



Keppie Massie

Rossendale Local Plan

Report concerning estimated
construction costs used in the
Economic Viability Assessments

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1 Introduction

WYG have supported Keppie Massie with their work for Rossendale Council in respect of development viability assessments for a number of types of development in order to test Local Plan viability.

WYG's work has been in respect of the construction costs of the different types of development anticipated and tested and this report details the methodology adopted and gives summaries of the construction cost data prepared.

The developments have been divided into two basic categories: residential and non-residential. These are considered separately.

Within the residential category we have consider costs generically and for specific developments

2 Generic residential developments

2.1 Range of developments

Residential developments have been split into three categories based on development density and within each several different sizes of development have been used, based on the requirements of Rossendale Council and for each of these a typical level of specification has been costed. The densities adopted are as follows:

30 dwellings per hectare

40 dwellings per hectare

Each density has been costed on a green and brownfield basis. Further details are provided below.

Net site areas have been derived for each development typology based on the assumed densities as follows:

Scheme	Dwelling Nos	30 dph	40 dph
1	10 No	3,333m2	2,500 m2
2	25 No	8,333 m2	6,250 m2
3	50 No	16,667 m2	12,500 m2
4	75 No	25,000 m2	18,700 m2
5	100 No	33,333 m2	25,000m2

Table 1 – Net site areas

A mix of accommodation for each development scenario has been used as follows:

SCHEME	DWELLING TYPES	GFA/DWG	30 DPH		40 DPH	
			NO	GFA	NO	GFA
Scheme 1 10 dwellings	1b terraced	48 m ²	0 No	0 m ²	0 No	0 m ²
	2b Semi	59 m ²	1 No	59 m ²	1 No	59 m ²
	3B semi	88 m ²	4 No	352 m ²	1 No	352 m ²
	4b detached	116 m ²	4 No	464 m ²	0 No	464 m ²
	4B+ detached	146 m ²	1 No	146 m ²	0 No	146 m ²
	TOTAL AREA			1,021 m ²		1,021 m ²
Scheme 2 25 dwellings	1b terraced	48 m ²	0 Nr	0 m ²	0 Nr	0 m ²
	2b Semi	59 m ²	8 Nr	177 m ²	1 Nr	177 m ²
	3B semi	88 m ²	33 Nr	968 m ²	2 Nr	968 m ²
	4b detached	116 m ²	30 Nr	1160 m ²	1 Nr	1160 m ²
	5b detached	146 m ²	4 Nr	146 m ²	0 Nr	146 m ²
	TOTAL AREA			2,451 m ²		2,451 m ²
Scheme 3 50 dwellings	1b terraced	48 m ²	0 Nr	0 m ²	0 Nr	0 m ²
	2b Semi	59 m ²	5 Nr	295 m ²	3 Nr	295 m ²
	3b semi	88 m ²	22 Nr	1,936 m ²	5 Nr	1,936 m ²
	4b detached	116 m ²	20 Nr	2,320 m ²	2 Nr	2,320 m ²
	5b detached	146 m ²	3 Nr	438 m ²	0 Nr	438 m ²
	TOTAL AREA			4,989 m ²		4,989 m ²
Scheme 4 75 dwellings	1b terraced	46 m ²	0 No	0 m ²	1 Nr	0 m ²
	2b Semi	65 m ²	8 Nr	472 m ²	8 Nr	472 m ²
	3b semi	86 m ²	33 Nr	2,904 m ²	11 Nr	2,904 m ²
	4b detached	116 m ²	30 Nr	3,480 m ²	4 Nr	3,480 m ²
	5b detached	158 m ²	4 Nr	584 m ²	1 Nr	584 m ²
	TOTAL AREA			7,440 m ²		7,440 m ²
Scheme 5 100 dwellings	1b terraced	46 m ²	0 No	0 m ²	2 Nr	0 m ²
	2b Semi	65 m ²	10 Nr	590 m ²	15 Nr	590 m ²
	3b semi	86 m ²	45 Nr	3,960 m ²	23 Nr	3,960 m ²
	4b detached	116 m ²	40 Nr	4,640 m ²	7 Nr	4,640 m ²
	5b detached	158 m ²	5 Nr	730 m ²	3 Nr	730 m ²
	TOTAL AREA			9,920 m ²		9,920 m ²

Table 2 – Accommodation mix details.

The construction cost assessments for each development scenario are shown in tabulated form in Appendix A.

Also costed are two different sizes of development of new build flats.

The table below summarises the apartment development typologies that we have assessed.



