


**Land at Warburton Lane, Trafford**  
**Appeal by Redrow Homes Limited**  
**LPA Ref: 98031/OUT/19**  
**Statement of Common Ground**  
**G A Bushell of Expertqs Limited**  
**September 2020**



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**Appendices**

**Appendix 1 – Scott Schedule of development construction costs based at 4Q2019.**

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# 1. Introduction

- 1.1. This is a Statement of Common Ground (SoCG) prepared by Gary Anthony Bushell FRICS, MAE, QDR, APAEWE of Expertqs Limited, expert witness acting on behalf of Redrow Homes Limited (herein referred to as 'the Appellant').
- 1.2. It has been prepared in respect of an appeal against the Council's non-determination of an application (Ref: 98031/OUT/19) for residential development of land at Warburton Lane, Trafford ('the Site').
- 1.3. I have appended my Scott Schedule (**Appendix 1**) relating to the development construction costs based at 4Q2019 extracted from my report dated 20 February 2020.
- 1.4. Matters which are agreed are set out in **Section 2** of this Statement. Matters which have not been agreed are outlined in **Section 3**.

## 2. Agreed Construction Cost Matters

2.1. Matters agreed are:

### **Standard and abnormal extra over construction costs**

2.2. There is agreement about the percentage additions for the cost of preliminaries on abnormal development costs and the percentage additions for contingency and professional fees on standard and abnormal development costs. These agreements are set out below.

2.2.1. The addition for contingency on standard build costs is 3%

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2.2.2. The addition for professional fees on standard build costs is 5%.

2.2.3. The addition for the cost of preliminaries on abnormal works is 5%.

2.2.4. The addition for contingency on abnormal build costs is 5%.

2.2.5. The addition of professional fees on abnormal build costs is 6%.

### 3. Matters in Dispute

#### 3.1. Matters not agreed are:

##### **Standard construction costs**

The standard base-build cost per square foot for the dwellings, including the cost of the preliminaries

3.1.1. According to Mr Bushell's report, the base-build cost for estate housing generally based at 4Q2019 was £76.57 per ft<sup>2</sup>.

3.1.2. Since writing his report, it has come to Mr Bushell's notice that when calculating the base-build cost, he inadvertently used the BCIS average price for the UK as opposed to the Trafford location. This error is corrected in Mr Bushell's proof of evidence.

The standard build cost of the main estate infrastructure and plot related external works.

3.1.3. According to Mr Bushell's report, the standard cost for infrastructure and plot external works for the Site, based at 4Q2019, was £18,000 per plot or £16.20 per ft<sup>2</sup>.

The cost of standard plot service connections.

3.1.4. According to Mr Bushell, the additional cost of plot service connections for the Site, based at 4Q2019, was £2,750 per plot or £2.47 per ft<sup>2</sup>.

The additional cost of garages.

3.1.5. According to Mr Bushell, the additional cost of garages for the Site, based at 4Q2019, was £3,026,250 or £6.81 per ft<sup>2</sup>.

The allowance for contingency relating to standard works.

3.1.6. Mr Bushell has added the agreed contingency of 3% to the standard construction costs.

The allowance for professional fees relating to standard works.

3.1.7. To cover the cost of professional fees, Mr Bushell has added the agreed 5% to the standard construction costs and the contingency sum.

## Abnormal and extra over construction costs

### The abnormal and extra over costs relating to site specific works

3.1.8. According to Mr Bushell's February 2020 report, the total cost of the abnormal works for the Site, based at 4Q2019, was £15,638,030 (excluding preliminary costs, contingency and professional fees). The abnormal works comprised the following headings:

a.	Enabling works	£2,705,187
b.	SW drainage	£1,293,425
c.	FW drainage	£425,500
d.	Off-site rising mains	£1,288,000
e.	Roads & footpaths	£1,723,682
f.	Landscaping, paths, play areas	£2,138,135
g.	S278 highway works	£701,174
h.	Abnormal foundations & retaining walls	£2,211,167
i.	Miscellaneous abnormal costs	£1,930,236
j.	Abnormal utility costs	£1,221,524

### The cost of additional preliminaries relating to the abnormal costs.

3.1.9. Mr Bushell has added the agreed 5% to the abnormal construction costs for the costs of extended and additional preliminaries related to the abnormal works.

### The allowance for contingency relating to abnormal works.

3.1.10. Mr Bushell has added the agreed contingency of 5% to the abnormal and extra over costs and the cost of preliminaries.

### The allowance for professional fees relating to abnormal works.

3.1.11. To cover professional fees, Mr Bushell has added the agreed 6% to the abnormal and extra over costs and the contingency sum.

## Additional costs since February 2020 report

3.2. Apart from the standard and abnormal development costs in Mr Bushell's February 2020 report, in his draft SoCG, there some additional costs to be considered, relating to the effects of Covid-19, the effects of the proposed enhanced Building Regulations, the improvement works to the Flixton crossroads, and the indexation of the costs in Mr Bushell's February 2020 report to the date of the appeal which is 4Q2020.

3.3. Mr Bushell mentioned these additional cost items during his meeting with Ms Sandford and she told him that she was not instructed to consider any additional costs. Ms Sandford later deleted all references to them in her alternative SoCG. These additional cost items are dealt with below.

### **Effects of Covid-19 on construction costs**

3.3.1. Since the submission of the outline planning application viability appraisal, the effects of the Covid-19 pandemic have adversely affected construction costs and build periods.

