

Joanna Moloney  
MARCH 2

Portfolio



# A New Model Of Adaptive Reuse

My project aims to provide an alternative model of adaptive reuse by allowing the resident's to repair and improve the building themselves. This allows for the apartments to be affordable and fosters a sense of community in the area.

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# Site Introduction

Both buildings used to be hospitals until 2011.  
It has been vacant since then.  
In 2014 planning permission was granted for a mixed use development for 'later living'.  
The local plan has allocated 20 units for the site.

West House  
4 storey Victorian building  
with modifications

Gambier House  
3 storey Victorian building  
with modifications

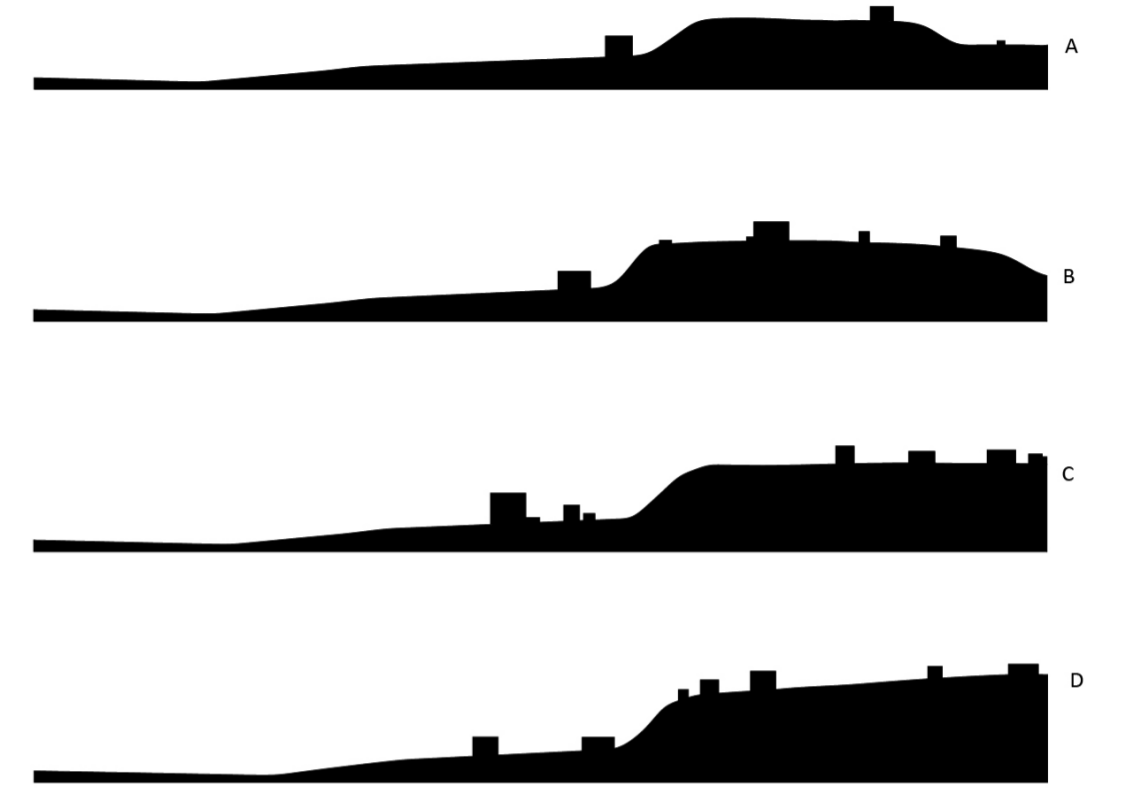
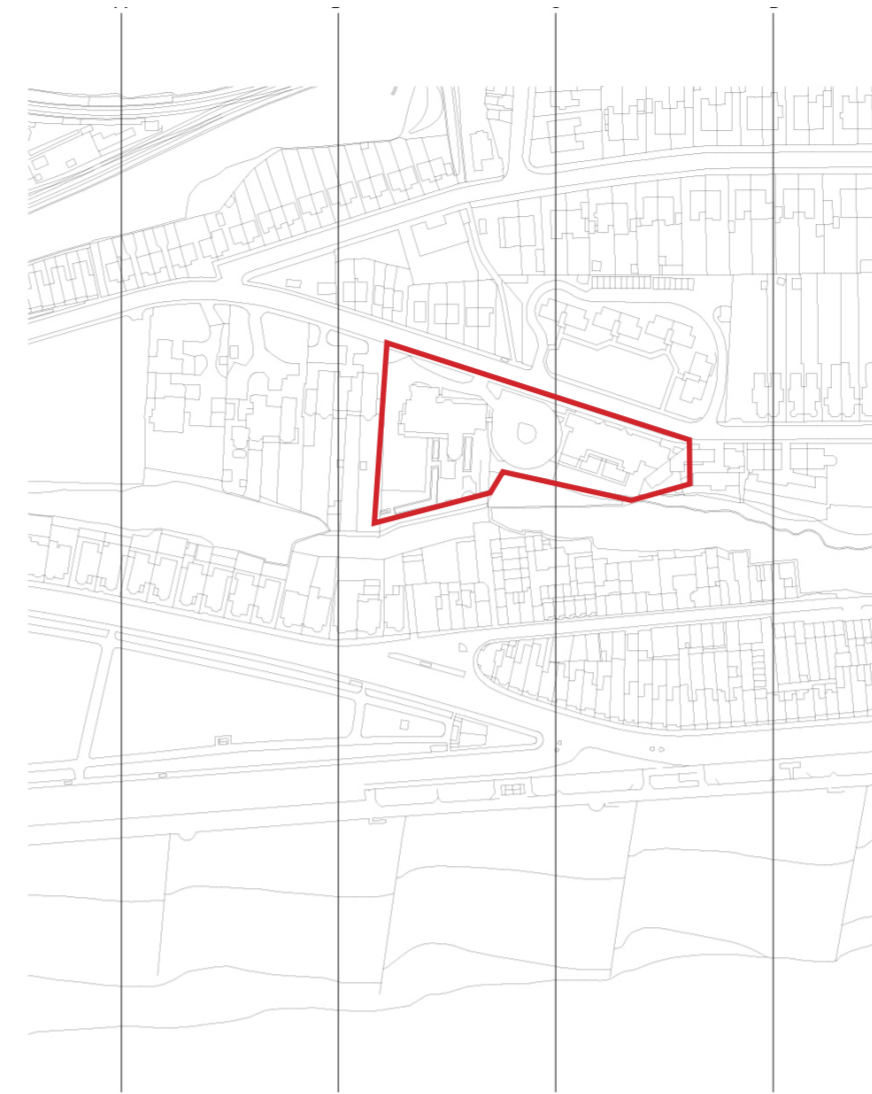


Site Plan

Site Context

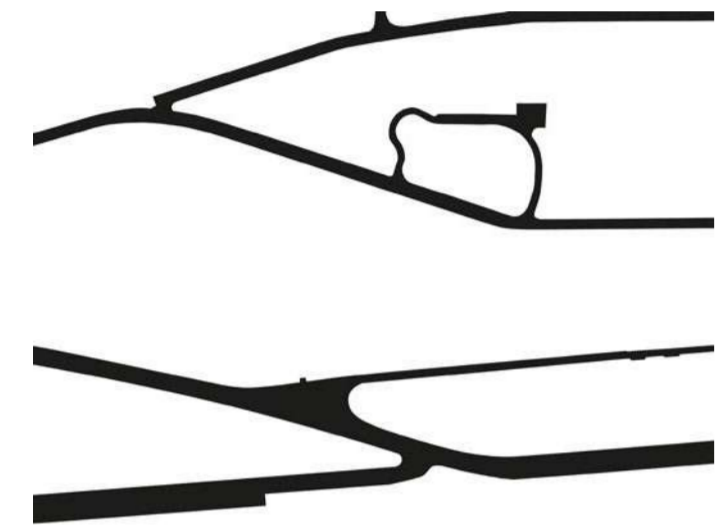


Businesses

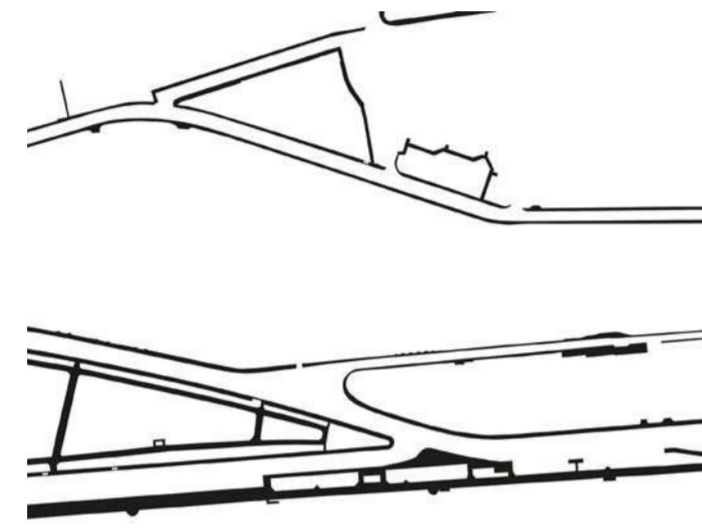


Site Sections

Site Buildings

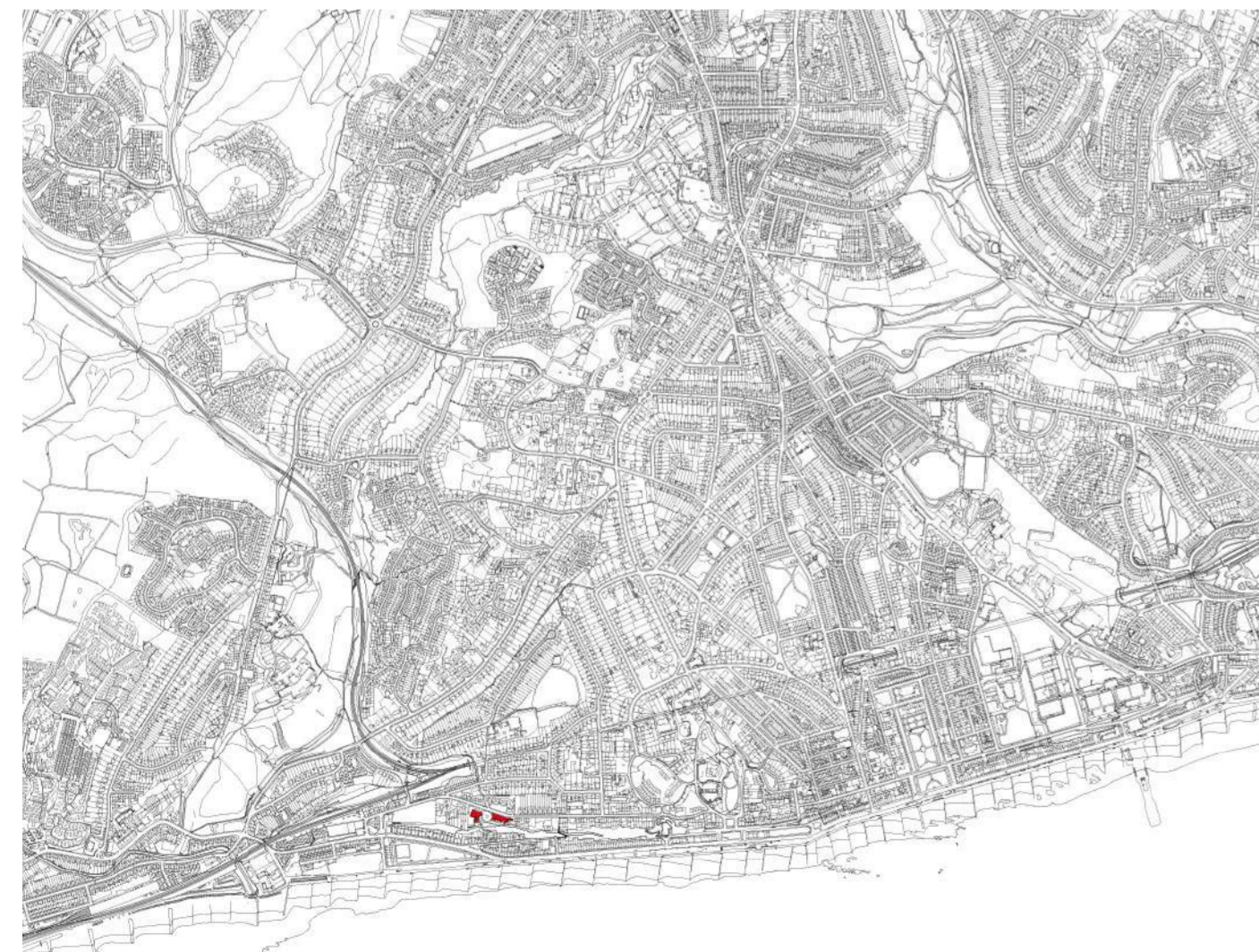


Houses

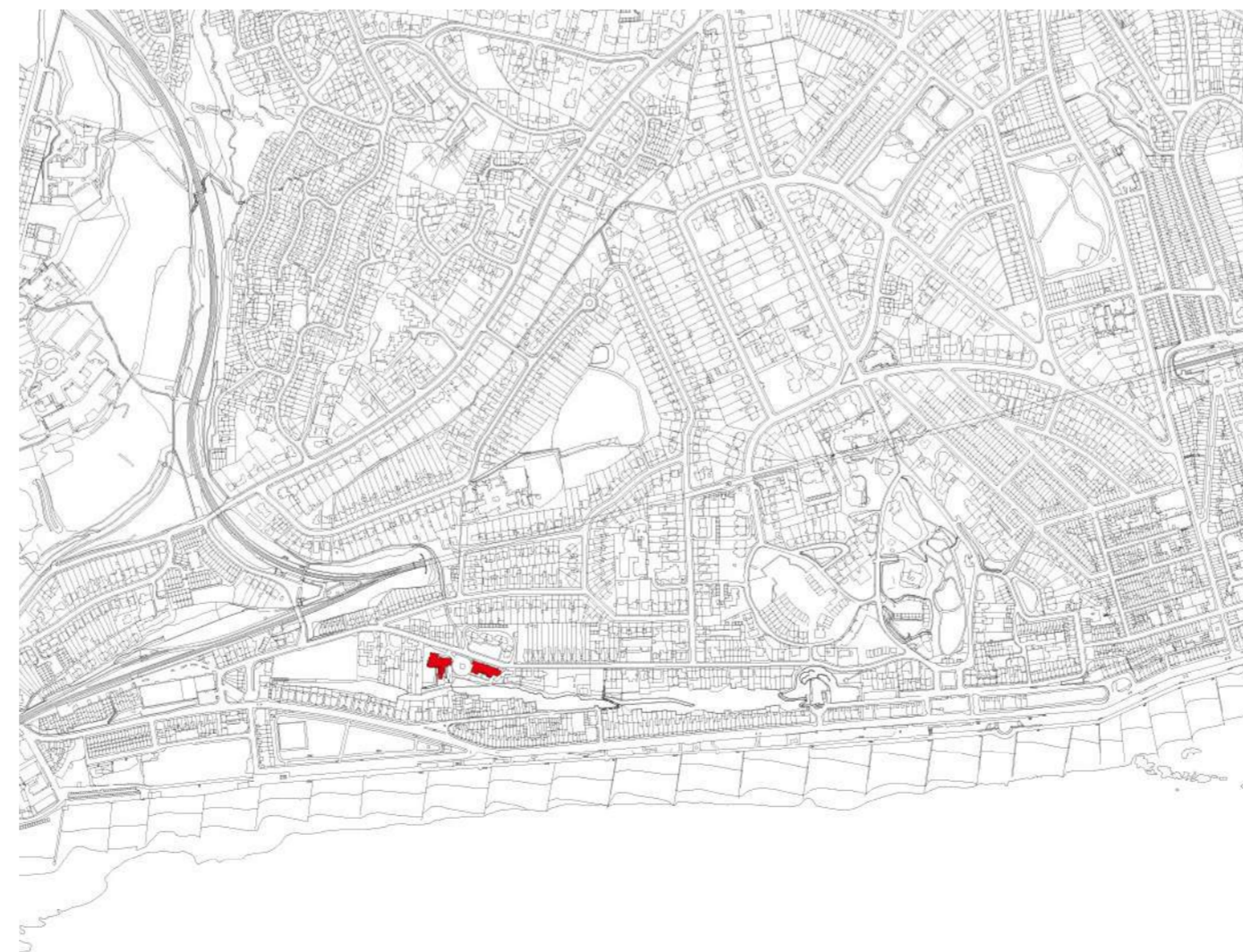


Pavements

Roads



1:10000 @A2



1:5000 @A2



1:2500 @A2

Images of Context



Local Businesses



Public vs Private Green Space



1 Flowers by Lil

Florist providing bespoke artificial bouquets and flower arrangements for weddings.



2 Sprodnick Baits

Fishing shop providing bait and tackle.



3 West Hill Road Pottery

Shop selling home-made pottery.



4 Date Club Greenwich

Dating service for local residents and black tie events.



5 The Marina Fountain

Local pub that serves food and drink.



6 Food City Hastings

Off licence.



7 Illustra Prototype Models

Shop that models of collective cars.



8 Knights Interiors

Fabric store.

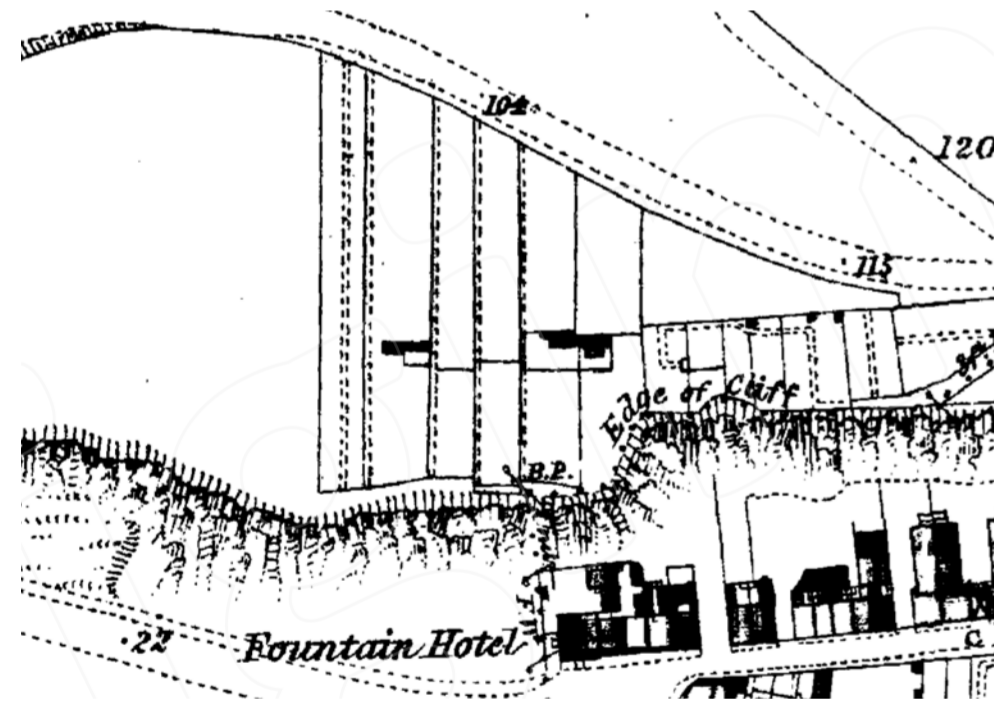


Ages of Buildings

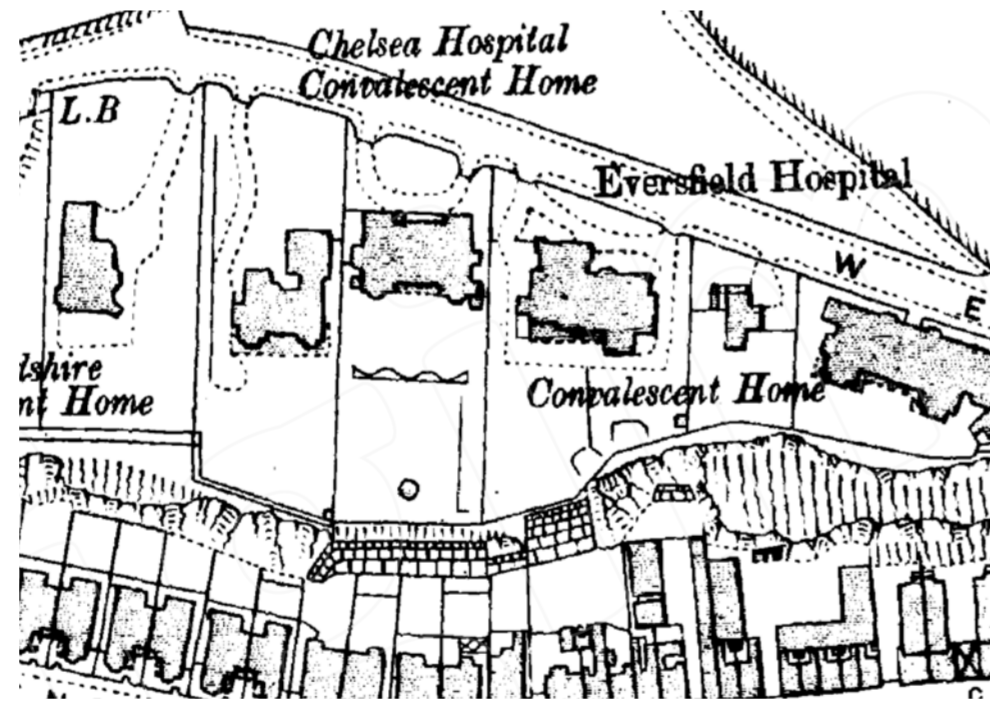


Site History

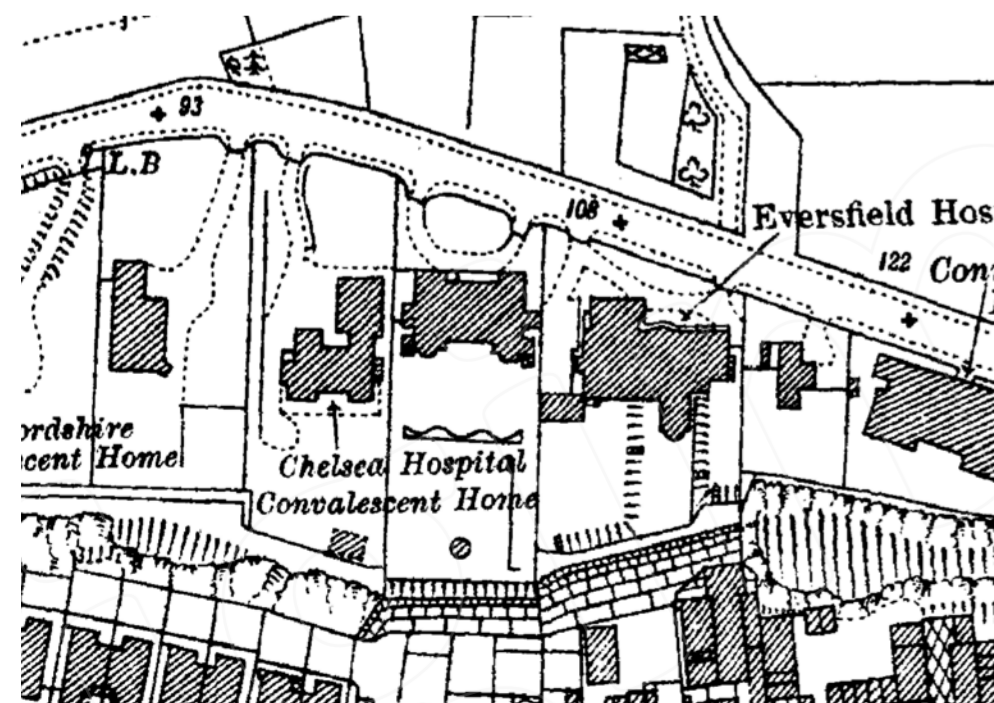
Gambier House was built as a Convalescent Home for Railway Men in 1897. In 1948 the NHS purchased the site to use the buildings as hospitals. It was vacated in 2011. In 2014 a mixed use development for 'later-living' was granted planning permission.



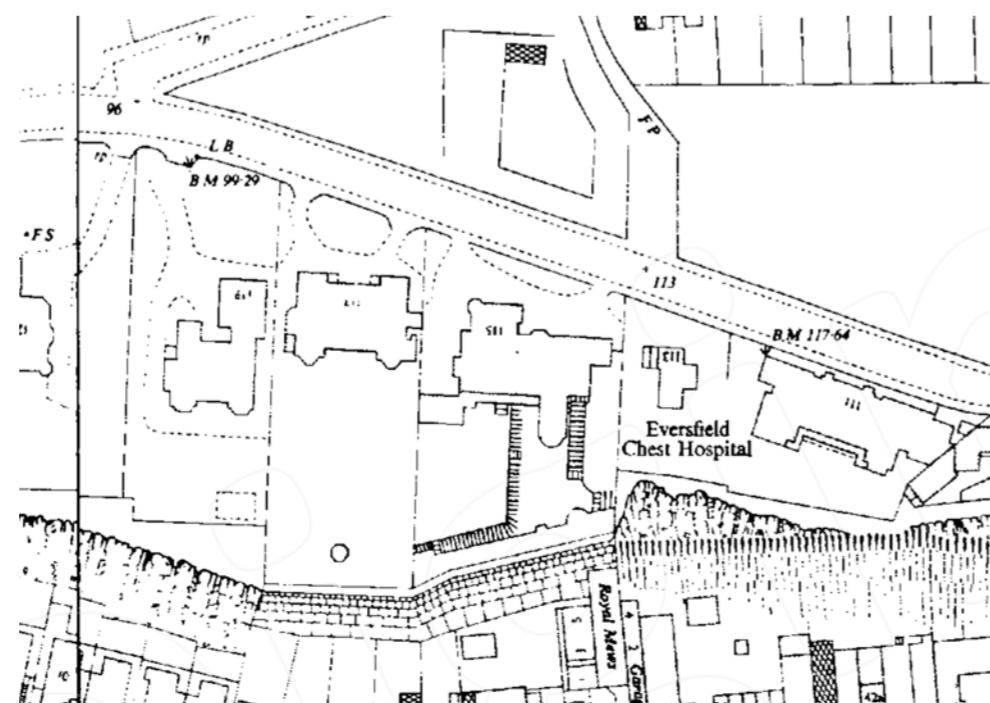
1870



1900



1920



1950

Artefacts



Brick textures from West Hill House facade



Crumbled brick from West Hill House facade



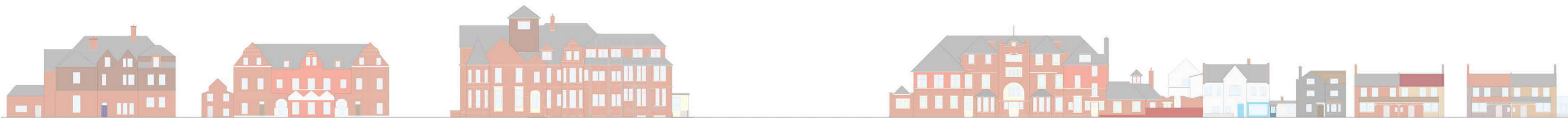
West House



Gambier House



West House





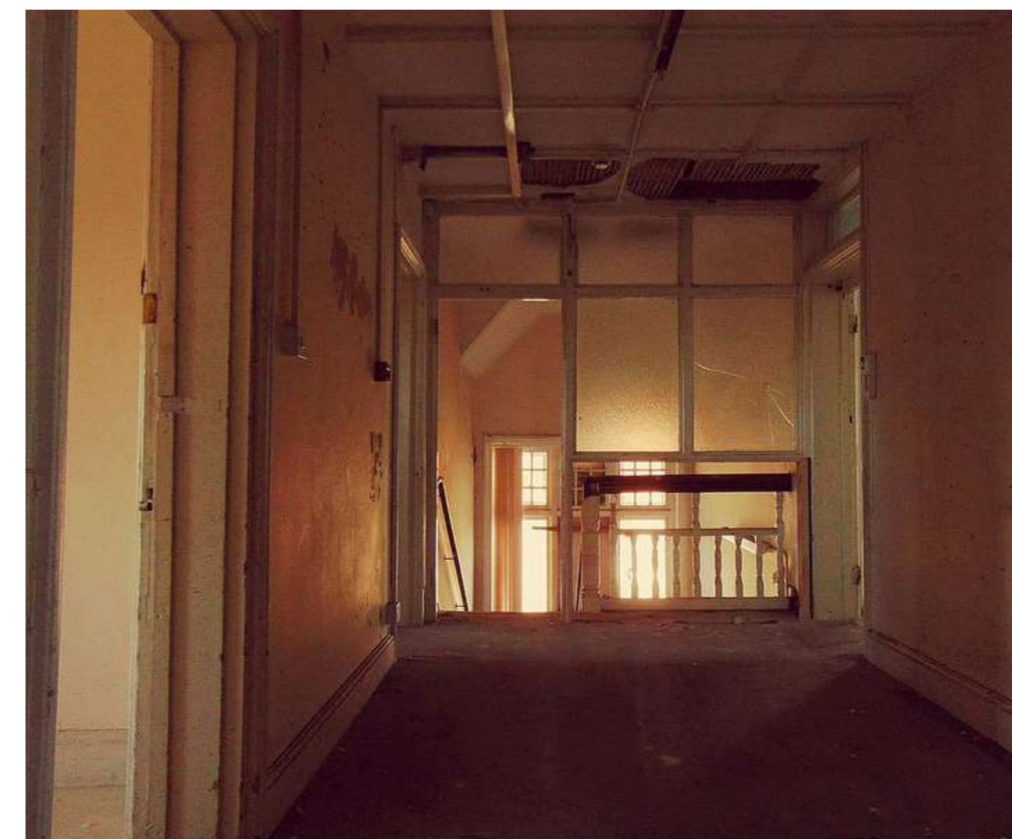
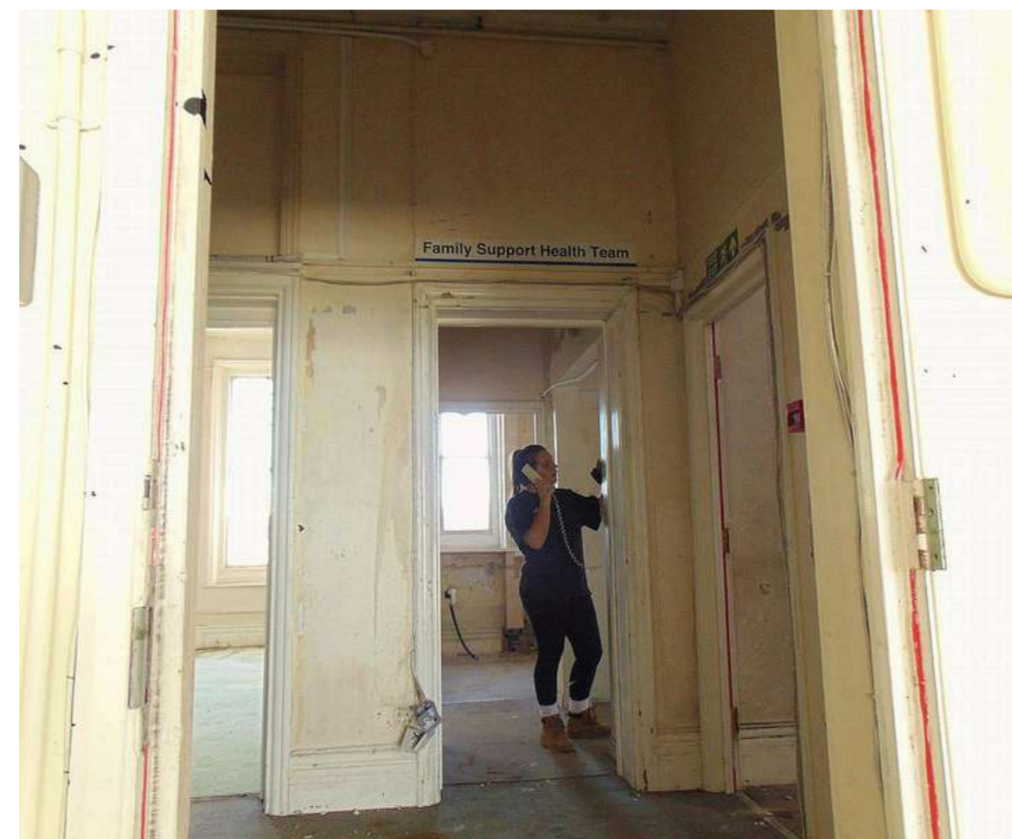
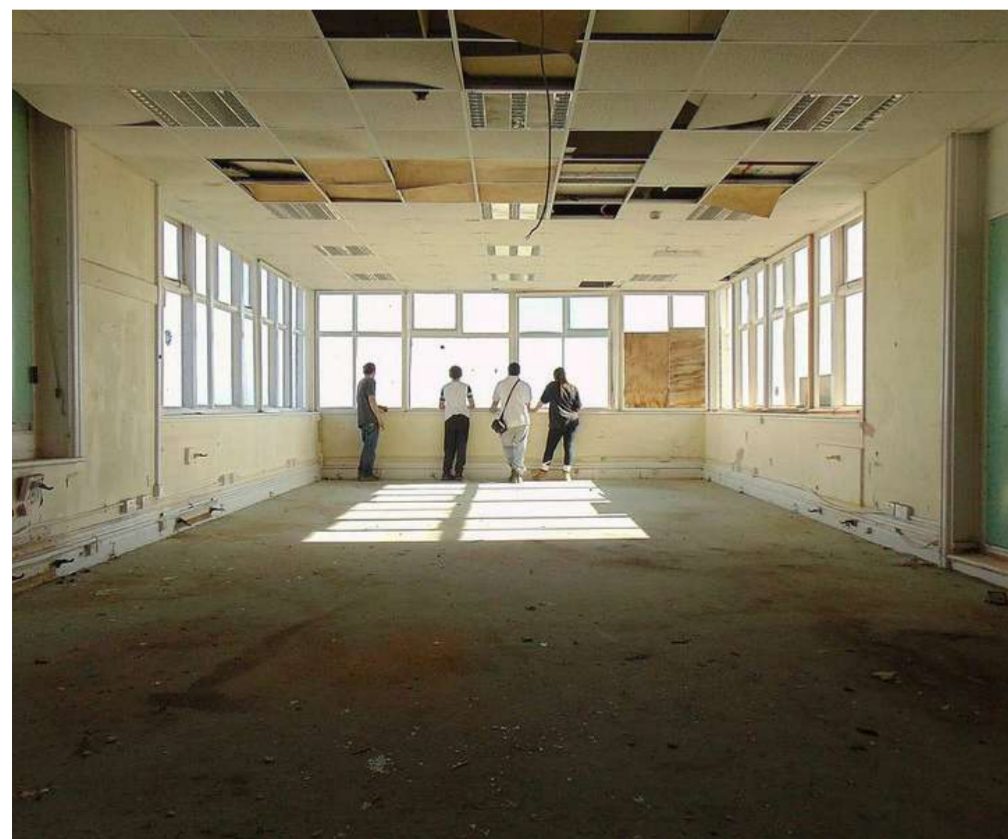
West House



