



**CUSHMAN &  
WAKEFIELD**

**BUSINESS SENSITIVE AND CONFIDENTIAL**

**Viability Assessment:  
Land at Quadrant Distribution  
Centre, Davy Way, Quedgeley,  
Gloucester, GL2 2RN**

**ON BEHALF OF ASHTENNE INDUSTRIAL FUND  
LIMITED PARTNERSHIP**

**11<sup>th</sup> July 2018**

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# 1. INTRODUCTION

## 1.1 SCOPE & PURPOSE

This report has been prepared by Cushman & Wakefield (“C&W”) in response to an instruction from Ashtenne Industrial Fund Limited Partnership (“the Applicant”) to provide an independent viability assessment of the proposed industrial and residential development at a site known as Land at Quadrant Distribution Centre, Davy Way, Quedgeley, Gloucester, GL2 2RN (“the Site”).

The Site comprises a vacant, brownfield employment site extending to 8.09 hectares (20 acres). It is identified as a Key Employment Site (allocated for employment uses) under Stroud District Council’s (“the Council”) Stroud District Local Plan (November 2015).

As summarised within this report, C&W have appraised the viability of a proposed industrial scheme comprising 25 units, extending to 281,500 sq ft. C&W assessment concludes that due to the brownfield nature of the Site and the significant burden of a number of abnormal costs relating to contamination, site levels, services and surface water drainage measures, industrial development at the Site is not deliverable in viability terms.

This report therefore considers the viability of alternative uses, namely a proposed residential scheme incorporating 160 dwellings, and investigates the viability of this scheme and any associated planning obligations which the scheme may be able to support.

The conclusion is that the proposed residential development is unable to viably support a “policy compliant” level of Affordable Housing (30%) but may be able to support the provision of c. 20% Affordable Housing, along with Community Infrastructure Levy (CIL) contributions of £1.04M.

This report outlines the approach taken by C&W in assessing the economic viability of both industrial and residential development on the Site. The report also identifies the surplus value available for the delivery of planning obligations (including the provision of on-site Affordable Housing).

## 1.2 VIABILITY IN PLANNING

Before going into the detail of viability relating specifically to the Site, it is imperative to provide context on the issue of viability in planning more generally, and to review the nature of (and inter-relationships between) the stakeholders involved in the development process. A comprehensive understanding of these issues is a pre-requisite to the issue of development viability.

### National Planning Policy

In March 2012 the Government published the *National Planning Policy Framework* (NPPF) which replaces all national Planning Policy Statements and Guidance Notes (with the exception of waste policies). The NPPF sets out the Government’s economic, environmental and social planning policies for England and articulates their vision of ‘sustainable development’.

A key principle of the NPPF is the *presumption in favour of sustainable development*, which requires Local Planning Authorities to plan positively for new development, and approve all individual proposals wherever possible. Within the context of achieving ‘sustainable development’, the NPPF refers to ensuring viability and deliverability at sections 173-177:

***“To ensure viability, the costs of any requirements likely to be applied to development, such as requirements for affordable housing, standards, infrastructure contributions or other requirements should, when taking account of the normal cost of development and mitigation, provide competitive returns to a willing land owner and willing developer to enable the development to be delivered.”***

### Local Planning Policy

The Site is allocated as a Key Employment Site within the Stroud District Local Plan (November 2015), and under Delivery Policy EI1 (Key Employment Sites).

### RICS Financial Viability in Planning 1<sup>st</sup> Edition 2012

The *RICS Financial Viability in Planning 1<sup>st</sup> Edition 2012 Guidance Note* (RICS Viability GN) sets out best practice for practitioners involved in undertaking viability appraisal work. At section 2.1.2 it provides an RICS definition of ‘financial viability’ for the purposes of planning decisions:

***“An objective financial viability test of the ability of a development project to meet its costs, including the cost of planning obligations, whilst ensuring an appropriate site value for the landowner and a market risk-adjusted return to the developer in delivering that project.”***

### The Harman Report

The issues of viability are also considered within a report titled *Viability Testing Local Plans: Advice for Planning Practitioners* (“the Harman Report”), which was produced by the Local Housing Delivery Group in 2012. Whilst this report focuses mainly at a Local Plan preparation level, some of the general observations give helpful guidance at a site specific level. For example, at page 14 the report provides the following definition of viability;

***“An individual development is viable if, after taking account of all costs, including central and local government policy and regulatory costs and the cost and availability of development finance, the scheme provides a competitive return to the developer to ensure that development takes place and generates a land value sufficient to persuade the landowner to sell the land for the development proposed. If these conditions are not met, a scheme will not be delivered”.***

## 1.3 REPORT LIMITATIONS

This report provides a viability assessment of the Site within the context of viability in planning. It does not constitute a formal valuation of the Site and thus any values given herein are exempt from the current RICS Valuation – Global Standards 2017 (the “Red Book”).

C&W reserves the right to update, amend or vary our advice should the content of this report be disputed and / or the matter progresses to a planning Appeal, Hearing or Inquiry. Furthermore, it is important that unless otherwise agreed by C&W the contents of this report remain **Business Sensitive & Confidential**, and are for the sole use of the Council and its respective professional advisers only.

None of the information we have provided in this report may be reproduced or referred to in any document, circular or statement, nor may its content or any part thereof be disclosed orally or otherwise to a third party, or placed in the public domain.

## 2. THE SITE & PROPOSED DEVELOPMENT

### 2.1 SITE LOCATION & DESCRIPTION

The Site comprises a vacant, brownfield site that extends to a gross area of circa 8.09 hectares (20 acres). It is situated on the southern side of the A38 Gloucester Road, between Quedgeley and Hardwicke, approximately 8.05 km (5 miles) south of Gloucester city centre. A plan detailing the land edged red is enclosed as **Appendix A**.

The Site is accessed off Davy Way, which provides direct access to the B4008 Bristol Road to the west, which in turn, leads to the A38 Gloucester Road directly to the south of the Site. The A38 can also be accessed directly to the north, via Davy Way, off the Waterwells roundabout. Junction 12 of the M5 Motorway is located less than one mile to the south, via the A38.

The Site is bound on the western, northern and eastern edges by industrial uses, including Quadrant Distribution Centre directly to the west and St Modwen's speculative development built on greenfield land comprising seven industrial units directly bordering the Site to the north and east.

The surrounding area is mixed use in nature, predominantly commercial / employment uses in the immediate vicinity with residential uses further afield, namely to the north and north west, on the opposing side of the A38, and directly to the south east.

The land directly to the south of the Site, on the other side of the Shorn Brook (currently agricultural land), comprises Hunts Grove, a proposed major residential led development site which was granted outline consent in 2008 for the delivery of up to 1,750 homes and 5.75 hectares (14.21 acres) employment development (B1 to B8 uses), among other uses.

Directly to the south east, adjacent to the Site, the first phase of the Hunts Grove residential development (c. 350 dwellings) is being completed by Crest Nicholson.

The Applicant acquired the whole of Quedgeley estate (including the Site, the site on which the Quadrant Business Centre now stands and other surrounding land parcels) from the Ministry of Defence (MOD) in c. 2000 and since acquisition, have undertaken a number of works to develop the estate. Of the original land acquired, the Site is the only remaining land parcel which remains undeveloped. The part of the Site which remains undeveloped is the area most challenging in delivery and viability terms.

Works undertaken to date have included the demolition of the old MOD units (including removal of asbestos) and removal of roads, hard-standings, underground services ductworks etc, site clearance, provision of a new utility service mains, and the construction of the new access road (Davy Way) which bounds the Site on the western boundary.

The Site suffers from changing levels throughout (primarily due to excess soil having been left on Site following the development of the surrounding area) with steep slopes on the north and east boundaries. The south boundary slopes more gradually towards the Shorn Brook.

### 2.2 PROPOSED DEVELOPMENT OPTIONS – INDUSTRIAL

The proposed industrial scheme largely divides the Site into four sections, all of which are accessed from a central estate road off the roundabout at the southern end of Davy Way, with a secondary access off Davy Way within the north-eastern corner of the Site. The net developable area of the Site assuming this development option is 6.73 hectares (16.63 acres).

The proposed scheme incorporates 25 units ranging from 2,500 to 100,000 sq ft (GIA), with a total proposed floor area of 281,500 sq ft. This mix has been informed by C&W's industrial agency teams based on the most likely mix for the Site taking into consideration current occupier demand. The table below provides the accommodation for the indicative scheme and a plan is incorporated as **Appendix B**.

REF	UNIT AREA GIA (SQ FT)	NO. OF UNITS	TOTAL FLOOR AREA GIA (SQ FT)
<b>5.25 Acre Site</b>			
Industrial / warehouse unit	2,500	5	12,500
Industrial / warehouse unit	3,000	2	6,000
Industrial / warehouse unit	4,000	1	4,000
Industrial / warehouse unit	5,000	9	45,000
Industrial / warehouse unit	6,000	4	24,000
<b>Sub-total</b>		<b>21</b>	<b>91,500</b>
<b>Unit 1</b>			
Industrial / warehouse unit	100,500	1	100,000
<b>Sub-total</b>		<b>1</b>	<b>100,000</b>
<b>Unit 2</b>			
Industrial / warehouse unit	30,000	1	30,000
<b>Sub-total</b>		<b>1</b>	<b>30,000</b>
<b>Unit 3</b>			
Industrial / warehouse unit	20,000	1	20,000
<b>Sub-total</b>		<b>1</b>	<b>20,000</b>
<b>Unit 4</b>			
Industrial / warehouse unit	40,000	1	40,000
<b>Sub-total</b>		<b>1</b>	<b>40,000</b>
<b>TOTALS</b>		<b>25</b>	<b>281,500</b>

### 2.3 PROPOSED DEVELOPMENT OPTIONS – RESIDENTIAL

The proposed residential development extends to a net developable site area of 4.40 hectares (10.87 acres) and comprises 160 dwellings, incorporating a mix of apartments and two, three and four-bedroom houses.

The Applicant's architects, Higgs Young Architects Limited, have drawn up two indicative scheme plans (which are incorporated as **Appendix C**). To clarify, the two scheme plans incorporate the same housing numbers / type and mix, albeit show slightly different layouts. An accommodation schedule is provided below:

HOUSE TYPE	DESCRIPTION	NO. OF UNITS	UNIT AREA (SQ FT)		TOTAL AREA (SQ FT)	
			GROSS INTERNAL AREA (GIA)	NET INTERNAL AREA (NIA) *	GROSS INTERNAL AREA (GIA)	NET INTERNAL AREA (NIA) *
A	4 bed detached	5	2,546	2,546	12,730	12,730
B	4 bed detached	7	1,507	1,507	10,549	10,549
C	3 bed detached	3	1,410	1,410	4,230	4,230
F	3 bed semi	48	1,152	1,152	55,296	55,296
G	2 bed terrace	8	872	872	6,975	6,975
H	2 bed semi	45	797	797	35,865	35,865
I (a)	Apartment	6	495	421	2,970	2,525
I (b)	Apartment	6	538	457	3,228	2,744
J	3 bed corner	19	1,141	1,141	21,679	21,679
K	3 bed corner	13	1,119	1,119	14,547	14,547
<b>TOTALS</b>		<b>160</b>			<b>168,070</b>	<b>167,140</b>

\* Assumes a Gross to Net ratio of 85%.

## 2.4 VIABILITY ISSUES AND SITE CONSTRAINTS

In light of the former use of the Site and the necessary site preparation and enabling works, there are a number of constraints and challenges that the Site faces in terms of physical delivery of any type of development which must be considered in appraising the development options. These are detailed below:

- Significant surplus of soil on site resulting from development of neighbouring land which requires levelling / removal prior to redevelopment;
- Issues surrounding surface water drainage (i.e permitted surface water run-off rate of 2.5 litres / second / ha) which requires the construction of swales and / or attenuation ponds to contain surface water (owing to the nature of the sub-soil i.e. clay, soak-aways in isolation would not be sufficient). There are cost implications for this and similarly, the need for any attenuation ponds reducing the overall 'net developable area';
- Steep slopes on the east and northern boundary;
- Sensitivity to noise from adjoining industrial uses to the west, north and east of the Site, as such, need for noise buffers and bunds (particularly relevant in respect of the residential development);
- Contamination issues resulting from for the former use of the Site, including elevated levels of PAHs (Polycyclic Aromatic Hydrocarbons) widely spread across the Site as well as other localised contamination issues such as diesel spills, pits containing buried bulbs / radio vales and another containing asbestos cement / sheet fragments. There is therefore the need for remediation when considering development to more sensitive uses (residential) – removal of shallow soils in garden areas and / or capping with a suitable thickness of clean soils etc;
- Requirement for additional power to be brought to the Site due to limited direct connections.

Overall, it is necessary to understand the above works and constraints in the context of the financial viability analysis undertaken in the following sections.

## 3. INDUSTRIAL MARKET COMMENTARY

### 3.1. MARKET OVERVIEW – TAKE UP, SUPPLY AND DEMAND

The first half year of 2017 was an good year for the industrial sector in the South West region. The region recorded its highest half year industrial take-up figures in the last ten years, with take-up at 3.6 million sq ft compared with 2.6 million sq ft take-up recorded in the second half year of 2016 (the second highest half year take-up in the last ten years), and take-up of 1.6 million sq ft in the corresponding first half year of 2016.