According to the BCIS, the lockdown has had three potential effects:

- i. Productivity: changes in productivity resulting from the implementation of site operating procedures (SOP).
- ii. Preliminaries: lengthening due to extended contract period and thickening due to increased cost of supervision for SOP, increased welfare and cleaning, social distancing, additional PPE, etc.
- iii. Market conditions: reduced demand, reduced availability of resources, and increased overheads.

3.3.2. Mr Bushell is of the opinion that the additional costs of mitigating the effects of the Covid-19 pandemic in 2020 should be added to the construction costs in his report.

### **Effects of proposed Building Regulation changes on Construction Costs**

3.3.3. Since the submission of the outline planning application viability appraisal, there is the prospect of the introduction of some changes to the Building Regulations. The proposed changes cover the wider impacts of Part L for new homes, including changes to Part F. It is possible that some changes will come into effect in 2020.

3.3.4. Mr Bushell is of the opinion that the additional costs of any changes to the Building Regulations that come into effect in 2020 should be added to the construction costs in his report.

### **Improvements to Flixton crossroads**

3.3.5. At the time of Mr Bushell's February 2020 report, this work was originally part of a S106 contribution of £1.5m for highway improvements. The Council has since asked the Appellant for a £1.215m contribution to transport. I am told by the Appellant that the improvements to the Flixton crossroads will be carried out by the developer and will be

dealt with by a 'Grampian' condition in accordance with drawing SCP/16544/SK13C.

3.3.6. Mr Bushell is of the opinion that the additional cost of the highway improvements to the Flixton crossroads should be added to the abnormal costs.

### **Indexation of costs from 4Q2019 to 4Q2020**

3.3.7. The standard and abnormal costs in Mr Bushell's report were based at 4Q2019. The enquiry hearing falls in the period 4Q2020. All construction costs should be rebased accordingly.

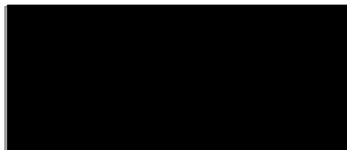
## 4. Statement of Truth

4.1. This SoCG has been prepared by **G A Bushell**,

*I the undersigned expert individually understand my overriding duties to the Planning Inquiry, have complied with them and will continue so to do.*

*I further confirm that I have neither jointly nor individually been instructed to, nor has it been suggested that I should, avoid or otherwise defer from reaching agreement on any matter within my competence.*

Signed:

A solid black rectangular box redacting the signature of Gary Anthony Bushell.

Date: 11 September 2020

**Gary Anthony Bushell FRICS, MAE, QDR, APAEWE of Expertqs Limited (on behalf of the Appellant)**



**APPENDIX 1**

**Scott Schedule of development construction costs based at 4Q2019.**

**Warburton Lane, Partington, Trafford - SOCG Scott Schedule - WITHOUT PREJUDICE**  
**Abnormal Cost Summary from Expertqs report dated 20 February 2020 based at December 2019 (4Q2019)**

Ref	Cost Element Description	G Bushell Cost £	K Sandford Cost £	K Sandford Comments
	400 Units, total sales floor area = 444,550 ft2 Development Area = 13.66 ha			
	<b>Abnormal Works</b>			
A1	Enabling works	2,705,187		
A2a	Drainage (surface water)	1,293,425		
A2b	Drainage (foul water)	425,500		
A3	Off-site rising mains	1,288,000		
A4	Road and footpath construction	1,723,682		
A5	Landscaping, cycleways, footpaths, and play areas	2,138,135		
A6	S278 Warburton Lane access into eastern and western parcels, including Pelic	701,174		
A7	Abnormal foundations & retaining walls	2,211,167		
A8	Miscellaneous abnormal costs, including footpath connections	1,930,236		
A9	Abnormal utilities costs (excluding plot connection charges)	1,221,524		
	<b>Sub Total : Abnormal Works</b>	<b>15,638,030</b>	<b>0</b>	
	Preliminary Costs on Abnormal Works			
A10	Preliminary Costs 5%	781,901		
	<b>Sub Total including Preliminary Costs</b>	<b>16,419,931</b>	<b>0</b>	
	Contingency on Abnormal Works and Prelim costs			
A11	Contingency 5%	820,997		
	<b>Sub Total including Contingency</b>	<b>17,240,928</b>	<b>0</b>	
	Professional Fees on Abnormal Works, Prelims, and Contingency			
A12	Professional Fees 6%	1,034,456		
	<b>Sub Total including Professional Fees</b>	<b>18,275,383</b>	<b>0</b>	
<b>INDUSTRY WIDE STANDARD ALL-IN BUILD COSTS</b>				
S1	Estate Housing Generally BCIS Lower Quartile Average Price 4Q19 including standard foundations and prelims. Currently based on UK location.	1,088.00		
	<b>BCIS average price per ft2</b>	<b>101.08</b>		
S2	Discount for main contractors' profit and overheads embedded in BCIS - 10%	-9.19		
		91.89		
S3	Discount for size and scope of project and national housebuilder efficiencies - 20%	-15.31		
	<b>Discounted BCIS average price per ft2</b>	<b>76.57</b>		
S4	Standard roads and sewers and plot related site works (£18,000 per plot)	16.20		
S5	Standard plot service connections (£2,750 per plot)	2.47		
	Additional cost of garages excluded from sales areas			
S6	Single detached (based on 67% of plots = 269 no.)	6.81		
	<b>All-in standard build cost per ft2</b>	<b>102.05</b>	<b>0.00</b>	
S7	Contingency 3%	3.06		
		105.11	0.00	
S8	Professional Fees 5%	5.26		
		110.37	0.00	

