildings, the site steps where the granite bedrock has been cut into forming the base for the existing buildings. The step is approximately 1m high.

In order to widen the scope of the project as well as introducing questions around suitability of development, environmental and visual impact, students were given the whole site defined by the redline boundary to work within. Many students opted to work with the existing levels to avoid further excavation, some schemes incorporated the step into the building proposals and other students proposed more challenging schemes requiring extensive remodelling of levels and increased impact on the coastal edge both visually and ecologically.



Students were given the option of retaining the existing school building or assuming it would be demolished. Four students out of nineteen opted to keep the original school building due to its historic and cultural significance. These schemes faced challenges related to accessibility, the location of the building on the site and the integration of it within the wider proposals. Many students proposed reusing the rubble from the demolished buildings for construction and ground works. However, given the proposed cultural use of the site and its potential use as a museum of island life, it could be argued that this important part of the island's history should be preserved. Addressing this, many students proposed

schemes that aimed to continue the use of the site as a place for education.

Given the Duchy of Cornwall are the landowners, they would exercise significant control over any development in terms of architectural expression, design, materiality and construction. They would also likely have a strong influence on the appointment of a design team. Whilst concerns around material choice, sustainability, quality, longevity and sensitive design all formed part of the student brief and the role of the Duchy was discussed in studio workshops, no singular design approach was enforced and questions around stylistic choices and architectural expression were left open for the students to explore. The Council of the Isles of Scilly also has a design guide, again whilst this was by no means ignored and an understanding of the planning process is an integral part of the project, guidance was not enforced and students were able to make and justify their own choices. This all raises interesting questions in terms of the likely amount of design control the Duchy or the Council may exert over future development on the site and in turn the ability to make the most of the opportunity to create a unique and distinct building of significant architectural quality.

The requirements of the ARB and RIBA state that students must develop proposals for a three storey building in order to ensure they can work at a level of complexity involving multiple levels, access design and construction techniques beyond a purely domestic scale. Most of the surrounding buildings are 2-3 storey or 2 storey with roof dormers. Students worked with this requirement in a number of ways when determining the scale and massing of proposals. Some schemes investigate ways in which to sink parts of the building in a semi basement level, others incorporated space within the roof pitch or used the changes in levels on the site. The height of proposals in relation to Carn Thomas and the surrounding buildings was carefully considered. Most schemes opted not to go any taller than the top of the prominent granite outcrop so as to protect it's natural character and avoid over dominance. Some students investigated the inclusion of taller elements into their schemes as a way of creating a visual reference point for the proposals.


Round I.
Black Rk.
Lion
W. Withen
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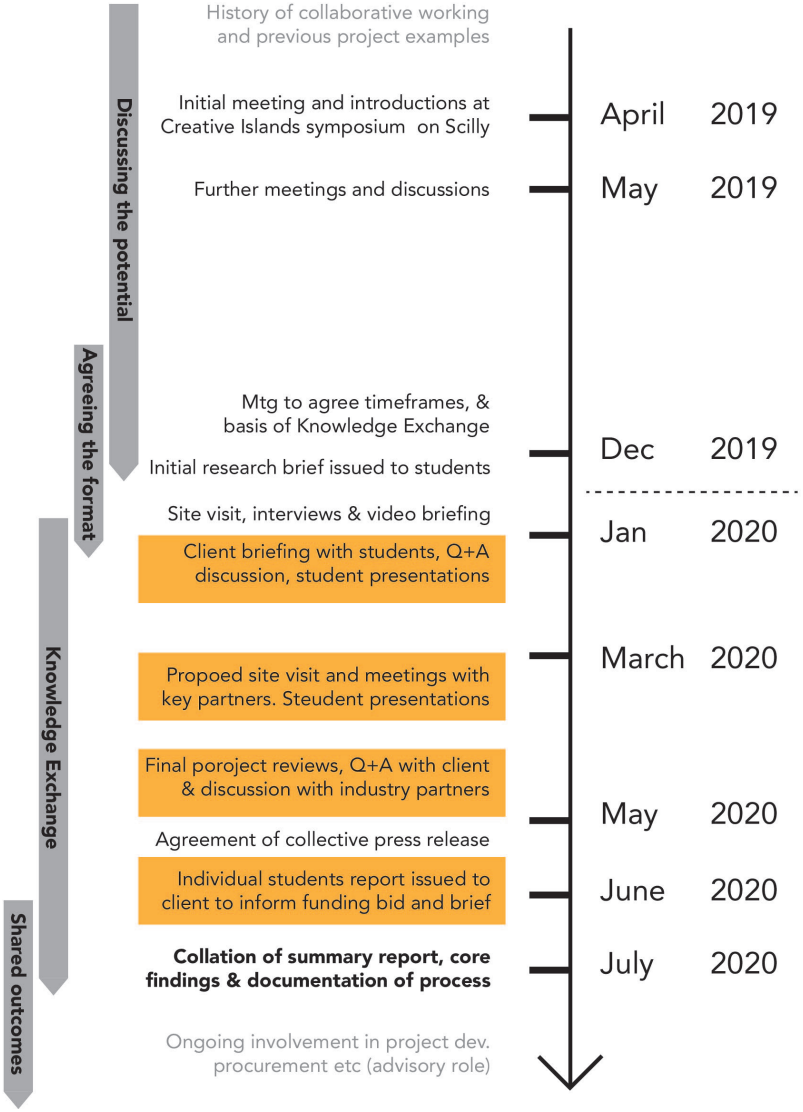
Section 2

Process and Programme

Project Outline

The first stage of the brief was issued to students in December 2019 to introduce the project, client, location and a set of collective research tasks. These covered a range of topics including ecology, topography, geology, demographics, employment, climate and history as well as reference to relevant precedent studies of projects addressing similar issues. Students presented their findings and shared this research with their peers at the end of January 2020. The second stage of the process involved an extensive site briefing, client presentations and initial conceptual responses from students. This included a video briefing and interviews with: The museum curator and facilities manager, Kate Hale and John Hutchins; The development manager for the Council of the Isles of Scilly, Nicola Stinson; Jeremy Brown and Tammy Bedford from Creative Islands; As well as local resident Grant Tucker talking about the islands' history and David Mawer and Julie Love talking about local wildlife and ecology.

A fundamental objective of the brief was to ask what else could this building do in order to support the local community as well as providing a destination for visitors. This was echoed in three key aspects: Social infrastructure; The civic economy and Technologies of Making.


Discussing the potential
Agreeing the format
Knowledge Exchange
Shared outcomes
History of collaborative working and previous project examples
Initial meeting and introductions at Creative Islands symposium on Scilly
April 2019
Further meetings and discussions
May 2019
Mtg to agree timeframes, & basis of Knowledge Exchange
Initial research brief issued to students
Dec 2019
Site visit, interviews & video briefing
Jan 2020
Client briefing with students, Q+A discussion, student presentations
Propoed site visit and meetings with key partners. Steudent presentations
March 2020
Final poroject reviews, Q+A with client & discussion with industry partners
May 2020
Agreement of collective press release
Individual students report issued to client to inform funding bid and brief
June 2020
Collation of summary report, core findings & documentation of process
July 2020
Ongoing involvement in project dev. procurement etc (advisory role)

Video Briefing

"They came over in dense fog, we have an argument here, whether it was thick fog or dense fog… and I reckon it was dense fog. You only have it once in a blue moon"
Gavin Tucker

"Everything around here has been built up over the years and the islands themselves are full of history, dating back to almost pre-history when all the islands were once attached and the museum itself contains everything. It contains pottery, it contains stonework, it contains swords, personal belongings, wreck history…the whole lot"
John Hutchins

"There's something else about it which is sometimes hard to define but it's a sense of being involved in or observing or experiencing a way of life that is different to living on the mainland and it's partly to do with the geography…bit it also generates this feeling of otherness and seperateness...People have to be self-sufficient in a practical day to day way but also it affects the cultural activity as well. There is a real sense of being Scillonian and being different"
Tammy Bedford

"There's very much a make do and mend approach here, really through necessity. "One of the key things for us is the lack of space for cultural activity, the lack of high quality space for people to participate in and enjoy creative work or all kinds"
Jeremy Brown







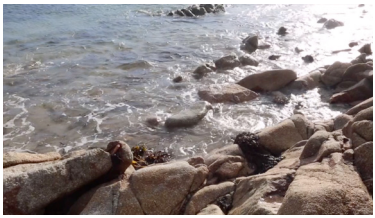
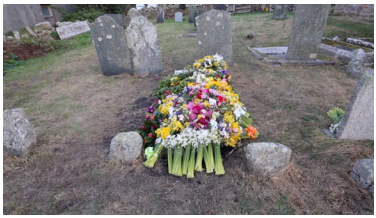



"We have to think about the costs of development here to see if we can get a business case to stack up. The cost of development compared to Cornwall mainland are around about 150%. You've got the logistics of bringing materials onto the islands which can be very expensive. We are usually looking at around £3500/m2 to build on a site like this"

"Anything that is built here needs to fit in with the environment. A lot of people come to visit the islands because of its green credentials and because of the quality of the environment and the buildings have to respect that context"
Nicola Stinson

"Normally a sword was burried with a male royal and a mirror was buried with a female royal, here the found both. It could have been a woman who ruled, it could have been transgender…Its very special in that respect. This was discovered on Bryher in 1990. It would be interpreted today more openly than when it was found. So this is the shipwreck section, The Schiller is a famous wreck, the Victorian Titanic. Very tragic, coming from New York to Hamburg, huge loss of life'
Kate Hale

"We have a challenge in trying to create a new space that allows us to share culture, present some of the wonderful artefacts of the museum and provide a facility both for the local community and for visitors to share and enjoy what is an extraordinarily rich history and heritage of a very beautiful and unique corner of the country"
Jeremy Brown







Talks and Workshops

Following the briefing students worked to develop their ideas supported by group and individual tutorials, peer review sessions, group workshops and a series of talks. As the client partners, Jeremy Brown and Tammy Bedford of Creative Islands attended review sessions and provided feedback on student proposals. A valuable process for the students and the development of their ideas.

Key workshops covered issue related to the challenges of working and building on Scilly, comparative studies of similar size/population and considering alternative materials and technologies. Legal and professional issues were also covered in these sessions.

To support the theme of 'Technologies of Making' we invited local makers, creatives and experts to share their experiences.

Writer and literary wanderer Wyl Menmuir shared his process of engaging with place and his experience as one of five writers commissioned for the 'Walking Stories' project, a collection of short stories set on the islands. Granite sculptor, quarryman and artist, Dr David Paton gave a first hand account of working with granite, the granite landscape and the challenges of transporting work across the sea from the UK. Carpenter, timber frame designer and champion of sustainable technologies Tom Jubb, talked about his work using landing crafts to transport timber frame elements onto St Martin's and Bryher. Local boatbuilder and craftsperson Amy Stringfellow shared her interest and skills using traditional techniques as well as running a hands on timber steam-bending workshop with students. Rose Martin and Dr Katie Bunell shared their work and project 'Brickfield' reigniting lost skills in brickmaking using found materials and local china clay.

Other sessions relating to the new community building on St Agnes by PBWC Architects, building community spaces by Architecture 00 and a Hempcrete build workshop were postponed due to Coronavirus.

Walking Stories
Wyl Menmuir

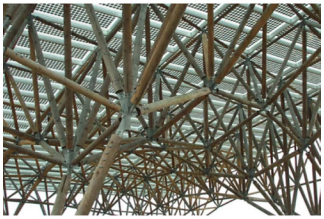
Tuesday 28th January 2020
10.30am

Tracing Granite
Dr. David Paton

Monday 3rd February 2020
1.30pm

The Craft of Boatbuilding
Amy Stringfellow

Friday 21st Feb 2020
1.30pm



Building with Timber
Tom Jubb, Carpenter Oak

Monday 24th Feb 2020
1.30pm

Community Building
Sarah Hollingworth,
Architecture 00
Friday 13th March 2020
10.30am

Community Space on Scilly
Emma Hoskins
PBWC Architects
Monday 16th March 2020
1.30pm

Architecture in an imperfect world
Niall Maxwell
Rural Office for Architecture
Thursday 19th March 2020
5.30pm - 6.30pm

Building with Hemp
Bob Moores

Thursday 20th April 2020
1.30pm

Brickfield
Rosanna Martin
Dr Katie Bunnell
Online Talk
Available on Stream

The scheduled site visit and presentation planned to coincide with the start of the passenger ferry schedule had to be cancelled in light of travel restrictions due to COVID-19.

Students adapted quickly to this new and challenging situation. They worked from an extensive set of photographs taken as part of the briefing process, site plans, LIDAR data, local history archives, drone footage, aerial views and street view to form an understanding of the site whilst working remotely. Although unplanned and disappointing for all, this has introduced new skills related to working at a distance from a physical site and collaborative approaches using new tools. However, it should not be seen as a replacement for the vital and critical understandings of people and place that come from spending time there.

Students presented their proposals in a series of online forum events and gained feedback from their peers, tutors and a panel of guests. The panel included: Julia Kashdan Brown, a teaching fellow at the University of Bath and practicing architect; Niall Maxwell, Director and Founder of Rural Office for Architecture and visiting tutor at the Welsh School of Architecture; Jeremy Brown and Tammy Bedford of Creative Islands, representing the client and user groups. The schemes presented are diverse in their scope and focus, all with differing responses to the complex needs of potential user groups, addressing both locals and visitors.

Some projects take a more provocative and propositional stance, some are more practically grounded and rooted in the sensitivities of the place.

Common themes emerging included the appropriate size and scale of the buildings, the use of and relationship to outdoor spaces, seasonal usage patterns, circulation, access routes and management issues related to a

small multipurpose venue as well as the consideration of revenue generating facilities. These common themes, approaches and emerging building typologies are summarised at the end of this document.

Date(week commencing)	Study Block week	Proposed activity		
		Teaching staff	**Islands Partnership**	**Students**
20/12/19	-	Issue brief to students		
06/01/20	-	Background research		Desktop research (specific topics) and relevant precedent studies
13/01/20	-	Background research	Provision of any relevant information	
20/01/20	-	Toby Carr, site visit to Scilly to meet with Islands Partnership and others, prepare briefing film for students.	Facilitate visit, access to site, meetings with key partners. (Possible short interviews)	
27/01/20	1	Remote briefing with students	Facilitate remote briefing with 4 key partners (skype conversations) Possibly Monday and Thursday. Optional, Jeremy or Tammy to attend briefing workshop in Falmouth	Briefing and initial user group consultations (remotely) **KEY OUTPUT** Summary and consolidation of desktop research, in standardised format, pdf
03/02/20	2	Tutorials and seminars		Concept Design
10/02/20	3	Tutorials and seminars		Concept Design
17/02/20	4	Interim review	Possible client catch-up	Concept Design, Interim review
24/02/20	5	Tutorials and workshops in Falmouth		Detail Design, technical workshops
02/03/20	6	Tutorials and workshops in Falmouth		Detail Design, technical workshops
09/03/20	7	Tutorials and workshops in Falmouth		Detail Design, technical workshops
16/03/20	8	Tutorials and workshops in Falmouth		Detail Design, technical workshops
23/03/20	9	Interim review and presentation on Scilly. Travel by Scillonian (3 nights)	Interim review and presentation on Scilly (invite to key partners)	Interim review and presentation on Scilly. Travel by Scillonian (3 nights)
30/03/20	10	Tutorials		Amending design and presentation
06/04/20	-			Amending design and presentation (Independent study)
13/04/20	-			Independent study
				Amending design and presentation (Independent study)
20/04/20	11	Tutorials		Amending design and presentation
27/04/20	12	Final review (in Falmouth)	Attend final review (in Falmouth)	Final review (in Falmouth) Final design submission (drawings, visuals, models and reports) **KEY OUTPUT** Drawings and reports in pdf format
Assessment and grading				
21/05/20	-	Final degree show in Falmouth	very welcome!	Final degree show in Falmouth

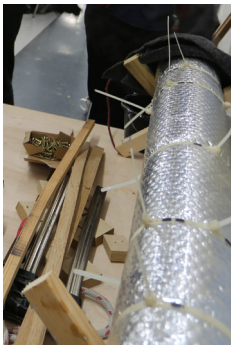
Continuity, impact and informing the HLF bid (suggested activities)				
Summer 2020	-	Possible partnership, (eg. design and layout of potential touring exhibition, digital archive, project reports)	Sharing of ideas and **KEY OUTPUTS** as a tool for community engagement and consultation (initial phase)	
September 2020	-	Potential for research and innovation submission within Falmouth University	Collation of consultation, responses to inform brief, scope and vision Summary of process Future engagement plan Preparing HLF bid	
October 2020			HLF bid submission	
Successful funding application		Possible partnership, advisory role	Invited competition to pre-selected practices	
Project development and design review		Possible partnership, advisory role		

Images: This page, from Tom Jubb, Post-Beam illustrating the sequence of building a new fish shop on the island of Bryher using pre fabricated timber frames, panels and landing craft. Opposite page: Students taking part in a timber steam bending workshop with boatbuilder Amy Stringfellow and learning some traditional techniques.







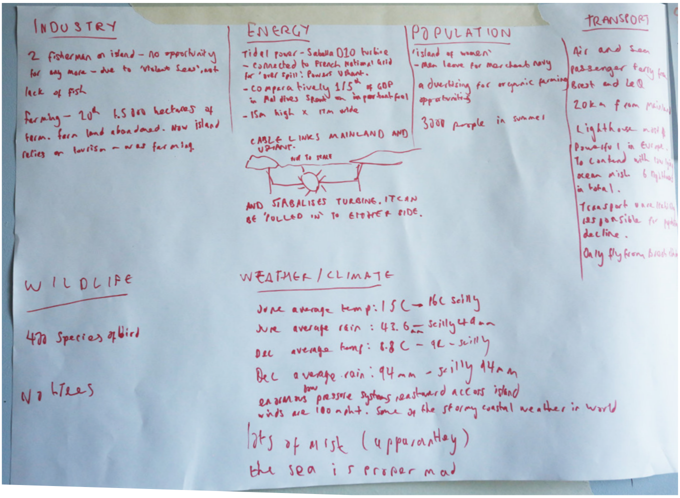



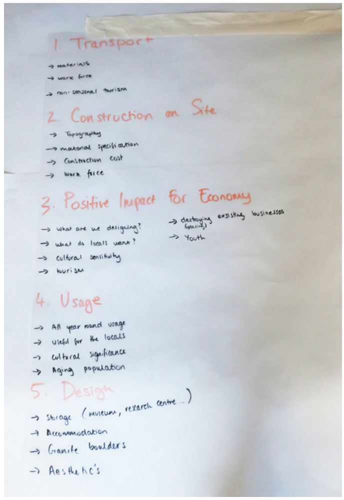
5 Key Challenges

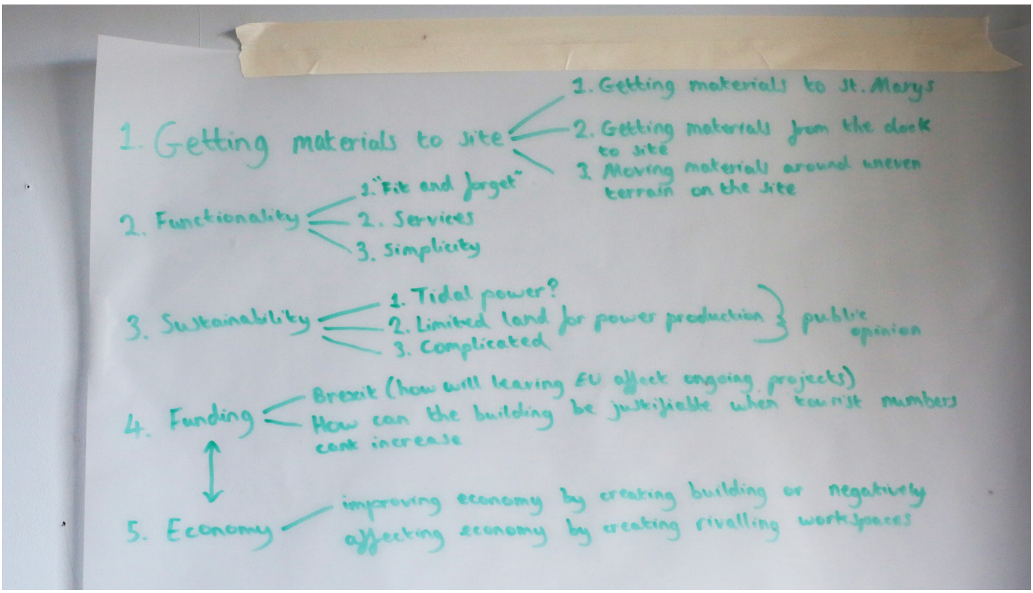
In this workshop, students worked in groups to identify, given the brief, location and site, what they considered to be the five key challenges for the project. These were discussed together with a number of overlapping challenges identified between groups. The outcomes of this are shown in the table below and in the notes taken from the workshop shown opposite.

Perhaps unsurprisingly for such a remote location, site logistics and transport were identified as the top challenge, both in terms of construction logistics on site and in terms of getting people, equipment and materials to site. This has led many students to investigate off site manufacturing, using reclaimed and recycled materials from waste already on the islands as well as proposing training opportunities in construction for young people. Related to this is the challenge of supporting the local economy rather than working against it, opportunities for community kitchens, bookable rooms, training classes and space to display and sell work have all been investigated. Sustainability has been identified as a key challenge, considering energy usage and supply, wastewater treatment, fresh water supply as well as efficient building fabric to keep running costs low. Students have made reference to the Smart Islands project considering photovoltaics as well as offshore wind and tidal energy generation schemes.

Other issues raised were around defining the target market for the building, considering age profiles, needs and interests of both locals and visitors. Students developed themes raised in the Destination Management Plan relating to visitor trends and numbers as well as local skills and knowledge. One issue being the lack of post sixteen education on the islands meaning there is a significant drop in numbers of younger residents when compared to the UK as a whole. Some proposals investigate

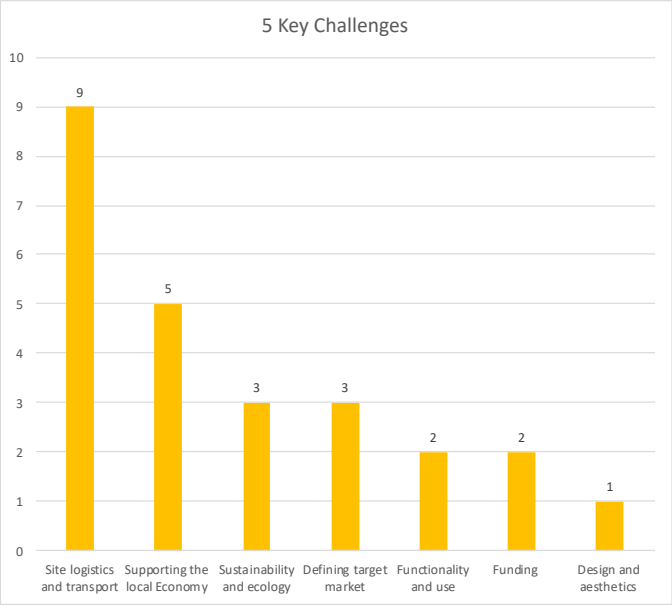

INDUSTRY
2 fisherman on island - no opportunity for any more - due to 'violent seas', not lack of fish
farming - 20th 1.5 000 hectares of farm. farm land abandoned. Now island relies on tourism - was farming.
ENERGY
Tidal power - Sabella D10 turbine
- connected to French National Grid for 'over spill'. Powers Ushant.
- comparatively 1/5th of GDP in Maldives spent on important fuel
- 15m high x 17m wide
CABLE LINKS MAINLAND AND USHANT.
NOT TO SCALE
AND STABALISES TURBINE. IT CAN BE 'PULLED IN' TO EITHER SIDE.
POPULATION
'island of women'
- Men leave for merchant navy
advertising for organic farming opportunities
3000 people in summer
TRANSPORT
Air and Sea passenger ferry from Brest and Le Q
20km from mainland
Lighthouse most powerful in Europe. To contend with low lying ocean mist. 6 lighthouses in total.
Transport unreliability responsible for population decline.
Only fly from Brest
WILDLIFE
400 Species of bird
No trees
WEATHER / CLIMATE
June average temp: 15C → 16C Scilly
June average rain: 43.6mm - Scilly 44mm
Dec average temp: 8.8C - 9C - Scilly
Dec average rain: 94mm - Scilly 94mm
enormous low pressure systems eastward across island
winds are 100mph. Some of the stormy coastal weather in world
lots of mist (apparantley)
the sea is proper mad


1. Transport
→ materials
→ work force
→ non-seasonal tourism
2. Construction on Site
→ Topography
→ material specification
→ Construction cost
→ work force
3. Positive Impact for Economy
→ what are we designing?
→ what do locals want?
→ cultural sensitivity
→ tourism
→ destroying exsisting businesses (replacing)
→ Youth
4. Usage
→ All year round usage
→ useful for the locals
→ cultural significance
→ Aging population
5. Design
→ Storage (museum, research centre...)
→ Accommodation
→ Granite boulders
→ Aesthetic's


1. Getting materials to site
1. Getting materials to St. Marys
2. Getting materials from the dock to site
3. Moving materials around uneven terrain on the site
2. Functionality
1. "Fit and forget"
2. Services
3. Simplicity
3. Sustainability
1. Tidal power?
2. Limited land for power production
3. Complicated
public opinion
4. Funding
Brexit (how will leaving EU affect ongoing projects)
How can the building be justifiable when tourist numbers cant increase
5. Economy
improving economy by creating building or negatively affecting economy by creating rivalling workspaces

connections with mainland college groups, universities and local training opportunities in order to address this issue. The question of why locals would go to such a venue was also raised and the question of 'needs' discussed. This has been investigated extensively by the Creative Islands team and will be addressed through continual collaborative working. The core urgent need identified is rehousing the museum and extending the notion of what a museum can be.