Take up in 2016 and the first half of 2017 was generally skewed by significant occupier transactions, in particular the land sales in Avonmouth for the development of 1.2 million sq ft / 55 acres for The Range (H2 2016) and 1.25 million sq ft / 33.5 acres for Amazon (H1 2017). In contrast, take-up in the second half of 2017 was down to only 550,000 sq ft, a reduction in part due to reduced standing stock and ready land supply in the prime distribution locations, and in part due to the lack of one of the major land transactions experienced in the previous 18 months. Take-up so far in 2018 is 660,000 sq ft, already exceeding take up in the first second half of 2017 (Cushman & Wakefield Research).

Industrial supply of existing stock in the South West region stands at 4.3 million sq ft, up slightly from the 12 year low experienced in 2017 (Cushman & Wakefield Research). As a result, despite relative political and economic uncertainty, the market has begun replenishing stock through speculative development, with major schemes at Horizon 38, Bristol (580,000 sq ft), Central Park, Bristol (555,000 sq ft), Symmetry Park, Swindon (217,000 sq ft) and Western Approach, Avonmouth (105,500 sq ft).

As is the trend across the whole of the South West, supply in Gloucester remains low, which continues to put an upward pressure on rental levels. This has been evident over the last six years, and is likely to fuel further speculative new build development. Mid box development appears to be the key target for most developers, taking advantage of market demand as St Modwen have continued to do at their Gateway 12 development at Waterwells Business Park in Gloucester (adjacent to the Site). There is also good demand and a constrained supply for small light industrial units on multi-unit schemes in main towns and cities across the South West, however high build costs are generally preventing development of these types of unit, albeit there are some examples of it taking place in Gloucester such as Gabwell Business Centre.

In line with the regional trend, demand in Gloucester across the board has continued to improve, and continues to be a popular location with national, but mainly local occupiers. Gloucester is the prime location in Gloucestershire (outside of Bristol and Avonmouth) in logistics and industrial terms, with the larger business parks close to the motorway such as Gloucester Business Park, Quedgeley West Business Park, and Waterwells Business Park continuing to prove popular and experiencing high occupancy rates.

Occupiers tend to prefer these locations due to the straightforward access from the M5 motorway, and the age and specification of the units. Demand generally continues to be good, albeit primarily focused on accommodation of below 50,000 sq ft, and with a large amount of such demand falling in the sub-20,000 sq ft size range. This follows in to land demand, with the majority coming from owner occupiers and regional / local industrial developers seeking plots of sub- 2.02 hectares (5 acres). Demand for buildings over 50,000 sq ft is very limited, albeit not completely absent, and demand for development plots of 2.02 hectares (5 acres) and above is extremely limited indeed.



### 3.2. COMPETING SCHEMES

Gloucester Business Park is generally accepted as being the best logistics and industrial location in Gloucestershire, being a well-managed Arlington / Goodman developed park providing both proximity to the main populations of Gloucester and Cheltenham, and being situated immediately adjacent to Junction 11A of the M5 motorway. Gloucester Business Park is also considered to be the prime office location for the area. Gloucester Business Park accommodates large logistics and industrial occupiers such as UPS, G-Tekt, DHL Trade Team, Royal Mail, and Laithwaites, as well as office occupiers including Horizon Nuclear Power and Lockheed Martin.

Waterwells Business Park and Quedgeley West Business Park are also considered to be prime business park locations, with Waterwells Business Park accommodating a mix of industrial occupiers as well as out-of-town office occupiers, and Quedgeley West Business Park being more focused on distribution.

Waterwells Business Park accommodates logistics and industrial occupiers such as DPD, Premiere, and Parcelforce, with office occupiers including Gloucestershire Constabulary and Kohler Mira. The business park also accommodates other multi-tenanted office developments and a large number of smaller multi-tenanted light industrial / business unit schemes which have been developed by various regional and local developers over the last 10 years or so.

Quedgeley West Business Park is a St Modwen developed scheme that is now completed and fully occupied, with distribution units from 12,000 to 100,000 sq ft and occupiers including CM Downton, Schlumberger, Gardiner Brothers, and Advanced Insulation.

New larger logistics and industrial development is now being focused around the limited last remaining plots at the larger Gloucester Business Park and Waterwells Business Park. Added to this, other largely undeveloped sites are being promoted and brought forward such as Centre Severn and Gloucester 12.

Centre Severn is located in Barnwood, not far from Gloucester Business Park but closer to the City Centre, and comprises 5.7 hectares (14 acres) of land suitable for a range of potential uses including logistics and industrial, roadside, and leisure. Access to the scheme is via Junctions 11 and 11a of the M5 motorway. The scheme is to be developed by local developer Peveril Securities.

Gloucester 12 (formerly Javelin Park) is a Graftongate scheme located in Quedgeley, on the eastern side of Junction 12 close to Quedgeley West Business Park. The site comprises of 5.86 hectares (14.48 acres), previously promoted to accommodate large logistics and industrial buildings of between 100,000 sq ft and 280,000 sq ft, the scheme is now being promoted for mid-box units.

In addition, Quedgeley East Business Park is a former airfield which is well occupied with smaller occupiers, but will be brought forward for redevelopment by St Modwen in due course.

In terms of brownfield redevelopment sites closer to the City Centre, Rockhaven Developments are developing a small circa 1.21 hectare (3 acre) plot within Triangle Park, a retail-led development scheme. Rockhaven Park will comprise small light industrial / business units appealing to local occupiers.

In addition, Paloma Capital and Chase Commercial will be redeveloping the 4.37 hectare (10.80 acre) Former Interbrew Premises on Eastern Avenue for a mix of small to medium sized industrial units and roadside type uses. They are currently promoting the scheme named Access Park.

### 3.3. SPECULATIVE DEVELOPMENT

#### **Gateway 12, Waterwells Business Park**

Gateway 12 is St Modwen's now established speculative mid-box development scheme, comprising seven brand new units between 24,154 sq ft and 66,392 sq ft with approximately 10% office content and dedicated service yard. The scheme borders the Site on two sides, situated on an L-shaped site. We understand that St Modwen's acquired this land in 2015 and comprised greenfield land with few development constraints.

Units have been developed progressively since 2015, with two sold and one let to date. The first transaction was the sale of Unit 2 comprising 40,924 sq ft to ProCook in December 2015 at a price equating to circa £80.00 per sq ft. This was followed less than a year later by the sale of Unit 3 comprising 40,482 sq ft to Warwick Fabrics in November 2016 at a price equating to circa £84.00 per sq ft. Both transactions were off quoting prices of £90.00 per sq ft and quoting rents of £6.75 per sq ft.

With the next phases of development, St Modwen have revised their strategy and are now only offering units on a leasehold basis. The first letting at Gateway 12 has recently completed (March 2018), with Unit 5 comprising 38,869 sq ft being let to Amazon on a 10 year lease with break at year 5 at £6.75 per sq ft. There is understood to be strong interest in the next unit, Unit 6 comprising 41,355 sq ft, where an in-principle deal is understood to have been agreed pending approvals.

The final phases of the scheme are currently under construction with Units 4 and 4a comprising 24,154 sq ft and 34,099 sq ft respectively, having a proposed practical completion date of July 2018. Unit 6 comprising 66,392 sq ft is also under construction with a proposed practical completion date of October 2018. The units are being offered on a leasehold only basis at quoting rents of £6.75 per sq ft, although it is understood there is occupier interest at c. £6.50 per sq ft.

#### **Gabwell Business Centre, Waterwells Business Park**

Gabwell Business Centre is a new small light industrial unit development by Gabwell Property Developments comprising two terraces totalling 15 units ranging from 2,869 to 4,916 sq ft or combinations thereof. The scheme borders part of the Site (to the west), and the units are currently under development with a proposed practical completion date of April 2018.

The units are being offered on a freehold basis, with quoting prices in the order of £104 per sq ft, with consideration being given to leasehold proposals at circa £7.50 per sq ft based upon terms and status. Two larger units of 3,912 and 4,916 sq ft are understood to be under offer.

#### **Gloucester 12, Quedgeley**

Gloucester 12 (formerly Javelin Park) is a proposed development situated adjacent to Junction 12 of the M5 motorway and to the east of the motorway itself. The site comprises a total of 5.86 hectares (14.48 acres), and was previously promoted for large format distribution units of up to 280,000 sq ft.

The latest revised masterplan alters the scheme to provide mid-box distribution units, and the first phase comprises of four units of 17,000 sq ft, 27,000 sq ft, 37,500 sq ft, and 40,000 sq ft respectively with circa 10% office content and dedicated service yards.

The units are being offered on a freehold or leasehold basis, with quoting prices of £105 to £110 per sq ft and quoting rents of £6.75 to £6.95 per sq ft. The units are not currently proposed to be speculatively

developed, but are being marketed on a build to suit basis with a delivery period of 9 months, and the marketing promotes build to suit units of 20,000 to 125,000 sq ft.

#### **Rockhaven, Triangle Park, Metz Way**

Rockhaven is new development by Rockhaven Developments comprising of five blocks of small light industrial units totalling 22 units, located close to Gloucester City Centre in a popular commercial and retail location. The units range from 1,875 to 3,125 sq ft or combinations thereof, and are currently under development with a proposed practical completion date of mid-2018.

The units are being offered on a freehold or leasehold basis, with quoting prices of £110 per sq ft and quoting rents of £8.00 per sq ft. Block A comprising six units incorporates solar PV, and are available to rent only at the higher rents of £8.50 per sq ft, to reflect the benefit of the solar PV gains.

### **3.4. DEVELOPMENT LAND**

Whilst development has generally been relatively limited across the South West since 2007, the aforementioned speculative industrial development that have recently taken place, mean that Gloucester has been active in terms of industrial development in the region. This has partly been down to availability of serviced development land in the city compared to other more constrained locations along the M5 corridor, such as Cheltenham and Bristol (as distinct from Avonmouth, which is very much geared towards the distribution market).

However, it must be noted that whilst the overall view on development in the region is positive due to improving market dynamics impacting positively on rental / capital values, there are still development sites which remain vacant and undeveloped due to high build costs and development constraints preventing them being brought forward for speculative development. On such sites, it is likely that speculative development of any nature will require a number of pre-lettings / pre-sales in order to render development financially viable.

Straightforward land transactions are relatively few and far between, and this is due to the majority of sites being within the ownership of developers looking to benefit from developing buildings for occupiers.

For evidence of land transactions, you have to either look at somewhat historic transactions, seek to analyse pre-let or pre-sale transactions, look further afield than Gloucester, or consider brownfield sites. The latter are difficult to analyse due to unknown abnormal costs or constraints, which can negatively impact different sites to differing degrees. The following are the key recent land transactions in the Gloucester area.

#### **Waterwells Business Park**

Gloucestershire Police purchased 2.8 acres at Waterwells Business Park at the end of 2014 for a price understood to equate to £275,000 per acre.

However, the most recent transaction on Waterwells Business Park, was the sale of 0.87 hectares (2.15 acres) immediately adjacent to the Site, to Gabwell Property Developments in December 2015, at a price equating to £325,581 per acre.

We understand that this Site was effectively “cleaned” prior to disposal, with contamination and remediation works having been undertaken by the vendor, in contrast to the Site where further works are required.

### **Gloucester Business Park, Hucclecote**

Gloucester Business Park is the prime distribution and business park in the Gloucester and Cheltenham area, but there has been a lack of straight land transactions since ROK purchased a site of approximately 1.62 hectares (4 acres) from Arlington at a rate of £283,000 per acre back in 2006.

More recently in June this year, TBS Engineering purchased a 3.55 hectares (8.78 acre) plot at the business park to develop a 100,000 sq ft purpose built facility incorporating 20,000 sq ft of offices. The site which was acquired on a freehold basis included an element of expansion land. The land price stated to have been paid for the land equates to approximately £380,000 per acre, however this is not a true reflection of the actual land price as the building is being constructed on a freehold turnkey basis by the developer, Goodman, and the land price includes a large element of developers profit on the expansion land which is not immediately being developed. Taking in to account the developers profit applied to the expansion land, the land price is understood to equate to a base price of circa £325,000 per acre.

There is understood to be serious occupier-led interest in the remaining 10.12 hectares (25 acres) at Gloucester Business Park.

### **Kingsway Business Park, Quedgeley**

Kingsway Business Park is located between Waterwells Business Park and Gloucester City Centre. It comprises a mixed use site where an Asda superstore, Greene King pub and health centre (Roseway Health) have been secured. A prominent plot of 1.04 hectares (2.57 acres) remains available for higher value / roadside uses, but a 1.21 hectares (3 acre) plot is under offer at a price understood to equate to approximately £425,000 per acre.

### **Stroudwater Business Park, Stonehouse**

Further south along the M5 corridor, a 1.82 hectare (4.5 acre) greenfield site at Oldends Lane on the edge of Stroudwater Business Park in Stonehouse near Stroud was sold in June 2017. The site benefited from planning consent for employment uses, and was sold to Dairy Partners for the development of their own bespoke warehouse and office facility, at a price equating to £400,000 per acre. We understand from the marketing agent that there were no issues relating to contamination / remediation, with the site being greenfield land.

A further 0.49 hectare (1.2 acre) site on Brunel Way, Stroudwater Business Park, comprising the residue of an earlier development on behalf of Schlumberger, was sold to Sterling Storage for the development of a self-storage facility, at a price equating to £312,500 per acre. The site is broadly rectangular in shape, comprising surfaced tarmac, and slopes off towards a brook at the rear, thereby reducing the net developable area considerably.

### **Former Interbrew Premises, Eastern Avenue, Gloucester**

The Former Interbrew Premises which benefits from a prominent frontage to Eastern Avenue was sold in 2016 for a reported £5 million equating to £462,963 per acre to investor / developer Paloma Capital / Chase Commercial off a quoting price of £6.25 million equating to £578,704 per acre.