10 Nr New flats on 2 floors (without a lift)		
2B Flats,	10 No	80.68 m2 (inc common area)
Total gross floor area	10 No	807 m2
50 Nr new flats on 3 floors, (including lift)		
1B Flats,	10 No	65.74 m2 (inc common area)
2B Flats,	30 No	81.68 m2 (inc common area)
3B Flats,	10 No	117.19 m2 (inc common area)
Total gross floor area	50 No	4,280 m2

Table 3 – Accommodation in flats

The cost details for flats are shown in tabulated form in Appendix B.

2.2 Costing methodology - Houses

Costs for the buildings:

- The dwellings themselves are costed based on their floor area. All dwellings are assumed to have two floors of the same area. The substructure costs that have been adopted are based on a rate per m2 that has been applied to the footprint area and are for normal substructures comprising simple strip footings founded at a nominal depth of 1m. Rates per m2 are derived from data held by WYG based on a large range of housing projects carried out in recent years.
- Superstructure costs have been calculated on a rate per m2 basis and applied to the gross internal floor area for each dwelling. These too are derived from data held by WYG. Each different floor area has a different rate/m2 to reflect the differing costs per m2 as the dwelling size varies.

Costs for the external works etc.:

- These are density based following an assessment of plot size from density
- Estate roads and footpaths; area and costs assessed from plot size; include kerbs, street lighting and road drainage. Rates and prices are from our cost data and published data
- Work within curtilage is assessed based on areas derived from the plot size and include boundaries, parking area, paving, grassed and planting areas. Rates and prices are from our cost data and published data
- Drainage and incoming service supplies costs are assessed on a cost / dwelling basis and include plot drainage and an allowance for mains drainage, using typical costs



- Public Open space: costs are based on areas defined by Rossendale Council. Works will include allowances for grass, trees and future maintenance.

Costs for other matters:

- Preliminaries are costed on a cost per week for a period based on the sales rate
- Fees for design, planning etc are based on % of the construction costs
- Adjustment for costs to reflect the size of the development; large developments are more economic than small ones.
- Depending on the site typology costs for abnormal works will be included on the basis of cost/dwelling or cost/m² of the site. These could include allowance for poor ground conditions or similar works or costly site clearance.
- Contingencies are included at 5%
- As profit will be included elsewhere within the viability appraisal, it is not included within construction costs

A number of items are excluded from the overall rate per sq m assessment and are included elsewhere as appropriate by Keppie Massie in preparing the viability assessments. These include

- Costs for abnormals, except as stated in relation to previously developed/brownfield sites, Code for Sustainable Homes and sustainability works, Section 278 works or similar, off-site works and incoming infrastructure/service reinforcement

2.3 Costing methodology – Flats

- Generally as for houses.
- Floor areas include common areas
- External areas are assumed based on the areas regarded as necessary per flat
- Exclusions are as houses. In addition the cost assessment for flats does not include estate roads as this form of development is costed on the basis of a 'stand alone' development served by existing roads, or roads developed separately.



2.4 Outline Specification assumed

WYG have assumed the following outline specification for the purposes of assessing the construction costs

Generally	
Building regulations	All works will comply with the current Building Regulations in force.
NHBC	All works will comply with the current NHBC requirements (or similar) in force.
Code for Sustainable Homes	It has been assumed the dwellings will comply with level 4 of the Code for Sustainable Homes on specific sites.
Substructures	
Foundations (normal)	Standard strip footings at nominally 1m deep have been assumed to the external walls and party walls.
Ground floors	In situ concrete with insulation and screed over.
Superstructures	
Staircases	Standard timber stairs with timber balustrades. Concrete stairs to flats
Upper floors	Chipboard floor boarding on timber joists. Concrete floors to flats complying with acoustic and fire requirements of the Building Regulations
External walls	Facing brick, with some detailing, externally; cavity fully filled with insulation, and blockwork inner skin.
Roof	Pitched roof with concrete tiles and trussed timber structure.
Roof insulation	400mm fibreglass quilt at ceiling level.
Rainwater installation	uPVC gutters and downpipes. Rainwater harvesting assumed on specific sites
Windows	uPVC framed windows with double glazing.
External doors	uPVC or similar front and rear doors.
Internal walls and partitions	Generally of studwork within dwellings, with insulation and plasterboard. Party walls in concrete blockwork to meet the acoustic and fire requirements of the Building Regulations
Internal doors	Hollow core doors with timber veneer appearance and ironmongery, frames in softwood, gloss painted. Doors to and within flats will be fire rated in accordance with the Building Regulations.
Floor finishes	No applied floor finishes; painted softwood skirtings. Carpet finish to common areas of flats.