Issues of functionality and use were raised, thinking about how a new building could address the needs of the multiple user groups, how could it operate and how might it be used differently in and out of the tourist season and shoulder periods. Outside of the top five challenges, funding was also identified and interestingly for a group of architecture students, design and aesthetics were also seen as one of the lesser challenges. Of course, these themes are not seen in isolation and require creative problem solving to address in a holistic sense.



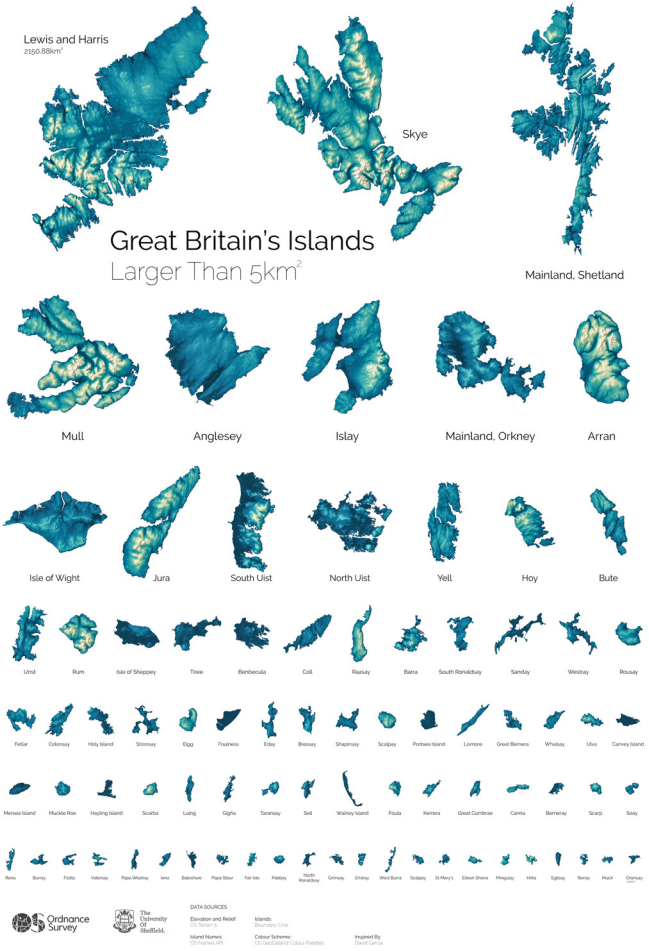
- TRANSPORT COSTS + FREIGHT. (UNRELIABLE). (NOT 2025)
- LACK of SUBSISTENCE — VERY FEW INDUSTRIES OTHER THAN TOURISM.
- FOCUS ON IMPROVING/ENCOURAGING DIGITAL SERVICE INDUSTRIES (AVOIDING FREIT).
- ~~LACK of~~ NOT ABLE TO RETAIN YOUNG PEOPLE. (POTENTIAL FOR DIG. & INNOVATIVES)
- DRINKING WATER. + SEWAGE.

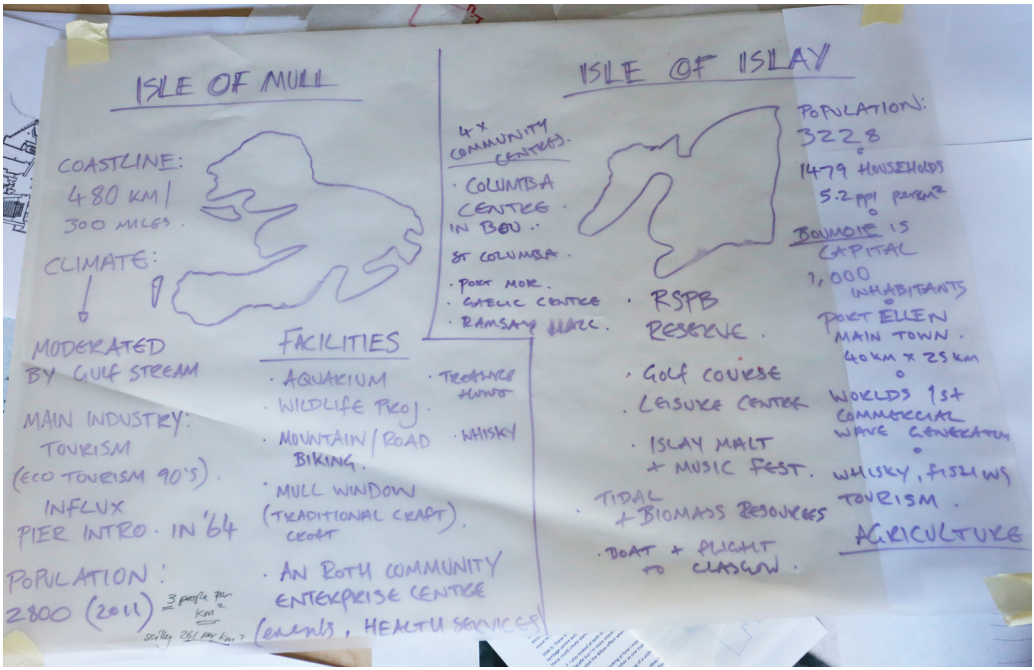
Islands in Context

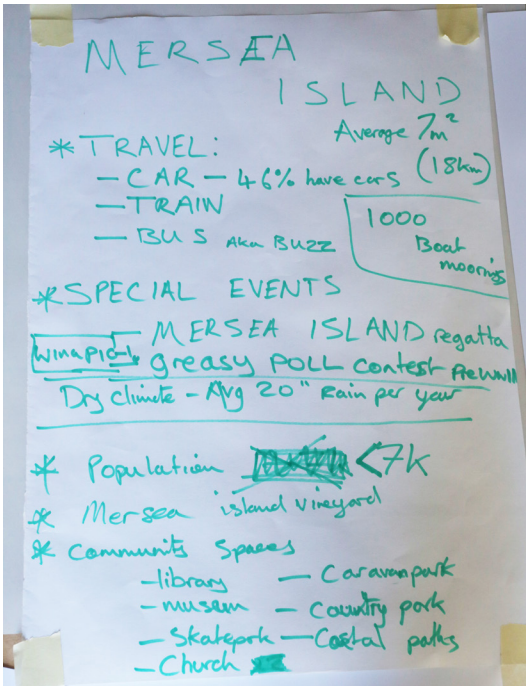
Based on research conducted jointly by the University of Sheffield and the Ordnance Survey, this workshop looked into the closest UK island neighbours to St Mary's in terms of land mass, length of coast as population. The study collated data from the 82 islands around the British coast that are larger than 5km2. St Mary's is 75th in the list at 6.56km, with closest neighbours in area being the Scottish islands of Scalpay and Eilean Shona. Looking at length of coastline, Mersea Island is a close relative, sitting in the Thames Estuary and connected to the coast via a tidal causeway. In terms of population, Mull, North and South Uist and Islay are close comparisons to St Mary's albeit with vastly different population densities. Geographically the Channel Islands, despite having very different population numbers, have similar characteristics of a group of islands connected together by sea. Alderney is closest to St Mary's in terms of area and population. Off the Brittany coast in France is the Molene archipelago, again with similar characteristics as a group of islands. Ushant being the largest and closest in characteristics to St Mary's.

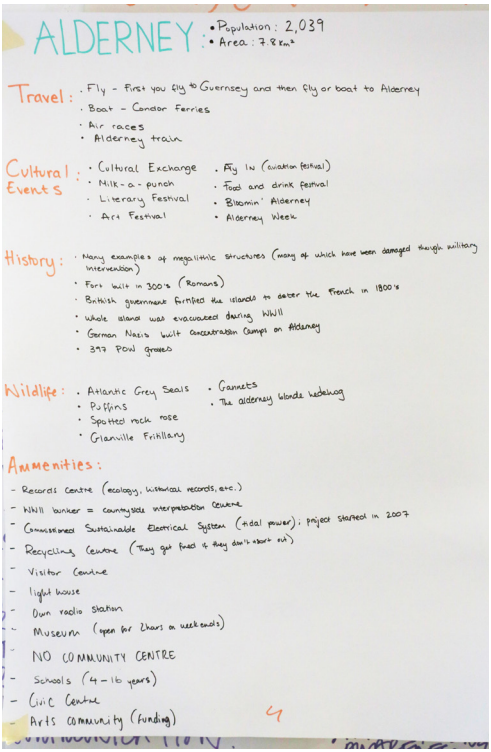
Students carried out group research into Mull, Islay, Alderney, Mersea Island, North and South Uist. Considering facilities, the local

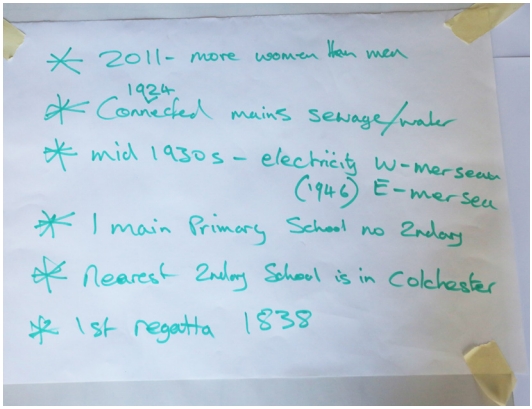
economy, transport and community infrastructure. This initial desktop research highlighted similar issues with transport, infrastructure and the balance of tourism vs local needs. Most islands also celebrated an abundance of wildlife both on land and in the sea providing opportunities for visitors to experience this.

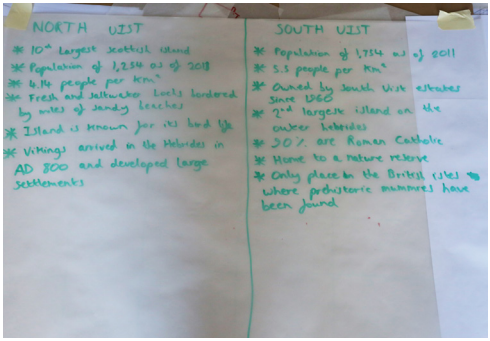



ISLE OF MULL
COASTLINE:
480 KM /
300 MILES.
CLIMATE:
MODERATED
BY GULF STREAM
MAIN INDUSTRY:
TOURISM
(ECO TOURISM 90'S).
INFLUX
PIER INTRO. IN '64
POPULATION:
2800 (2011)
FACILITIES
· AQUARIUM
· WILDLIFE PROJ.
· MOUNTAIN / ROAD BIKING.
· MULL WINDOW (TRADITIONAL CRAFT) CRAFT
· AN ROTH COMMUNITY ENTERPRISE CENTRE
· TREASURE HUNTS
· WHISKY
ISLE OF ISLAY
4 X COMMUNITY CENTRES.
· COLUMBA CENTRE IN BOW.
· ST COLUMBA
· PORT MOR.
· GAELIC CENTRE
· RAMSAY HALL.
· RSPB RESERVE.
· GOLF COURSE
· LEISURE CENTRE
· ISLAY MALT & MUSIC FEST.
· TIDAL & BIOMASS RESOURCES
· BOAT & FLIGHT TO GLASGOW.
POPULATION:
3228
1479 HOUSEHOLDS
5.2 PPL PER KM²
BOWMORE IS CAPITAL
1,000 INHABITANTS
PORT ELLEN MAIN TOWN.
40KM x 25 KM
WORLDS 1ST COMMERCIAL WAVE GENERATION
WHISKY, FISH, WS TOURISM.
AGRICULTURE


MERSEA ISLAND
Average 7m²
* TRAVEL:
– CAR – 46% have cars
– TRAIN
– BUS Aka BUZZ
(18km)
1000 Boat moorings
* SPECIAL EVENTS
MERSEA ISLAND regatta
WIMAPIC
greasy POLL contest
Dry climate - Avg 20" Rain per year
* Population <7k
* Mersea island Vineyard
* Community Spaces
– library
– museum
– Skatepark
– Church
– Caravan park
– Country park
– Coastal paths


ALDERNEY:
• Population: 2,039
• Area: 7.8km²
Travel:
· Fly - First you fly to Guernsey and then fly or boat to Alderney
· Boat - Condor Ferries
· Air races
· Alderney train
Cultural Events:
· Cultural Exchange
· Milk-a-punch
· Literary Festival
· Art Festival
· Fly In (aviation festival)
· Food and drink festival
· Bloomin' Alderney
· Alderney Week
History:
· Many examples of megalithic structures (many of which have been damaged through military intervention)
· Fort built in 300's (Romans)
· British government fortified the islands to deter the French in 1800's
· Whole island was evacuated during WWII
· German Nazis built Concentration Camps on Alderney
· 397 POW graves
Wildlife:
· Atlantic Grey Seals
· Puffins
· Spotted rock rose
· Glanville Fritillary
· Gannets
· The alderney blonde hedgehog
Ammenities:
- Records Centre (ecology, historical records, etc.)
- WWII bunker = countryside interpretation Centre
- Commissioned Sustainable Electrical System (tidal power), project started in 2007
- Recycling Centre (They get fined if they don't separate out)
- Visitor Centre
- light house
- Own radio station
- Museum (open for 2hours on weekends)
- NO COMMUNITY CENTRE
- Schools (4-16 years)
- Civic Centre
- Arts community (Funding)


* 2011- more women than men
* 1934 Connected mains sewage/water
* mid 1930s - electricity W-mersea (1946) E-mersea
* 1 main Primary School no 2ndary
* Nearest 2ndary School is in Colchester
* 1st regatta 1838

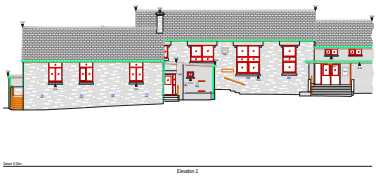

NORTH UIST
* 10th Largest Scottish island
* Population of 1,234 as of 2011
* 4.4 people per km²
* Fresh and saltwater Lochs bordered by miles of sandy beaches
* Island is known for its bird life
* Vikings arrived in the Hebrides in AD 800 and developed large settlements
SOUTH UIST
* Population of 1,754 as of 2011
* 5.5 people per km²
* Owned by South Uist estates since 1850
* 2nd largest island on the outer hebrides
* 30% are Roman Catholic
* Home to a nature reserve
* Only place in the British Isles where prehistoric mummies have been found

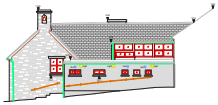
Round I.
Black Rk.
Lion
W. Withen
Brewer
White I.
E. Withen
Menawore
Camber Rocks
Pernagie I.
Pernagie Pt.
Goldenball
St. Helens
Plumb I.
Rushy Pt.
Roundrock Pt.
Merrick
Tinklers Pt.
Mackerel Rock
Abbey Ruin
Kettle
Kettle Pt.
Piper Hole
Norwethal I.
St. Helens Pool
Tean
Middle Tn.
St. Martins
St. Martins Bay
Shipman Hd.
Pan
Gimble Pt.
Olivers Ca.
Gimble B.
Crows I.
Old Man
Shaking Rk.
Lower Tn.
Bread &
Carn
Old Grimsby Har.
Foremans I.
Hedge Rock
Tean Sd.
Laurence Bay
Hell B.
Hangman I.
Cellar
Tresco
Lit. Cheese Rk.
Higher Tn.
Cuckoo
Palace
Gt. Cheese Rk.
St. Martins Flats
Maths Ledge
Higher Bay
Popplestone B.
Grimsby Har.
Dolphins Tn.
Parks Ledge
Cruthers Pt.
Church
Bryher
Trevallies Rk.
Borough
Lizard Pt.
Rock
Guthers I.
Lit. Gan
Moon Rk.
Old Pt.
Green B.
Tresco Flats
Lake
Great Bay
Crab Le.
Appletree Pt.
Pentle Rk.
Craggyellis
New Grounds
Gerwick
S. Cony B.
Works Pt.
Abbey Ruins
Skirt I.
Crow Flats
Castle Beyer
Colvel Rocks
Bags Ledge
Green I.
Comes
Crow Bar
Flat Ledge
Yellow Rk.
Long Crew
Queens Ledge
Puffin I.
Crow Pt.
Mare Ledges
Crow Beacon
Bar Pt.
Bar Pt.
Paper Ledge
Mare
Tuisidgen I.
Samson
Flee Rk.
Flat Ledge
Vincent Ledge
Pots Ledge
Pendrathen Pier
E. Terengoves
Watermill
Stony I.
Carn
Cove
White I.
Nut
Cods Ledge
Creeb
Shirk Pt.
Green I.
Up. Terengoves
Holvear
New Qu
Southward Well
Newford
Carn Morval Pt.
Newhouse Stone
The Road
Holyvale
Gt. Minalto
Admiralty Ledge
Taylors I.
Mount Todden
Lit. Minalto
Porthloo B.
St. Marys
Longstone
Normandy
Newford I.
Old Man
Mt. Flagin
Carnfriers
Peak
Rat I.
Sallakey
Pool
Carn Thomas
Permellin
Scar
Star Castle
Hugh Town
Old Cas.
Old Town
Stavel Pt.
The Hugh
Porthmellon
Church
Old Tn. Bay
Giants Cas.
Blue Carn
Church Pt.
Eel Bank
Woolpack Pt.
Beacon
Wras
Porthcressa B.
Bartholomew Ledge
Gilstone Ledges
Bristolmans Ledge
Carriestarne
Gt. Smith
Teneers Ledge
St. Marys Sound
Pollard
Jolly Rk.
Peninnis Head
Annet Hd.
Spaniards Ledge
Spanish Ledge
Smith Sound
Broworth Pt.
Porth Hellick B.
Cow
Kittern
Bow
Annet
Burnt I.
Gugh
Carnhimbra Pt.
Priglis B.
Light Ho.
St. Agnes
Bean C.
Wetnose
Cuckolds Carn

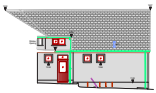
Section 3

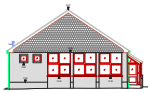
Outcomes

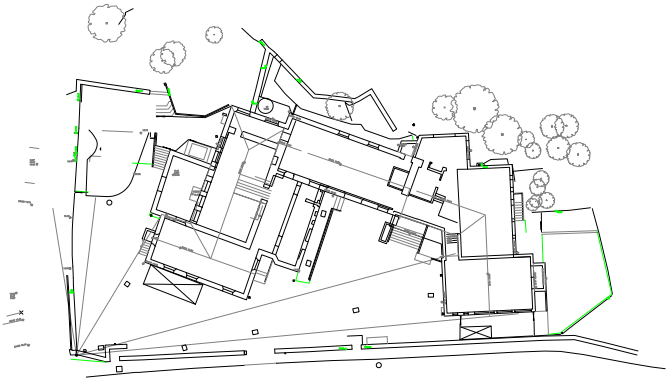
Site Investigations









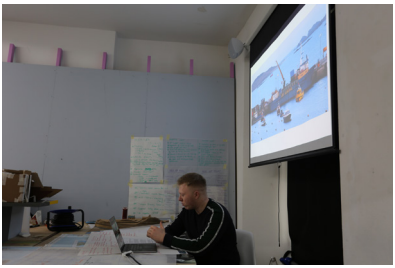


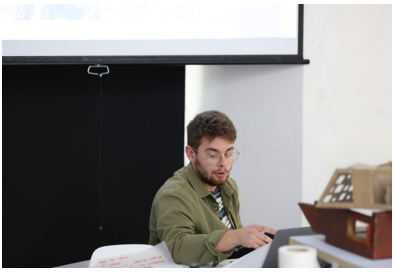
Students carried out desktop site research and presented this to peers and colleagues. A collective resource of information on demographics, geography, geology, climate, history, topography and culture was compiled and shared.

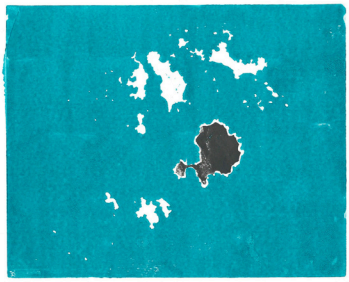
The next pages illustrate the students' initial responses to the site through sketches models and drawings, testing ideas and concepts.

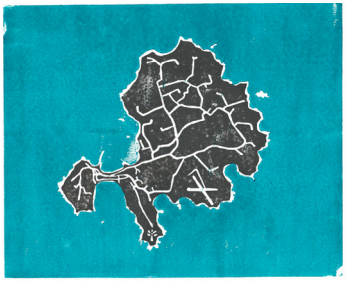


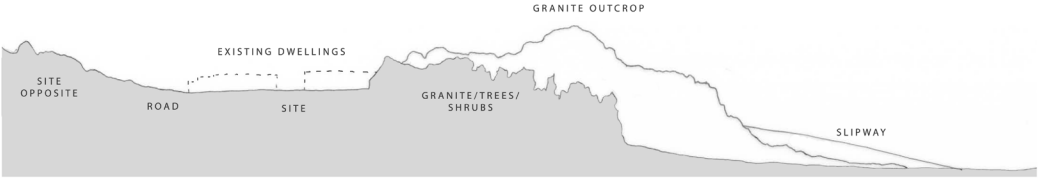




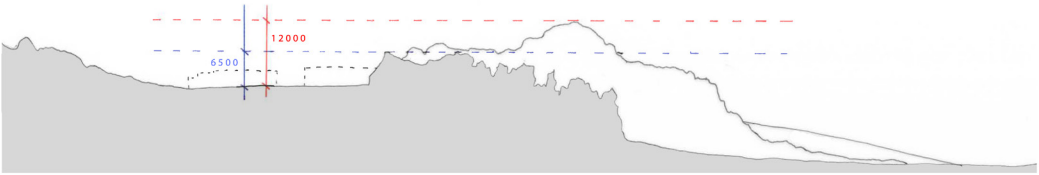



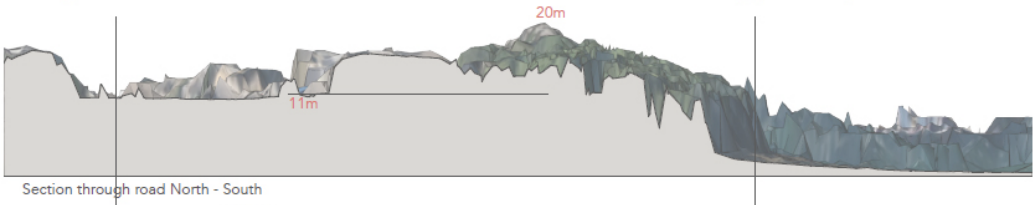




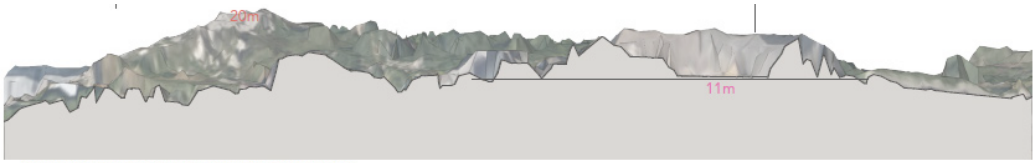


SITE SECTION - NORTH TO SOUTH

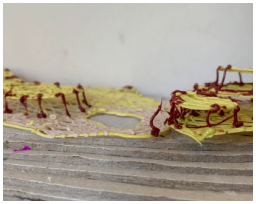


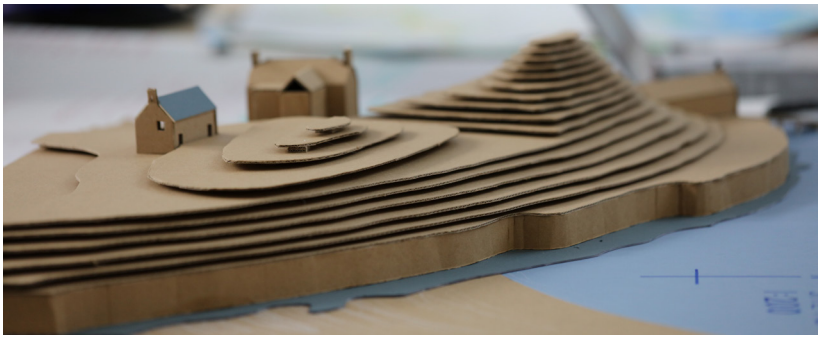


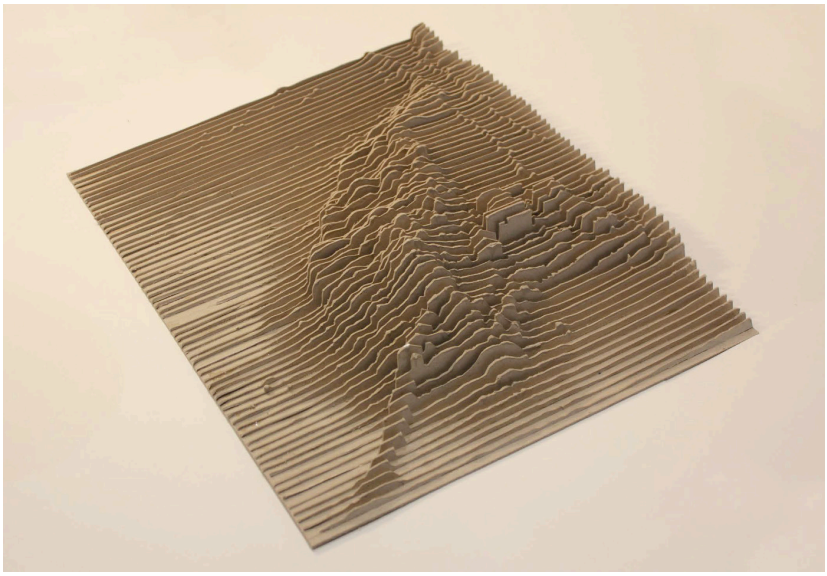
Section through road North - South

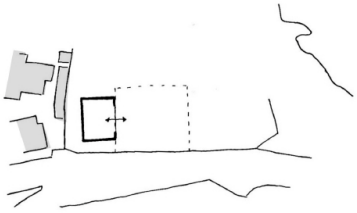


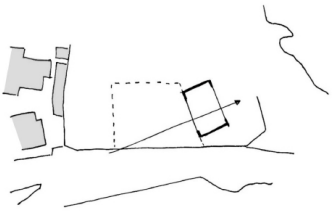
Section through road and across site East - West

