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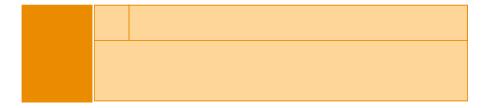


## WHOLE PLAN VIABILITY ASSESSMENT

## **CONSTRUCTION COST STUDY**

## For NOTTINGHAM AREAS:

BROXTOWE BOROUGH COUNCIL NOTTINGHAM CITY COUNCIL RUSHCLIFFE BOROUGH COUNCIL









Whole Plan Viability Assessment

Order of Cost Study

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## **Executive Summary**

## 1. The Project

This Cost Study provides an estimate of construction costs over a range of development categories, to support a Whole Plan Viability Assessment.

## 2. Allowances

The Estimate includes on-cost allowances for the following:

- Consultants
- Building Regulations and Planning fees
- NHBC Insurance where applicable

## 3. Basis of Estimate

The basis of the Estimate is in Section 2 of this report.

## 4. Detailed Construction Cost Study

The detailed Cost Study is given in Section 3 of this report.

## 5. Risk Allowance

A Risk Allowance of 5% of construction cost is recommended

## **Project Description**

NCS have been appointed by Broxtowe Borough Council, Nottingham City Council and Rushcliffe Borough District Council for the production of the Council's Community Infrastructure Levy Charging Schedule, through to adoption.

Gleeds are acting as part of the NCS team, to provide indicative construction costs, over the range of development categories, to inform the Appraisal.

The range of development categories are as agreed with NCS.

## **Basis of Cost Study**

### **Base Date**

Rates for Construction Costs in the Estimate have been priced at a Base Date of 1<sup>st</sup> quarter (January to March) 2018. Allowances must be made for inflation beyond this date dependent on the mid-point date of construction.

### **Procurement**

The costs included in this Estimate assume that procurement is to be achieved on a single stage competitive tender basis, from a selected list of Contractors.

## **Scope of Development Types**

The scope of development types within the various categories varies between categories.

This is reflected within the range of construction values stated for a particular category.

For the purposes of undertaking the Viability Appraisal, average rates for construction have been given for each development category; the range of values have also been stated.

### **Basis of Costs**

The following benchmarking data was used in the preparation of the estimate:

- 1. Analysis of construction costs over a range of projects within the Gleeds Research and Development Data Base.
- 2. Where insufficient data is available within any particular category cross-reference is also made to BCIS construction cost information.
- 3. The rates adopted in the study are based on research of local construction projects to the region, the costs associated with these and Gleeds own national database of construction costs by construction type. The report recognises that different types of construction company incur different levels of costs due to differences in buying power, economies of scale etc. The rates assume that substantial new residential development (House and Bungalows) will be undertaken primarily by regional and national house builders and the adopted rates reflect this. The adopted rates therefore tend to fall below median BCIS construction rates which cover building cost information from all types of construction company to individual builders. This is considered to be a more realistic approach than the adoption of median general rates, to reflect the mainstream new build residential development particularly since smaller schemes undertaken by smaller scale construction companies will enjoy exemption from zero carbon and affordable housing requirements.
- 4. Reference is also made to the Communities and Local Government Cost Analysis for Code for Sustainable Homes, in respect of dwelling costs. For all future reports from October 2015 onwards the figures presented will be based upon the upcoming National Housing Standards that are estimated to come into force at this time. Early indications and analysis suggest that there will be little cost variance beyond an equivalent CoSH Code 4 as a result although we will continue to monitor the situation.

All construction costs have been adjusted for Location Factor (Broxtowe Borough Council, Nottingham City Council and Rushcliffe Borough, Nottinghamshire)

Note: the cost allowances are based on current building regulations.

## Assumptions/Clarifications

The following assumptions/clarifications have been made during the preparation of this Estimate:

- The costs included in this Estimate assume that competitive tenders will be obtained on a single stage competitive basis.
- There are no allowances in the Estimates for Works beyond the site boundary.
- All categories of development are assumed to be new build.
- It is assumed development takes place on green or brown field prepared sites, i.e. no allowance for demolition etc.
- All categories of development include an allowance for External Works inc drainage, internal
  access roads, utilities connections ( but excluding new sub-stations ), ancillary open space etc
- Site abnormal and facilitating works have been excluded and are shown separately.

### **Access Standards**

## Category 2

Costs in respect of meeting Category 2 Standards have been considered within the report.

Category 2 dwellings are in essence very similar to Lifetime Homes with a couple of minor enhancements such as step free access, a minimum stair width of 850mm and amendments to WC layouts to ensure no obstructed access.

The design solutions (And therefore cost) of meeting Category 2 standards will vary from site to site and will potentially range from relatively small on a good site with some innovative design to between 1% and 2% on a less favourable site which includes apartments. There is potentially a more significant impact on the cost of apartments due to the requirement for a lift but again this can be minimised through design, the accessible units may be allocated on the ground floor for example thus negating the need for a lift.

Some of the requirements impact on actual size of the dwelling, our costs are provided on a £/m² basis so any increase in dwelling size is automatically picked up within the rate.

For the purpose of the assessment we would recommend an uplift of 1% across the board (Except bungalows) on all residential costs be applied in order to meet Category 2 standards.

