

The Construction of Shallowford's Ark

The story begins in 2013, when the trustees reviewed the long-term goals and objectives of The Shallowford Trust, aiming to ensure long term sustainability of its main mission. One of many objectives identified, was to build an 'all weather space' that could be used for outdoor educational purposes ranging from spinning, to plant identification, felting to insect monitoring, Dartmoor Community meetings to celebrations on the moors.

Planning permission was granted in September 2016, but the original architectural ideas were taken by Malcolm Hunter (Trustee and Carpenter) to a Cornwall based company 'Timber Frame Design and Build' in Callington, where Ellie Peart set to work with the overall concept for a beautiful, self- built barn that would be tough enough for children to splash paint and make their own bows and arrows but beautiful enough to hold a wedding. The result, in pictures, can be seen below.



The stable and pig sheds were originally roofed with tin by John Howe in the 1970s. Malcolm Hunter and his team worked from 1982 to develop the front two pig pens, building the Bull Pen and repairing the office in 1987. The stable for Barny and Bridie was built in front of the office in the 1980s. These barns served their purpose of housing uncountable numbers of animals and enabling many a painting session or a barbecue on a wet day for around forty years.



The office was truly hidden – a secret door behind an open fronted stable. In this picture, the stable is relegated as a temporary store for an old washing machine! Spring 2019.



6th July 2019: the walls of Barny and Bridies' stable come down. The wood is recycled and the wonderful old stone face of the barn, now used as an office, is exposed!

Within hours the work is completed by a Providence House (Battersea, London Youth Club) work party – including two highly amusing Polish twins and headed up by Phil Dorman, with Robert Musgrave as the driver of yet another fantastic group of volunteers.



Phil Dorman: Shallowford's stoical and highly skilled carpenter who organizes many of the people who volunteer for the work parties, ensures the re-use of materials and made the barns as water-tight as possible for the next few months as we raised funds for the new build.



5th September 2019. The yard tidied up and ready for 'Open Day' on 14th September 2019.



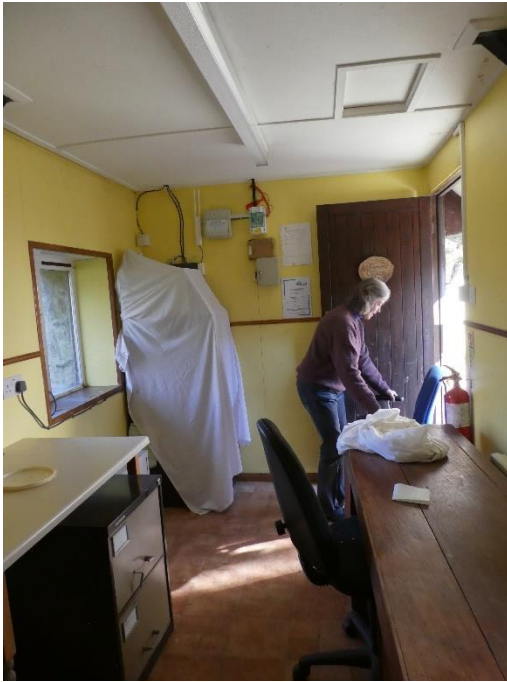
14th September 2019: over 60 people visited the farm trying spinning, willow weaving, lots of Boris Burgers and cream teas were indulged! The last public event for the old barns!



12th October 2019. Local Volunteers (including Debbie and Al Sandels – the previous Trust Manager and husband) and the Hodges come to help, fuelled with Boris Burgers, they heave, shovel kick and whack the spades to expose cobbles we did not know existed!



Until 15th November 2019, the office was small, very small. Will Dracup (Farm Manager) felt there was a need to see more from his Trust Manager and decided that the best way to motivate her was to increase the space. Discussions were held with Malcolm and Phil..... and so more whacking and thwacking took place!



Serena – the engine of many activities at Shallowford, empties what has been her main office, to enable Phil and his team to start their magic as volunteers undertaking yet again a major, essential building work.



15th November 2019: Will Dracup, our Farm Manager sets to work cementing the gaps where the rats have been active under the office for the last twenty years or more!



Malcolm and Phil plan out and start measuring the boarding for the extension.



Painted at speed by Serena, Will and Julia..... the final space is huge and luxurious. More to the point, it's possible to manoeuvre more than one person at a time and actually lock, store and find valuable documents! By 9th December 2019..... we had an all dancing, scanning, networked printer!

But..... by knocking down the interior partition a hole in the tin roof was identified.