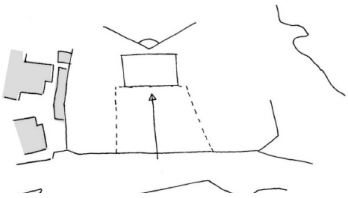


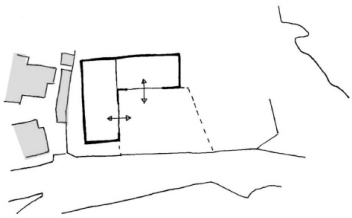


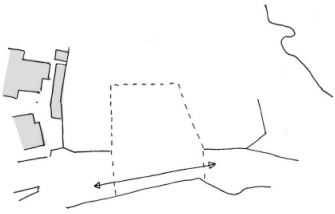


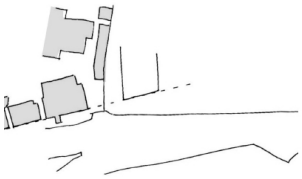


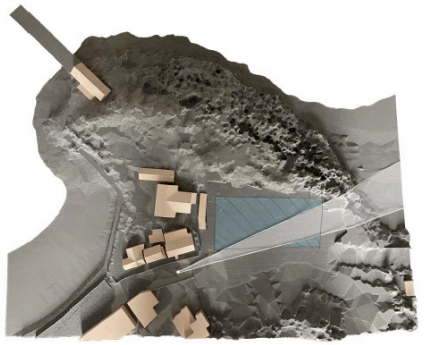


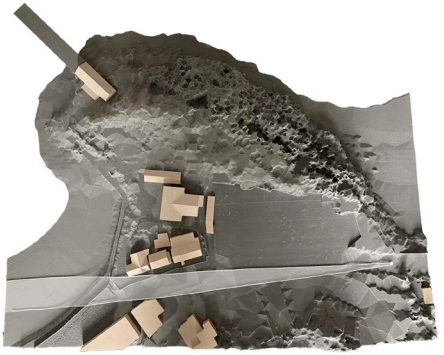


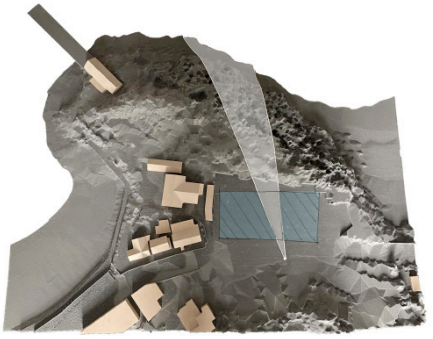


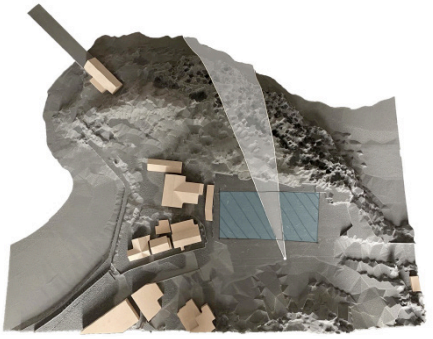


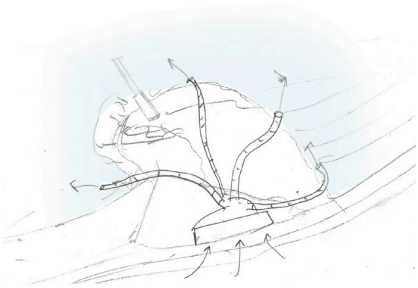


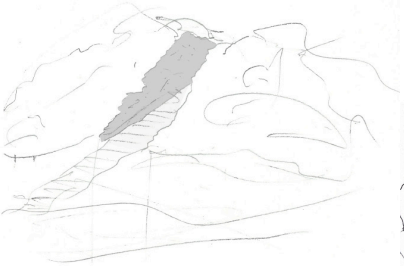


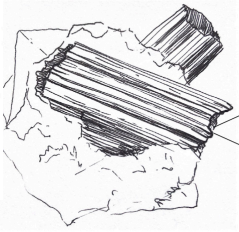


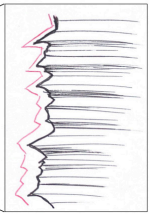






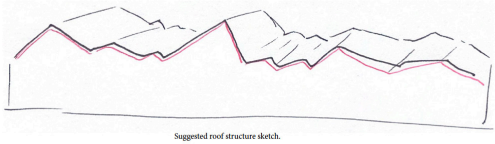




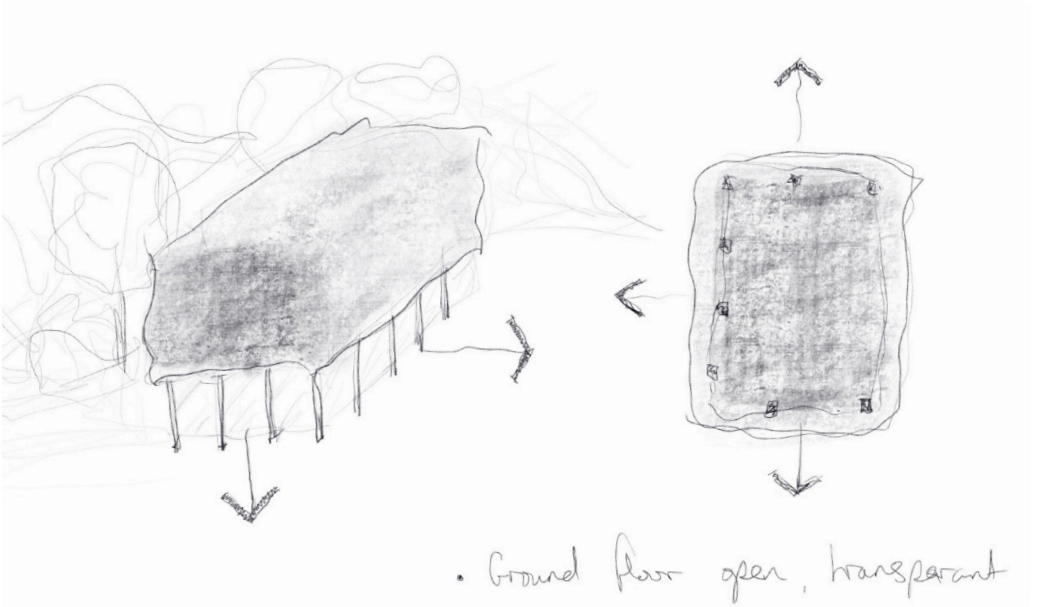


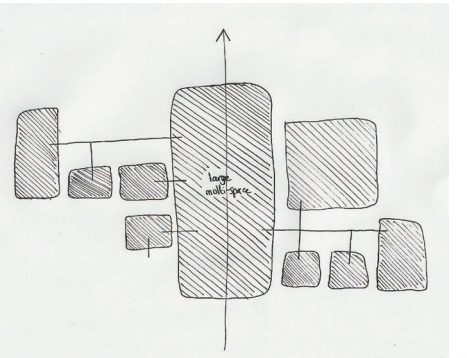
Tourmaline and quartz crystals that can be found in granite.

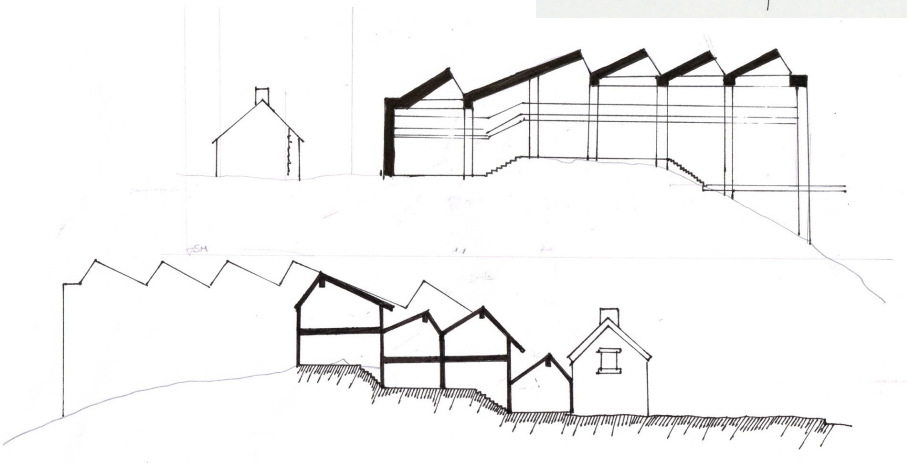
Edge of tourmaline crystal
creates the angular roof shape.



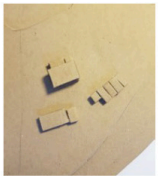
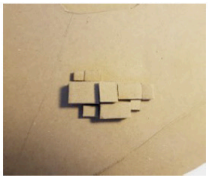
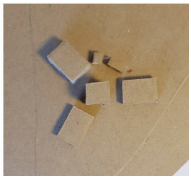
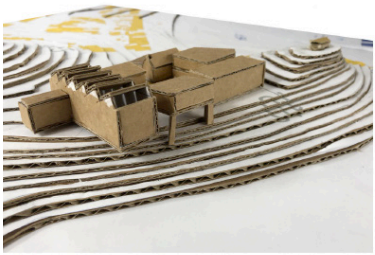
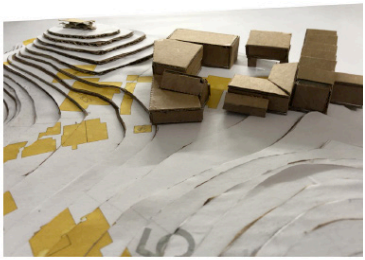
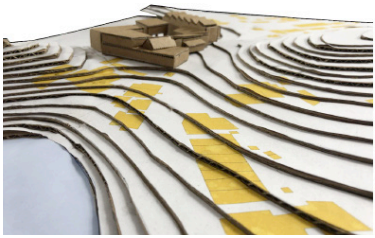
Suggested roof structure sketch.

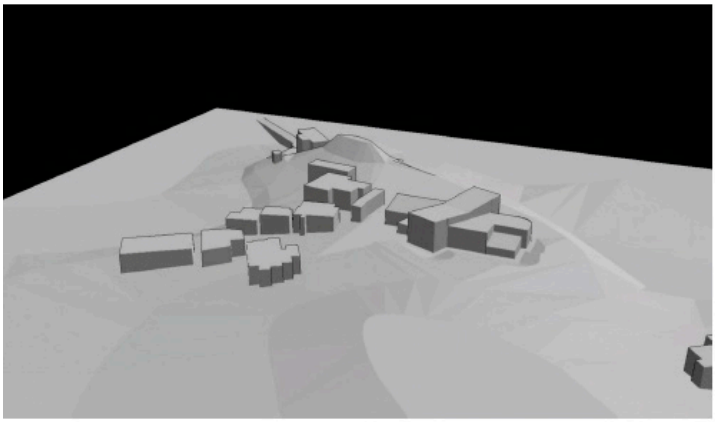

• Ground floor open, transparent

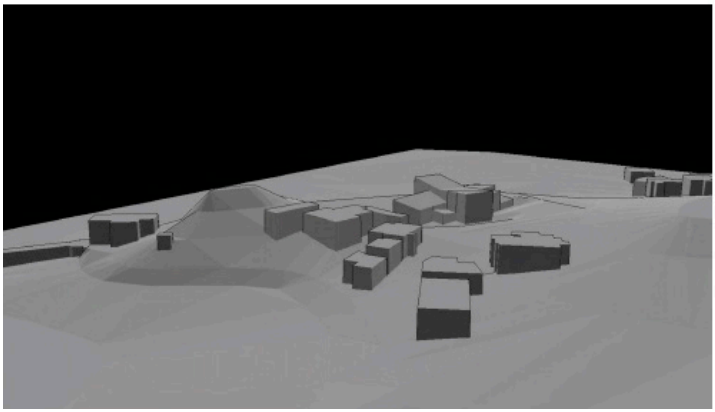

large
multi-space

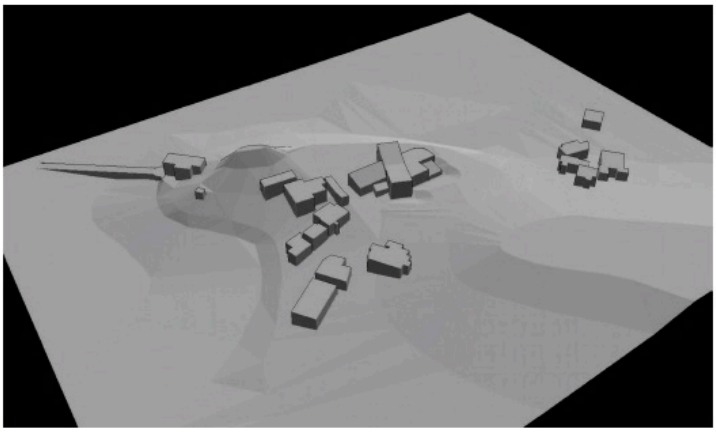


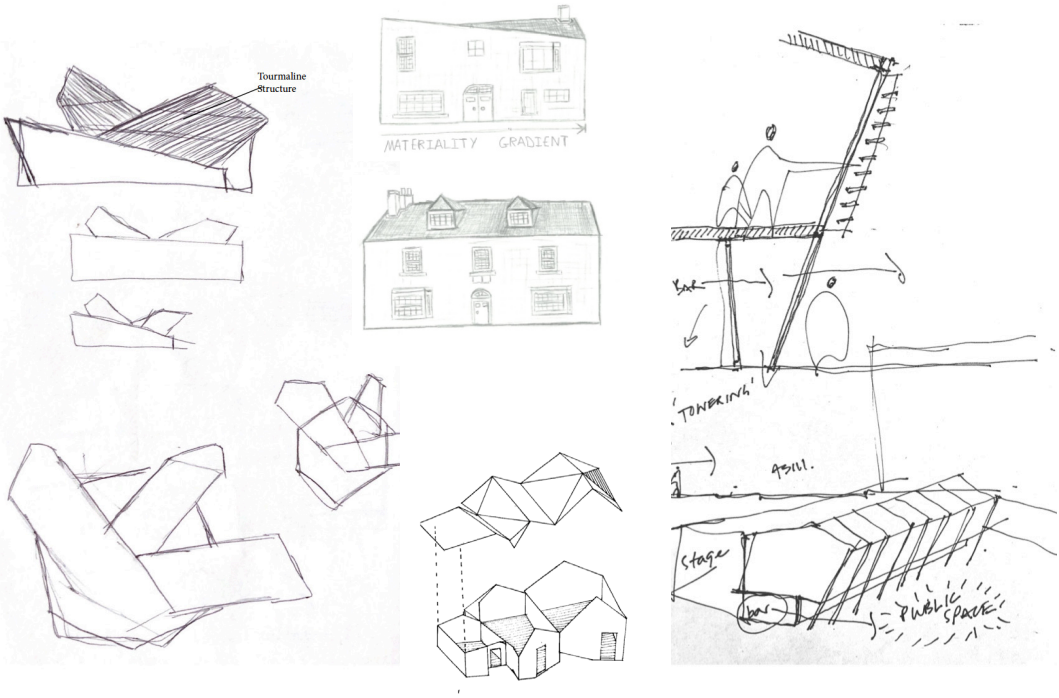


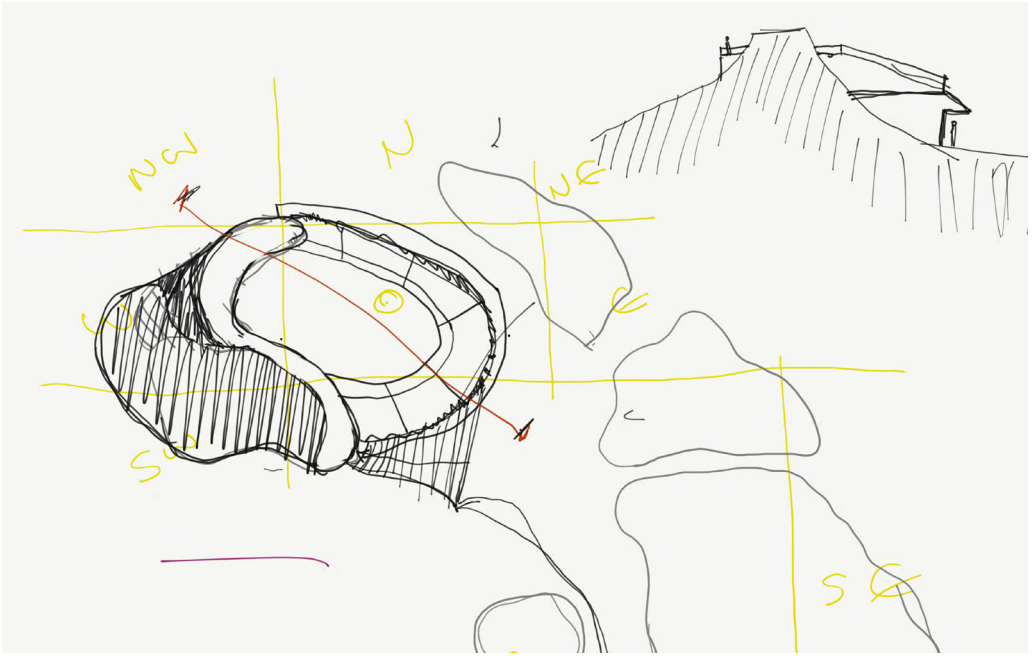








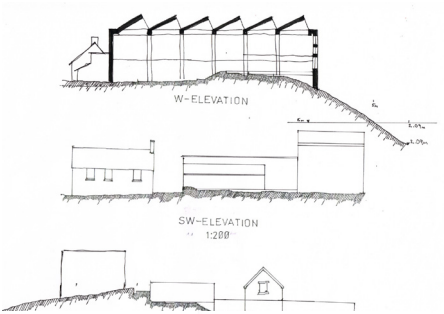


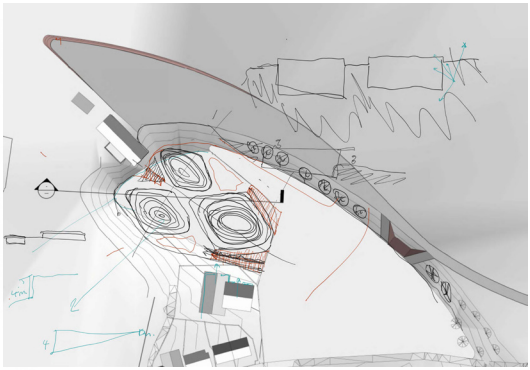


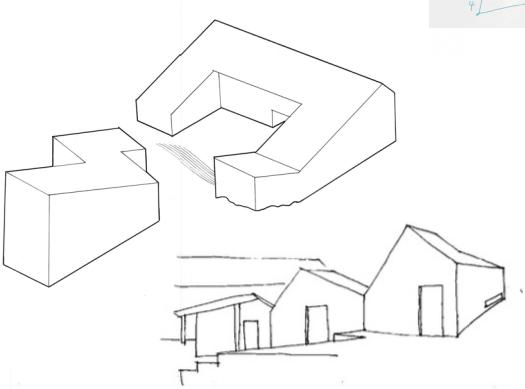


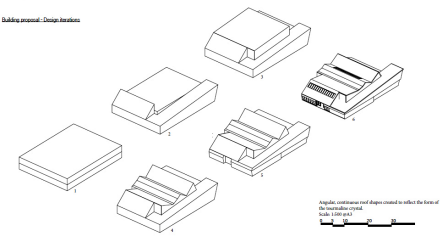

Tourmaline
Structure
MATERIALITY GRADIENT
TONBRIDGE
STAGE
PUBLIC SPACE

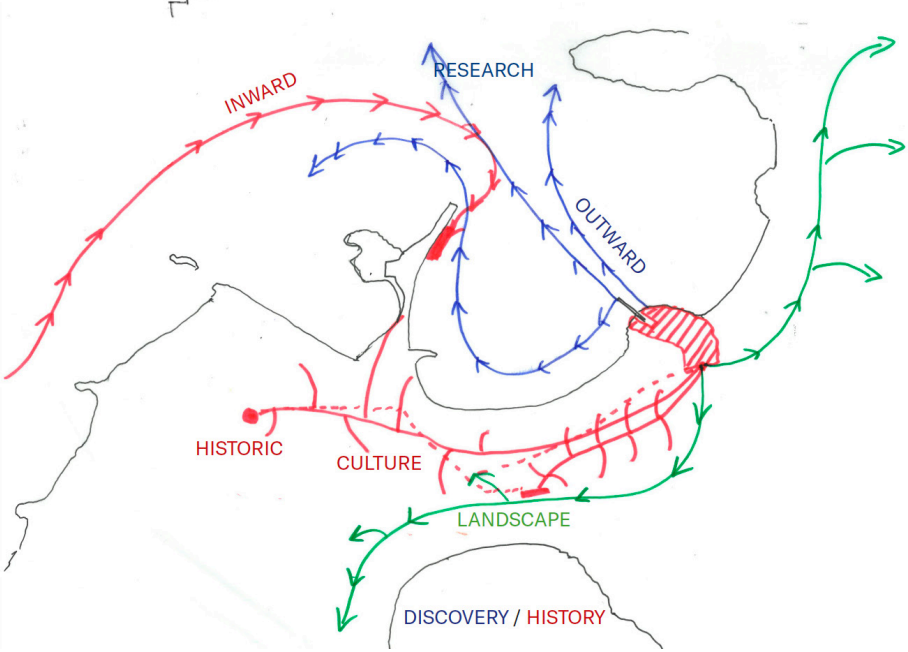

NW
N
NE
W
E
SW
SE

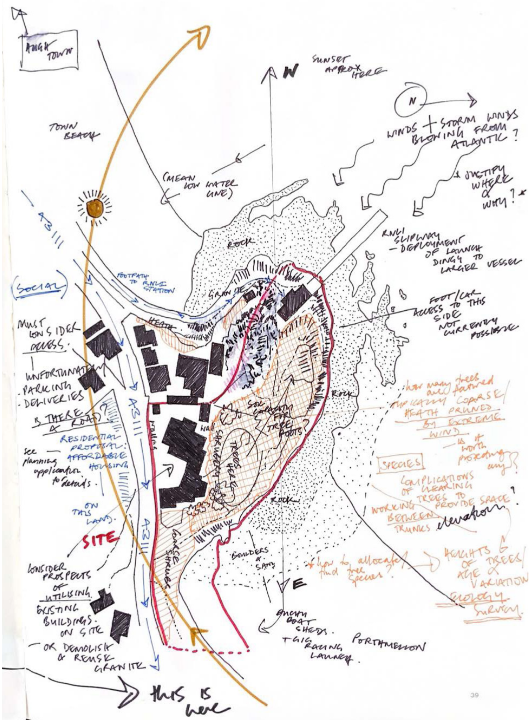

W-ELEVATION
SW-ELEVATION
1:200

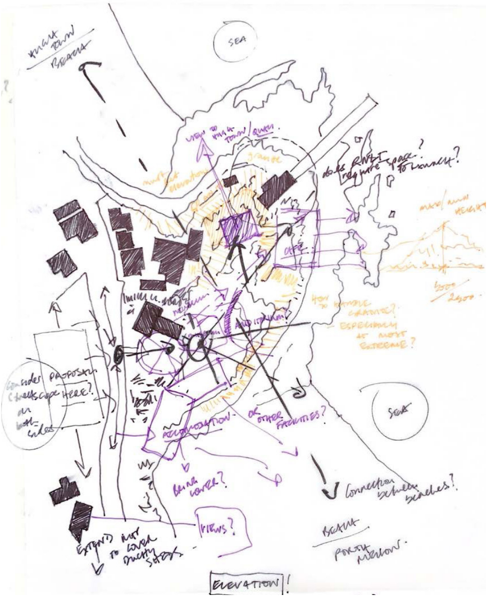


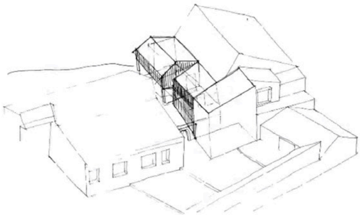


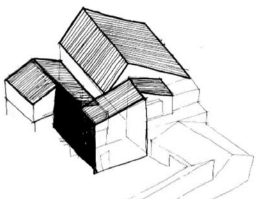

1. Proposal
Building proposal - Design iterations
Angular, continuous roof shapes created to reflect the form of the Australian crystal.
Scale: 1:200 pick3

