ARTIST’S STUDIO
The Coach House Old Portsmouth
Design & Site Supervision

Project coordinated by Francis Graves
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# Project Summary

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<th><strong>Designer / Practitioner:</strong></th>
<th>Francis GRAVES Architect</th>
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<td><strong>Title:</strong></td>
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<td><strong>Venue / Location:</strong></td>
<td>Peacock Lane Old Portsmouth PO1 2PA</td>
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<td><strong>Client / Curator:</strong></td>
<td>Francis &amp; Julie Graves</td>
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| **Dates:**                  | 2013 Design  
|                             | 2015 Planning & listed Building Consent  
|                             | 2017-18 Construction |
| **Funding:**                | Private |
| **Budget:**                 | £250,000 |
| **Co contributors/Co-exhibitor:** | Planning Consultat: Paul Cashin (PCA)  
|                             | Structural Engineers : WRD ltd (Southampton)  
|                             | Building Control: Assent (Southamton)  
|                             | Clerk of Works: Phil Illingworth |
Construction photos
Instagram graves4210
Statement about the Research Content and Process

Project Description

The design and build of an new Artist’s Studio + refurbishment of an existing building

Key Questions

1. How is a design of a mixed use scheme on a tight urban site integrated into the existing urban fabric
2. What are the key parameters in designing an artist’s studio integrated with a dwelling
3. How should historic listed and new buildings be dealt with on this project
4. What is an appropriate procurement route?

Research Method

“...design & research constitute neither polar opposites or equivalent domains of activity..”

There are many schools of thought regarding the relationship between design & research from Stephen Kieren & Matt Powers assertions in the JAE (Journal of Architectural Education) that they are essentially two different domains of activity to David Soloman tracing the development of the “research studio” in the same journal concluding that they are both “well fabricated hybrids”.

One pervasive theme in architectural education is that research relates to a rather narrow field of study based on fact and quantitative data and so unrelated to the intuitive nature of design. I prefer to believe that most design projects necessitate a degree of research. and although the built project may not be a totally reprentative of these research activities, it can resonate with the research involved in it’s design.

“research entails the “search for stuff”, while the arts “generate it”
Sullivan G., “Art Practice as Research” Sage 2010

Dissemination

The project is due for completion on site in July 2018 and UK based and International Architectural magazines will be targeted for publication (AJ, BD, RIBAJ, AR, JAE, AD, Casabella, El Croquis, A10 New European Architecture, 2A Magazine Plan etc....) The work may alo be disseminated through the artist in occupation through Art Journals & magazines, collaborators and other contacts.
Statement of Significance

As more people currently work from home, the concept of separate living and working environments is becoming outmoded. Designing an Artist’s studio integrated with a dwelling responds to this situation whilst also exploring the specific requirements of an artist’s working environment.

Introduction

The project was conceived on the basis of the existing dwelling being much too small to accommodate a work room for an artist. The artist is currently renting a studio in a creative hub for visual artists; Artspace Portsmouth. Whilst this offers contact with other creative artists and the support of a well established organisation, it was felt that creative output was being compromised due to constant interruptions that became unavoidable in this group studio environment. The idea of offsite membership of Artspace along with building and occupying a purpose built studio at home became an attractive option.
Conceptual sketches were presented in 2009 and the property was purchased on the basis of it’s potential for extension. Designs were developed over several years with planning and listed building consent being obtained in 2015 and construction was started in 2017

Aims and Objectives

Aim 1:
To restructure an existing dwelling adapted to the living requirements of the C21st whilst meeting the constrains imposed by the existing listed building
The existing building was a rather poorly converted rear extension to a fine early C19th house that escaped world war 2 bombing on High Street in Portsmouth
Listed building status was probably due to the fact that it was originally part of the larger house rather than any inherent architectural qualities of the structure itself.

Aim 2:
To add a new building whilst meeting the requirements of a living artist for a contemporary studio space and respecting the existing structure.
The mixed use nature of this project limited the design responses considered and the reflection on architectural unity/contract was interrelated with this and the new and existing structures

Aim 3
To deal with the contrast between old and new structures on this tight and complex historic urban site.
Although there was space to build the Studio, the site was “L” shaped cut off from High Street by the adjoining C19th house. The main access and frontage was thus on Peacock Lane.

