

## **Independent Review of Construction Cost Estimate**

De Paul House, 628-634 Commercial Road, London E14 7HS (the "Appeal Site")

Written Statement Explaining Cost Differences by Neville Onan-Read FRICS

PINS ref: APP/E5900/W/20/3250665

LPA Ref: PA/19/00804

11 December 2020

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## **1.0 Qualifications and Experience**

- 1.1 I, Neville Onan-Read confirm that:
- 1.2 I am a Partner of Robinson Low Francis LLP (RLF), a national quantity surveying and project management practice and a Fellow of the Royal Institution of Chartered Surveyors with over 38 years post-qualification experience.
- 1.3 Prior to joining Robinson Low Francis I trained at Henry Cooper & Sons and joined L.A.Francis & Sons in 1982 and joined the partnership in 1986. The business merged in 1994 to form the current firm where I continued as a Partner.
- 1.4 I have worked on a variety of public and private sector construction and infrastructure projects in the United Kingdom as a quantity surveyor and cost consultant. I have acted predominantly in the residential sector over the last 20 years working with housebuilders and developers on low rise housing, apartment schemes, mixed use, BTR, co-living and senior living schemes on projects with up to 2450 units.
- 1.5 I lead the RLF Viability Assessment Service and have personally undertaken assessments on over 30 schemes.

## **Declaration and Statement of Truth**

- 1.6 I confirm that I have made clear which facts and matters referred to in this report are within my own knowledge and which are not. Those that are within my own knowledge I confirm to be true. The opinions I have expressed represent my true and complete professional opinions on the matters to which they refer.
- 1.7 I confirm that I am not instructed under any conditional or other success-based fee arrangement.
- 1.8 I confirm that my report complies with the requirements of the RICS – Royal Institution of Chartered Surveyors, as set down in the RICS Practice Statement *Surveyors acting as expert witnesses*.

## **2.0 Background**

- 2.1 A Statement of Common Ground dated 24 November 2020 was issued in respect of an Appeal (App/E5900/W/20/3250665) lodged by Wayview Limited ("the Appellant") as a result of the refusal of a planning application LPA ref. PA/19/00804. The Appeal is made under Section 78 of the Town and Country Planning Act 1980.
- 2.2 The Appellant appointed 3-Sphere as its Cost Consultant and my discussions have taken place with Ms Zoe Rines acting for 3-Sphere. Where this Statement refers to 3-Sphere it refers to Ms Zoe Rines.
- 2.3 The Statement of Common Ground dated 24 November 2020 set out a schedule of Disagreed Cost Elements and this document sets out the reasons for the differences in those elements.
- 2.4 For ease of reference I have included the Schedules of Agreed and Disagreed Cost Elements in Appendix A and B respectively; the latter expanded to show the elemental differences between 3-Sphere's updated Cost Plan and my final Construction Cost Estimate Review findings.

## **3.0 Commentary on Disagreed Costs**

- 3.1 Substructure: the difference is £1,500 on a total of £1.67m, with my assessment being higher, representing 0.09% and as far as I am aware is the result of rounding differences in our respective totals for this element.
- 3.2 Roof: my assessment is £13,755 lower than 3-Sphere and although there are various differences the principal disagreement is the rate for the 'green roof' which itself produces a difference of £15,350. The Applicant has included a rate of £200/m<sup>2</sup> which is described as 'extra over' the normal roof covering membrane and insulation which is priced at £100/m<sup>2</sup>. My compromise assessment is £150/m<sup>2</sup> and in my opinion this is a 'full' allowance with reference to my own mean benchmark comparable of £88/m<sup>2</sup>.

