

Could a restricted urban site provide a contemporary house with access to light, views, privacy and delight?



North Gardner Street: A Backland Site in Glasgow's West End

Client Mr & Mrs Fullerton

Location: North Gardner Street, Hyndland, Glasgow

Cost: £280,000

Completed 2013

Cameronwebster architects' work responds to context, and creates and connects spaces where life and work can be enjoyed with a special relationship to the changing context, landscape, sun and sky. Their projects aim to reach a conceptual clarity that transcends fashion. The freedom to express this clarity exists only because of a complete and practical understanding of the building process. There is a particular sensitivity to the communicative power of materials –in their assembly, juxtapositions and response to lighting.

The approach is disciplined and rigorous, but with a sense of the romantic. There is also an academic wish to take a step back from the details of a brief and consider the ultimate purpose of an architectural design –to benefit all.

Research Question

The question was whether an old furniture workshop at the back of a 19th century urban tenement block, with a very restricted outlook, could be converted into an attractive modern dwelling. Could the restrictions provide a contemporary house with access to light, views, privacy and delight?



site plan



Context

The context is not uncommon: Glasgow tenements often had factories and workshops built at their rear, creating conditions similar to the Berlin Mietshaus.



Berlin



Glasgow

Many of these industrial buildings were cleared in the twentieth century, (often along with the tenements themselves) but several backland buildings remained in commercial use at the beginning of the twenty-first century. As the value of property in the city's west end has risen, the opportunity to convert these buildings has become more financially attractive, as they offer spatial potential in popular locations. They are however also severely constrained by their immediate surroundings.

These circumstances are not confined to Glasgow, and even more extreme cases can be found in London and elsewhere where the value of land very high and shortage of building plots is acute.

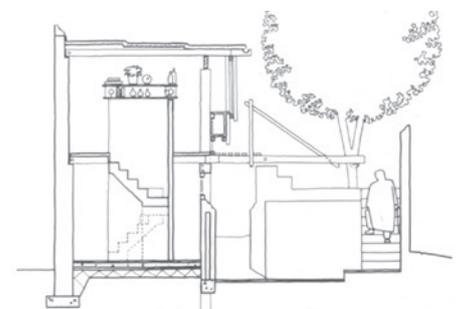
Through investigating early examples of residential development within tight urban context, cameronwebster examined Murray Mews by Foster + Partners. Built in 1966, London, the 3 small houses were arranged along a mews, making the most of light from above and protected the privacy of the individual. Another case study referred to was Ted Cullinan's Camden Mews, built in 1964. This house is constrained by two party walls either side but allowing a south facing aspect to manipulate the sunlight to maximum benefit both programatically and thermally.



murray mews, Foster + Partners 1966



Camden Mews, Ted Cullinan 1964

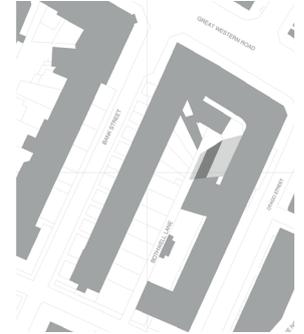


Camden Mews, Ted Cullinan 1964

In 2009 cameronwebster built their studio to the rear of a tenement in the west end of Glasgow. The Printworks is located at the bottom of an unsurfaced lane behind an urban block in Glasgow's West End. The original building was a glue factory and subsequently used as a printworks until around the turn of the century, when it became derelict, and the lane was turned into a dumping ground.