18th December 2019. Off with the old corrugated iron and on with the new, via a little help from Will and his Manitou. Malcolm and Dave Adams braved 50mph gusts of wind (notice the picture is taken from indoors!) to install the ridge to make the new roof water tight. The new window was made courtesy of Malcolm's good carpentry skills!

Construction of the Ark



There it is 17th Jan 2020 19th January 2020 now it's gone!



The volunteer Providence House team who with hard enthusiasm on a very wet 11th January 2020 – pulled down the entire barn unit.

The old roof came off and the walls came down with a little help from the Dracup's Manitou (yet again) with John at the helm this time (Will dared to disappear skiing!)





14th January 2020: in came Matt Symes broke up all the cement and dug the foundation hole.



15th January: main drains dug and foundation gravel laid.



Temporary views into the yard that could be lost for another 50-100 years!



21st January 2020: Glendenning's delivery of cement for level one of the many foundation levels.



22nd January – the blocks arrived and the foundation walls are built by Matt and his brother.



24th January 2020: layers upon layers



And more layers.



30th January 2020: the cement slab is ready for construction!



16th March 2020: the day before the major build. Phil Dorman and Peter Fouche from Providence House assess, think and plan!



16th March 2020: major parts of the building arrive – from Timber Frame and Design in Cornwall, flat packed!



18th March 2020: the walls went up within a few hours with the first weeks team of Malcolm Hunter, Dave Adams, Chris Houston, Phil Dorman and Peter Fouche with Will Dracup and the manitou! Note the thermal insulation – high tech stuff!



17th -18th March 2020: beams go across to add security to the frame.



18th March 2020 – the frame is secured by the team.



18th March 2020 – tricky trying to match all the angles securely.



18th March 2020 – two gable ends are secure.



20th March 2020 – the trusses made with secretly inserted metal joints are carefully lowered into position.



20th March 2020: machines on both sides to ensure people are in place to secure the roof beams.



20th March- end of the day! Roof stable



24th March 2020: Will deftly manipulates the Manitou speeding up the roof work and enabling considerably faster work than would be possible with scaffolding.



24th March 2020: teams work in pairs with Will moving the machinery and tea and coffee provided!



27th March 2020. The frame is on, boarding to be put in place.



20th March
2020



30th March 2020: first layer of breathable membrane
Followed by the anthracite covered metal sheeting.



2nd April 2020: doors and windows with dark grey metal frames are inserted. Takes a while!



6th April 2020: the outside boarding in 'standard' farm boarding (hit and miss boarding) has begun.



8th April 2020: The electrician arrives to ensure all the primary wiring is in place before boarding and insulation is completed.



8th April 2020: Rockwool under the hardboard is followed by layers of thermal insulation, fire retardant and yet more boarding. It will be very warm!



15th April 2020: all the fire retardant and insulation in the roof is in place followed by plasterboard before painting.



15th April 2020: Phil's weekend work was to tidy-up the office door.



16th April 2020: the front of the barn with panelling in place before the drainpipes have been completed.



20th April 2020
The back view of the barn with wooden doors open.



20th April 2020: the first roof plasterboard is hoiked up and held in place as the screws are drilled. It's a four-person job, with very tired arms and necks at the end of the day.



20th April 2020: some suppliers are still working. We gain a delivery of Celotex (floor insulation), hardboard and other floor materials. It's a LOT of insulation again..... this building will be as toasty as a badgers holt!



21st April 2020: the internal plaster boarding is nearly completed. The floor will be next!



22nd April 2020: first later of Celotex is positioned with a damp proof course under the lower Celotex layers.



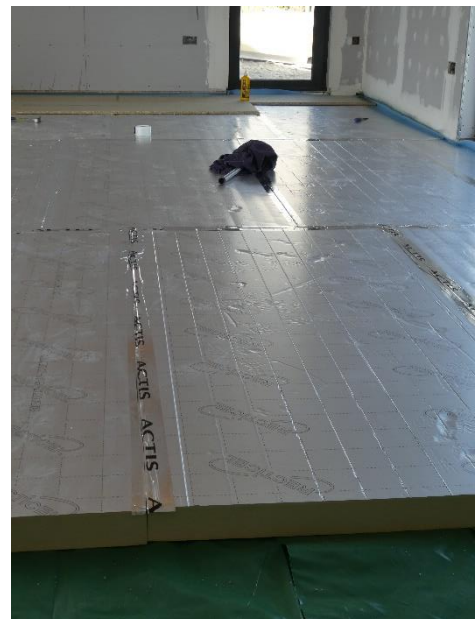
22nd April 2020: all seals are carefully taped and snugly fitted to ensure no leakage of air, moisture or radon.