- 3.3 External Walls: my assessment is £24,305 lower than 3-Sphere and is the product of different rates for two items. The Applicant has included a base rate for brick faced external cavity walls at £350/m<sup>2</sup> with an 'extra over' rate for Rockpanel Cladding of £70/m<sup>2</sup>. My assessment includes an 'extra over' rate of £50/m<sup>2</sup> which accounts for the saving in labour of traditional laid facing brick over an economical cladding product that will be erected in a shorter period with significantly lower labour cost. The second difference is the allowance for openings in the external wall; the Applicant has measured the external wall area gross over openings the area of which has been agreed at 617m<sup>2</sup> (this being the window area only excluding doors), consequently I applied a reduction in the aggregate resultant external wall rate of £360/m<sup>2</sup> to allow for the saving of wall element but to include the extra labour and materials in forming openings (brick reveals, cavity closers, lintels, cavity membranes etc). My assessment is a reduction in rate of £100/m<sup>2</sup> and the Applicant has applied £75/m<sup>2</sup>. This is summarised in the table below.

	<u>3-Sphere (£)</u>	<u>RLF (£)</u>
External walls	869,400	869,400
Reduction for Rockpanel rate over 444m <sup>2</sup>	(13,320)	(22,200)
Reduction for gross measurement 617m <sup>2</sup> (window openings)	(46,275)	(61,700)
<b>Total</b>	<b>809,805</b>	<b>785,500</b>

- 3.4 Internal Doors: my assessment is £21,800 lower than 3-Sphere and is the product of a difference in rate for the toilet doors. The quantum is agreed at 109 doors; 3\_Sphere has included a rate of £800 per unit and I have applied a rate of £600 per unit. A toilet door is non-fire rated and ironmongery will include a lever and mortice latch with a locking snib. My rate is at the upper range of internal door benchmark costs.

- 3.5 Mechanical and Electrical Services: my assessment is £384,275 lower than 3-Sphere. 3-Sphere's cost plan Clarifications Section 2.2 item 15-16 confirms that MEP solutions have been assumed pending receipt and review of information from the services engineer and the relevant extract is included as Appendix C. Notwithstanding the content of the cost plan does indicate an air source heating system with mechanical ventilation. As a consequence of the assumptions I am of the opinion that the total of this element, excluding only lifts which are dealt with below, should be compared to available benchmarks for a project of a similar nature. In the table below I set out the respective positions and the resultant rates.

	<u>3-Sphere (£)</u>	<u>RLF (£)</u>	<u>£/m2</u>
Agreed sub-elements 6A,6B,6C,6H,6I	921,543	921,543	202.54
Disagreed sub-elements 6D,6E,6F	1,896,149	1,511,974	
<b>Total Services including Builders Work</b>	<b>2,817,692</b>	<b>2,433,517</b>	
Cost per unit (109nr)	25,850	22,325	
Gross internal floor area	4,550	4,550	
<b>£/m2 of gross internal floor area</b>	<b>619</b>	<b>535</b>	

As a comparable source to support my own assessment I have utilised data from a recently tendered shared ownership residential project located in Newham of circa £20m which includes 74 apartments and has a gross residential area of 7,502m2. Tenders were received from four contractors in August 2020 and I have extracted the services sums from the Contract Sum Analysis for the residential element; the data is included as Appendix D and my assessment is indicated therein. While I acknowledge that the project is not a hostel/HMO scheme, it is priced for an air source heat pump system, mechanical ventilation with heat recovery and photovoltaic panels which is like for like with the subject scheme. It also has individual kitchens, bathrooms and en-suites across the units which would increase the amount of plumbing and electrical points over and above the hostel/HMO units where common kitchen facilities are utilised.

My methodology is to utilise the agreed elemental services rates from the table in Appendix A and introduce the mean rates from the benchmark project where there is a detailed elemental summary. This occurs for the lowest and highest tenders so provides a balanced assessment. The agreed elements amount to a rate of £202.54/m<sup>2</sup> and this is added to the mean rate for balance of elements with an allowance for builders work in connection. The balance of elements is assessed at £331.34/m<sup>2</sup> which when added to the agreed elements rate equates to £533.98/m<sup>2</sup>. My allowance is £535/m<sup>2</sup> and I believe it to be a fair assessment of the total services installations.