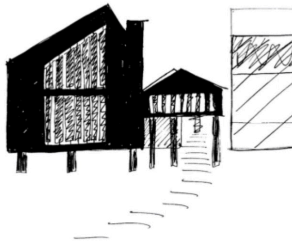

INWARD
RESEARCH
OUTWARD
HISTORIC
CULTURE
LANDSCAPE
DISCOVERY / HISTORY

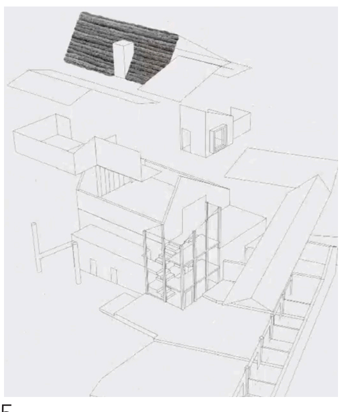

TOWN BEACH
SUNSET APPROX HERE
N
WINDS + STORM WINDS BLOWING FROM ATLANTIC?
JUSTIFY WHERE & WHY?
(MEAN LOW WATER LINE)
ROCK
SOCIAL
FOOTPATH TO RNLI STATION
RNLI SLIPWAY - DEPLOYMENT OF LAUNCH DINGY TO LARGER VESSEL
FOOT/CAR ACCESS TO THIS SIDE NOT CURRENTLY POSSIBLE
MUST CONSIDER ACCESS.
UNFORTUNATELY PARKING DELIVERIES
IS THERE A ROAD?
A3111
SPECIES
COMPLICATIONS OF CLEARING TREES TO PROVIDE SPACE WORKING BETWEEN TRUNKS
elevation
SITE
HEIGHTS OF TREES/ AGE & VARIATION
ECOLOGY SURVEY
CONSIDER PROSPECTS OF UTILISING EXISTING BUILDINGS ON SITE
OR DEMOLISH & REUSE GRANITE
BOULDERS & SAND
E
PORTHMELLON
this is here

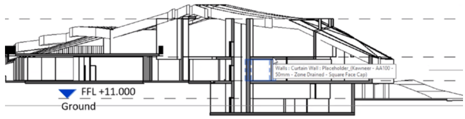

SEA
SEA
VIEWS?
BRING LOWER?
Connection between beaches?
BEACH
PORTHMELLON
ELEVATION



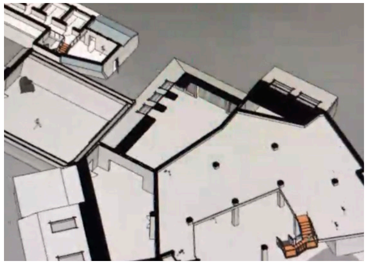


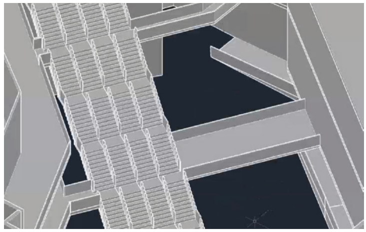


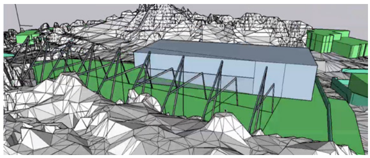


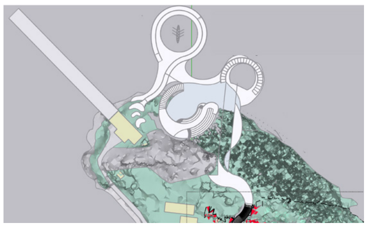

FFL +11.000
Ground

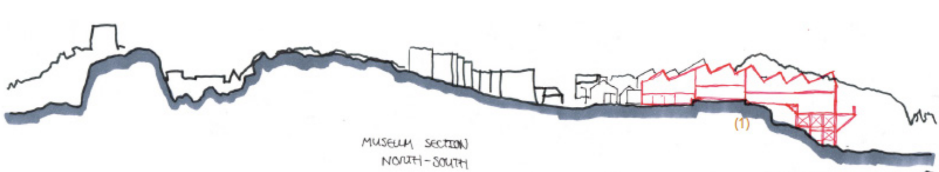

St Mary's Pool
Porthmellon Industrial Estate







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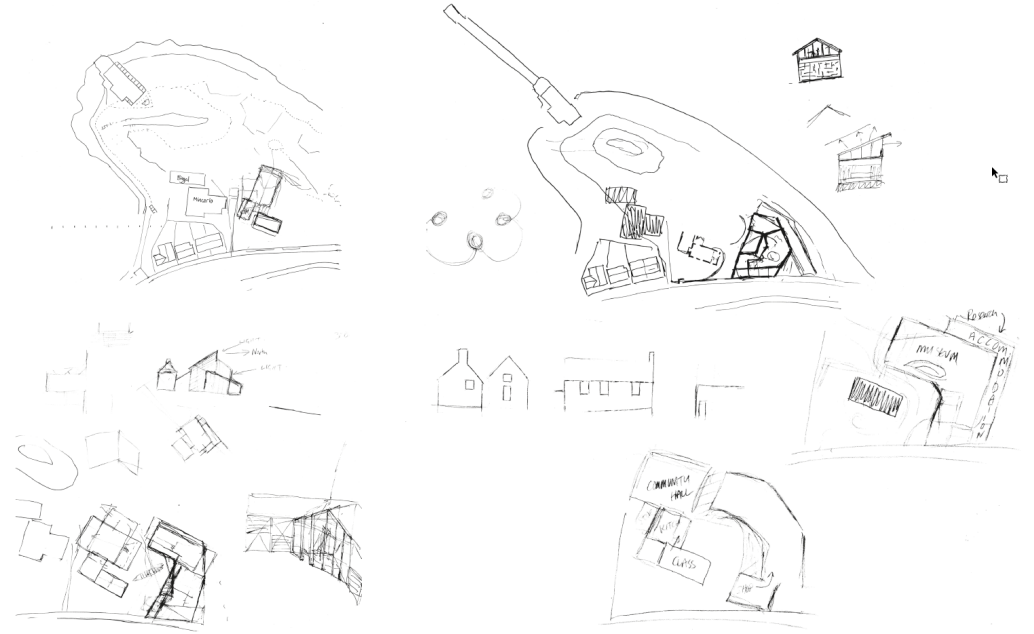
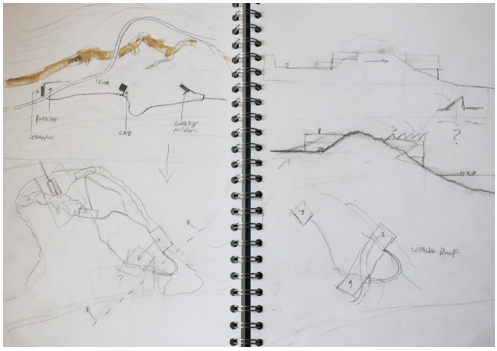
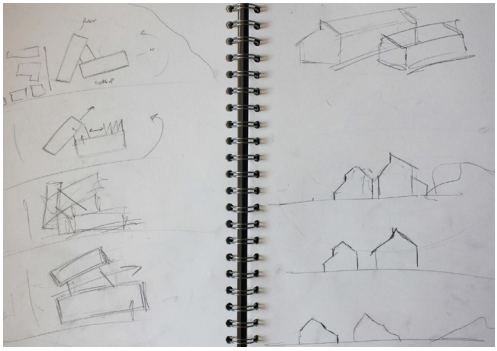
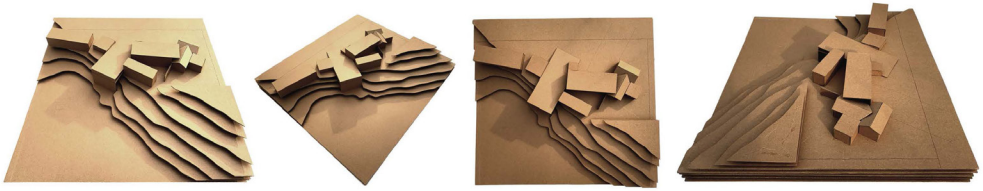
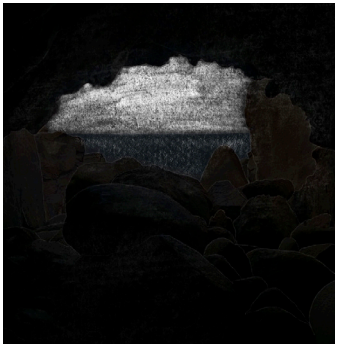
NORTH-SOUTH
(1)

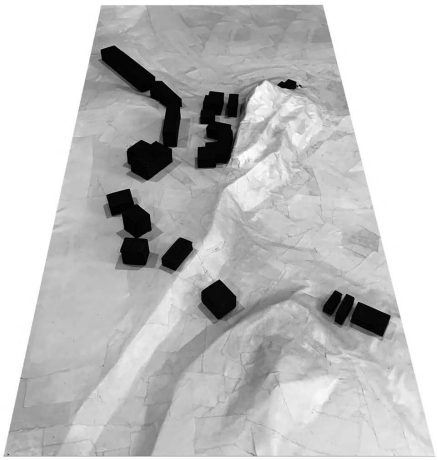

COMMUNITY HALL
CLASS

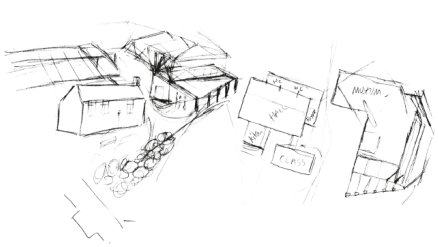


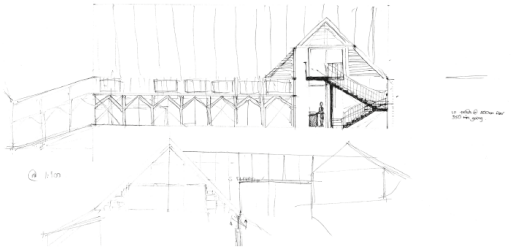


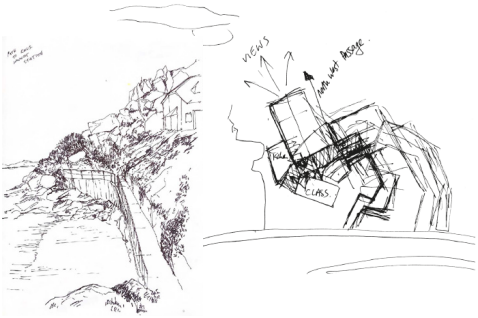


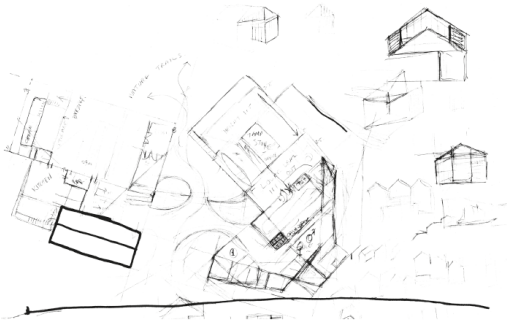








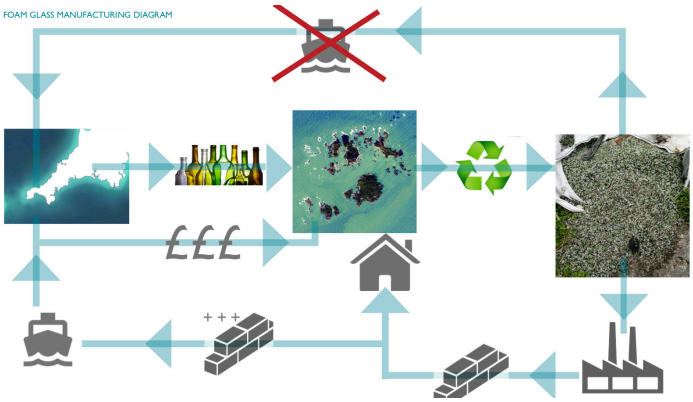

VIEWS
MAIN ENTRANCE
CLASS



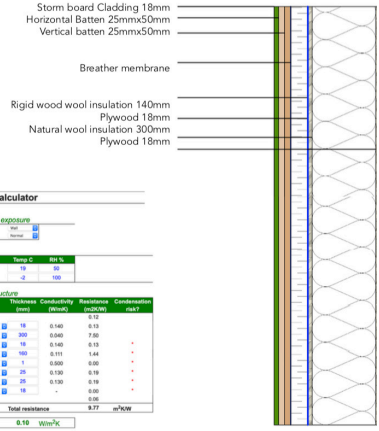
Sustainable Design

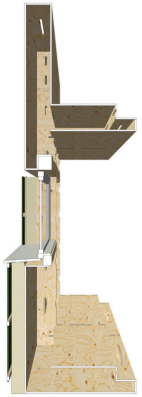
A new building in an Area of Outstanding Natural Beauty and a spectacular natural setting must be constructed and operated to have minimal environmental impacts, making use of natural resources and renewable energy. The Smart Islands programme is working to develop sustainable infrastructure and this project could form part of that agenda.

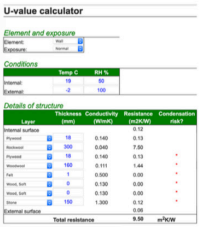
Students investigated a number of renewable energy sources including tidal, waves, wind, geothermal and solar. As with the Smart Islands programme, solar was the most prevalent choice as it is easily installed with little negative impacts. A trial tidal scheme is underway in neighbouring Ushant in Brittany albeit with much stronger tidal flows.



Type	U-Value (Part L) standard W/(m²K)	Passivhaus Standard W/(m²K)
Wall	0.28	0.10 to 0.15
Pitched roof – insulation at ceiling level	0.16	0.10 to 0.15
Pitched roof – insulation at rafter level	0.18	0.10 to 0.15
Flat roof or roof with integral insulation	0.18	0.10 to 0.15
Floor	0.22	0.10 to 0.15







U-value calculator

Element and exposure

Element: Wall
Exposure: Normal

Conditions

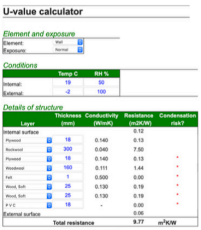
	Temp C	RH %
Internal:	19	55
External:	-2	100

Details of structure

Layer		Thickness (mm)	Conductivity (W/mK)	Resistance (m2K/W)	Condensation risk?
Internal surface				0.12	
Plywood	☑	18	0.140	0.13	
Rockwool	☑	300	0.040	7.50	
Plywood	☑	18	0.140	0.13	*
Woodwool	☑	100	0.111	1.44	*
Felt	☑	1	0.500	0.00	*
Wood, Soft	☑	0	0.130	0.00	*
Wood, Soft	☑	0	0.130	0.00	*
Stone	☑	150	1.300	0.12	*
External surface				0.06	
		Total resistance		9.50	m²K/W

U-VALUE 0.11 W/m²K

Granite Clad Wall



U-value calculator

Element and exposure

Element: Wall
Exposure: Normal

Conditions

	Temp C	RH %
Internal:	19	55
External:	-2	100

Details of structure

Layer		Thickness (mm)	Conductivity (W/mK)	Resistance (m2K/W)	Condensation risk?
Internal surface				0.12	
Plywood	☑	18	0.140	0.13	
Rockwool	☑	300	0.040	7.50	
Plywood	☑	18	0.140	0.13	*
Woodwool	☑	100	0.111	1.44	*
Felt	☑	1	0.500	0.00	*
Wood, Soft	☑	25	0.130	0.19	*
Wood, Soft	☑	25	0.130	0.19	*
P V C	☑	18	-	0.00	*
External surface				0.06	
		Total resistance		9.77	m²K/W

U-VALUE 0.10 W/m²K

Storm board Clad Wall

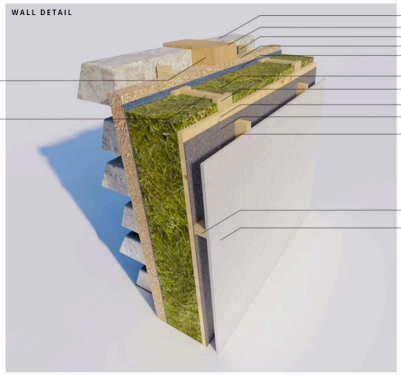
" Integration of these renewable energy sources and the opportunity for storage within the proposal would also support the Smart Islands programme being introduced to Scilly.

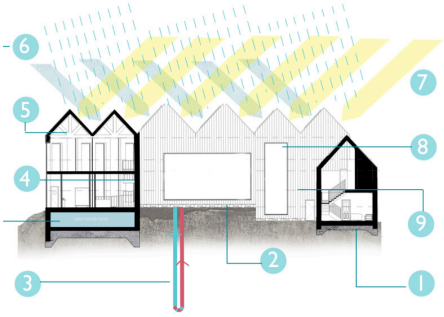
Smart Islands is a major programme of interconnected projects that aims to support the community on Scilly in moving towards a low-carbon future with sustainable energy, water, sewage and waste management.

This is what the project aims to achieve:

- *Reduce electricity bills by 40% by 2025 – this will be achieved by reducing how much energy we use and utilising renewable energy produced on Scilly, distributed through an innovative community venture and local energy tariff*
- *Generate 40% of the Islands' electricity by renewables by 2025 – through a combination of solar, energy from waste and potentially wave, wind or tidal*
- *Transition to 40% of vehicles being low carbon or electric by 2025 – installing infrastructure to support electric vehicles*
- *Manage waste and sewage locally and sustainably - by treating food and other organic wastes in an energy from waste plant on St Mary's*
- *Raise aspirations and provide opportunities links with Five Islands School, provide training and job opportunities, create links with Universities*
- *Become an environmentally aware and responsible tourism destination – building new momentum and adding credibility to Scilly's identity and positioning*

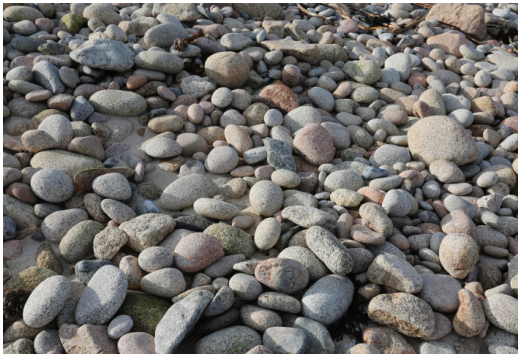
https://www.scilly.gov.uk/business-licensing/smart-islands"
Will Beckwith

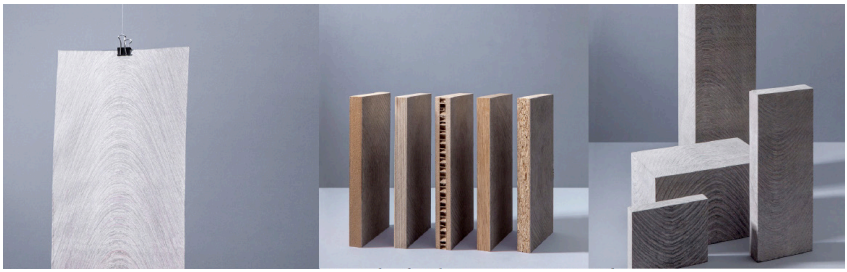




Revive lost skills and industries to combine with technologies of the future.

Transmitting ethical codes through the architecture and within the centre itself in order to create continuity for further exploration throughout the community. Reigniting specific skills and rituals that have been imbedded within the islands throughout history.





Other challenges include minimising the draw on existing water supply and sewerage networks. Students investigated rainwater harvesting systems, grey water recycling, localised waste water treatment solutions including 'living machines'. Most buildings operated using natural ventilation and daylighting with some students investigating technology such as Tesla roof tiles and on site storage.

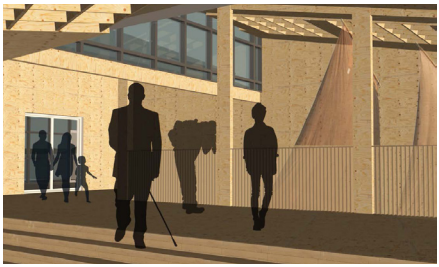
Technical detailing focussed on fabric energy efficiency, with some proposed build systems achieving high thermal and airtightness levels, close to Passivhaus standards using wood fibre insulation to create an all timber building solution. Students investigated the on site generation of materials from waste including demolition rubble, crushed glass, ocean plastics (storm board) newspaper and stone. Some proposals include cost benefit analysis of using waste material rather than transporting it from the islands.

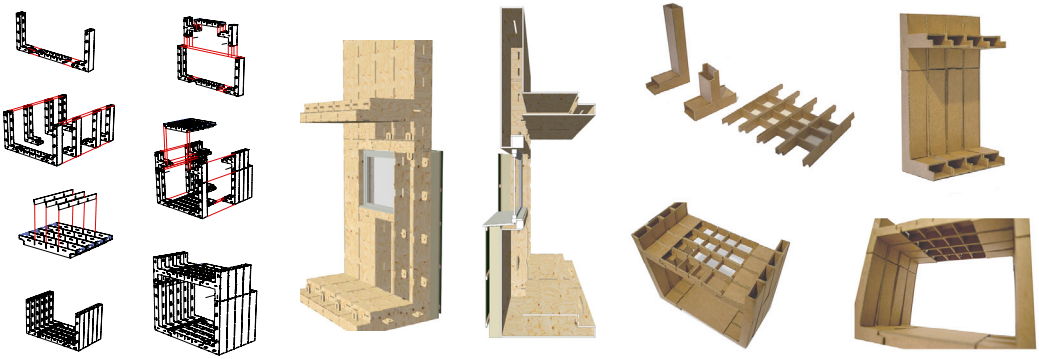
Building proposals included low impact natural, reclaimed and recycled materials. These include : Seaweed thatch; Shell-crete; Sand-lime bricks; Hemp-crete; Bamboo; Mycelium and flax.

