

PHILIP GOACHER ASSOCIATES

CONSULTING CIVIL AND STRUCTURAL ENGINEERS

PARK HOUSE 122a NEWLAND ROAD
WORTHING WEST SUSSEX BN11 1LB

TEL: [REDACTED]

Mr W Orr
Framework Accountancy Limited
23 Western Road
Littlehampton
West Sussex BN17 5NP

Our Ref: PSG/sh/13177/001

31st May 2013

By email and post

Dear Wayne

Re: ~~135~~ & 135A WICK STREET, LITTLEHAMPTON

It was a pleasure to have met with you at the above properties in order to discuss your proposed extensions, conversions and alterations with regard to how they may affect the existing structure.

I have obtained copies of your Architect's drawings showing the proposals and, as discussed, have now produced my own basic preliminary scheme drawings to assist with your tender pricing. I enclose copies of my Drawings 13177/PO1, PO2 and PO3 for your information and use.

With regard to the proposed works, I comment as follows:-

1. 135a Wick Street

- 1.1 I understand from our conversations and the drawings received that it is proposed to construct a new first floor above the existing single storey building, with the new structure having a pitched roof linked into the adjacent roof of 135 Wick Street.
- 1.2 I have reviewed the proposals and confirm that I believe the additional storey extension will be possible and I have indicated what I believe to be the basic structural layout for the roof construction and first floor.
- 1.3 With regard to the roof, I have assumed that this will take a traditional cut and pitched timber construction bearing onto new steel beams at ceiling level, rather than a trussed rafter roof construction. This is try to spread the roof load evenly around the loadbearing walls in order to avoid overloading certain areas of the existing structure, potentially leading to a requirement for localised underpinning.
- 1.4 With regard to the first floor structure, it is likely the existing flat roof joists will not be adequate to act as floor joists, however, this can be reviewed and



Managing Director P J Goacher B.Sc. (Hons.), C.Eng., MICE, M.I.Struct.E
Director Eur.Ing P S Grinyer C.Eng., M.I.Struct.E.

Philip Goacher Associates Ltd trading as Philip Goacher Associates
Registered Office: 38 Salisbury Road, Worthing, West Sussex BN11 1RD
Registered No: 7182475



some additional joists may be required for strengthening. I have assumed that the existing ground floor walls currently supporting the flat roof construction are loadbearing and will be adequate for supporting the new first floor and any structure from above.

- 1.5 With regard to the foundations, I have carried out a very basis load take down check and confirm the foundation widths required for the new first floor extension and roof construction are not particularly onerous, however, I suggest that they be exposed and confirmed prior to proceeding further with the design works. The minimum foundation widths likely to be required are shown on my Drawing PO1.
- 1.6 With regard to the existing rear elevation and proposed first floor rear elevation, it is noted that large window openings have been shown and a fairly small return pier at the south-west corner of the building at both levels will be created. This will require a steel frame to be provided around the windows at each level in order to maintain stability. Alternatively, a cheaper option will be to increase the pier length to perhaps 600mm or 750mm projecting from the south wall. This will avoid the need for the steel frame and other potential complications and will keep the structural form as simple as possible.
- 1.7 I have assumed that the first floor external wall construction will in fact be of traditional loadbearing masonry construction using medium density and/or lightweight thermally efficient blockwork. I believe this method of construction will in fact be more appropriate given the need for the steel beams, etc., at roof level and it will add little additional load over and above timber framing the internal leaf of the external walls as we have previously discussed during our meeting.

2.

~~2.1 I understand it is proposed to convert the existing house into four individual flats.~~

~~2.2 Whilst there will be a need for strengthening and structural alterations to the property, I do not anticipate there to be any significant difficulties with the proposed alterations and I believe the proposals will be possible.~~

~~2.3 As discussed during our meeting and inspection, I consider it necessary to provide additional support structure within the second floor to both provide support to the new floor joists and also to the existing roof structure. The new structure can be situated behind the existing timber stud walls, which will then be removed and new walls re-built on the lines of the beams, thus providing additional floor space to the second floor bedroom and lounge.~~

* CROSSED OUT SECTION
RELATES TO DIFFERENT
PROPERTY.

