6 John Street, London WC1 2ES

Structural Report

Ref No: 24032

Date November 2014

FLUID.STRUCTURES

STRUCTURAL ENGINEERS & TECHNICAL DESIGNERS

Quality management

Job No	24032
Client	G&T John Street Ltd
Location	London, WC1 2ES
Title	6 John Street
Document Status	DRAFT
Date	4th November 2014
Prepared By	David Crookes
Checked By	

Revision Status/ History

Rev	Date	Issue/ Purpose/ Comment	Prepared	Checked	Authorised

CONTENTS

1.0 INTRODUCTION

This Structural Report has been commissioned by Mr Gal Adir the current owner of 6 John Street, London WC1 2ES.

The Purpose of the report is to supplement the demolition drawings and schedules of work prepared by Coffey Architects with regard to the proposed work at 6 John Street.

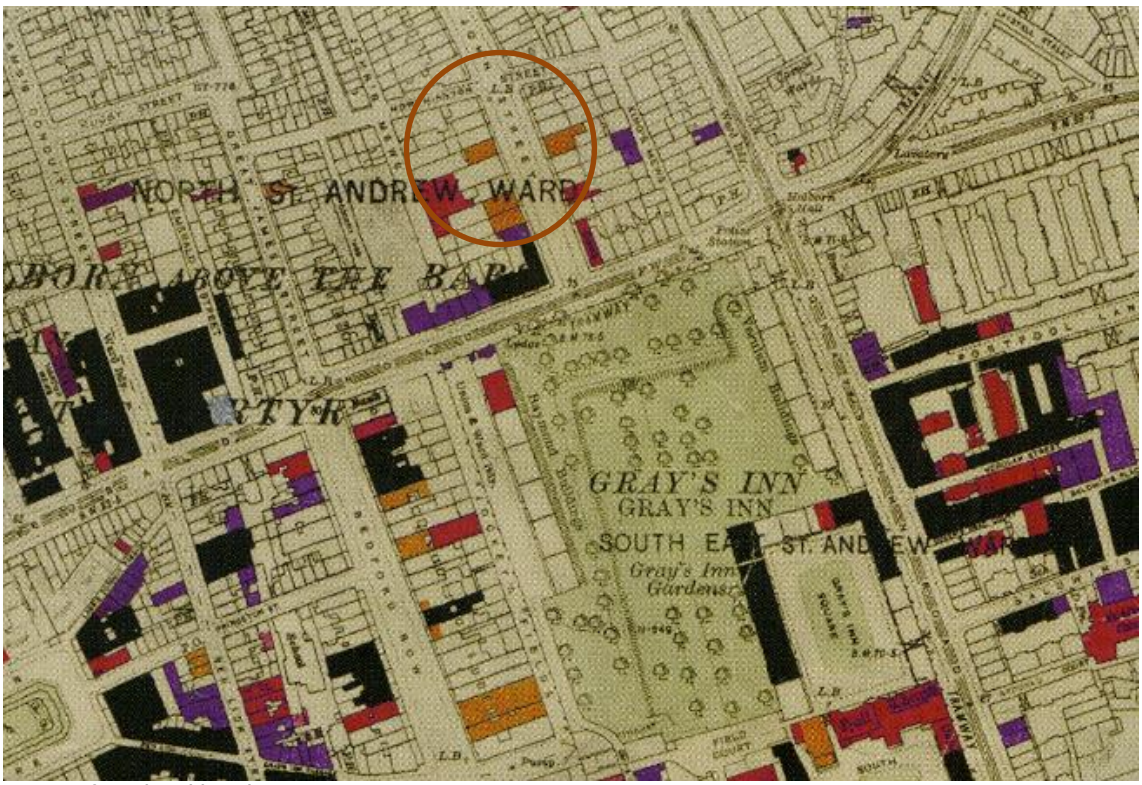
Camden Council's local area guidance states that a structural report should be commissioned to explain the existing means of structural support and the loss of fabric envisaged. This report should be cross referenced to the demolition drawings.

2.0 THE EXISTING MEANS OF SUPPORT TO THE BUILDING

The existing building sits mid terrace in a run of properties built as houses from 1754-1759. They are generally of four stories plus basement, whereas 6 John Street has a further storey with a slate mansard fronting on to the street. The run of 2-9 John Street is Grade II listed. The property also includes an existing two storey rear extension that currently spans the rear boundary between 6 John Street and the rear King's Mews site. The property is currently used as a construction training centre where students would undertake practical and theoretical training in various building trades.

Due to severe bomb damage during World War II, the entire building was substantially rebuilt. This included a complete façade rebuild, with an internal concrete frame and no internal historic fabric or decoration was retained. The existing rear façade of No. 6 John Street was rebuilt in the 1980's and is in a completely different style and out of character with the terrace.

Thus we understand that the original internal Georgian structure has effectively all been lost and that the original timber floors and internal load bearing walls were demolished after World War II. The existing means of support is provided by a reinforced concrete frame with concrete columns. This facilitates the existing workshop areas of the lower level and provides lateral stability to the building by means of frame action.



Extract from local bomb map

3.0 PROPOSAL WITH COMMENTARY ON LOSS OF FABRIC ENVISAGED

The listed façade and concrete structural frame of the property will be retained.

The internal partitions, existing stairs/ service core, rear elevation and rear extension will be demolished. In addition the industrial scale chimney (previously used to vent from the lower workshop areas) will be removed as will the dilapidated slate mansard roof to the roof terrace at fourth floor level. The extent of the demolition is clearly documented in the Architectural drawing/ series covering demolition.

Lower ground floor demolition plan	**798-151**
Ground floor demolition plan	**798-152**
First floor demolition plan	**798-153**
Second floor demolition plan	**798-154**
Third floor demolition plan	**798-155**
Fourth floor demolition plan	**798-156**

The retention of the existing concrete frame means that there will be little loss of the post work structural fabric and the buildings structural integrity will not be compromised during the temporary works. We understand that the building has had both workshop and educational usage and this would suggest that the concrete floor/ frame are more than capable of conversion for domestic loading usage.

The demolished rear façade will be rebuilt in brickwork in a manner more sympathetic to the context and the rebuilding of the rear façade will reintegrate No. 6 structurally within the Terrace.

Where areas of the concrete floor need to be altered the works will either involve filling in openings or creating new ones. Where openings are to be filled in (in the existing fabric) this will be done using suitable lightweight materials such as timber joists and ply or possibly using insitu concrete provided that the effect of the increase in load is not structurally significant.

Where new openings are to be made then they will most likely be trimmed with steel beams hard to the underside of the existing slab. Alternatively it may be possible to drill some builders work holes once the existing reinforcement in the slab has been determined.

To accommodate the new staircase positions it is likely that some new columns will need to be introduced. These will support the trimming to the new stairwells and will be taken down to the lower ground level to be found at a suitable new formation level. The construction of the new staircase will be sequenced so that this work is carried out at an early stage and is completed throughout the building before any significant area of the existing fabric is removed.

Fluid Structural Engineers
2nd Floor
21 St George's Road
London, SE1 6ES

t: 020 7820 7766

e: david@fluidstructures.com
w: www.fluidstructures.com