Gambier House

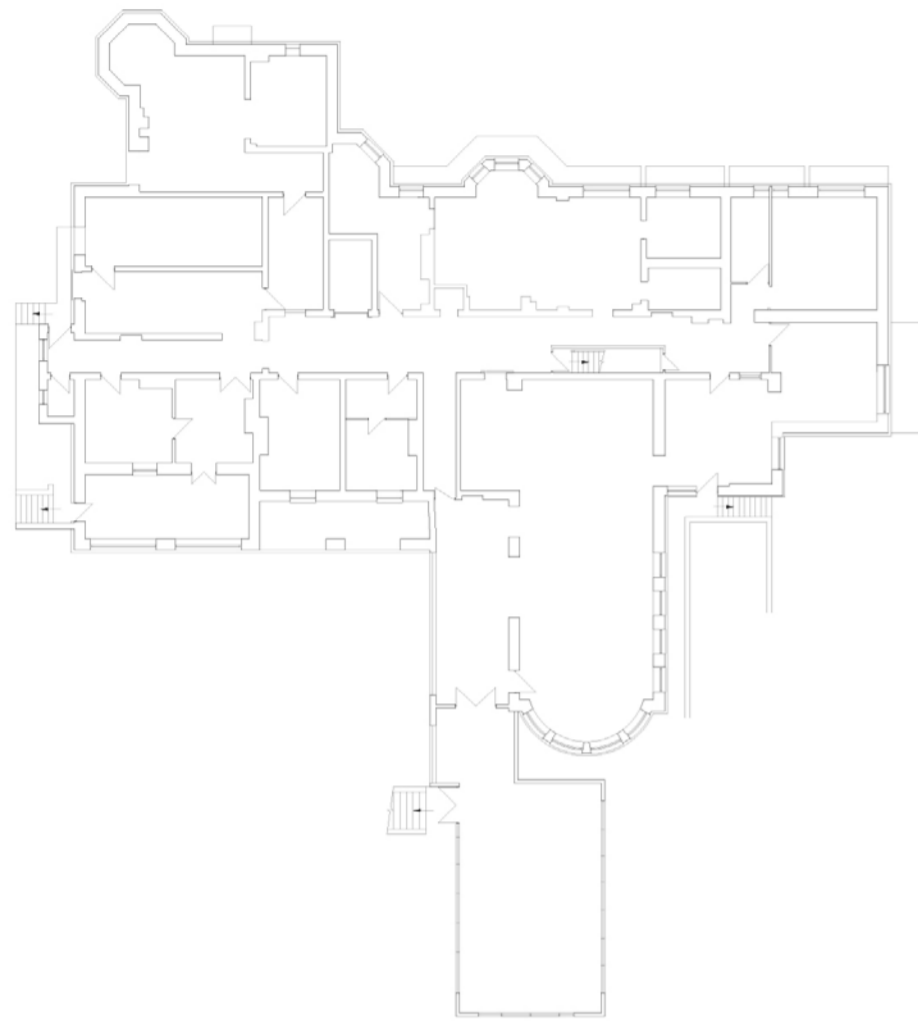


Interior Images

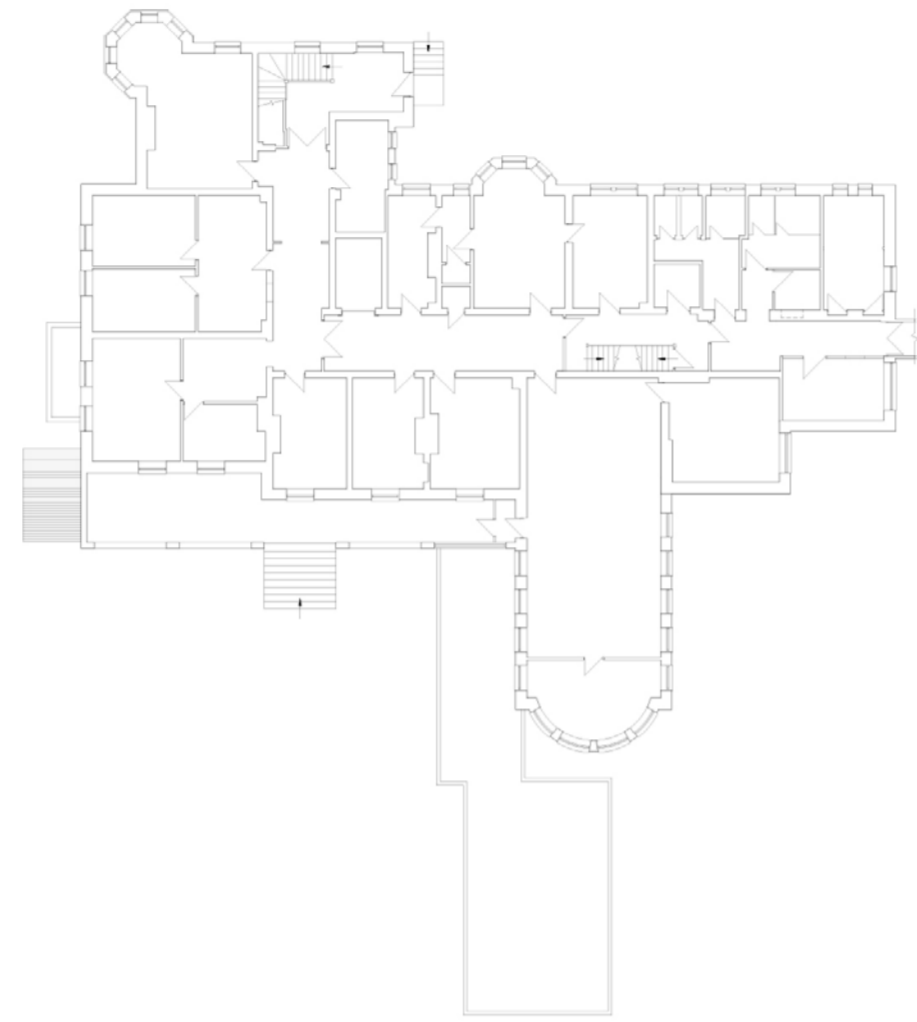


West House Plans – Existing

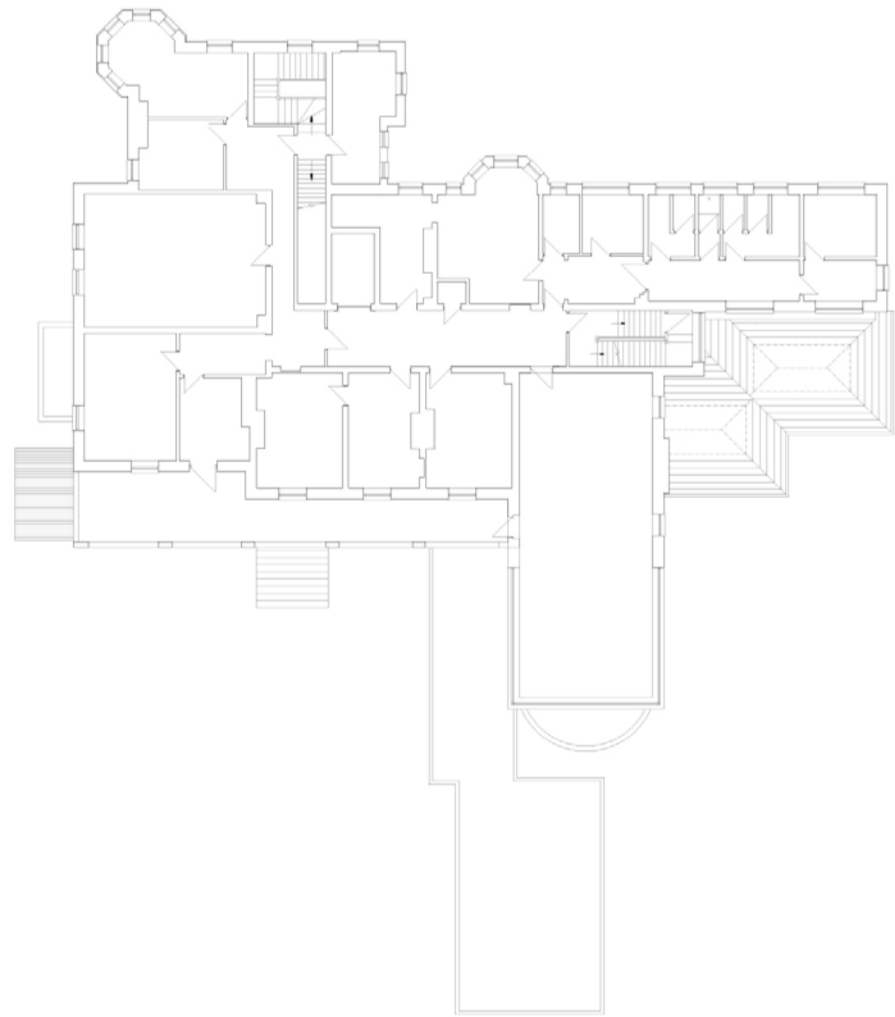
Lower Ground Floor



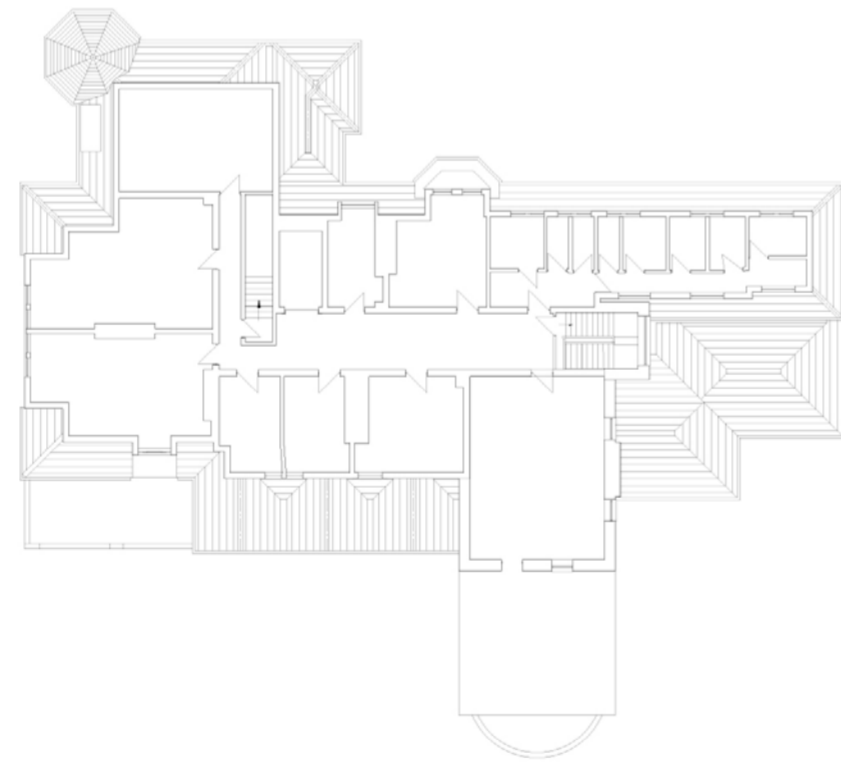
Ground Floor



First Floor

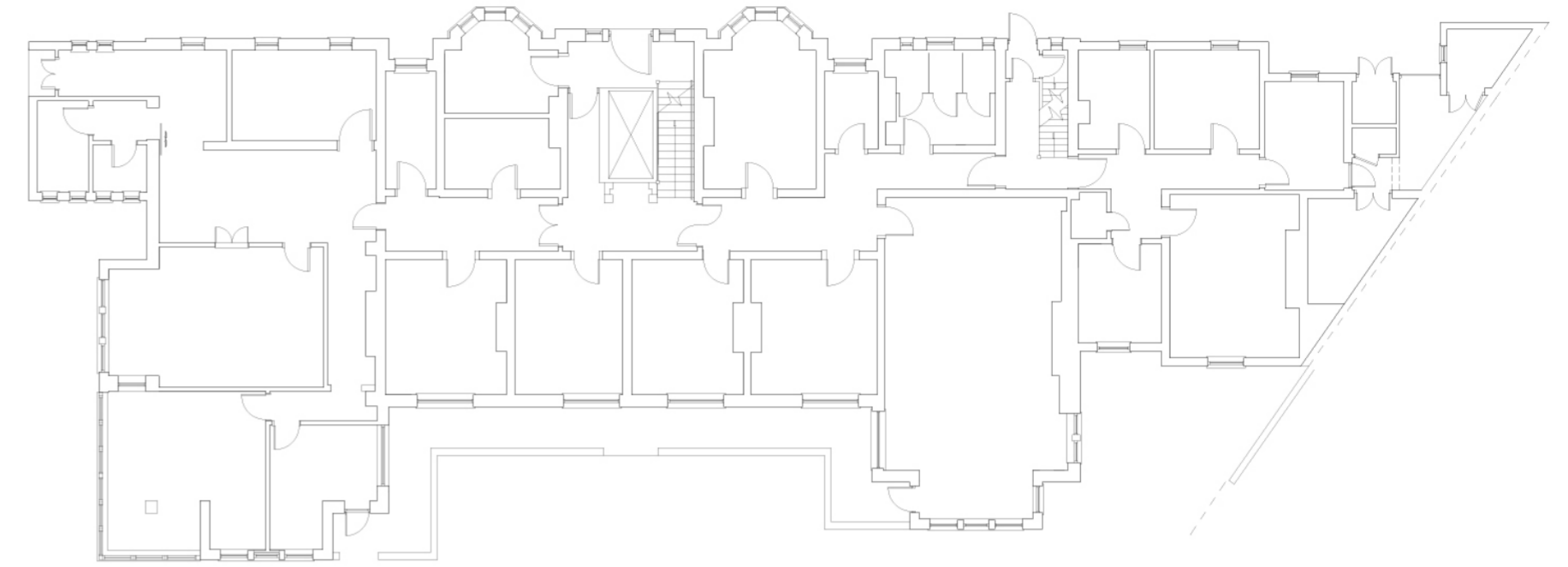


Second Floor

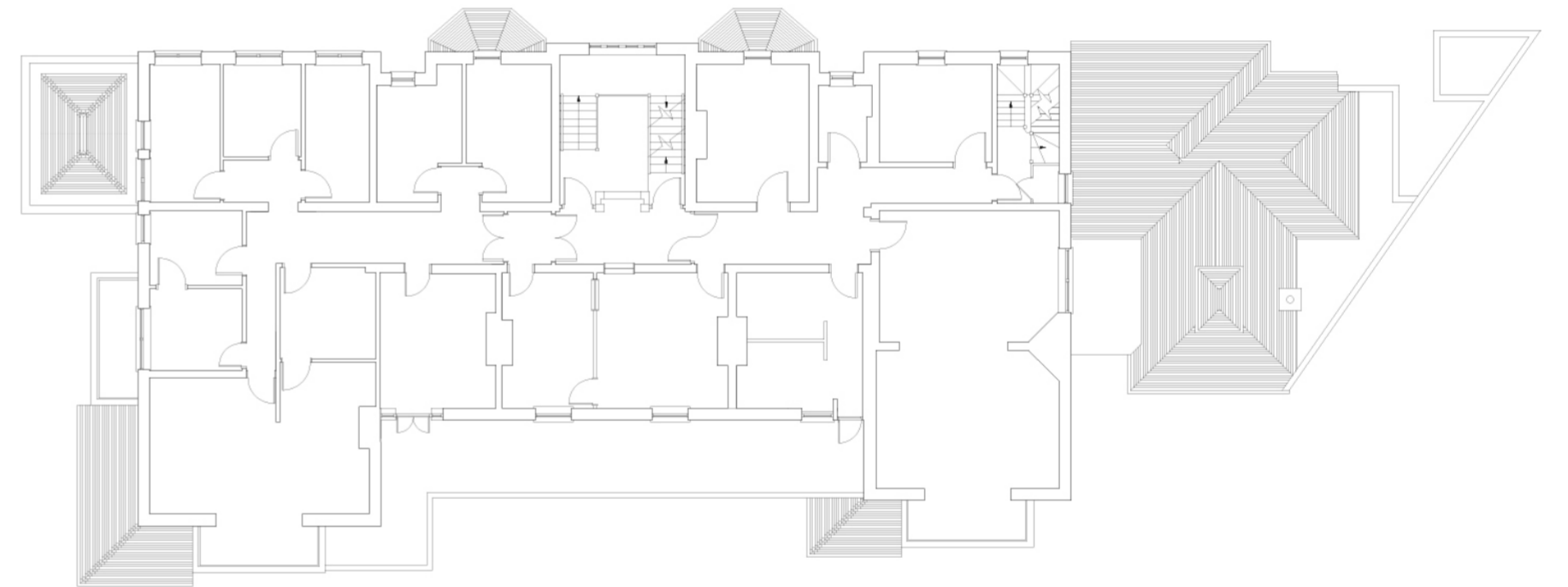


Gambier House Plans – Existing

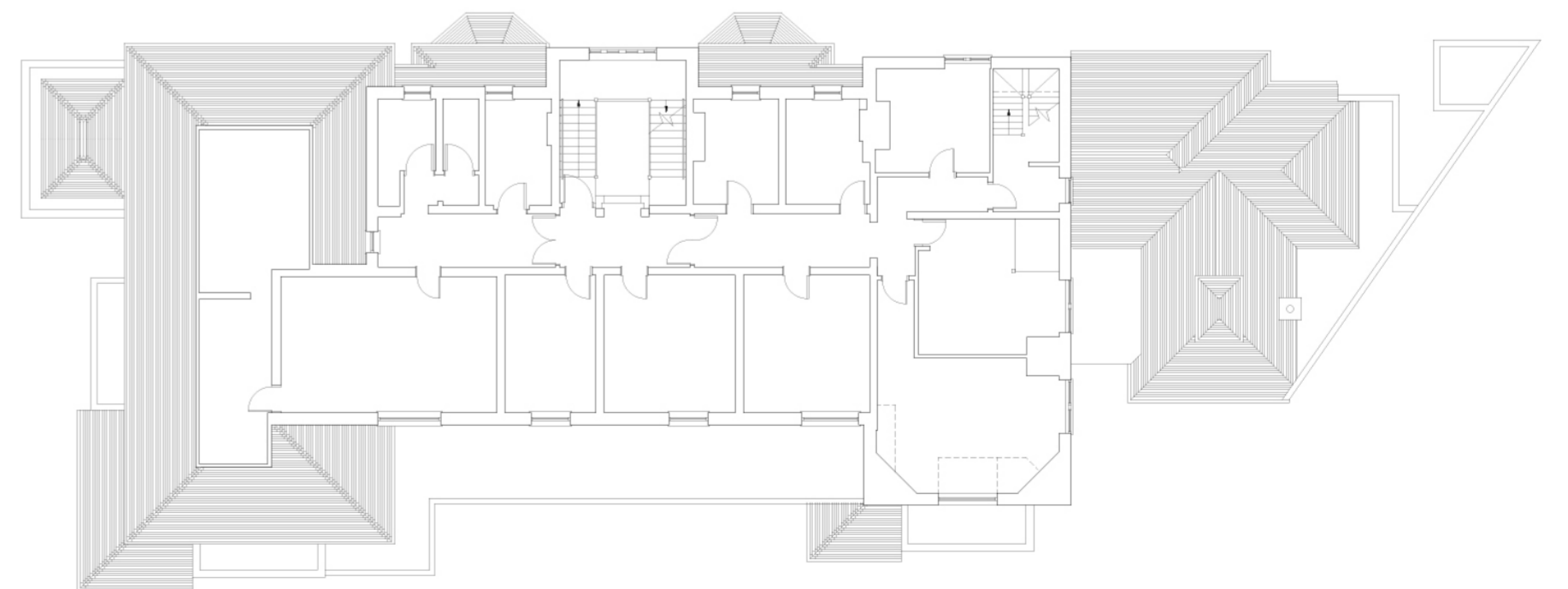
Lower Ground Floor

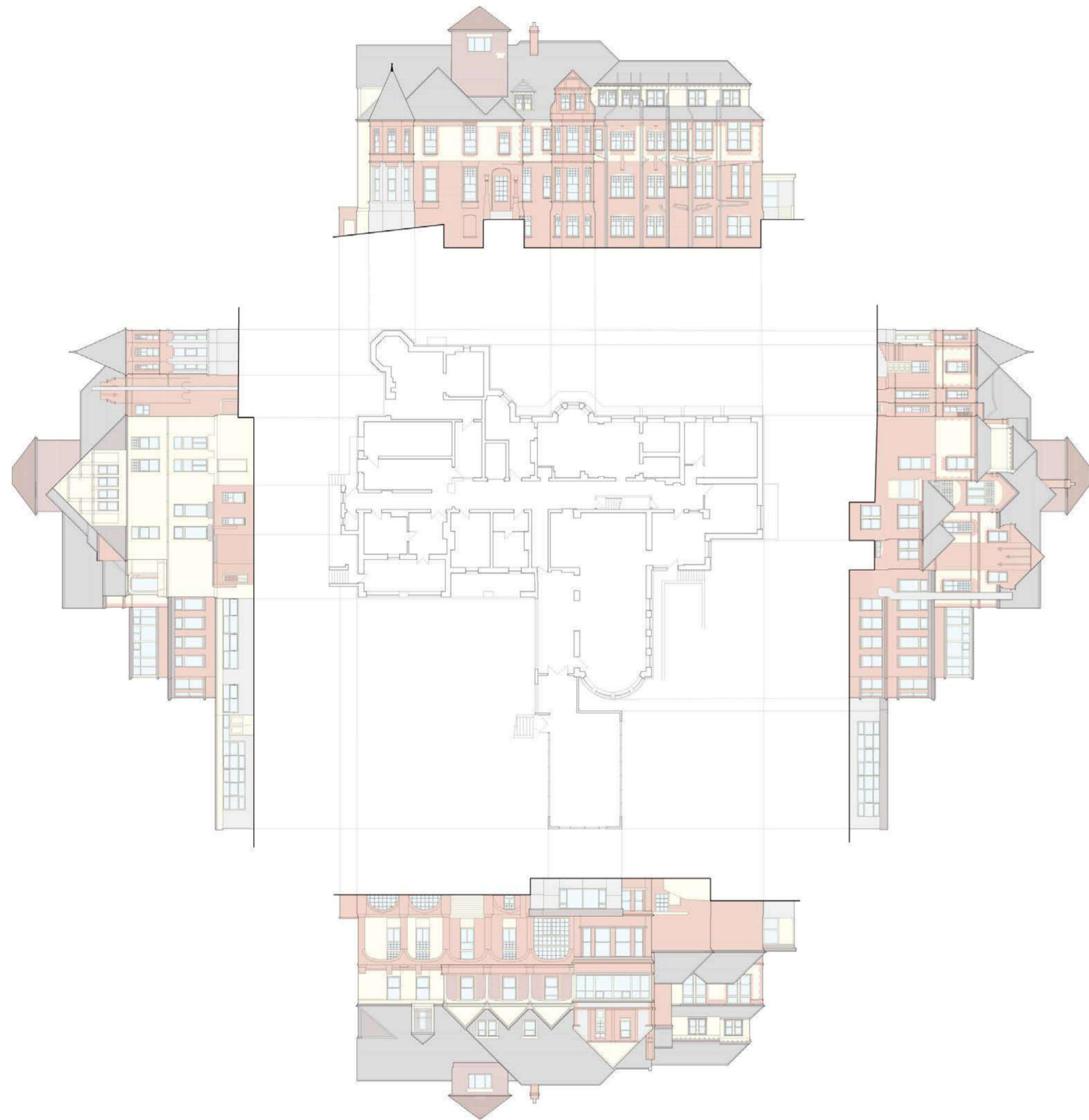


Ground Floor



First Floor

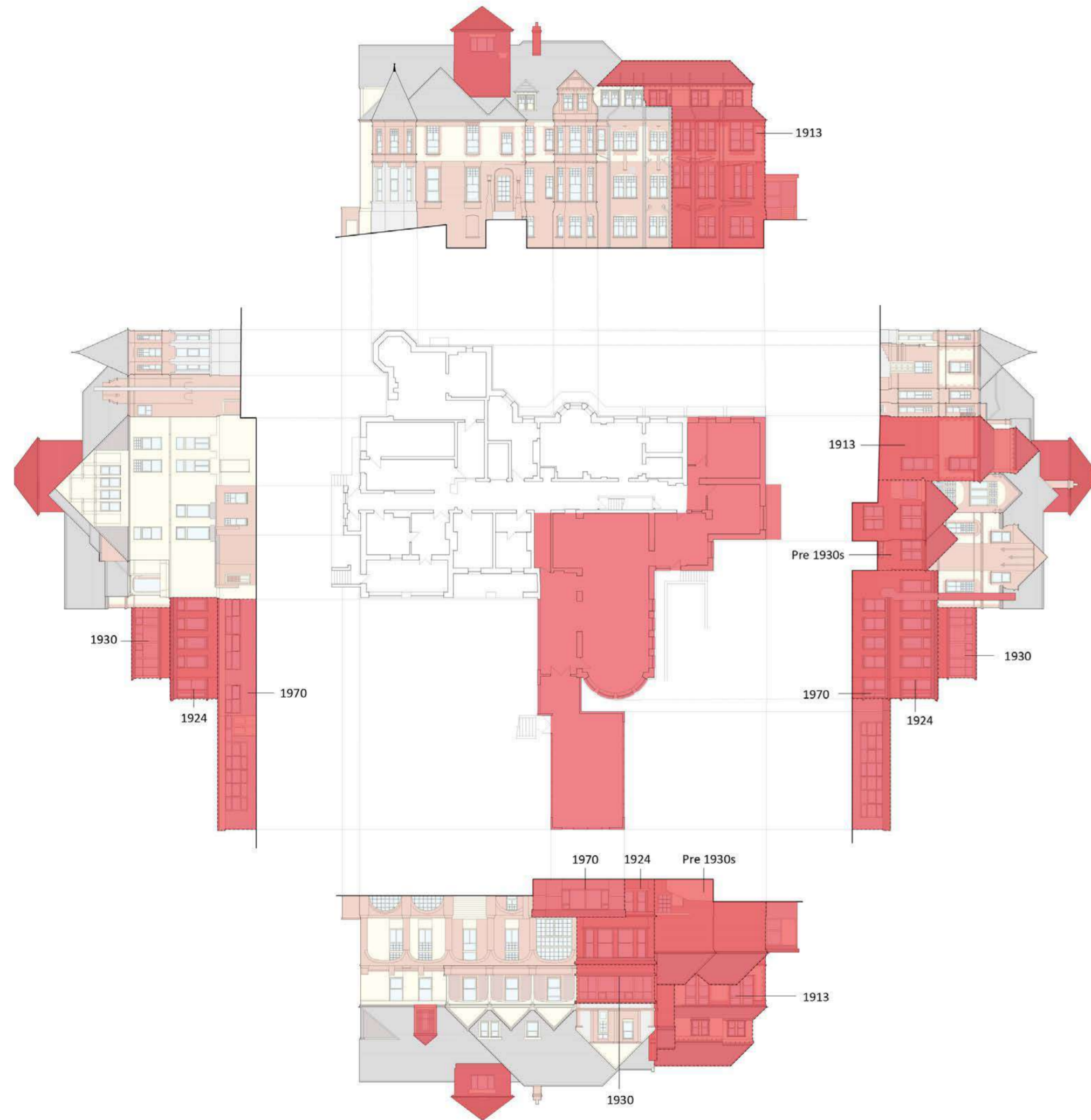




1:100

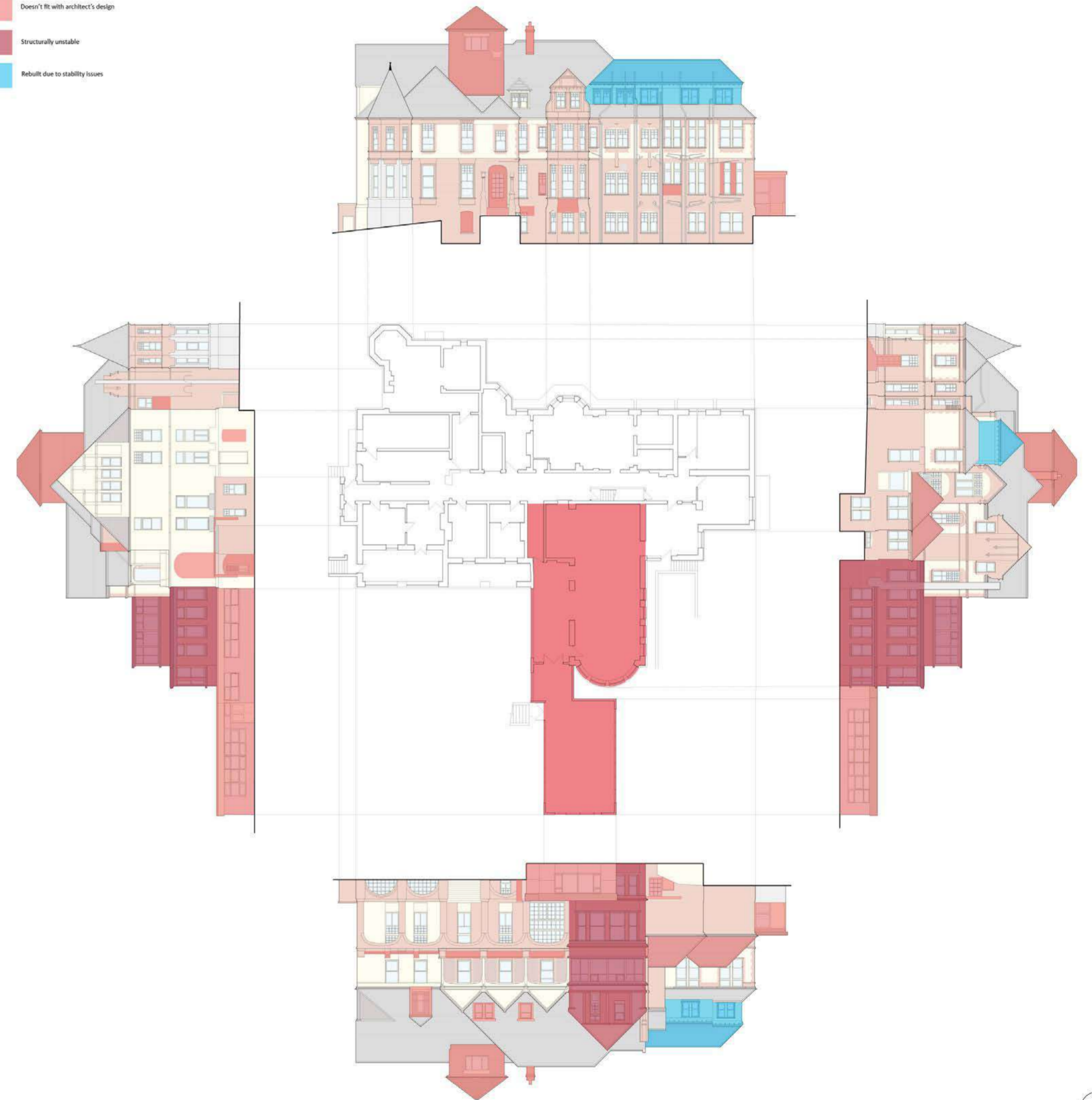


1:100



1:100

- Doesn't fit with architect's design
- Structurally unstable
- Rebuilt due to stability issues



1:100

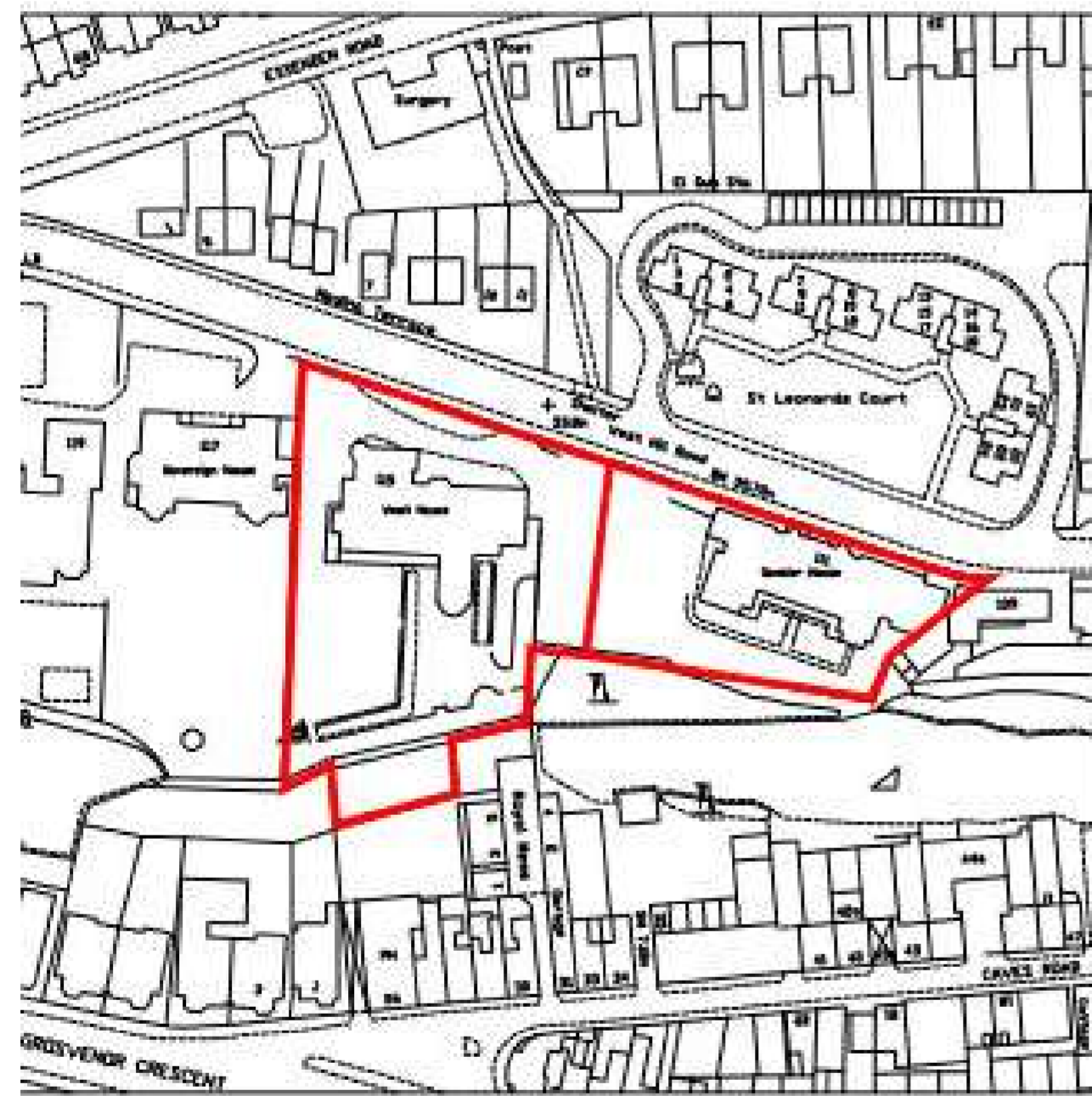


# Brief Development

## Local Plan

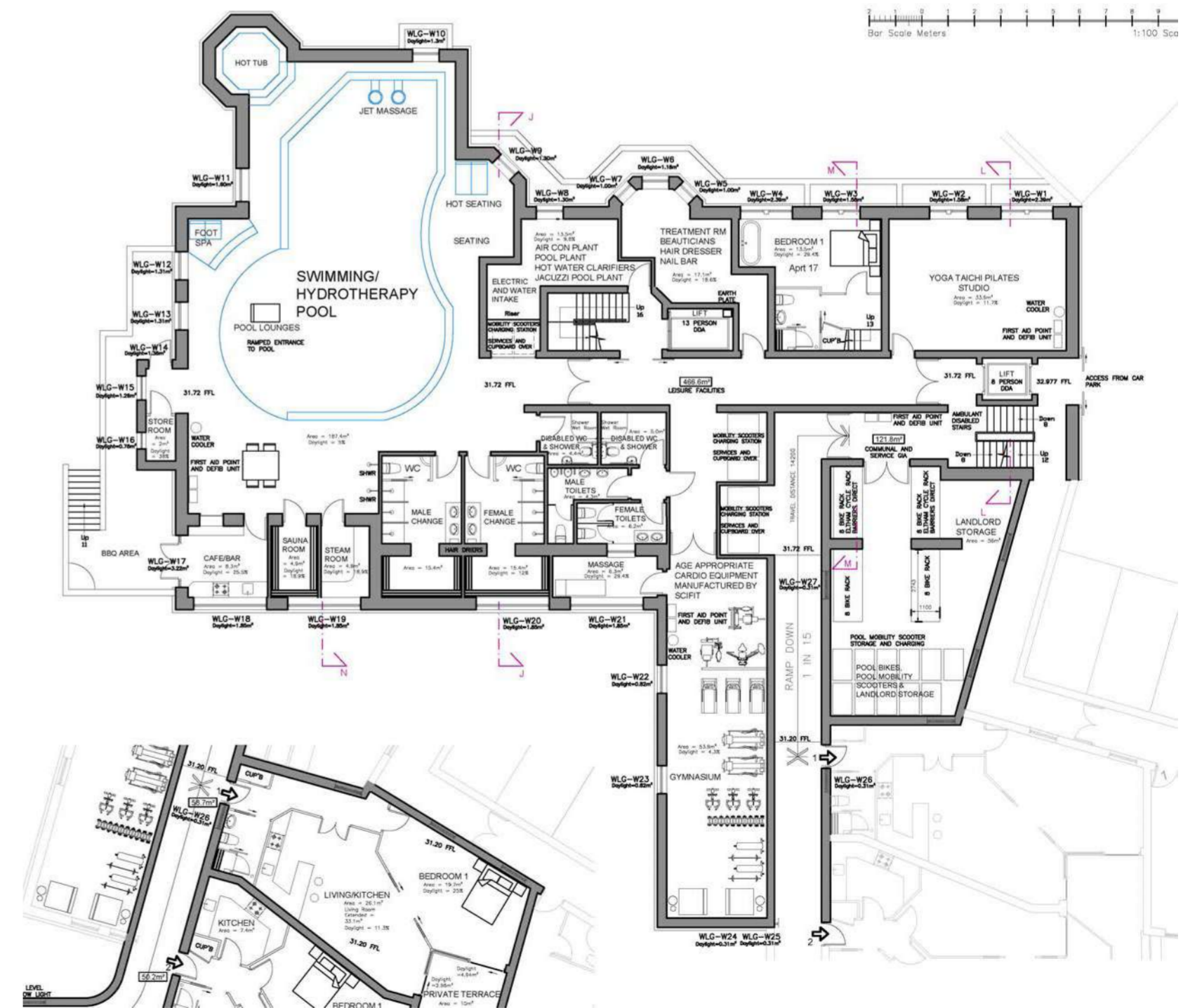
The Local Plan foresees the following for this Site:

- Provide 25% affordable housing in line with policy SP2.
- Retain and restore Gambier House and West House buildings together with infill development, or demonstrate how demolition provides a better design response.
- Consider proposals that include removal of unsympathetic or out of keeping additions to the buildings in order to better reveal the original design as this will be supported.



## Eversfield Regeneration Designs

The buildings are currently being developed into luxury homes for 'later living' by Eversfield Regeneration. They aimed to restore the buildings to its original design and remove the new extensions.