- 2.4 With regard to the removal of the ground floor chimney breasts within the single storey rear section of the property, I confirm that this will be possible and a new support structure can be installed if need be within the flat roof above the single storey extension. I do consider, however, that it may be more cost effective to remove the existing chimney breast projection on the rear of the property and the chimney stack at high level in its entirety, thus avoiding the need for providing support above the ground floor area. This may also have the advantage that you could install a larger window to the second floor lounge and possibly to the kitchen and lounge of Flat 4. It may even be possible to consider incorporating patio doors and a Juliet type balcony to the top floor, although you will of course need to take advice from your Architect on this.
- 2.5 With regard to the foundations of [REDACTED], I anticipate there is a likelihood of foundation strengthening works being required to the majority of the property. There will be a need for at least one new pad foundation to support a new steel post within the wall separating the bathroom of Flat 2 from the kitchen of Flat 1. It may also be necessary to underpin the loadbearing wall to the east side of the staircase, although the exact width and extent of foundation works cannot be confirmed at this time, as I will need to carry out detailed calculations in order to confirm the loads at foundation level. That said, the section of wall is only around 3.5m in length and underpinning to, say, a metre deep would only likely cost around £3,500 - £4,000.
- 2.6 With regard to the first floor structure and potentially the ground floor, it is probable that some strengthening works will be required in order to upgrade the floor to be able to support the new partitions, as well as to take account of the increase in load from the sound insulation boarding and fire protection, etc.
- 2.7 With regard to the front elevation of the building, it is likely that there will be a bressumer beam above the original shop front which may not be in particularly sound condition. It may therefore be prudent to have this area exposed also in order to inspect the structure above the shop, particularly at its bearings onto the existing walls and to allow to remove the existing beam and use the new ground floor walls as loadbearing walls to support the structure above the existing beam, thereby removing potential problems which could be attributed to deterioration of the beam in the near future.

I trust the enclosed information is of assistance and meets with your current requirements.

I understand that Craig Boddington of ECE Architects is dealing with the architectural aspects of both the Planning Applications and Building Regulations submissions and I confirm I will be pleased to assist with the preparation of the structural design, details and drawings for Building Regulations Approval.

I must also make you aware that the project will fall under the CDM (2007) Regulations and will be a "notifiable project" which places certain obligations on you as the Client. I attach a brief list of some of your roles and responsibilities as the Client for your information and also redirect you to the Health & Safety Executive website for further information on the CDM Regulations.

One of your principal roles is to employ a CDM Co-ordinator who will then act to assist you with complying with your duties and ensure co-ordination of all health and safety information from the initial design stage up to start of construction and then, following construction, will compile Health & Safety Files for the project. I confirm I can provide this service to you also.

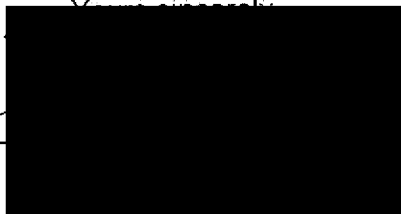
I am unsure at this stage how you propose to obtain costs and pricing for the works and whether you will be trying to obtain competitive tenders for a number of different building contractors. You may consider it beneficial to engage me to provide you with a Schedule of Works for the entire project which will list out the major construction items for the works which contractors can then price against in order to provide you with a fixed tender price. The Schedule of Works can then be reviewed and compared against interim valuations produced by the contractor each month in order to ensure that the contractor is only invoicing for works which they have actually undertaken on site.

I can provide you with a Schedule of Works for the proposed extension and alterations and can also act as Contract Administrator for the project if you require. I would provide a single point of contact for the contractor and yourself and will liaise with the Local Authority as required. Part of the role will also include undertaking occasion site visits to confirm progress and check the contractor's interim valuations before issuing a Certificate for Payment each month to you as the Client in order for you to settle the contractor's monthly invoice.

If you wish to discuss how I may be able to assist further in addition to providing the structural engineering input, I confirm I will be happy to talk further and confirm my envisaged fees. In the meantime, I enclose a fee account for works carried out to date.

I look forward to hearing from you again shortly.

Yours sincerely,



C. Eng., M.T. O'Connell
on behalf of PHILIP GOACHER ASSOCIATES

Enc