The site comprises 4.37 hectares (10.80 acres), with 147,000 sq ft of income producing warehouse space (£550,000 per annum until August 2017). The tenant, DHL Trade Team, vacated in August 2017, with the new owners having submitted a planning application for redevelopment to comprise of a mixture of roadside and small scale retail uses, with refurbishment and redevelopment of part of the existing warehouse accommodation.

This site is highly prominent and in the heart of Gloucester's main edge of town commercial area, so would be considered a superior location. In addition, the prominent element of the site and nature of the sale with income until August 2017 makes the transaction difficult to truly analyse in comparison to traditional employment land.

#### **Former Vibixa Premises, Cheltenham**

The Former Vibixa Premises comprises a broadly square site of 2.00 hectares (4.93 acres), with 133,600 sq ft of poor quality buildings on site, and was sold to Superdry for £3.10 million equating to £628,803 per acre for redevelopment and change of use in to new headquarter offices for the Cheltenham based multi-national retail brand. Whilst the land price achieved reflects a significant premium paid by a major local occupier, it is understood that industrial developers Chancerygate were strong under bidders and were rumoured to be bidding of a gross land value (excluding demolition and site servicing costs / abnormals) of in the region of £400,000 to £500,000 per acre. The site is on the edge of Cheltenham's main edge of town commercial area, so would be considered a superior location, particularly as Cheltenham suffers a lack of employment development land generally.

#### **Former National Grid, Arle Avenue, Cheltenham**

Other recent brownfield site sales include the 2.31 hectare (5.72 acres) Former National Grid site at Arle Road, Cheltenham, which sold to Wernick Hire in June 2016 at a price equating to £182,500 per acre. This comprised an awkward shaped site without prominence, and was sold to the neighbouring occupier. In addition, the site was situated adjacent to existing National Grid high pressure bullets, which together with the awkward shape limit the developability of much of the total site.

#### **Bishops Cleeve**

Gloucestershire Constabulary are currently going through the sales process to dispose of a 1.54 hectare (3.8 acre) greenfield site they historically purchased at Cleeve Business Park, Bishops Cleeve. It is understood that they paid in excess of £500,000 per acre for the Bishops Cleeve site originally, and are currently in a round of second bids to establish best sales price. The site is understood to be under offer to a national industrial developer at a price in the region of £400,000 per acre.

As evidenced by the above land transactions, the majority of land sales in the Gloucester and Cheltenham area are for 2.02 hectares (5 acres) or less. Aside from the Former Interbrew Premises on Eastern Avenue which comprises a 4.37 hectares (10.80 acre) prominent mixed use site in a mixed commercial location, there have been no substantial land transactions in the area in recent years over and above 2.02 hectares (5 acres) in size.

The freehold turnkey deal in which TBS Engineering purchased a new 100,000 sq ft building with associated plot and expansion land totalling 3.55 hectares (8.78 acres), is a rare occupier led transaction of such a scale in the Gloucester and Cheltenham area. There have certainly been no transactions of commercial land involving 8.09 hectares (20 acres) or more, and you have to look further afield to Avonmouth / Severnside, which represents the prime logistics and distribution location for the South West region, in order to find occupier or developer land transactions of any scale.

In the past 12 months, land transactions in Avonmouth / Severnside have included 14.16 hectares (35 acres) to developers Barberry / Richardson, 13.56 hectares (33.5 acres) to Amazon, and 6.07 hectares (15 acres) to DHL, meanwhile in 2016 further transactions comprised 22.26 hectares (55 acres) to The Range, (13.35 hectares (33 acres) to Lidl, 8.09 hectares (20 acres) to developers Mountpark, and 4.86 hectares (12 acres) to Davies Turner Logistics. Whilst demonstrating occupier demand in the Avonmouth / Severnside area in comparison to Gloucester / Cheltenham, many of the transactions

have also been encouraged by the unique 1957 planning consent covering this area and allowing for immediate development. Gloucester remains a location where demand is predominantly from small scale industrial developers and or owner occupiers, primarily seeking plots of between 0.4 to 2.02 hectares (1-5 acres).

### 3.5. RENTAL AND CAPITAL VALUES

The lack of supply together with improved demand, has pushed headline rents and capital values upwards over the last few years. Rental values for prime logistics and industrial space has increased to £5.75 per sq ft for 100,000 sq ft units and above, £6.50 per sq ft for 50,000 to 100,000 sq ft units, and more recently £6.75 per sq ft for mid-box units, such as those being developed at Gateway 12, Waterwells Business Park. Save for the recent letting activity at Gateway 12, the aforementioned prime rents are in the main predicated upon perceived prime rents, due to limited new speculative development and pre-let activity above 50,000 sq ft in Gloucester.

In terms of capital values, transactions at Gateway 12, Waterwells Business Park currently set the tone at between £80.00 and £84.00 per sq ft, with the sales of Units 2 and 3 respectively. This follows on from the tone generally set with sales of units between 12,000 and 30,000 sq ft at nearby Quedgeley West Business Park.

It is envisaged that this upwards pressure on both rents and capital values will continue, predominantly due to a shortage of supply.

### 3.6. LETTING TRANSACTIONS

The most recent letting transaction of any scale in Gloucester, was the letting of Highroller, Plot 6100, Gloucester Business Park, which albeit 20 years old and in tired condition at the time of the letting, represented some of the best large distribution premises in Gloucester. The unit was let to DHL Trade Team at £5.00 per sq ft for a 10 year term in January 2016.

The landlord agreed a low rent on the basis of using the premium from the former tenant as an offset to the current rental level. The building is over 260,000 sq ft with a standard 10% office content, with a variety of eaves heights from 10m to 18m as this was originally developed as a bespoke cold store. It should also be noted that DHL Trade Team took the building in need of substantial repair works and under an obligation to the landlord to put the building back into a fully repaired state, which contributed to the level of rent paid.

Subsequently in August 2016, Howard Tenens also completed a letting of the largest speculatively built distribution warehouse in Gloucestershire and the whole South West for many years, the 169,000 sq ft building at Severn Distribution Park, Sharpness, known as Bristol Gateway. This unit actually let within 3 months of practical completion to CM Downton, at a headline rental of £4.50 per sq ft, the rent reflecting the inferior location of the unit compared to the prime Gloucestershire distribution schemes.

The following schedule outlines key letting activity in the Gloucestershire area in the last two years:

ADDRESS	TENANT	TRANSACTION (DATE)	SIZE (SQ FT)	RENT £ PER ANNUM (£ PER SQ FT)	COMMENTS
Unit 6, Gateway 12, Waterwells Business Park, Hardwicke, Gloucester	Confidential	OML (Under Offer)	41,355	c.£279,146 (c.£6.75)	Brand new mid box distribution unit.

Unit 5, Gateway 12, Waterwells Business Park, Hardwicke, Gloucester	Amazon	OML (March 2018)	38,869	£262,366 (£6.75)	Brand new mid box distribution unit.
Unit 4, The IO Centre, Hurricane Road, Gloucester Business Park, Hucclecote, Gloucester	Infusion GB	OML (May 2017)	c.10,000	£80,000 (£8.00)	Existing tenant within the estate taking additional expansion space.
Unit 1, Ashchurch Business Centre, Tewkesbury	Fassa Bortollo	OML (Mar 2017)	23,436	£149,000 (£6.35)	The building has a larger office content, standing at approximately 40%. The comparable is located on Ashchurch Business Centre, to the north of Gloucester.
Unit 11a, Barnwood Fields Business Centre, Barnett Way, Barnwood, Gloucester	Sapa	Lease Renewal (Jan 2017)	9,608	£60,000 (£6.25)	1980s industrial unit within a terrace of three units, benefiting from external car parking. The building is older quality stock. There is a large yard and circulation area.
Unit 2, The IO Centre, Hurricane Road, Gloucester Business Park, Hucclecote, Gloucester	Infusion GB	OML (Sep 2016)	c. 9,000	£63,000 (£7.00)	Existing tenant within the estate taking additional expansion space. Prime business park location.
Unit 3, The IO Centre, Hurricane Road, Gloucester Business Park, Hucclecote, Gloucester	Infusion GB	OML (Sep 2016)	c.12,000	£81,000 (£6.75)	Existing tenant within the estate taking additional expansion space. Prime business park location.
Bristol Gateway, Severn Distribution Park, Sharpness	CM Downton	OML (Aug 2016)	169,478	£745,703 (£4.40)	Brand new distribution unit. Secondary location compared to Gloucester prime distribution locations.
Highroller, Plot 6100, Gloucester Business Park, Hucclecote, Gloucester	DHL Trade Team	OML (Jan 2016)	260,000	(£5.00)	20 year old distribution unit, originally constructed with cold storage provision. Rent is reduced to reflect condition and surrender premium obtained by the landlord.

In terms of new or modern small light industrial / business units of circa 1,000 to 3,500 sq ft, rents are approximately £7.50 per sq ft at developments such as The Aquarius Centre and Glenmore Business Centre, with premiums up to £9.50 per sq ft paid for more hybrid type space at Glenmore Business Centre.



## 4. C&W FINANCIAL APPRAISALS - INDUSTRIAL DEVELOPMENT

C&W's financial appraisal in respect of the proposed industrial development is enclosed within **Appendix D** and summarised below:

<b>C&amp;W APPRAISAL – PROPOSED INDUSTRIAL SCHEME</b>	
<b>REVENUES</b>	
GDV – Phase 1 (Unit 1)	£12.05M
GDV – Phase 2 (5.25 Acre Site)	£10.40M
GDV – Phase 3 (Units 2, 3 and 4)	£9.64M
Purchaser's Costs	(£2.18M)
<b>Net Development Value</b>	<b>£29.91M</b>
Tenant Revenue (rental income)	£0.673M
<b>Net Realisation</b>	<b>£30.58M</b>
<b>COSTS</b>	
Site Acquisition Costs	£0.11M
Construction Costs (Plot Costs)	£16.25M
Contingency	£0.81M
Infrastructure and Abnormal Costs	£6.03M
Professional Fees	£1.34M
Planning (CIL)	-
Marketing & Disposal Costs	£0.29M
Finance Costs	£1.37M
<b>Total Costs (Excluding Profit)</b>	<b>£26.20M</b>
Development Profit	£4.96M
<b>Total Costs (Including Profit)</b>	<b>£31.15M</b>
<b>RESIDUAL LAND VALUE</b>	<b>-£0.571M (Negative)</b>

C&W's financial appraisal in respect of the proposed industrial scheme produces a Residual Land Value of **-£0.571M (Negative)**. In order for the proposed scheme to be viable, the financial appraisal would need to produce a positive Residual Land Value at a level which incentivises the landowner to release the land for development.

The negative Residual Land Value therefore clearly demonstrates that the proposed industrial development is an unviable development option. The negative result is due to the significant burden of infrastructure / abnormal costs which the scheme must bear in order to deliver the proposed scheme.

In light of this, we have included as **Appendix E** a report by industrial agents, Knight Frank, who have been retained by the Applicant as marketing agents for the Site since 2005.

The report provides an overview of the marketing history of the Site and highlights the significant barriers to sale including abnormals / infrastructure costs hindering demand and similarly, lack of demand for land of this scale. This supports the view that the Site cannot viably support industrial development (on a speculative or owner occupier basis) and is therefore unlikely to be brought forward for development.

In the following sub sections, we outline the inputs and assumptions adopted by C&W for the purpose of our appraisal analysis.

#### 4.1. GROSS DEVELOPMENT VALUE

In arriving at our opinion of Gross Development Value in respect of the proposed industrial scheme, we have had regard to the local market supply and demand dynamics. In this regard, we have incorporated a Market Overview relating to the industrial market in Gloucester and the wider South West region within Section 3 above.

##### Rental Values

We have arrived at our opinion of rental value based on our understanding of Gloucester's industrial market, and the supply and demand dynamic, plus advice received from local estate agents and comparable evidence as previously reviewed.

C&W's appraisal assumes rental values for the completed industrial units ranging from £6.25 to £8.00 per sq ft, as detailed within the table below. The range in rental values adopted reflect the impact of quantum due to the range in proposed unit sizes.

C&W RENTAL VALUE ASSUMPTIONS	
Unit size	Rental Value
2,500 sq ft	£8.00 per sq ft
3,000 sq ft	£8.00 per sq ft
4,000 sq ft	£7.50 per sq ft
5,000 sq ft	£7.50 per sq ft
6,000 sq ft	£7.50 per sq ft
20,000 sq ft	£7.00 per sq ft
30,000 sq ft	£7.00 per sq ft
40,000 sq ft	£7.00 per sq ft
100,000 sq ft	£6.25 per sq ft

In reality, having regard to recent and relevant industrial comparables (as detailed in the report section above), these rental values may be considered optimistic. However, they have been adopted for the purpose of the analysis.

##### Investment Sales

C&W's appraisal has assumed the following letting profile and investment sales:

- **Phase 1 - Unit 1 (100,000 sq ft)** – pre-let assumed in respect of Unit 1. Investment sale assumed on completion of build (rental value capitalised at a yield of 5.0%). A 9 month rent free period has been reflected.
- **Phase 2 - 5.25 Acre Site (mix of units ranging from 2,500 to 6,000 sq ft)** – phased letting profile (no pre-lets) capitalised at 6.5% upon completion of lettings when investment sale is assumed. Rent free periods of 6 months per letting reflected.
- **Phase 3 – Units 2 (30,000 sq ft), 3 (20,000 sq ft) and 4 (40,000 sq ft)** – phased letting profile (no pre-lets) capitalised at 6.5% upon completion of lettings when investment sale is assumed. Rent free periods of 6 months per unit reflected.