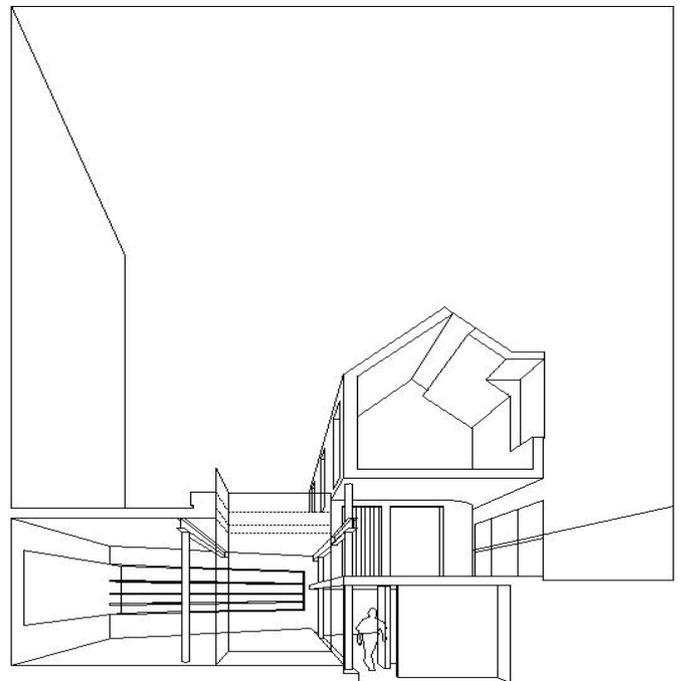


existing wash house



The existing brick structure was unsound and had to be demolished, but the potential of the building's section was developed, and the cast iron columns and concrete structure supporting the back court were retained.

A glazed and planted courtyard was introduced to bring in natural light and create a spacious office at the lower level. The building was raised a little, and the entrance from the lane now provides access to a further office level above, with interesting views between the different levels.



The new building is highly insulated, and natural light is maximised to reduce the energy load. Externally it is finished with a resin render and black painted timber, while internally the stair and floor are finished in oak, and the full length of the rear wall is shelved. A partly glazed floor allows daylight to the kitchen below.

The tenement courtyard was re-paved, and gives access to the new upper floor through the existing Otago Street tenement.

The experience of this project helped with the understanding of the tight site conditions of North Gardner Street, with respect to both planning and construction.

North Gardner Street - The site



This Glasgow site is completely surrounded and overlooked by four story tenement flats, which create considerable problems of privacy. It is orientated east/ west, bound to the north, south and east by the site boundary and adjacent backcourts.

Site access is via a narrow pend through the tenement block in Gardner Street. The existing furniture workshop building was built with brick, which had been partly rendered, with a slate roof, all of which was in a very dilapidated condition.



The client

Natasha Marshall and Neil Fullerton both graduated from the Glasgow School of Art in 1997 and started their printed and woven textile company to develop a range simple graphic fabrics and wall coverings which complement architectural space.



Having previously worked closely together in the design and development of our shared studio The Printworks in 2009, we developed a mutual appreciation of how light and views are fundamental to creating space. They wanted their home to be a backdrop for their fabric collections and so the windows and their detailing, together with the interaction of the curtains, became a key factor in the overall scheme.



They required a large four bedroom modern house, with a flexible and light living area that would allow them to showcase their fabrics. The nature of the site and the building's new residential use demanded creative and careful planning, with the correct positioning of rooms and windows being imperative to minimize the loss of privacy for the new owners and the multiple residential neighbours and adjacent school, while maximizing daylight to the habitable spaces.

Methodology

Due to the very restrictive nature of the site and the existing building filling up the “usable” space and aspect, a careful survey was carried out to determine the structure, boundaries and services.

Quite early on it was determined that much of the structure of the existing roof could be kept, and this allowed some alternative conceptual drawings to be made and discussed with the clients.

Early discussions with the Planning department also allowed a response to the restrictions imposed for access, overlooking and materiality.

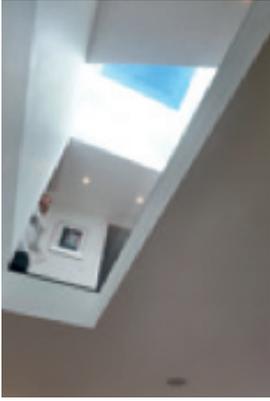
Having discussions with the client early on, with some of their requirements and visions, allowed a series of options to be tested and refined.



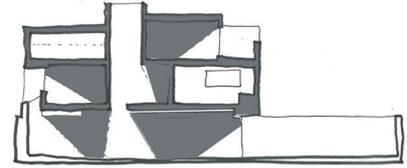
Many of cameronwebster's previous work was used as reference, in particular the projects which engage with the external surroundings and form courtyard space.

Materials considered were a simple palette of glass + timber together with white walls as an effective way to reheighten the relationship with context.