Round I.
Black Rk.
Lion
W. Withen
Brewer
White I.
E. Withen
Menawore
Camber Rocks
Pernagie I.
Pernagie Pt.
Goldenball
St. Helens
Plumb I.
Rushy Pt.
Roundrock Pt.
Merrick
Mackerel Rock
Abbey Ruin
Tinklers Pt.
Kettle
Shipman Hd.
Pan
Kettle Pt.
Piper Hole
Norwethal I.
St. Helens Pool
Tean
Old Man
Middle Tn.
St. Martins
St. Martins Bay
Gimble Pt.
Olivers Ca.
Gimble B.
Crows I.
Old Grimsby Har.
Foremans I.
Shaking Rk.
Lower Tn.
Hedge Rock
Tean Sd.
Laurence Bay
Hell B.
Hangman I.
Cellar
Tresco
Palace
Lit. Cheese Rk.
Gt. Cheese Rk.
St. Martins Flats
Moths Ledge
Higher Tn.
Higher Bay
Bryer
Popplestone B.
Grimsby Har.
Dolphins Tn.
Parks Ledge
Cruthers Pt.
Church
Trevallies Rk.
Borough
Lake
Lizard Pt.
Rock
Guthers I.
Moon Rk.
Old Pt.
Green B.
Lit. Gan
Great Bay
Tresco Flats
Crab Le.
Appletree Pt.
Pentle Rd.
Craggyellis
New Grounds
Gerwick
S. Cony B.
Works Pt.
Abbey Ruins
Skirt I.
Crow
Flats
Castle Beyer
Colvel Rocks
Green I.
Comes
Crow Bar
Flat Ledge
Yellow Rk.
Bags Ledge
Long Crew
Queens Ledge
Puffin I.
Crow Pt.
Mare Ledges
Crow Beacon
Bar Pt.
Bar Pt.
Samson
Paper Ledge
Mare
Tuisidgen I.
Flee Rk.
Plat Ledge
Vincent Ledge
Pots Ledge
Pendrathen Pier
Et. Terengoves
Watermill
Carn
White I.
Stony I.
Nut
Cods Ledge
Creeb
Cove
Up. Terengoves
Holvear
Shirk Pt.
Green I.
Southward Well
Newford
Carn Morval Pt.
Newhouse Stone
Holyvale
Gt. Minalto
The Road
Admiralty Ledge
Taylors I.
Mount Todden
Lit. Minalto
Porthloo B.
St. Marys
Longstone
Normandy
Newford I.
Old Man
Carnfriers
Mt. Elagin
Peak
Rat I.
Sallakey
Pool
Carn Thomas
Permellin
Star Castle
Scar
The Hugh
Hugh Town
Old Cas.
Old Town
Stavel Pt.
Giants Cas.
Porthmellin B.
Church
Old Tn. Bay
Blue Carn
Church Pt.
Eel Bank
Woolpack Pt.
Beacon
Wras
Gilstone Ledges
Bartholomew Ledge
Bristolmans Ledge
Carriestarne
Gt. Smith
Teneers Ledge
St. Marys Sound
Pollard
Jolly Rk.
Peninnis Head
Spaniards
Spanish Ledge
Broworth Pt.
Periglis B.
Cow
Kittern
Bow
Smith Sound
Burnt I.
Annet
St. Agnes
Gugh
Carnhimbra Pt.
Priglis B.
Light Ho.
Bean C.
Wetnose
Cuckolds Carn

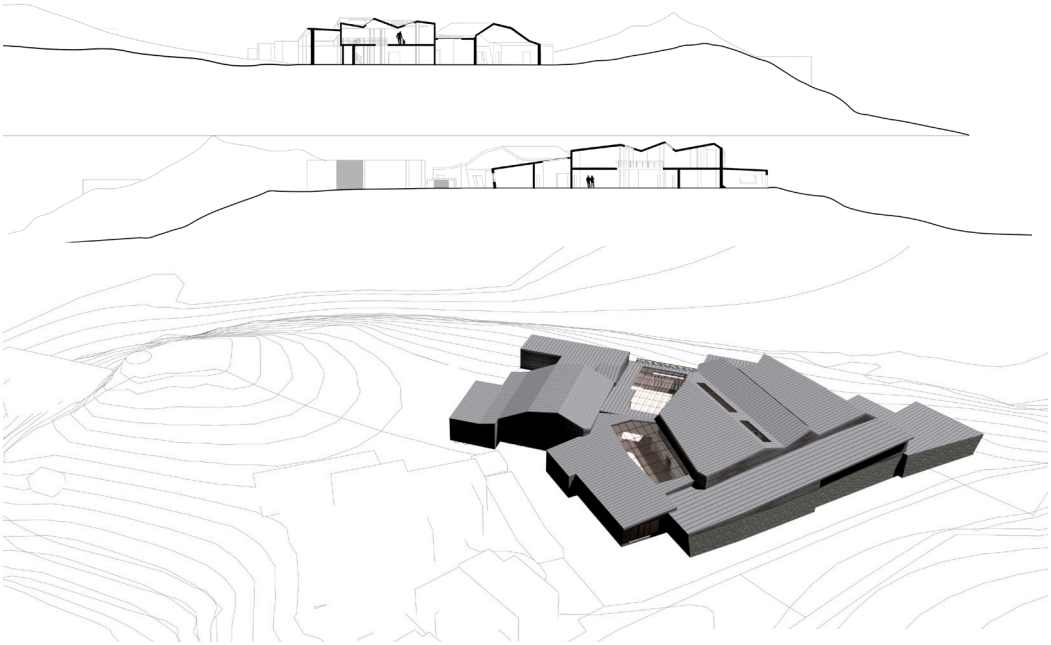
Student projects

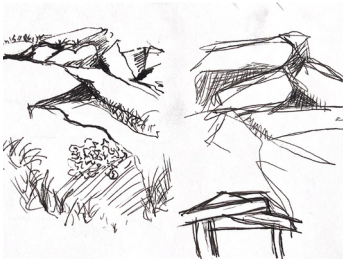
Connor Murley



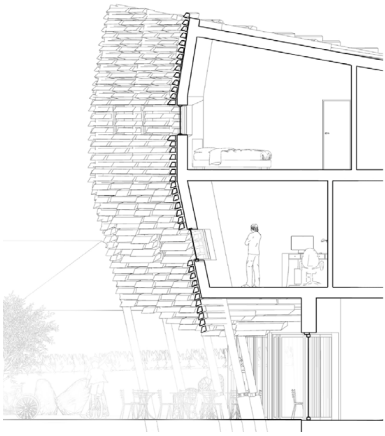


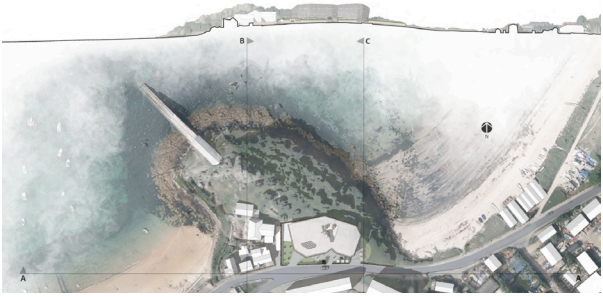
Agne Kazlauskaite

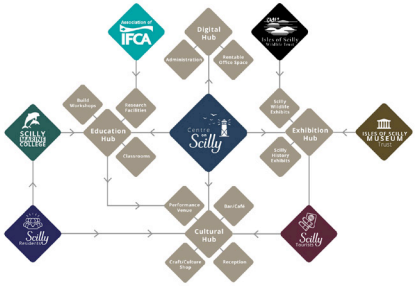


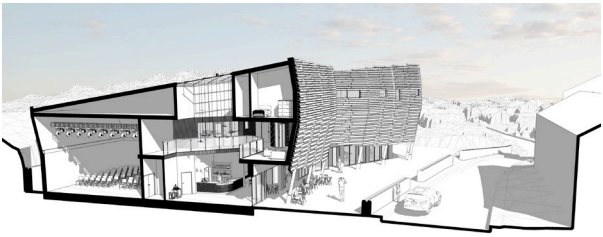


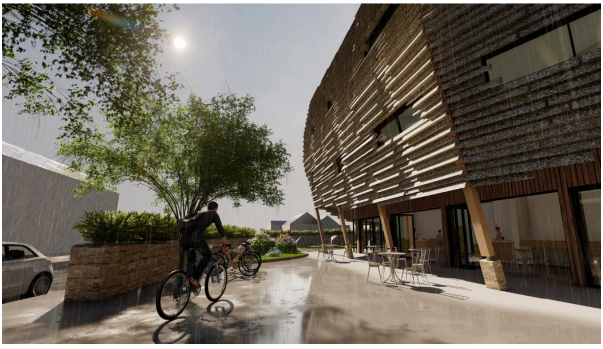
Jason Richards



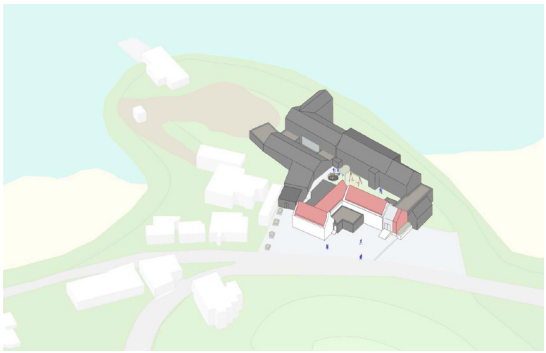


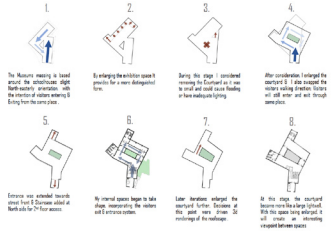


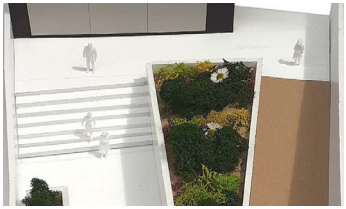


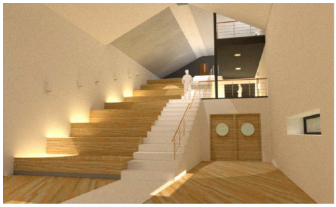


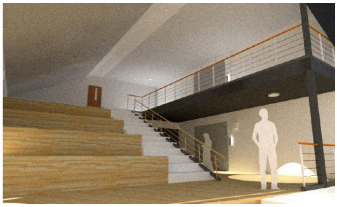
Adam Elliott

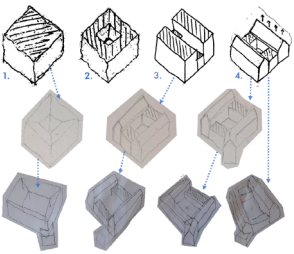




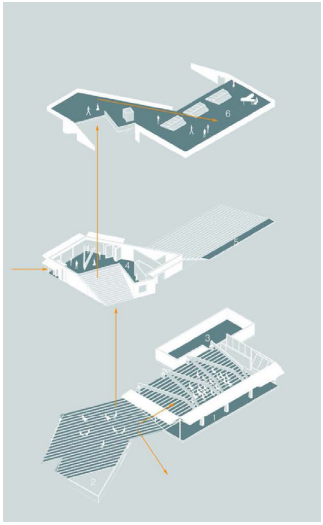




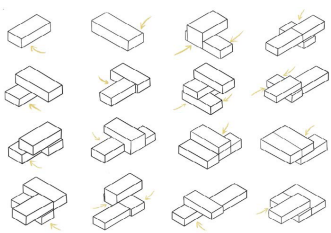


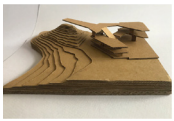


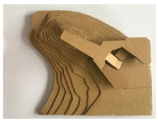
Joel Stockton

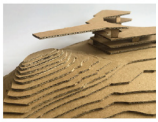


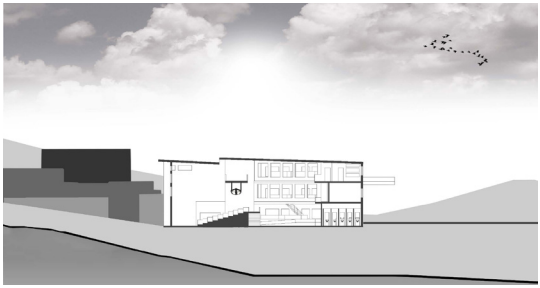
Monika Gedvilas











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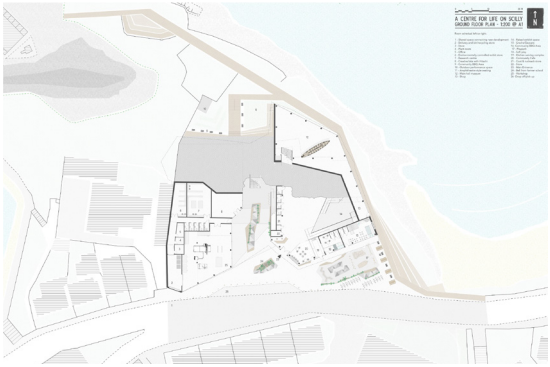

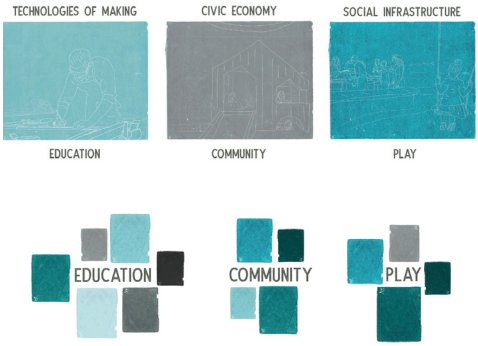

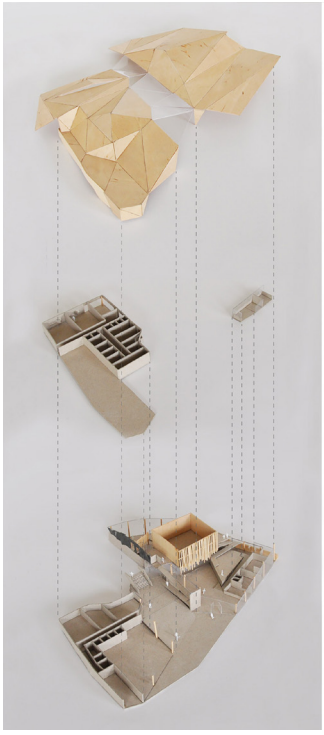

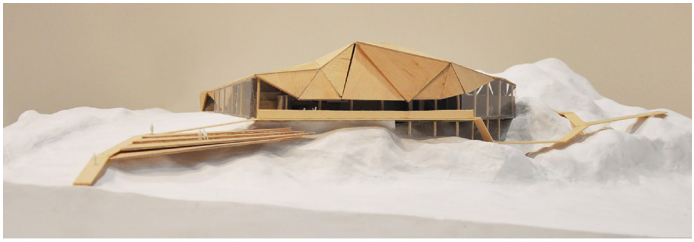

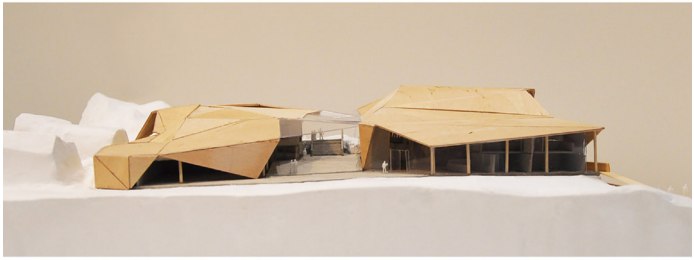

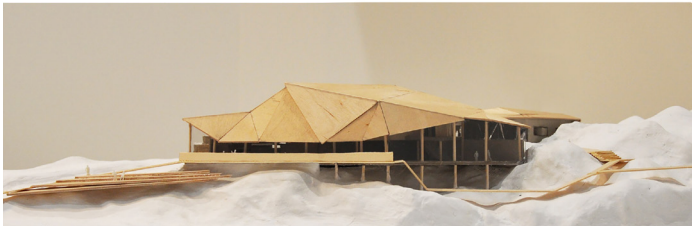

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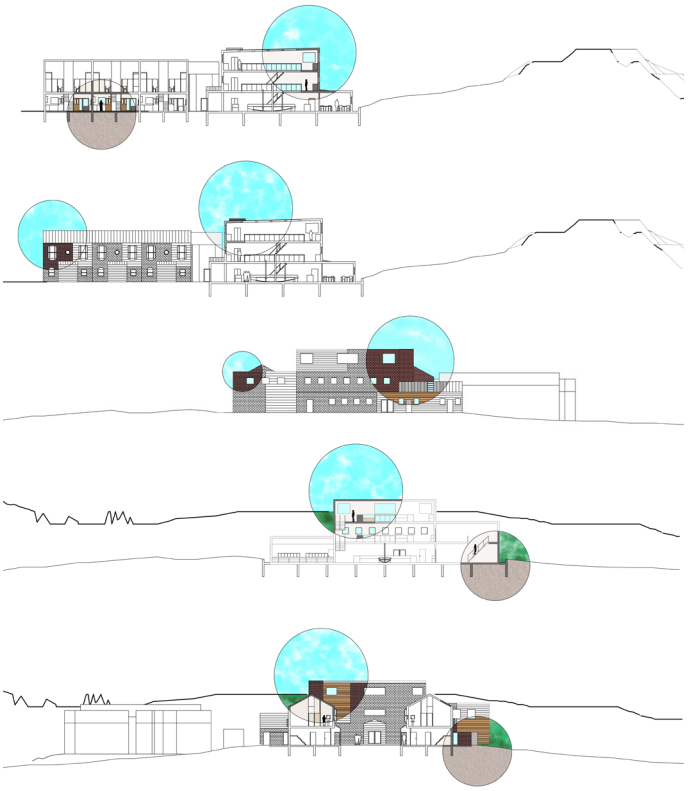

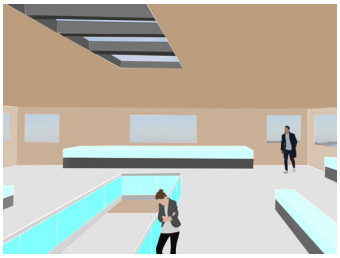

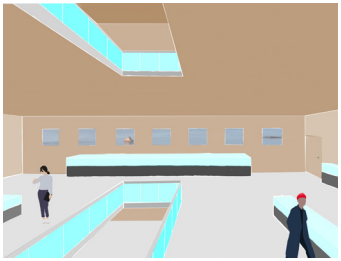

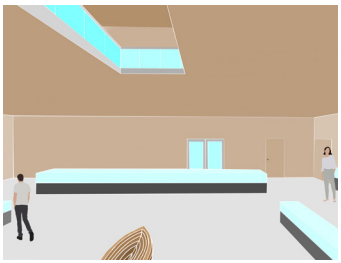

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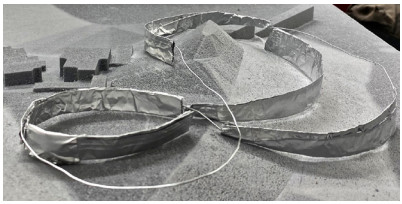

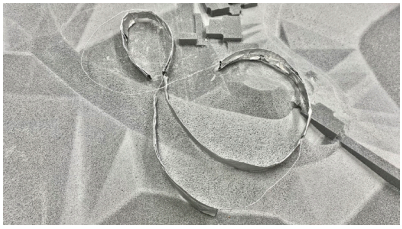

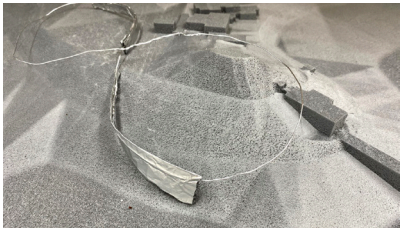

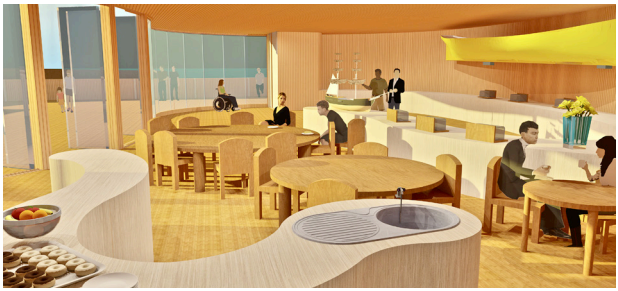

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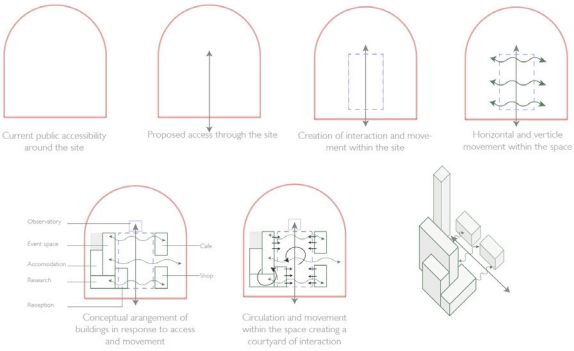
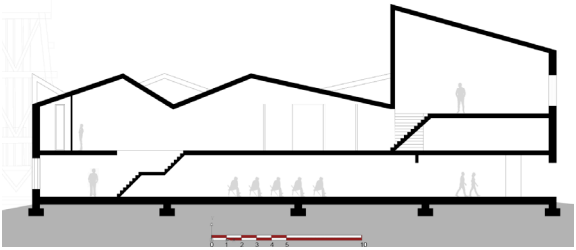
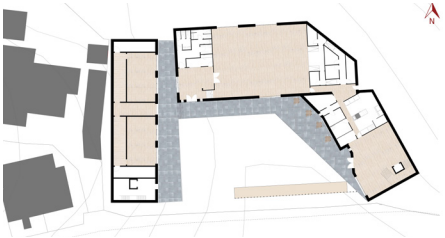

Current public accessibility around the site
Proposed access through the site
Creation of interaction and movement within the site
Horizontal and verticle movement within the space
Observatory
Event space
Accomodation
Research
Reception
Cafe
Shop
Conceptual arangement of buildings in response to access and movement
Circulation and movement within the space creating a courtyard of interaction





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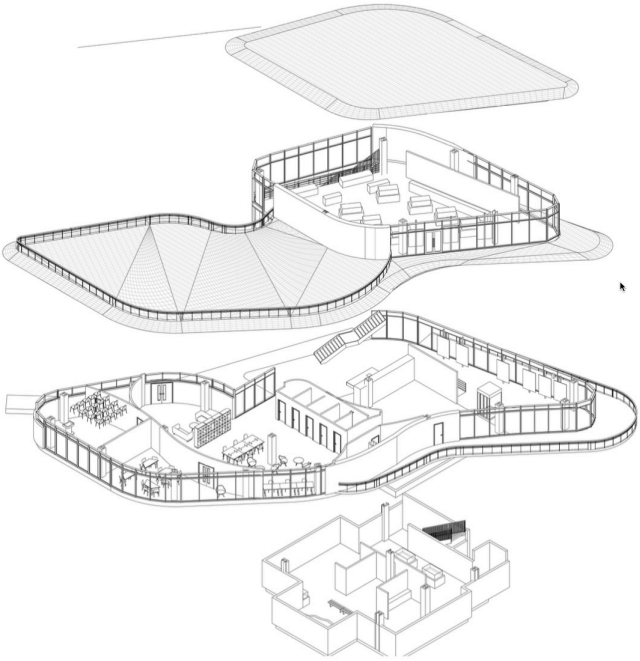
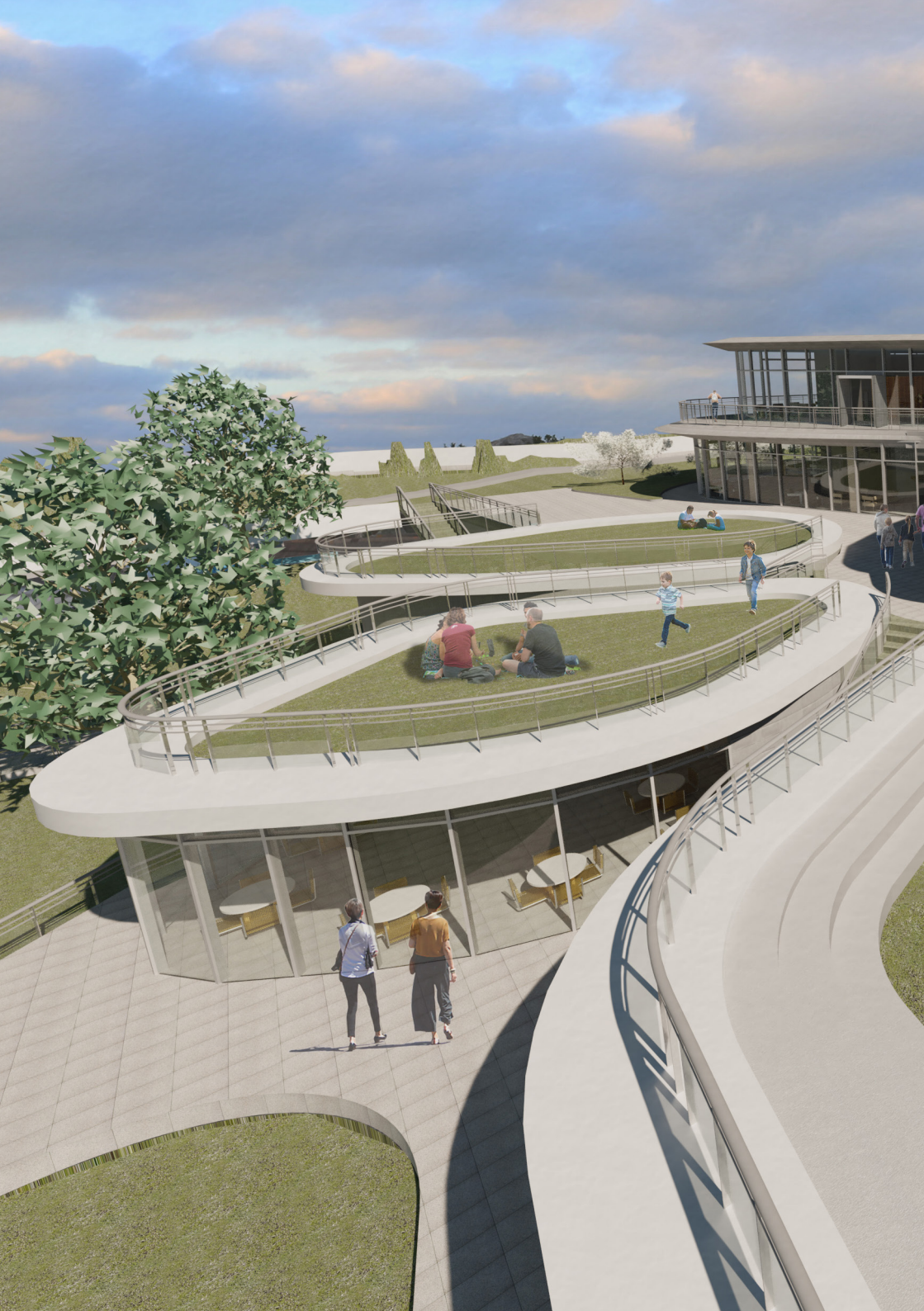
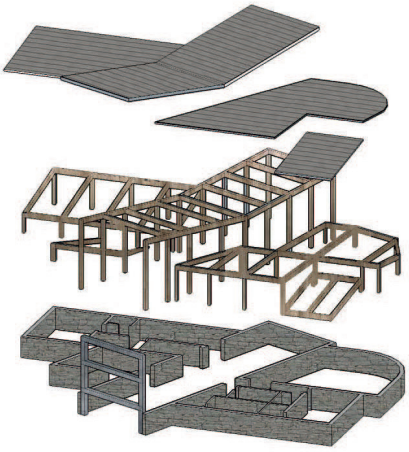
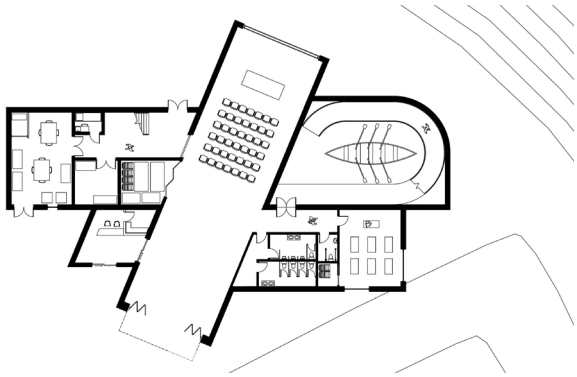
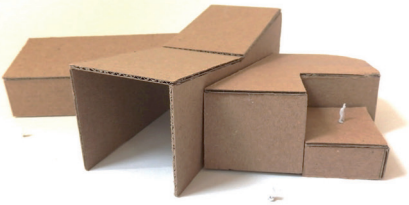




