

# HERTFORDSHIRE SECONDARY SCHOOL Secondary School Site Search Abnormals Budget Estimate Feb '12



## DOCUMENT ISSUE SHEET

Issue Nr.	Document	File Path	Issue Date	Parties Sent To	Prepared By	Checked By	Reviewed By
1.0	Abnormal Cost Review of Proposed Sites	C:\Documents and Settings\mc2184\Desktop\[Hertfordshire Secondary School Abnormal Costs REV A.xlsx]Project Details	29/02/2012	HERTFORD SHIRE SECONDARY SCHOOL	MC	JOS	FN

Authorised by Director:	Frank Nicholson
Date:	29 February 2012

# CONTENTS

	Page
1.0   Executive Summary.....	5
2.0   Basis, Assumptions and Exclusions.....	7
Appendix A   Summary of Sites.....	
Appendix B   Benchmark Base Scheme.....	
Appendix C   Site S(a) - Land east of A405 / north of A412.....	
Appendix D   Site S(b) - Froghall Farm and adjoining land, Maple Cross.....	
Appendix E   Site S(d) - Land nort-east of Baldwins Lane, Croxley Green.....	

# Section 1

# Executive Summary

## EXECUTIVE SUMMARY

- 1.1 This Abnormal Cost Review of Proposed Sites has been prepared to provide an 'Initial Budget Estimate' in relation to the current geotechnical and geo-environmental considerations. The Budget Estimate is based upon the design information listed in Section 2.
- 1.2 The Abnormal Cost Review of Proposed Sites as at 1Q 2012 price levels is summarised below into the costs associated with the substructures, the external works and associated Contractor mark ups.
- 1.3 Inflation to commencement on-site and during construction is excluded.

Description by Building	Base Scheme	Site A	Site B	Site D
<b>Building Costs</b>				
Substructure	£422,000	£1,038,000	£1,071,000	£1,141,000
External Works	£52,000	£52,000	£4,280,000	£1,473,000
<b>TOTAL BULIDING COST AT 1Q 2012 PRICES</b>	<b>£474,000</b>	<b>£1,090,000</b>	<b>£5,351,000</b>	<b>£2,614,000</b>
Main Contractor Preliminaries @ 12%	£57,000	£131,000	£642,000	£314,000
Main Contractor Overheads & Profit @ 3%	£16,000	£37,000	£180,000	£88,000
Contingency @ 10%	£55,000	£126,000	£617,000	£302,000
<b>TOTAL CONTRACTOR COSTS AND CONTINGENC</b>	<b>£128,000</b>	<b>£294,000</b>	<b>£1,439,000</b>	<b>£704,000</b>
<b>TOTAL CONSTRUCTION COST AT 1Q 2012 PRICE</b>	<b>£600,000</b>	<b>£1,380,000</b>	<b>£6,790,000</b>	<b>£3,320,000</b>

Table 1. Overview of benchmark sites

- 1.4 The above costs need to be read in conjunction with the basis, assumptions and exclusions in Section 2. Particular attention should be given to the exclusions to ensure they are included elsewhere in the overall appraisal of the scheme if the client deems them necessary.
- 1.5 This Initial Budget Estimate and any quantities contained within, has been prepared solely for the use of Hertfordshire County Council and should not be relied upon by any third party.

# Section 2

## Basis, Assumptions and Exclusions

## BASIS, ASSUMPTIONS AND EXCLUSIONS

- 2.0.0** The Abnormal Cost Estimates have been prepared on the following information:
- Vincent and Gorbing development principles plans 4806/112A, 4806/222B and 4806/293
- Aecom Reports - SiteA/60246806/GIR, SiteB/60246806/GIR, SiteC/60246806/GIR
- 2.0.1** We have made the following assumptions in preparing the Initial Budget Estimate These will need verification as the design information becomes available:
- 2.0.2** The Secondary School used in the benchmark base scheme has a gross internal area of 7,857m<sup>2</sup> and a building footprint of 4,140m<sup>2</sup>
- 2.0.3** The Secondary School base scheme comprises of 5,872m<sup>2</sup> of two storey accommodation, 1,293 m<sup>2</sup> of three storey accommodation and 836m<sup>2</sup> of double height sports hall facilities.
- 2.0.4** In terms of ground floor slab all three options have a suspended slab in lieu of the ground bearing slab in the base scheme
- 2.0.5** In terms of foundations all three options are based on piled foundations in lieu of strip footings in the base scheme
- 2.0.6** Gas membrane, sealed joints and passive venting have been included within the costs for Site B as a result of it's proximity to a landfill site
- 2.0.7** The costs for the playing fields in the base scheme and Site A have included for vegetation removal, cultivation of existing topsoil and grass seeding.
- 2.0.8** The costs for the playing fields in Field A of Site B is based on levelling the existing surface (assumed average excavation depth of 1m) and both Field A and B have included for a subsoil capping layer 1m in depth.
- 2.0.9** We have allowed for demolition and disposal of the existing sewerage facility which is located on Site B. We have assessed this to be circa 15,000m<sup>2</sup> in footprint with 3m high walls to perimeter
- 2.0.10** We have assumed the existing land in the NW Corner and NE Corner of Site D is sloping at 25<sup>0</sup>; we have assessed the area of the sloping site to be 33,750m<sup>2</sup>
- 2.0.11** The cut & fill quantities associated with the terracing works amount to circa 275,000 m<sup>3</sup>