- 3.6 Lifts: my assessment is £30,000 lower than 3-Sphere and due to a computation error should have been £60,000 lower. We note from the layout drawings that the lifts are sized differently, one lift car being approximately half the size on plan of the other. The Applicant has applied the same rate of £140,000 for each passenger lift with no differential. Each lift serves 8 floors and this represents £17,500 per floor. This allowance is far in excess of my own benchmark comparisons of £10,000-£12,500 per floor and, as a second level of comparison, is also significantly above rates for lifts when priced over the gross internal floor area. A comparable rate here is £35/m<sup>2</sup> on this basis whereas the 3-Sphere rate amounts to £68/m<sup>2</sup>.
- 3.7 Siteworks: my assessment is £47,500 higher than 3-Sphere due to two items being added. In my quantum assessment of the scheme I noted that there was a deficit between the site area and the building footprint and I made an allowance for additional paving. I also noted that external railing around the lightwells shown on the planning drawings had not been included and I made an allowance in respect of this.
- 3.8 External Services: my assessment is £70,000 lower than 3-Sphere due to a difference the allowance for electrical service mains connection. 3-Sphere has applied a 'Provisional Sum' of £100,000 for a new electrical connection including builders work and my assessment is £30,000. The Applicant has suggested that a substation may be required, however no space provision or access has been indicated on the planning drawings. Furthermore, the 3-Sphere consultants cost plan Clarifications Section 2.2 item 12 includes the statement 'Assumes the existing power capacity is sufficient; i.e. no allowance has been made for HV works (substation)'. This extract is included as Appendix C.

- 3.9 Preliminaries: my assessment is £56,638 higher than 3-Sphere. 3-Sphere has recalculated the allowance by applying a percentage (actual percentage is 17.7%) to their adjusted cost plan whereas I have maintained the lump sum included in the original cost plan. I accept as reasonable the sum of £1,933,884 equating to £23,022 per week over an 84 week construction programme as originally included in Appendix 5 of Rapleys Financial Viability Assessment Report dated 3 December 2019.
- 3.10 Overhead and Profit: my assessment is £139,054 lower than 3-Sphere. The computation of this sum is on the basis of a percentage applied to the net works and preliminaries costs and 3-Sphere has applied a 7% allowance whereas I have applied a reduced rate of 6%. In my opinion 7% is excessive for a project of this scale and this is supported by recent tender returns. As a comparator I have set out in Appendix D the mean addition included by four tenderers on the residential project located in Newham of circa £20m. The calculation shows a mean allowance of 5.58% (range 5.13% to 6.03%). In addition we have received confidential tender information for a co-living scheme of circa £23m which was set at 4% further justifying the level of 6%.
- 3.11 Design Risk and Contingencies: my assessment is £274,331 lower than the 3-Sphere. The computation of this sum is on the basis of a percentage applied to the net works cost, preliminaries and overhead and profit. The Applicant has applied a 7% allowance whereas I have applied a reduced rate of 5%. In my opinion 7% is excessive for a new build project of this scale with a design submitted for planning. In my experience of viability cost assessments 5% has been the normal and acceptable provision in cost estimates.



#### **4.0 Conclusion and Opinion**

- 4.1 My Viability Cost Review dated 27 July 2020 assessed the likely build cost at tender stage to be £13,254,960 (£2,913/m) and following exchanges with the 3-Sphere cost consultant between September and November I increased my assessment by £145,441 to £13,400,401 (£2,945/m<sup>2</sup>). As can be seen from the schedule of disagreed costs my assessment for some elements exceeds that of 3-Sphere.
- 4.2 The 3-Sphere cost plan originally submitted amounted to £14,505,100 (£3,188/m<sup>2</sup>) excluding fees and following discussions and exchanges it has reduced its total by £252,816 to £14,252,284 (£3,132/m<sup>2</sup>).
- 4.3 The difference remaining amounts to £851,883 with three items comprising £797,560 (94%) of the total difference. Mechanical and electrical service installations, overheads and profit and contingencies.
- 4.4 During exchanges with 3-Sphere following my Viability Cost Review dated 27 July 2020 I cited data from co-living schemes as a comparable. I have procured, on a confidential basis, tender data from the Contractor appointed to construct one co-living scheme. The scheme is for 222 units with an average size of 17.8m<sup>2</sup>, a gross internal floor area of 8,018m<sup>2</sup> and the tender equates to £2,919/m<sup>2</sup> including demolition and external works at a base date of first quarter 2020. The build rate net of demolition and external works is £2,807/m<sup>2</sup>. This compares favourably to my own rate of £2,801/m<sup>2</sup> calculated on the same basis. Furthermore, the scheme is for private rental and all units include mini-kitchens not provided in the subject scheme. It also includes additional common amenity facilities. The declared overhead and profit for this tender is 4%.
- 4.5 Having considered relevant benchmark data I conclude that my assessment represents a fair and reasonable construction cost estimate which sits at the likely level of what could have been achieved in a competitive tender at the declared base date of fourth quarter 2019.