Cal Turner







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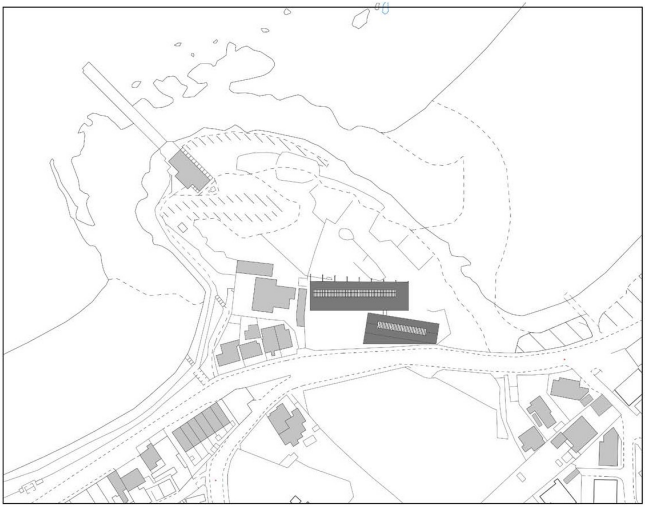

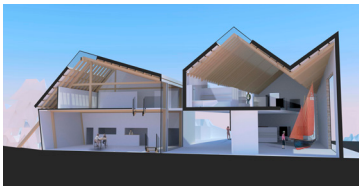

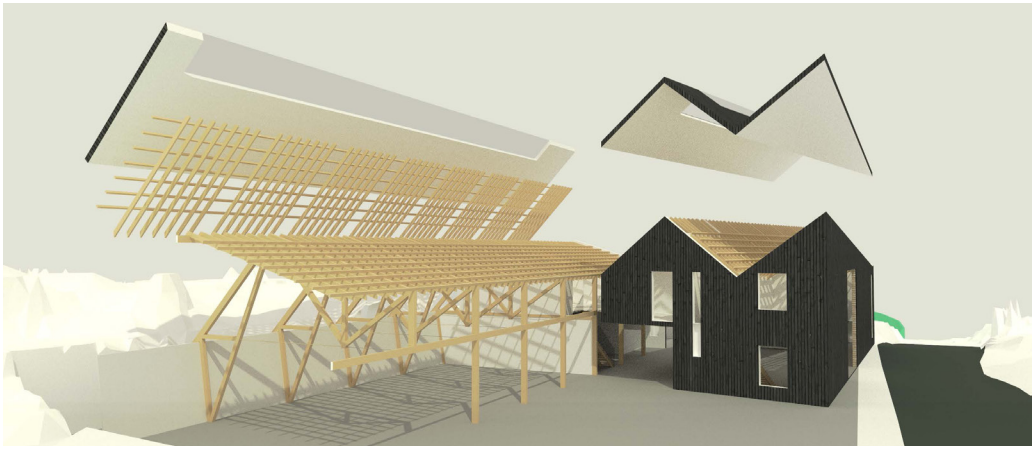

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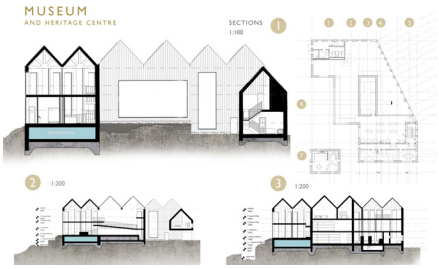

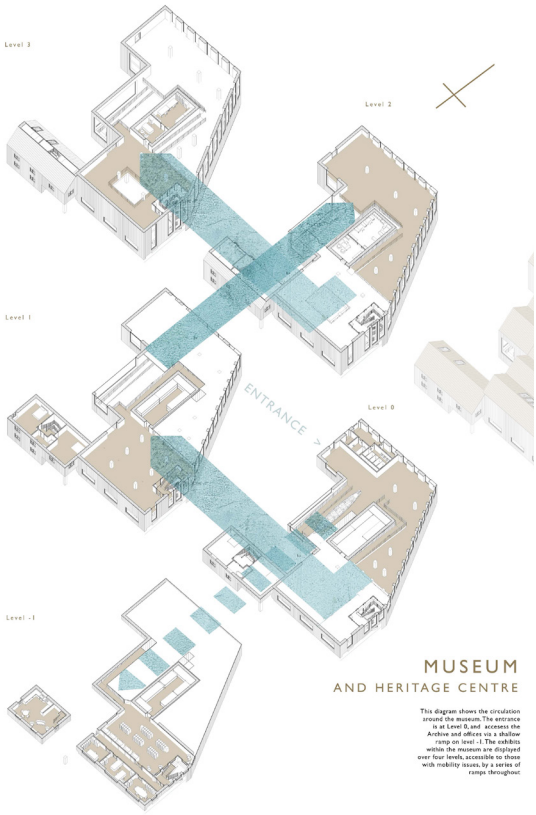

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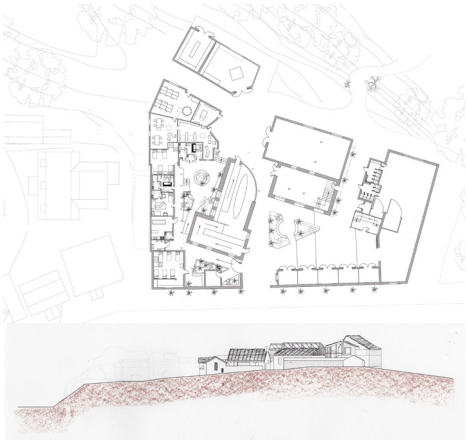

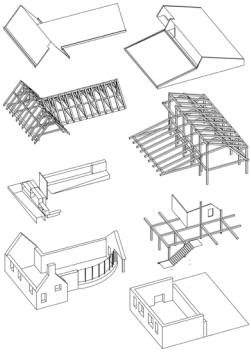

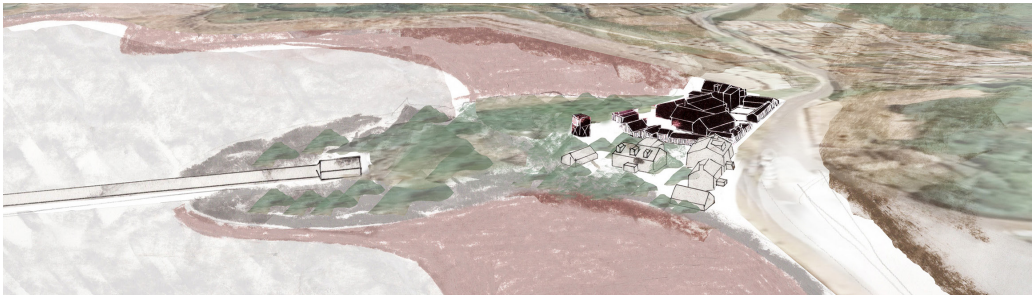

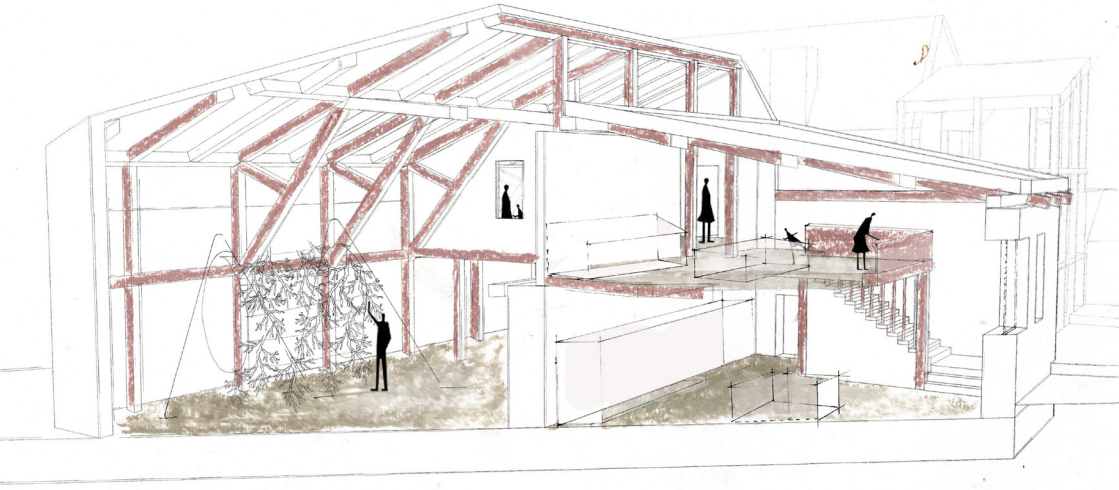

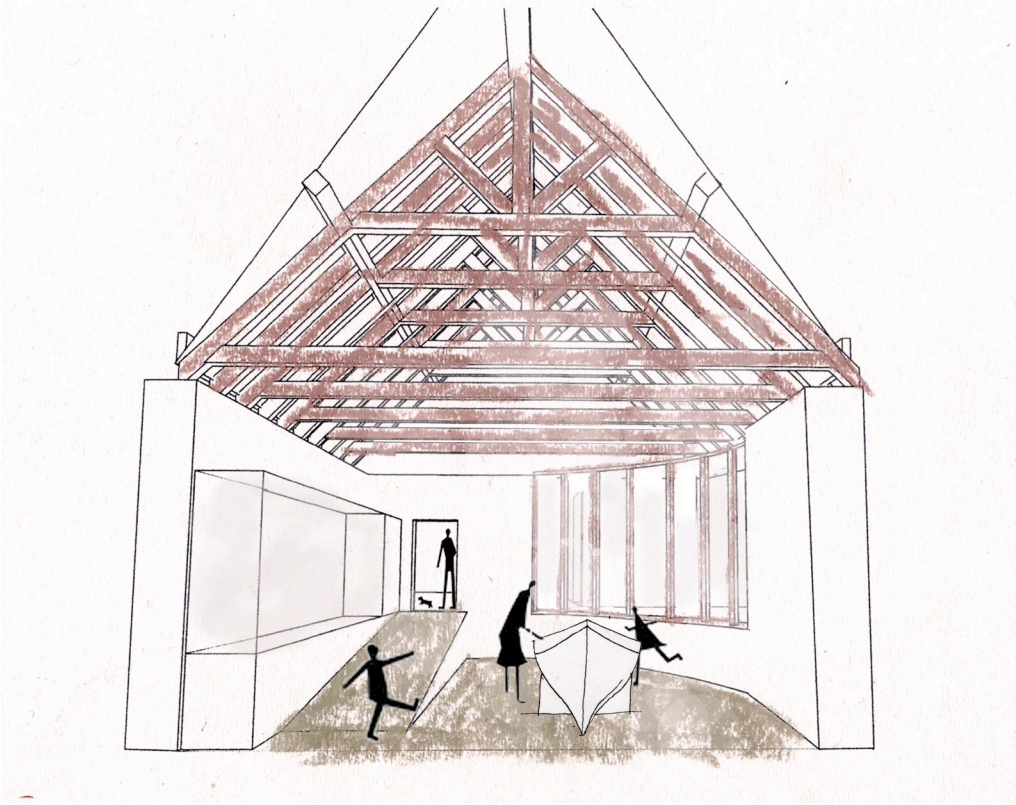

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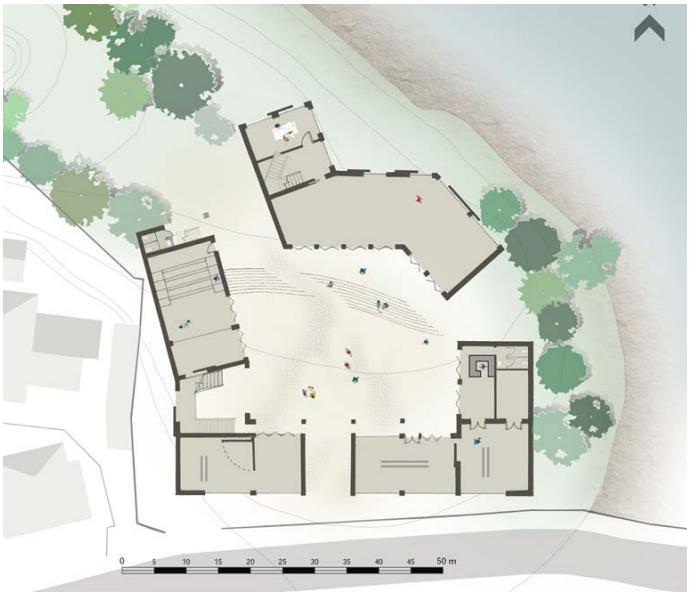

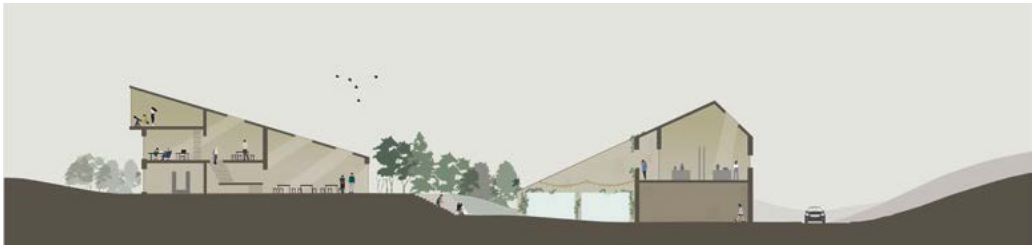

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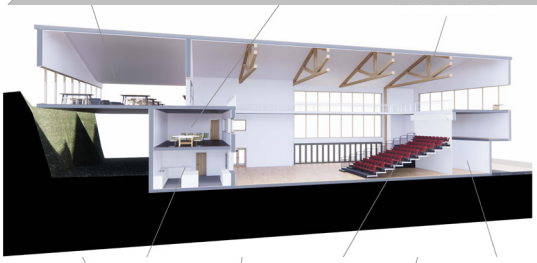

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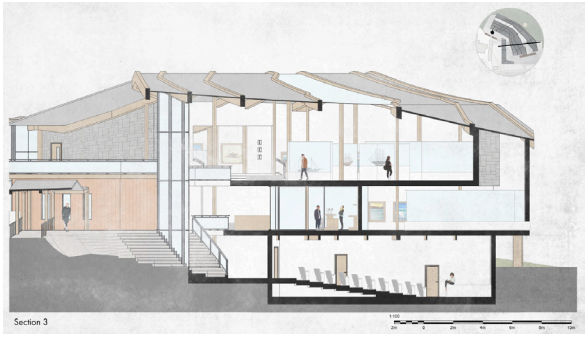

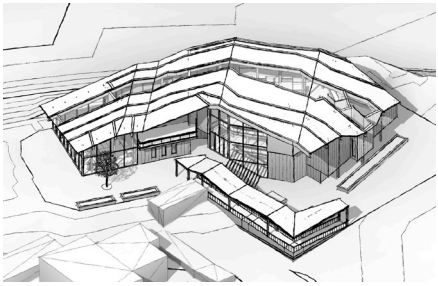

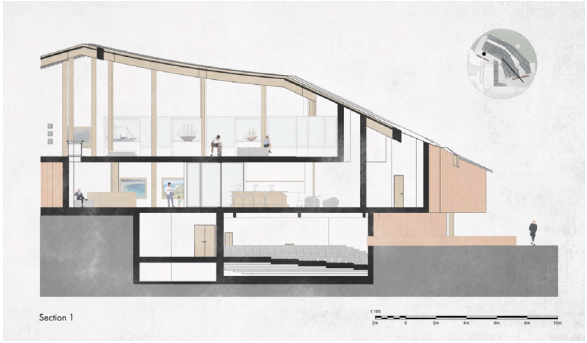

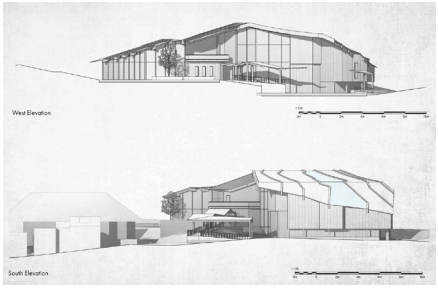

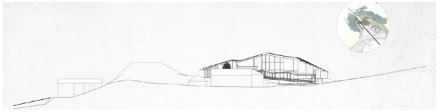

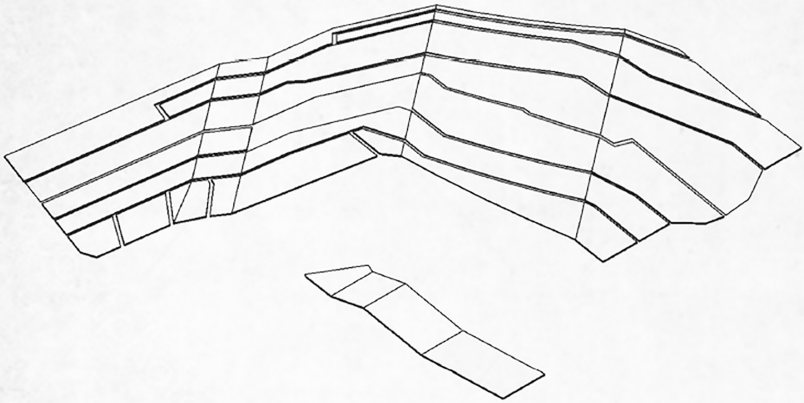

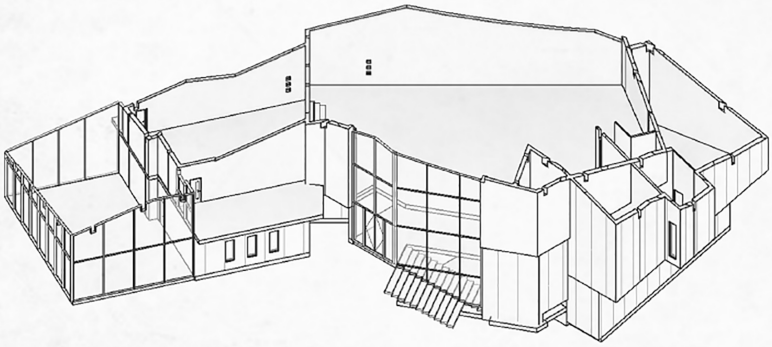

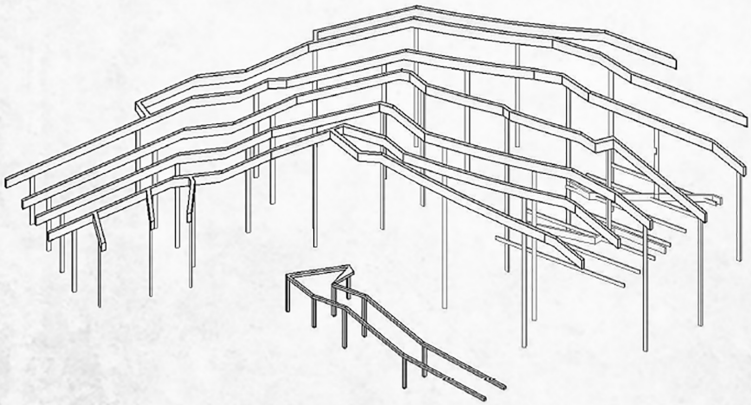


Round I.
Black Rk.
Lion
W. Withen
Brewer
White I.
E. Withen
Menawore
Camber Rocks
Pernagie I.
Pernagie Pt.
Goldenball
St. Helens
Plumb I.
Rushy Pt.
Roundrock Pt.
Merrick
Abbey Ruin
Tinklers Pt.
Mackerel Rock
Kettle
Kettle Pt.
Piper Hole
Norwethal I.
St. Helens Pool
Tean
Middle Tn.
St. Martins Bay
St. Martins
Shipman Hd.
Pan
Gimble Pt.
Olivers Ca.
Gimble B.
Crows I.
Old Man
Shaking Rk.
Lower Tn.
Rock
Carn
Tresco
Foremans I.
Hedge Rock
Tean Sd.
Old Grimsby Har.
Laurence Bay
Hell B.
Hangman I.
Cellar
Lit. Cheese Rk.
Higher Tn.
Palace
Bryer
St. Martins Flats
Maths Ledge
Higher Bay
Popplestone B.
Grimsby Har.
Dolphins In.
Gt. Cheese Rk.
Parks Ledge
Cruthers Pt.
Trevallies Rk.
Lizard Pt.
Church
Borough
Rock
Lake
Guthers I.
Moon Rk.
Old Pt.
Green B.
Lit. Gan
Great Bay
Tresco Flats
Pentle Bt.
Craggyellis
New Grounds
Crab Le.
Appletree Pt.
Crow
Gerwick
S. Cony B.
Works Pt.
Abbey Ruins
Skirt I.
Flats
Castle Beyer
Colvel Rocks
Green I.
Comes
Crow Bar
Bags Ledge
Flat Ledge
Long Crow
Yellow Rk.
Queens Ledge
Puffin I.
Crow Pt.
Mare Ledges
Crow Beacon
Bar Pt.
Bar Pt.
Paper Ledge
Mare
Innisidgen I.
Flee Rk.
Plat Ledge
Vincent Ledge
Pots Ledge
Pendrathen Pier
Samson
Stony I.
Gt. Terengoves
Watermill Cove
Carn
White I.
Nut
Cods Ledge
Creeb
Up. Terengoves
Holvear
New
Shirk Pt.
Green I.
Newford
Southward Well
Carn Morval Pt.
Newhouse Stone
The Road
Gt. Minalto
Admiralty Ledge
Taylors I.
Holy Vale
Mount Todden
Lit. Minalto
Porthloo B.
St. Marys
Longstone
Normandy
Newford I.
Carn Friers
Old Man
Mt. Elagin
Peak
Rat I.
Sallakey
Pool
Carn Thomas
Permellin
Sear
Star Castle
Hugh Town
Old Cas.
Old Town
Stavel Pt.
The Hugh
Giants Cas.
Porthmellon B.
Church
Old Tn. Bay
Blue Carn
Church Pt.
Eel Bank
Woolpack Pt.
Bartholomew Ledge
Beacon
Wras
Gilstone Ledges
Bristolmans Ledge
Carn Leh
Carriestarne
Gt. Smith
Teneers Ledge
St. Marys
Pollard
Jolly Rk.
Peninnis Head
Annet Hd.
Smith
Porth Conger B.
Spaniards
Spanish Ledge
Broworth Pt.
Cow
Kittern
Bow
Annet
Sound
Burnt I.
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Gugh
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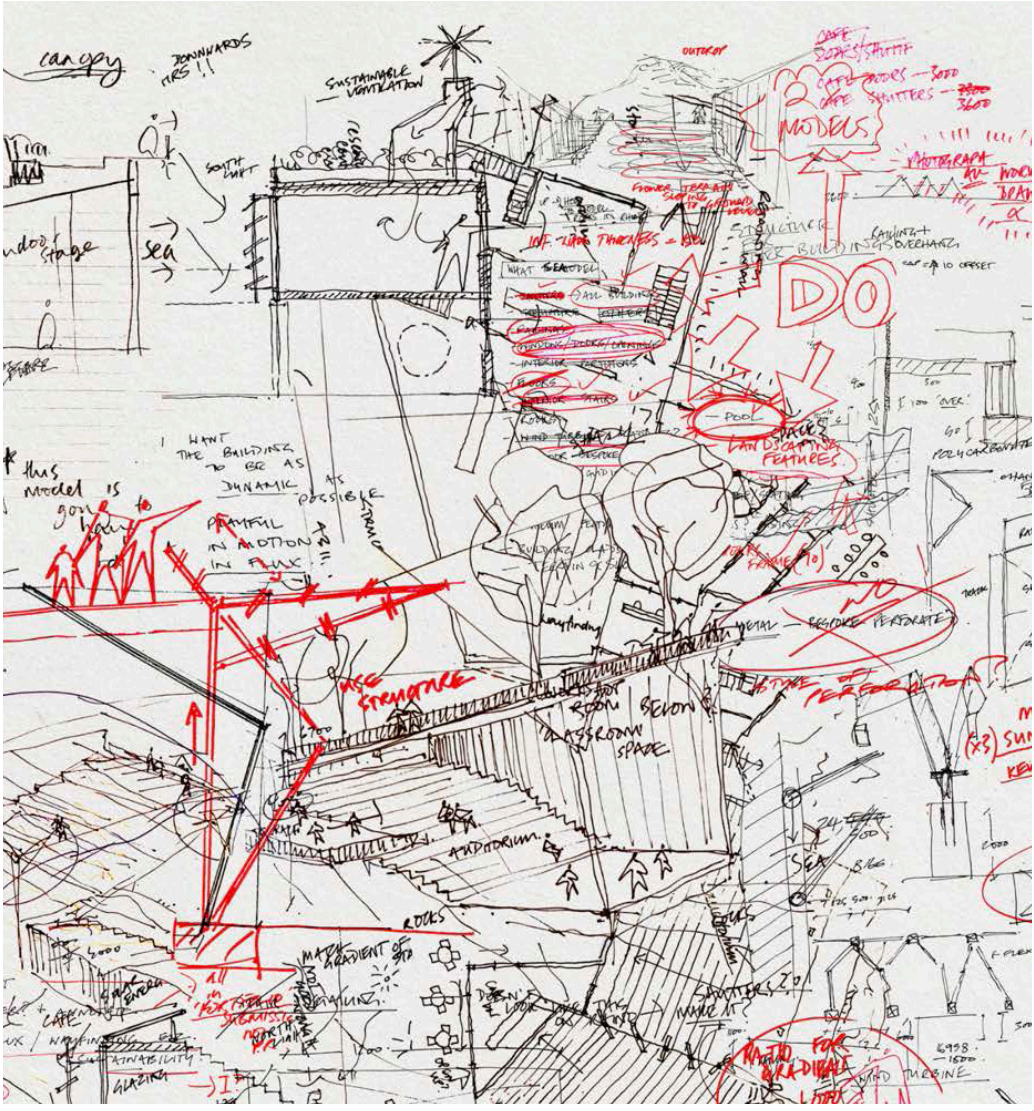
Priglis B.
Light Ho.
Bean C.
Wetnose
Cuckolds Carn

Section 4

Conclusions & Recommendations



Summary

The work included in this report suggests a series of ideas and approaches to the questions of what might a Centre for Life on Scilly be and who would it be for. The designs developed by students are not proposals but are ways of thinking about the brief. The work covers a broad range of responses, typologies and building forms. Each student has considered carefully the balance of functions within the building that could work together to support the overall objectives of the project.