#### 4.2. DEVELOPMENT COSTS

##### Acquisition Costs

The appraisal includes Acquisition Costs, where applicable, as follows:

- Stamp Duty Land Tax at the prevailing rate;
- Agents Fees at 1%;

- Legal Fees at 0.8%.

### Construction Costs

C&W have consulted BCIS in respect of the base build costs relating to the construction of the industrial units.

BCIS data rebased to the South West as at June 2018 demonstrates that lower quartile build costs for general purpose-built warehouses / stores reflect the following rates (based on unit size) (see BCIS summary sheet attached as **Appendix F**):

UNIT SIZE GIA (SQ FT)	BCIS RATE PER SQ FT
Up to 500 sq m (5,381 sq ft)	£81.38 per sq ft
500 to 2,000 sq m (5,381 to 21,528 sq ft)	£57.04 per sq ft
Over 2,000 sq m (21,528 sq ft)	£48.50 per sq ft

C&W have reflected these costs within the appraisal, although it is recognised that 'median' build costs may be more appropriate for a scheme of this nature (reflecting the rental profile adopted).

For clarity, BCIS build costs relate to the cost associated with the physical delivery of the industrial units only (including standard foundations and preliminaries) – all other development costs are excluded from the above estimates.

### Infrastructure and Abnormal Costs

Aside from the standard unit build costs (where a BCIS rate has been adopted as detailed above) all other construction costs associated with the scheme have been provided by cost consultants, Gleeds, with further amendments relating to the assumed scheme provided by Cost Consultant John Tywdell (Order of Cost Estimate, Addendum, June 2018), and included at the rear of Gleeds cost report.

The costs provided by Gleeds relate to a former indicative masterplan. Having been reviewed, the masterplan for the industrial scheme has been updated, hence the update to the costs provided by Cost Consultant John Tywdell.

The full Gleeds cost estimate (dated May 2018) and the cost consultant's amendments are enclosed as **Appendix G** and summarised within the table below:

COST ITEM	COST ESTIMATE
Site Preparation Works	£1,045,329
Roads, Paths, Pavings and Surfacing	£2,423,582
Fencing	£201,783
External Drainage	£667,843
External Services	£1,130,295
<b>SUB-TOTAL</b>	<b>£5,468,832</b>
Preliminaries @ 15%	Included above
OHP @ 5%	Included above
Design Development Risk	£273,442
Construction Risk	£287,114
<b>TOTAL COSTS</b>	<b>£6,029,388</b>

For clarity, of the total anticipated construction costs, summarised within the table above, those considered to be “Abnormal Costs” associated with the development are summarised within Section 3 of the Order of Cost Estimate, Addendum, June 2018, and summarised within the table below:

<b>COST ITEM</b>	<b>COST ESTIMATE</b>
Site Preparation Works	£753,371
Roads, Paths, Pavings and Surfacing	£1,315,513
External Drainage	£274,000
External Services	£110,000
<b>SUB-TOTAL</b>	<b>£2,452,885</b>
Preliminaries @ 15%	£367,932
OHP @ 5%	£141,040
Inflation from Q1 2016 to Q2 2018	£441,556
Design Development Risk	£170,171
Construction Risk	£178,679
<b>TOTAL ABNORMAL COSTS</b>	<b>£3,752,263</b>
<b>TOTAL ABNORMAL COSTS (EXCL. CONTINGENCY)</b>	<b>£3,403,412</b>

The costs for the development as estimated by Gleeds as at May 2018 (with later amends by John Tywdell, John 2018) therefore total £6.03M of which c. £3.40M are considered to be “Abnormal Costs” (excluding contingencies / risk allowances).

### Contingency

The appraisal accommodates a 5% contingency rate for Design Development Risk and 5% contingency rate for Construction Risk applied to costs detailed above (i.e. Site Preparation Works, Roads, Paths, Pavings and Surfacing, Fencing, External Drainage, External Services and Abnormals) as recommended by the cost estimate report by Gleeds.

C&W have also incorporated a 5% contingency on the base build costs obtained from BCIS.

### Professional Fees

C&W have applied Professional Fees at 6% of Construction Costs and Infrastructure and Abnormal Costs, which would be considered appropriate for a development of this scale and nature (typically assume 6%-8%).

### Planning (CIL / S106)

CIL has not been applied in line with Stroud District Council's Charging Schedule (February 2017). CIL is not chargeable on commercial development within Stroud district (other than Supermarkets and Retail Warehousing).

C&W have assumed no S106 costs within the appraisal. Should it transpire however that this development would be subject to planning contributions in this regard, this would need to reflect within the analysis as a cost of the development, which would further impact on the scheme's viability.

### Marketing & Disposal Costs

Marketing & Disposal Costs have been included at the following rates in accordance with standard market practice:

- Letting Agent Fees @ 10% of GDV;

- Letting Legal Fees @ 5% of GDV;
- Purchaser's Costs @ 6.8% of GDV.

### Finance Costs

Finance Costs have been assumed at a 6% debit rate.

### Development Profit

The appraisal accommodates a development profit reflecting at 19.34% return on cost.

## 4.3. DEVELOPMENT TIMESCALES & CASHFLOW ASSUMPTIONS

C&W's appraisal is based on a total project period of 59 months, and assumes the following timescales:

INPUT	C&W VIEW
<b>Pre-Construction Phase</b>	6 months
<b>Phase 1 – Unit 1 (total - 100,000 sq ft)</b>	
<b>Construction Phase</b>	12 months S-curve application of costs over the construction period
<b>Letting Profile</b>	Pre-let investment sale on completion of the construction period (October 2019)
<b>Phase 2 - 5.25 Acre Site (total 91,500 sq ft)</b>	
<b>Construction Phase</b>	24 months commencing 6 months into the construction of Phase 1 (April 2019) S-curve application of costs over the construction period
<b>Letting Profile</b>	Phased letting profile over 36 months commencing 10 months into the construction phase 6 months rent free on each proposed letting Investment sale assumed on completion of the phased letting period of 36 months (February 2023)
<b>Phase 3 – Units 2, 3 and 4 (total 90,000 sq ft)</b>	
<b>Construction Phase</b>	12 months commencing 12 months into the construction of Phase 2 (April 2020) S-curve application of costs over the construction period
<b>Letting Profile</b>	Phased letting profile over 18 months commencing 6 months into the construction phase 6 months rent free on each proposed letting Investment sale assumed on completion of the phased letting period of 12 months (October 2021)

C&W's assumptions in respect of the remainder of the appraisal inputs are summarised in the table below:

INPUT	C&W VIEW
<b>Land Value &amp; Acquisition Costs</b>	N/A
<b>Infrastructure and Abnormal Costs</b>	Apportioned across land parcels according to size of plot S-curve application over the construction period
<b>Contingency</b>	Linked to construction costs
<b>Professional Fees</b>	Linked to construction costs
<b>Planning (CIL)</b>	N/A
<b>Marketing &amp; Letting Costs</b>	Flat-line application over the letting period
<b>Disposal Costs (investment sale)</b>	Flat-line application on investment sale

#### 4.4. VIABILITY CONCLUSION

C&W's financial appraisal produces a negative land value of **-£0.571M**. This does not constitute a 'competitive return' which would incentivise the landowner to release the land and it is clearly against the guidance set out in the NPPF and RICS Financial Viability GN.

Given the complexity of the Site and considerable costs associated with preparing the Site for development, the above industrial scheme is not viable and therefore is unlikely to be brought forward for development. This view has been verified by the lack of demand for the Site and the fact that it has not been brought forward for development since it was first marketed in 2005.

In light of this, in order for the Site to be brought forward for development, it is necessary for alternative uses to be considered.

The following report sections investigate the viability of the proposed residential scheme incorporating 160 dwellings and considers the level of planning obligations the scheme can potentially support (Affordable Housing provision and CIL / S106 contributions).

## 5. BENCHMARK LAND VALUE

### 5.1. BENCHMARK LAND VALUE (COMPETITIVE RETURN)

In assessing whether the proposed residential scheme is viable, regard has been had to a Benchmark Land Value, being the ‘threshold’ value against which viability is tested – i.e. for a scheme to be deemed viable, the site value must be at a level which adequately incentivises the landowner to release the land for development, the premise being that willing vendors will not dispose of sites below this threshold. This is against this figure which viability is tested.

RICS Guidance (Financial Viability in Planning) and other Planning Policy guidance states that in undertaking an assessment of financial viability it is important that each of the stakeholders receive a fair and reasonable outcome if development is to occur, being 1) the Local Planning Authority in terms of meeting its policy objectives (whether it is in the form of new site infrastructure, roads, education, affordable housing, etc.), 2) the Developer in terms of receiving a reasonable level of profit in return for its delivery risk exposure, and 3) the Landowner in terms of a reasonable return for the land – as an incentive to bring the opportunity forward and release the land for development.

***“An objective financial viability test of the ability of a development project to meet its costs, including the cost of planning obligations, whilst ensuring an appropriate Site Value for the landowner and a market-adjusted return to the developer in delivering that project”.***

The RICS Guidance Note (GN) does not define what constitutes a ‘competitive return’ on land principally because landowners may require different returns at different stages of the economic / development cycle. However, it does provide a framework against which practitioners can judge what can be deemed as acceptable given the relevant circumstances.

Point 3.4.4 of the GN refers to the importance of considering an uplift from the current use value of any site when assessing the appropriate ‘competitive return’ on land:

***“For a development to be financially viable, any uplift from current use value to residual land value that arises when planning permission is granted should be able to meet the cost of planning obligations while ensuring an appropriate Site Value for the landowner and a market risk adjusted return to the developer...The return to the landowner will be in the form of a land value in excess of current use value...”.***

The Site Value, therefore, representing the figure considered to be the ‘competitive return’ to the landowner, enough to incentivise the landowner to release the land for development, is the figure that needs to be established, and the figure against which viability of the scheme should be tested.

#### **Current Use Value (CUV)**

C&W opinion of Current Use Value (CUV) is based on the existing, employment / industrial use, for which the Site is allocated.

In arriving at our opinion of gross value in terms of the Site, we have reviewed employment land transactions within Gloucester and the wider area, as detailed within the Market Commentary section above (Section 3).

The most comparable transaction is the sale of a neighbouring plot of land, adjoining the Site, which sold to Gabwell Property Developments Limited in December 2015 for a price reflecting c.£325,000 per acre.

We note that this comparable is far smaller than the Site, at only two acres. We would therefore expect there to be a discount reflected in the value of the Site, to take into consideration the impact of quantum.

Having regard to the above comparable evidence, and with regard to RICS guidance, C&W consider a gross CUV of £275,000 per acre to be appropriate for the purpose of the viability analysis. Based on a 'developable' land area of 16.63 acres, this equates to a **gross** threshold land value of £4.57M.

We note that the Site is constrained by a number of abnormalities due to the Site's specific constraints, which will impact on the land value achieved.

The independent cost report (Gleeds, dated May 2018) identifies that abnormal costs amount to £3.40M. When deducted from the gross threshold land value, this equates to a gross CUV of £1.17M (Net Land Value of c.£70K per acre).

The CUV has been considered in the context of the NPPF and RICS viability guidance, recent comparable land transactions in the Gloucester / wider South West area, and acknowledging the level of development constraints specific to the Site.

### **Shinfield Principle**

The Shinfield Approach relates to an appeal in respect of 'Land at the Manor' in Shinfield (appeal ref: APP/X0360/A/12/2179141), and a planning application submitted by the University of Reading (to Wokingham Borough Council) which sought consent for residential-led development comprising up to 126 dwellings, a sports pavilion, public open space, landscaping and associated works.

At appeal the Inspector noted that the NPPF does not define what constitutes a 'competitive return' to the landowner and / or developer, but referred to the acknowledgement of the RICS Viability GN that, whilst planning obligations paid on development need to be paid for out of the uplift in land value generated by planning consent, other than in exceptional cases that obligation cannot use up the whole uplift generated.

In this regard, C&W notes that Section 3.4.3 of the RICS Viability GN identifies the importance of identifying upper and lower parameters in value terms for assessing the 'Site Value', such that for development to be financially viable, the landowner must be adequately 'compensated' in the form of a value uplift from CUV:

***“The residual land value (ignoring any planning obligations and assuming planning permission is in place) and current use value represent the parameters within which to assess the level of any planning obligations. Any planning obligations imposed will need to be paid out of this uplift but cannot use up the whole of this difference, other than in exceptional circumstances, as that would remove the likelihood of the land being released for development.”***

In the Shinfield case, the Inspector upheld the approach adopted by the Appellant, which was based on the contention that a 'competitive return' (and equitable position) for the landowner is the midway point between the Site's CUV (the 'lower parameter') and its value with the benefit of planning permission unfettered by planning obligations (the 'upper parameter'). In summary, therefore, the Shinfield approach contends that the competitive return, i.e. the Benchmark Land Value, should be halfway between the CUV and the 'upper parameter' value.

More recent research by RICS (Financial Viability Appraisal in Planning Decisions: Theory and Practice, April 2015) examines the approach established by the Shinfield case and confirms that, in the absence



of more appropriate and reliable methods for establishing the appropriate ‘threshold land value’ against which viability should be tested, this approach:

*“...addressed the issue of changing viability through time and avoids the circularity issue that afflicts threshold land values that are based on market values or purchase price...This approach...tracks changing market states and shares the profits of development between developers, landowners and the community in a way that is more equitable and responsive than current approaches.”*

### ‘Upper Parameter’ – No Planning Obligations

Having established the CUV in respect of the Site, at c. £1.17M, representing the ‘lower parameter’, the ‘upper parameter’ must be established, being the residual land value of the Site assuming no planning obligations and assuming planning permission is in place.