## Appendix A

### Schedule of Agreed Costs

	Element	3-Sphere	RLF
2	Major Demolition Works	413,000	413,000
3A	Frame	422,510	422,510
3B	Upper Floors	614,560	614,560
3D	Stairs and Ramps	140,000	140,000
3F	Windows and External Doors	487,550	487,550
3G	Internal Walls and Partitions	465,780	465,780
4A	Wall Finishes	338,939	338,939
4B	Floor Finishes	353,754	353,754
4C	Ceiling Finishes	248,515	248,515
1	Fittings, Furnishings and Equipment	549,500	549,500
6A	Sanitary Fittings	229,050	229,050
6B	Disposal Installations	128,538	128,538
6C	Water Installations	179,953	179,953
6H	Fire & Lightning Installations	162,296	162,296
6I	Communication Installations	221,706	221,706
7B	Drainage	29,315	29,315
	<b>Agreed Sums</b>	<b>4,984,966</b>	<b>4,984,966</b>

Elements 6A to 6I equate to £202.54/m<sup>2</sup>.

## Appendix B

### Schedule of Disagreed Costs

	Item	3-Sphere	RLF	Difference	
1	Substructure	1,669,300	1,670,800	1,500	
3C	Roof	373,825	360,070	(13,755)	
3E	External Walls	809,805	785,500	(24,305)	
3H	Internal Doors	319,600	297,800	(21,800)	
6D	Space Heating & Cooling	405,421	233,944	(171,478)	] (384,175)
6E	Ventilation	471,750	492,680	20,930	
6F	Electrical Installations	1,018,978	785,350	(233,628)	
6G	Lift and Conveyor Installations	310,000	280,000	(30,000)	
7A	Siteworks	87,500	134,900	47,400	
7C	External Services	150,000	80,000	(70,000)	
08	Preliminaries	1,877,246	1,933,884	56,638	
09	Overhead and Profit	861,448	722,394	(139,054)	
10	Design Risk & Contingencies	912,445	638,114	(274,331)	
	<b>Disagreed Sums</b>	<b>9,267,318</b>	<b>8,415,435</b>	<b>(851,882)</b>	

<b>Agreed Sums</b>	4,984,966	4,984,966
<b>Total Cost Estimate</b>	14,252,284	13,400,401
<i>£/m2</i>	<i>3,132</i>	<i>2,945</i>

## **Appendix C**

Extract from 3-Sphere Cost Plan (Clarifications)



## 2.0 EXCLUSIONS & CLARIFICATIONS

### 2.1 EXCLUSIONS

- 1 Project insurances
- 2 Client direct furnishes etc
- 3 Section 106/278 works
- 4 Financing costs
- 5 Abnormal out of hours working
- 6 Removal and disposal of Clients FF&E
- 7 Latent defects insurance
- 8 Works outside of the site demise unless specifically identified
- 9 Provision of artwork
- 10 Stationary and other client operating equipment such as cutlery, crockery, stationary etc.
- 11 Adoption of Pre-Construction Services Agreement and associated additional costs
- 12 Independent commissioning
- 13 Acceleration costs
- 14 Specialist equipment not specifically identified
- 15 Costs associated with meeting future changes in legislation
- 16 Cost associated with OPEX such as FM / maintenance agreements / spares etc.
- 17 Dilapidation costs
- 18 Inflation
- 19 Computers, printers, fax machines and the like
- 20 Capital allowances saving
- 21 Removal and/or disposal of redundant furniture
- 22 Temporary power
- 23 Generator; assumed not required
- 24 Asbestos Removal
- 25 Removal of Contaminated Soil