COST ESTIMATE DETAILS						Supporting documents	K Sandford Abnormal Cost £	K Sandford comments
A1 : Enabling Works								
Item	Description	Qty	Unit	Rate £	Abnormal Cost £			
<b>1</b>	<b>Enabling Works</b>							
a	Strip vegetation & debris strip of open space area (11.31 hectares)	113,100	m2	£0.50	£56,550.00	POS area from parameters plan A16942.010 ( <b>Appendix 2</b> )		
b	Strip excess topsoil depth (391mm less standard 150mm ( <b>topsoil depths from schedule in Appendix 17</b> ) to development area (13.66 hectares)	32,921	m3	£4.00	£131,682.40	Development area from parameters plan ( <b>Appendix 2</b> ). Quantity is 136,600 m2 x 0.391, less 136,600 m2 x 0.150.		
c	Remove surplus topsoil from development areas (some re-used on gardens (13.66 ha x 25% x 150 mm deep)	48,288	m3	£25.00	£1,207,202.50	Development area from parameters plan ( <b>Appendix 2</b> ). Quantity is 136,600m2 x 0.391, less 136,600 m2 x 0.25 x 0.150.		
d	Excavate and remove surplus subsoil from development areas (east site 6.00 ha x 0.30 m ave cut plus west site 7.66 ha x 0.30 m deep)	40,980	m3	£25.00	£1,024,500.00	Development area from parameters plan ( <b>Appendix 2</b> ). Quantity is 136,600 m2 x 0.30 m assumed depth.		
e	Allowance for tree root protection	15,021	m2	£12.00	£180,252.00	Quantity measured from parameters plan ( <b>Appendix 2</b> ) and shown on TBA Tree Survey Report dated February 2018		
f	Extra over cost of removing bedrock by mechanical means in deep excavations, including removal from site	1400	m3	£75.00	£105,000.00	Betts Geo Desk Study Report dated March 2018 and Ground Investigation Report dated November 2018.		
	<b>Carried to Summary</b>				<b>£2,705,186.90</b>		<b>£0.00</b>	

COST ESTIMATE DETAILS A2a : Drainage (Surface Water)						Supporting documents	K Sandford Abnormal Cost £	K Sandford Comments
Item	Description	Qty	Unit	Rate £	Abnormal Cost £			
2A	<u>Surface Water Drainage</u>					Betts Hydro FRA and Drainage Management Strategy dated December 2019		
	<u>Surface Water Attenuation</u>							
a	Allowance for proposed attenuation basins/ponds average 1.0m deep east site - 4,005 m2	4,005	m3	£60.00	£240,300.00	Quantity measured from parameters plan (Appendix 2) Betts Hydro FRA and Drainage Management Strategy dated December 2019 Appendix O drawing 111A (Appendix 18)		
b	Allowance for proposed attenuation basins/ponds average 1.0m deep west site - 3,849m2	3,849	m3	£60.00	£230,940.00	Quantity measured from parameters plan (Appendix 2). Betts Hydro FRA and Drainage Management Strategy dated December 2019 Appendix O drawing 111A (Appendix 18)		
c	Allowance for attenuation storage tanks or oversized pipes east site	179	m3	£355.00	£63,545.00	Q quantities taken from Betts Hydro FRA Page 32, Table 5 (464m3 + 1135m3 + 2585m3, less ponds 4005m3).		
d	Allowance for attenuation storage tanks or oversized pipes west site	1,498	m3	£355.00	£531,790.00	Quantities taken from Betts Hydro FRA Page 32, Table 5 (593m3 + 1451m3 + 3303m3, less ponds 3849m3).		
e	Allowance for flow control chambers and hydrobrakes to ponds	5	nr	£13,000.00	£65,000.00	Quantity taken from Betts Hydro FRA Appendix M preliminary drainage plan HYD304		
f	Allowance for headwalls to pond inlets	8	nr	£5,000.00	£40,000.00	Quantity taken from Betts Hydro FRA Appendix M preliminary drainage plan HYD304		
g	Allowance for surface water outlet structures from ponds into Red Brook	5	nr	£5,000.00	£25,000.00	Quantity from Betts Hydro preliminary drainage plan HYD304. Betts Hydro FRA and Drainage Management Strategy December 2019 Appendix O drawing 111A (Appendix 18)		
	<u>Sundry Items</u>							
h	CCTV and jetting of abnormal attenuation drainage	1	Item	£10,000.00	£10,000.00	Estimate		
j	Allowance for 300 mm diameter pipework connections into Red Brook	170	nr	£180.00	£30,600.00	Quantity measured from Betts Hydro FRA Appendix M preliminary drainage plan HYD304		
k	Allowance for outfall headwalls to Red Brook	5	nr	£5,000.00	£25,000.00	Quantity taken from Betts Hydro FRA Appendix M preliminary drainage plan HYD304		
l	Allowance for protection/knee high fencing to ponds	5	nr	£1,000.00	£5,000.00	Quantity taken from Betts Hydro FRA Appendix M preliminary drainage plan HYD304		
m	Allowance for signage, life rings, etc to ponds	5	nr	£1,250.00	£6,250.00	Quantity taken from Betts Hydro FRA Appendix M preliminary drainage plan HYD304		
n	Allowance for SW pipe to cross the existing gas pipeline and easement area west site	2	nr	£10,000.00	£20,000.00	Quantity taken from Betts Hydro FRA Appendix M preliminary drainage plan HYD304		
	Carried to Summary				£1,293,425.00		£0.00	