Themes

In terms of approaching the needs of residents and visitors, students have considered a range of approaches, often choosing to place a major focus on one aspect. These range from: Developing and supporting education and skills growth; Demonstrating ways of living with natural resources; Strengthening and improving flexible community facilities; Design for seasonal changes; The Creation of a place for cultural exchange.

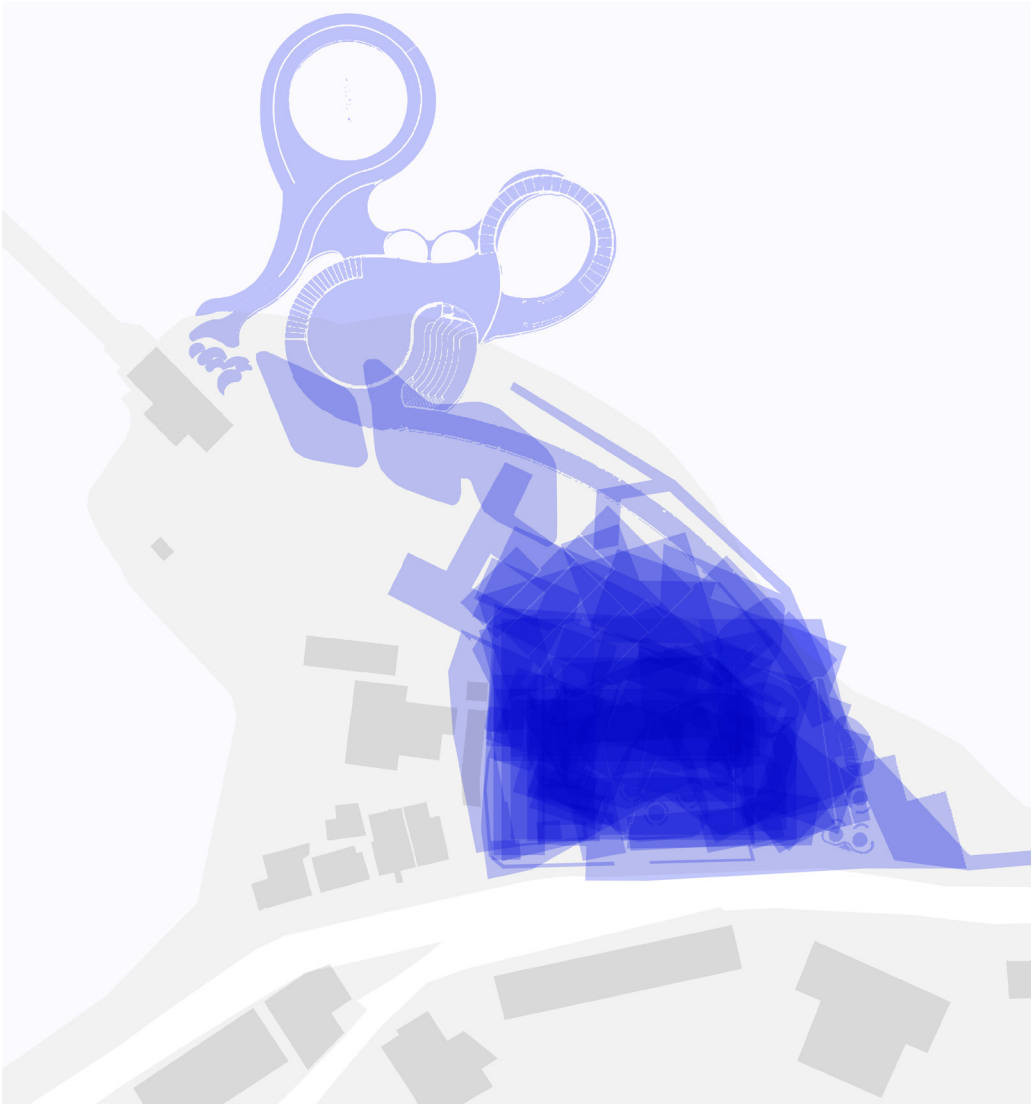
Concepts for building proposals, form, massing and materials have been informed by these responses in addition to the local natural and built context. Students have investigated: Rocks, strata and layers, inspired by the low lying islands, history and weathered granite forms; The islands' context as a

collection of entities and connections, both inward and outward looking; The resourcefulness and resilience of islanders; Traditional boats, hulls, ribs and frames; The historic landscape of burial chambers, standing stones and hidden treasures.

The emerging themes evident in the projects are responding to the unique setting, exploring opportunities for shared spaces, responding to the changing needs as a result of seasonal fluctuations (in climate and numbers) and considering appropriate ways to build in a sensitive and beautiful natural place.

Building location
Students considered the whole site within the redline ownership boundary. The majority utilised the existing building levels and cuts into the site. Some students decided to retain the existing original classroom building on the site as a historic asset, which had knock on effects on the location of the rest of the buildings. Other projects utilised the change in level to provide an additional storey to the buildings, locating elements adjacent to the existing cut step. A few schemes propose extensive re-levelling of the site creating unique and unusual features dispersed across the promontory. In practical, financial and ecological terms this would likely be prohibitive and have a negative impact on the setting. A few projects looked at modifying the existing cut and partial re-levelling. Whilst this is inevitable to some extent in the construction of the new buildings, it was felt it should be kept to a minimum. This means that in most cases, the rear of the proposed buildings is aligned with that of the existing.

Most schemes are in some way set back from the roadside edge in order to allow a welcoming public space as part of the entrance sequence. In some cases this is by splaying or breaking the line of the street frontage from the existing adjacent buildings. In most cases the larger



mass of buildings are set away from the western boundary with Mincarlo in order to avoid overlooking and overshadowing.

The diagram opposite shows an overlay of the footprints of the proposed buildings on the site. The lighter areas indicate the dispersed layouts developed by a few students. The darker areas indicate shared view of the collective preferred locations on buildings on site. Many schemes also included areas for future expansion of the museum collection and centre activities.

Typologies and layout

The south-facing courtyard has been the predominant typology in this study offering a welcoming public space which serves to organise the buildings and functions. One of the drawbacks of this layout is the lack of views afforded to the North towards the off islands and in some cases, reduced access to the rear of the site. In some cases it also leads to an overly complex arrangement or repetitive roof forms.

A related typology explored by the students is a series of more enclosed, smaller courtyards or gardens where the buildings create their own context. The challenge with these layouts has been to provide an outward as well as inward looking aspect. In some cases the number of entrances and complexity of construction in these schemes has been problematic and could be impractical although they do offer opportunities for smaller scale articulation.

Several schemes explored the use of a linear typology either running parallel or perpendicular to the road. Splayed or slipped arrangement allow for the creation of framed external spaces. There are benefits of efficiency in these layouts although this is limited to those which utilise the existing levels and do not look to excavate extensively to the north. There are simplicities of construction in these layouts utilising repeating frames. In some cases this is

combined with the opportunity to create more expressive roof forms.

Some students have developed the idea of a big roof, seeing it as a new topography and an additional layer to the landscape. This approach has benefits that everything is 'under one roof' whilst also creating tensions in terms of the size and scale of the building in the landscape. Each of these schemes breaks the roof form into a series of planes, reducing the impact of the whole. Leaving some spaces open to the roof creates unique and unusual spaces.

A couple of schemes investigated a more dispersed layout offering the flexibility to use different areas of the site during different seasons or events. Both schemes look at ways to integrate the buildings into the natural setting using a series of pods and connecting routes. Despite this, the ecological impacts of developing such a large area of the site could be huge. Cost implications of developing a series of distinct and dispersed buildings would likely be prohibitive alongside the potential issues with managing such a facility.

The diagram opposite indicates the range of typologies explored by students.

Ste Davies
Jarad Gill
Dispersed
Dan Williams
Will Beckwith
Stepped street
Laura Harris
Adam Elliott
Internal courtyards
George Taylor
Agne Kazlauskaite
Mikey Koskela
Big roof
Monika Gedvilas
Jason Richards
Cal Turner
Todd Roper
Parallel blocks
Ethan Nichols
Lockie Gray
Connor Murley
Kath Hawkins
Courtyard square

Areas and costs
Considering the wish list of spaces from key organisations and potential for shared spaces, students investigated the area requirements for the building. This ranged from 1420 – 3700 m2 with the extreme highest and lowest values removed. The average area of the proposals was 2115m2

Working with outline costs/m2, an assumed medium – high quality finish, compared with benchmark costings of similar schemes, students estimated the potential costs of their proposals. These have then been given a percentage uplift, as advised by Nicola Stinson. This includes an assumption of build costs at a round £3500/ m2 or a percentage increase of around 1.5% compared to the mainland. These envisaged costs are very broad brush and should be seen as such. They represent building only construction costs and do not include external works, landscaping, professional fees or contingency.

Using the £3500/m2 applied to the project areas and removing the three highest and lowest values, the figures range between £5.8 and £8.6 million with an average of £7.13 million. Alternatively, taking the 1.5% uplift applied to student's estimated cost calculations, the figures are between £3.4 and£ 8.4 million with an average of £5.11 million. These figures are

illustrative only and any future proposals should be subject to detailed cost analysis relative to a target funding envelope.

Innovative uses
As well as working through the opportunities for shared and combined spaces, students developed several innovative uses and potential user groups for the project. This included a community kitchen with the possibility of a café run by a local operator, space for caterers, fresh and wild food events, markets and cooking classes.

Other ideas developed were; On site accommodation for a care-taker or centre manager and family, a mending and repair café, tapping into the make do and mend spirit of the islands; A specialist gig rowing heritage centre; Facilities for out of season wild sports events; Maker spaces and 'open studio' which may be a performance venue, exhibition space or artists workspace; A construction skills centre and bio materials lab, a centre for excellence in building in remote places. Many schemes also looked at providing a more permanent home for the monthly market. More information on proposed uses is available in the individual student reports.

From the early stage briefing and research exercises, all students were mindful of the

"A versatile community kitchen may enhance the Islands' economy. There is the potential to serve drinks and light refreshments in conjunction with performances, markets, workshops, talks or meetings. It is possible then, also to offer a catering facility in association with the private hire of a function hall for parties, weddings, wakes etc. By hiring island-based caterers to provide this service, the opportunity is created to generate income. Enterprising local cooks could be hired to serve a one-off group meal for visiting residential research or study groups, host day-long small group foraging courses for visitors, including cooking a meal with the day's bounty, or offer cookery experiences or demonstrations"
Kath Hawkins

"The proposal needs to strongly cater for the aging population and seek to engage other populations where possible. Entwining nature and wildlife into the proposal will make it economically viable and of interest to both tourists and residents. Despite the relatively low unemployment rate, there's an opportunity to create jobs and train people with new skills within the proposal and the subsequent construction of it" Lockie Gray

need to address the demographic challenges on Scilly. A growing aging population and lack of skills and training opportunities for young people (no post 16 education on the islands) meant that many students investigated functions or uses of the building related to skills and training or partnerships with colleges and universities, some of which already exist. Combined with an aging visitor profile meant that many projects looked at ways to attract new audiences to the islands.

Materials and construction

Students explored the challenges of building on Scilly and proposed several innovative solutions. These ranged from growing crops for building materials locally – bamboo, hemp, flax, seaweed; Harvest mapping materials and using local resources – sand, seaweed, shells, reclaimed building stone; Using waste, demolition rubble (retaining walls), glass, newspaper, cardboard; On site manufacturing using CNC technology to reduce transport miles.

Many students investigated the use of timber framing technology or timber panellized construction both of which are already used on the islands. This requires components to be made on the mainland and transported as

freight or on specialist landing craft. Some students investigated the development of a local construction centre combined with traditional skills training so buildings could be made on site using raw materials bought in and sourced locally. This system could also be used to build affordable housing on the islands, for example on the adjacent site. Logistical issues with time on site, labour and programme were also considered with some students proposing the construction of simple accommodation on site first, later to be used by visiting groups.

Students also explored the use of alternative construction materials and up-cycling waste materials. Seaweed thatch, sand-lime bricks, K-Briq, Foamglass blocks and shell-crete are some examples. There is strong potential for the building to showcase the resourcefulness of islanders, becoming an exemplar project in the use of natural, reclaimed or bio materials.

"If construction can only be done through the summer months when there is better weather and less wind, then this could cause a problem with a large workforce. There needs to be some thought as to where these people can stay on the island alongside the many tourists that travel here each year"
Cal Turner

Next steps

Consultation
An extensive amount of collaborative work has already been undertaken in order to forge partnerships, combine resources and develop ideas. This is reflected in the collective vision of the partner organisations and the ambition of the project. The missing, or under-represented voices in the conversation are those of the residents, businesses, visitors and potential building users.

As the next step in the process, we propose an expansive period of community consultation that can strengthen and inform the direction of the project. This could involve community events, workshops, test spaces, co-design processes or online engagement. We hope that some of the themes, opportunities and ideas discussed and presented in this document can inform and spark future conversations.

Congratulations to all our students for their achievements in what has been an unusual and challenging time.
Adam, Agne, Cal, Connor, Dan, Ethan, George, Jarad, Jason, Joel, Kath, Laura, Lockie, Mikey, Monika, Ste, Todd and Will. Well done.

Special thanks to:
Tammy Bedford and Jeremy Brown, Creative Islands, for their energy and enthusiasm in making this collaboration possible, working with our students to guide their ideas and provide a client perspective on the developing work.

Acknowledgements and thanks to:
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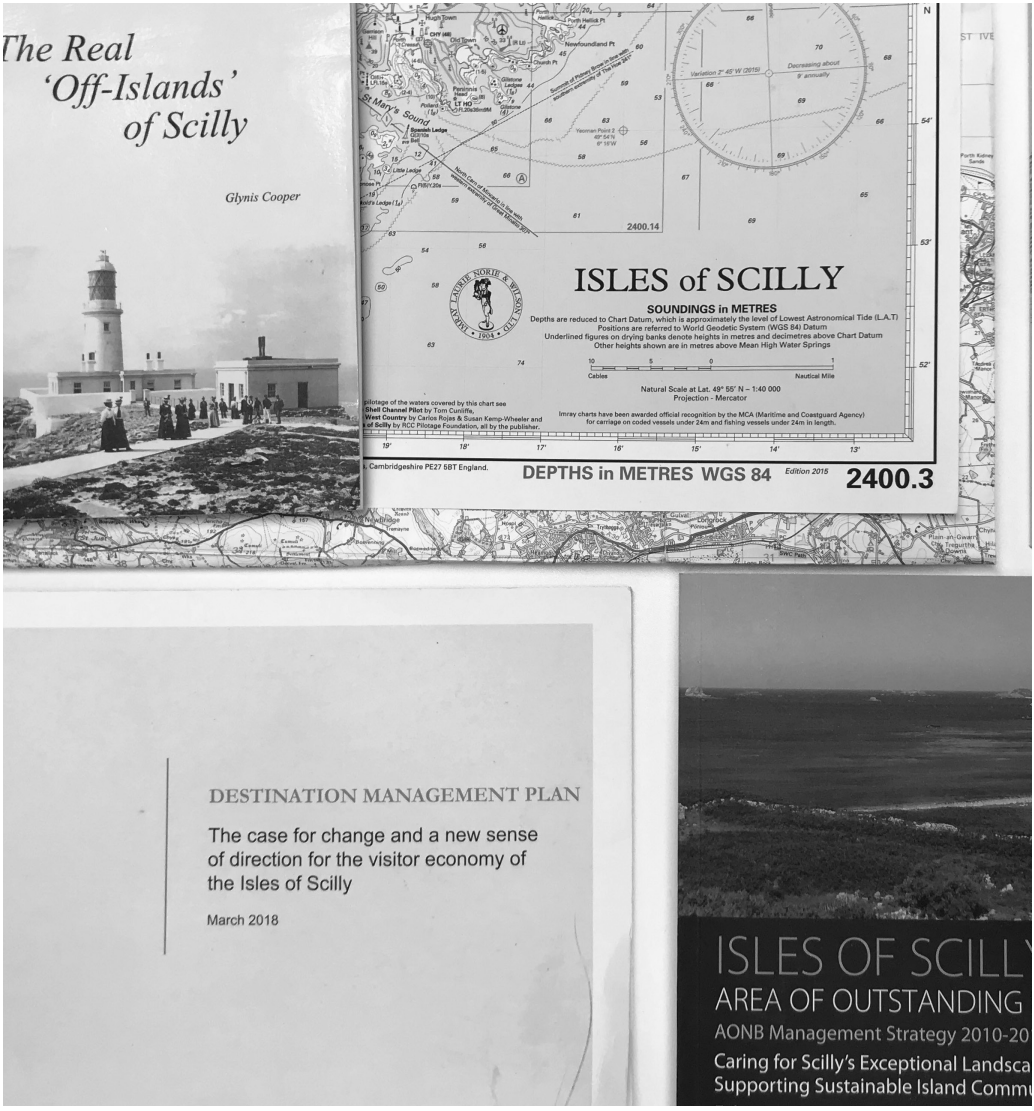
Our Staff Team:
Tom Ebdon, Toby Carr, Janie Hinton, Mark Innes and Jacob Down.

Falmouth University, BA(hons) Architecture, 2020

Round I.
Black Rk.
Lion
W. Withen
Brewer
White I.
E. Withen
Menawore
Camber Rocks
Pernagie I.
Pernagie Pt.
Goldenball
St. Helens
Plumb I.
Rushy Pt.
Roundrock Pt.
Merrick
Tinklers Pt.
Mackerel Rock
Abbey Ruin
Kettle
Kettle Pt.
Shipman Hd.
Pan
Norwethal I.
Tean
St. Martins Bay
Piper Hole
St. Helens Pool
Middle Tn.
Gimble Pt.
Olivers Ca.
Gimble B.
Crows I.
Old Man
Shaking Rk.
Lower Tn.
Carn
St. Martins
Tresco
Old Grimsby Har.
Foremans I.
Hedge Rock
Tean Sd.
Laurence Bay
Hell B.
Hangman I.
Cellar
Palace
Lit. Cheese Rk.
Higher Tn.
Bryher
Gt. Cheese Rk.
Maths Ledge
Higher Bay
Grimsby Har.
Dolphins Tn.
St. Martins Flats
Cruthers Pt.
Popplestone B.
Parks Ledge
Church
Trevallies Rk.
Borough
Lizard Pt.
Rock
Lake
Guthers I.
Moon Rk.
Old Pt.
Green B.
Lit. Gan
Great Bay
Tresco Flats
Pentle Bay
Craggyellis
New Grounds
Crab Le.
Appletree Pt.
Gerwick
Abbey Ruins
Skirt I.
Works Pt.
Crow Flats
Castle Beyer
Colvel Rocks
Green I.
Comes
Crow Bar
Bags Ledge
Long Crow
Flat Ledge
Yellow Rk.
Queens Ledge
Mare Ledges
Crow Beacon
Bar Pt.
Puffin I.
Crow Pt.
Bar Pt.
Paper Ledge
Mare
Pendrathen Pier
Flee Rk.
Plat Ledge
Vincent Ledge
Pots Ledge
Carn
Watermill Cove
Stony I.
White I.
Samson
Nut
Cods Ledge
Creeb
Up Terengoves
Holvear
Shirk Pt.
Green I.
Newford
Southward Well
Carn Morval Pt.
Newhouse Stone
Holyvale
Mount Todden
Gt. Minalto
Admiralty Ledge
Taylors I.
The Road
St. Marys
Lit. Minalto
Porthloo B.
Longstone
Normandy
Newford I.
Old Man
McElagin
Carnafriers
Rat I.
Peak
Sallakey
Pool
Carn Thomas
Permellin
Star Castle
Hugh Town
Scar
Old Cas.
Old Town
Stavel Pt.
The Hugh
Giants Cas.
Church
Old Tn. Bay
Blue Carn
Church Pt.
Porthmellon B.
Woolpack Pt.
Eel Bank
Bartholomew Ledge
Beacon
Wras
Gilstone Ledges
Bristolmans Ledge
Carrestarne
Gt. Smith
Pollard
Jolly Rk.
Teneers Ledge
St. Marys
Peninnis Head
Spaniards
Spanish Ledge
Smith
Broworth Pt.
Cow
Kittern
Bow
Sound
Annet
Burnt I.
Porth Conger B.
Gugh
Carnhimbra Pt.
Priglis B.
St. Agnes
Light Ho.
Bean C.
Wetnose
Cuckolds Carn

Appendix


The Real
'Off-Islands'
of Scilly
Glynis Cooper
ISLES of SCILLY
SOUNDINGS in METRES
Depths are reduced to Chart Datum, which is approximately the level of Lowest Astronomical Tide (L.A.T)
Positions are referred to World Geodetic System (WGS 84) Datum
Underlined figures on drying banks denote heights in metres and decimetres above Chart Datum
Other heights shown are in metres above Mean High Water Springs
Natural Scale at Lat. 49° 55' N – 1:40 000
Projection - Mercator
DEPTHS in METRES WGS 84
Edition 2015
2400.3
DESTINATION MANAGEMENT PLAN
The case for change and a new sense of direction for the visitor economy of the Isles of Scilly
March 2018
ISLES OF SCILL
AREA OF OUTSTANDING
AONB Management Strategy 2010-20
Caring for Scilly's Exceptional Landsca
Supporting Sustainable Island Commu

Falmouth Univeristy BA(hons) Architecture
Centre for Life on Scilly
Cost Summary
Jul-20

	Area /m2								Cost estimate/ £ million				
	Workshop/ research space	Kitchen/Café	Museum	Accom + Communal	Sports/play	Events space	External structures	TOTAL	Low	High	Average	Scilly uplift (1.5%)	Cost @ £3500/m2
Todd Roper	312	160	608	172				1252	1.4	2.2	1.80	2.70	4.38
Ste Davies	424		234	114	1908	822	232	3734			9.30	13.95	13.07
Monika Gedvilas								2233			4.00	6.00	7.82
Mikey Koskela								1779			3.60	5.40	6.23
Laura Davies	530		350	320		820		2020			4.50	5.30	7.07
Joel Stockton							6500	5500			16.50	19.20	19.25
George Taylor								1417			2.80	4.20	4.96
Ethan Nichols								1860			5.60	8.40	6.51
Dan Williams								/	3.2	5	4.10	6.15	/
Jason Richards								2827			/	11.30	9.89
Adam Elliot								781			2.90	4.35	2.73
Agne Kaslauskaite	138	320	840	157		200		1655			/	4.30	5.79
Jarad Gill								2102			/	3.40	7.36
Will Beckwith			812			1285		2097	2.6	3.3	2.95	4.43	7.34
Connor Murley	440		860	365		240	540	2445			2.70	4.90	8.56
Kath Hawkins	186	75	900	200		375	500	2236			2.97	4.50	7.83
Callum Turner								/			/	2.40	/
Lockie Gray	485	297	564	135		474		1955			1.90	2.85	6.84

Red highlight indicates high and low figures removed from cost and area averages

AV TOTAL **2115** m2

AV TOTAL **£ 5.11** **£7.13** million

Nordic House

Faroe Island

Description

The site is similar to ours in the sense of isolation and exclusion from the mainland. The Faroe islands experience a similar lifestyle to those on Scilly. For example, the food they eat is either brought by ship once a week or they fish.