In assessing the ‘upper parameter’ residual land value, C&W have run an appraisal based on the proposed residential scheme assuming 100% open market units and zero addition planning obligations (i.e. no CIL / S106 contributions).

Details of our financial appraisal are summarised within the following report section.

### 5.2. C&W FINANCIAL APPRAISAL – 0% AFFORDABLE HOUSING

C&W’s financial appraisal in respect of the proposed residential development assuming 0% Affordable Housing is enclosed within **Appendix H** and summarised in the table below.

<b>C&amp;W UPPER PARAMETER APPRAISAL – PROPOSED RESIDENTIAL SCHEME 0% AH</b>	
<b>REVENUES</b>	
Open Market Sales	£46.80M
<b>Total Revenue</b>	<b>£46.80M</b>
<b>COSTS</b>	
Site Acquisition Costs	£0.54M
Construction Costs (Plot Costs)	£15.57M
Garage Build Costs	£0.085M
Site Works / Abnormals (incl. Prelims, OH&P, Design Contingency / Risk)	£6.56M
Construction Contingency	£1.10M
Professional Fees	£1.78M
Planning (CIL)	n/a
Marketing & Disposal Costs	£1.48M
Finance Costs	£2.46M
<b>Total Costs (Excluding Profit)</b>	<b>£29.57M</b>
Development Profit (20% of GDV)	£9.36M
<b>Total Costs (Including Profit)</b>	<b>£38.93M</b>
<b>RESIDUAL LAND VALUE</b>	<b>£7.87M</b>

The following section provides details on C&W assessment of Residual Land Value assuming 0% Affordable Housing, as detailed in the table above.

### 5.3. GROSS DEVELOPMENT VALUE

#### Open Market Revenue

C&W's revenue assumptions for the proposed residential scheme incorporating 160 Open Market dwellings produces a total Gross Development Value (GDV) of £46.80M.

In arriving at our opinion of open market sales rate, C&W considered comparable evidence from new build residential schemes from within Quedgeley and the wider Gloucester market. Our research is incorporated within **Appendix I**.

The market evidence ranges from £229 to £331 per sq ft, with the range in values reflecting location, quality of scheme, size of units etc.

C&W are of the opinion that the sales evidence from the adjacent Hunts Grove Gate scheme by Crest Nicholson offers the most comparable evidence given the proximity to the scheme and comparable location. Our research indicates that sales values for this scheme is in the order of £260 - £300 per sq ft.

In light of this, the appraisal analysis has therefore assumed a 'blended' average sales rate of £280 per sq ft in respect of the open market accommodation.

### 5.4. DEVELOPMENT COSTS

#### Acquisition Costs

Stamp Duty Land Tax is included at the prevailing rate, Agent Fees at 1%, Legal Fees at 0.8% (plus VAT on fees).

#### Construction Costs

C&W have consulted BCIS in respect of the base build costs relating to the construction of the residential dwellings.

BCIS data rebased to the South West as at June 2018 demonstrates that lower quartile build costs for general estate housing and apartments reflect the following rates (see BCIS summary sheet attached as **Appendix J**):

DWELLING TYPE	BCIS RATE PER SQ FT
Estate Housing generally	£94.48 per sq ft
Flats (apartments) generally	£108.98 per sq ft

C&W have reflected these costs within the appraisal. It could be argued that median costs are more appropriate, however, for the purpose of our analysis we have adopted the above rates.

For clarity, BCIS build costs relate to the cost associated with the physical delivery of the residential units only (including standard foundations and preliminaries) – all other development costs are excluded from the above estimates.

### Site Works / Abnormals

Aside from the standard unit build costs (where a BCIS rate has been adopted as detailed above) all other construction costs associated with the scheme have been provided by cost consultants, Alium Group (dated July 2018 and attached as **Appendix K**) and are summarised within the table below:

<b>COST ITEM</b>	<b>ALIUM GROUP COST ESTIMATE (MAY 2018)</b>
<b>Site Works and Abnormals</b>	
Site Preparation Works	£0.72M
External Drainage	£0.29M
External Services	£0.81M
Extra over Services for residential (connections to houses)	£0.49M
External Works (Roads, Pavings, Gardens etc)	£1.87M
Tree Protection Works (allowance)	£0.05M
Four New Retention Ponds	£0.32M
Environmental Improvements	£0.51M
<b>Other Costs</b>	
Preliminaries @ 15%	£0.76M
Overheads and Profit @ 7.5%	£0.44M
Design Contingency / Risk @ 5%	£0.31M
<b>Sub-Total Other Costs</b>	<b>£1.51M</b>
<b>TOTAL</b>	<b>£6.56M</b>

### Contingency

In addition to the Design Contingency / Risk allowance (at 5%) as recommended by Alium Group (detailed in the table above), C&W's appraisal accommodates a 5% contingency rate for construction contingency, applied to both the base build costs (Construction Costs) and Site Works / Abnormals.

### Professional Fees

Professional fees have been included at 8% of total costs.

### Marketing & Disposal Costs

Marketing & Disposal Costs accommodate Marketing Costs, Sale Agent Fees and Legal Fees, as detailed below:

- Marketing & Sale Agent Fees – C&W have included an allowance of 3% of GDV. This includes an inclusive cost for the actual sales agents plus marketing fees appropriate for a development of this nature, such as site advertising and branding, production of marketing brochures and collateral, show home costs, staffing costs (based in the show rooms), running costs (electricity, security, maintenance etc.) and associated holding costs which can be significant.
- Legal Fees - C&W has applied £500 per market unit.

### Finance Costs

Finance Costs are assumed at a 6% debit rate.

### Development Profit

The appraisal accommodates a development profit reflecting a 20% return on GDV (6% on GDV applied to Affordable dwellings in other scenarios).

## 5.5. DEVELOPMENT TIMESCALES & CASHFLOW ASSUMPTIONS

C&W's appraisal is based on a total project period of 61 months, and assumes the following timescales:

- 9-month pre-construction phase;
- 40-month construction phase (average of 4 units per month);
- 40-month sales phase commencing 12 months into the construction period, reflecting a sales rate of 4 units per month;
- C&W's appraisal cash-flow assumptions are summarised below:

INPUT	C&W VIEW
Open Market Sales	Flat-line application over the sales period – 4 market sales per month
Land Value & Site Acquisition Costs	100% at project commencement
Garage Build Costs	S-curve application over the construction period
Construction Costs (Plot Costs)	S-curve application over the construction period
Site Works / Abnormals	S-curve application over the pre-construction / construction period
Contingency	Linked to construction costs
Professional Fees	Linked to construction costs
Planning (CIL)	n/a
Marketing & Disposal Costs	Flat-line application over the sales period

## 5.6. APPRAISAL SUMMARY

Taking into consideration the appraisal inputs as detailed above, assuming 0% Affordable Housing contributions, the 'upper limit' financial appraisal produces a Residual Land Value of £7.87M.

## 5.7. BENCHMARK LAND VALUE

By adopting the Shinfield principle as discussed above, C&W have assumed that 50% of the increase in value between the CUV (£1.17M) and the Residual Land Value based on zero planning contributions (£7.89M) is shared equally between the Local Planning Authority and the landowner. This is demonstrated within the table below, and results in a Benchmark Land Value of c. £4.52M:

SHINFIELD PRINCIPLE	
Residual Land Value (RLV) with 0% affordable housing	£7.87M
Current Use Value (CUV)	£1.17M
Enhancement in value (RLV – CUV)	£6.70M
"Equitable split" (half of the enhancement of value between RLV and CUV)	£3.35M
<b>Benchmark Land Value</b>	<b>£1.17M + £3.35M = £4.52M</b>

The Benchmark Land Value represents a value of c. £415K per net developable acre.

Values in Gloucester and the surrounding area for consented residential development land are in the region of £375K to £550K per acre, dependent on size, configuration, abnormals and agreed planning obligations.

Drawing upon the above and our knowledge of the local residential land markets, we are satisfied that the Benchmark Land Value adequately reflects an appropriate value for the Site.

## 6. C&W FINANCIAL APPRAISALS – RESIDENTIAL DEVELOPMENT

Having established the Benchmark Land Value, as detailed within the previous report section, it is against this figure which viability can be tested to assess the extent to which the proposed residential scheme may be able to support planning contributions as well as delivering a competitive return to the landowner.

It is therefore essential to establish in the first instance whether a ‘policy compliant’ development (assuming 30% Affordable Housing provision) would result in a Residual Land Value in line with the Benchmark Land Value and as such, would be capable of delivering a satisfactory return to the landowner as well as a policy compliant level of planning contributions.

Failing to achieve a value in line with the Benchmark Land Value would therefore render the policy compliant position un-viable.

C&W’s financial appraisal in respect of the proposed “policy compliant” residential scheme is enclosed within **Appendix L** and summarised in the table below:

<b>C&amp;W APPRAISAL – PROPOSED RESIDENTIAL SCHEME 30% AH</b>	
<b>REVENUES</b>	
Open Market Sales	£33.06M
Affordable Housing Sales	£6.87M
<b>Total Revenue</b>	<b>£39.93M</b>
<b>COSTS</b>	
Site Acquisition Costs	£0.33M
Construction Costs (Plot Costs)	£15.57M
Garage Build Costs	£0.085M
Site Works / Abnormals (incl. Prelims, OH&P, Design Contingency / Risk)	£6.56M
Construction Contingency	£1.10M
Professional Fees	£1.78M
Planning (CIL)	£0.93M
Marketing & Disposal Costs	£1.06M
Finance Costs	£1.65M
<b>Total Costs (Excluding Profit)</b>	<b>£29.05M</b>
Development Profit	£7.12M
<b>Total Costs (Including Profit)</b>	<b>£36.18M</b>
<b>RESIDUAL LAND VALUE</b>	<b>£3.75M</b>
Benchmark Land Value (BLV)	£4.52M
<b>VIABILITY “DEFICIT / SURPLUS”</b>	<b>£0.77M “Deficit”</b>

The following report section incorporates details of C&W’s financial appraisal assuming a policy compliant level of Affordable Housing provision (30% Affordable Housing) as detailed in the table above.

### 6.1. ACCOMMODATION SCHEDULE

For the purpose of our analysis, we have assumed a straight split of 70% / 30% in terms of unit numbers between the Open Market and Affordable Housing elements. Our assumptions are detailed within the table below:

HOUSE TYPE	DESCRIPTION	TOTAL NO. OF UNITS	OPEN MARKET DWELLINGS	AFFORDABLE HOUSING DWELLINGS
A	4 bed detached house	5	4	1
B	4 bed detached house	7	5	2
C	3 bed detached house	3	2	1
F	3 bed semi-detached house	48	34	14
G	2 bed terrace	8	6	2
H	2 bed semi-detached house	45	31	14
I (a)	Apartment	6	4	2
I (b)	Apartment	6	4	2
J	3 bed corner house	19	13	6
K	3 bed corner house	13	9	4
<b>TOTALS</b>		<b>160</b>	<b>112</b>	<b>48</b>

## 6.2. GROSS DEVELOPMENT VALUE

### Open Market Revenue

C&W's revenue assumptions in respect of the open market element of the proposed development are as per the assumptions made within the appraisal detailed above i.e. a 'blended' average sales rate of £280 per sq ft. This results in a total Gross Development Value (GDV) for the open market element of £33.06M.

### Affordable Revenue

C&W's revenue assumptions for the 48 affordable units produces a total affordable GDV of £6.87M.

This reflects a 'blended' average sales rate of £140 per sq ft, equating to 50% of our adopted sales rate for the market units (£280 per sq ft).

## 6.3. DEVELOPMENT COSTS

### Acquisition Costs

Stamp Duty Land Tax is included at the prevailing rate, Agent Fees at 1%, Legal Fees at 0.8% (plus VAT on fees).

### Construction Costs / Site Works / Abnormals

Costs have been assumed as per the appraisal above, and in line with BCIS estimates (attached as **Appendix J**) and the cost report provided by Alium Group (dated May 2018 and attached as **Appendix K**).

**Contingency**

As above, C&W's appraisal accommodates a 5% contingency rate for Design Contingency / Risk and 5% rate for Construction Contingency.

**Professional Fees**

Professional fees have been included at 8% of total costs.

**Planning (CIL) / S106**

CIL has been adopted at a rate of £84.24 per sq m (£7.84 per sq ft) in line with the Council's CIL Charging Schedule for Stroud District (applied to the market units only) and updated for indexation.

S106 have not been included within the analysis. Greater clarity from the Council is required in this regard, as inclusion of any S106 will inevitably impact on the viability outcome.

**Marketing & Disposal Costs**

As above, the Marketing & Disposal Costs accommodate Marketing Costs, Sale Agent Fees and Legal Fees have been included as follows:

- Marketing & Sale Agent Fees – 3% of GDV;
- Legal Fees - £500 per market unit.

In addition to the above, C&W have included an amount of £10,000 relating to agent's fee for negotiating the Affordable Housing agreement with the Registered Provider.

**Finance Costs**

Finance Costs are assumed at a 6% debit rate.

**Development Profit**

The appraisal accommodates a development profit reflecting a 20% return on GDV for the Open Market housing and 6% on GDV for the Affordable Housing element. Overall, assuming delivery of 30% Affordable Housing, this produces a blended margin of 17.84 profit on GDV%.