Wall finishes	Plasterboard dry lining with skim and emulsion paint finishes. Ceramic tiling included as splashbacks in bathrooms and in shower areas to 1.8m high.
Ceiling finishes	Plasterboard with skim and emulsion paint finish.
Fittings	Kitchen fittings of medium to basic quality; no white goods or appliances.
Sanitary fittings	Bath in white acrylic, WCs and wash basins in white ceramic with taps, wastes etc.
Plumbing installation	Soil and waste pipework in uPVC generally boxed in. Hot and cold water pipework in plastic pipework with insulation.
Heating installation	Gas fired high efficiency combination condensing boiler with radiators, controls etc.
Electrical installation	Wiring for power and lighting. Switches and socket outlets in white plastic. All fittings with Low energy lamps. No decorative fittings included. Smoke detectors included.
TV aerial installation	Cable points in Living Room and Main bedroom; containment to roof space or aerial point. No aerial included.
Telephone installation	Conduit installation to points in Living Room and Main Bedroom to all units.
Lift installation	Not included except within the larger flat development
Externally	
House drives	Black tarmacadam on suitable base and sub-base.
Paving	Pre-cast concrete flags on compacted granular fill generally.
Grassed areas	Topsoil with grass seed generally (turf to front gardens). Topsoil thickness 150mm
Fencing - rear	In treated softwood and as indicated on the drawings/site plan
Fencing - front	None; open plan assumed except where railings are indicated on the site plan
Roads and footpaths	Adopted roads to adoption standards in black tarmacadam with street lighting, concrete kerbs and road drainage. Footpaths in precast concrete flags to adoptable standards. Roads to courts and parking areas and access to flats assumed to be non-adopted but to similar specification to adopted roads.
Drainage	Drainage in UPVC pipework with inspection chambers and manholes. Collector drains and drains beyond curtilage are to be adopted.



Incoming services	Service supplies for <ul style="list-style-type: none"> • Gas • Electricity • Water • Telephone – duct only from road
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Table 4 – Specification details

3 Site specific residential developments

3.1 Sites costed

The following sites have been costed to allow their viability to be tested

Site	Number of dwellings included	Approx site area
Site A (Crawshawbooth)	48 Nr	16000 m2
Site B (Crawshawbooth)	57 Nr	19000 m2
Site C (Crawshawbooth)	84 Nr	28000 m2
Site D (Rawtenstall)	63 Nr	21000 m2
Site E (Rawtenstall)	48 Nr	16000 m2
Site F (Rawtenstall)	100 Nr	50000 m2
Site G (Rawtenstall)	78 Nr	26000 m2
Site H (Newchurch)	60 Nr	20000 m2
Site I (Bacup)	81 Nr	27000 m2
Site J (Bacup)	78 Nr	26000 m2
Site K (Bacup)	54 Nr	18000 m2
Site L (Helmshore)	150 Nr	50000 m2

Table 5 – Details of specific residential sites



The accommodation to be provided on each site is as follows

SITE	2 Bed Semi	3 Bed Semi	4 Bed Det	4 Bed+ Det	Total
Site A (Crawshawbooth)	5 No	22 No	19 No	3 No	49 No
Site B (Crawshawbooth)	6 No	25 No	23 No	3 No	57 No
Site C (Crawshawbooth)	8 No	38 No	34 No	4 No	84 No
Site D (Rawtenstall)	7 No	28 No	25 No	3 No	63 No
Site E (Rawtenstall)	5 No	22 No	19 No	2 No	48 No
Site F (Rawtenstall)	10 No	45 No	40 No	5 No	100 No
Site G (Rawtenstall)	8 No	35 No	31 No	4 No	78 No
Site H (Newchurch)	6 No	27 No	24 No	3 No	60 No
Site I (Bacup)	8 No	37 No	32 No	4 No	81 No
Site J (Bacup)	9 No	34 No	30 No	5 No	78 No
Site K (Bacup)	5 No	24 No	22 No	3 No	54 No
Site L (Helmshore)	15 No	67 No	60 No	8 No	150 No

Table 6 – Accommodation assumed for specific residential sites

3.2 Costing methodology

The costing methodology follows the principles of the generic sites and is based on the density.

In these cases, however, the individual site density is calculated from the number of dwellings and the site areas shown above and then. As with generic sites, the costs for the external areas are then based on quantities derived from the actual density.