COST ESTIMATE DETAILS A2b : Drainage (Foul Water)						Supporting documents	K Sandford Abnormal Cost £	K Sandford Comments
Item	Description	Qty	Unit	Rate £	Abnormal Cost £			
<b>2B</b>	<b><u>Foul Water Drainage</u></b>					Betts Hydro FRA and Drainage Management Strategy dated December 2019		
	<b><u>Pumping Station</u></b>							
a	Allowance for FW pumping stations to east and west sites	2	nr	£150,000.00	£300,000.00	Estimate		
b	Allowance for on-site rising main to east site	500	m	£110.00	£55,000.00	Quantity estimated from Illustrative Masterplan 013B ( <b>Appendix 16</b> )		
c	Allowance for on-site rising main to west site	550	m	£110.00	£60,500.00	Quantity estimated from Illustrative Masterplan 013B ( <b>Appendix 16</b> )		
	<b><u>Sundry Items</u></b>							
d	CCTV, jetting and testing of abnormal pumping stations and rising mains	1	item	£10,000.00	£10,000.00	Estimate		
	Carried to Summary				<b>£425,500.00</b>		<b>£0.00</b>	

COST ESTIMATE DETAILS A3 : Off Site Rising Mains						Supporting documents	K Sandford Abnormal Cost £	K Sandford Comments
Item	Description	Qty	Unit	Rate £	Abnormal Cost £			
<b>3</b>	<b>Off Site Rising Mains</b>							
a	Allowance for off site rising main at 1.2m deep through existing Warburton Ln/Oak Road to UU sewage works. Includes allowance for traffic management - east site	970	m	£600.00	£582,000.00	Quantity taken from marked up OS plan ( <b>Appendix 19</b> ).		
b	Allowance for off site rising main at 1.2m deep through existing Warburton Ln/Oak Road to UU sewage works. Includes allowance for traffic management - west site	1,060	m	£600.00	£636,000.00	Quantity taken from marked up OS plan ( <b>Appendix 19</b> ).		
c	Allowance for connections to existing UU sewage works	2	item	£25,000.00	£50,000.00	Estimate		
d	Legal costs for each connection	2	item	£10,000.00	£20,000.00	Estimate		
	<b>Carried to Summary</b>				<b>£1,288,000.00</b>		<b>£0.00</b>	

**COST ESTIMATE DETAILS**  
**A4 : Road and Footpath Construction**

COST ESTIMATE DETAILS A4 : Road and Footpath Construction						Supporting documents		K Sandford Comments
Item	Description	Qty	Unit	Rate £	Abnormal Cost £		K Sandford Abnormal Cost £	
<b>4</b>	<b><u>Road and Footpath Construction</u></b>							
	<b><u>Spine Roads (6.75m carriageway)</u></b>	<b>1,679</b>	<b>m</b>			Quantity measured from Illustrative Masterplan ( <b>Appendix 16</b> )		
a	Capping; 300mm thick, including excavation and remove off site	3,400	m3	£60.00	£203,998.50	Quantity measured from Illustrative Masterplan ( <b>Appendix 16</b> ). Betts Geo Ground Investigation Report anticipates 3% CBR		
	<b><u>Extra over standard 5.5m wide estate road</u></b>							
b	Sub base, 350mm thick	735	m3	£45.00	£33,055.31	Quantity measured from Illustrative Masterplan ( <b>Appendix 16</b> )		
c	Base course, 180mm thick	2,099	m2	£25.00	£52,468.75	Quantity measured from Illustrative Masterplan ( <b>Appendix 16</b> )		
d	Binder course, 60mm thick	2,099	m2	£20.00	£41,975.00	Quantity measured from Illustrative Masterplan ( <b>Appendix 16</b> )		
e	Wearing course, 45mm thick	2,099	m2	£25.00	£52,468.75	Quantity measured from Illustrative Masterplan ( <b>Appendix 16</b> )		
f	Tack coat, bitumous spray	2,099	m2	£1.00	£2,098.75	Quantity measured from Illustrative Masterplan ( <b>Appendix 16</b> )		
g	6.75m wide road with single frontage or no frontage to dwellings outside NDA	2,604	m2	£87.00	£226,569.75	Quantity measured from Illustrative Masterplan ( <b>Appendix 16</b> )		
	<b><u>Extra over cost of block paved road (generally 4.8m wide)</u></b>	<b>1,200</b>	<b>m</b>			Quantity estimated from Illustrative Masterplan ( <b>Appendix 16</b> )		
h	Capping; 300mm thick, including excavation and remove off site	1,728	m3	£60.00	£103,680.00	Quantity estimated from Illustrative Masterplan ( <b>Appendix 16</b> ). Betts Geo Ground Investigation Report anticipates 3% CBR		
j	Extra over cost of block paviors	5,760	m2	£25.00	£144,000.00	Quantity estimated from Illustrative Masterplan ( <b>Appendix 16</b> )		
	<b><u>Private Shared Drives (generally 4.5m wide)</u></b>	<b>1,700</b>	<b>m</b>			Quantity estimated from Illustrative Masterplan ( <b>Appendix 16</b> )		
k	Capping; 300mm thick, including excavation and remove off site	2,295	m3	£60.00	£137,700.00	Quantity estimated from Illustrative Masterplan ( <b>Appendix 16</b> ). Betts Geo Ground Investigation Report anticipates 3% CBR		
l	Extra over cost of block paviors	7,650	m3	£25.00	£191,250.00	Quantity estimated from Illustrative Masterplan ( <b>Appendix 16</b> )		
	<b><u>Footpaths to spine road 2m wide</u></b>							
m	2.0m wide footpath with single frontage or no frontage to dwellings outside NDA	1,526	m2	£41.00	£62,566.00	Quantity measured from Illustrative Masterplan ( <b>Appendix 16</b> )		
	<b><u>Kerbs &amp; edgings to spine road</u></b>							
n	Precast concrete road kerbs straight or curved to 6.75m wide spine road with single frontage or no frontage to dwellings outside NDA	763	m	£35.00	£26,705.00	Quantity measured from Illustrative Masterplan ( <b>Appendix 16</b> )		
p	Precast path edgings straight or curved to 6.75m wide spine road with single frontage or no frontage to dwellings outside NDA	763	m	£12.00	£9,156.00	Quantity measured from Illustrative Masterplan ( <b>Appendix 16</b> )		
	<b><u>Street Lighting to spine road with single frontage or no frontage to dwellings outside NDA</u></b>							
q	New street lighting, columns every 20m both sides (staggered)	38	nr	£2,500.00	£95,000.00	Quantity estimated from Illustrative Masterplan ( <b>Appendix 16</b> )		
r	Trenching, cabling & ductwork, not exceeding 1.5m depth	763	m	£30.00	£22,890.00	Quantity measured from Illustrative Masterplan ( <b>Appendix 16</b> )		