Concept design

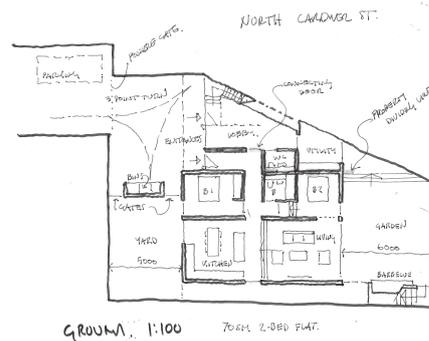
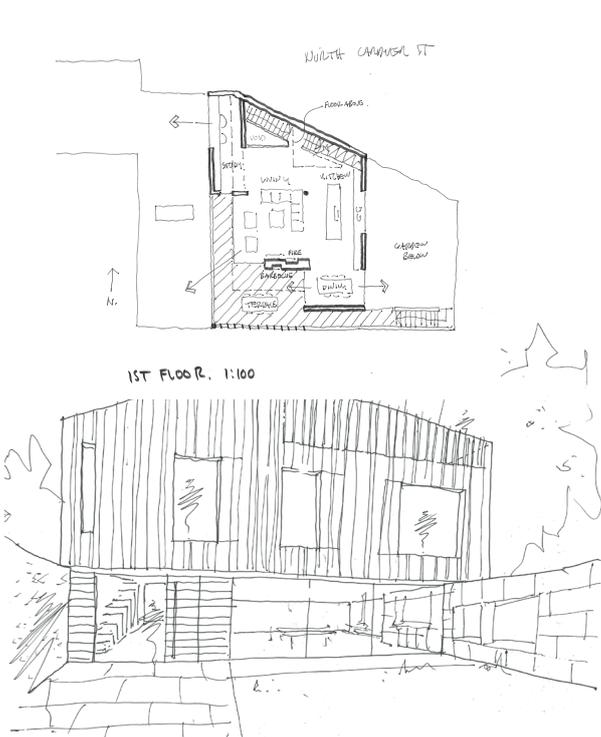


"Architecture is the masterly correct and magnificent play of masses brought together in light".
Le Corbusier, Towards a new Architecture 1923



The nature of the site constraints, together with the acknowledgement of the sun's position throughout the day and seasons, allowed the key spaces to be determined in their relationship to the external space and glimpsed views of sky.

Essentially, a solid wall enclosed the site on three sides on the ground level, leaving the West elevation open to the external space at the front of the site and main access.



Early schemes show an attempt to pull the accommodation into a core within the centre of the plan, allowing daylight to wash down the perimeter walls.

Level changes on the ground floor were also considered as a way of modulating the internal spaces and their relationship to each other and external connections.

Due to budget constraints and an attempt to simplify the concept, the ground floor was organised by dividing the space with the staircase, carefully positioned high level windows and a central roof light, allowing light to flood the deep plan from above.



This development into the planning submission was assisted through the use of physical and CAD models, to allow the spatial configuration to be adjusted and calibrated in the precision of window placement.



Construction

Once planning permission was granted and a Building Warrant obtained, the process of finding a builder could commence. In March 2011 the JCT Minor Works Building Contract (MW) 2005 (for use in Scotland) Revised October 2007 between the client and contractor was signed.

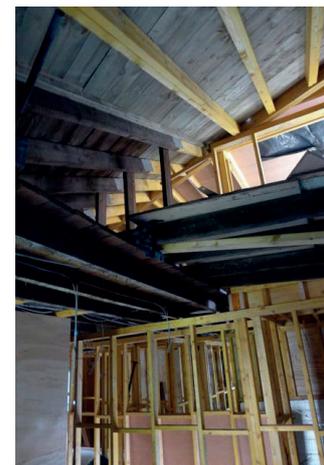
The construction process started with the careful dismantling of the existing front façade of the workshop to allow the main ground floor space to be revealed. **1**

The surrounding brick walls were repaired and new windows carefully opened up according to the strict planning conditions regarding privacy to surrounding tenement blocks. **2**

The main structural elements were then inserted – steel beams to allow a generous opening to the west and support and configure the first floor spaces. **3**

Works to the ground floor out revealed a problem with the identification and connection of existing drains running below ground. **4** Once solved, the ground floor could have a concrete screed poured over an under-floor heating system.

The house quickly took shape with the construction and assembly of the timber studwork, allowing the window and rooflight positions to be revealed and enjoyed. **5**



The final glazing elements allowed the external façade to be boarded. **6**

Vertical, random width boards form the external bin enclosure and run into the house to conceal the cloak room, wc and utility spaces.**7**

Finally the horizontal cedar cladding could be applied and allowed to weather, which over time will turn from an orange to a silver and fit well within the context of the surrounding stone tenements.**8**



5



6



7



8



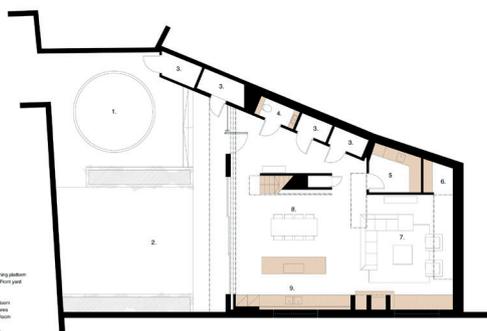
The only opportunity for substantial glazing at the ground floor was at the entrance, where a walled landscaped courtyard was created to screen that part of the house from the surrounding tenements.