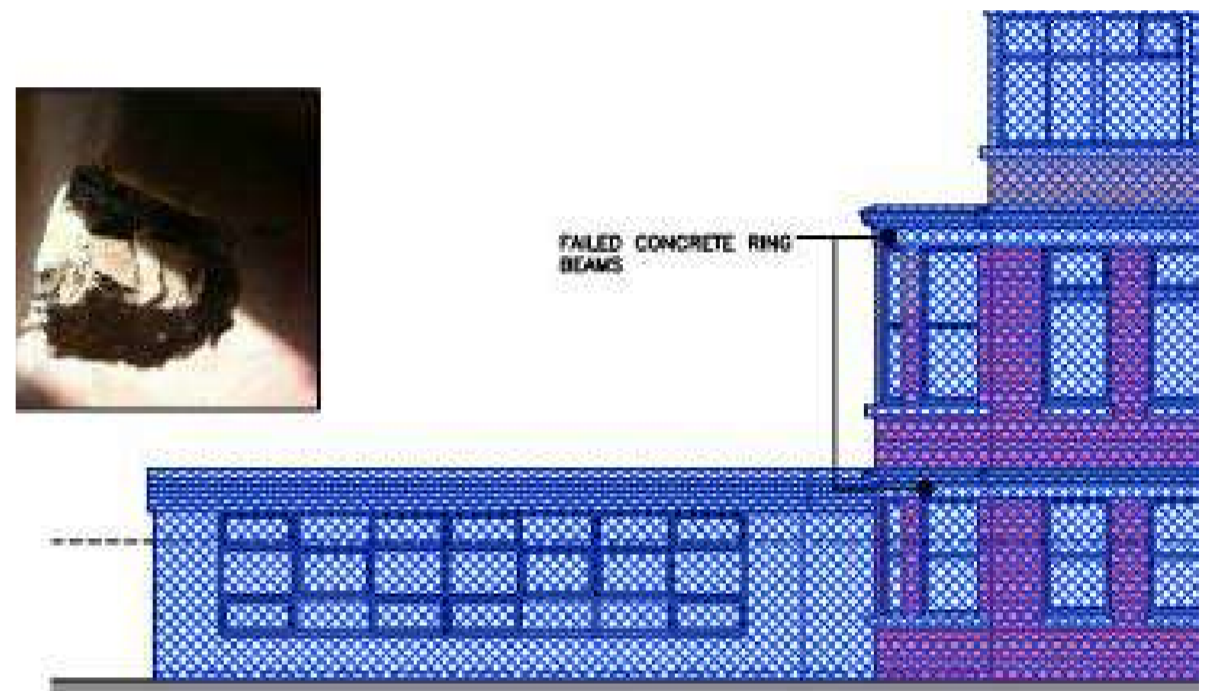






**2.5. Proposed Re-development of West House Buildings:**

Certain sections of West House are in a condemnable condition and should be demolished as a result of weather damage and vandalism. These mainly consist of old/corroded iron and steelwork, concrete floors and ring beam. However, the general condition of the majority of the original masonry remains sound



Area that will be demolished due to structurally instability

# Massing

Users And The Spaces They Need:

Main users:

- Permanent residents:
- Adults
  - Young adults
  - Children

Temporary residents

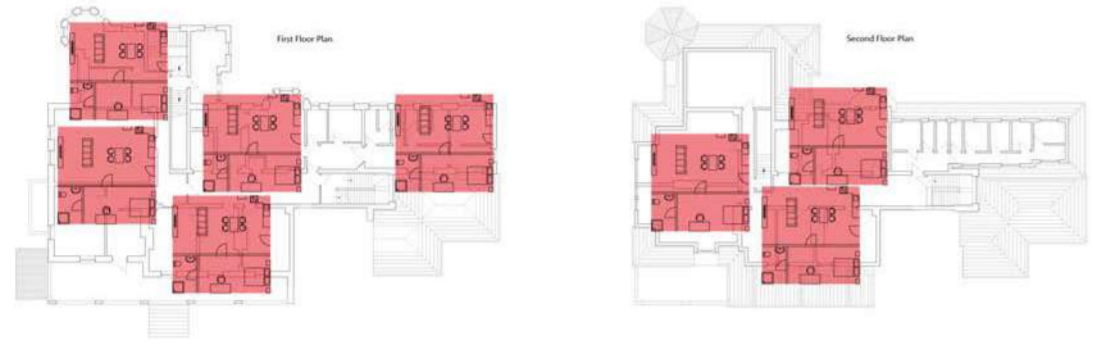
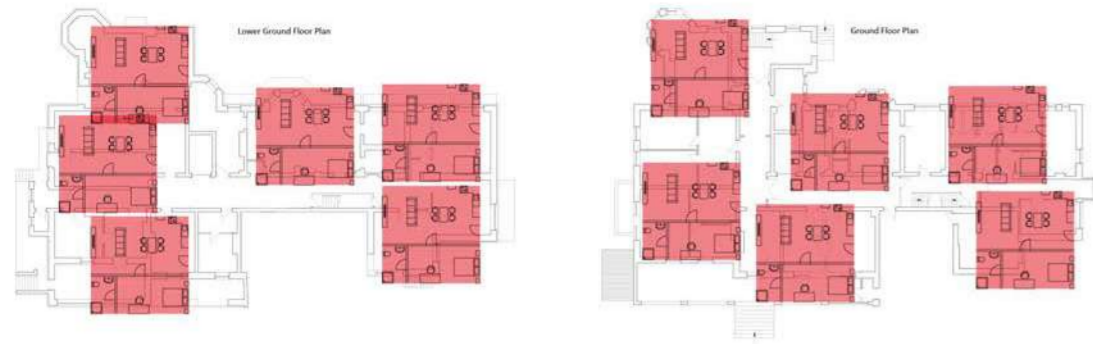
Visitors to workshop and garden

Users with special requirements:

- Wheelchair users
- Elderly people
- Bike users
- Young children

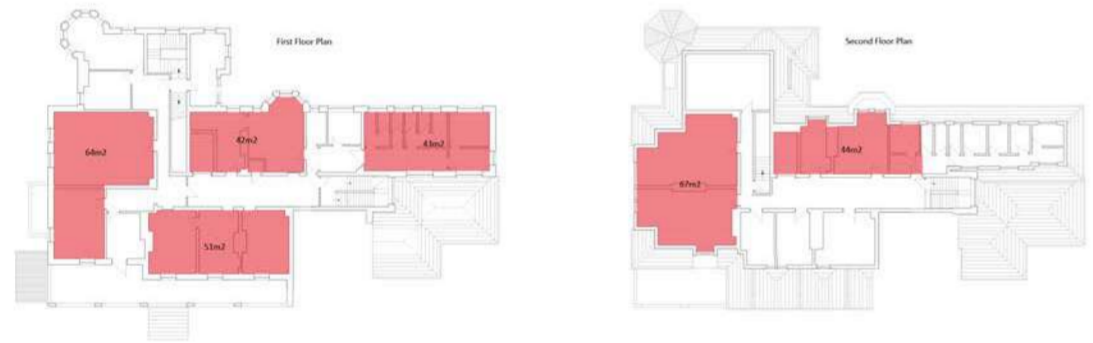
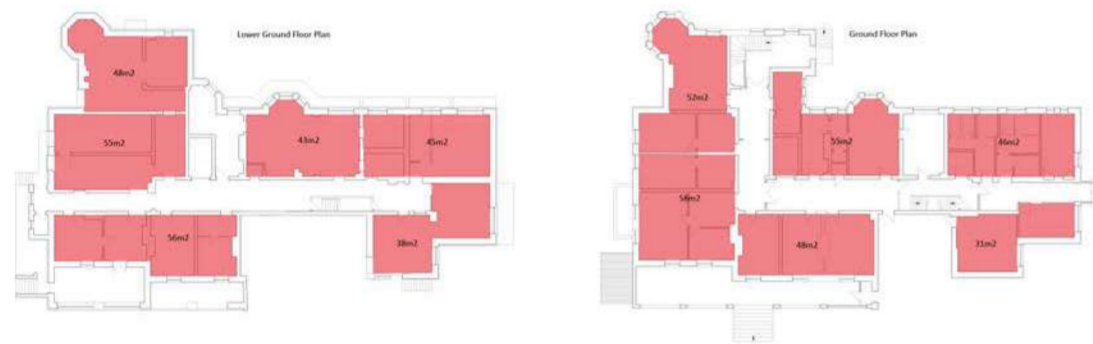


West House Massing Tests



1:100

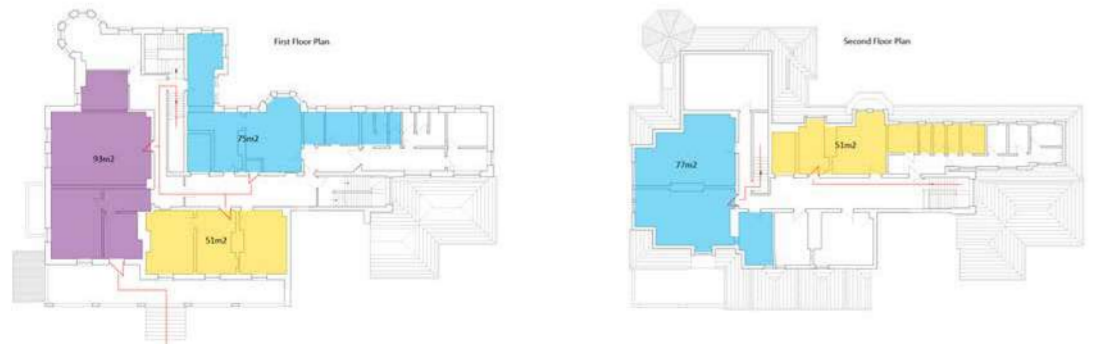
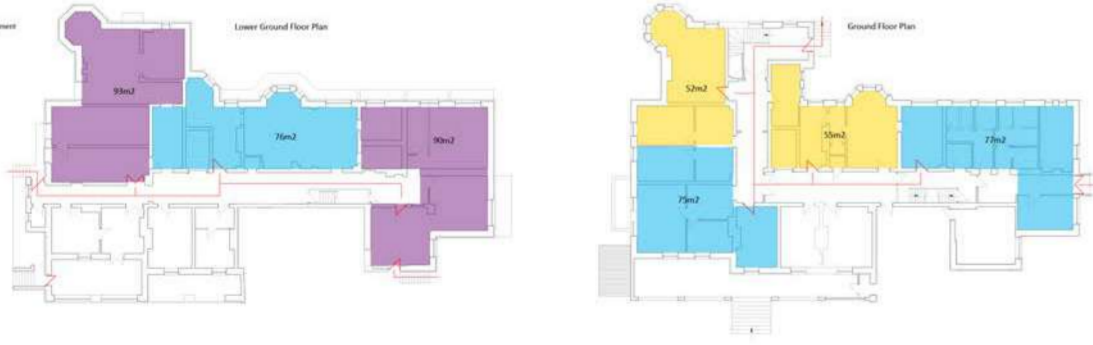
Two Bedroom Apartment Test



1:100

Fitting Apartments Into Existing Walls

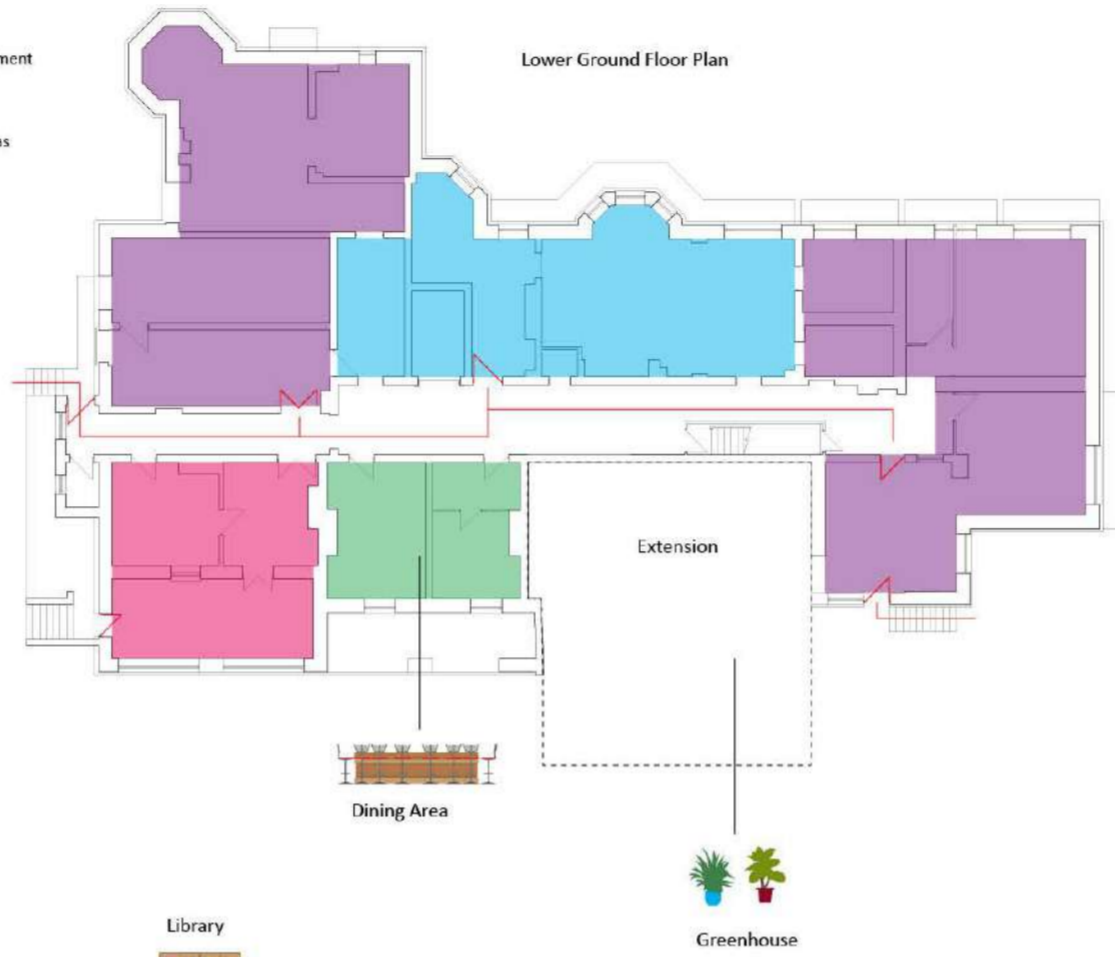
- One bedroom apartment
- Two bedroom apartment
- Three bed apartment



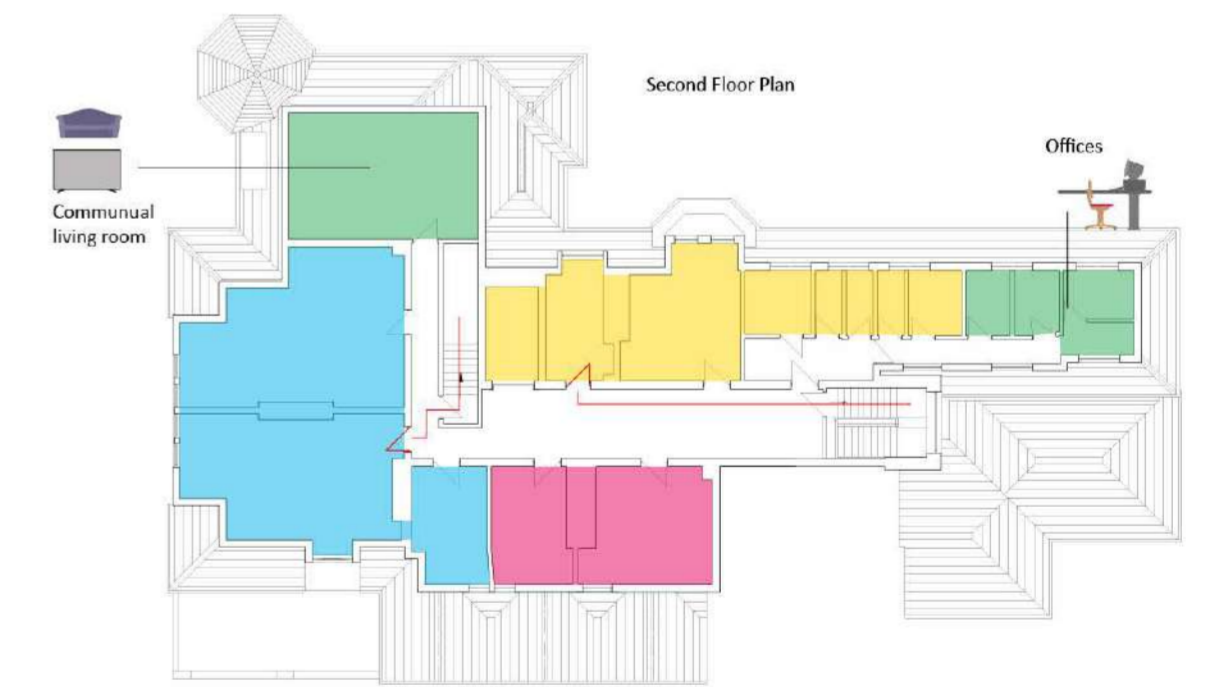
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Fitting in 1, 2 and 3 Bedroom Apartments

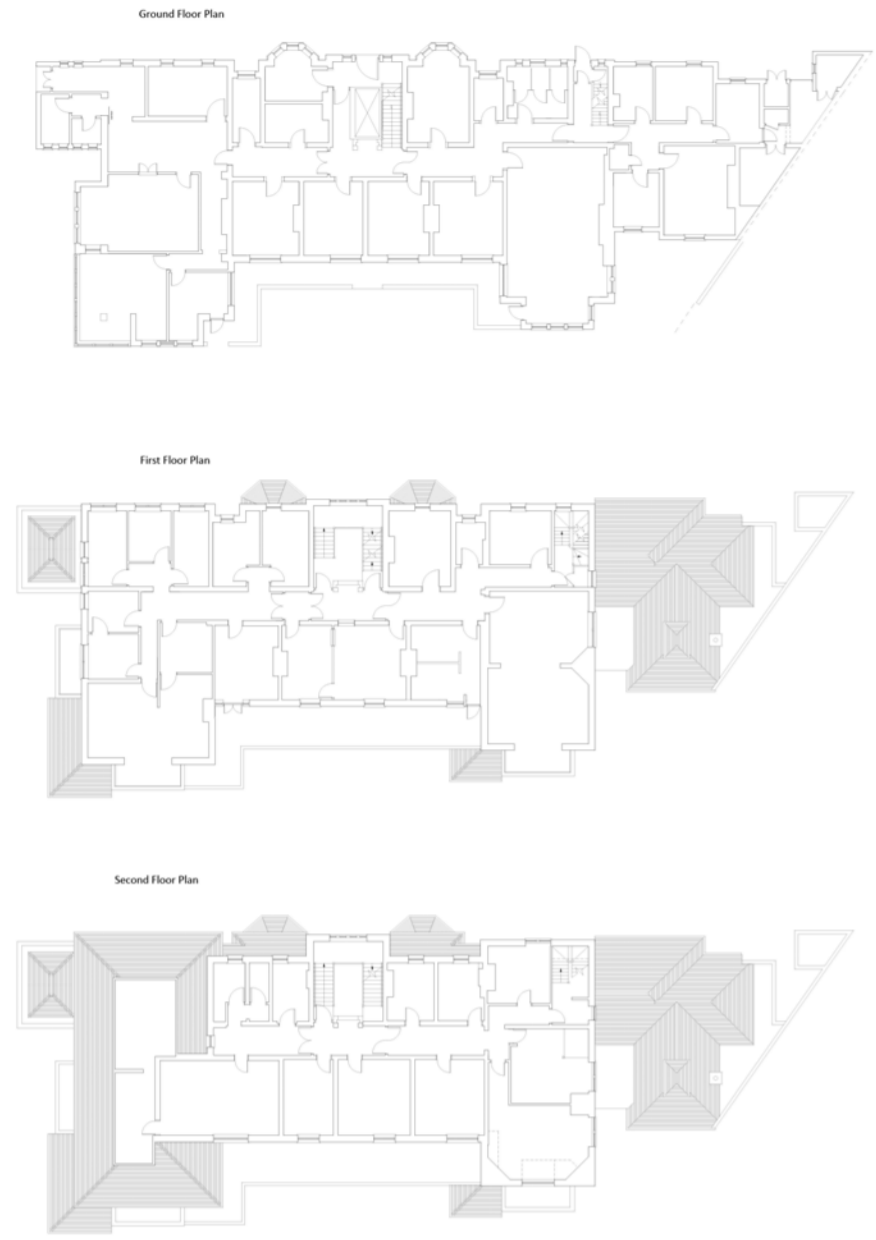
- One bedroom apartment
- Two bedroom apartment
- Three bed apartment
- Communal areas
- Rented rooms



Adding More Uses



# Gambier House Massing Tests



1:100



1:100

## Existing Plans



1:100

## Two Bedroom Apartment Test



1:100

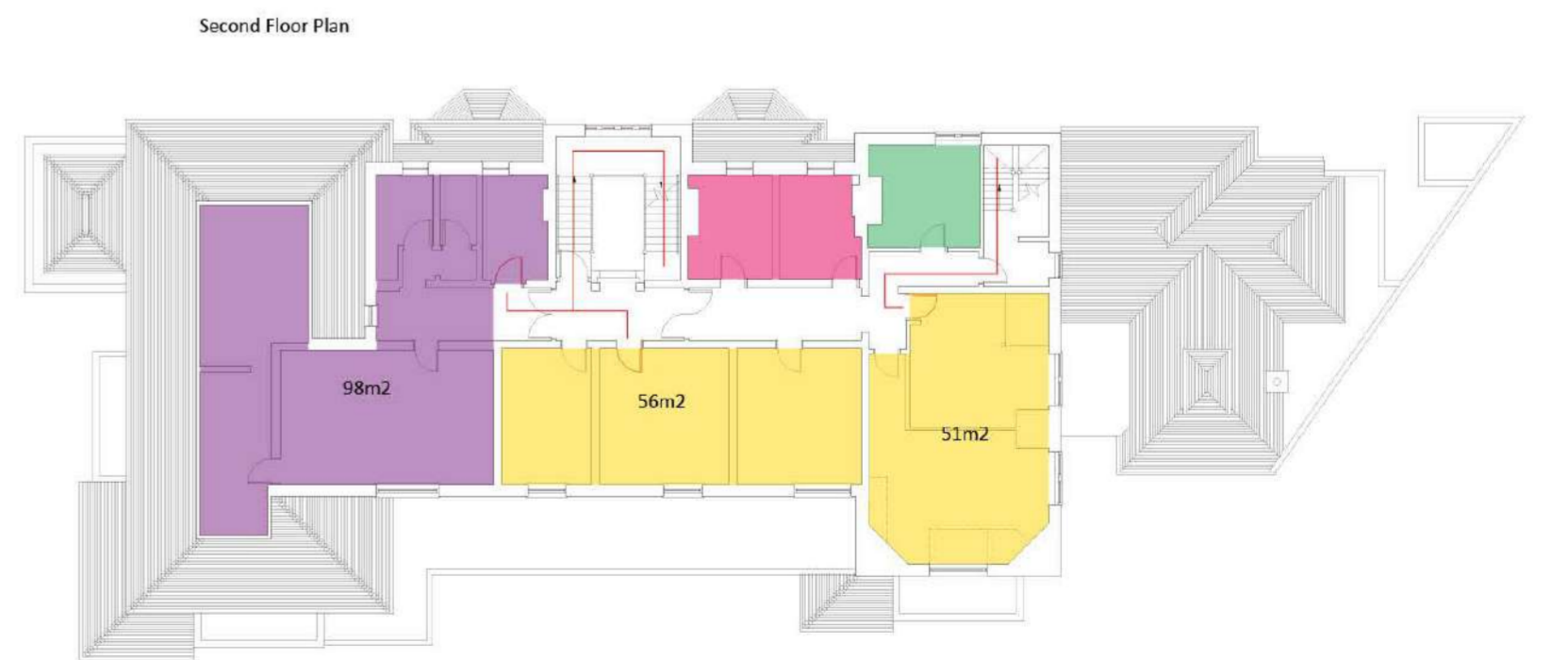
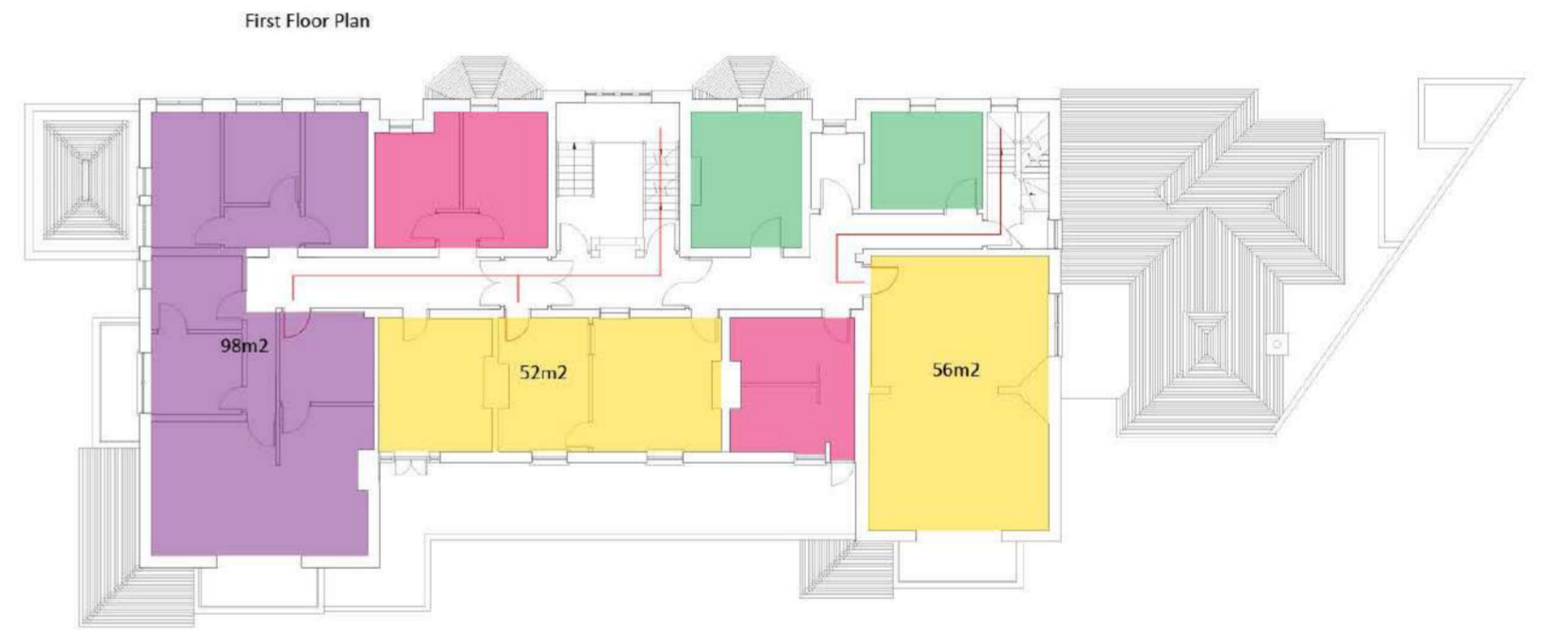
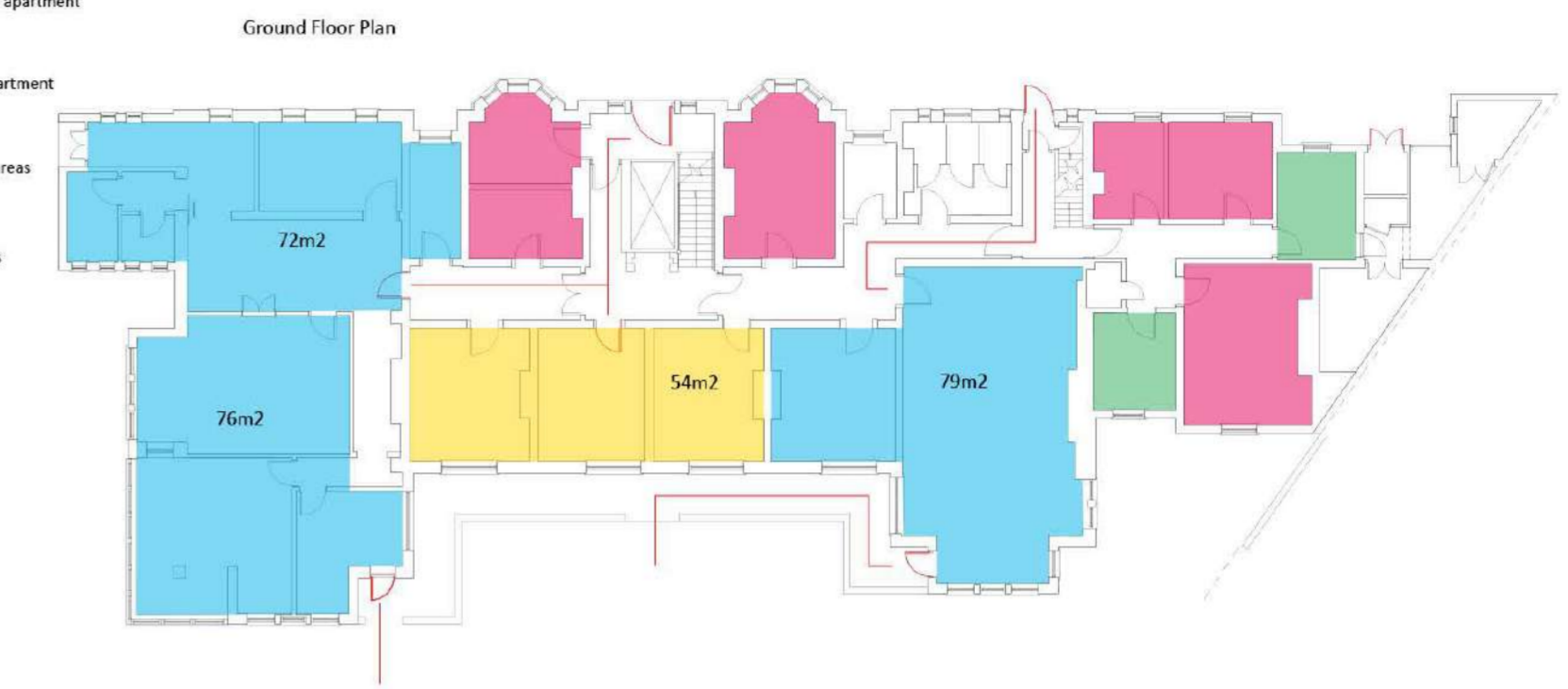
## Fitting Apartments Into Existing Walls

1:100

## Fitting in 1, 2 and 3 Bedroom Apartments

1:100

- One bedroom apartment
- Two bedroom apartment
- Three bed apartment
- Communal areas
- Rented rooms



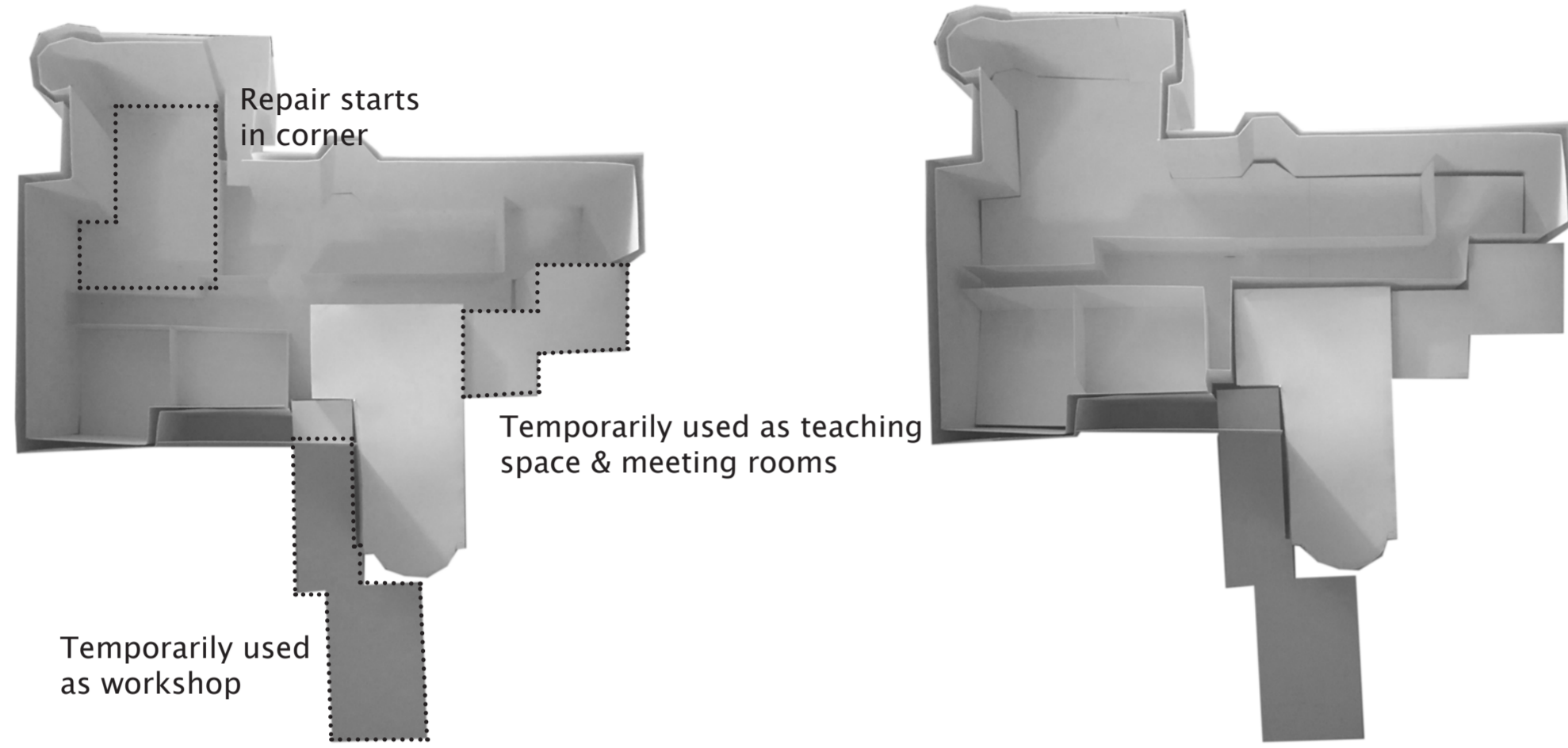
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## Adding More Uses

Process of Repair – West House

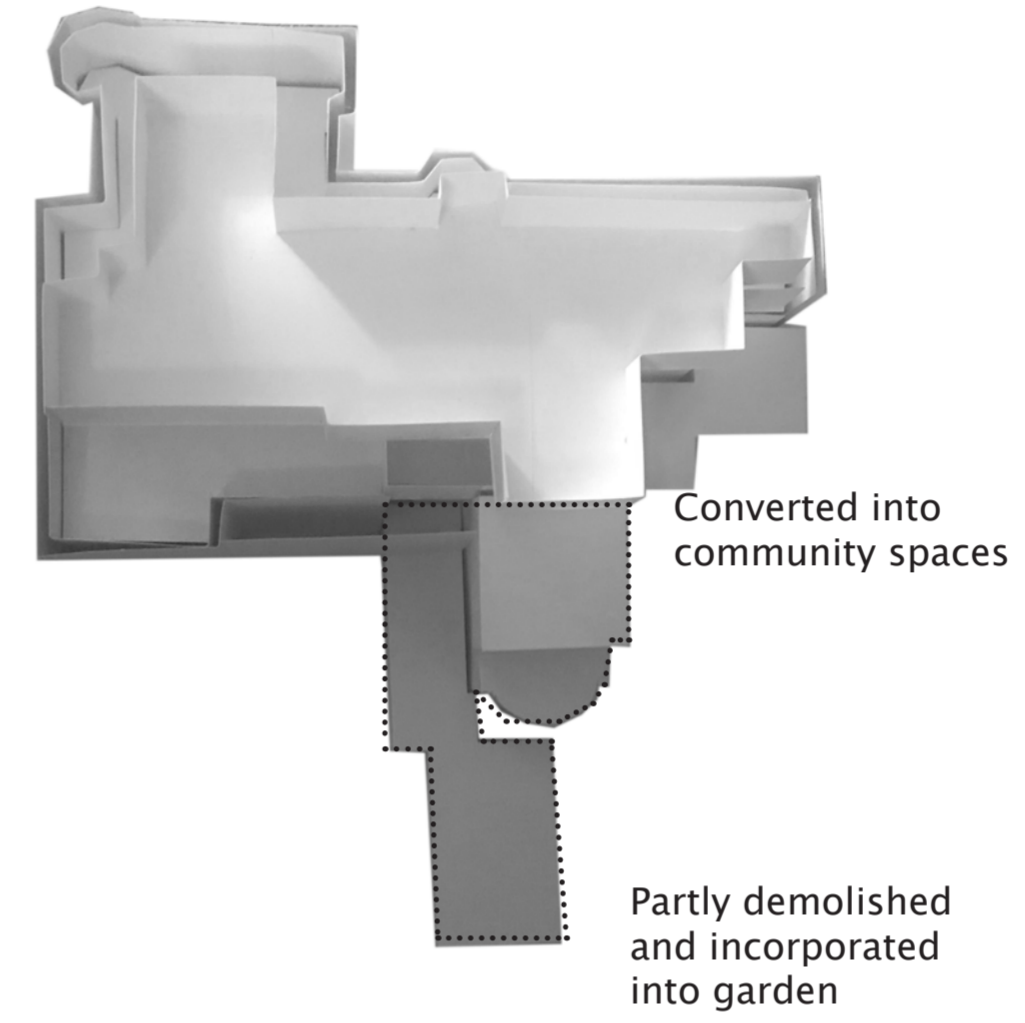
Phase One

Residents move into lower ground and ground floor.  
Requirement to renovate upper two floors in contract – cheaper houses.