COST ESTIMATE DETAILS A4 : Road and Footpath Construction						Supporting documents	K Sandford Abnormal Cost £	K Sandford Comments
Item	Description	Qty	Unit	Rate £	Abnormal Cost £			
s	Allowance for cable joints, terminations, draw pits etc.	38	nr	£250.00	£9,500.00	Quantity estimated from Illustrative Masterplan ( <b>Appendix 16</b> )		
t	Allowance for utility company connections	38	nr	£200.00	£7,600.00	Quantity estimated from Illustrative Masterplan ( <b>Appendix 16</b> )		
	<u>Other costs</u>							
u	Allowance barriers/pedestrian guardrails etc	30	m	£200.00	£6,000.00	Estimate		
v	Non signalised pedestrian crossings	6	nr	£20,000.00	£120,000.00	Estimate		
w	Allowance for trees to spine road, inc tree, pit and grill etc	50	nr	£1,500.00	£75,000.00	Quantity estimated from Illustrative Masterplan ( <b>Appendix 16</b> )		
x	Allowance for commuted sum for spine road trees	50	nr	£2,000.00	£100,000.00	Quantity estimated from Illustrative Masterplan ( <b>Appendix 16</b> )		
	<b>Carried to Summary</b>				<b>£1,723,681.81</b>		<b>£0.00</b>	



COST ESTIMATE DETAILS A5 : Landscaping & Play Areas						Supporting documents	K Sandford Abnormal Cost £	K Sandford Comments
Item	Description	Qty	Unit	Rate £	Abnormal Cost £			
5	<b>Landscaping &amp; play areas</b>							
	<b>Landscaping</b>							
a	Allowance for removal of trees	4	nr	£400.00	£1,600.00	Quantity taken from Tree survey schedule in TBA Tree Survey Report dated February 2018		
b	Tree surgery and pruning to retained trees	133	nr	£150.00	£19,950.00	Quantity taken from Tree survey schedule in TBA Tree Survey Report dated February 2018		
c	Tree protection fencing to retained trees	3,291	m	£25.00	£82,275.00	Quantity measured from parameters plan (Appendix 2) and tree survey schedule in TBA Tree Survey Report dated February 2018		
d	Existing hedgerows to be removed and disposed off site	300	m	£35.00	£10,500.00	Quantity from parameters plan (Appendix 2) and tree survey schedule in TBA Tree Survey Report dated February 2018		
e	Make good to retained hedgerows	189	m	£20.00	£3,780.00	Quantity measured from parameters plan (Appendix 2)		
f	Allowance for amenity grass (total open space is 113,100 m2)	73,094	m2	£1.00	£73,094.00	Quantity measured from parameters plan (Appendix 2)		
g	Allowance for wet meadow grass	6,786	m2	£1.00	£6,786.00	Assumed 6% of open space		
h	Allowance for ornamental planting	3,393	m2	£15.00	£50,895.00	Assumed 3% of open space		
j	Allowance for species-rich meadow grassland	28,275	m2	£5.00	£141,375.00	Assumed 25% of open space		
k	Allowance for display meadow seeding	570	m2	£5.00	£2,850.10	Assumed 4% of open space		
l	Allowance for bulb planting	425	m2	£8.00	£3,400.00	Estimated quantity (depends on final layout and design)		
m	Allowance for ornamental and specimen tree planting	500	nr	£250.00	£125,000.00	Estimated quantity (depends on final planning layout and design)		
n	Allowance for native woodland buffer planting	982	m2	£15.00	£14,730.00	Estimated quantity (depends on final planning layout and design)		
p	Allowance for new hedgerows	5,000	m	£50.00	£250,000.00	Estimated quantity (depends on final planning layout and design)		
q	Allowance for marginal aqua planting 1.4 m wide to 5 ponds	560	m2	£30.00	£16,800.00	Quantity measured from parameters plan (Appendix 2). Betts Hydro FRA and Drainage Management Strategy dated December 2019 Appendix O drawing 111A (Appendix 18)		
r	Allowance for feature brick wall, railings and piers to east and west site entrances	50	m	£1,000.00	£50,000.00	Estimated quantity and rate (depends on final planning layout and design)		
s	Allowance for feature entrance piers to open spaces	18	nr	£500.00	£9,000.00	Estimated quantity and rate (depends on final planning layout and design)		
t	Allowance for low mounds to open spaces	1	item	£10,000.00	£10,000.00	Estimated cost (depends on final planning layout and design)		
u	Allowance for benches in public open space	15	nr	£500.00	£7,500.00	Estimated cost (depends on final planning layout and design)		
v	Allowance for bins in public open space	15	nr	£200.00	£3,000.00	Estimated cost (depends on final planning layout and design)		
w	Allowance for 3m cycle route through public open spaces	7,563	m2	£40.00	£302,520.00	Quantity measured from Illustrative Masterplan (Appendix 16). Specification and rate depends on final planning layout and design.		
x	Allowance for 2m pedestrian route through open spaces	1,076	m2	£40.00	£43,040.00	Quantity measured from Illustrative Masterplan (Appendix 16). Specification and rate depends on final planning layout and design.		
	<b>LEAP's &amp; LAP's</b>							
y	Allowance for LEAP - 400m2	2	nr	£85,000.00	£170,000.00	Indicative layout of play provision is shown at page 91 of TEP D & AS dated December 2019		
z	Allowance for LAP - 100m2	6	nr	£40,000.00	£240,000.00	Indicative layout of play provision is shown at page 91 of TEP D & AS dated December 2019		
aa	Allowance for boundary treatments, fencing, walling, railings, gates, etc	3917	m	£120.00	£470,040.00	Quantity measured from Illustrative Masterplan (Appendix 16). Specification and rate depends on final planning layout and design.		
ab	Allowance for external lighting to cycleways, pedestrian ways, and play areas	1	item	£30,000.00	£30,000.00	Estimated cost (depends on final planning layout and design)		
	<b>Carried to Summary</b>				<b>£2,138,135.10</b>		<b>£0.00</b>	