**6.4. DEVELOPMENT TIMESCALES & CASHFLOW ASSUMPTIONS**

C&W's appraisal is based on a total project period of 49 months, and assumes the following timescales:

- 9-month pre-construction phase;
- 40-month construction phase (average of 4 per month);
- 28-month sales phase commencing 12 months into the construction period, reflecting a sales rate of 4 units per month in respect of the Open Market dwellings;
- Sales phase of 12 months in respect of the Affordable Housing dwellings (revenue split 50/50 with the first revenue stream at 75% build completion and the remainder post practical completion);
- C&W's appraisal cash-flow assumptions are summarised below:

INPUT	C&W VIEW
Open Market Sales	Flat-line application over the sales period – 4 market sales per month
Affordable Housing Sales	Flat-line application over the sales period split in two equal tranches (at 75% completion of construction phase and at practical completion)
Land Value & Site Acquisition Costs	100% at project commencement
Garage Build Costs	S-curve application over the construction period
Construction Costs (Plot Costs)	S-curve application over the construction period
Site Preparation Works	S-curve application over the pre-construction period
External Drainage	S-curve application over the construction period
External Services	S-curve application over the construction period
Extra over Services for residential (connections to houses)	S-curve application over the construction period
External Works (Roads, Pavings, Gardens etc)	S-curve application over the construction period
Tree Protection Works (allowance)	S-curve application over the construction period
Four New Retention Ponds	S-curve application over the construction period
Environmental Improvements	S-curve application over the construction period
Preliminaries	Linked to construction costs
Overheads and Profit	Linked to construction costs
Contingency	Linked to construction costs
Professional Fees	Linked to construction costs
Planning (CIL)	N/A
Marketing & Disposal Costs	Flat-line application over the sales period

## 6.5. APPRAISAL SUMMARY

Taking into consideration the appraisal inputs as detailed above, the “policy compliant” financial appraisal assuming the delivery of 30% Affordable Housing produces a Residual Land Value of £3.75M.

## 6.6. VIABILITY CONCLUSION

C&W’s financial appraisal produces a residual land value of £3.75M. When compared against the Benchmark Land Value of £4.52M, this results in a viability “deficit” of £0.77M.

In conclusion therefore, a “policy compliant” scheme offering 30% Affordable Housing therefore cannot be supported in viability terms.



## 7. SENSITIVITY ANALYSIS – IMPACT OF REDUCED PLANNING OBLIGATIONS

### 7.1. SENSITIVITY TESTING

C&W have undertaken a level of sensitivity testing in order to provide an indication of the impact of reducing the planning obligations on the viability position. The scenarios tested are as follows:

- **Scenario 1** – 20% Affordable Housing including CIL contribution and £0 S106;
- **Scenario 2** – 22% Affordable Housing including CIL contribution and £0 S106.

C&W's financial appraisals in respect of the above tested scenarios are enclosed within **Appendix M** and summarised in the table below, alongside the “Base Case” policy compliant scenario:

### 7.2. APPRAISAL SUMMARIES

APPRAISAL INPUT	“POLICY COMPLIANT” (BASE CASE) 30% AFFORDABLE HOUSING	SCENARIO 1 20% AFFORDABLE HOUSING	SCENARIO 2 22% AFFORDABLE HOUSING
<b>REVENUES</b>			
Open Market Sales	£33.06M	£37.08M	£36.12M
Affordable Housing Sales	£6.87M	£4.86M	£5.34M
<b>Total Revenue</b>	<b>£39.93M</b>	<b>£41.94M</b>	<b>£41.46M</b>
<b>COSTS</b>			
Site Acquisition Costs	£0.33M	£0.36M	£0.25M
Construction Costs (Plot Costs)	£15.57M	£15.57M	£15.57M
Garage Build Costs	£0.085M	£0.085M	£0.085M
Site Works / Abnormals (incl. Prelims, OH&P, Design Contingency / Risk)	£6.56M	£6.56M	£6.56M
Construction Contingency	£1.10M	£1.10M	£1.10M
Professional Fees	£1.78M	£1.78M	£1.78M
Planning (CIL)	£0.93M	£1.04M	£1.01M
Marketing & Disposal Costs	£1.06M	£1.19M	£1.16M
Finance Costs	£1.65M	£1.79M	£1.71M
<b>Total Costs (Excluding Profit)</b>	<b>£29.05M</b>	<b>£29.46M</b>	<b>£29.31M</b>
Development Profit	£7.12M	£7.80M	£7.66M
<b>Total Costs (Including Profit)</b>	<b>£36.18M</b>	<b>£37.26M</b>	<b>£36.97M</b>
<b>RESIDUAL LAND VALUE</b>	<b>£3.75M</b>	<b>£4.68M</b>	<b>£4.49M</b>
Benchmark Land Value (BLV)	<b>£4.52M</b>	<b>£4.52M</b>	<b>£4.52M</b>
<b>VIABILITY “DEFICIT / SURPLUS”</b>	<b>£0.77M “DEFICIT”</b>	<b>£0.16M “SURPLUS”</b>	<b>£0.03M “DEFICIT”</b>

### 7.3. VIABILITY CONCLUSION

- **Scenario 1** – 20% Affordable Housing – the proposed scheme is viable producing a Residual Land Value of £4.68M resulting in a viability “surplus” of £0.16M when compared against the Benchmark Land Value (£4.52M).
- **Scenario 2** – 22% Affordable Housing – the proposed scheme is unviable producing a Residual Land Value of £4.49M resulting in a marginal viability “deficit” of £0.03M when compared against the Benchmark Land Value (£4.52M).

## 8. C&W ANALYSIS & CONCLUSIONS

### 8.1. CONCLUSION

C&W's analysis above has shown that, due to the brownfield nature of the Site and the costs associated with delivering the employment scheme (site infrastructure, abnormals, servicing etc.), the proposed industrial scheme as described within this report is not deliverable in viability terms.

C&W's financial appraisal of the proposed industrial scheme resulted in a Residual Land Value of **-£0.571M**. This does not constitute a 'competitive return' which incentivises the landowner to release the land for development and is clearly against guidance set out in the NPPF and RICS Financial Viability GN.

It is therefore C&W's view, that if the Site is to be brought forward for development, alternative, higher value uses must be considered.

In light of this, this report has also considered the viability of the proposed residential development, incorporating 160 dwellings, incorporating a mix of apartments and two to four-bedroom houses.

If a development is to progress at the Site, it is essential that a deliverable planning position is agreed which provides the landowner with a competitive return for releasing the land and the planning authority with an adequate level of planning contributions.

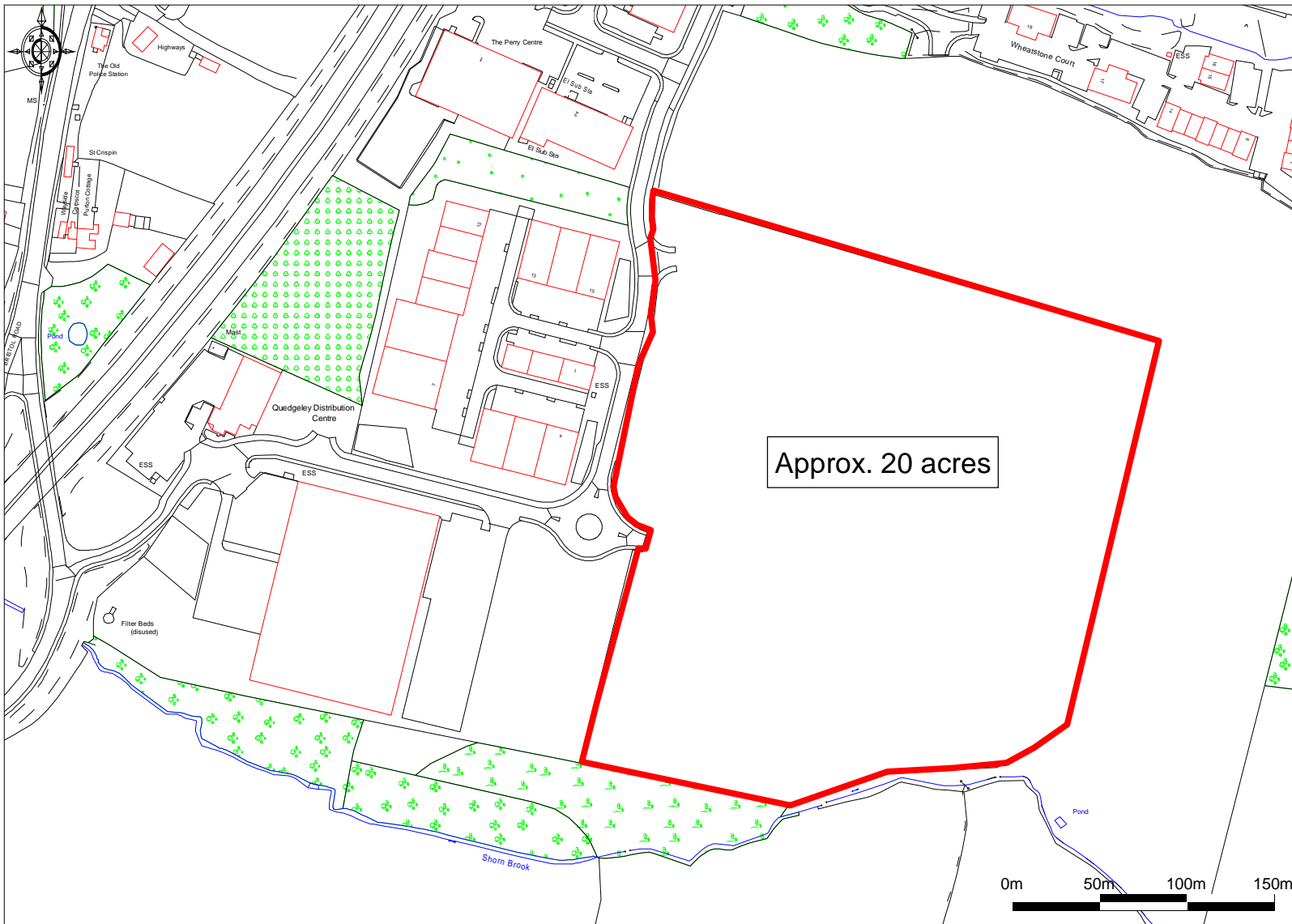
C&W's policy compliant appraisal (assuming 30% Affordable Housing) produces a Residual Land Value of **£3.75M**, which results in a viability "deficit" of £0.77M when compared to the Benchmark Land Value (£4.52M), which indicates that the proposed residential scheme cannot viably support policy compliant level of planning obligations including Affordable Housing (i.e. 30%) and CIL contributions, particularly in the context of the Site's delivery challenges and abnormal costs.

The above sensitivity analysis demonstrates that the proposed residential scheme may be capable of supporting c. 20% Affordable Housing provision. At this level of Affordable Housing, plus CIL contributions of c. £1.04M, the scheme delivers a positive Residual Land Value of £4.68M which reflects a marginal viability "surplus" of £0.16M against the Benchmark Land Value of £4.52M.

We would note, that whilst C&W's appraisals have included CIL contributions, S106 costs have not been included. Greater clarity will be required in respect of likely requirements in this regard, as this will inevitably impact on the viability outcome.

## Appendix A – Red Line Site Plan

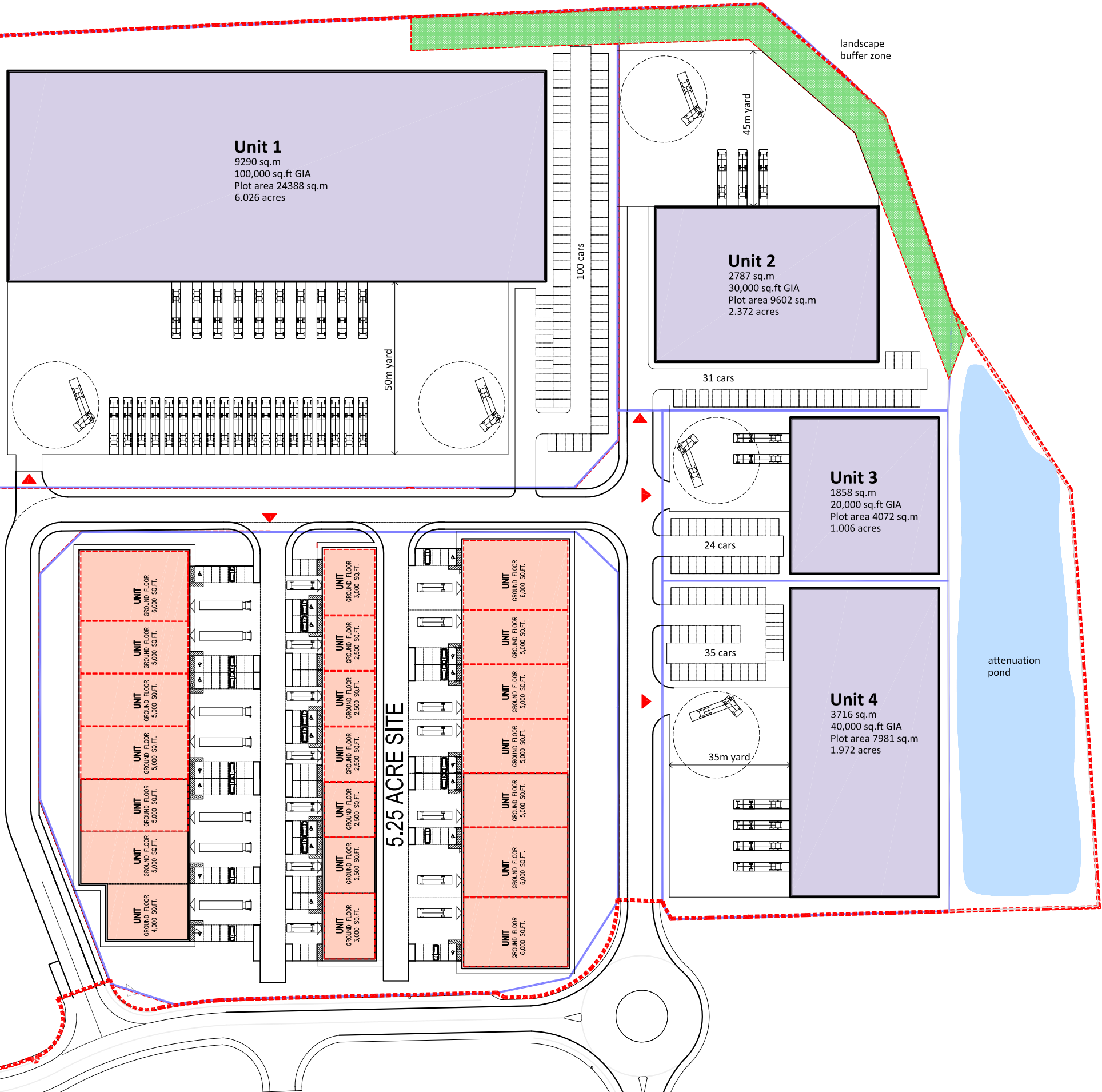
# Quadrant Distribution Centre Gloucester - Remaining Land