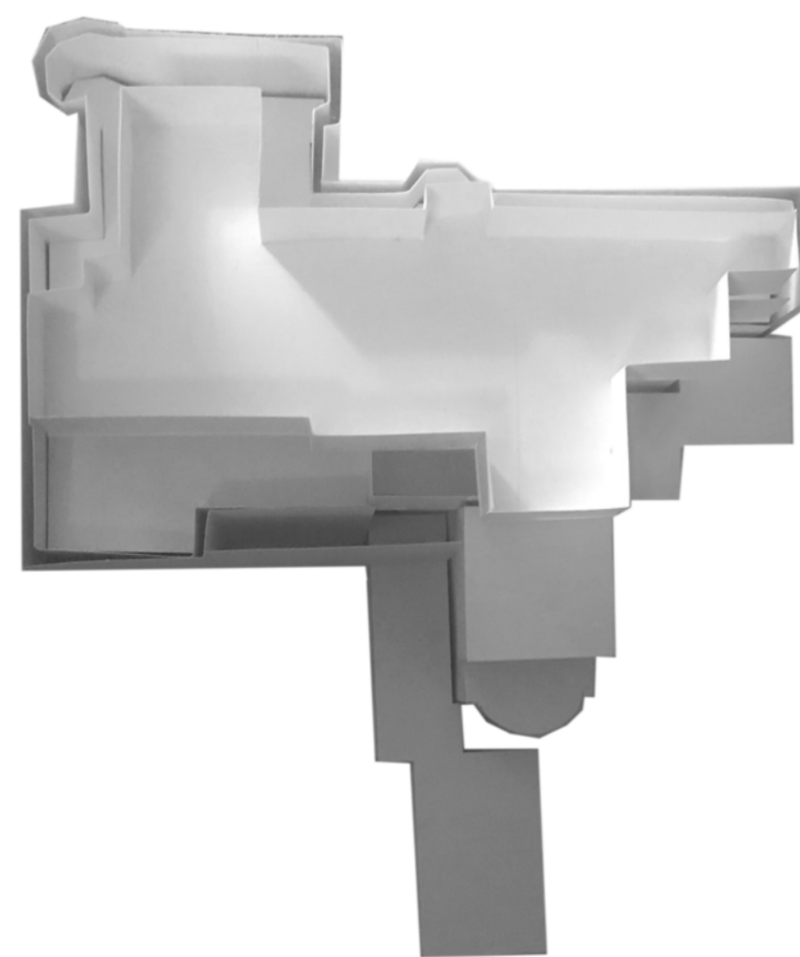
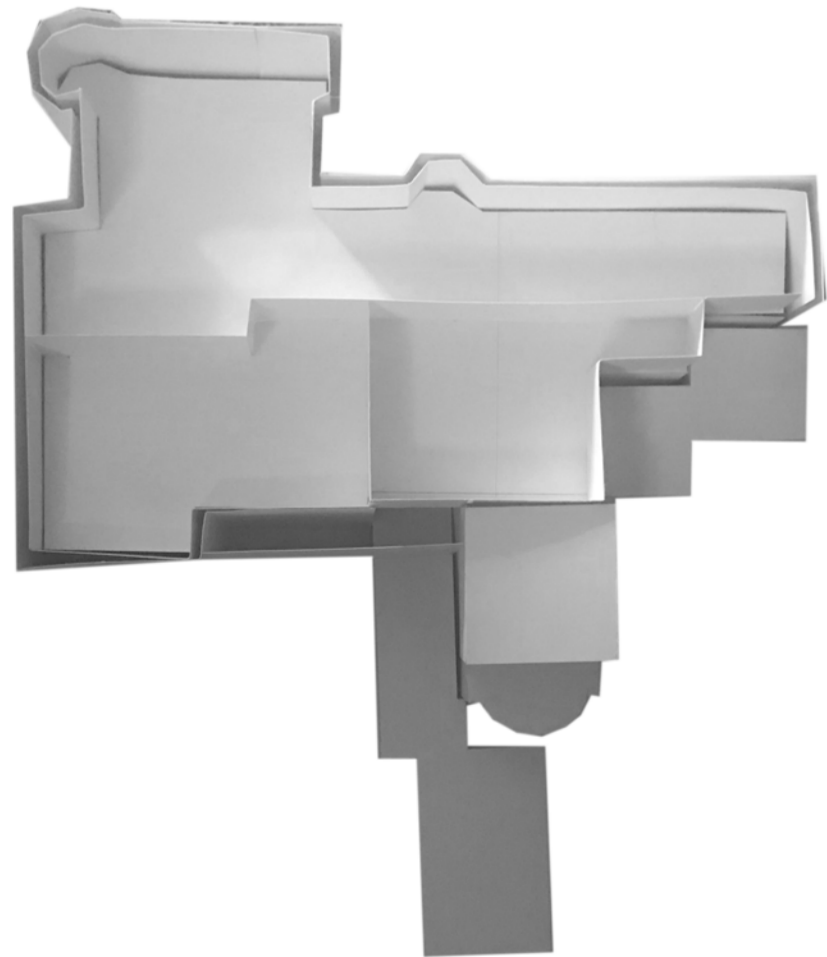
Phase Three

Extensions demolished.



Lower Ground Floor

Ground Floor

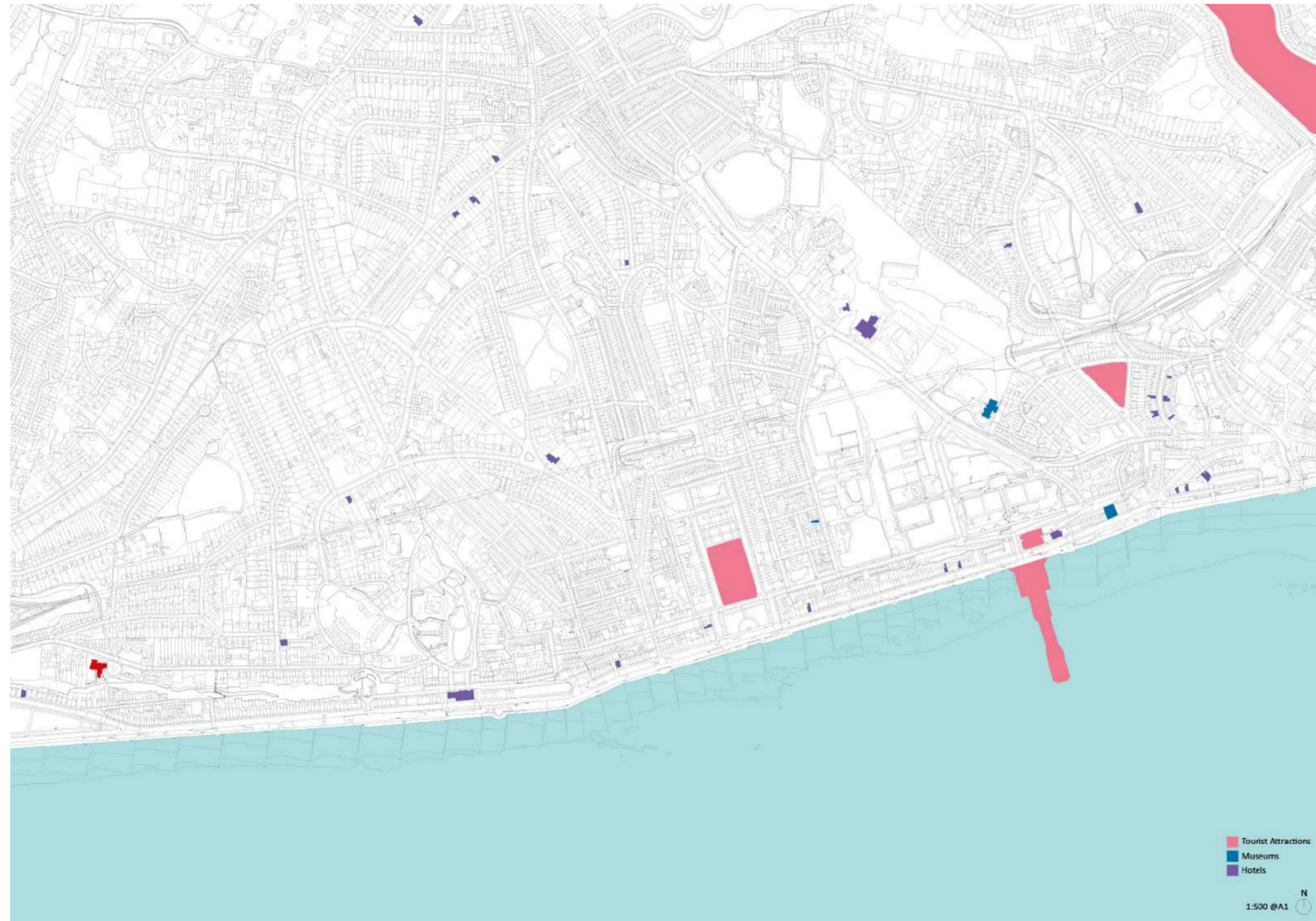


First Floor

Second Floor

# Wider Strategy

## Tourism in Hastings



## Different Types of Hotels in Hastings

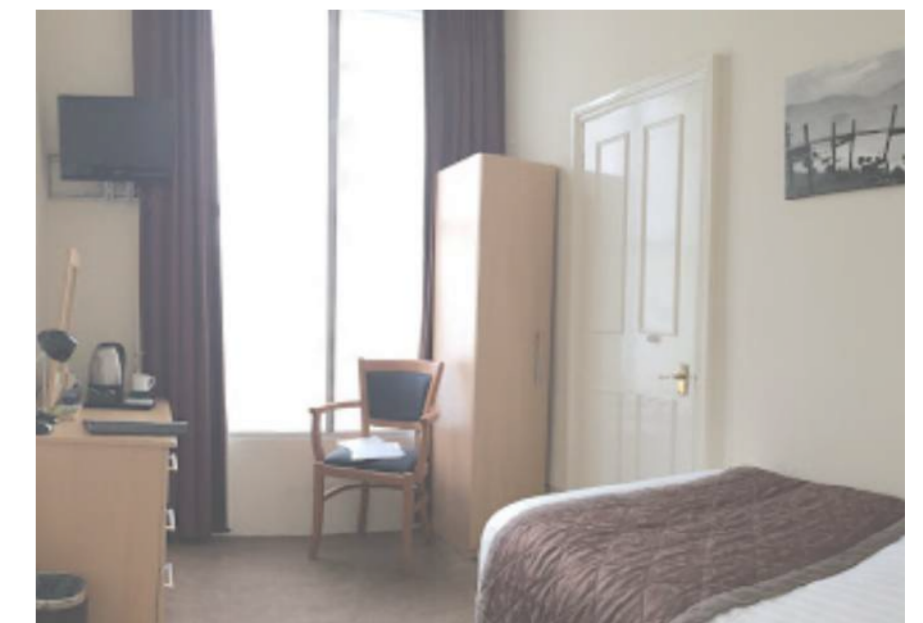
### Premier Inn



### Bannatyne Spa Hotel



### Alexander's Hastings



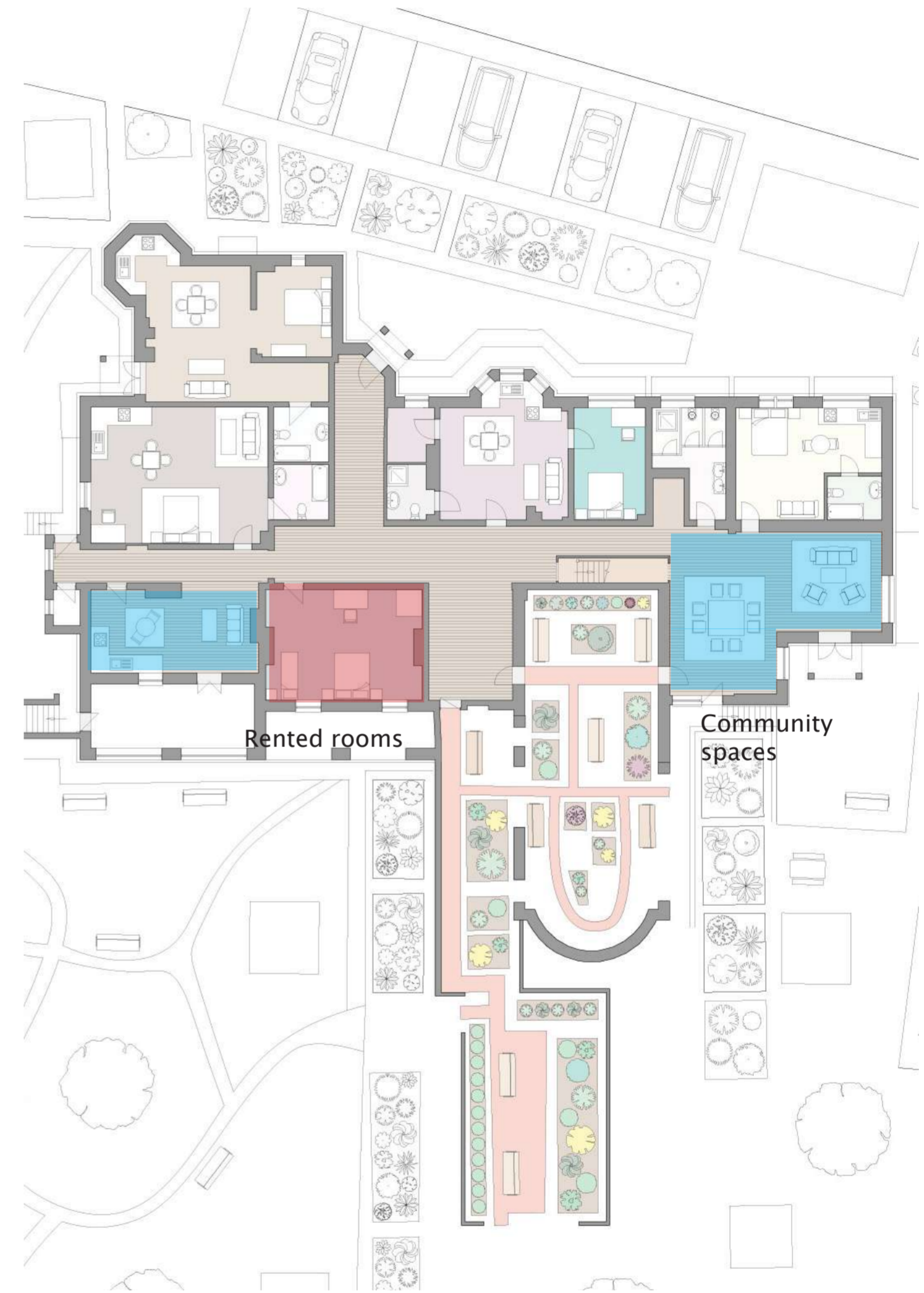
In 2019 there was an estimated 515,000 overnight tourism trips made to Hastings.

An estimated £288.3 million was spent by day and overnight visitors in 2019.

There were around 3.8 million day visitors to Hastings in 2019.



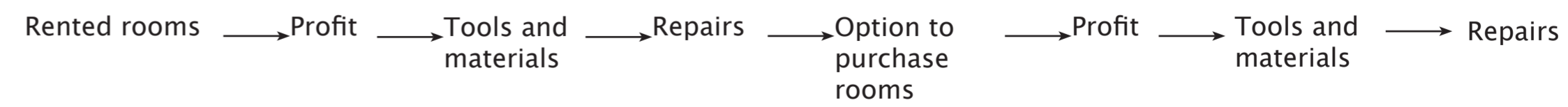
Plan



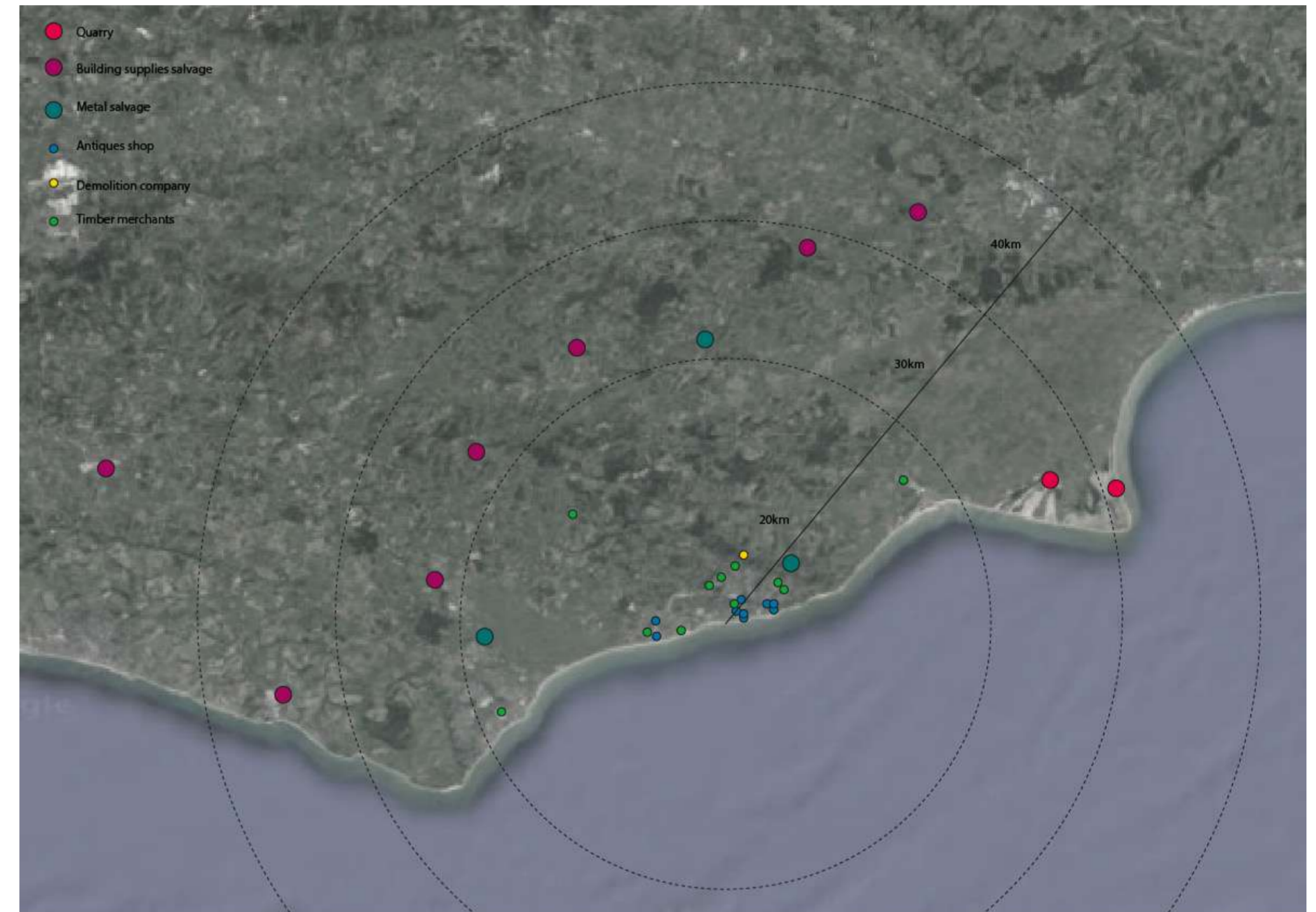
Atrium



Community space



<b>RDV Decorating &amp; Property Maintenance</b> Internal and External Decorating 26 Muirfield Rise, St Leonards-on-Sea East Sussex TN38 0XL Tel: 01424 258887 or 07999 483748 <a href="#">Website</a> <a href="#">Contact</a>	<b>Croft Glass</b> Windows, Doors & Conservatories 92-98 Beaconsfield Road, Hastings, East Sussex TN34 3TN Tel: 01424 436776 <a href="#">Website</a>	<b>J Dicker Carpentry &amp; Joinery</b> All Types Of Carpentry & Joinery 2 Redlays Cottages, Cottage Lane, Hastings, East Sussex TN35 4RR Tel: 07941 415346
<b>Creative Decorating</b> Domestic and Commercial Decorator 106 Hughenden Road, Hastings East Sussex TN34 3TA Tel: 01424 713431 or 07913 712618 <a href="#">Website</a> <a href="#">Contact</a>	<b>WindowTek</b> Refurbishment, repair & Supply Unit 51 Beachways, 409-411 Bexhill Road St Leonards on Sea, East Sussex TN38 8AR Tel: 01424 431 422 <a href="#">Website</a> <a href="#">Contact</a>	<b>Bentley &amp; Hall</b> The Complete Home Furnisher 21 South Terrace, Hastings East Sussex Tel: 01424 436917
<b>K J Anderson</b> Painting & Decorating 7 Neilson Court, Amherst Close Hastings, East Sussex TN34 1TZ Tel: 01424 446972	<b>Emted Carpentry</b> Loft Conversions and All Carpentry 176 Elphinstone Road, Hastings East Sussex TN34 2BN Tel: 07581 196740 <a href="#">Website</a> <a href="#">Contact</a>	<b>Random Upholstery</b> Reupholstery and Furniture Repair 9 Ledsham Way, St Leonards on Sea East Sussex TN37 7LG Tel: 01424 7559333
<b>MPB Painting &amp; Decorating</b> Domestic & Commercial 8A Chiltern Drive, Hastings East Sussex TN34 3PZ Tel: 07594 709778	<b>Ray Bowles Carpentry</b> Carpentry 55 Birch Way, Hastings, East Sussex TN34 2JY Tel: 01424 839220	<b>Alan Kent</b> Painter working with marble and wood 16 (1/2) George Street Old Town Hastings, East Sussex TN34 3EG Tel: 01424 439860 <a href="#">Website</a> <a href="#">Contact</a>



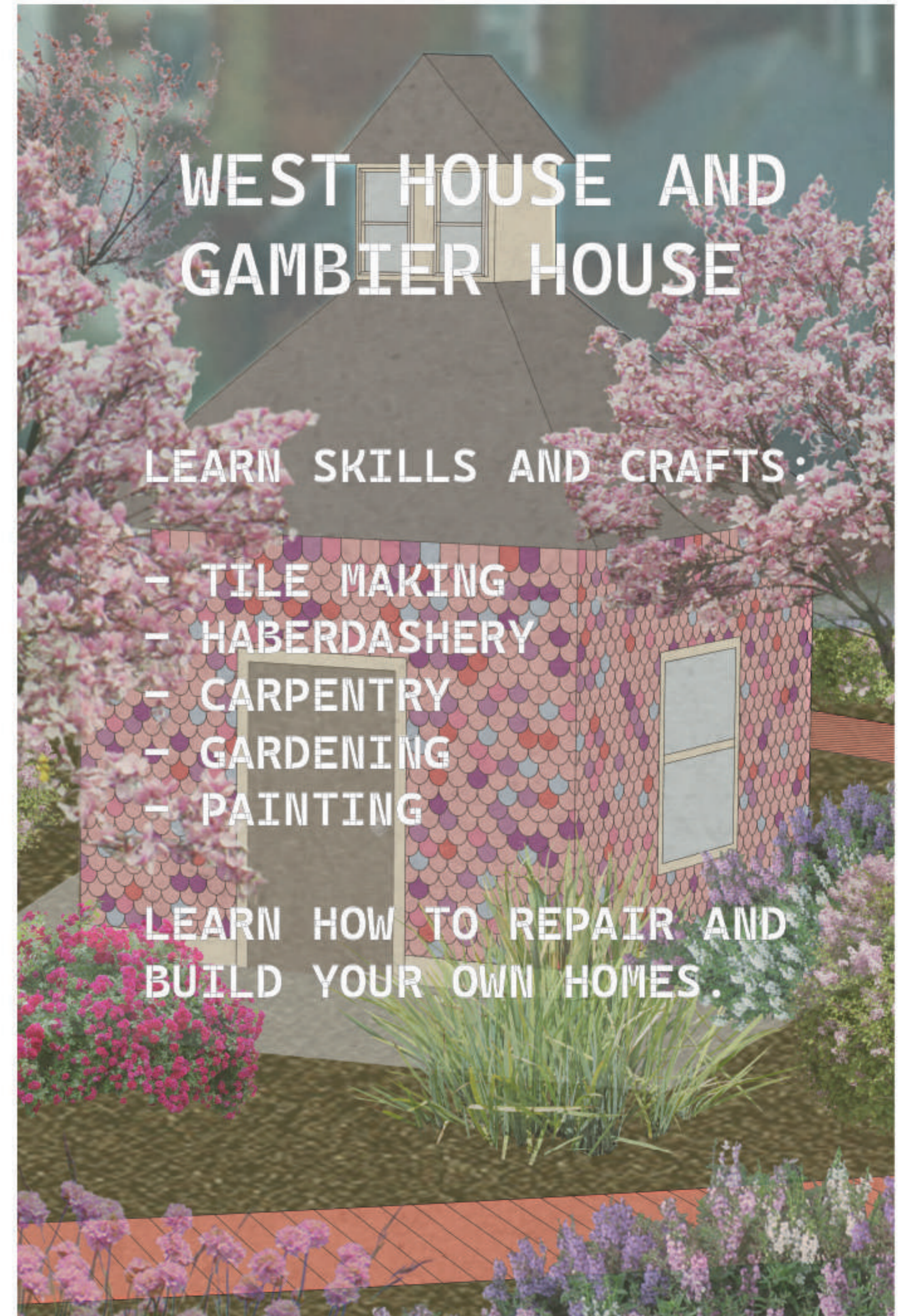
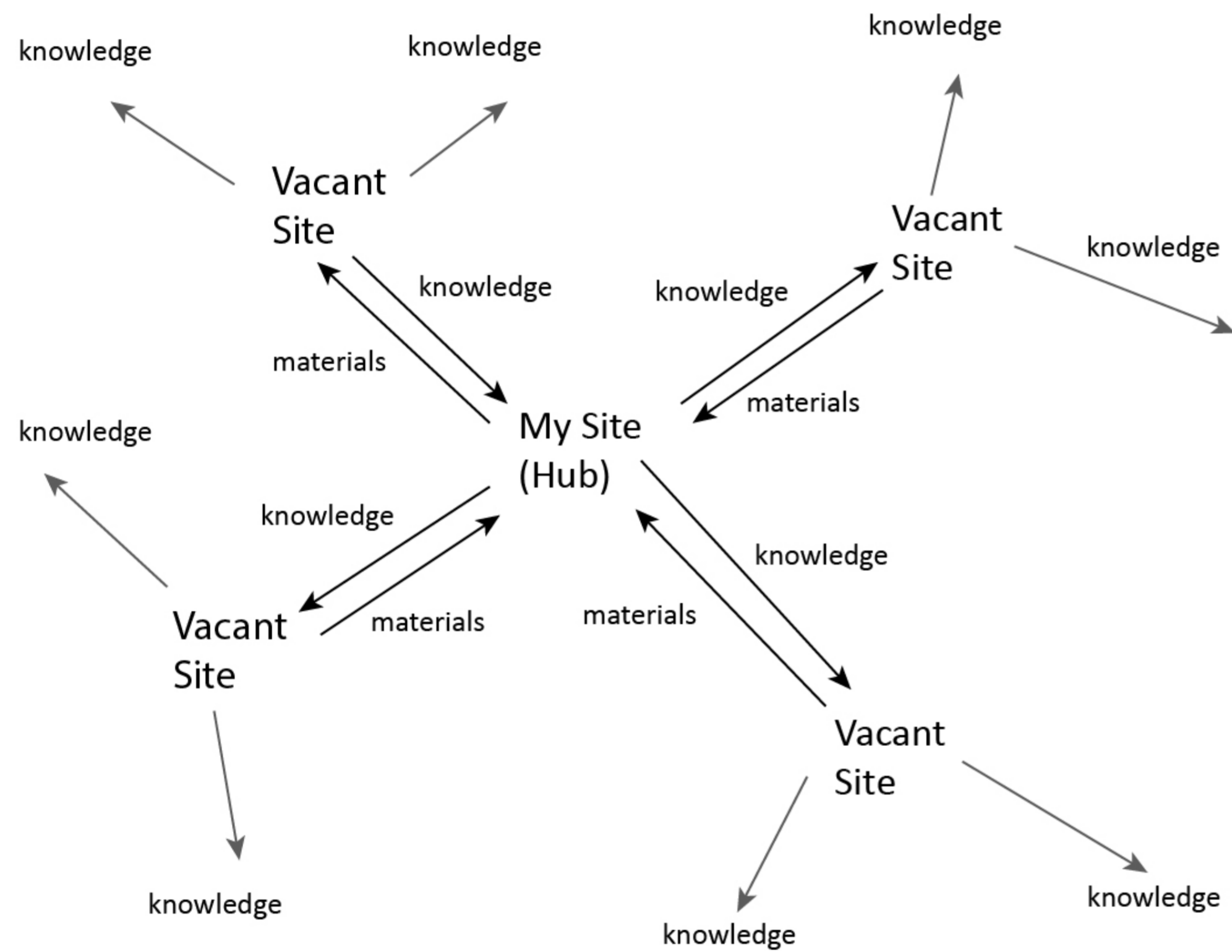
**Natali Stewart**

Natali Stewart is experienced feltmaker, colorist and yarn dyer based in East Sussex.

Natali Stewart is experienced feltmaker, colorist and yarn dyer based in East Sussex. She works with finest wool and silk materials. Hand felted items are exhibited through the Sussex Guild shop and venues. She creates one of a kind wearable items such as scarves, wraps and snoods. Also makes felted handbags which are more of interior design, or statement pieces. Member of the Sussex Guild since 2009.







# Design Development

Craft  
Garden  
Plans  
Garden Pavilion  
Interior Spaces

# Craft

Present for Hastings – Socks in a Box



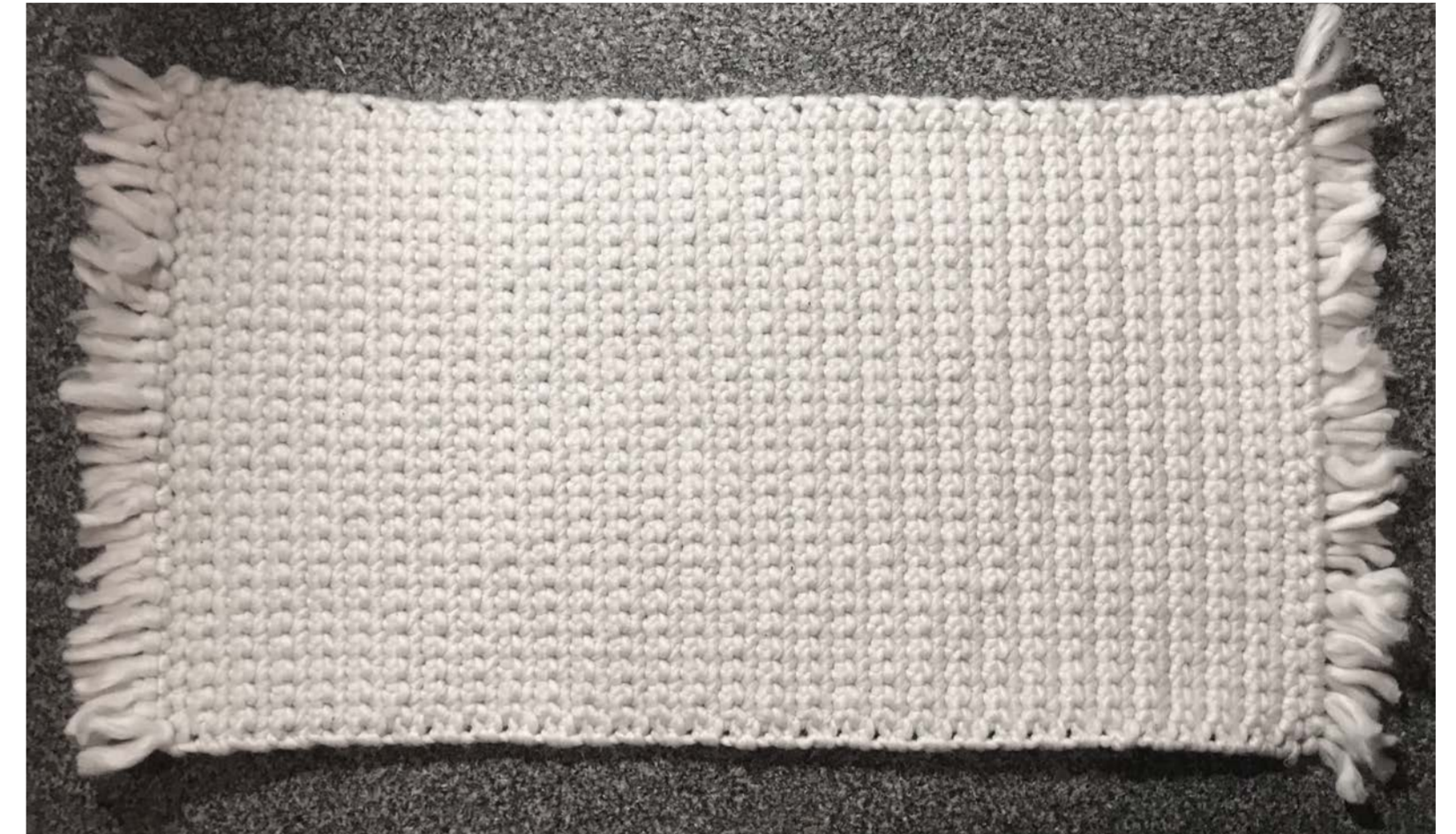
Brief one was to create a present for Hastings with the prior knowledge of the area that we had, I created a community group called socks in a box which teaches crafts to the community.



Matching Existing Tiles



Repairing With Colourful Tiles



Crochet Rug to Repair Interiors



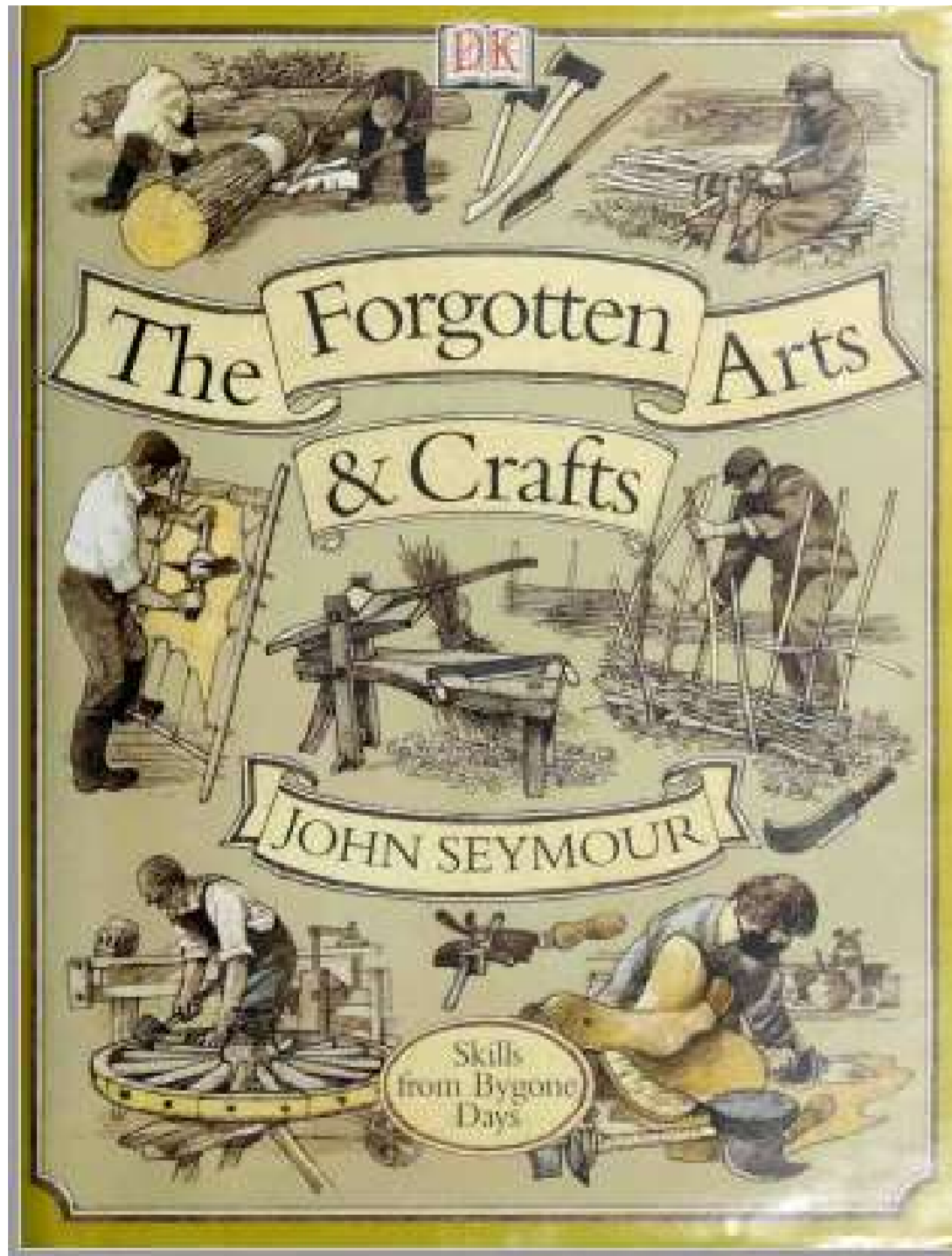
Matching Colour of Existing Tiles



Restoring a Cabinet



Repairing With Colourful Tiles



## BRICKMAKING

**M**Y EXPERIENCE OF MAKING BRICKS was gained in Africa, many years ago, when the only way of obtaining most building materials was to make them yourself. Bricks were made, quite simply, by finding a suitable brick earth, moulding this into brick shapes and then air- and sun-drying them. Finally the bricks had to be fired, using either dry wood or charcoal.

Finding the right brick earth is not as simple as it sounds. Bricks are not made of pure clay but of a judicious mixture of clay and sand, and other grades of earth. The only way you can test a sample of earth is to mould it and fire it. Even a test in a very hot oven is better than nothing. Pure clay will crack in the firing, whereas a too sandy mixture will not hold together at all. Choosing the right earth is a matter of experience.

First, the earth has to be thoroughly puddled, which, in Africa, was an easy and every musical matter. I watched half a dozen Africans trample it with their bare feet singing heartily as they did so and took a

leaf from their book. Once mixed to a smooth consistency the clay would then be forced into brick-sized moulds (slightly more than brick-sized, actually, because earth shrinks as it dries), placed on planks in the sun for a week or two (you can be sure there will be no rain in the dry season), and then built into a kiln and fired. In northern Europe the drying process is carried out under cover and takes a month.