## COST ESTIMATE DETAILS

## A6 : S278 Works

COST ESTIMATE DETAILS A6 : S278 Works						Supporting documents	K Sandford Abnormal Cost £	K Sandford Comments
Item	Description	Qty	Unit	Rate £	Abnormal Cost £			
6	<b><u>S278 Works into eastern and western sites</u></b>					Measured from SCP drawing F09E (Appendix 15)		
	<b><u>Site Clearance</u></b>							
a	Allowance for clearance of trees and hedgerows and dispose off site	1	item	£55,000.00	£55,000.00			
b	Take down existing timber post and rail fencing to area of new access and dispose off site	277	m	£25.00	£6,925.00			
c	Allowance to strip existing verges along west side of Warburton Lane	354	m2	£5.00	£1,770.00			
d	Allowance to take down existing street lights/bollard/sign posts etc and dispose off site	1	item	£5,000.00	£5,000.00			
e	Allowance to take down existing street lights/bollards/sign posts etc and dispose off site	1	item	£5,000.00	£5,000.00			
f	Break out existing highway gullies to Warburton Lane	30	nr	£50.00	£1,500.00			
g	Remove steel gate to existing farm access	1	item	£1,000.00	£1,000.00			
	<b><u>Earthworks</u></b>							
h	Break out kerbs to existing Warburton Lane (west)	179	m	£12.00	£2,148.12			
j	Break out kerbs to existing footway (east)	158	m	£12.00	£1,896.00			
k	Break out existing edgings	158	m	£10.00	£1,580.00			
l	Break out existing farm access	260	m2	£20.00	£5,192.20			
m	Break out existing old Warburton Lane	342	m2	£25.00	£8,550.00			
n	Break out existing footway	56	m2	£20.00	£1,120.00			
p	Excavation to new footpath formation (say 300mm deep) and dispose off site	317	m3	£35.00	£11,095.00			
q	Excavation to new road formation (say 650mm deep) and dispose off site	370	m3	£35.00	£12,950.00			
r	Plane out existing surface course to carriageway	2,951	m2	£10.00	£29,510.00			
s	Trim existing carriageway to formation	2,951	m2	£5.00	£14,755.00			
t	Allowance for kerb remedials prior to surfacing	170	m	£75.00	£12,750.00			
u	Allowance for edgings remedials prior to surfacing	170	m2	£60.00	£10,200.00			
	<b><u>Highway Drainage</u></b>							
v	Allowance to make good/upgrade existing surface water sewer along Warburton Lane (assumed required)	1	item	£10,000.00	£10,000.00			
w	Allowance for new surface water sewer to access rd incl new pipeworks, chambers, gullies, connections etc.	1	item	£40,000.00	£40,000.00			
x	Allowance for connections into existing sewers along Warburton Lane	1	item	£4,000.00	£4,000.00			
	<b><u>Carriageway</u></b>							
y	Capping layer; 300mm thick, including excavation and remove off site	171	m3	£60.00	£10,260.00			
z	MOT type 1 sub base, 350mm thick, spread, levelled and compacted	199	m3	£45.00	£8,955.00			
6	<b><u>S278 Works into eastern and western sites</u></b>							
aa	Base course, 180mm thick	569	m2	£25.00	£14,225.00			
ab	Binder course, 60mm thick	569	m2	£20.00	£11,380.00			
ac	Wearing course, 45mm thick	569	m2	£25.00	£14,225.00			
ad	Tack coat, bitumous spray	569	m2	£1.00	£569.00			
	<b><u>Carriageway (Emergency Link Access)</u></b>							
ae	Capping layer; 300mm thick	6	m3	£60.00	£360.00			
af	MOT type 1 sub base, 350mm thick, spread, levelled and compacted	7	m3	£45.00	£315.00			
ag	Base course, 180mm thick	20	m2	£25.00	£500.00			
ah	Binder course, 60mm thick	20	m2	£20.00	£400.00			
aj	Wearing course, 45mm thick	20	m2	£25.00	£500.00			
ak	Tack coat, bitumous spray	20	m2	£1.00	£20.00			
	<b><u>Carriageway Re-Surfacing</u></b>							
al	Wearing course, 45mm thick	2,951	m2	£25.00	£73,775.00			
am	Allowance for regulating	2,951	m2	£10.00	£29,510.00			
	<b><u>Footways/Traffic Islands</u></b>							
an	Footway comprising 150mm type 1 sub base, 60mm binder and 20mm surface course	1,056	m2	£40.00	£42,240.00			
ap	Traffic Islands to Warburton Lane comprising 150mm	20	m2	£40.00	£800.00			