The costs for the dwellings are then assessed using the costs per m² that were used for the costing of the generic sites.

Specific allowances are then made for factors that have been identified for each site, based on site visits and specific local knowledge and data.. The factors considered are as follows:

- Levels
- Site access
- Flood risk
- Contamination
- Poor ground
- Clearance



Each of these factors has been given a grade from the detail shown below. Each grade represents a cost per m2 of the dwelling floor area for works that may be needed. While this approach is to some extent subjective, it is difficult to conceive of a more robust approach without undertaking costly and, in some cases, intrusive research or investigations.

<u>Poor ground</u>		Cost per m2
0	Piling (8m deep)	£ 44.30 /m2
1	Vibro-compaction	£ 22.15 /m2
2	Increased foundation depth	£ 13.29 /m2
3	None	£ 0.00 /m2

Table 7 – Graded costs for poor ground

<u>Extra clearance</u>		Cost per m2
	Major demolition	£ 16.61 /m2
1	Significant demolition	£ 13.29 /m2
2	Medium/Large demolition	£ 9.97 /m2
3	Medium demolition	£ 6.65 /m2
4	Slabs + some demolition	£ 3.32 /m2
5	None	£ 0.00 /m2

Table 8 – Graded costs for extra site clearance

<u>Contamination</u>		Cost per m2
0	Major contamination	£ 44.30 /m2
1	Significant contamination	£ 27.69 /m2
2	Medium/bad contamination	£ 11.08 /m2
3	Medium contamination	£ 4.43 /m2
4	Light contamination	£ 2.22 /m2
5	No contamination	£ 0.00 /m2

Table 9 – Graded costs for contamination

<u>Flood risk</u>		Cost per dwelling
0	Severe problems	£2,769
1	Major risk	£1,661
2	Medium risk	£1,108
3	Intermediate risk	£554
4	Minor allowance	£277
5	No risk	£0

Table 10 – Graded costs for flood risk

In addition further allowances have been made for compliance with Level 4 of the Code for Sustainable Homes and for Rainwater Harvesting.

4 Non-residential developments

4.1 Range of developments

A number of different non –residential development types have been costed, as shown in the table below:

Type	Location	Floor area (ft2)	Floor area (m2)	Site areas (m2)
Offices	Out of Town	5,000 ft2	464 m2	559 m2
Offices	Out of Town	20,000 ft2	1,857 m2	2,200 m2
Offices	Out of Town	10,000 ft2	929 m2	1,108 m2
Industrial B2/B8	All areas	5,000 ft2	464 m2	698 m2
Industrial B2/B8	All areas	10,000 ft2	929 m2	1,381 m2
Industrial B2/B8	All areas	20,000 ft2	1,857 m2	2,740 m2
Industrial B2/B8	All areas	50,000 ft2	4,643 m2	9,583 m2
Industrial B2/B8	All areas	100,000 ft2	9,287 m2	19,116 m2
Industrial B2/B8	All areas	250,000 ft2	484,395 m	44,984 m2
Retail (Food store - Convenience)	All areas	3,000 ft2	279 m2	644 m2
Retail (Food store - Convenience)	All areas	10,000 ft2	929 m2	2,267 m2
Retail (Food store - Convenience)	All areas	30,000 ft2	2,786 m2	6,752 m2
Retail (Food store - Convenience)	All areas	50,000 ft2	4,643 m2	11,229 m2
Non food retail (Out of Town)	All areas	3,000 ft2	279 m2	278 m2
Non food retail (Out of Town)	All areas	10,000 ft2	929 m2	1,891 m2
Non food retail (Out of Town)	All areas	30,000 ft2	2,786 m2	5,627 m2
Gymnasium	All areas	10,000 ft2	929 m2	1,816 m2
Hotel	All areas	30,000 ft2	2,786 m2	2,734 m2
Food and Drink (Pub/Restaurant)	All areas	5,000 ft2	464 m2	1,670 m2
Residential Institutional (50 Bed)	All areas	44,000 ft2	4,086 m2	2,565 m2
Care/Nursing Home (50 Bed)	All areas	30,000 ft2	2,786 m2	2,297 m2

Table 5 – Non residential developments – areas of buildings and sites

The costs are given in tabulated form in Appendix C.



4.2 Costing methodology

Costs for the buildings:

- Normal substructures and superstructures based on costs per m2 from BCIS for buildings of the same type and comparable size. BCIS data adjusted for location and brought up to date

Costs for the external works etc.:

- Areas based on parking requirements with allowances for circulation and landscaped areas, footpaths etc.