### ALTERNATIVE METHODS OF FIRING

There were two methods of firing the bricks. Both involved building a clamp of bricks, but in the first the brick piles criss-crossed so as to leave spaces in between them. Cavities (fireplaces) were also left at ground level along the windward side of the clamp. The whole thing then had to be plastered with mud, except for the fireplaces (which were no more than a yard apart) and some small vents on the leeward side where the smoke could escape during the burning. Next, the fireplaces were filled with well-dried wood and set alight. It was

**ORNAMENTAL BRICKS**  
The most demanded for ornamented and decorative bricks is from sections of old buildings requiring repair or to supply decorative originals and from individualists building a new house to add a touch of originality to a new brick wall. The bricks are made individually in wooden moulds, cast up in a vat to allow for shrinkage as the bricks dry out. The design is moulded in reverse in the base of the mould.



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## BRICKMAKING

necessary to keep these fires burning for a week, which required a lot of firewood.

I gave this method up (although it produced perfectly good bricks) in favour of the charcoal method. In this latter, after a layer of bricks were built, with wide spaces between them, and the spaces filled with small pieces of charcoal. When the clamp was at least seven feet high - and as long and wide as you had bricks for - it was plastered all over with mud. As with the dry wood method, small holes were left high up on the leeward side to let the smoke out, and slightly larger holes at ground level on the windward side to act as fireplaces. We then lit the charcoal and just let it burn inwards, consuming all the small pieces of charcoal within the clamp. It would burn away quite happily for several days, and after about a week it would be cool enough to break open.

### BRITISH BRICKS

Brickmaking in Britain goes back to Roman times. I have seen the hard and level sites they selected with an eye to drying their thin, wooden-moulded bricks.

The usual method of making bricks by hand today is *roller moulding*. The brick



**CLAY WINNING**  
While most clay for bricks is obtained from excavations and deeper levels, there are still a few individuals for making their own bricks who dig their clay by hand. This is laborious and back-breaking work, but after the brickmaker has done the best they can, they have the best clay and reject the sub-standard.



**MOULDING A BRICK**  
The rough clot of clay is formed by rolling it in dry sand (left) and shaping it into a rectangular block. The clot is then pushed hard into the ready-sanded mould and the excess clay cut off with a wire line (right). The brick is then turned out ready for drying.

**WIRE BOX**  
This is used for rolling the clay in sand.

**BRICK MOULD**  
Once made ready of four interlocking pieces of wood, individual brick moulds are now made of hard-wood lined with steel, although plastic moulds are increasingly being used. All moulds are made just larger than the final brick to allow for the clay to shrink during drying and firing.

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## WORKSHOP CRAFTS

maker prepares his work bench by nailing to it a rock board on which there is a raised back which forms the frog or recess in the brick and over which the mould is placed. During the board, and the mould, with sand, he rolls out a lump of clay to form a rectangular clot or wisp of clay which is then pressed into the mould, ensuring that every crevice is filled. The surface of the clay is then levelled with a wire box or a rake, which is just a damp stick and the mould is then turned out on to a roller board. When

sufficient bricks are made, a heater-off transports them to a drying platform called a *back*. Drying can take as long as six weeks, depending on the weather, although such refinements as underfloor heating do help.

The other process for making bricks, *slip moulding*, is not used so much now. In this process, the brick maker wets the mould rather than sanding it, and the mould is placed directly on the bench without a stock. Since a slip-moulded brick is wetter, it requires more drying time before firing.

**A BRICK KILN**  
The most important of a brick kiln is constant heat, produced by wood, charcoal, or a similar substance, which is used. The bricks are piled up in a clamp, the fuel moulded and while still a firewood a hot mud and applied with the bricks in wet it, with only a wet left to fuel the fire and some smaller openings in the windward side to allow the smoke to escape. Once alight, the fire slowly burns itself out and after about a week the kiln can be dismantled and the fired bricks taken out.



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**THE HACK BARRROW**  
The traditional brick-maker's hack barrow is, indeed, its own tradition, and carries its name - bricks as the brickmaker himself can conveniently lift. It is much in use as the bricks have to be carried from the pallet board where they have been placed after moulding to the back of drying platform, and from there to the water when dry.

## TILE MAKING

**TRADITIONAL CLAY TILES ARE MADE** from the same materials as hand-made bricks and made in much the same way. Tiles, though, are made in many different sizes and shapes, and different parts of the world have different patterns. These beautiful pantile roofs of Italy and the South of France are curved to exactly the shape of the thigh of some Roman tile maker centuries ago. The tiles were made flat and to the right size, then folded over the thigh to form a curve.

Nowadays, the clay is shaped and pressed in moulds and the tiles, after air-drying, are fired in the same way as bricks. Tiles can also be salt-glazed - with the kiln at a very high temperature salt is thrown in and the resulting gas hardens the surface of the tiles. Flooring tiles are often glazed on one side, as is pottery - one glaze as tile makers have it. Tiles are one of the artifacts though which, so easily made by machine, are practically never made by hand now.

**ROOFING**  
There are many ways to fix tiles to form a roof. The Italian tile, high-formed, or otherwise, is attached in tiers. The individual tiles are laid alternately convex and concave. In this way, rain water runs from the tile with its convex side uppermost into the troughs formed by its neighbors with their concave sides uppermost. This arrangement forms a series of troughs, kept watertight by successively overlapping tile edges, running right down the roof. The design makes it possible to have the comparatively flat roofs one sees in Mediterranean countries without fear of leaks.

Most northern European roofs are covered with small rectangular tiles, measuring 12 by 6 inches - nine-holed dimensions. They are punched, for two roofing nails, and are moulded with two ribs (little projections) along one of the short sides. On the roof, the ribs hook over the tiling butters that are fixed parallel to the eaves and ridge. Plain tile roofs have a much steeper angle, or pitch, to help the overlapping tiles shed rain water.

**PLAIN TILES**  
Plain tiles require pegs or nails to hold them secure on steeply pitched roofs.



**MAKING A TILE**  
You can make tiles by hand in a mould, the back of which is knogged in a square iron frame with the two prongs that push into the mud holes in the tile. You shape the clay in the mould with a bow, using the flat wooden surface for smoothing the surface of the tile (1), and cutting away the superfluous clay with the second end (2). The tile can then be removed for firing (3).

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The red areas on the drawings show the parts of the facade which have broken tiles that need replacing. The following pages will teach you how to make these tiles.



North Gambier House



West Gambier House



South Gambier House

New Tiled Areas

The red areas on the drawings show the parts of the facade which could be improved by covering them with new tiles. The following pages will teach you how to make these tiles.



North West House



East West House



South West House



West West House

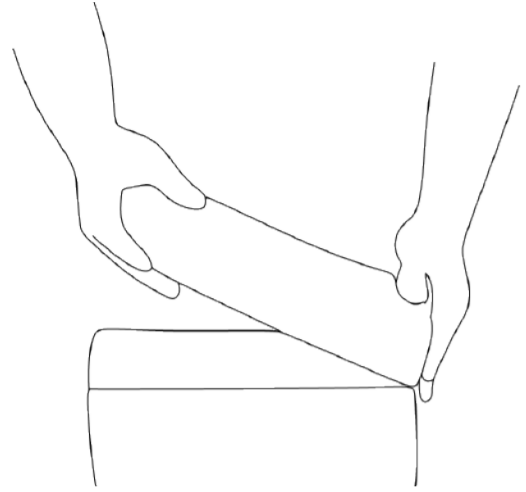
## How to Make Ceramic Tiles

### Step One: Rolling Clay

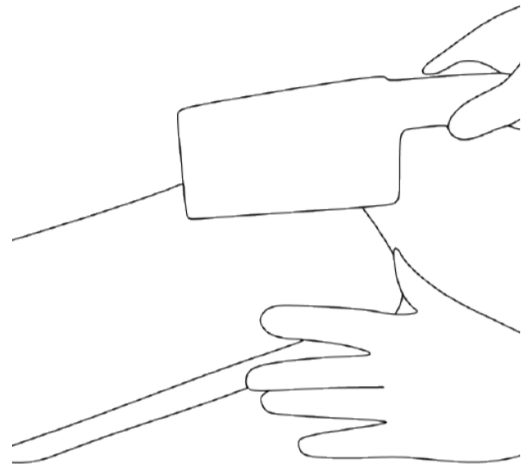
You will need:

- Clay
- Mallet
- Canvas sheets
- Slab roller

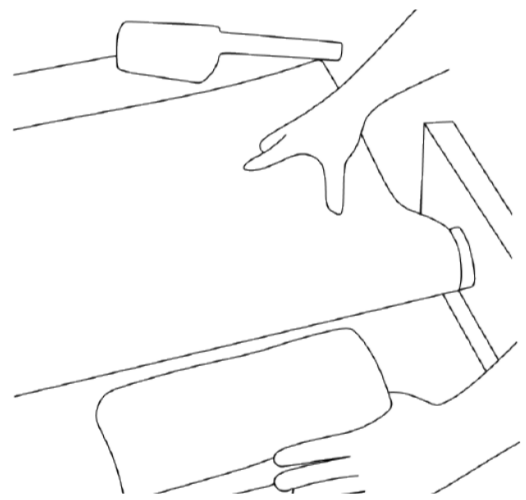
Cut clay block into three equal sections. Put a sheet of canvas onto the slab roller and transfer clay onto it.



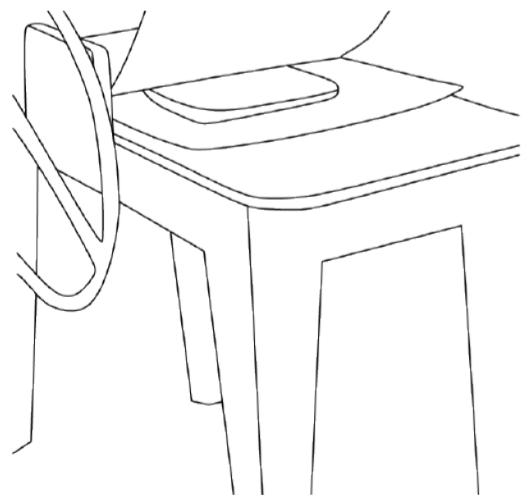
Pound the edge of the clay that will be fed into the roller.



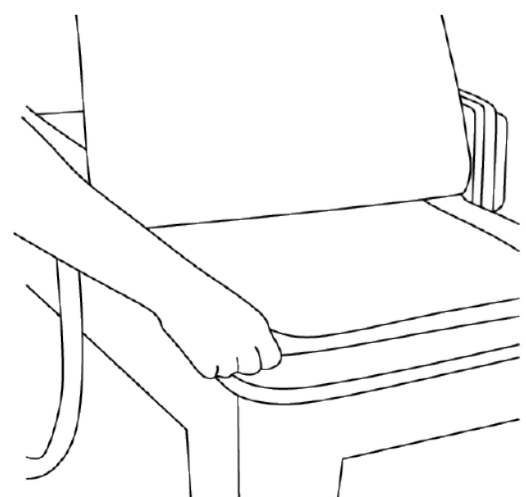
Cover the roller with a sheet of canvas so the clay is sandwiched between the two sheets.



Roll the clay, turning it 90 degrees each time you roll.



Roll until the clay is at your desired thickness. Transfer to a sheet of drywall and leave until it is bendable but not pliable like wet clay.



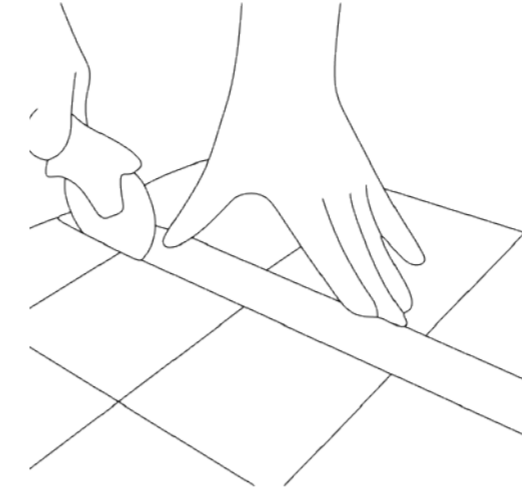
## How to Make Ceramic Tiles

### Step Two: Cutting Clay Into Tiles

You will need:

- Clay
- Ruler
- Pizza cutter
- Wooden block in desired shape of tile

To cut rectangular or square tiles, measure out how large you want the tiles to be then using a ruler, cut the tiles with a pizza cutter.

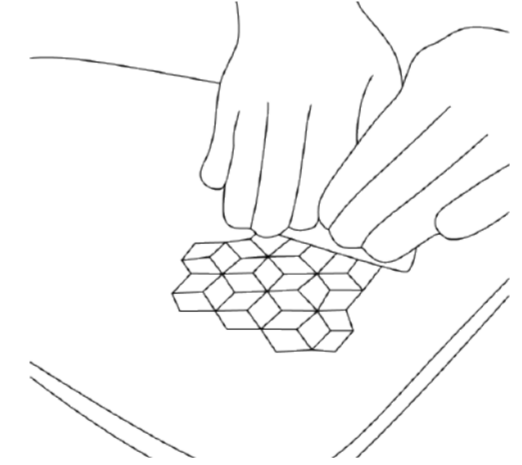


To make rounded tiles, place a wooden block onto the clay and cut around it.

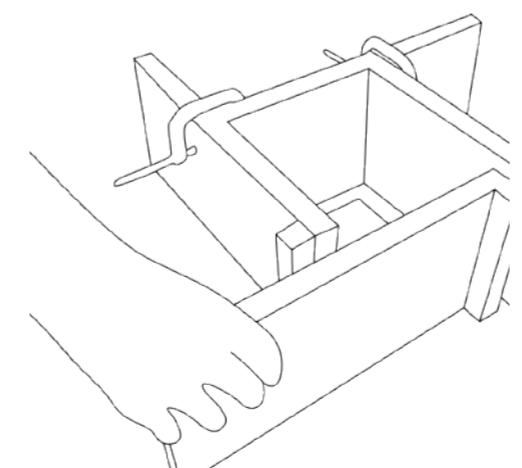


### Optional: Making a Mould

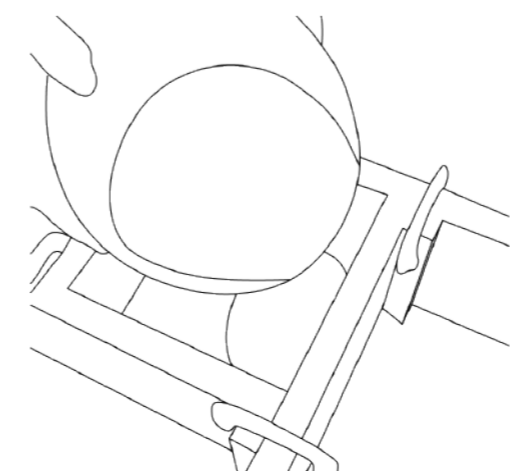
Make the master tile. This has to be the same size and shape that you want the tiles to be. To create patterns, different textures can be pressed into the clay.



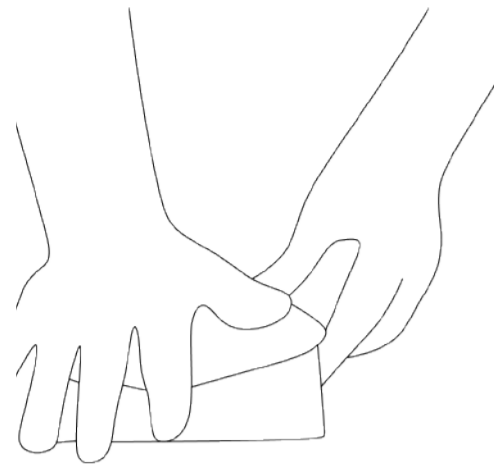
Fix the tile onto acrylic glass using water. Place the boards around the tile and clamp them together. Use wet clay to seal the gaps. Apply a mold release agent to prevent the plaster from sticking.



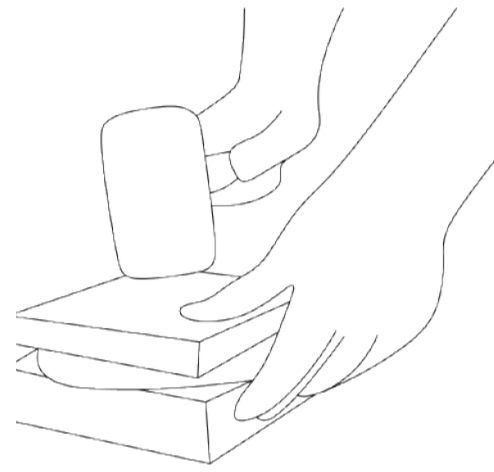
Pour the plaster into the mould, wait for it to dry and remove the master tile.



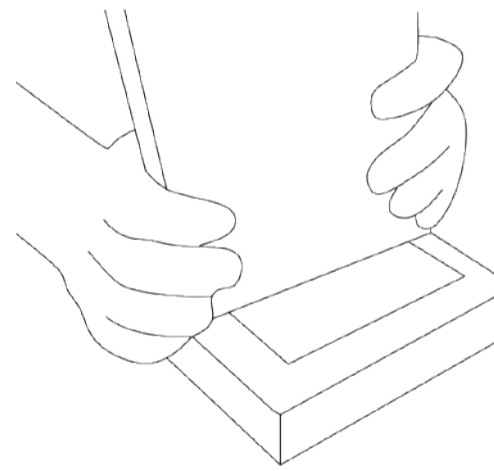
### Optional: Using a Tile Mold



Press the clay into the mold.



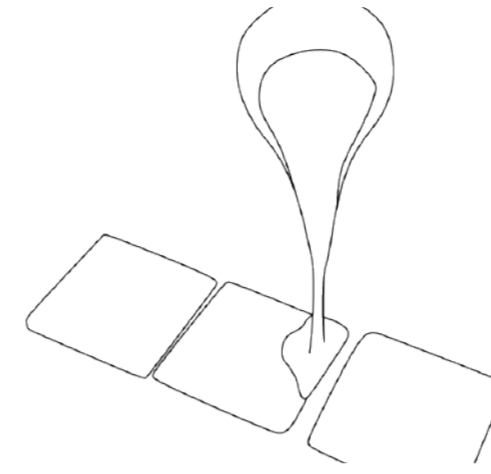
Cover with a wooden board and hit with a mallet to make the clay spread evenly.



Remove the excess clay from the mold. Wait for a few minutes and then release the tile from the mold. Leave to dry on a sheet of drywall.

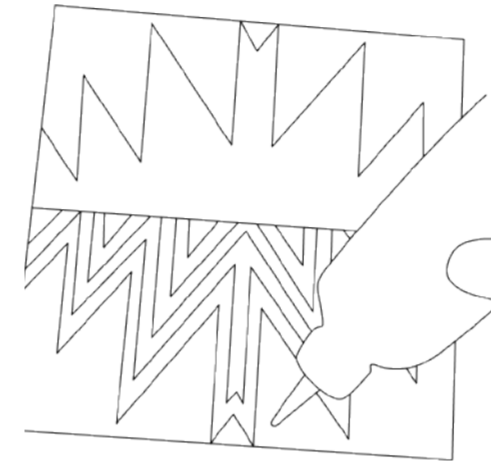
### Step Three: Decorating and Firing

#### Option One: Pouring The Glaze

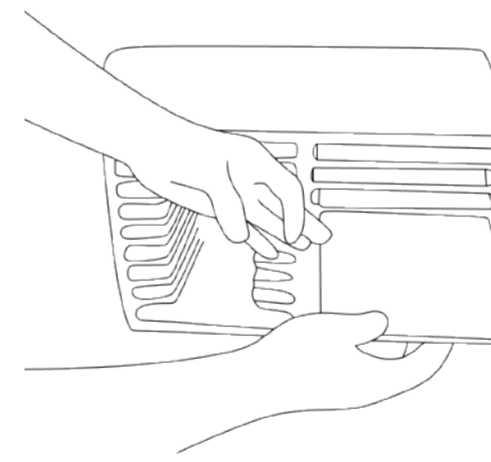


If you want a tile which is a single colour, pour the glaze directly onto the tile. Once dry to the touch, clean up the edges using a rubber scraper.

#### Option Two: Using Underglaze

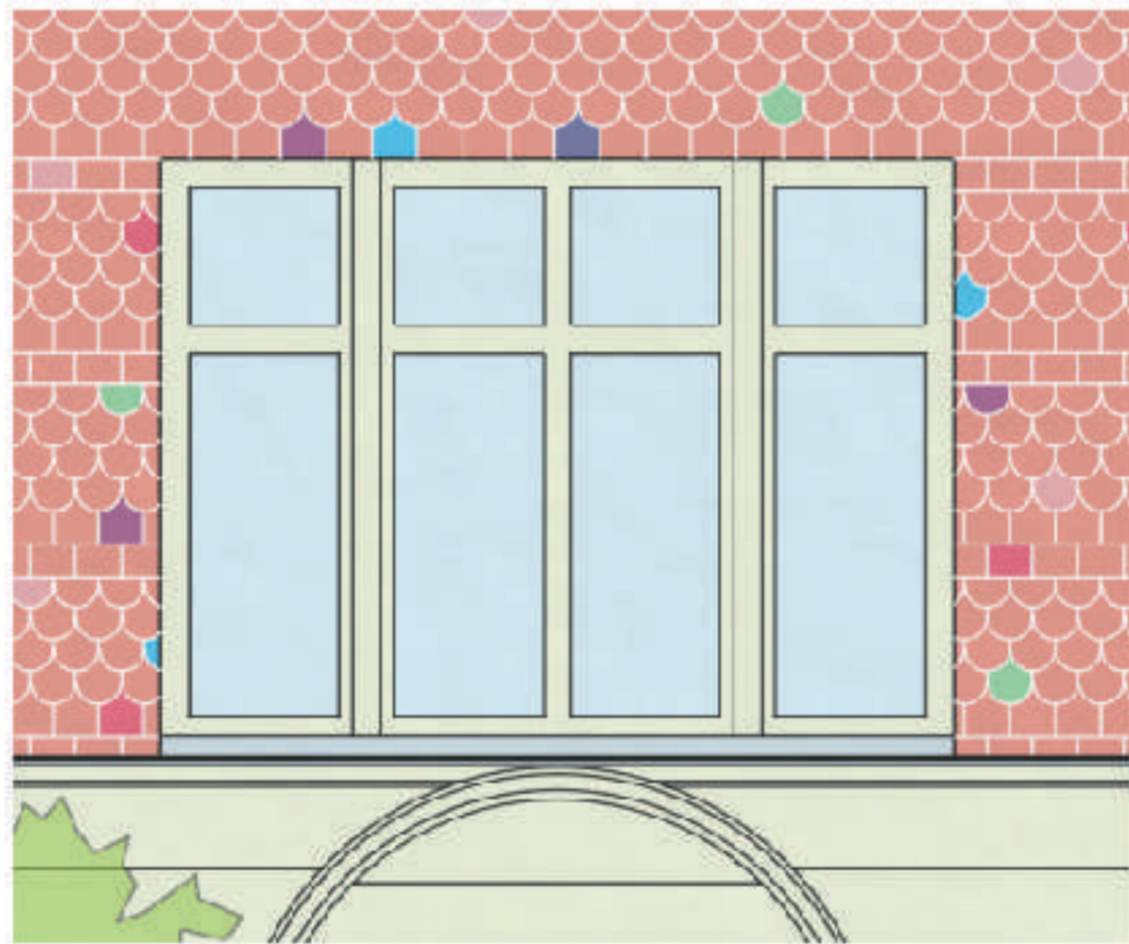
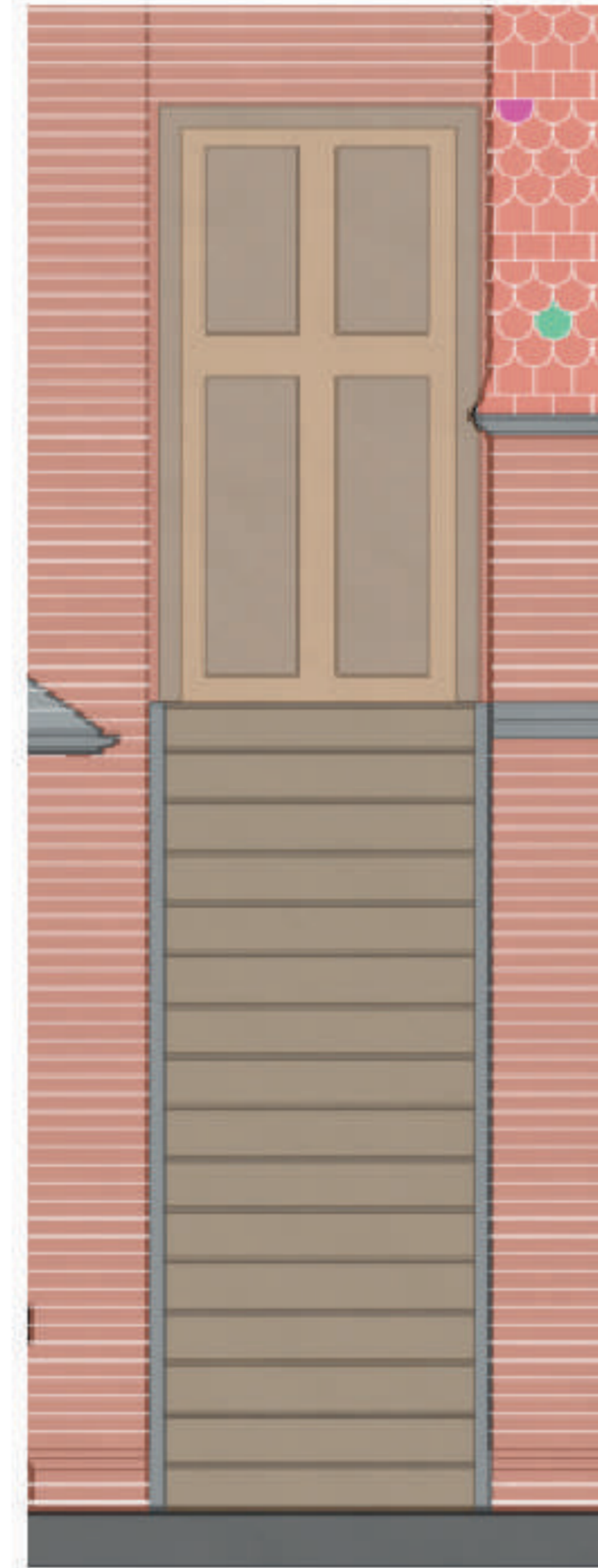
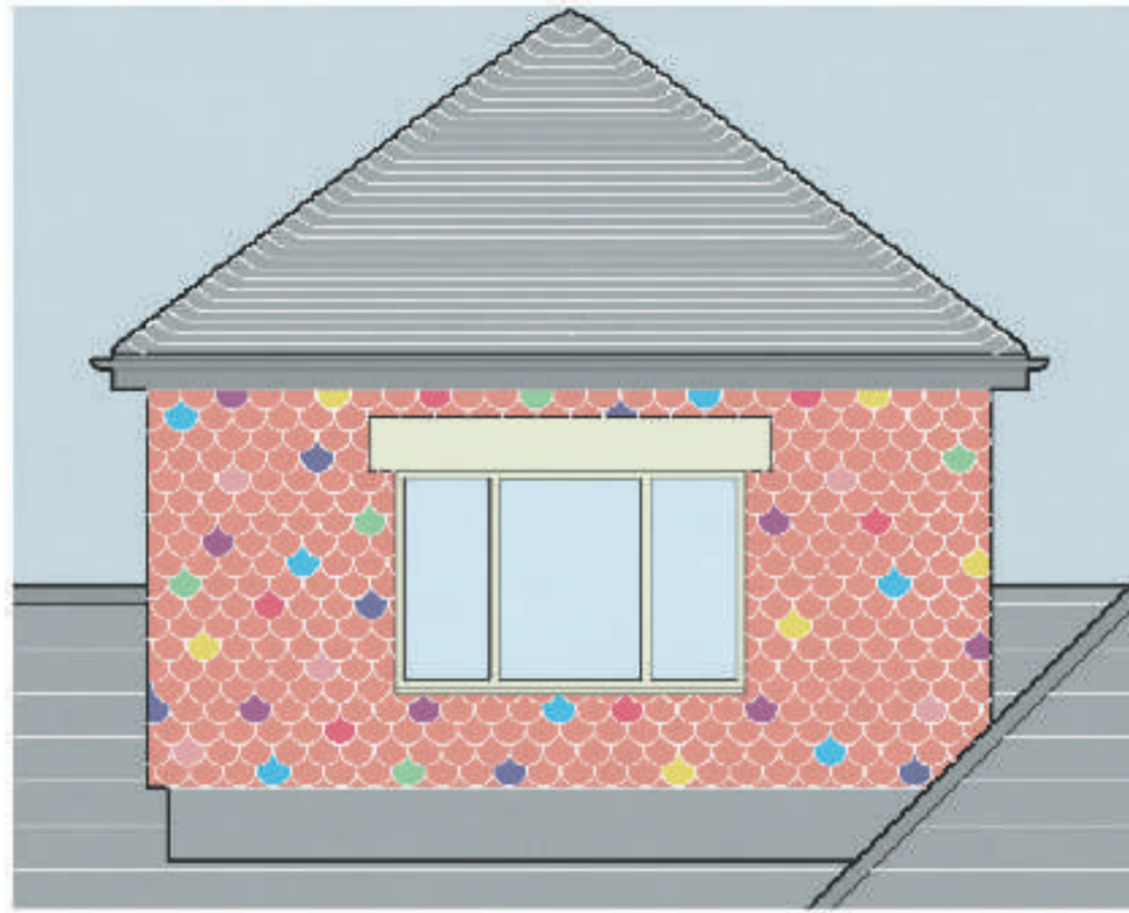


To make more intricate designs use underglaze. This can be applied with a paintbrush or for finer lines and geometric shapes, use a squeeze bottle.



Stack the tiles and place them into the kiln.



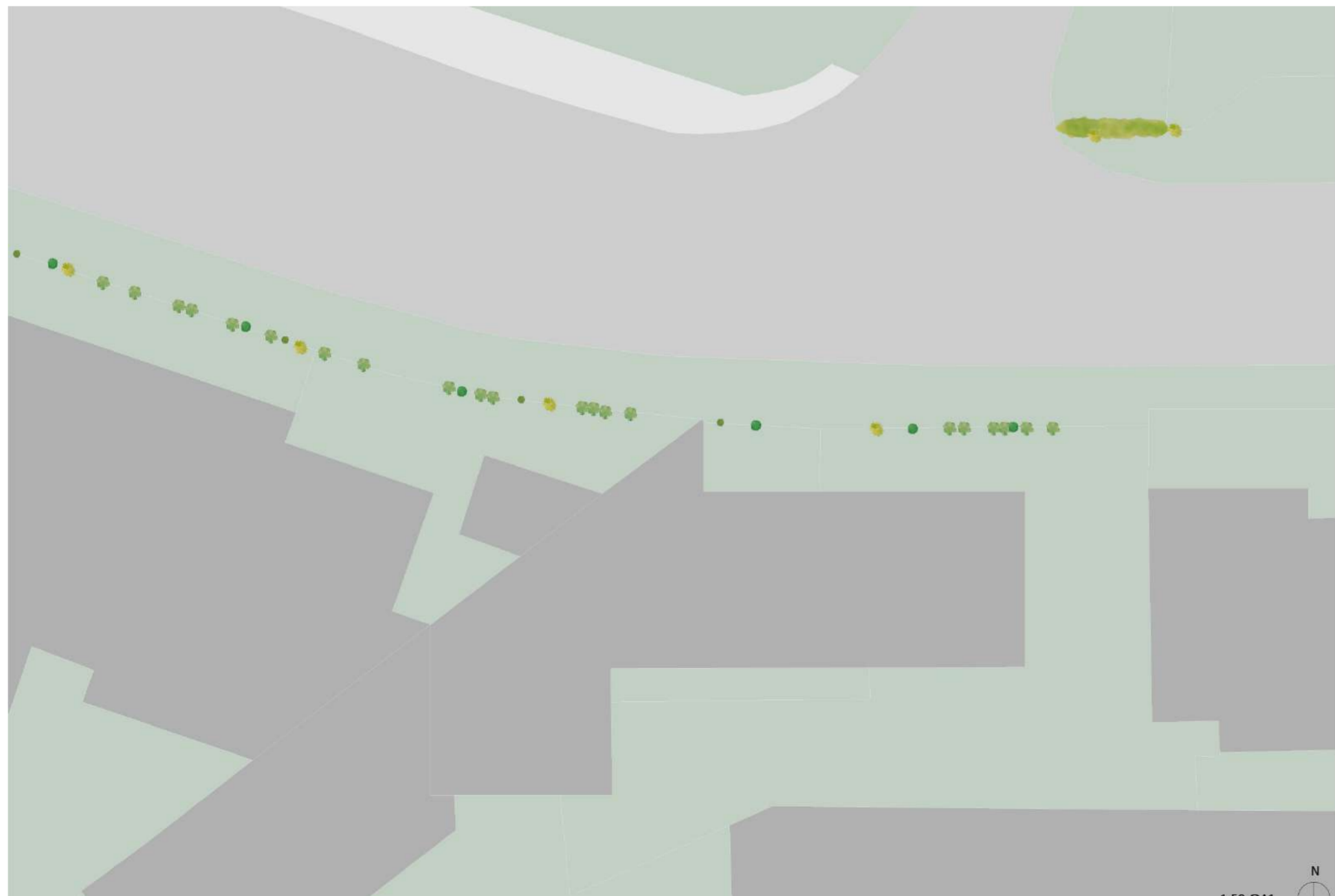


# Garden

## Existing Site Ecology

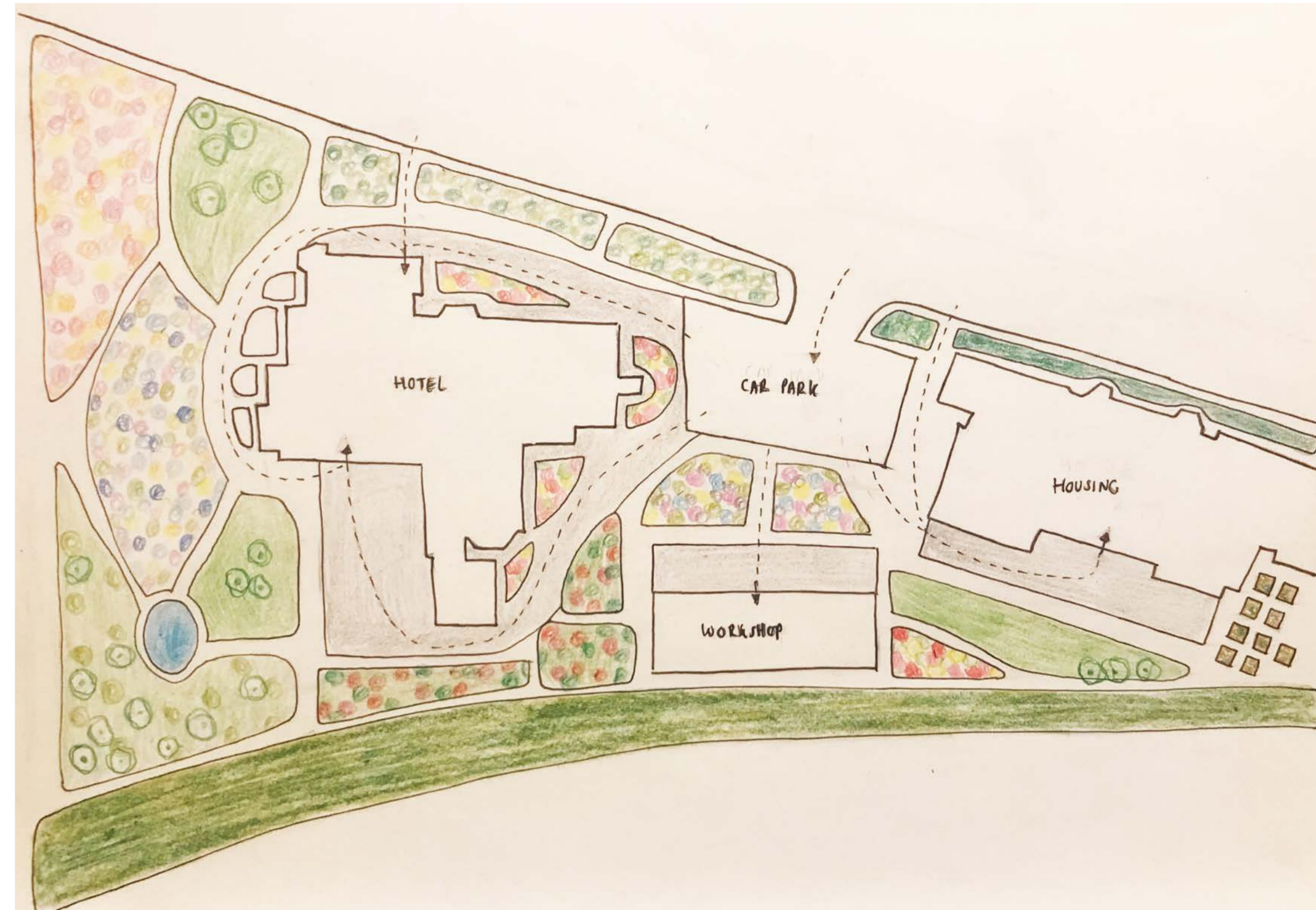
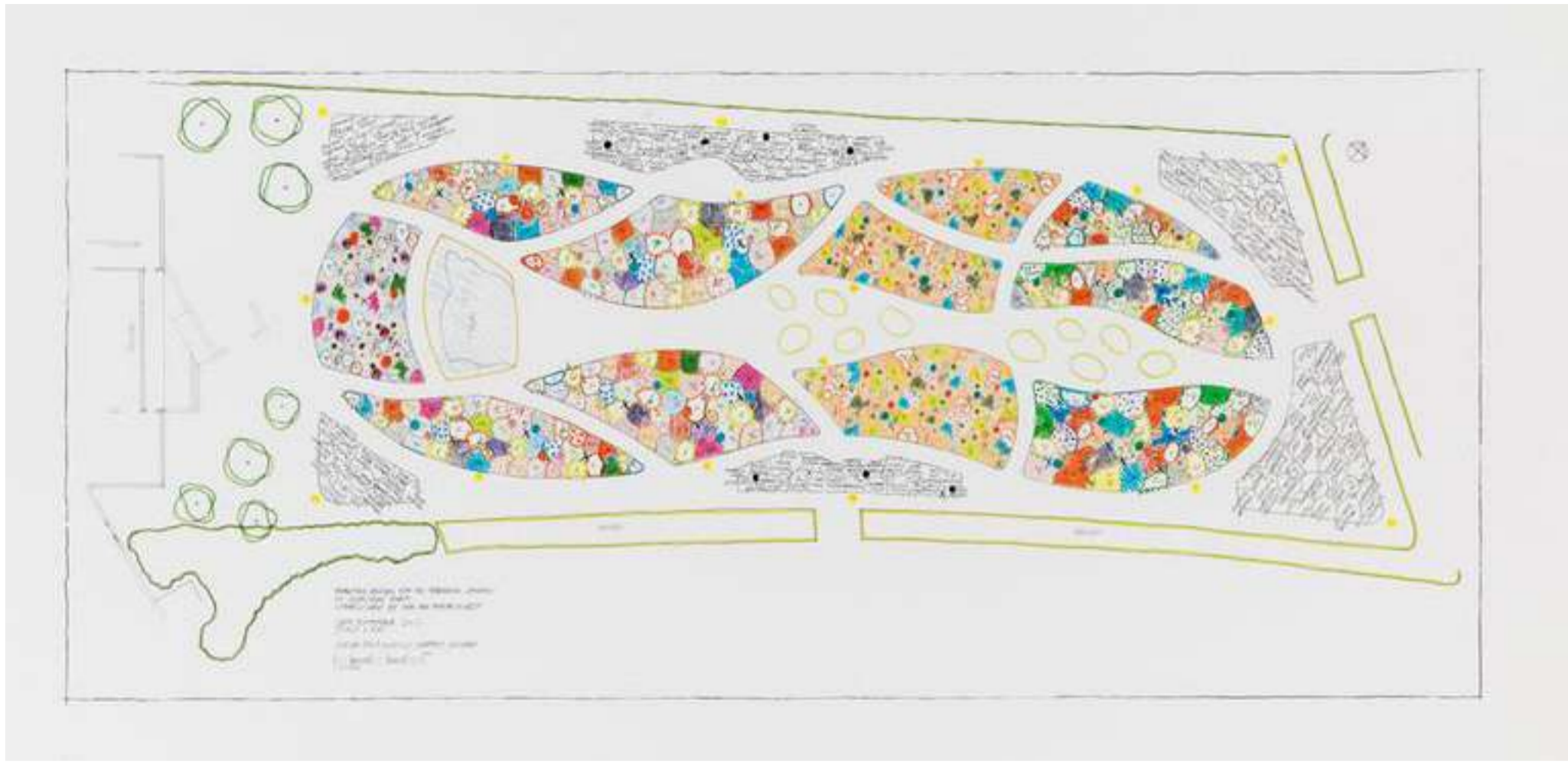