## BASIS, ASSUMPTIONS AND EXCLUSIONS

### Exclusions

- 2.1.0** The following items are excluded from the Abnormal Cost Estimates, but are known to have a cost impact and therefore need to be covered by other budgets within the overall Project Cost Appraisal. The list is intended as a guide only and cannot be relied upon to be exhaustive:
- 2.1.1 Construction cost other than those identified as an abnormal as a result of the geotechnical and geo-environmental
  - 2.1.2 Professional design fees
  - 2.1.3 Legal fees; planning/building control fees; statutory fees; third party fees/costs
  - 2.1.4 Client finance costs and insurances
  - 2.1.5 Project insurances
  - 2.1.6 Value Added Tax (VAT)
  - 2.1.7 Site B excludes for any work associated with the landfill site and commercial unit which is within the boundary of the site but outside of the school masterplan.
- 2.3.0** The following are excluded, but may result in additional cost and should therefore be covered by a Project Contingency/Risk Allowance held by the Client:
- 2.3.1 Services diversions and upgrades
  - 2.3.2 Out of hours working
  - 2.3.3 Phasing costs
  - 2.3.4 Effects of working condition restrictions, such as Section 61 or Environmental Management Plans
  - 2.3.5 Inflation beyond 1Q 2012



# Appendix A

# Summary of Sites

## ELEMENTAL BACK-UP | SUMMARY OF SITES

**Benchmark Base Scheme**

Building Elements	Total
<b>Substructure</b>	
1 Substructure	422,280
<b>Sub Total   Substructure:</b>	<b>422,280</b>
<b>External Works</b>	
2 External Works	51,700
<b>Sub Total   External Works:</b>	<b>51,700</b>
<b>SUB TOTAL   Excl Prelims, OH&amp;P, Contingency</b>	
	<b>473,980</b>
<b>Preliminaries, OH&amp;P, Risk and Contingency Allowances</b>	
Preliminaries @ 12.0%	57,000
Main Contractor OH&P @ 3.0%	16,000
Contingency @ 10.0%	55,000
<b>Sub Total   Preliminaries, OH&amp;P, Risk and Contingency Allowances:</b>	<b>128,000</b>
<b>TOTAL   Incl Prelims, OH&amp;P, Contingency</b>	
	<b>601,980</b>
	<b>SAY: 600,000</b>

**Site S(a) - Land east of A405 / north of A412**

Building Elements	Total
<b>Substructure</b>	
1 Substructure	1,037,580
<b>Sub Total   Substructure:</b>	<b>1,037,580</b>
<b>External Works</b>	
2 External Works	51,700
<b>Sub Total   External Works:</b>	<b>51,700</b>
<b>SUB TOTAL   Excl Prelims, OH&amp;P, Contingency</b>	
	<b>1,089,280</b>
<b>Preliminaries, OH&amp;P, Risk and Contingency Allowances</b>	
Preliminaries @ 12.0%	131,000
Main Contractor OH&P @ 3.0%	37,000
Contingency @ 10.0%	126,000
<b>Sub Total   Preliminaries, OH&amp;P, Risk and Contingency Allowances:</b>	<b>294,000</b>
<b>TOTAL   Incl Prelims, OH&amp;P, Contingency</b>	
	<b>1,383,280</b>
	<b>SAY: 1,380,000</b>

## ELEMENTAL BACK-UP | SUMMARY OF SITES

## Site S(b) - Froghall Farm and adjoining land, Maple Cross

Building Elements	Total
<b>Substructure</b>	
1 Substructure	1,070,700
<b>Sub Total   Substructure:</b>	<b>1,070,700</b>
<b>External Works</b>	
2 External Works	4,279,868
	<b>4,279,868</b>
<b>SUB TOTAL   Excl Prelims, OH&amp;P, Contingency</b>	
	<b>5,350,568</b>
<b>Preliminaries, OH&amp;P, Risk and Contingency Allowances</b>	
Preliminaries @ 12.0%	642,000
Main Contractor OH&P @ 3.0%	180,000
Contingency @ 10.0%	617,000
<b>Sub Total   Preliminaries, OH&amp;P, Risk and Contingency Allowances:</b>	<b>1,439,000</b>
<b>TOTAL   Incl Prelims, OH&amp;P, Contingency</b>	
	<b>6,789,568</b>
	<b>SAY: 6,790,000</b>