Costs for other matters

- Preliminaries are costed within the costs per m2 derived from BCIS for the buildings.
- Fees for design, planning etc are based on a % of the construction costs
- Contingencies will be included at 5%
- Profit is included within the costs
- Abnormal works will be included on the basis of cost/m2 of the building or cost/m2 of the site. These would include allowance for poor ground conditions or similar.

Exclusions

- Costs for abnormal works except as stated in relation to previously developed/brownfield sites, and sustainability works, Section 278 works or similar, off-site works and incoming infrastructure. These matters are dealt with elsewhere in the appraisals by Keppie Massie.



5 Contingencies

WYG have included within the costs for all schemes, whether residential or non-residential, an allowance for unknowns and risk in the amount of 5% which we consider is reasonable.



APPENDIX A – Summaries of costs for generic residential sites - houses



**ROSSENDALE COUNCIL
CIL ECONOMIC VIABILITY APPRAISAL - TYPICAL COSTS FOR RESIDENTIAL - HOUSES**

Summary for density 30 dwellings per hectare (Low Sales rates)

12 May 2015

GREEN FIELD SITE - Intermediate quality				
	Total Cost	Av Cost per dwelling	Av cost per m2	Sales rate and Construction period
Scheme 1 10 dwellings	£ 1,131,726	£ 113,173	£ 1,108	n/a/m 8 months
Scheme 2 25 dwellings	£ 2,759,779	£ 110,391	£ 1,126	1/m 29 months
Scheme 3 50 dwellings	£ 5,358,442	£ 107,169	£ 1,074	1.5/m 37 months
Scheme 4 75 dwellings	£ 7,915,777	£ 105,544	£ 1,064	2/m 42 months
Scheme 5 100 dwellings	£ 10,270,260	£ 102,703	£ 1,035	2/m 54 months
BROWN FIELD SITE - Intermediate quality				
	Total Cost	Av Cost per dwelling	Av cost per m2	Sales rate and Construction period
Scheme 1 10 dwellings	£ 1,196,023	£ 119,602	£ 1,171	n/a/m 8 months
Scheme 2 25 dwellings	£ 2,916,049	£ 116,642	£ 1,190	1/m 29 months
Scheme 3 50 dwellings	£ 5,665,196	£ 113,304	£ 1,136	1.5/m 37 months
Scheme 4 75 dwellings	£ 8,390,364	£ 111,872	£ 1,128	2/m 42 months
Scheme 5 100 dwellings	£ 10,881,459	£ 108,815	£ 1,097	2/m 54 months

Note: construction periods are based on the Sales Rates stated with and include a lead in to first sale of 4 months. Scheme 1 of 10 dwellings is too small to be constructed to a sales rate and is assumed to have a period based on optimum construction time.

Assumptions

Floor areas as provided

Site areas derived from densities required

Fees - variable depending on project size

Contingencies - 5% throughout

No abnormal development costs

VAT excluded from all costs

Contractor's profit excluded

No allowance for Code for Sustainable Homes compliance

See notes and specification details attached



**ROSSENDALE COUNCIL
CIL VIABILITY APPRAISAL - TYPICAL COSTS FOR RESIDENTIAL - HOUSES**

Summary for density 40 dwellings per hectare (Low Sales rates)

12 May 2015

GREEN FIELD SITE - Intermediate quality				
	Total Cost	Av Cost per dwelling	Av cost per m2	Sales rate and Construction period
Scheme 1 10 dwellings	£ 1,114,908	£ 111,491	£ 1,092	n/a/m 8 months
Scheme 2 25 dwellings	£ 2,714,912	£ 108,596	£ 1,108	1/m 29 months
Scheme 3 50 dwellings	£ 5,271,597	£ 105,432	£ 1,057	1.5/m 37 months
Scheme 4 75 dwellings	£ 7,701,063	£ 102,681	£ 1,035	2/m 42 months
Scheme 5 100 dwellings	£ 10,077,070	£ 100,771	£ 1,016	2/m 54 months
BROWN FIELD SITE - Intermediate quality				
	Total Cost	Av Cost per dwelling	Av cost per m2	Sales rate and Construction period
Scheme 1 10 dwellings	£ 1,174,883	£ 117,488	£ 1,151	n/a/m 8 months
Scheme 2 25 dwellings	£ 2,860,410	£ 114,416	£ 1,167	1/m 29 months
Scheme 3 50 dwellings	£ 5,556,961	£ 111,139	£ 1,114	1.5/m 37 months
Scheme 4 75 dwellings	£ 8,120,956	£ 108,279	£ 1,092	2/m 42 months
Scheme 5 100 dwellings	£ 10,640,543	£ 106,405	£ 1,073	2/m 54 months

Note: construction periods are based on the Sales Rates stated with and include a lead in to first sale of 4 months. Scheme 1 of 10 dwellings is too small to be constructed to a sales rate and is assumed to have a period based on optimum construction time.