## Ecology Map



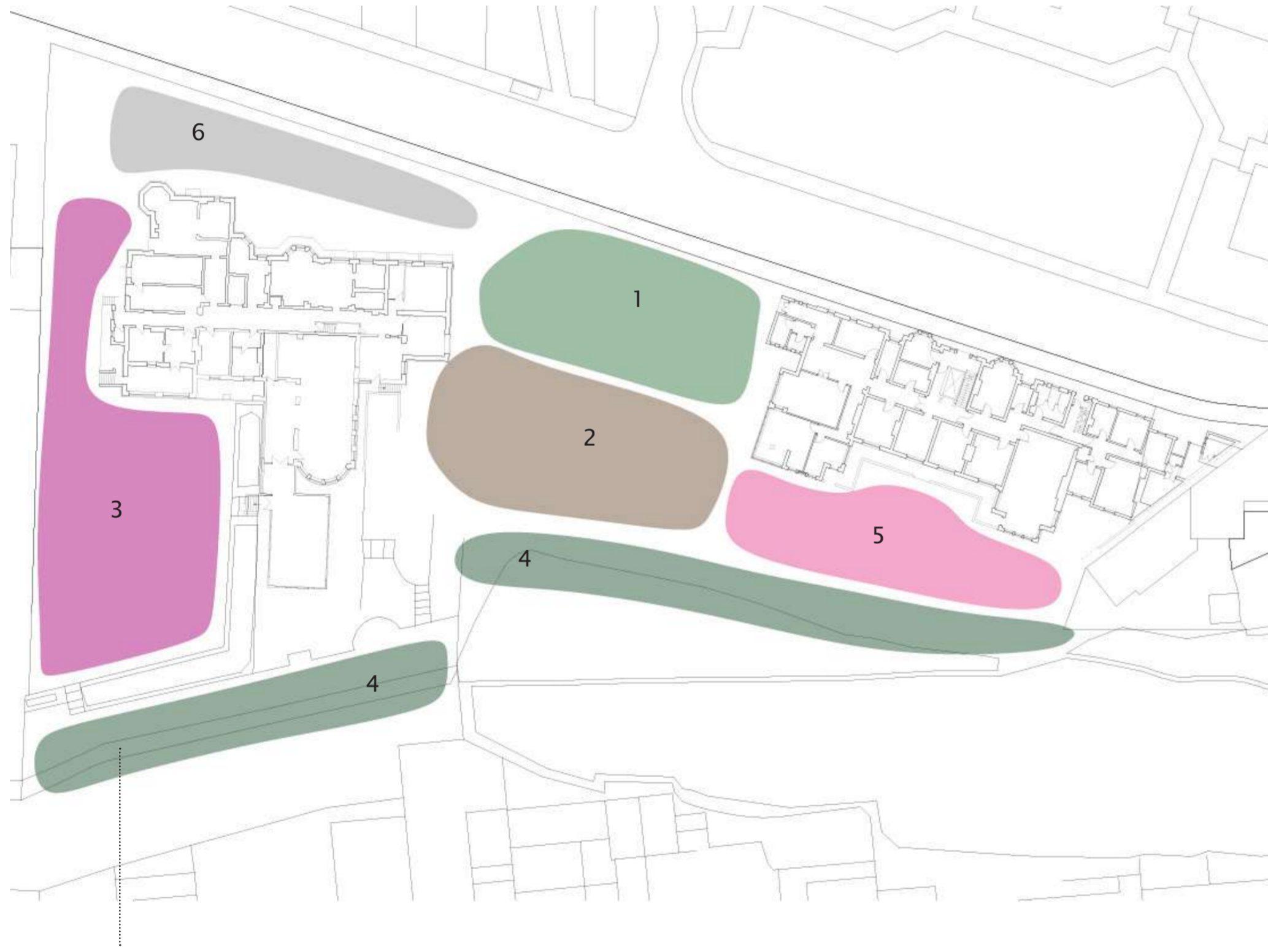
## Ecology Map





Garden Zones

- 1 Social Zone
- 2 Allotments
- 3 Quiet Wild flower Garden
- 4 Planting to Reduce Cliff Erosion
- 5 Formal Garden
- 6 Parking Spaces and Bike Storage

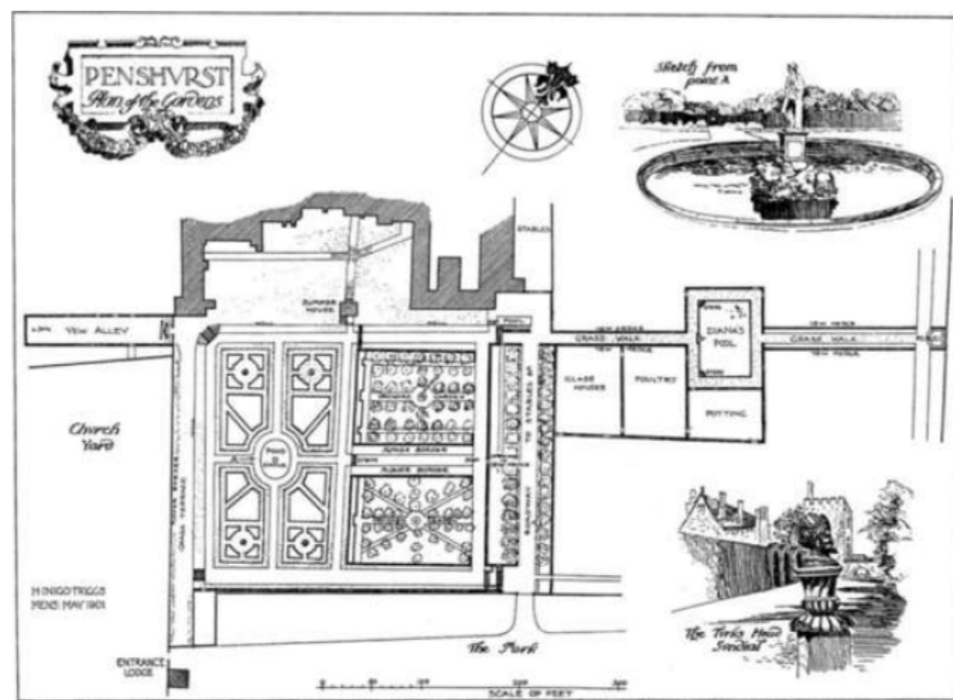
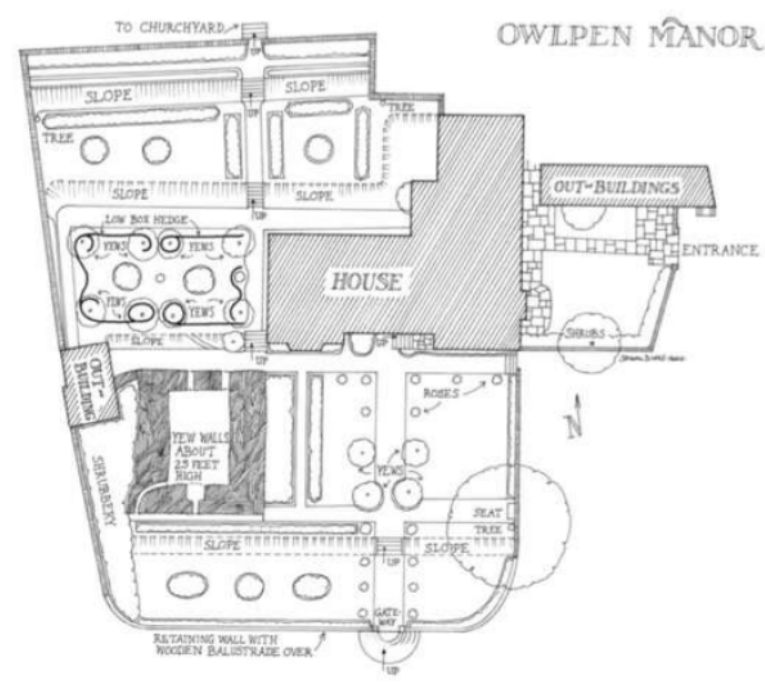
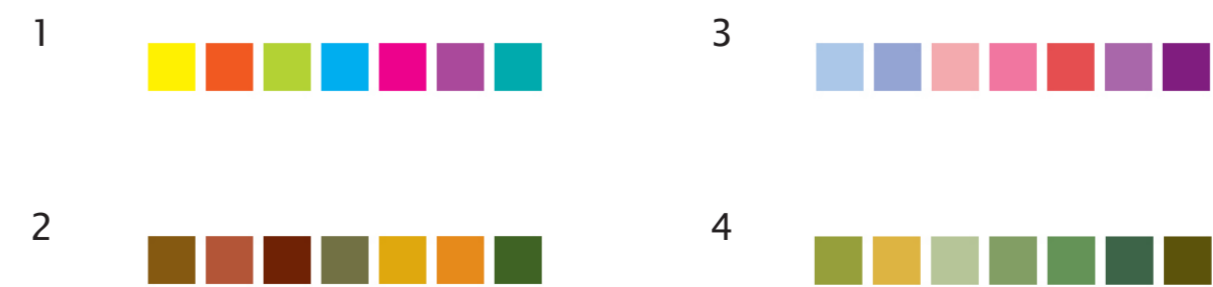
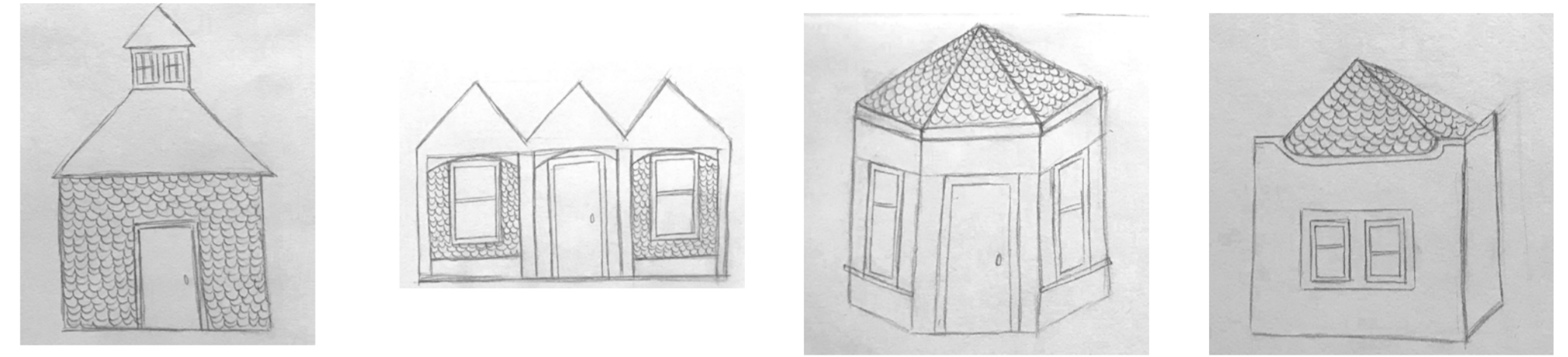
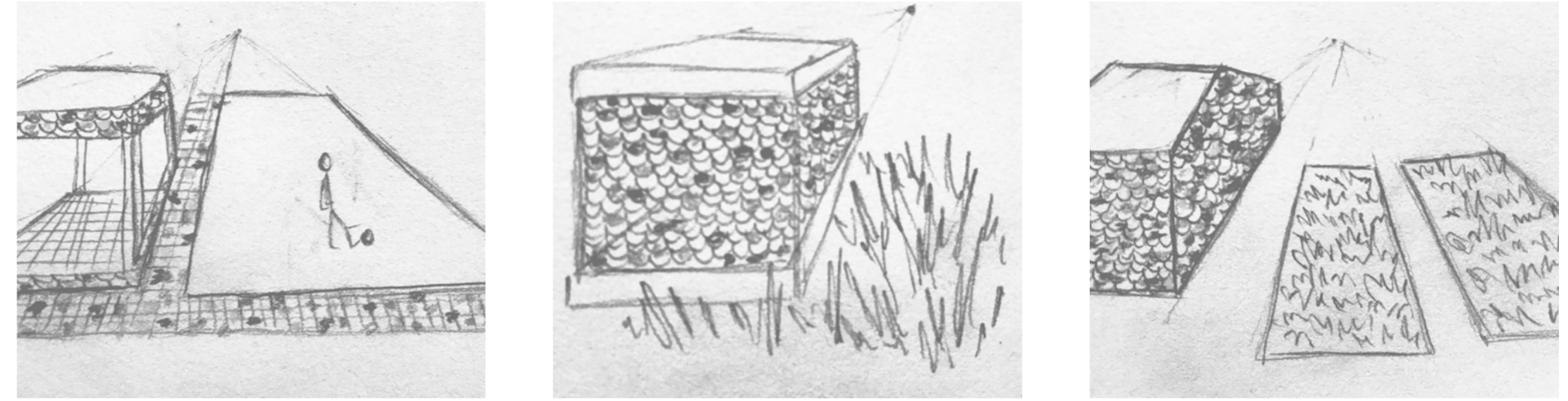
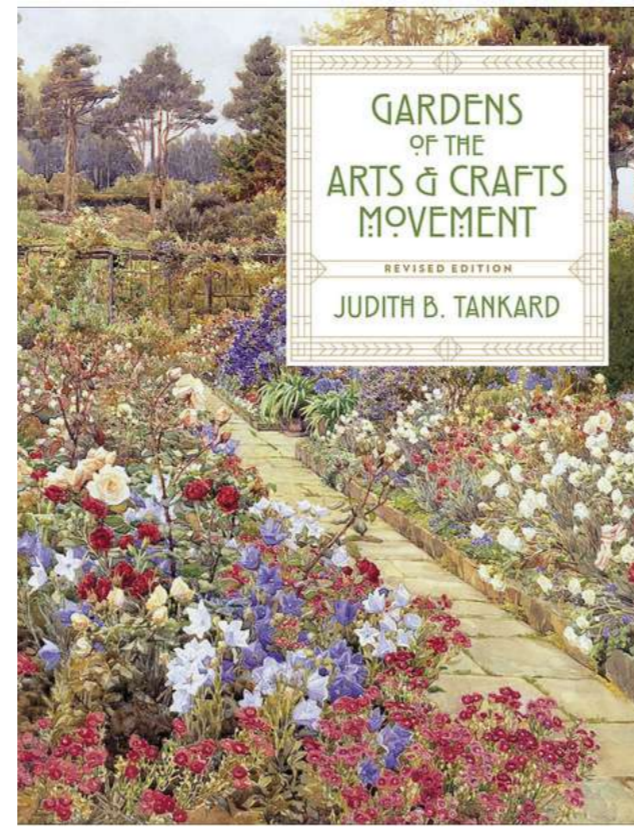


Planting to Prevent Cliff Erosion

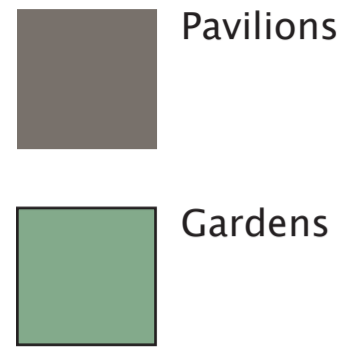


Developed Garden Design



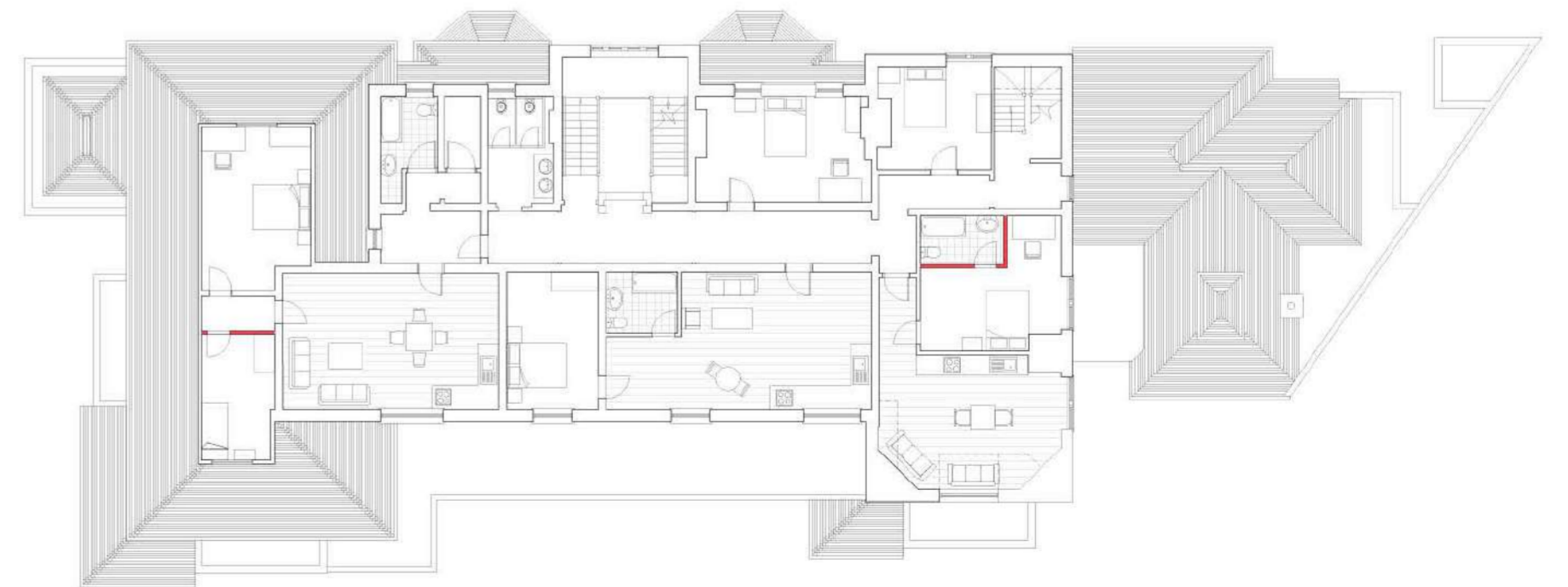
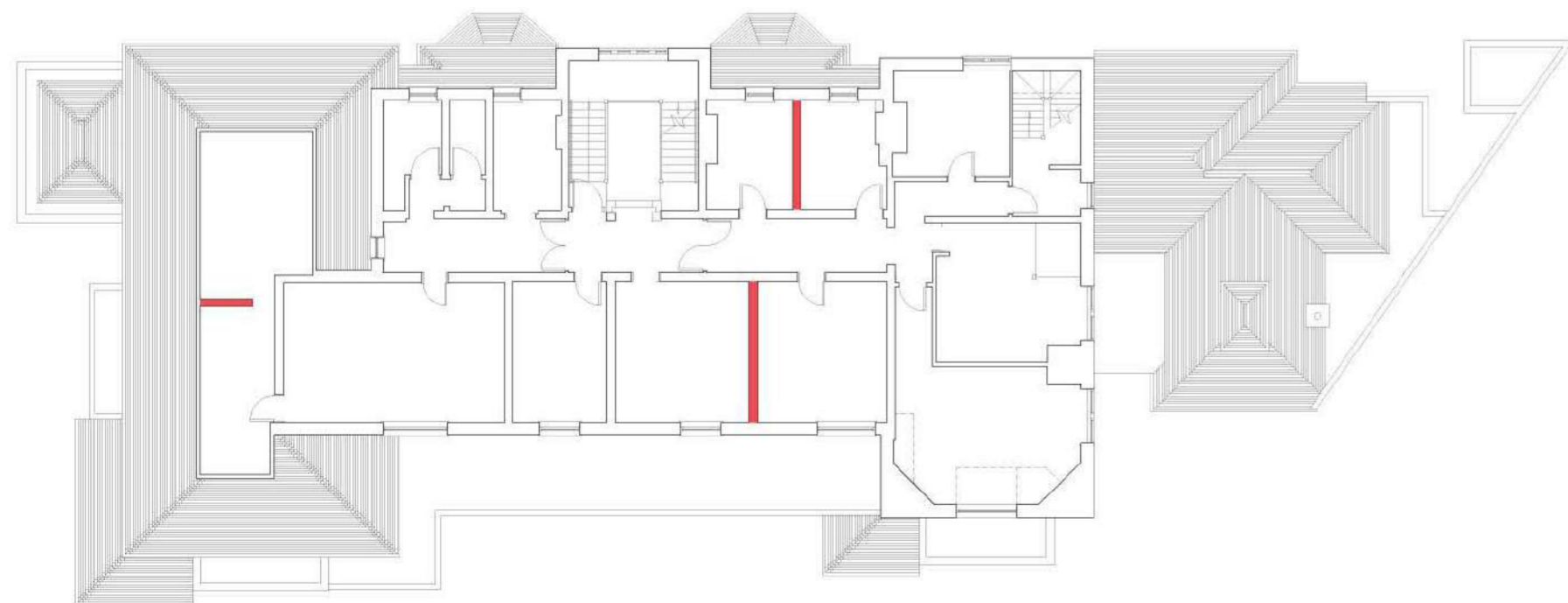
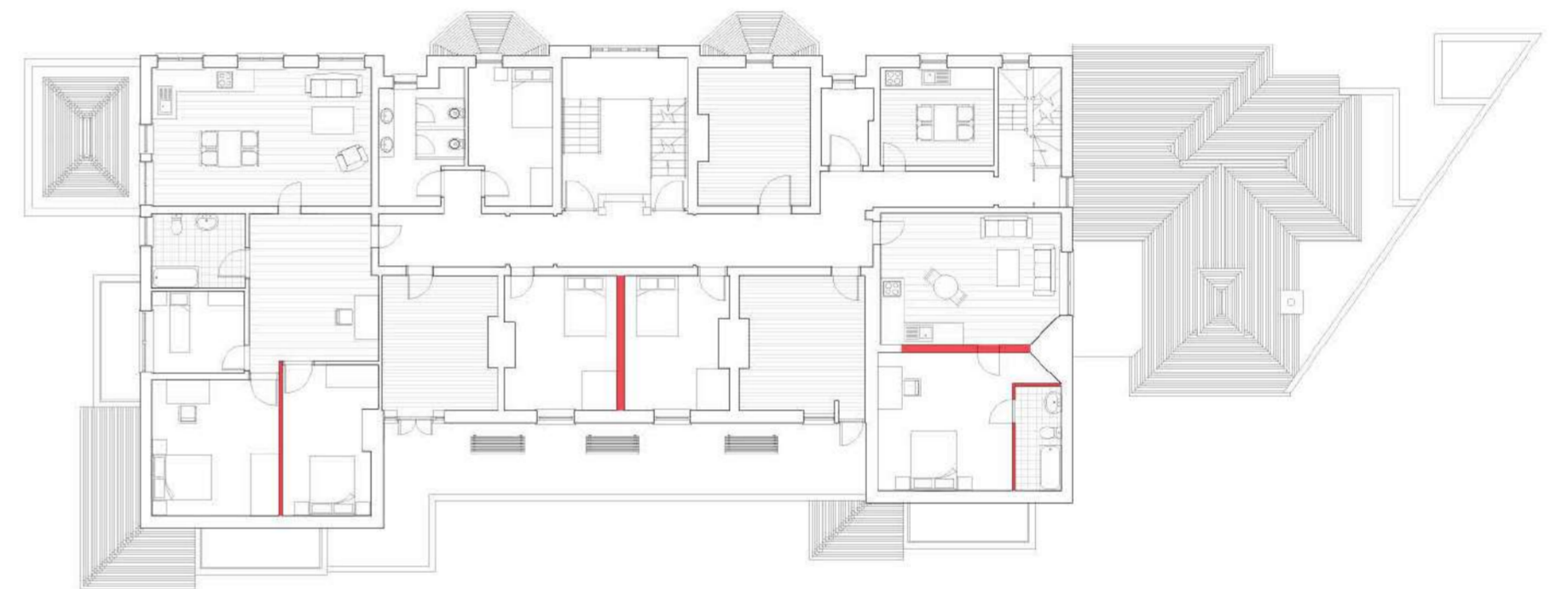
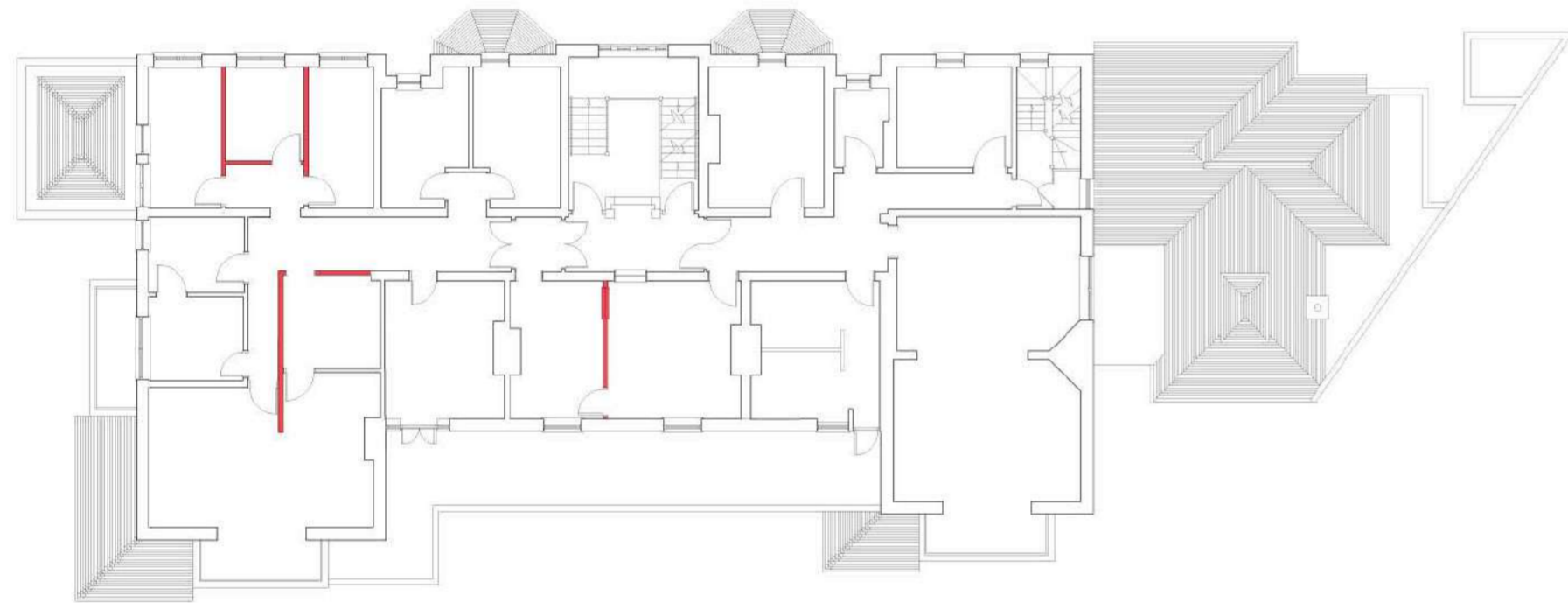
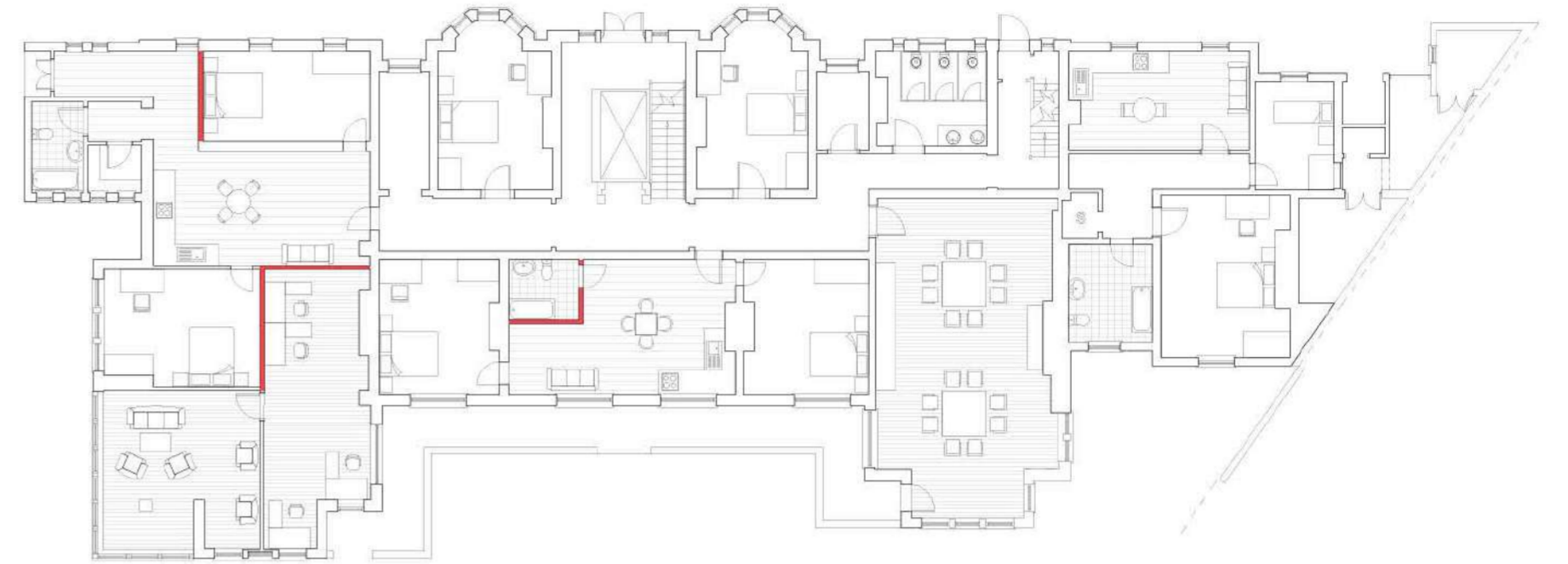
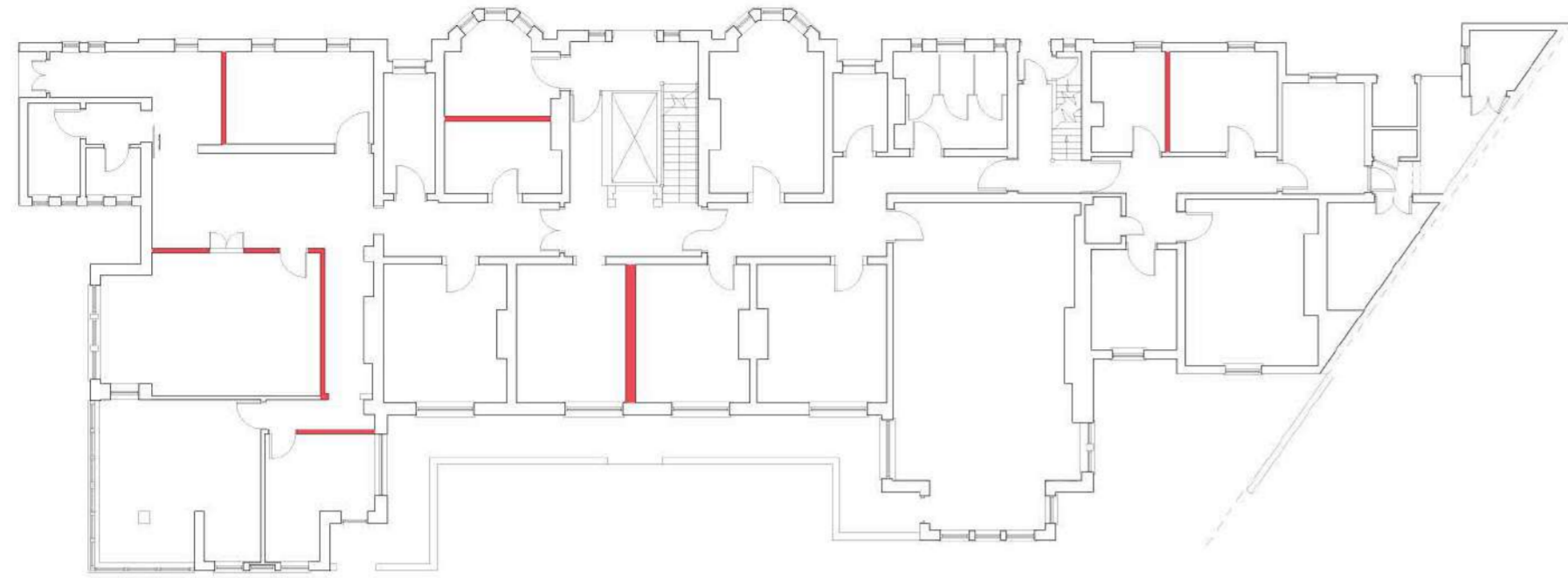