## Site S(d) - Land north-east of Baldwins Lane, Croxley Green

Building Elements	Total
<b>Substructure</b>	
1 Substructure	1,141,080
<b>Sub Total   Substructure:</b>	<b>1,141,080</b>
<b>External Works</b>	
2 External Works	1,473,100
	<b>1,473,100</b>
<b>SUB TOTAL   Excl Prelims, OH&amp;P, Contingency</b>	
	<b>2,614,180</b>
<b>Preliminaries, OH&amp;P, Risk and Contingency Allowances</b>	
Preliminaries @ 12.0%	314,000
Main Contractor OH&P @ 3.0%	88,000
Contingency @ 10.0%	302,000
<b>Sub Total   Preliminaries, OH&amp;P, Risk and Contingency Allowances:</b>	<b>704,000</b>
<b>TOTAL   Incl Prelims, OH&amp;P, Contingency</b>	
	<b>3,318,180</b>
	<b>SAY: 3,320,000</b>

# Appendix B

# Benchmark Base Scheme

## ELEMENTAL BACK-UP | BENCHMARK BASE SCHEME

1 Substructure	Qty	Unit	Rate	Total
1.01 <b>Excavation and Disposal</b>				
1.02 Excavation & disposal	4,140	m2	13	53,820
1.03 <b>Foundations</b>				
1.04 Strip foundations	4,140	m	29	120,060
1.05 Ground bearing concrete slab	4,140	m3	60	248,400
Sub Total   1 Substructure:				422,280

2 External Works	Qty	Unit	Rate	Total
2.01 <b>Soft Landscaping</b>				
2.02 Removal of vegetation and vegetable soil and dispose off site	110,000	m2	0.18	19,800
2.03 Cultivating existing topsoil	110,000	m2	0.16	17,600
2.04 Grass seeding	110,000	m2	0.13	14,300
Sub Total   2 External Works:				51,700

**SUB TOTAL | Excl Prelims, OH&P, Contingency** **473,980**

Preliminaries	Qty	Unit	Rate	Total
17.00 Main Contractor Preliminaries @	12.0%			57,000
Sub Total   Preliminaries:				57,000

Main Contractor OH&P	Qty	Unit	Rate	Total
18.00 Main Contractor OH&P @	3.0%			16,000
Sub Total   Main Contractor OH&P:				16,000

Contingency	Qty	Unit	Rate	Total
19.00 Contingency @	10.0%			55,000
Sub Total   Contingency:				55,000

**TOTAL | Incl Prelims, OH&P, Contingency** **601,980**

**SAY: 600,000**

# Appendix C

## Site S(a) - Land east of A405 / north of A412

## ELEMENTAL BACK-UP | SITE S(A) - LAND EAST OF A405 / NORTH OF A412

1 Substructure	Qty	Unit	Rate	Total
1.01 <b>Suspended Slab</b>				
1.02 Suspended Slab	4,140	m2	87	360,180
1.03 <b>Foundations</b>				
1.04 Piled Foundations; 6m deep	4,140	m2	160	662,400
1.05 Allowance for soft spots	1	item	15,000	15,000

Sub Total | 1 Substructure: 1,037,580

2 External Works	Qty	Unit	Rate	Total
2.01 <b>Soft Landscaping</b>				
2.02 Removal of vegetation and vegetable soil and dispose off site	110,000	m2	0.18	19,800
2.03 Cultivating existing topsoil	110,000	m2	0.16	17,600
2.04 Grass seeding	110,000	m2	0.13	14,300

Sub Total | 2 External Works: 51,700

**SUB TOTAL | Excl Prelims, OH&P, Contingency** **1,089,280**

Preliminaries	Qty	Unit	Rate	Total
17.00 Main Contractor Preliminaries @	12.0%			131,000

Sub Total | Preliminaries: 131,000

Main Contractor OH&P	Qty	Unit	Rate	Total
18.00 Main Contractor OH&P @	3.0%			37,000