Assumptions

Floor areas as provided

Site areas derived from densities required

White goods

Floor finishes

Sundries

VAT excluded from all costs

Contractor's profit excluded

No allowance for Code for Sustainable Homes compliance

See notes and specification details attached



**ROSSENDALE COUNCIL
LOCAL PLAN ECONOMIC VIABILITY APPRAISAL**

TYPICAL COSTS FOR RESIDENTIAL - FLATS

28 April 2015

Scheme of 10 units on two floors; infill site off existing roads off; no lift

1b flat			0.00 m2
2b flat	10 Nr	69.68 m2	696.80 m2
Average GFA/ unit =			69.68 m2
Addition for common areas			11.00 m2
Total GFA			80.68 m2

Costs for single flat

Substructures	80.68 m2	£ 78.12 /m2	£6,302
Superstructures	80.68 m2	£ 708.63 /m2	£57,172
Total		£ 787 /m2	£63,474

External works

Entrance roads	0 m2		
Footpath to entrance road	0 m2		
Road crossing	1 Nr	£2,790	£2,790
Car parking; tarmacadam; 1 space / flat +	21 m2	£ 55.80 /m2	£1,161
Kerbs, lighting and drainage to above	21 m2	£ 21.20 /m2	£441
Paving, paths etc; assumed at 12 m2 / flat	12 m2	£ 35.71 /m2	£429
Grassed area	10 m2	£ 8.93 /m2	£89
Bin stores	1 Nr	£279	£279
Allowance for fences, railings and gates	1 Nr	£558	£558
Site clearance	83 m2	£ 3.91 /m2	£326
Drainage including attenuation	1 Nr	£2,678	£2,678
Incoming services	1 Nr	£4,185	£4,185
Preliminaries (cost per unit per week)	30 weeks	£418	£12,554

Total Costs of single flat

£88,964

Fees	7.50%	£6,672
Contingencies	5.00%	£4,782

TOTAL FOR SINGLE FLAT

£100,418

Less Contractor's profit and overheads included	-7.00%	-£7,029
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TOTAL COSTS FOR SINGLE FLAT

£93,389

SCHEME COST FOR 10 No FLATS

£933,890

Cost/m2 £1,157.52

Site area	1012 m2
Average site area per flat	101 m2



APPENDIX B Summaries of costs for generic residential sites - flats



**ROSSENDALE COUNCIL
LOCAL PLAN ECONOMIC VIABILITY APPRAISAL**

TYPICAL COSTS FOR RESIDENTIAL - FLATS

28 April 2015

Scheme of 50 units on three floors including lift; off existing road (no access road included)