# Plans

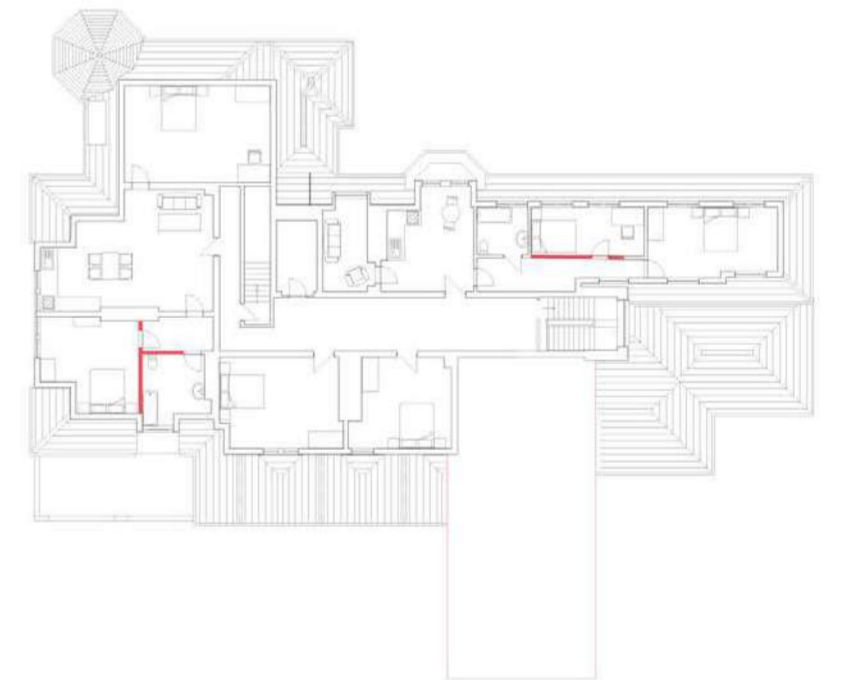
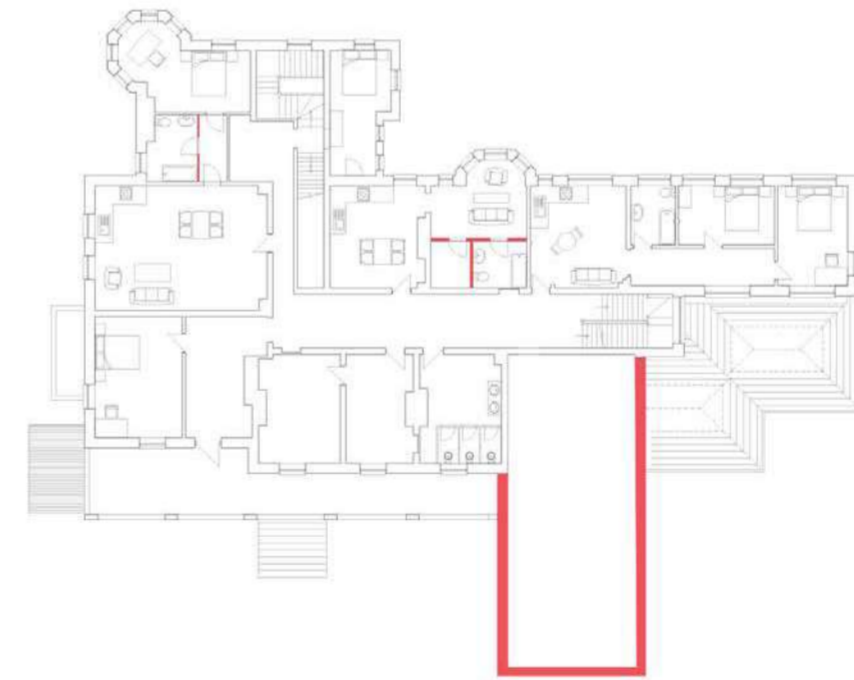
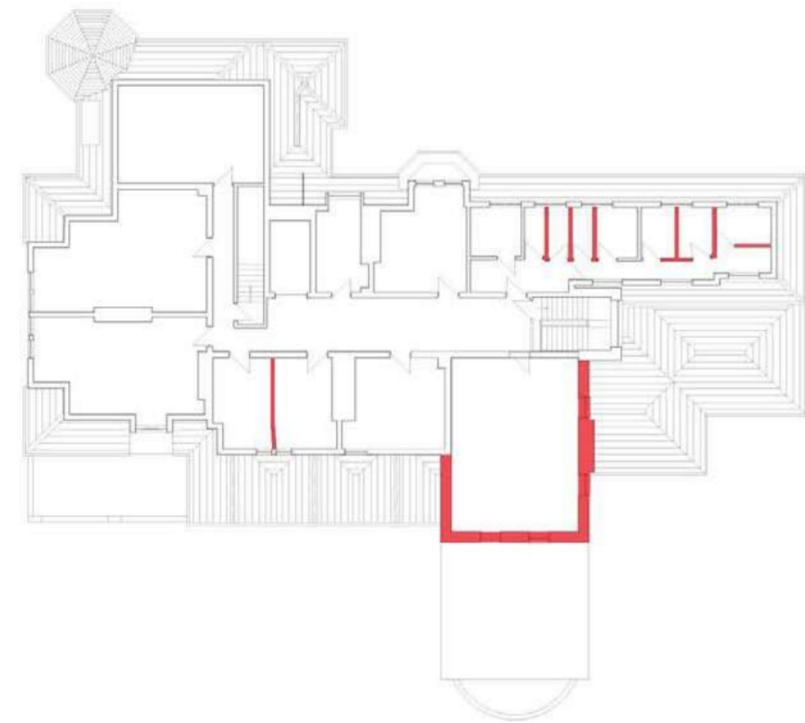
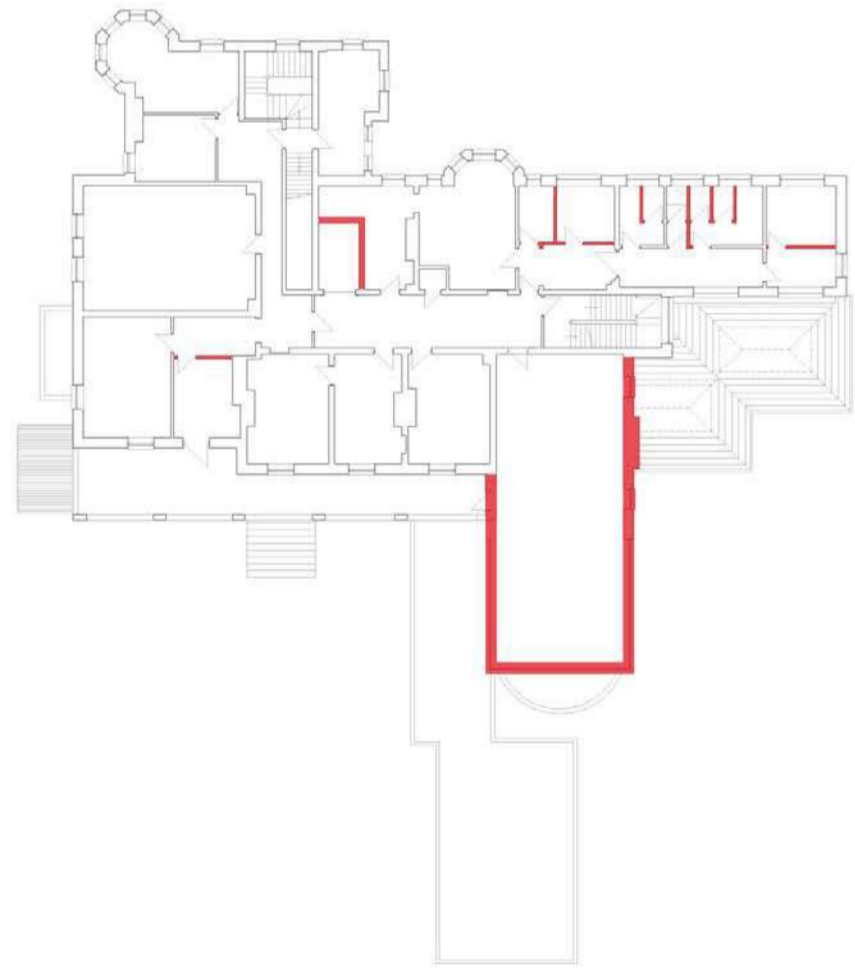
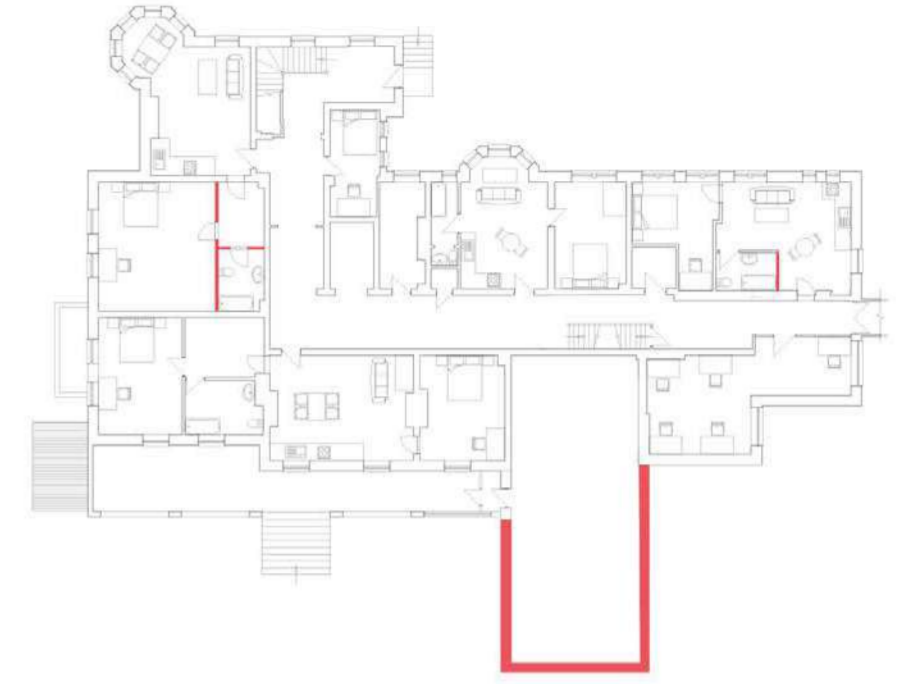
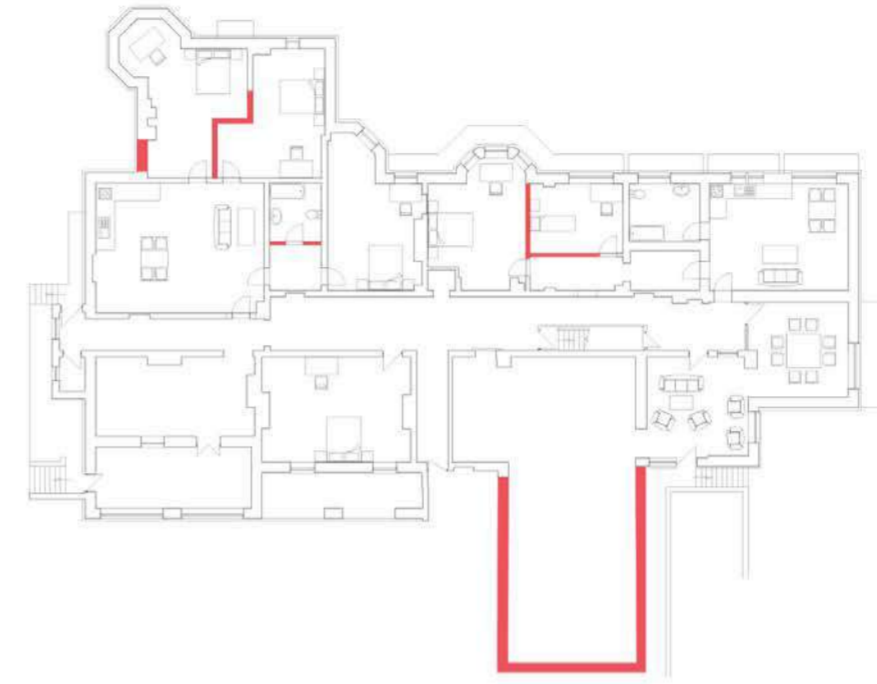
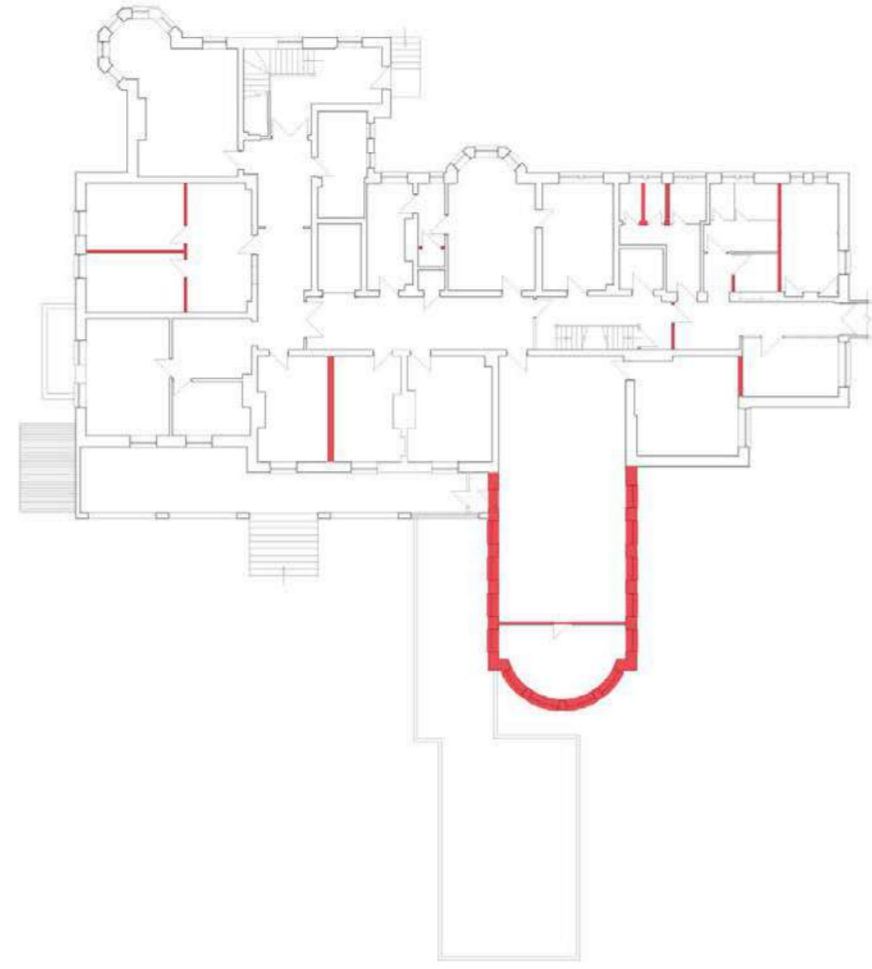
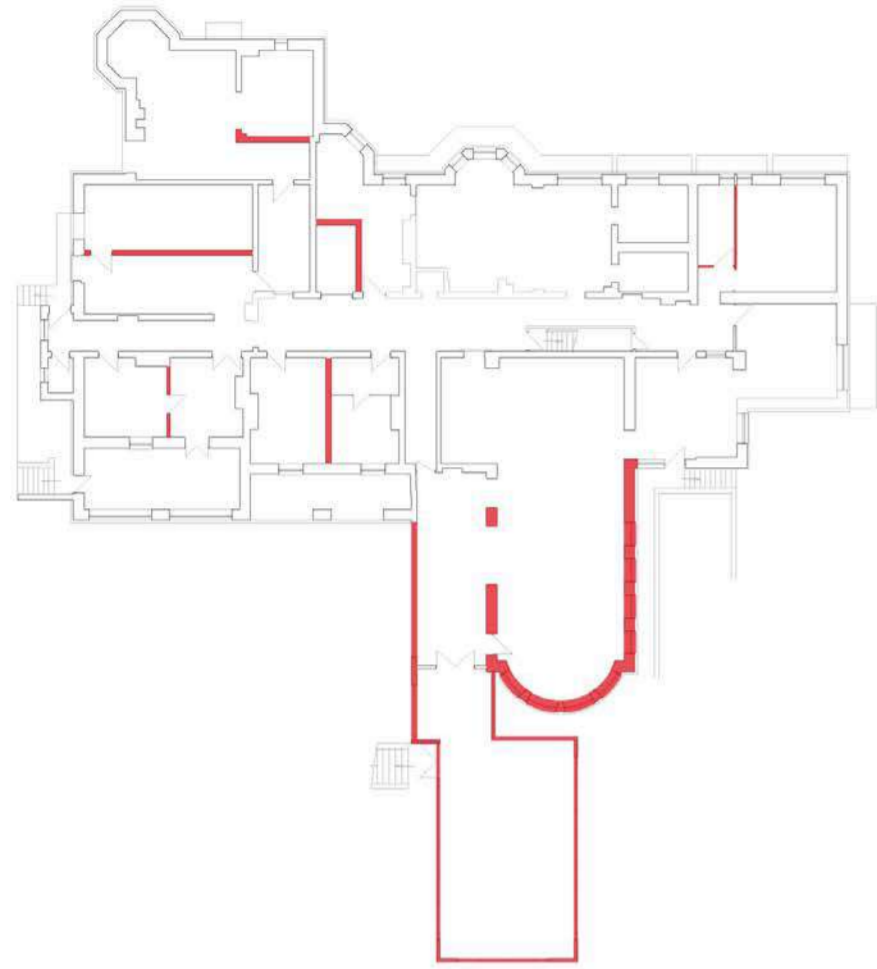
## Gambier House Initial Plans

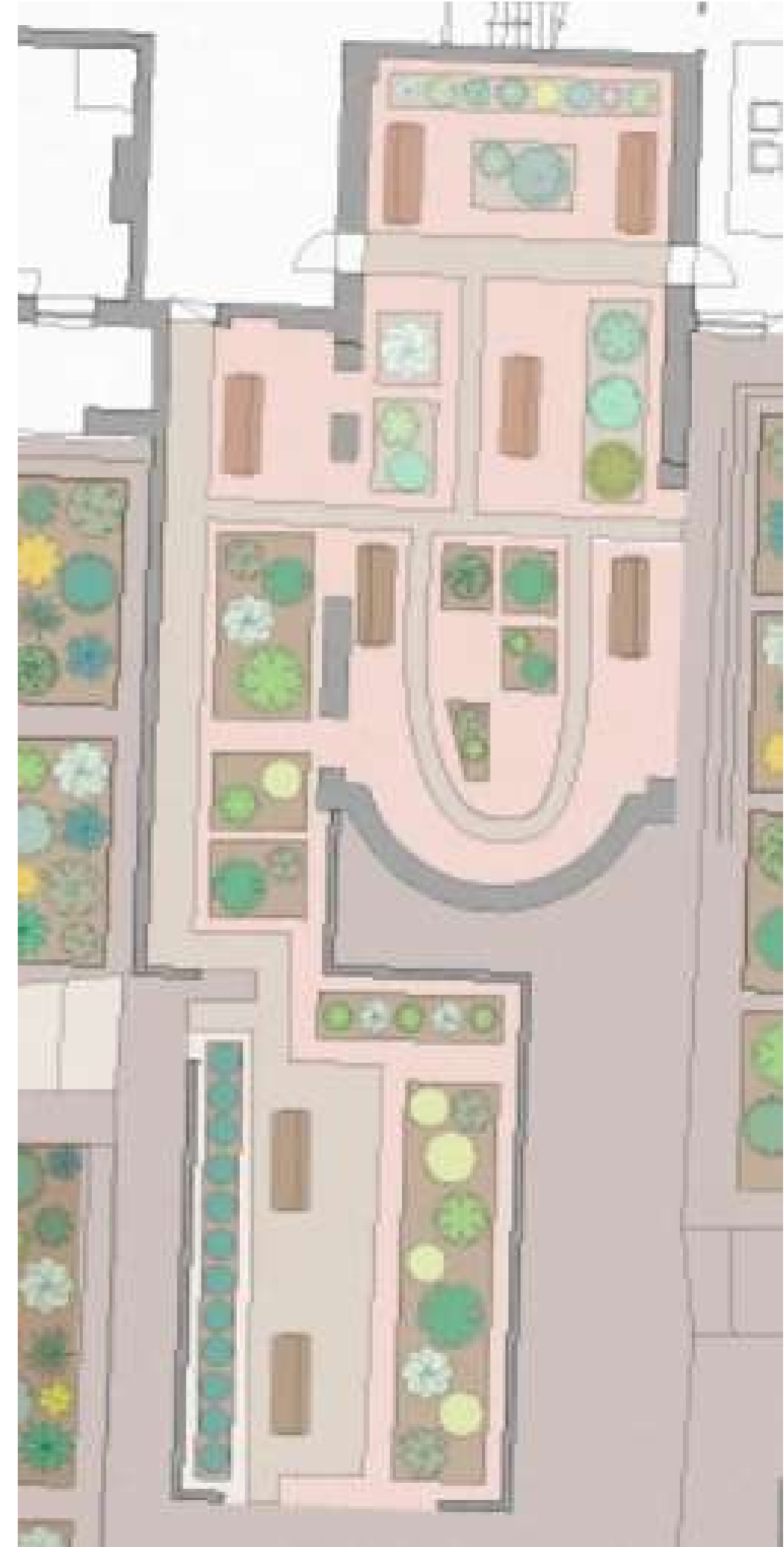
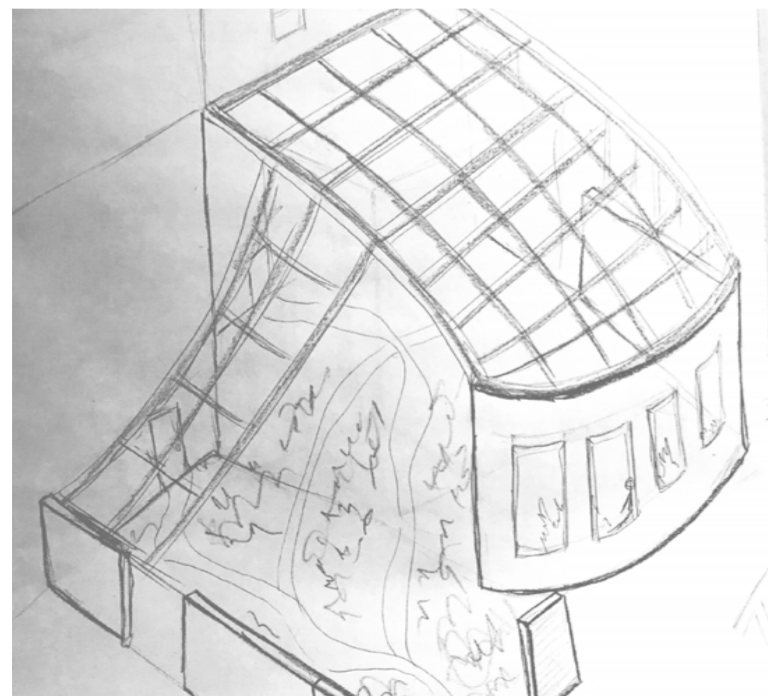
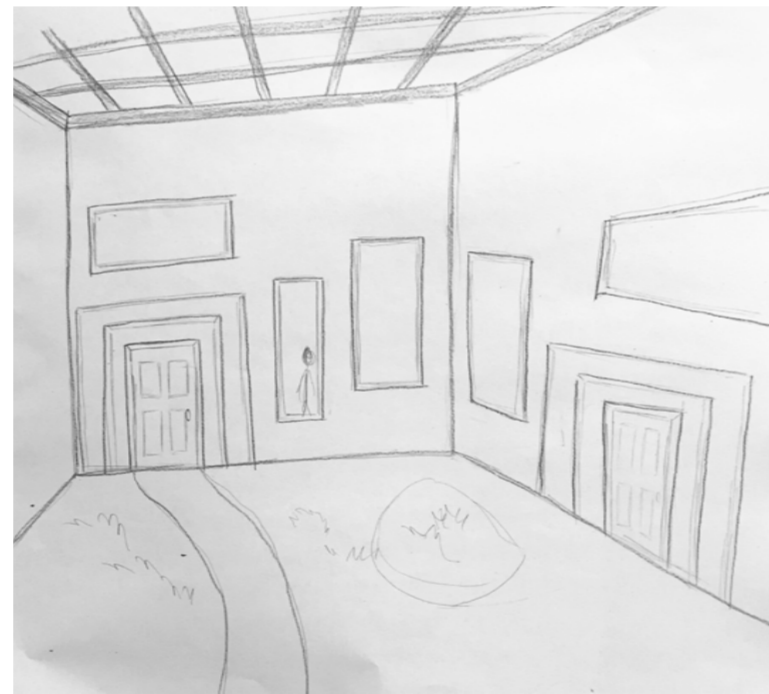
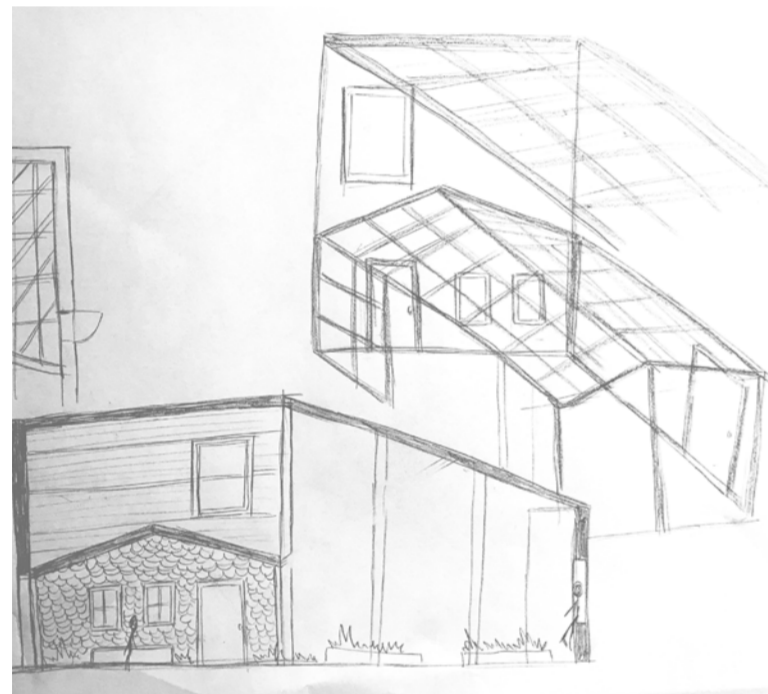


Red – demolished walls

Red – new walls









Interior Tile Colour Palettes

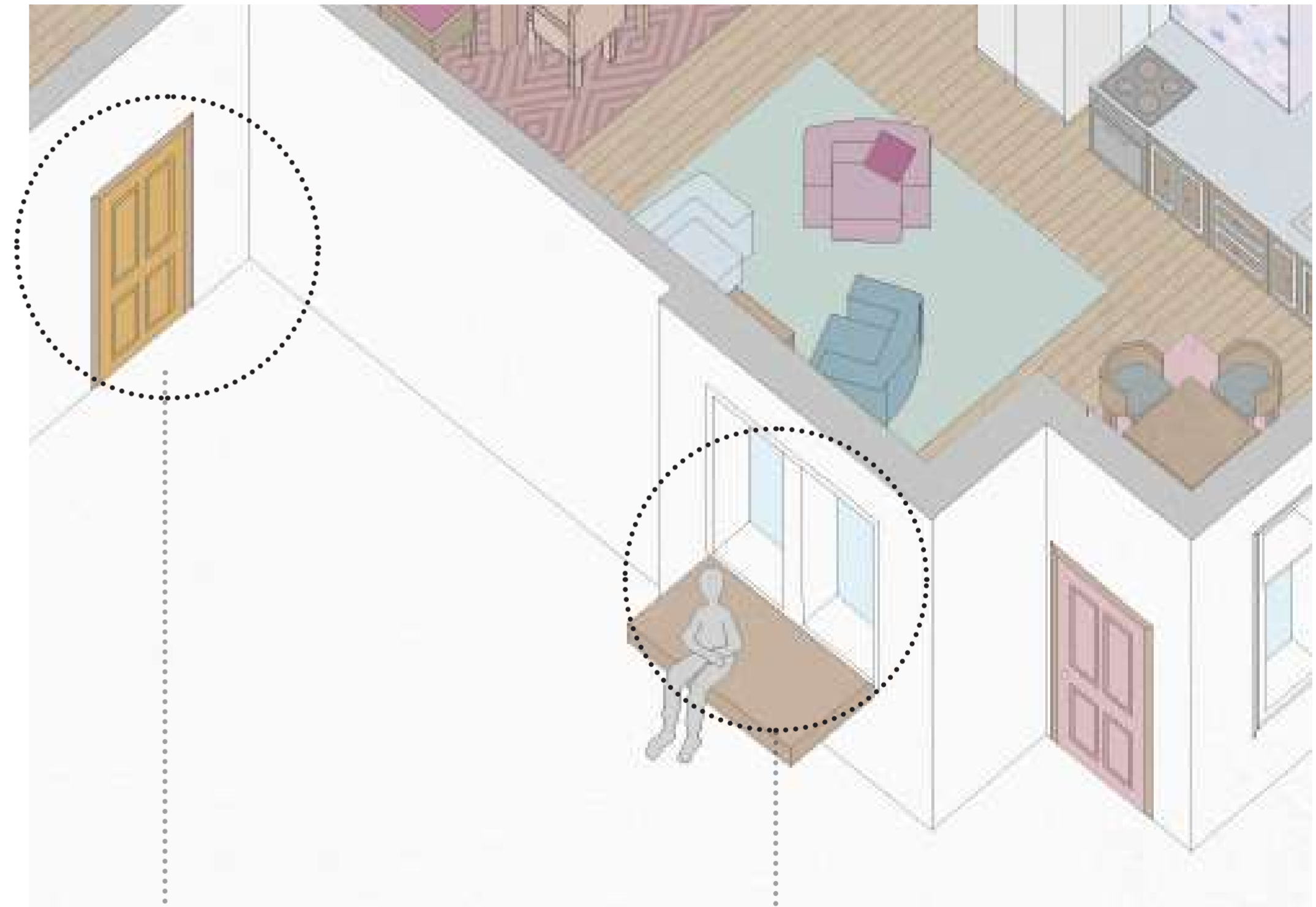
Use crochet to cover walls and floors.

Paint over walls that are in good condition.



Use carpentry to build furniture.

Use tiles to cover walls and furniture.

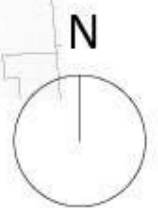


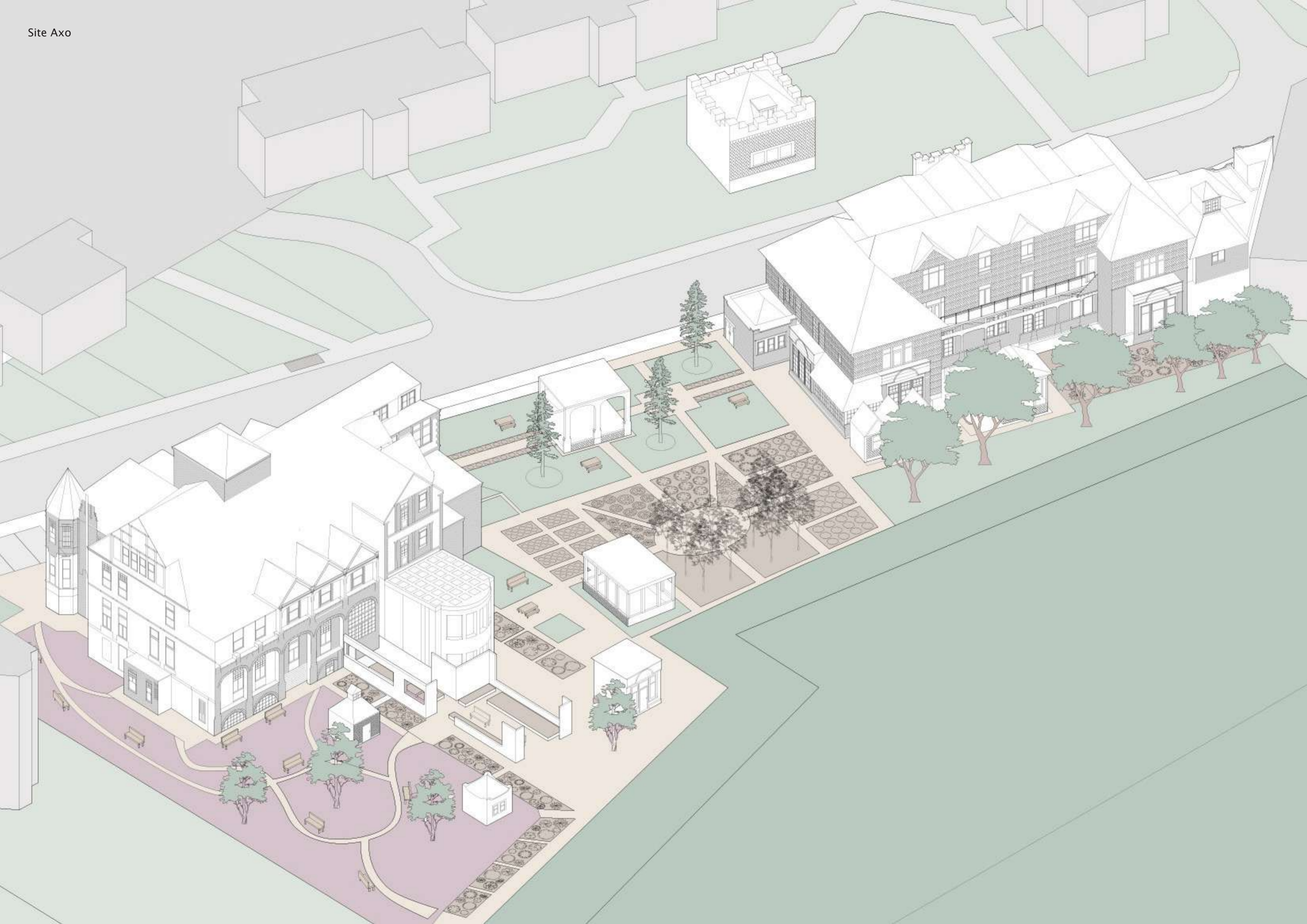
Add new entrances to façades.

Use carpentry to extend window sills.