22nd April 2020: A second radon barrier is placed between the two layers of Celotex, with a damp seal lining around the edge.



22nd April 2020: all joins are carefully sealed with tape for both the radon barrier and the Celotex.





22nd April 2020: 22ml chipboard is placed and sealed over the Celotex.



22nd April 2020: more sealing and more securing of specialised hard chip floor boarding'



27th April 2020: Tristan and Ed use a spray on adhesive to secure the 'wavey' foam ridging material that holds on the final ridge pieces which are drilled securely in place.

Note: the original design had ridge pieces of 200cm which were considered too small for the overall size of the roof and replaced with 300cm ridging.



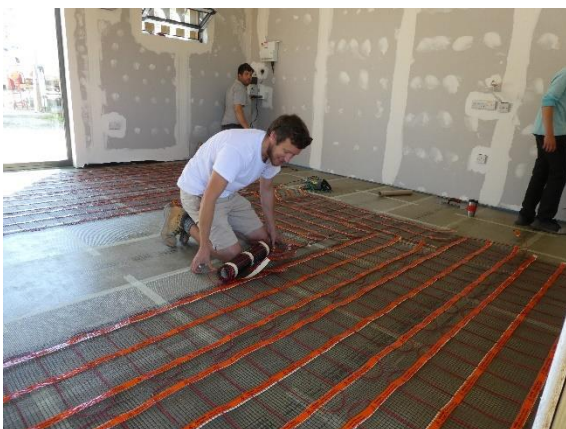
27th April 2020: view of completed roofs from the house.



13th May 2020: Malcolm and Dave visit for a day to install the guttering on the Corndon side to the office and the drain pipe for the two buildings.



19th May 2020: special underfloor heating mats are laid and sealed with tape by Ed over the hard chip board.



20th May 2020: Ed, Tristan and Rami install the electric underfloor heating cables.



20th May 2020 Tristan, Ed and Rami mixing the cement bonding finish and Tristan laying the quick drying cement.



11th June 2020: Jess and Malcolm Hunter arrived (11th – 12th and then 15th – 17th June) with Dave Adams to start the filling of holes, joints and dents. Using masks, an extractor fan, a lot of plaster, sanding and a dangerous balancing (Malcolm) – they took the room to perfection.



15th June 2020: The work was completed in sections up and down to allow parts to dry as other sections were worked upon. The aim was to complete the walls before the floor was put down to prevent damage. But in truth – there was almost no plaster or paint splatter – just a lot of dust!



22nd July 2020: the Ark painting is completed and the room ready for it's first meetings. Note, the Corndon doors were not fitted for several months as we waited for funding.



8th July 2020 work laying the special Lotus International Oxford Oak Vinyl Floor, was completed on the 9th July by Dave Adams and Malcolm Hunter. Subsequently many children have been foiled – they believe it is real wood!



5th – 6th September 2020: the Providence House Work Party arrives to construct the frame for the end wall cupboard.

Martin the Plumber connected the sink, cutting out the worktop bench etc in early October 2020, following on from Tristan Denman and Will Dracup fitting the kitchenette units in late September.

Mike Eslick fixed the aluminium door facing towards Corndon Tor as a tradesman with the required technical skills on 13th October 2020.



29th October 2020: the cupboard doors arrive. Made to measure by Malcolm Hunter.



18th December 2020: Malcolm and Dave arrive at the farm to fit and hang the large cupboard doors



The Ark interior with all cupboard doors shut and the kitchenette door open.



View of the Ark looking towards the house. Note the agricultural detail of water troughs for both overhead and wall lights.