COST ESTIMATE DETAILS A6 : S278 Works						Supporting documents	K Sandford Abnormal Cost £	K Sandford Comments
Item	Description	Qty	Unit	Rate £	Abnormal Cost £			
	type 1 sub base, 60mm binder and 20mm surface course							
aq	E/o for tactile paving/crossing points to traffic island and footways	16	m2	£150.00	£2,400.00			
aq1	Controlled Pelican pedestrian crossing	1	item	£20,000.00	£20,000.00			
	<b><u>Kerbs &amp; Edgings</u></b>							
ar	Precast concrete kerbs to new footpath construction to new access and footway opposite new entrance	419	m	£35.00	£14,665.00			
as	New kerbs to traffic island	24	m	£35.00	£840.00			
at	Precast concrete edgings to new footpath construction to new access and footway opposite new entrance	587	m	£12.00	£7,044.00			
	<b><u>Traffic Signs, Fencing &amp; Road Markings</u></b>							
au	Allowance for new carriageway signage	1	item	£15,000.00	£15,000.00			
av	Illuminated bollards at traffic islands (2nr per island)	4	nr	£500.00	£2,000.00			
<b>6</b>	<b><u>S278 Works into eastern and western sites</u></b>							
aw	Allowance for pedestrian guardrail to new access/crossing (assumed 30m/ side of new access)	120	m	£150.00	£18,000.00			
ax	Allowance for new road markings, including white lining, hatching, symbols etc.	1	item	£6,000.00	£6,000.00			
	<b><u>Street Lighting &amp; Ductwork</u></b>							
ay	Design supply & install street lighting, incl feeder pillars drawpits, ducting, cabling, jointing, terminations etc	23	nr	£2,750.00	£63,250.00			
az	Allowance for Statutory Undertakers (connections)	1	item	£30,000.00	£30,000.00			
	<b><u>Traffic Management</u></b>							
ba	Allowance for traffic management (assumed duration)	24	wks	£3,000.00	£72,000.00			
	<b>Carried to Summary</b>				<b>£701,174.32</b>		<b>£0.00</b>	

COST ESTIMATE DETAILS						Supporting documents	K Sandford Abnormal Costs £	K Sandford Comments
A7 : Foundations & Retaining Walls								
Item	Description	Qty	Unit	Rate £	Abnormal Cost £			
7	<b><u>Foundations/Retaining Walls</u></b>					Betts Geo Ground Investigation Report dated November 2019		
a	Allowance for 8m of retaining walls average 800mm high to 33% of plots	1,067	m	£400.00	£426,666.67	Estimated - costs depends on reserved matters planning layout and finished site levels		
b	Extra over cost of abnormal foundations to dwellings, i.e. piled based on 6.0m deep with ground beams and beam and block floor slab (25% of plots)	100	nr	£7,500.00	£750,000.00	Estimated quantity and average extra-over rate compared to standard strip foundations		
c	Extra over cost of abnormal foundations to detached garages, i.e. piled based on 6.0m deep with ground beams and beam and block floor slab (assume 70% of plots have single garages)	67	nr	£3,000.00	£201,000.00	Estimated quantity and average extra-over rate compared to standard strip foundations		
d	Extra over for cost of reinforced strip/trench fill to house foundations with suspended insitu floor slab (50% of plots)	100	nr	£5,000.00	£500,000.00	Estimated quantity and average extra-over rate compared to standard strip foundations		
e	Extra over for cost of reinforced strip/trench fill to detached garages foundations with suspended insitu floor slab (assume 70% of plots have single garage)	67	nr	£2,000.00	£134,000.00	Estimated quantity and average extra-over rate compared to standard strip foundations		
f	Underbuild to dwellings where out of ground or split level	133	nr	£1,500.00	£199,500.00	Estimated - costs depends on reserved matters planning layout and finished site levels		
	<b>Carried to Summary</b>				<b>£2,211,166.67</b>		<b>£0.00</b>	