	1B	10 Nr		2B	30 Nr		3B	10 Nr		TOTALS
GFA/ unit =	55.74 m2			69.68 m2			102.19 m2			
Addition for common areas (inc lift)	10.00 m2			12.00 m2			15.00 m2			
Total GFA for each type	65.74 m2			81.68 m2			117.19 m2			4280 m2
<u>Costs for single flat</u>										
Substructures	66.00 m2	£ 57.66 /m2	£3,805	82.00 m2	£ 57.66 /m2	£4,728	117.00 m2	£ 57.66 /m2	£6,746	£247,350
Superstructures	66.00 m2	£ 691.89 /m2	£45,665	82.00 m2	£ 691.89 /m2	£56,735	117.00 m2	£ 691.89 /m2	£80,951	£2,968,199
Lift	66.00 m2	£ 10.04 /m2	£663	82.00 m2	£ 10.04 /m2	£824	117.00 m2	£ 10.04 /m2	£1,175	£43,087
Total		£ 759.59 /m2	£50,133		£ 759.59 /m2	£62,286		£ 759.59 /m2	£88,872	£3,258,636
External works										
Entrance road	15 m2	£ 61.38 /m2	£921	15 m2	£ 61.38 /m2	£921	15 m2	£ 61.38 /m2	£921	£46,033
Footpath to entrance road	12 m2	£ 39.06 /m2	£469	12 m2	£ 39.06 /m2	£469	12 m2	£ 39.06 /m2	£469	£23,435
Road crossing		£2,789.87	£0		£2,789.87	£0		£2,789.87	£0	£0
Car parking; tarmacadam; 1 space / flat + 60% circulation	21 m2	£ 55.80 /m2	£1,161	21 m2	£ 55.80 /m2	£1,161	21 m2	£ 55.80 /m2	£1,161	£58,029
Kerbs, lighting and drainage to above	21 m2	£ 21.20 /m2	£441	21 m2	£ 21.20 /m2	£441	21 m2	£ 21.20 /m2	£441	£22,051
Paving, paths etc; assumed at 12 m2 / flat	12 m2	£ 35.71 /m2	£429	12 m2	£ 35.71 /m2	£429	12 m2	£ 35.71 /m2	£429	£21,426
Grassed area	10 m2	£ 8.93 /m2	£89	10 m2	£ 8.93 /m2	£89	10 m2	£ 8.93 /m2	£89	£4,464
Bin stores	1 Nr	£278.99	£279	1 Nr	£278.99	£279	1 Nr	£278.99	£279	£13,949
Allowance for fences, railings and gates	1 Nr	£557.97	£558	1 Nr	£557.97	£558	1 Nr	£557.97	£558	£27,899
Site clearance	118 m2	£ 3.91 /m2	£460	118 m2	£ 3.91 /m2	£460	118 m2	£ 3.91 /m2	£460	£22,987
Drainage including attenuation	1 Nr	£2,678.28	£2,678	1 Nr	£2,678.28	£2,678	1 Nr	£2,678.28	£2,678	£133,914
Incoming services	1 Nr	£4,184.81	£4,185	1 Nr	£4,184.81	£4,185	1 Nr	£4,184.81	£4,185	£209,240
Preliminaries (cost per unit per week)	60 weeks	£167.39	£10,044	60 weeks	£167.39	£10,044	60 weeks	£167.39	£10,044	£502,177
Total Costs of single flat			£71,845			£83,998			£110,584	£4,344,240
Fees		7.00%	£5,029		7.00%	£5,880		7.00%	£7,741	£304,097
Contingencies		5.00%	£3,844		5.00%	£4,494		5.00%	£5,916	£232,417
TOTAL FOR SINGLE FLAT			£80,718			£94,372			£124,241	£4,880,753
Less Contractor's profit and overheads included		7.00%	£5,650		7.00%	£6,606		7.00%	£8,697	£341,653
TOTAL COSTS FOR SINGLE FLAT			£86,368			£100,978			£132,938	
SCHEME COST FOR 50 No FLATS			£863,680			£3,029,346			£1,329,380	£5,222,406
Cost/m2			£ 1,314 /m2			£ 1,236 /m2			£ 1,134 /m2	£ 1,220 /m2
Site area			6049 m2							
Average site area per flat			121 m2							