Aim 3
To develop an environmentally consious design including high levels of insulation and energy efficient ventilation.
Whilst bugetary constrains lead to selecting materials with higher embodied energies than was originally envisaged, the new build insulation and mechanical ventilation with heat recovery
Site progress shots
Instagram graves4210 & francis_a_graves
throughout was not compromised.

Questions

1. How is the design of a mixed use scheme on a tight urban site integrated into the existing urban fabric?
2. What are the key parameters in designing an artist’s studio integrated with a dwelling?
3. How should historic listed and new buildings be dealt with on this project?
4. What is an appropriate procurement route?

Context

The project is set in the heart of Old Portsmouth. The original structure was a rear extension to a large early C19th house on High Street. The site is “L” shaped with access from a North facing frontage onto Peacock Lane. This frontage is flanked to the West by a small two storey one bed house built in the late C20th and a 3 storey terrace of houses to the East including some built early and some late in the C20th. To the rear/South are gardens and garages of nearby properties accessed from a small service road, Farthing Lane. Gas drainage and water services were all available in Peacock Lane though the existing all water supply was from High Street though the adjoining house. Electrical supply was from Farthing Lane to the South. All existing houses in Peacock Lane other than 2 in the East adjoining terrace were built post world war 2. However, the whole of Peacock Lane is within The Old Portsmouth conservation area.

Design

Design work was developed with the Artist who demanded natural North light in the studio and independently controlled thermal comfort all year round, as the studio would be in constant use during working days and the dwelling areas only in use early mornings, evenings and weekends.

The intervention of WRD Engineers after a ground survey, lead to the introduction of 14 piles capped and connected with ground beams with a reinforced concrete ground slab laid on top. This included starter bars for 4 reinforced concrete columns to support a first floor slab for the studio. 100mm rigid insulation was laid on top of both ground and 1st floor slabs with a liquid screed poured on top and polished.

The rest of the new build was constructed in Structural Insulated Panels (SIPs) including all walls and roofs. New walls were finished in Siberian Larch cladding or rendered. All new pitched roofs were slate covered and flat roofs were finished with proprietary sedum roofing.
New windows and doors were painted timber and rooflights were standard patent glazing or traditional steel framed.

The new build housed not only the 1st floor studio but also a ground floor guest bedroom, shower room, new entrance and kitchen.

The new build was articulated and differentiated from the existing structure using both form and selection of materials so that the studio structure appeared separate.

A conventional gas fired heating system was designed in conjunction with Mechanical Ventilation with Heat Recovery (MVHR) to ensure that winter time ventilation avoided the need to open a window and the resulting heat loss.

**Findings**

1) The scale and massing of the proposal, although slightly over those of the two bed house to the West, are a whole floor below the terrace of houses to the East. The new build is articulated and clearly defined against the existing structure and thus perceived as separate. As the existing structure has been altered and added to over the years, the current works have altered and added to the history of the property enhancing its quality whilst sensitively integrating into its urban context.

2) The key parameters in designing this Live/Work project are:
   - Indirect natural lighting for artist’s studio
   - Storage space for artwork and materials
   - Climatic control for work day use independent of living areas
   - Separate project (wet) and admin (dry) areas in studio

3) Although the project includes refurbishment of the existing historic listed building and integrates living uses with work spaces, new and old buildings are treated quite separately architecturally. New buildings are clearly defined and differentiated from the old in both form and materials used. The only common material used on existing and new buildings externally is render and there are no existing and new rendered walls adjacent to one another.

4) Procurement on this project was originally envisaged using a traditional standard JCT intermediate form of contract. However, when the tenders came in way over budget, an Artist builder Phil Illingworth, was appointed as Clerk of Works and sub-contract packages let directly with Phil coordinating these and direct labour.

**Dissemination**

This project will not complete on site until July 2018. Hence dissemination will only start in earnest once practical completion has occurred and the project is occupied and can be properly evaluated and photographed in use.
Ground Works
Instagram graves4210
Previous Projects & Bibliography

Projects by Francis GRAVES Architect

2004 to date
Consultancy Work  Projects include:
• Design of a New House, Haselmere: Preparation of Brief & Concept Design
• Refurbishment of Barrington Villa Southsea: Scheme Design
• Housing Scheme Limoux France: Scheme Design with Robert Lyall Architects
• Artist’s Studio Portsmouth: Scheme Design, Detail Design, Design & Site Supervision.
• Restaurant and Boathouse Chapel St Leonards: Scheme Design
• Hotels Cardiff, Manchester & Newcastle: Scheme Design with Clash Architects
• Fishing Port Tianjin China: Urban Design Master Plan with Clash Architects
• Villas, Eguilles & La Ciotat France: Scheme Design
• Service Stations for electric cars Aix en Provence France: Feasibility Study