The Nordic house community centre was built in 1983 by architect Ola Steen. It was designed for the locals to come and meet, aswell as bring tourism in. The building contains a wide variety of multifunctional uses, from a auditorium to a cafe.

This precedent has helped me understand how to not only deal with the landscape and opinions of the locals but also how to design something that gives people joy and happiness.

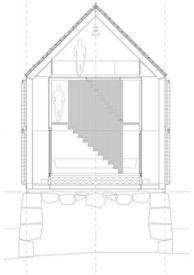
Architect/Design Team
Ola Steen
Year Completed
1983
Construction Cost
£7m
Floor Area
2000m2

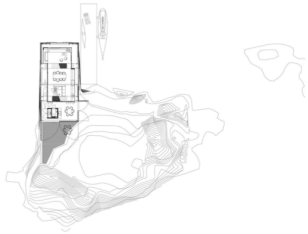
Key Similarities to Centre of Life on Scilly

- It makes a difference to the lives of the islanders.
- Isolated location
- Place for sharing culture
- Transitional space

All Images from Nordichouse.com

CONTEXT/ SITE PRECEDENT - WEEKEND HOUSE





Weekend house in Norway. This house is only accessible by boat and has been built to withstand extreme weather. The building has 17 different timber openings that almost act as an exterior curtain, these are in place to make the building appear anonymous when not in use and for the user to batten down the hatches in cases of extreme weather. I chose this precedent as it shows a different way of working by creating off- site and delivering at a nearly complete stage , this could be a viable option to build on St. Marys. pictures taken from https://www.archdaily.com/924181/weekend-house-straume-knut-hjeltnes

TECHNICAL PRECEDENT - CORRUGATED CARDBOARD POD

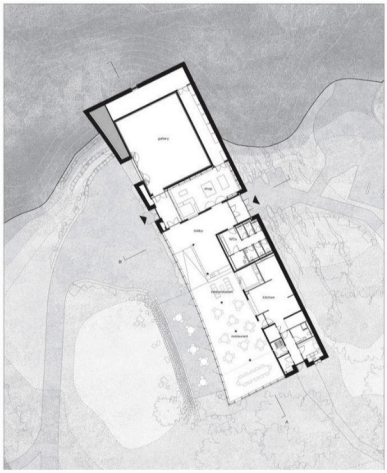
This corrugated cardboard pod was created by students at Rural studio in Alabama in order to innvestigate the insulative values, thermal mass and structural capabilities of a material that would normally head to land fill after its original ntended use, this project focuses on adaptive re-use of a specific material in order to create a cheap and effective space. this is something I hope to emulate within my design and i hope to have a focus on the adaptive re-use of specific waste materials in order to bring down construction costs and create a space that is better fro the environment when compared to a contemporary build.

Info and pictures taken from http://ruralstudio.org/project/corrugated-cardboard-pod/

DAN WILLIAMS
FALMOUTH UNIVERSITY
ARC 330

PRECEDENT
THE WESTON VISITOR CENTRE AND GALLERY

The Weston is a visitor centre and gallery, located in a hillside setting in Yorkshire Sculpture Park, West Yorkshire, England. Constructed within a former quarry, the 673m² building includes a gallery, interpretation space, restaurant and shop.



The building has two façades, the arc-shaped western elevation which is glazed at the southern end where the restaurant is located, providing views across the park, and the east elevation is a 50m long wall of layered concrete. Due to the site's exposure, weather and prevailing winds, the building was designed to be single storey to sit low in the landscape

Possible concepts to relate to my proposal:
- Design considerations to environment and surroundings.
- Separations of spaces still including transformable space.
- Material considerations to sites history and surroundings.

Images from: https://www.archdaily.com/914491/the-weston-visitor-centre-and-gallery-feilden-fowles?ad_source=search&ad_medium=search_result_projects

Carnival arts centre

Location: Luton

Architect: Ash Sakula Architects

Client: UK Centre for Carnival Arts

Contractor: Apollo Property Services Group

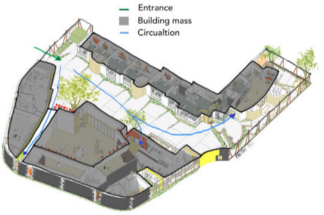
Contract Value: £ 3.9 million

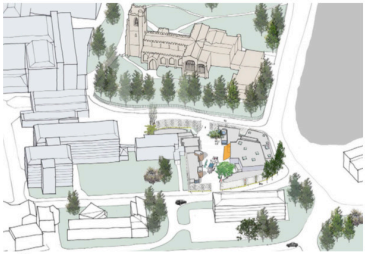
Date of completion: Mar 2009

Gross internal area: 1420 sqm

What inspired the my proposal from this precedent is the courtyard area and the connection and interaction between the buildings and transitional space of the courtyard and how it can be flexible and be used for walking, sitting, seeing, hearing and talking making it a pleasant place to be (Jan gehl).

(1)





(2)

(1) https://www.ashsak.com/projects/carnival-arts-centre

(2) https://www.ashsak.com/projects/carnival-arts-centre

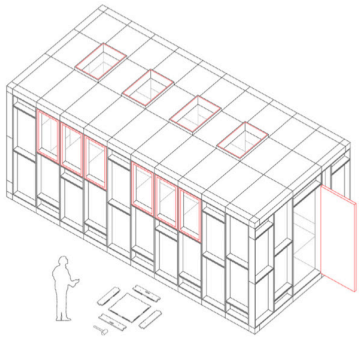
- U-Build is a self build system that uses boxes cut out of Plywood by a CNC Machine then screwed together, stacked upon each other then bolted together.

- The cavity is then filled with natural sheep wool insulation.

- Using a similar system and principle I will aim to interpret the possibilities of the proposal and implement an alternative system that can be unique to Scilly and building typologies.

- Having a CNC machine with in the building potentially inviting visitors and locals to make a box or two, where tourists can give back the community and the centre for life.

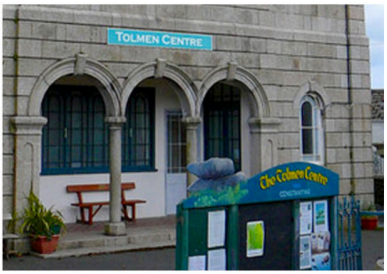
- Therefore by providing training and utilising the local workforce about the system this method could be used on the housing site adjacent to Carn Thomas.



https://u-build.org

The Tolmen Centre, Constantine, Falmouth

I have chosen the Tolmen Centre, not for architectural merit or inspiration, but because of what it does. For me, it encapsulates everything which a Community Centre can and should do. It even houses a museum and heritage centre and is reknowned for its diverse programming.



Architect/Design Team:	Former Methodist Chapel 1835
Year Completed:	1998-9
Construction cost:	Not known
Floor Area (GIA):	Approx 570m²
Contract type:	
Construction method:	Dressed granite, timber, slate roof

Key similarities with Centre for Life on Scilly

- This is a multi-use building which forms the focus for the community, hosts numerous arts and cultural events, and is also available for private hire.
- There are two large spaces where people might congregate.
- Uses include Farmers' Market, Hosting BBC Any Questions, plays, community meals, film nights.

Description

The Tolmen Centre is a not-for-profit community centre and venue, housed in a former Methodist Chapel off the main street in Constantine. Of my three precedent examples, is the most alligned to the proposed mixed use of the Centre for Life on Scilly, save for research facilities and accommodation.

Downstairs, the building is used to house art exhibitions, parties and functions, yoga and keep fit classes, as well as art workshops, farmers' markets and meetings. It can be divided into two to create two smaller spaces if required. There is also an office, with print and scanning facilities, and a computer with adobe design packages installed which can all be used for nominal charges. A fully equipped kitchen which can cater for up to 100 seated people services this space, and the whole downstairs area becomes a café providing a pre-booking only supper club, offering reasonably priced meals from 6pm on performance days. Without tables and chairs, more people can be served, and there is access to outside space from the Guildroom. The Tolmen Centre also has a full alcohol licence.

Upstairs is a formal theatre space with a stage on two levels, and raked seating in a semi-circular arrangement. The theatre is equipped with lighting gantry, a sound and lighting desk with amplification, but also a projector and screen which enables the transformation of the theatre into a cinema. This facility is regularly used by several local theatre groups as a rehearsal space, and has hosted BBC Radio 4's programme 'Any Questions' on more than one occasion. A stai lift grant disabled access to the first floor.

At Ground floor level the old vestry to the side of the building houses the Constantine Heritage Centre and Museum, which is curated by a team of volunteers who are happy to help people explore archives and look into historical family records.

The ethos of the Tolmen Centre as not-for -profit gives it a special status in the community. It is widely regarded as a great venue offering far more than one would expect in a village the size of Constantine. Music performances, both classical and contemporary, theatre, film nights, puppetry festivals, art and nature workshops, classes, exhibitions, meetings and a function space bring vibrance and variety to a small village facility, which is frequented by people travelling from miles around.

CONTEXT/ SITE PRECEDENT

Island Hall, St Agnes, Isles Of Scilly

Description

The brief for the Island Hall on St Agnes was largely created by the Architects at PBWC who made it their mission to uncover 'the brief within the brief' in the words of Rachael Gaunt. This brought about the idea for a feasting hall which could accommodate the entire population of St Agnes.

The original hall was renovated, and a link corridor was added, which leads on to a purpose-built kitchen, designed to be able to cater for the whole island.

There are also six small workshop/studio spaces for rent by the island's crafts people and artists, a room full of gym equipment for use by islanders, and a large meeting room on a mezzanine, which has a balcony looking out towards Annett and Sampson to the North.

To the east of the new buildingdown a couple of granite and turf steps, is a wide expanse of grass, which can be used for team games, but is also large enough and suitably flat, to house a wedding marquee. The Island hall has been used in association with weddings in the past, but the new additions make it a perfect venue, whilst still adaptable.

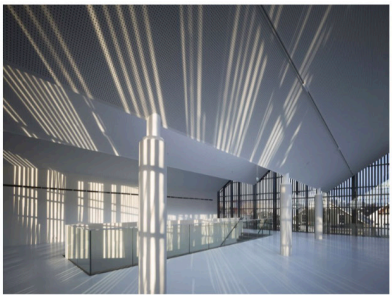
The timber construction was presumably designed to keep freight costs down, as well as for reasons of sustainability. The whole development sits happily alongside the original hall, with its complementary natrual palate.

Architect/Design Team:	PBWC, St Ives
Year Completed:	2014
Construction cost:	£2.4m
Floor Area (GIA):	260m² approx
Contract type:	Dawnus Construction w Emmanual Hendry
Construction method:	Timber frame, slate and zinc roofs, slate paving and galvanised rainwater goods.

Key similarities with Centre for Life on Scilly

- Its on the isles of Scilly!
- The hall can be used in different ways to fulfill multiple functions
- The building is designed to accommodate public and private use.
- Construction reflects freight costs, and was built sustainably.

- The Kaap Skil Maritime and Beachcomber's Museum in Northern Holland shows beautiful light play, and is essentially a timber-clad greenhouse. This couldn't work for my building because of its orientation.
- Sverre Fehn's Hedmark Museum is beutiful demonstration of visible structure, again with a natural materials palette and visible structure, which I love.

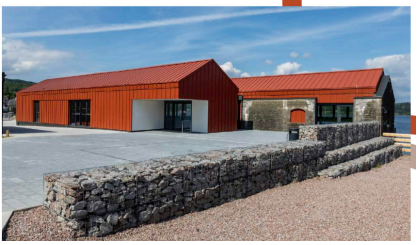


Above and Left: Kaap Skil Museum, Holland, by Mecanoo Architects, Photos from Arch Daily and Mecanoo Architecten.
Right: the Hedmark Museum, Norway by Sverre Fehn, Photos by Enrique Pérez

Building Precedent - The Egg Shed Heritage & Community Centre

The Egg Shed Heritage & Community centre provides the Scottish town of **Ardrishaig** a building for "Heritage interpretation, retail and community use".

Named after the building's former use a transit storage for eggs, the original structure has been retained and creatively reused within a challenging site, providing a historical springboard from which the design of the new building took shape.



Egg Shed Heritage & community center ->

Area: 270m²
Main material: Steel Clad
Material Manufacturers: GreenCoat
Project Budget: £1m – £1.99m

Cost per m²: £3,703.7 – £7,370.4

Argal Farm Workshops - Cornwall

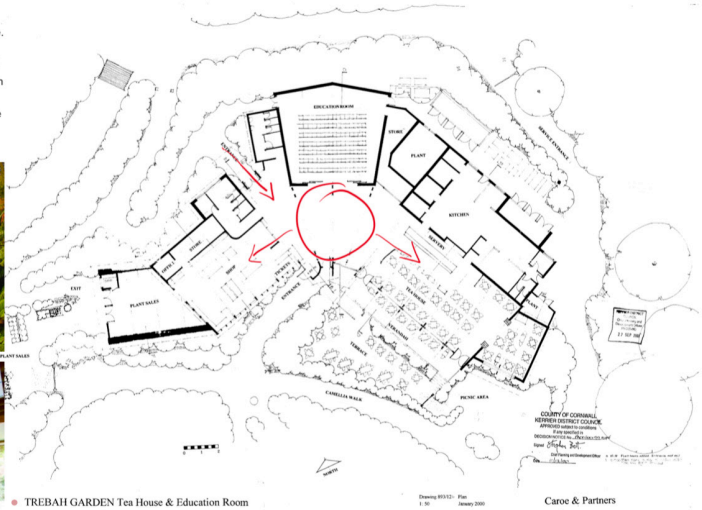
Argal Home Farm offers creative businesses a communal live/work environment in a rural setting. The purpose built workshop spaces allow for small businesses to share skills and ideas in a Cornish countryside setting.

It's estimated that 4 out of 5 business owners on the Isles of Scilly work from their homes (Isles of Scilly Local Plan 2015 report). A new building on Scilly could benefit from having workshop spaces that residents can rent at low rates to allow for more functional, hard wearing and creative spaces.

Hibbert Centre - Trebah Gardens

The Hibbert Centre at Trebah offers a space where visitors to the gardens can sit and enjoy food and drink, browse the culture shop or visit the education auditorium where events take place.

The programme of the ground floor is simple but effective. The main entrance leads immediately to an open plan layout where the reception, culture shop and cafe are all visible and tacked onto the central space circled in red on the plan. This creates an environment that can be easily navigated for visitors as they are able to immediately see where the different functions are located.



TREBAH GARDEN Tea House & Education Room

Caroe & Partners

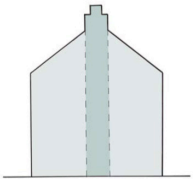
Arts and Cultural Precedent

Building Our Islands
Architectural Discovery
Outer Hebrides

Concept Proposal
Section 2.2.1

Influences from Precedent in my Design:

- A remote island community celebrating local skills, art, architecture and crafts...: ("A project in the Outer Hebrides to learn about and engage with their built environment through workshops, illuminations, art and photography...")
- Celebrating the heritage of the island and raising awareness of protecting heritages on remote island locations.
- Using regular massing sizes and shapes for buildings to respect existing styles.



Arts and Cultural Precedent

Linhay Barn
Cornwall
United Kingdom

Concept Proposal
Section 2.2.1

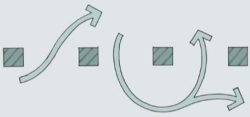
Influences from Precedent in my Design:

Pillars in Cornish linhay barns provide structural support for 1st floor

Space on ground floor for livestock to pass freely in and out depending on weather/feeding

Threshold between indoor/outdoor is blurred

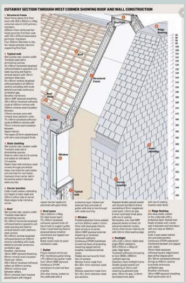
Diagram showing free-flowing ground floor threshold between structural pillars



Technical Precedent Study

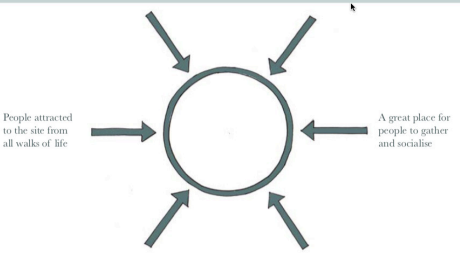
Newlyn Art Gallery Extension
Newlyn, Cornwall
United Kingdom

Concept Proposal
Section 2.2.4



Influences from Precedent in my Design:

- People from all backgrounds, diversities and ethnicities etc are drawn in to the site due to a wide range of amenities.
- Provides a small south-western coastal town with a community driven hub for arts and culture.
- Relies on a local community and seasonal tourism to keep its doors open year round.
- Exposure to the harsh weather conditions, MUMA Architects opted for sturdy steel-framed extension.
- Considered and influenced by weather and elements.



Technical Precedent Study

Isle of Eigg
Scotland
United Kingdom

Concept Proposal
Section 2.2.4

Isle of Eigg is home to the world's first stand alone energy grid that provides electricity from a combination of three renewable energy sources:

- 11km of underground high voltage cable connects residents to energy generated from three hydroelectric plants (100kW, 5kW and 6kW).
- Four 6kW wind turbines.
- 50kW solar photo-voltaic capacity which produce approximately 90% of electricity needed locally.

A battery bank able to provide electricity for up to 24 hours helps smooth out supply and demand and two 80kW diesel generators are used for back-up.

Isles of Scilly have similar conditions and resources to Isle of Eigg. Wind from Atlantic Ocean fetch, tidal changes as well as a milder climate annually compared to mainland UK.

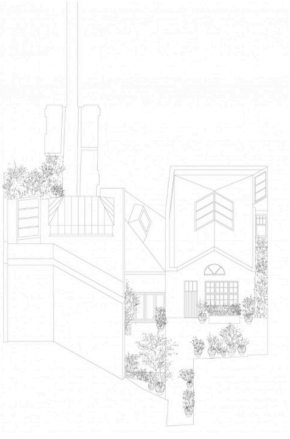
GMIT Furniture College, Galaway
O'donnel & Tuomey

> Timber frame workshop situated on the site of a former industrial school.
> Designed in response to functional requirements.

Ty Pawb, Wrexham
Featherstone Young

> "Ty Pawb is a cultural community resource, bringing together arts and markets within the same footprint. This coexistence celebrates the significance of markets within Wrexham's cultural heritage and identity.
> "We offer a new space for dialogue around subjects including social and civic issues, the environment, health, cultural identity, sustainability and education.
> "We present a contemporary programme of welcoming and inclusive exhibitions, socially engaged projects and live performance. The programme emphasises skills and craft, working with emerging and established artists from all backgrounds."

> Multi-functioning spaces
> Thoughtfully designed furniture and storage to enable spaces to be flexible
> Low disposable income community



OHSt, London
6a Architects

> Two former workshops, originally a coach house and works building that have seen constant alterations over the space of 200 years resulting in little rational.
> Series of intimate spaces tracing time.
> Walled garden

SECTION 2.2

Arts and Culture Precedent

Ottorahanga - New Zealand - Dale williams mayor

Not your average mayor, of a not so average small town in New Zealand with a population of 2,700.
When he took office in 2004 the town suffered from high unemployment, youth crime and young people leaving to search for work.

Through a joined up approach to give opportunites to the youth through guidance, employment relations and education

Otorohanga is a changed placed.

In the 8 years since the introduction of the scheme, between 95-100% now complete apprenterships with the national average just 40%. Youth crime has fallen by 75% but most telling is the youth are staying because there is opportunity, with not a single unemployed under 25 in the community since 2006.

If the 'center for life' could adopt a similar approach to opportunity, education and guidance for post 16 islanders more could stay instead of leaving for the mainland not to return.

The scheme could run alongside the existing guidance from the five islands academy, while introducing new ideas through the research center, the creative labs and the fly in factory.
Allowing the post 16's more choice whether to stay or leave with apprenterships, hands on courses, job opportunities or even guidance on business start-up.

Photo of Dale Williams courtesy of stuff.co.nz
Photo of Otorohanga courtesy of trover.com
Click here to see his Ted talk

SECTION 2.2

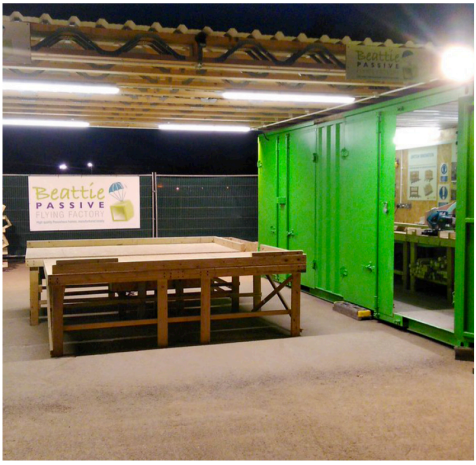
Arts and Culture Precedent

Cornwall and the Isles of Scilly LEP-
Young People and Our Future Economy

The CIOS LEP is already involved in the project on Scilly and while researching opportunities for children in the region to influence their surroundings I came across this event the CIOS LEP were part of with the Eden Project. The premise was to get the kids insight into the shaping of Cornwall's future.
The event was really well received, giving the students a chance to voice their opinions on issues in Cornwall and the Isles of Scilly. The feedback was then used to help formulate Cornwalls strategic plan going forward.

Events like this should be more common place to help engage students but also show them that they can effect their surroundings. This is something Jan Gehl identifies to help build healthy happy communities.

Photo courtesy of the CIOS LEP



SECTION 2.2

Arts and culture Precedent

Beattie Passive - Flying factory

Beattie Passive are a company delivering Passivhaus standard builds by taking temporary factories to site along with skilled workers to do so. They also train in their systems, which generated the idea of having a workshop and training center in the proposal.

SECTION 2.2

Context/Site Precedent
Vestre Fjordpark by ADEPT -
Aalborg Denmark - https://adept.dk/project/vestre-fjordpark

The connection between the land and water provides a balance for the nearby city dwellers to connect with nature. The pretense of the project is focused on education and the health benefits of the natural surroundings. It provides a space for people to gather, meet and play in the outdoor environment, something the new center for life on Scilly has to achieve to benefit the community and visitors alike.

SECTION 2.2

Context/Site Precedent

Helen & Hard
Geopark - Stavanger, Norway

The idea of play in the center for life is crucial and Helen & hard demonstrate how it can turn a once diused harbour-side site into a busting social meeting point.

It utilises repurposes materials from the offshore oil industry and was designed with the help of youth groups to steer it's direction.

The ideas behind this would help to in-tergrate the scheme at Carn Thomas into the community and bring the essential life and colour to the centre.

http://www.helenhard.no/thinking/geopark

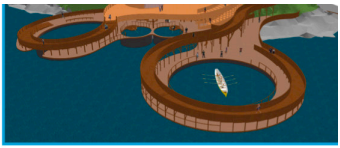
SECTION 2.2

Context/Site Precedent

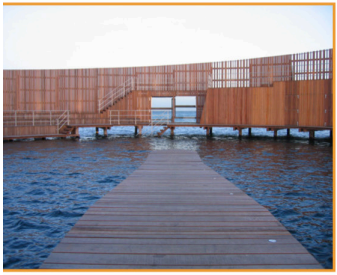
Precedent - Dorte Mandrup - Wadden Sea visitor centre - Denmark

This was another precedent for materials and techtonics. The angles, the big roof, the rainscreen timber and the partially glazed sections under that timber on the roof were a big influence on the direction of the overall aesthetics for the center for life.

White Arkitekter: Kastrup Sea Bath
Kastrup, Denmark



Technical Aspect: Azobe Timber



Kastrup Sea Bath is constructed from Azobe timber, a tropical hard wood.

It is an incredibly durable material. Most pertinently for my proposal, it is resistant to decay through continued wet/dry cycles - such as high and low tides.

My waterside development contends with some of the same challenges as Kastrup Sea Bath and I have responded to the conditions by using Azobe timber too.

I have not however used azobe timber throughout. In the image of my design above, a darker timber is visible on the lower levels.

The lighter timber is not as regularly and extensively exposed to sea water so it didn't merit the extra (financial & environmental) cost and additional workmanship required, when using azobe timber.

-Holman Industrial Area - Fishing facility By Snøhetta.
-Industrial Fishing Facility has all aspects of the process housed in a collection of spaces that are broken up.
-Each building is clearly identifiable with distinct material palette.

Images from https://snohetta.com/projects/408-holmen-industrial-area

-Timber Research Centre University of Arkansas By Grafton Architects
- Large timber volumes, large street presence and tapers back.
- Wood workshop facilities, educational centre.

Images from https://www.architecturalrecord.com/articles/14516-grafton-architects-to-design-applied-research-center-for-university-of-arkansas