APPENDIX C Summaries of costs for non-residential sites



Type	Location	No floors	Floor area (ft2)	Floor area (m2)	Site area (ft2)	Site areas (m2)	Base cost	Extra cost for Brownfield site	Total for Brownfield site	TOTAL COST	BREEAM assumed addition for Very good	OVERALL TOTAL COST	Fee % included	Constrn period
Offices	All areas	2 Nr	5,000 ft2	464 m2	6,023 ft2	559 m2	£ 1,778 /m2	£ 49.22 /m2	£ 1,827 /m2	£848,450	0.5%	£852,692	12%	7 months
Offices	All areas	2 Nr	20,000 ft2	1,857 m2	23,688 ft2	2,200 m2	£ 1,629 /m2	£ 49.15 /m2	£ 1,678 /m2	£3,116,926	0.5%	£3,132,510	12%	10 months
Offices	All areas	2 Nr	10,000 ft2	929 m2	11,928 ft2	1,108 m2	£ 1,480 /m2	£ 49.18 /m2	£ 1,529 /m2	£1,420,116	0.5%	£1,427,217	11%	14 months
Industrial B2/B8	All areas	1 Nr	5,000 ft2	464 m2	7,519 ft2	698 m2	£ 814 /m2	£ 50.23 /m2	£ 864 /m2	£401,297	0.3%	£402,501	9%	4 months
Industrial B2/B8	All areas	1 Nr	10,000 ft2	929 m2	14,870 ft2	1,381 m2	£ 768 /m2	£ 50.18 /m2	£ 818 /m2	£759,823	0.3%	£762,102	8%	6 months
Industrial B2/B8	All areas	1 Nr	20,000 ft2	1,857 m2	29,504 ft2	2,740 m2	£ 621 /m2	£ 50.14 /m2	£ 671 /m2	£1,246,540	0.3%	£1,250,280	7%	8 months
Industrial B2/B8	All areas	1 Nr	50,000 ft2	4,643 m2	103,187 ft2	9,583 m2	£ 634 /m2	£ 52.13 /m2	£ 686 /m2	£3,185,967	0.3%	£3,195,525	7%	10 months
Industrial B2/B8	All areas	1 Nr	100,000 ft2	9,287 m2	205,844 ft2	19,116 m2	£ 624 /m2	£ 52.11 /m2	£ 676 /m2	£6,278,900	0.3%	£6,297,737	6%	12 months
Industrial B2/B8	All areas	1 Nr	250,000 ft2	23,217 m2	484,392 ft2	44,984 m2	£ 615 /m2	£ 51.70 /m2	£ 667 /m2	£15,478,796	0.3%	£15,525,233	6%	14 months
Retail (Food store - Convenience)	All areas	1 Nr	3,000 ft2	279 m2	6,937 ft2	644 m2	£ 1,211 /m2	£ 52.97 /m2	£ 1,264 /m2	£352,147	0.7%	£354,612	8%	5 months
Retail (Food store - Convenience)	All areas	1 Nr	10,000 ft2	929 m2	24,406 ft2	2,267 m2	£ 1,124 /m2	£ 53.41 /m2	£ 1,177 /m2	£1,093,430	0.7%	£1,101,084	7%	9 months
Retail (Food store - Convenience)	All areas	1 Nr	30,000 ft2	2,786 m2	72,707 ft2	6,752 m2	£ 1,038 /m2	£ 53.35 /m2	£ 1,091 /m2	£3,040,532	0.7%	£3,061,815	5%	10 months
Retail (Food store - Convenience)	All areas	1 Nr	50,000 ft2	4,643 m2	120,916 ft2	11,229 m2	£ 990 /m2	£ 53.33 /m2	£ 1,043 /m2	£4,844,588	0.7%	£4,878,500	7%	12 months
Non food retail (Out of Town)	All areas	1 Nr	3,000 ft2	279 m2	2,989 ft2	278 m2	£ 1,212 /m2	£ 52.15 /m2	£ 1,264 /m2	£352,197	0.7%	£354,662	8%	5 months
Non food retail (Out of Town)	All areas	1 Nr	10,000 ft2	929 m2	20,367 ft2	1,891 m2	£ 1,075 /m2	£ 52.04 /m2	£ 1,127 /m2	£1,046,655	0.7%	£1,053,982	7%	8 months
Non food retail (Out of Town)	All areas	1 Nr	30,000 ft2	2,786 m2	60,589 ft2	5,627 m2	£ 885 /m2	£ 51.98 /m2	£ 937 /m2	£2,610,459	0.7%	£2,628,732	6%	10 months
Gymnasium	All areas	1 Nr	10,000 ft2	929 m2	19,552 ft2	1,816 m2	£ 1,221 /m2	£ 51.76 /m2	£ 1,273 /m2	£1,181,986	1.0%	£1,193,806	12%	9 months
Hotel	All areas	2 Nr	30,000 ft2	2,786 m2	29,437 ft2	2,734 m2	£ 1,487 /m2	£ 48.46 /m2	£ 1,535 /m2	£4,277,855	1.0%	£4,320,634	12%	12 months
Food and Drink (Pub/Restaurant)	All areas	2 Nr	5,000 ft2	464 m2	17,979 ft2	1,670 m2	£ 1,822 /m2	£ 57.32 /m2	£ 1,879 /m2	£872,640	1.0%	£881,366	12%	11 months
Residential Institutional (50 Bed)	All areas	3 Nr	44,000 ft2	4,086 m2	27,625 ft2	2,565 m2	£ 1,474 /m2	£ 47.27 /m2	£ 1,521 /m2	£6,216,178	1.5%	£6,309,421	12%	15 months
Care/Nursing Home (50 Bed)	All areas	2 Nr	30,000 ft2	2,786 m2	24,733 ft2	2,297 m2	£ 1,661 /m2	£ 47.93 /m2	£ 1,709 /m2	£4,761,146	1.5%	£4,832,563	12%	12 months
Car Showroom	All areas	1 Nr	10,000 ft2	929 m2	90,937 ft2	8,445 m2	£ 2,317 /m2	£ 75.93 /m2	£ 2,393 /m2	£2,222,262	1.0%	£2,244,484	5%	8 months