COST ESTIMATE DETAILS						Supporting documents	K Sandford Abnormal Cost £	K Sandford Comments
A8 : Miscellaneous								
Item	Description	Qty	Unit	Rate £	Abnormal Cost £			
<b>8</b>	<b>Miscellaneous</b>							
a	Allowance for pumping of ground water during r&s construction	1	item	£250,000.00	£250,000.00	Estimate		
b	Allowance for skylark fencing	189	m	£150.00	£28,384.50	REC Breeding Bird Survey Report dated February 2019		
c	Allowance for skylark plots; 4x4m	5	nr	£5,000.00	£25,000.00	Estimate		
d	Allowance for bird boxes	20	nr	£100.00	£2,000.00	REC Breeding Bird Survey Report dated February 2019		
e	Allowance for bat boxes	20	nr	£100.00	£2,000.00	REC Bat Survey Report dated February 2019		
f	Allowance for acoustic glazing facing road	20	nr	£300.00	£6,000.00	Hepworth Noise Assessment Report dated November 2019		
g	Allowance for acoustic fencing facing road	100	m	£200.00	£20,000.00	Hepworth Noise Assessment Report dated November 2019		
h	Allowance for archaeology survey works	1	item	£20,000.00	£20,000.00	CgMs Archaeological Desk-Based Assessment dated October 2018		
j	Allowance for upgrade works to off site Warburton Lane/Central Road mini roundabout and Manchester Road/Moss Lane Road mini roundabout	1	item	£500,000.00	£500,000.00	SCP drawing ARC01 Rev 4 (Appendix 15) in Appendix 9 of SCP Transport Assessment dated December 2019, Singleton Clamp drawing 06206/01/003 dated Dec 2007 (Appendix 20).		
j1	Footpath, cycleway connection and bridge link to east site 1	1	item	£116,092.00	£116,092.00	TEP drawings D8041.001.001B, 002.001, 004.001, 005.001 (Appendix 21), Betts Hydro Flood Risk and Hydraulic Assessment dated 10 February 2020, TBA Tree Survey Report dated February 2020, TBA Arbicultural Impact Assessment and Method Statement dated February 2020, TEP Statement of Landscape Design dated February 2020, Cost estimate (Appendix 23). CTS Bridges budget quotation (Appendix 24)		
j2	Footpath, cycleway connection and bridge link to west site 2	1	item	£126,759.00	£126,759.00	TEP drawings D8041.001.002B, 002.002, 004.002, 005.002 (Appendix 22), Betts Hydro Flood Risk and Hydraulic Assessment dated 10 February 2020, TBA Tree Survey Report dated February 2020, TBA Arbicultural Impact Assessment and Method Statement dated February 2020, TEP Statement of Landscape Design dated February 2020, Cost estimate (Appendix 23).		
k	Allowance for creation of emergency accesses off existing Warburton Lane incl. removal bollards	4	nr	£15,000.00	£60,000.00	Shown on parameters plan (Appendix 2)		
l	Allowance for PV or other renewable energy cost (assume 15%)	60	plots	£4,000.00	£240,000.00	Estimate		
m	Builders work and electrical connections for PV	60	plots	£500.00	£30,000.00	Estimate		
n	Allowance for extra-over cost of 16m per plot for 1.8m high screen walls where gardens abut highways (assumed 25% of plots)	1,600	m	£315.00	£504,000.00	Estimated cost (depends on final planning layout and design)		
<b>Carried to Summary</b>					<b>£1,930,235.50</b>		<b>£0.00</b>	

COST ESTIMATE DETAILS						Supporting documents	K Sandford Abnormal Cost £	K Sandford Comments
A9 : Utilities								
Item	Description	Qty	Unit	Rate £	Abnormal Cost £			
9	<b>Utilities (As per UCML Level 2 Utility Study)</b>					UCML Level 2 Utility Study 2nd Revision 8 February 2019		
	<b>Electricity</b>							
a	Allowance for non-contestable works to existing electric network (western parcel)	1	item	£7,141.29	£7,141.29	Page 23 of UCML study		
b	Allowance for non-contestable works to existing electric network (eastern parcel)	1	item	£7,141.29	£7,141.29	Page 20 of UCML study		
c	Allowance for contestable works - Option 2 based on 400 gas heated dwellings & EV charging capacity (whole site)	1	item	£858,241.76	£858,241.76	Page 25 of UCML study		
d	Diversions - recovery and relocation underground of 160m of overhead conductors (eastern parcel)	1	item	£18,000.00	£18,000.00	Page 29 of UCML study		
	<b>Gas</b>							
e	Diversions - medium pressure main at site entrance (eastern parcel)	1	item	£48,000.00	£48,000.00	Page 43 of UCML study		
	<b>Water</b>							
f	Diversions - distribution diversion (western parcel)	1	item	£38,000.00	£38,000.00	Page 61 of UCML study		
g	Diversions - distribution diversion to site entrance (eastern parcel)	1	item	£38,000.00	£38,000.00	Page 57 of UCML study		
	<b>Other costs to east and west parcels</b>							
h	Allowance for secondary substation	2	nr	£70,000.00	£140,000.00	Estimate (capacity unknown)		
j	Allowance for gas governor	2	nr	£30,000.00	£60,000.00	Estimate (capacity unknown)		
k	Allowance for off-site GPR surveys	2	nr	£3,500.00	£7,000.00	Estimate		
	<b>Carried to Summary</b>				<b>£1,221,524.34</b>		<b>£0.00</b>	