### 2.2 CLARIFICATIONS

- 1 Costs current at 4Q 2019
- 2 Costs have been based on documents listed in section 4
- 3 Start on site date 4Q 2020
- 4 Form of procurement traditional single stage lump sum
- 5 All works carried out within normal working hours
- 6 Works to be carried out in 1 phase
- 7 Design complies with current building regulations including Part L
- 8 All risks project insurance to be taken out by the client
- 9 All incoming utilities connection costs to be funded direct by Client.
- 10 No environmental assessment required
- 11 All quantities are indicative and should not be relied upon.
- 12 Assumes the existing power capacity is sufficient; i.e. no allowance has been made for HV works (sub-station)
- 13 Assumes existing water connection is sufficient
- 14 Following BREXIT It is not possible to predict with any certainty the effects of inflation and other market factors on building prices. This should be kept under review in light of actual inflation within the construction industry or if any other market factors come into effect
- 15 Budgets are based on certain assumptions made at this stage (particularly with regard to Structural, MEP Services solutions)
- 16 Services have been assumed pending receipt and review of information from the services engineer
- 17 Apartments assumed as being fitted out to a similar specification based on previous development fit out specification (Kellogg Tower)

## **Appendix D**

### Benchmark Residential Project Data

# **Benchmark Residential Project (100% shared ownership apartments)**

**Location: London E7 (5 miles from DePaul House)**

Tenders received August 2020

74 apartments (187 kitchens/bathrooms/ensuites)

2nr Cores

Gross internal floor area of residential = 7,502m2

Ground and 6 upper floor levels in one block

Air source heat pumps, MHVR units and PV's

<b>SERVICES</b> (all rates per m2 of gross internal floor area of residential)		<u>Tender 1</u>	<u>Tender 2</u>	<u>Tender 3</u>	<u>Tender 4</u>	<b>Mean</b>	<u>Agreed £/m2</u>
6A	Sanitary Installations	36.22	4.68	26.86	12.88		50.34
	Services Equipment	89.83	inc	113.60	434.71		
6B	Disposal Installations	15.76	inc	15.86	inc		28.25
6C	Water Installations	12.80	inc	41.60	inc		39.55
	Heat Source	14.25	226.67	78.76	inc		
6D	Space Heating and Air Conditioning	34.52	inc	inc	inc		
6E	Ventilation Systems	26.07	inc	26.23	inc		
6F	Electrical Installations	88.33	162.34	126.33	inc		
	Fuel Installations	1.13	inc	inc	inc		
6G	Lift and Conveyor Installations (excluded)	-	-	-	-		
6H	Fire and Lightning Protection	36.81	inc	39.06	inc		35.67
6I	Communication, Security and Control Systems	14.20	inc	14.78	inc		48.73
	Sprinkler Installations	13.78	inc	26.07	inc		
	Specialist Installations	1.05	inc	3.62	inc		
	Builder's Work In Connection With Services	12.34	19.45	12.16	23.23		part inc
6N	Services subtotal	397.09	413.15	524.92	470.82	451.50	202.54
Sub-elements not agreed (shaded)		268.96		374.62		321.79	321.79
Builders work on last say 3%		8.07		11.24		9.65	9.65
							<b>533.98</b>
<b>RLF Assessment £/m2</b>							<b>535.00</b>

## **Overhead & Profit Assessment**

Total Tender (excluding Fees)	19,246,625	19,394,158	20,667,079	20,707,672	
Overhead & Profit Included	1,093,754	957,925	1,161,759	1,010,282	
Net Works & Preliminaries	18,152,871	18,436,233	19,505,320	19,697,390	
Overhead & Profit as a Percentage of Works & Preliminaries	6.03%	5.20%	5.96%	5.13%	<b>5.58%</b>
<b>RLF Assessment</b>					<b>6.00%</b>