Sub Total | Main Contractor OH&P: 37,000

Contingency	Qty	Unit	Rate	Total
19.00 Contingency @	10.0%			126,000

Sub Total | Contingency: 126,000

**TOTAL | Incl Prelims, OH&P, Contingency** **1,383,280**

**SAY: 1,380,000**

# Appendix D

## Site S(b) - Froghall Farm and adjoining land, Maple Cross



## ELEMENTAL BACK-UP | SITE S(B) - FROGHALL FARM AND ADJOINING LAND, MAPLE CROSS

1 Substructure	Qty	Unit	Rate	Total
1.01 <b>Suspended Slab</b>				
1.02 Suspended Slab	4,140	m2	87	360,180
1.03 <b>Foundations</b>				
1.04 Piled Foundations; 6m deep	4,140	m2	160	662,400
1.05 Gas membrane, sealed joints & passive venting	4,140	item	8	33,120
1.06 Allowance for soft spots	1	item	15,000	15,000

Sub Total | 1 Substructure: 1,070,700

2 External Works	Qty	Unit	Rate	Total
2.01 <b>Soft Landscaping</b>				
2.02 Removal of vegetation and vegetable soil and dispose off site	110,800	m2	0.18	19,944
2.03 Imported topsoil (Field A&B)	22,160	m3	22	487,520
2.04 Grass seeding	110,800	m2	0.13	14,404
2.05 <b>Contamination</b>				
2.06 Reduce level dig, spread and level site; average depth 1m (Field A)	88,900	m2	4	355,600
2.07 Imported subsoil capping layer; average 1m depth	110,800	m2	28	3,102,400
2.08 <b>Demolition</b>				
2.09 Demolition of existing sewerage structure (15,000 m2)	15,000	m2	20	300,000

Sub Total | 2 External Works: 4,279,868

**SUB TOTAL | Excl Prelims, OH&P, Contingency** **5,350,568**

Preliminaries	Qty	Unit	Rate	Total
17.00 Main Contractor Preliminaries @	12.0%			642,000

Sub Total | Preliminaries: 642,000

Main Contractor OH&P	Qty	Unit	Rate	Total
18.00 Main Contractor OH&P @	3.0%			180,000

Sub Total | Main Contractor OH&P: 180,000

Contingency	Qty	Unit	Rate	Total
19.00 Contingency @	10.0%			617,000

Sub Total | Contingency: 617,000

**TOTAL | Incl Prelims, OH&P, Contingency** **6,789,568**

**SAY: 6,790,000**

# Appendix E

## Site S(d) - Land north-east of Baldwins Lane, Croxley Green

## ELEMENTAL BACK-UP | SITE S(D) - LAND NORT-EAST OF BALDWINS LANE, CROXLEY GREEN

1 Substructure	Qty	Unit	Rate	Total
1.01 <b>Suspended Slab</b>				
1.02 Suspended Slab	4,140	m2	87	360,180
1.03 <b>Foundations</b>				
1.04 Piled Foundations; 6-7m deep	4,140	m2	185	765,900
1.05 Allowance for soft spots	1	item	15,000	15,000

Sub Total | 1 Substructure: 1,141,080

2 External Works	Qty	Unit	Rate	Total
2.01 <b>Soft Landscaping</b>				
2.02 Removal of vegetation and vegetable soil and dispose off site	82,000	m2	0.18	14,760
2.03 Removal of existing vegetation (Option A)	25,000	m2	1	25,000
2.04 Topsoil strip, stockpile and reinstate	5,063	m3	5	25,315
2.05 Grass seeding	82,000	m2	0.13	10,660
2.06 <b>Terracing</b>				
2.07 Cut & fill to NW Corner; assumed existing 25 <sup>0</sup> slope	181,875	m3	5	909,375
2.08 Cut & fill to NE Corner; assumed existing 25 <sup>0</sup> slope	90,938	m3	5	454,690
2.09 Stabilisation works to new embankments	8,325	m2	4	33,300

Sub Total | 2 External Works: 1,473,100

**SUB TOTAL | Excl Prelims, OH&P, Contingency** **2,614,180**

Preliminaries	Qty	Unit	Rate	Total
17.00 Main Contractor Preliminaries @	12.0%			314,000

Sub Total | Preliminaries: 314,000

Main Contractor OH&P	Qty	Unit	Rate	Total
18.00 Main Contractor OH&P @	3.0%			88,000

Sub Total | Main Contractor OH&P: 88,000

Contingency	Qty	Unit	Rate	Total
19.00 Contingency @	10.0%			302,000

Sub Total | Contingency: 302,000

**TOTAL | Incl Prelims, OH&P, Contingency** **3,318,180**

**SAY: 3,320,000**

Submitted by:

Mark Claridge  
Senior Associate

Address details  
3rd Floor Portwall Place  
Portwall Lane  
Bristol  
BS1 6NA

Tel: +44 (0) 117 927 7832

Fax: +44(0) 870 048 1497