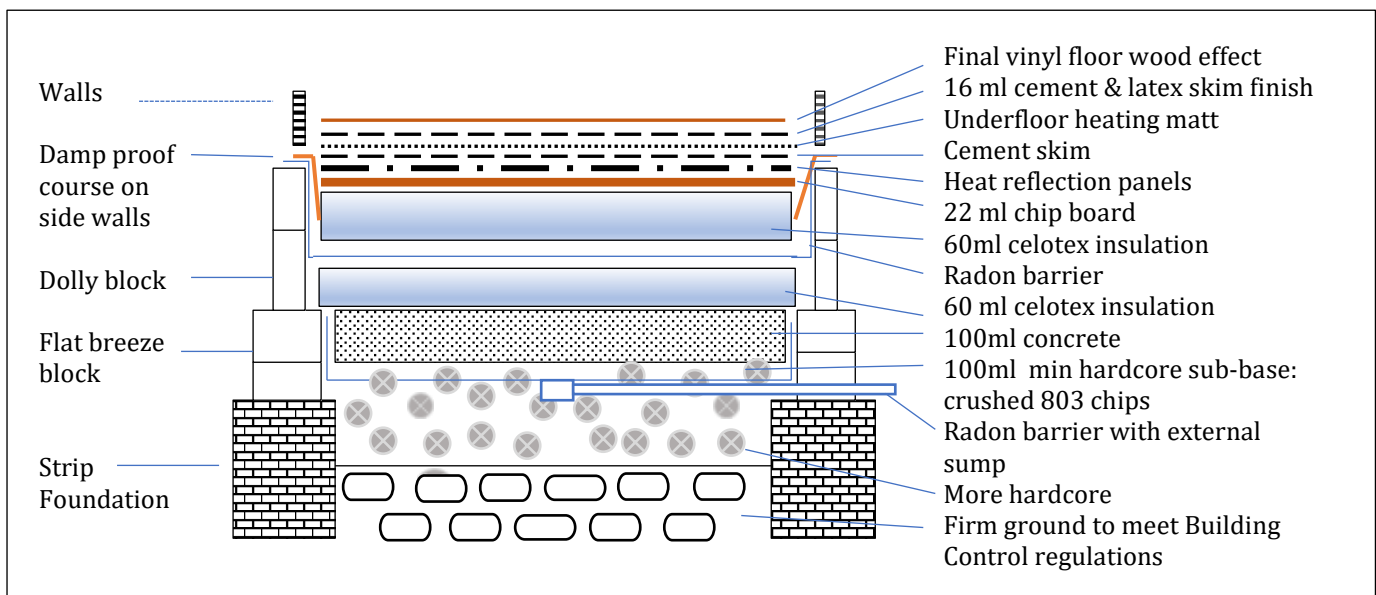


13th August 2020: Providence House Girls Group: Future Board Planning: the first official group to use the Ark. Please note, many groups have used the Ark since it was made water-tight. However, we are unable to show photos due to Corona Virus restrictions.



March 2020: Simon re-purposes stones from the Barn to complete the cobbled area.

Foundations to Final Floor Design:



Radon Barrier:

There are two radon barriers. One in the hardcore sub-base, that has a sump and external pipe to draw radon out from under the building. The second radon barrier is under the timber frame, between the two layers of Celotex, glued to the damp proof course covering the entire floor area, joined with the radon tape to form a seal.

Workforce on the Ark

Name	Work Period	Relationship	Status
Chris Houston	16 th March – 21 st March	Friend of Malcolm's	Volunteer

Dave Adams	16 th March – 28 th March & regularly afterwards	Friend of Malcolm's	Volunteer
Malcolm Hunter	16 th March – 31 st March & regularly afterwards	Trustee	Volunteer
Phil Dorman	16 th March – 24 th April	Providence House	Paid + volunteer
Peter Fouche	16 th March – 17 th April	Providence House	Paid + volunteer
Tristan Denman	20 th April +	Local contract Electrician	Contractor
Ed Leech	20 th April	Apprentice local contract Electrician	Contractor
Will Dracup + manitou	16 th March +	Farm Manager	Contractor + volunteer
Rami McDade	Some days before + 27 th April +	Local	Volunteer – learning
Ed, Tristan, Rami	19 th May (Ed) 20 th May	Ed, Tristan, Rami	Lay underfloor heating system As part of the contract.
Phil Dorman, Chris Broome, Christian Osborne, Christian Gordon, Josiah Johnson	3 rd – 6 th September	Providence House Workparty	Volunteers
Martin the Plumber Jones	29 – 10 th October 2020	Local tradesman	Fitted out kitchenette plumbing and worktop
Mike Eslick + friend	13 th October 2020	Local tradesman	Inserting and rejigging the aluminium windows
Simon Damant	March 2021	Friend of Julia's	Volunteer



May 2019



May 2021

Financial Donors and Supporters:

Anonymous: One Trustee enabled the entire process to begin

Foxglove Trust

Gibbons Family Trust

Without a doubt, the Ark could never have been completed without the insurmountable support of Malcolm Hunter and Ian Potts. Malcolm took the concept, found the designer, organised volunteers and undertook much of the work himself. Thank you also to his family who supported in many ways and the many, many volunteers who not only worked on the building but moved items around (the Shallowford Shuffle), finding and transporting sofas and generally helping the project to completion. THANK YOU!



July 2022: the Ark is often used as a quiet space for meetings and discussions.



July 2023: Cotham School: the Ark becomes a centre for weaving.