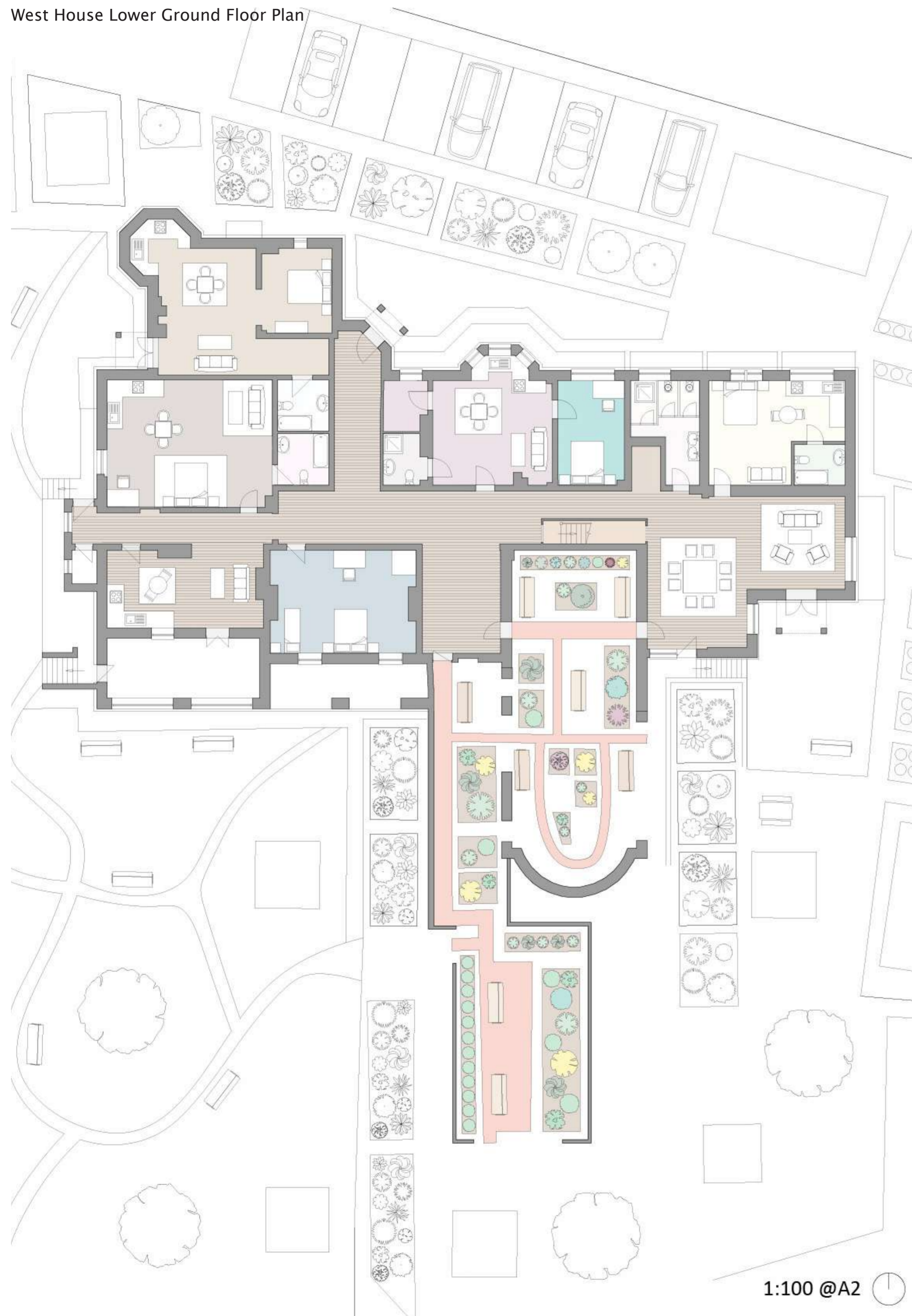


- Pavilions
- 1 West House
- 2 Gambier House
- 3 Garden Pavilion





West House Lower Ground Floor Plan



1:100 @A2



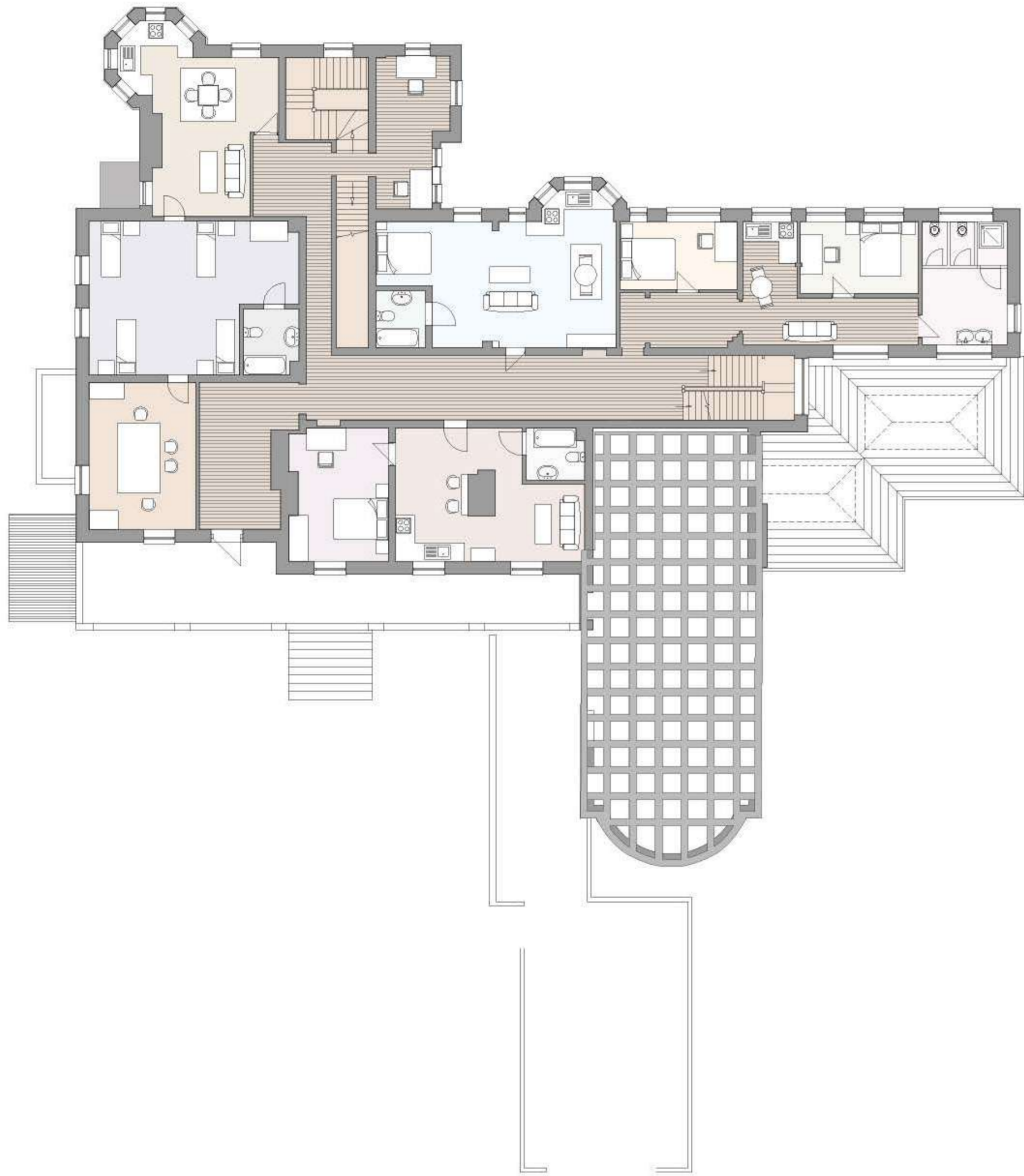
West House Ground Floor Plan



1:100 @A2



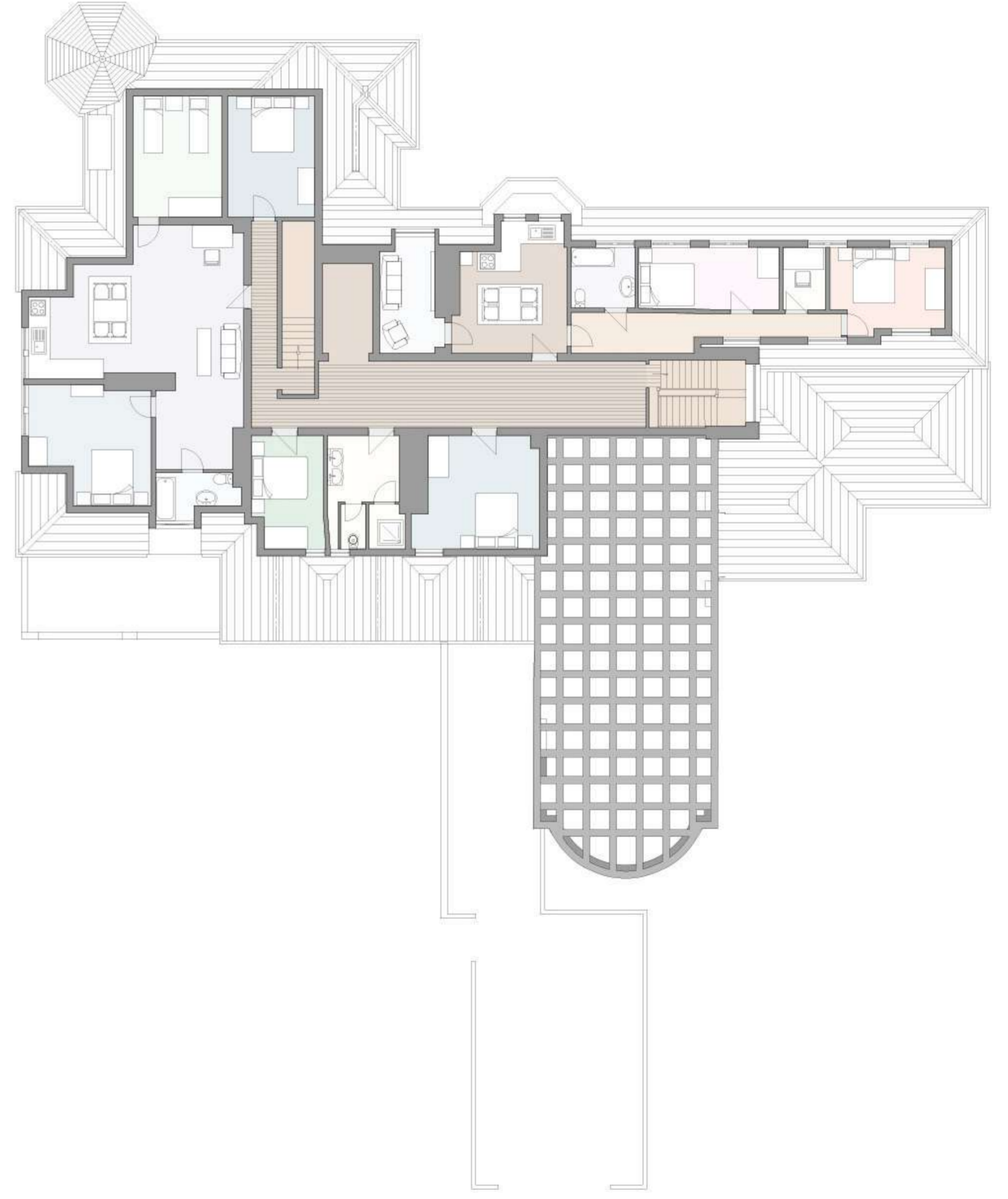
West House First Floor Plan



1:100 @A2

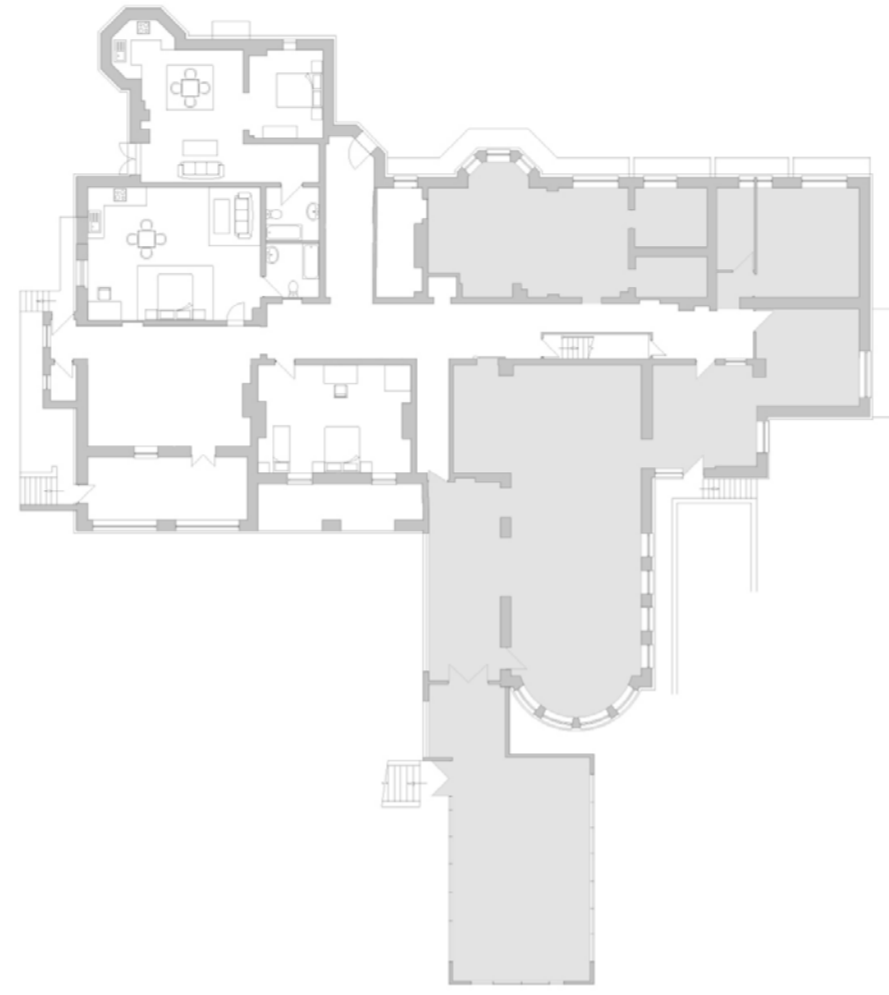
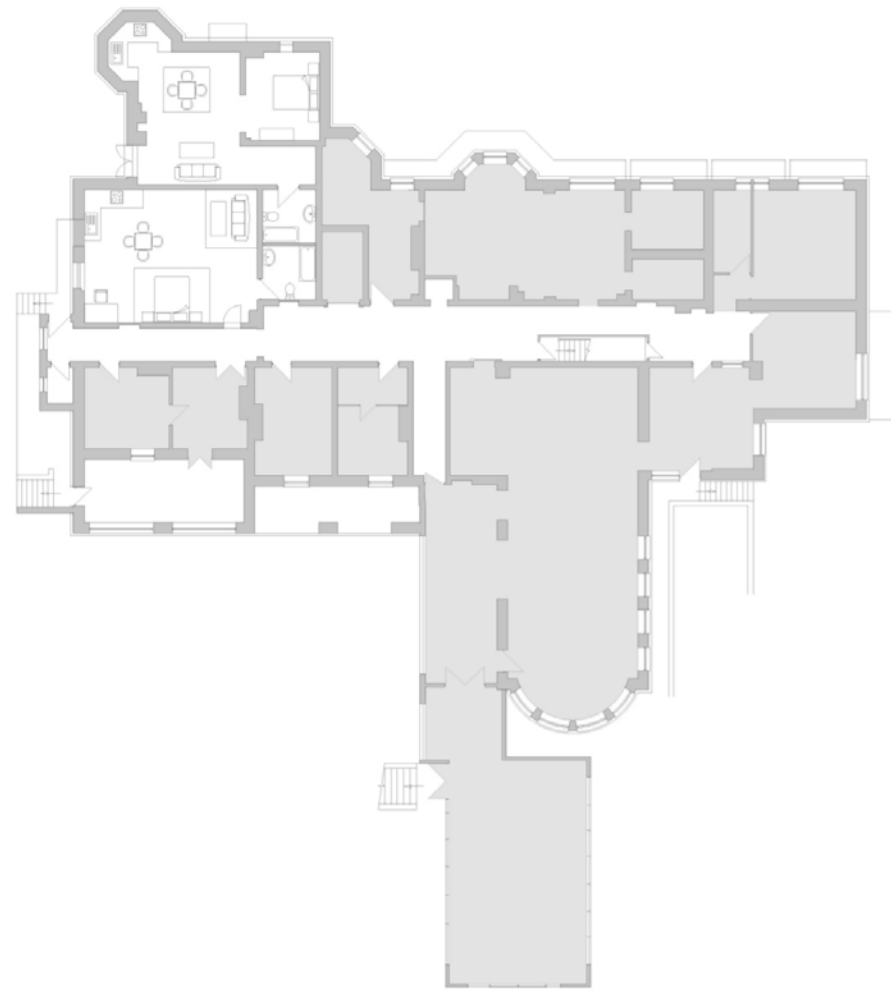


West House Second Floor Plan



1:100 @A2







Gambier House Lower Ground Floor Plan

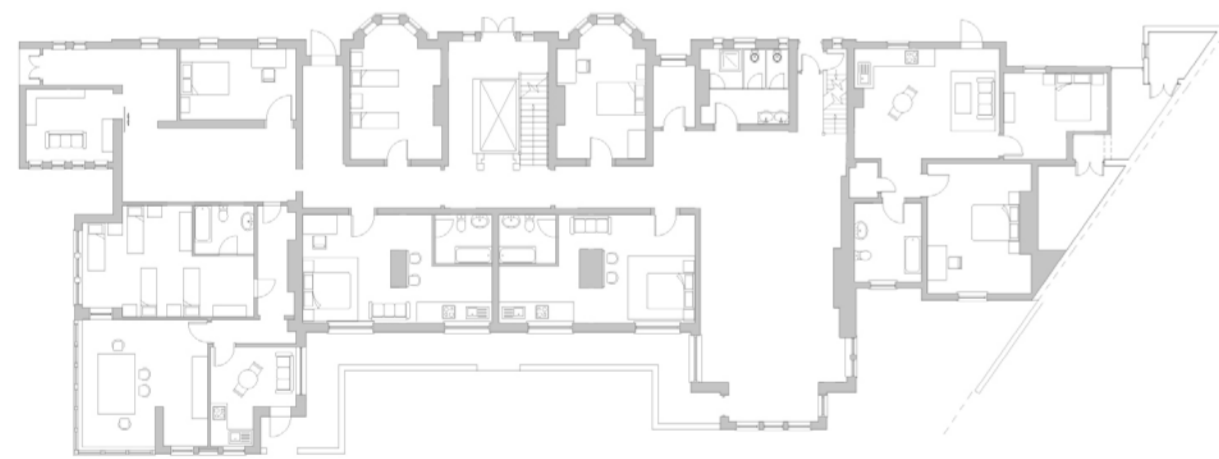
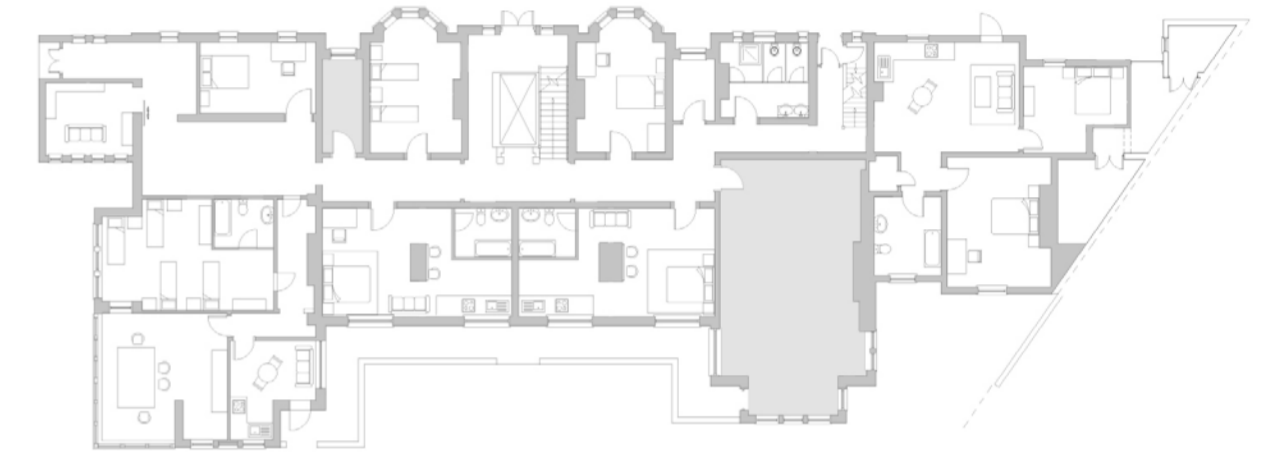
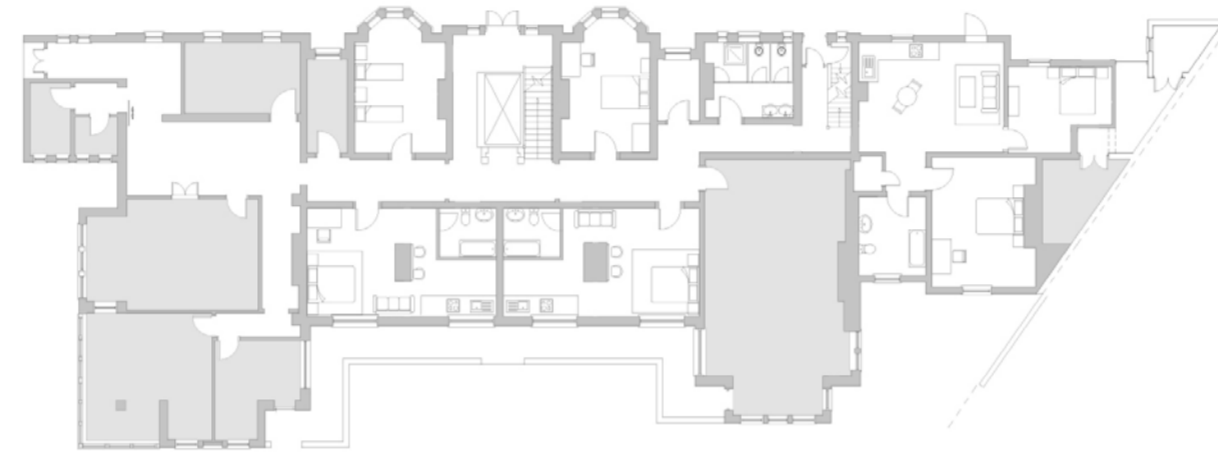
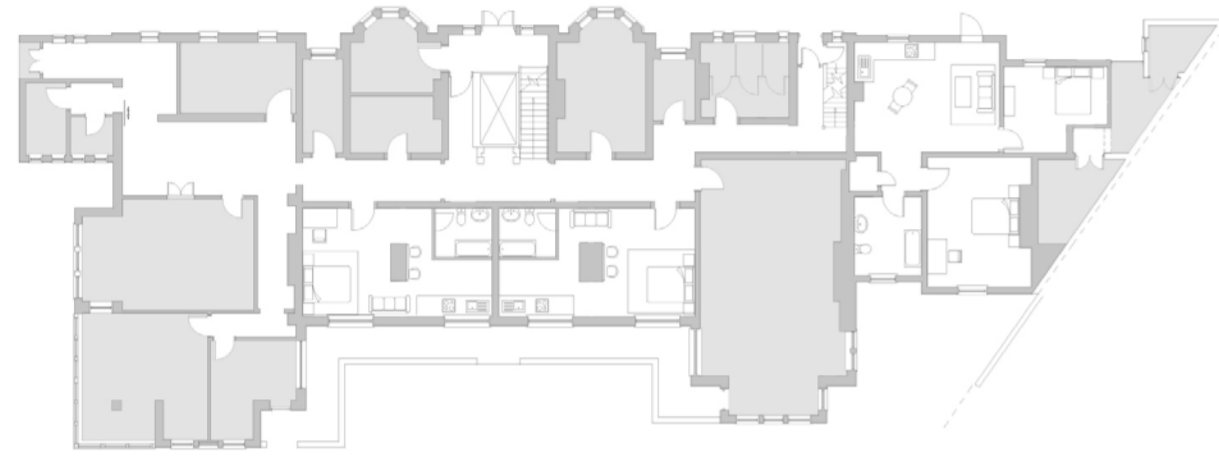


Gambier House Ground Floor Plan



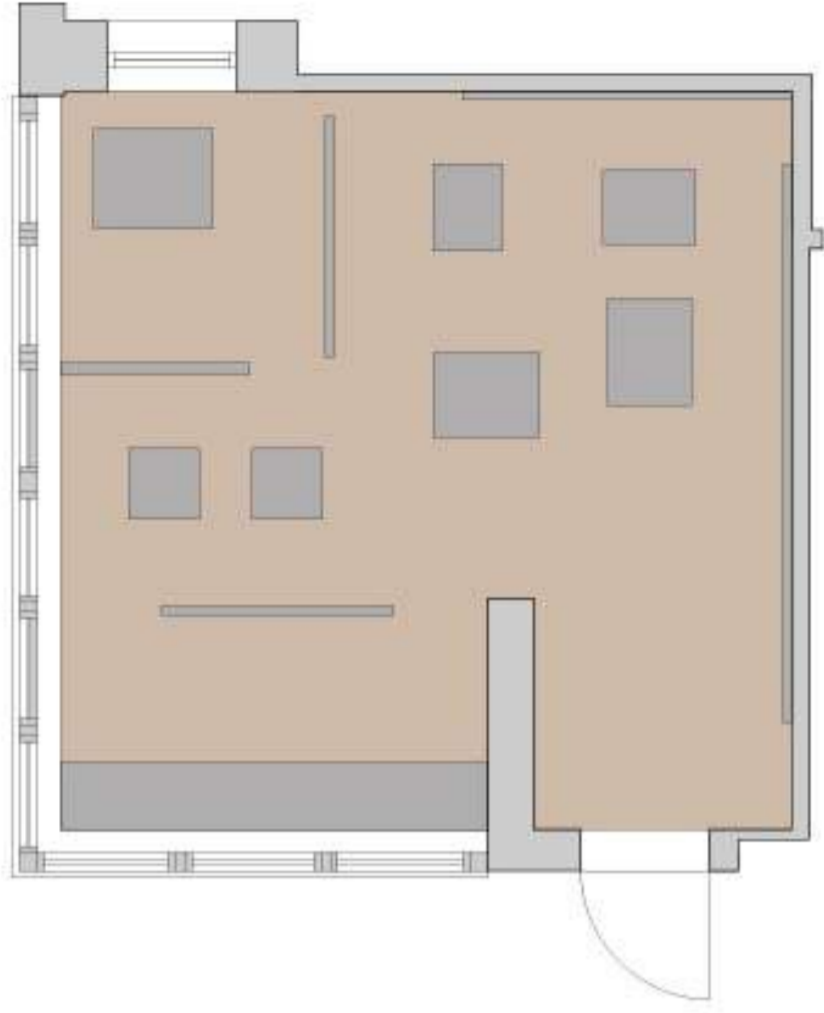


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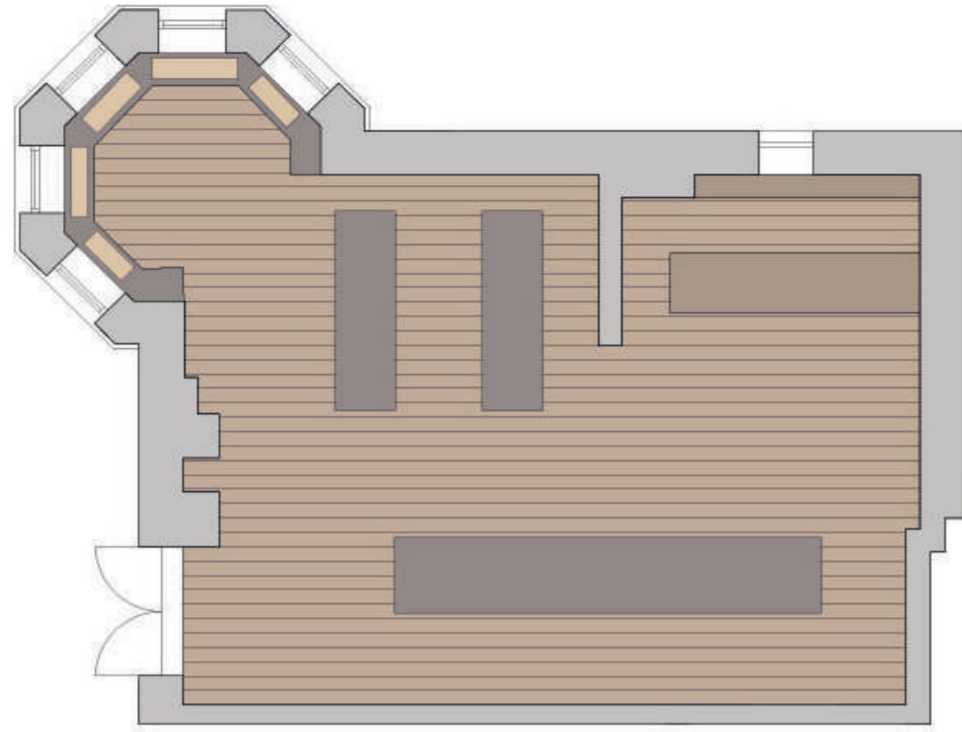


Alternative Programs

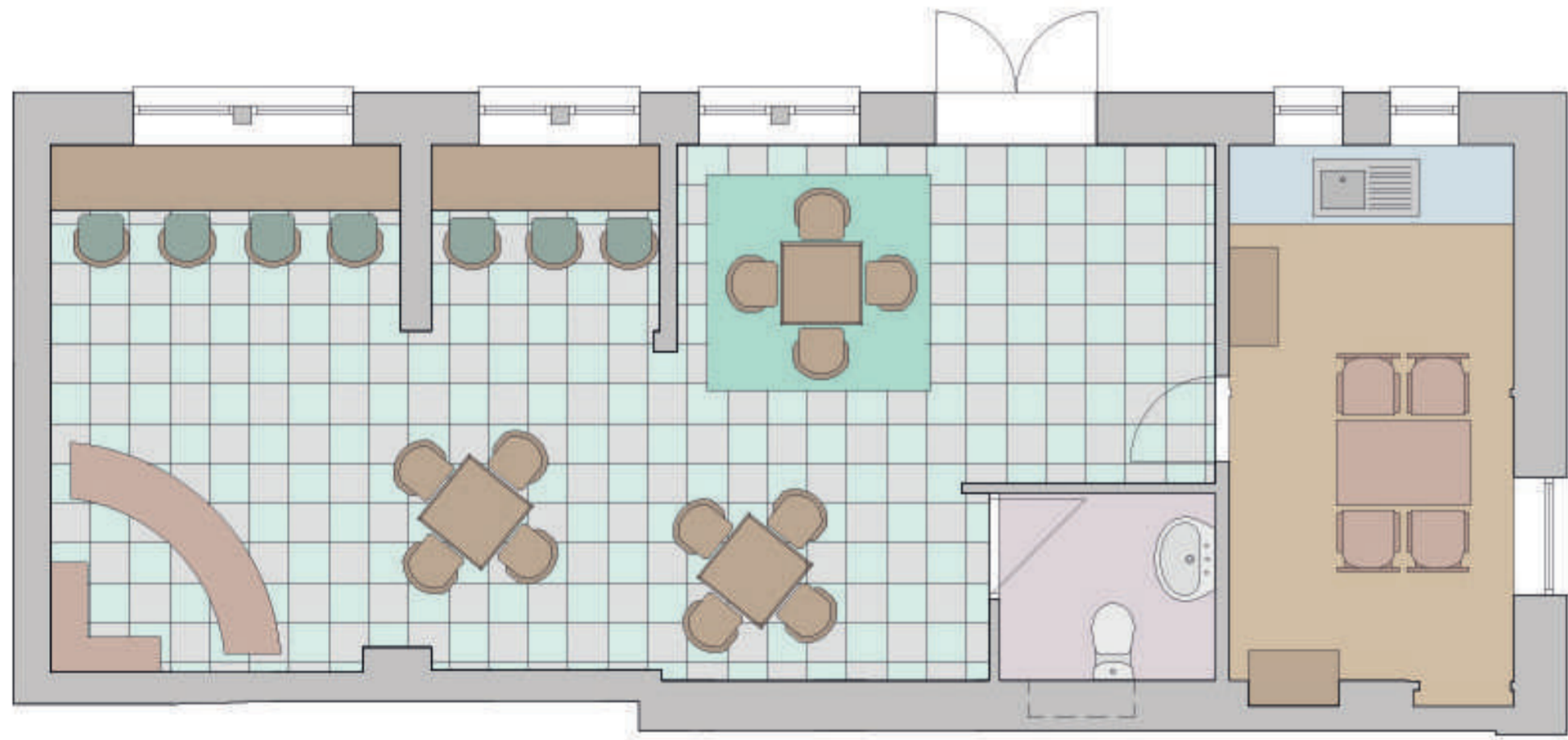
1



2



3



Interior Axo





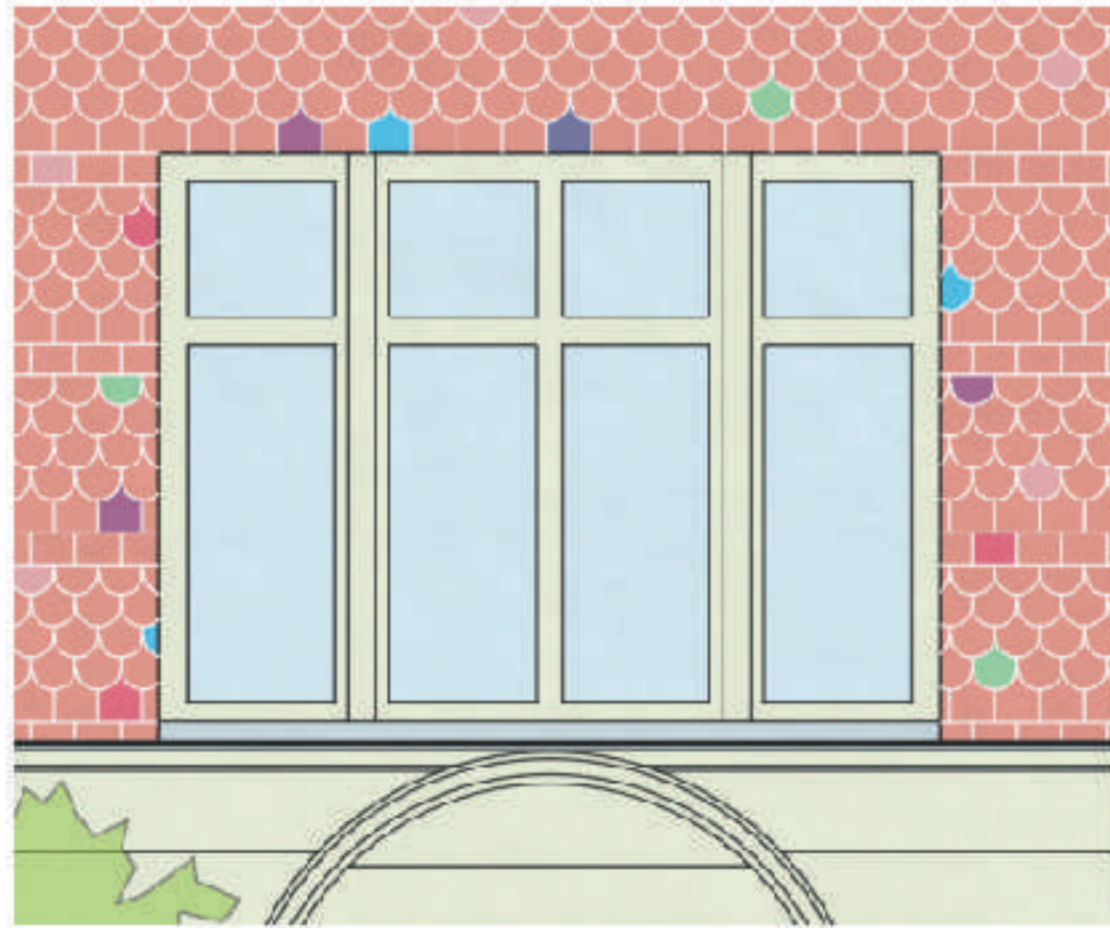
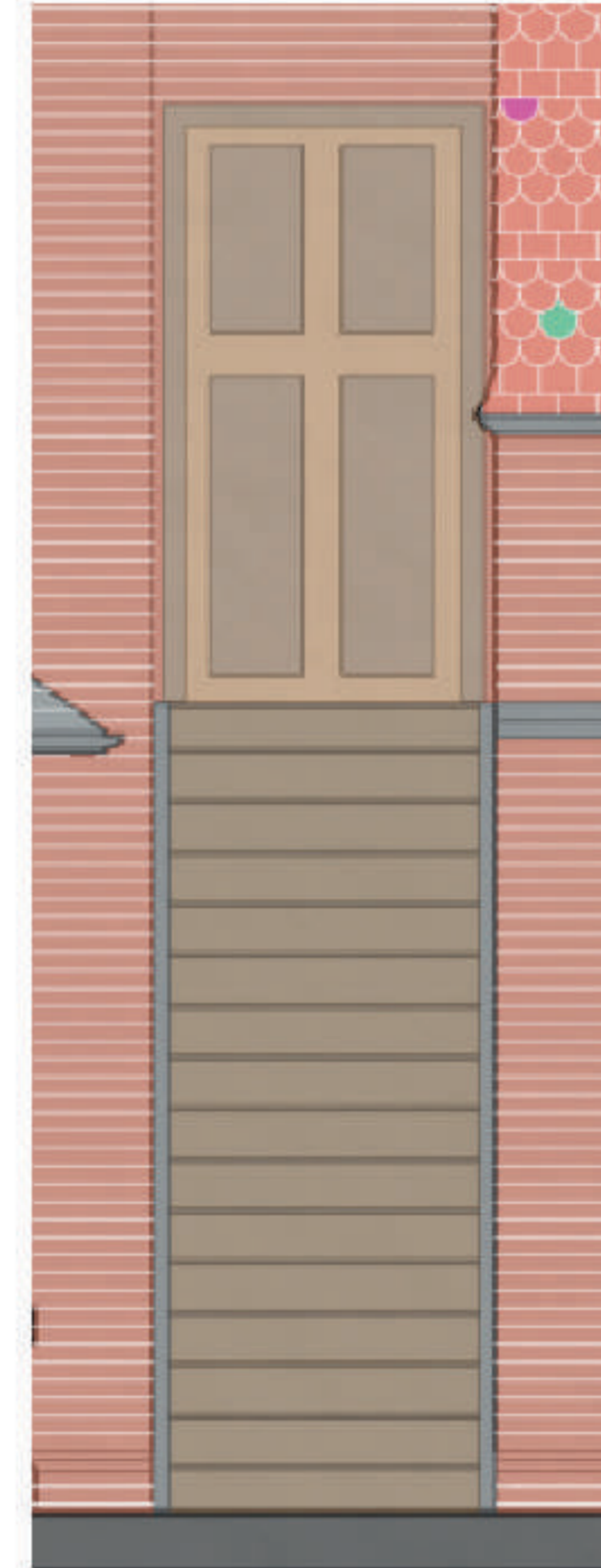
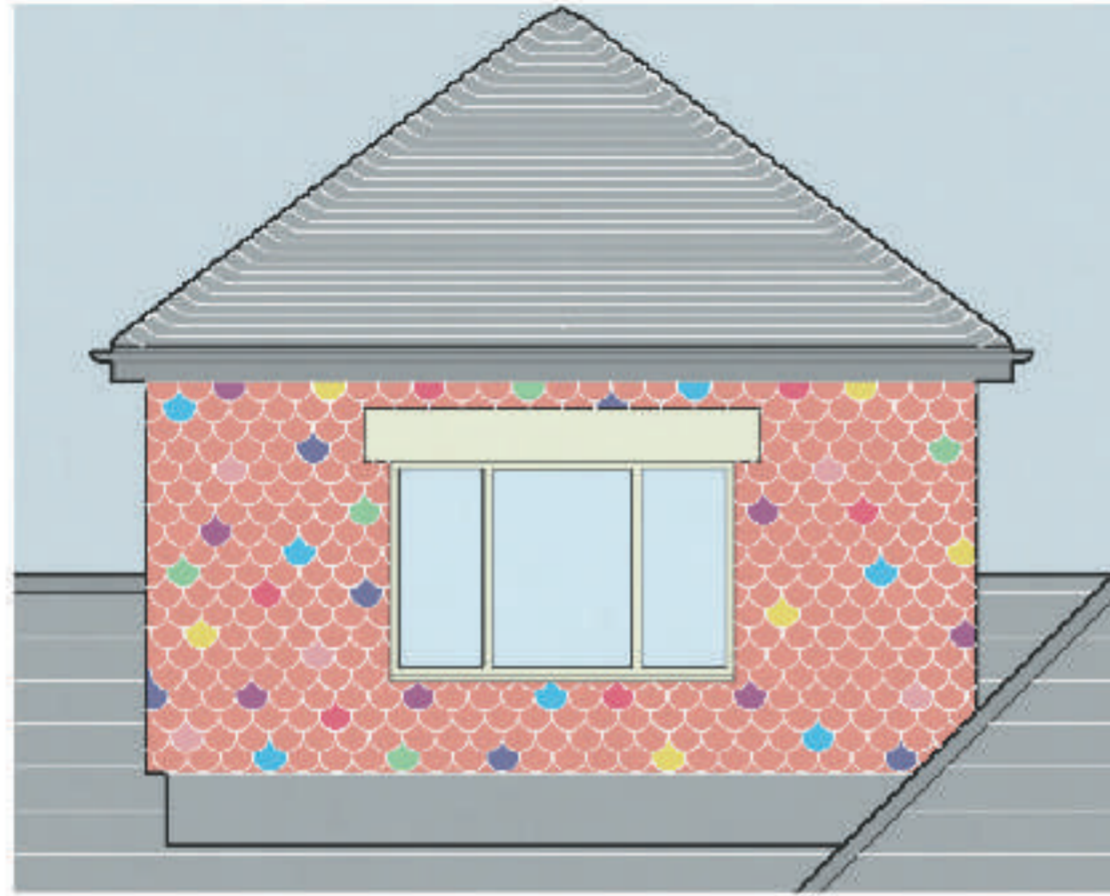


Garden Pavillion



1:20 Detail Perspective













Street Elevation 1:200