Ordnance Survey © Crown Copyright 2010. All rights reserved. Licence number 100020449.  
Getmapping plc 2010. Plotted Scale - 1:3500

## Appendix B – Indicative Scheme Plan – Industrial

ST MODWENS SITE



**Offices**  
 Woking  
 London  
 Milton Keynes  
 Warsaw

**Architecture**  
 Planning  
 Master Planning  
 Urban Design  
 Interiors

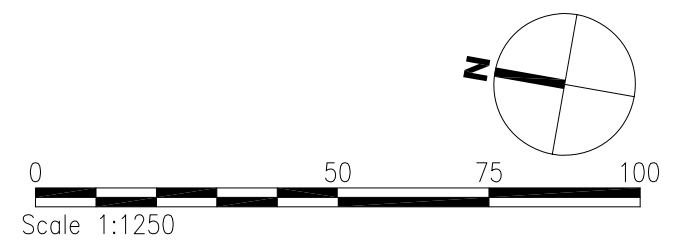
24 Church St. West  
 Woking, Surrey,  
 GU21 6HT  
 01483 494 350

Revisions:

Drawn/Chkd: Date:

Figured dimensions only are to be used. All dimensions to be checked onsite. Differences between drawings and between drawings and specification or bills of quantities to be reported to the PRC Group. The copyright of the drawings and designs contained therein remains vested in the PRC Group

Client: Hansteen
Project: QDC Quedgely PHASE 2
Drawing Title: <b>PROPOSED SITE LAYOUT</b>



Scale @ A3: 1:1250	Checked by: GW	Date: Jun 2018
Job No: 10352	Stage: FE	Drawing No: 202
Construction <input type="checkbox"/>	Preliminary <input type="checkbox"/>	Information <input type="checkbox"/>
Approval <input type="checkbox"/>	Tender <input type="checkbox"/>	



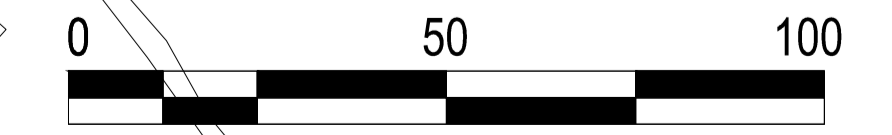
PRC Architecture & Planning

## Appendix C – Indicative Scheme Plans – Residential





CLIENT	REVISIONS	DATE	STATUS	SCALE	PROJECT	DRAWING NAME	DRAWING NUMBER
Hansteen Holding PLC	rev B: 02-07-18 rev A: 26-03-18	22-01-18	PRELIMINARY	1:1000 @ A1	QUEDGELEY GLOUCESTER	PROPOSED MASTERPLAN	17050(P)202B



**HIGGS YOUNG**  
**ARCHITECTS**

HIGGS YOUNG ARCHITECTS LTD  
 54 BOSTON PLACE  
 LONDON NW1 6ER  
 Tel: 0044 (0)20 7724 9395  
 E-mail: info@higgsgyoung.com



CLIENT	REVISIONS	DATE	STATUS	SCALE	PROJECT	DRAWING NAME	DRAWING NUMBER
Hansteen Holding PLC	rev C: 02-07-18 rev B: 20-03-18 rev A: 26-02-18	24-01-18	PRELIMINARY	1:1000 @ A1	QUEDGELEY GLOUCESTER	PROPOSED MASTERPLAN OPTION 2	17050(P)204C

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E-mail: info@higgsgyoung.com

## Appendix D – C&W Financial Appraisal, Industrial Scheme

Quedgeley, Industrial Development Option  
Land at Davy Way, Gloucester  
C&W Development Appraisal

**Quedgeley, Industrial Development Option  
Land at Davy Way, Gloucester  
C&W Development Appraisal**

Summary Appraisal for Merged Phases 1 2 3

Currency in £

**REVENUE**

**Rental Area Summary**

	Units	ft <sup>2</sup>	Rent Rate ft <sup>2</sup>	Initial MRV/Unit	Net Rent at Sale	Initial MRV
Unit 1	1	100,000	6.25	625,000	625,000	625,000
2,500 Unit	5	12,500	8.00	20,000	100,000	100,000
3,000 Unit	2	6,000	8.00	24,000	48,000	48,000
4,000 Unit	1	4,000	7.50	30,000	30,000	30,000
5,000 Unit	9	45,000	7.50	37,500	337,500	337,500
6,000 Unit	4	24,000	7.50	45,000	180,000	180,000
Unit 3	1	20,000	7.00	140,000	140,000	140,000
Unit 4	1	40,000	7.00	280,000	280,000	280,000
Unit 2	1	30,000	7.00	210,000	210,000	210,000
<b>Totals</b>	<b>25</b>	<b>281,500</b>			<b>1,950,500</b>	<b>1,950,500</b>

**Investment Valuation**

<b>Unit 1</b>						
Market Rent	625,000	YP @	5.0000%	20.0000		
(9mths Rent Free)		PV 9mths @	5.0000%	0.9641	12,050,860	
<b>2,500 Unit</b>						
Current Rent	100,000	YP @	6.5000%	15.3846	1,538,462	
Rent Free	(100,000)	YP 6mths @	6.5000%	0.4769		
		PV 2yrs @	6.5000%	0.8817	(42,044)	
					<b>1,496,417</b>	
<b>3,000 Unit</b>						
Current Rent	48,000	YP @	6.5000%	15.3846	738,462	
Rent Free	(48,000)	YP 6mths @	6.5000%	0.4769		
		PV 2yrs 9mths @	6.5000%	0.8410	(19,250)	
					<b>719,211</b>	
<b>4,000 Unit</b>						
Current Rent	30,000	YP @	6.5000%	15.3846	461,538	
Rent Free	(30,000)	YP 6mths @	6.5000%	0.4769		
		PV 3yrs 6mths @	6.5000%	0.8022	(11,476)	
					<b>450,062</b>	
<b>5,000 Unit</b>						
Current Rent	337,500	YP @	6.5000%	15.3846	5,192,308	
Rent Free	(337,500)	YP 6mths @	6.5000%	0.4769		
		PV 4yrs @	6.5000%	0.7773	(125,106)	
					<b>5,067,201</b>	
<b>6,000 Unit</b>						
Market Rent	180,000	YP @	6.5000%	15.3846		
(3mths Unexpired Rent Free)		PV 3mths @	6.5000%	0.9844	2,725,974	
Renewal Rent Free	(180,000)	YP 6mths @	6.5000%	0.4769		
		PV 4yrs 9mths @	6.5000%	0.7415	(63,645)	
					<b>2,662,329</b>	
<b>Unit 3</b>						
Current Rent	140,000	YP @	6.5000%	15.3846	2,153,846	
<b>Unit 4</b>						
Current Rent	280,000	YP @	6.5000%	15.3846	4,307,692	
<b>Unit 2</b>						
Market Rent	210,000	YP @	6.5000%	15.3846		
(3mths Unexpired Rent Free)		PV 3mths @	6.5000%	0.9844	3,180,303	
					<b>32,087,923</b>	

**GROSS DEVELOPMENT VALUE 32,087,923**

Purchaser's Costs (2,181,979)  
Effective Purchaser's Costs Rate 6.80% (2,181,979)

**NET DEVELOPMENT VALUE 29,905,944**

**Income from Tenants**

2,500 Unit 250,000  
3,000 Unit 84,000  
4,000 Unit 30,000  
5,000 Unit 168,750  
Unit 3 70,000  
Unit 4 70,000  
672,750

**NET REALISATION 30,578,694**

**OUTLAY**

**ACQUISITION COSTS**

Residualised Price 1,599,441  
Residualised Price (Negative land) (2,170,432)

**Quedgeley, Industrial Development Option  
Land at Davy Way, Gloucester  
C&W Development Appraisal**

Stamp Duty	5.00%	79,972	(570,991)
Agent Fee	1.00%	15,994	
Legal Fee	0.80%	12,796	
			108,762

**CONSTRUCTION COSTS**

Construction	ft <sup>2</sup>	Build Rate ft <sup>2</sup>	Cost	
Unit 1	100,000	48.50	4,850,000	
2,500 Unit	12,500	81.38	1,017,250	
3,000 Unit	6,000	81.38	488,280	
4,000 Unit	4,000	81.38	325,520	
5,000 Unit	45,000	81.38	3,662,100	
6,000 Unit	24,000	57.04	1,368,960	
Unit 3	20,000	57.04	1,140,800	
Unit 4	40,000	48.50	1,940,000	
Unit 2	<u>30,000</u>	48.50	<u>1,455,000</u>	
<b>Totals</b>	<b>281,500</b>		<b>16,247,910</b>	<b>16,247,910</b>

Contingency	5.00%	812,395	812,395
-------------	-------	---------	---------

**Other Construction**

Phase 1 Infra/Abnormal Costs	2,185,318	
Phase 2 Infra/Abnormal Costs	1,903,903	
Phase 3 Infra/Abnormal Costs	1,940,168	
		6,029,389

**PROFESSIONAL FEES**

Professional Fees	6.00%	1,336,638	1,336,638
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**MARKETING & LETTING**

Letting Agent Fee	10.00%	195,050	
Letting Legal Fee	5.00%	97,525	
			292,575

**FINANCE**

Debit Rate 6.000%, Credit Rate 0.000% (Nominal)			
Total Finance Cost			1,370,692

**TOTAL COSTS** **25,627,370**

**PROFIT** **4,951,324**

**Performance Measures**

Profit on Cost%	19.32%
Profit on GDV%	15.43%
Profit on NDV%	16.56%
Development Yield% (on Rent)	7.61%
Equivalent Yield% (Nominal)	5.93%
Equivalent Yield% (True)	6.15%
IRR	21.77%
Rent Cover	2 yrs 6 mths
Profit Erosion (finance rate 6.000)	2 yrs 12 mths

## Appendix E – Knight Frank Marketing Report – June 2018

## Historic Marketing and Interest (2005-2018)

Quadrant Business Park, Quedgeley,  
Gloucester

Prepared on behalf of Hansteen Holdings Plc

11 June 2018

### Contact details

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## 1 Introduction

Knight Frank have been involved in the marketing of the brownfield development land at Quadrant Business Park, Gloucester since 2010 in both strategic and open marketing roles.

Initially our brief was to provide advice as to how best to bring forward the site to make it deliverable for potential occupiers. Once a number for these issues had been addressed our brief expanded to include open marketing to attract occupiers.

## 2 Strategic and Masterplanning

We attended a number of meetings with the full consultancy team to assess the issues that were preventing development and ensure that these could be dealt with. The object of the exercise was to be able to identify to a number of key elements as part of the development programme:

- 1) Total capacity of the site both in terms of single sided and cross docked distribution uses
- 2) Access arrangements for high volume HGV users and local highways considerations
- 3) Services Capacities and lead in times for additional services
- 4) Topography and suitability for large format floorplates
- 5) Flooding and water attenuation solutions
- 6) Ecology – current and management
- 7) Planning – massing and design (eaves heights, loading yards)
- 8) Noise or Hours of Use restrictions
- 9) Proximity of residential to boundaries – current and future
- 10) Contamination and remediation

Over a period of approximately 12 months the majority of the above issues were addressed. Where there was an immediate technical solution this was designed and costed as part of the delivery programme. Of particular note were some small “hotspots” of contamination, water attenuation and the need to mitigate water flow to the southern boundary, topography, and the ability to enlarge services. All of these elements added an element of “abnormal” costs when compared with a similar greenfield site free of constraints.

Once the above had been addressed, the team drew up a programme for delivery that could be included in timescales for delivery of a unit for a potential occupier. These costs were significant, and the shape and size of the proposed unit were yet to be agreed with an occupier. In essence, we were seeking to prepare a site that was as close to “development ready” as possible to be able to take it to the market. As part of the campaign, we were then confident that where there were outstanding technical issues we already had a solution that would stand up to robust due diligence.

### 3 Marketing

As a leading logistics and distribution agent in the South West we were aware of all of the requirements that came forward in the following years. In many cases we were responding in competition both on a local basis, and more frequently on a regional basis. The market started its post recession recovery in 2014/2015 and there were more requirements from manufacturers, distributors and retailers as trading volumes increased.

With a strong online and market based presence we were able to react to all requirements of differing unit sizes, and particularly where the occupier required a bespoke solution.