1990-2004
Alsop Architects- London Projects included:
• c/PLEX- The Public Digital Arts Centre. West Bromwich: Inception to site operations.
• Thameslink 2000 Blackfriars Station London: Inception to scheme design.
• Crossrail Paddington Station London: Scheme design.
• Regional Government Headquarters, Marseilles: Inception to Completion on Site.
• European Commission Building, Geneva: Inception to scheme design.
• Cardiff Bay Barrage: Detail design & tender documentation.
• Ferry Terminal Hamburg: Tender documentation
• La Frégate Café, Jersey: Inception to completion on site.

1987-1990
Everard & Graves Architects- London Projects included:
• Carnival Productions’ HQ & Film editing centre, London: Inception to completion on site.
• L’Ultima fashion HQ & distribution Centre, Milton Keynes: Inception to completion on site.
• Residential Projects for public & private clients, London: Inception to completion on site.

1983-1987
Powell-Tuck, Connor & Orefelt- London Projects included:
• Offices Cowcross Street, London: Inception to completion on site
• Metropolis Recording Studios, London: Detail design
• Penthouses, Hyde Park Gate, London: Detail design to completion on site.

1981-1983
The Architectural & Planning Partnership- West Sussex Projects included:
• Al Gaylani & Al Kademaya Urban Redevelopment Project Baghdad: Inception to detail design

Related writings by others


TRADA (2017) Structural timber elements: A pre-scheme design Guide High Wycombe Exova UK


Interviews:


Web


Art Space Portsmouth (2018) Viewed 22 January 2018 www.artspace.co.uk


Journals/Reviews/Newspapers

Tapper J (2018) London will lose creative crown if rents keep forcing artists out. Guardian Sat 17th March 2018

Mark L. (2013) MVHR failings may cause NHBC to re-write technical standards. AJ 16 October 2013

Videos

iSIPs (2009) Structural Insulated Panels Overview Viewed 3rd July 2010 https://www.youtube.com/watch?v=DjjeG0g5yoU

EPDM gasket seals
28mm thick sealed
double glazed unit
Knock-in
Thermal Break section
SPG2 section Skyline aluminium glazing bar
PC2 section aluminium snap-on cosmetic cap
PC1 section aluminium screw-on pressure plate
10 X 10mm RA24 EPDM foam strip fitted between cap screws

1. Bottom timber and window ~ by Kloeber Ltd
2. SPG3 glazing bars ~ by SPG Co Ltd
3. PC1 & PC2 caps ~ by SPG Co Ltd
4. WB3 weather bar with EPDM seals ~ by SPG Co Ltd
5. Glazing bar fixing cleats ~ by SPG Co Ltd
6. 28mm thick infill
7. Glass edge protection strip ~ by SPG Co Ltd
8. 54mm wide angle glass stop to foot of each glazing bar ~ by SPG Co Ltd

1. Code 4 lead flashings supplied and laid by others,
dressed only onto glazing by SPG Co Ltd
2. SPG3 glazing bar ~ by SPG Co Ltd
3. PC1 & PC2 caps ~ by SPG Co Ltd
4. 16swg aluminium channel end pack ~ by SPG Co Ltd
5. 28mm thick infill ~ by SPG Co Ltd

100 x 100 black coated aluminium box gutter fixed with back coated brackets all by Guttercrest Ltd
Ventilator Width
Chrome plated manual winding gear
Top insulated aluminium panel to outer frame
Aluminium came joint
Inner Frame
Baffles

Typical Skyline Section glazing bar
SECTION B-B
SECTION C-C
SECTION A-A
SECTION D-D
SECTION E-E
SECTION F-F

NMW-B 0600-2.10
NMW-B 0600-2.13
NMW-B 1800-2.06
NMW-B 1800-2.06
NMW-B 0600-3.13
NMW-B 0600-2.10 (602x450) 2 col
NMW-B 1800-2.06 (1800x270) 2 col
NMW-B 0600-2.10 (602x450) 2 col
NMW-B 1800-2.06 (1800x270) 2 col
NMW-B 0600-3.13 (602x585) 3 col
NMW-B 0600-2.10 (602x450) 2 col