## Category 3 Adaptable

Costs in respect of meeting Category 3 Adaptable Standards have been considered within the report.

Category 3 dwellings are suitable or potentially suitable through adaptation, to be occupied by wheelchair users. Issues which need to be considered include wheelchair storage space, maximum inclines of ramps, provision of services for power assisted doors (Developments with communal entrances), room sizes, provision for a through floor lift including power, kitchen design, bedroom ceilings being capable of taking the load of a hoist, door entry system connected to main bedroom and lounge.

The design solutions (And cost) for meeting category 3 standards will also vary from site to site, some of the requirements will be dealt with by increasing the area of the dwellings, the cost of this will therefore be picked up in the GIFA used and will not affect the overall £/m².

There are some specific requirements that will directly impact on costs such as power for assisted doors, provision for through floor lifts, door entry systems, kitchen designs and ceiling loadings. For the purpose of this assessment we would recommend an uplift of 9% be applied in order to meet category 3 adaptable standards for houses, 6% for apartments and 2% for bungalows..

## **Exclusions**

The Order of Cost Study excludes any allowances for the following:

- Value Added Tax
- Finance Charges
- Unknown abnormal ground conditions including:
  - Ground stabilisation/retention
  - Dewatering
  - Obstructions
  - Contamination
  - Bombs, explosives and the like
  - Methane production
- Removal of asbestos
- Surveys and subsequent works required as a result including:
  - Asbestos; traffic impact assessment; existing buildings
  - Topographical; drainage/CCTV; archaeological
  - Subtronic
- Furniture, fittings and equipment
- Aftercare and maintenance
- Listed Building Consents
- Service diversions/upgrades generally
- · Highways works outside the boundary of the site

# **Detailed Construction Cost Study**

Development Type, to achieve Breeam	Construction Cost £/m²		
Excellent	Min	Max	Median
Residential, bungalows	1,221	1,419	1,286
Additional cost for Cat 2 accessible dwellings			-
Additional cost for Cat 3 wheelchair adaptable			26
Residential, 2-5 bed	1,062	1,234	1,118
Additional cost for Cat 2 accessible dwellings			11
Additional cost for Cat 3 wheelchair adaptable			101
Low Rise Apartments Code 4 Equivalent	1,494	2,350	1,640
Additional cost for Cat 2 accessible dwellings			16
Additional cost for Cat 3 wheelchair adaptable			98
Office to residential conversion	682	1,770	1,560
Care Homes	1,378	1,993	1,521
Extra Care (Sheltered Housing)	1,175	2,168	1,362
General Retail, shell finish	807	1,168	1,104
Food Retail supermarket, shell finish	939	1,548	1,257
Retail refurbishment	614	1,042	736
Food Retail refurbishment	714	1,408	842
Hotels, 2,000m <sup>2</sup> mid-range, 3* inc. F&Ftgs	1,652	2,111	1,716
Offices, Cat A fit-out	1,475	2,878	1,746*
Industrial, general shell finish	628	1,171	840
Institutional / Community D7 (museums, library, public halls, conference)	2,515	3,268	2,964
Leisure D5 (cinema, bowling alleys, shell)	1,122	1,264	1,192**
Agricultural shells	442	1,384	892
SUI Generis			
Vehicle Repairs	1,418	2,071	1,662
Vehicle Showrooms	1,573	2,324	1,734
Builders Yard	614	1,708	1,166

## Note:

- \* Offices, Cat A are based on speculative office development, of cost efficient design
- \*\* Leisure D5 development is based on shell buildings (bowling alleys, cinemas and the like) and exclude tenant fit-out

## **On-costs**

Professional fees - Consultants (excluding legals) - Surveys etc Planning / Building Regs	7.25% <u>0.75%</u>	8%
Statutory Fees		0.6%
NHBC / Premier warranty (applies only to Residential		
and Other Residential)		0.5%
Contingency / Risk Allowance		5%

ushcliffe Borough Area.	Budget Cos
bnormal Costs, by their very nature, vary greatly between different sites.	£/Hectare
sudget figures are given, for typical categories relevant to the study area.	
he Budgets are expressed as costs per hectare of development site.	
rchaeology	11,000
ypically, Archaeology is addressed by a recording / monitoring brief by a pecialist, to satisfy planning conditions.	
ntrusive archaeological investigations are exceptional and not allowed for in the udget cost.	
ite Specific Access Works	22,000
lew road junction and S278 works; allowance for cycle path linking locally with existing	)
lajor off-site highway works not allowed for.	
ite Specific Biodiversity Mitigation / Ecology	
llow for LVIA and Ecology surveys and mitigation and enhancement allowance.	22,000
lood Defence Works	
llowance for raising floor levels above flood level, on relevant sites	28,000
sudget £2,000 per unit x 35 units, apply to 1 in 3 sites.	
Itilities, Gas, Electric	
Illowance for infrastructure upgrade	90,000
and Contamination	
leavily contaminated land is not considered, as remediation costs will be reflected the land sales values	28,000
llow for remediation/removal from site of isolated areas of spoil with elevated levels of contamination	

## **Ground Stability**

Allow for raft foundations to dwellings on 25% of sites

Budget £2,200 x 35 units x 25% 20,000