To the rear, a set back in the eastern end wall was formed to allow daylight to wash down the interior, and the middle of the roof was opened up with frameless glazing to allow the sun to penetrate the core of the building.



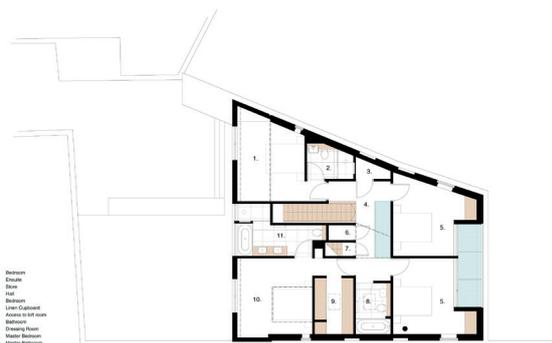
SECTION

- 1. Front garden
- 2. Kitchen
- 3. Living Room
- 4. Bedroom
- 5. Hall
- 6. Master Bathroom
- 7. Loft storage
- 8. Loft room
- 9. Terrace



GROUND FLOOR PLAN

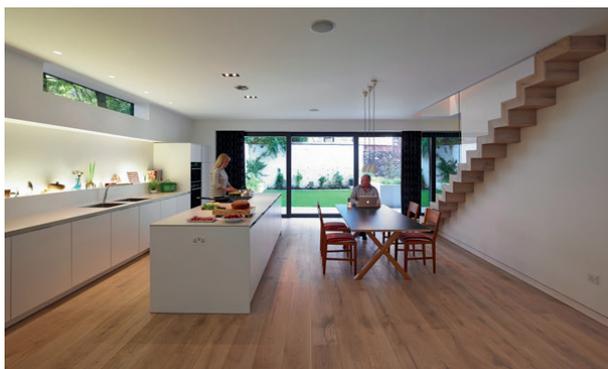
- 1. Car storage/garage
- 2. Living Room
- 3. Kitchen
- 4. Hall
- 5. Bedroom
- 6. Study Area
- 7. Living Room
- 8. Dining



FIRST FLOOR PLAN

- 1. Bedroom
- 2. Terrace
- 3. Store
- 4. Hall
- 5. Bedroom
- 6. Living/Closet
- 7. Access to loft room
- 8. Bedroom
- 9. Staircase
- 10. Master Bedroom
- 11. Master Bedroom

The wedge shaped site allows a generous entrance lobby to accommodate a timber lined storage wall, and the delicate glazed staircase divides this from the spacious open plan kitchen, dining and living areas.



The interiors create a calm, light and spacious environment, and allow the clients to display their textile designs to full effect.



At the first floor, the floor plate was extended to the west, cantilevering out to shelter the terrace space, whilst serving the primary function of interrupting any direct view into the main living space from the surrounding tenements.



A series of high level windows give views of the sky and surrounding trees, which creates the impression from inside that the house is in a leafy rural glade, rather than in the middle of Glasgow's high density urban area.

Externally, the original render and brick boundary walls and the slate roof have been retained and refurbished. The new west facing elevation has been split into two elements: the base (ground floor) is read as a combination of black stained cedar boarding and full height sliding glass windows. The elevation of the block above is a simple extrusion forward of the original building section, creating a light cedar-clad surface with black framed windows and shutters.



The landscaped entry courtyard incorporates a car turntable that allows the rest of the limited space to be planted.

The building won a GIA Award in 2013, and an RIAS Award and a Saltire Medal in 2014. It is greatly enjoyed by its owners, and works extremely well both as a flexible light filled home, and an attractive setting for their fabric designs. It is one of several schemes designed by cameronwebster in Glasgow back lanes that explore new possibilities for these often neglected areas of the city.

Exhibited at Royal Scottish Academy 2013

Published in Homes and Interiors Scotland Nov/ Dec 2013

Build it magazine March 2015

Home bUilding + Renovating magazine August 2015

Grand Designs Feb 2016