### 4 Occupiers & Requirements

Occupier	Size	Specification	Comments
Supergroup	750,000-800,000sq ft	Cross Docked 10% office content Ability to add a further 100,000sq ft	Appointed third party to undertake distribution function (Clipper) who had spare capacity in their network at Burton-on-Trent.
Waitrose	300,000sq ft	Single sided loading 5% office content	Included in option list down to last two locations Opted to secure a site at Central Park, Bristol Eventually didn't complete acquisition owing to losing market share to discount retailers
DHL Tradeteam	250,000sq ft	Single sided loading Mixture of dock level loading and surface level 10% office content	Relocation from Metz Way Acquired "High Roller" existing building on Gloucester Business Park
TBS	160,000sq ft	Single sided loading 15% office content	Relocation from Cheltenham Secured a FH site and building at Gloucester Business Park Recently completed
GE Dowty	180,000sq ft	Single sided loading High office content	Relocation from Cheltenham following fire Secured a LH building on Gloucester Business Park

Farmfoods	167,000sq ft	Single sided loading Temperature controlled Ability to add 100,000sq ft 5% office content	Secured a site a Central Park, Bristol and developed own building
Amazon	350,000sq ft	Single sided loading with limited dock level access Van based fleet/access No office content	Considered Design and Build options along M5 Secured existing building at Crossflow, Cabot Park, Bristol
Roper Rhodes	150,000-180,000sq ft	Single Sided Loading Up to 18m eaves Minimal office content	Initially focussed on Bath, with search area expanded to Gloucestershire
Downton	300,000sq ft	Single Sided loading Surface loading Minimal office content	Magners/Corona contract Relocation from Western Approach, Bristol Secured existing building in Chepstow
Eastbrook	100,000-150,000sq ft	Preference for land purchase Gloucester to Tewkesbury	Will only access site from
Kohler Mira	180,000-200,000sq ft	Single sided loading Docks and surface access Up to 20% office content	Three rounds of bidding over 5 year period Understood to have agreed terms in Gloucester (unknown location)
Furlong Flooring	180,000-200,000sq ft	Preference for existing building Freehold	Purchased former Unite Building at Stonehouse
DHL	150,000sq ft	Cross docked Temperature Controlled to part Many dock level doors	Purchased land at Central Park, Bristol Self developed building and undertook Sale & Leaseback

All of the above named occupiers were in discussion on the subject site. Not all concluded their search with undertaking an acquisition, but many did. One of the key drivers in a good proportion of the above locating at Central Park, Bristol was the pre-development site preparation undertaken by the developer, together with a very unusual planning position where an open B8 consent was in place.

## 5 Site Sales

During the marketing process there were a number of parties who would consider a purchase of part of the site. This approach presented the issue of the initial infrastructure investment to access the plots, as well as the need for establishing a masterplan (and therefore plot layout).

In terms of infrastructure cost, there was a need for the receipts from the sale to exceed the costs of the additional infrastructure to generate a positive net receipt. Therefore the quantum of the sale was to be sufficient to generate income in excess of the base “book value” of the land, together with covering the costs of extension of the roads and services, any site contamination clean up, site levelling and ecology. In addition, following this route required the establishment of a flooding and water attenuation strategy. Specifically addressing the flooding and water attenuation, the scheme needed to be comprehensive for the whole land holding and therefore the solution could occupy a significant land take. In this instance, the net developable land given over to a flood mitigation solution could be in the order of 1-2 acres – therefore nullifying small land plot sales.

In undertaking the sale of a smaller plot, there is the need to settle on a masterplan for the whole, by breaking up the wider land holding. This is a compromise, and sets the strategy for the future by excluding the ability to accommodate larger requirements. In this instance the land value therefore needs to escalate to reflect the additional road and services costs to be spread across the whole plot, together with the loss of net developable land.

During the marketing process, the following offers were received for smaller plots sizes:

Name	Plot Size	Use	Offer (£/acre)
Downton Distribution	3 acres	Trailer Parking	£350,000
Chancerygate Developments	5 acres	Multi-let industrial development	£400,000
Imperial Commercials	2.5 acres	HGV dealership and workshop	£425,000

## 6 Competing Sites

On a local level the following sites were directly competing:

Address	Developer	Size	Planning Status	Comments
Centre Severn, Barnwood, Gloucester	Peveril Securities	40 acres	Outline B8	Ecology clearance recently completed Some internal infrastructure Awaiting completion of access improvements to A38 by Glos CC/Highways
Spinnaker Park	n/a	20 acres	None	Understood to have unknown fill imported into site historically. Until this can be identified then little prospect of development as remediation cost unknown
Javelin Park	Graftongate	c.20 acres	Outline B8	Adjacent to new incinerator under construction at J12 M5 Infrastructure in place
Gloucester Business Park	Goodman/TPG	c.22 acres	Allocated "industrial"	Greenfield site that needs ecology "sweep" Infrastructure in place
Quedgeley East	St Modwen	c.45 acres	Awaiting planning consent	Large format B8 in masterplan Planning application held up by Highways and concerns over capacity at J12 M5

All of these sites have been available since the market matured (2014 onwards) and varying levels of pre-development preparation has been undertaken. The occupier schedule above demonstrates that Gloucester Business Park is the only scheme that has been successful in attracting occupier during this time.

## Appendix F – BCIS Summary Sheet – Industrial

## £/m2 study

**Description:** Rate per m2 gross internal floor area for the building Cost including prelims.

**Last updated:** 09-Jun-2018 12:20

› Rebased to South West Region ( 98; sample 867 )

**Maximum age of results:** Default period

Building function (Maximum age of projects)	£/m <sup>2</sup> gross internal floor area						Sample
	Mean	Lowest	Lower quartiles	Median	Upper quartiles	Highest	
New build							
<b>284. Warehouses/stores</b>							
Generally (15)	897	317	539	767	1,051	4,105	51
Up to 500m2 GFA (15)	1,608	583	876	1,118	1,896	4,105	8
500 to 2000m2 GFA (15)	871	430	614	841	1,096	1,483	15
Over 2000m2 GFA (15)	709	317	522	596	852	1,368	28
<b>284.2 Purpose built warehouses/stores</b>							
Generally (15)	961	317	583	767	1,114	4,105	37
Up to 500m2 GFA (15)	1,857	583	1,080	1,439	2,319	4,105	6
500 to 2000m2 GFA (15)	847	430	593	748	1,031	1,483	13
Over 2000m2 GFA (15)	745	317	528	710	877	1,368	18

## **Appendix G – Gleeds Costs Estimate (May 2018) & Order of Cost Estimate (Addendum) (June 2018)**





# ORDER OF COST ESTIMATE QUEDGLEY PHASE III - ENABLING WORKS

For:

**Hansteen**

Project No: LNCM XXXX

Issue 4.0

Date: May 2018

Gleeds Cost Management Limited  
95 New Cavendish Street, London W1W 6XF

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gleeds<sup>G</sup>

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**QDC QUEDGELEY PHASE III**

ENABLING WORKS

ORDER OF COST ESTIMATE

Based on PRC Architects drawings



Base Date: 2Q2018

## Section 1 : MAIN SUMMARY

	m <sup>2</sup>	ft <sup>2</sup>	TOTAL £	£/m <sup>2</sup>	£/ft <sup>2</sup>	Percentage of Cost
<b>Site Preparation Works</b>			864,949			15.26%
<b>Roads, Paths, Pavings and Surfacing</b>			2,538,748			44.80%
<b>Fencing</b>			201,783			3.56%
<b>External Drainage</b>			556,840			9.83%
<b>External Services</b>			977,666			17.25%
<b>SUB TOTAL</b>			5,139,986			90.70%
<b>Main Contractor Costs</b>						
1 Allowance For Main Contractors Preliminaries 15.0%			Included above			
2 Allowance For Main Contractors Overhead & Profit 5.00%			Included above			
<b>TOTAL COST EXCL. RISK &amp; INFLATION</b>			£5,139,986			90.70%
<b>Risk &amp; Inflation</b>						
1 Design Development Risk 5.00%			256,999			4.54%
2 Construction Risk 5.00%			269,849			4.76%
<b>TOTAL AT BASE DATE</b>			£5,666,834			100.00%
1 Tender price inflation to start on site date			Incl Above	-	-	
2 Building cost inflation to construction mid point			Excluded	-	-	
<b>TOTAL ESTIMATED COST AT CURRENT DAY</b>			£5,666,834			100.00%
<b>TOTAL ESTIMATED COST AT CURRENT DAY (Rounded)</b>			£5,670,000			100.00%

**QDC QUEDGELEY PHASE III****ENABLING WORKS****ORDER OF COST ESTIMATE**

Based on PRC Architects drawings

Base Date: 2Q2018

**Section 2 : MAIN WORKS CALCULATIONS**

	Quantity	Quantity ft <sup>2</sup>	Unit	RATE £	Rate £/ft <sup>2</sup>	TOTAL
<b>1 SITE PREPARATION WORKS</b>						
a	1		Item	50,000.00		50,000
Notional allowance for contamination removal (based upon site investigations risk of contamination deemed to be minor)						
b	81,810		m <sup>2</sup>	0.25		20,453
Notional allowance for site vegetation strip						
c	24,543		m <sup>3</sup>	1.50		36,815
Nominal 300mm strip off existing level						
d	24,543		m <sup>3</sup>	4.00		98,172
Cart topsoil on site to temp spoil heaps and later cart back						
e	24,543		m <sup>3</sup>	2.00		49,086
Filling topsoil to bunds and soft landscaping areas						
f	45,777		m <sup>3</sup>	1.50		68,666
Excavate to required level (Cut)						
g	45,777		m <sup>3</sup>	4.00		183,108
Cart subsoil on site to temp spoil heaps and later cart back						
h	583		m <sup>3</sup>	2.00		1,166
Filling to make up levels						
j	81,810		m <sup>2</sup>	0.50		40,905
Level and compact bottom of excavation						
k	1		Item	75,000.00		75,000
Notional allowance for forming bunds (scope of works yet to be defined)						
<b>SUB-TOTAL SITE PREPARATION WORKS</b>						<b>623,370</b>
<b>Preliminaries @ 15%</b>						<b>93,505</b>
<b>OHP @ 5%</b>						<b>35,844</b>
<b>Inflation from Q1 2016 to Q2 2018 Based on BCIS TPI @ 14.91%</b>						<b>112,230</b>
<b>TOTAL SITE PREPARATION WORKS (To Summary)</b>						<b>864,949</b>
<b>2 ROADS, PATHS, PAVINGS &amp; SURFACINGS</b>						
a	28,750		m <sup>3</sup>	35.00		1,006,250
Compacted 6F2 stone spot fill in 150mm layers						
b	189,750		m <sup>2</sup>	0.75		142,313
Level and compact stone in 150mm layers						
c	3,736		m <sup>2</sup>	70.00		261,520
'Ring Road' construction to adoptable standards; 45mm rolled asphalt 20mm pre-coated 55mm dense bitumen macadam (20mm) 110mm dense bitumen macadam (40mm) 390mm Type 1 certified crushed on site fill material compacted in max 150 layers on subgrade						
d	3,594		m <sup>2</sup>	70.00		251,580
'Spur Road' construction; 45mm rolled asphalt 20mm pre-coated 55mm dense bitumen macadam (20mm) 110mm dense bitumen macadam (40mm) 390mm Type 1 certified crushed on site fill material compacted in max 150 layers on subgrade						
e	1,473		m <sup>2</sup>	55.00		81,015
Footpath construction 25mm medium graded macadam (10mm) 50mm dense bitumen macadam (20mm) 250mm certified crushed on-site fill material compacted in max 150 layers on subgrade						
f	1,440		m	30.00		43,200
Standard HB2 kerbs, bullnozed, 125 x 275mm; c/w concrete haunching & bed						
g	1,440		m	20.00		28,800
50 x 150mm EF pre cast concrete edging c/w concrete haunching & bed						
h	1		Item	5,000.00		5,000
White lining to new road						
j	1		Item	7,500.00		7,500
Extra over for curved kerbs (allowance)						
k	1		Item	2,500.00		2,500
Connection into existing spur						
<b>SUB-TOTAL ROADS, PATHS, PAVINGS &amp; SURFACINGS</b>						<b>1,829,678</b>
<b>Preliminaries @ 15%</b>						<b>274,452</b>
<b>OHP @ 5%</b>						<b>105,206</b>
<b>Inflation from Q1 2016 to Q2 2018 Based on BCIS TPI @ 14.91%</b>						<b>329,412</b>
<b>TOTAL ROADS, PATHS, PAVINGS &amp; SURFACINGS (To Summary)</b>						<b>2,538,748</b>

**Section 2 : MAIN WORKS CALCULATIONS**

	Quantity	Quantity ft <sup>2</sup>	Unit	RATE £	Rate £/ft <sup>2</sup>	TOTAL
<b>3 FENCING</b>						
a Security vertical palisade fencing: 2.5m high; constructed in 55 x 100mm posts at 3m centres set in concrete to three sides of the development plot. Assumed existing fencing to front of development along 'Davy Way' is sufficient	831		m	175.00		145,425
<b>SUB-TOTAL FENCING</b>						<b>145,425</b>
<b>Preliminaries @ 15%</b>						<b>21,814</b>
<b>OHP @ 5%</b>						<b>8,362</b>
<b>Inflation from Q1 2016 to Q2 2018 Based on BCIS TPI @ 14.91%</b>						<b>26,182</b>
						<b>TOTAL FENCING (To Summary) 201,783</b>
<b>4 EXTERNAL DRAINAGE</b>						
a Cut; excavate pit for base of attenuation basin assumed 1.5m deep	9,000		m <sup>3</sup>	5.00		45,000
b Cart on site to temp spoil heap + later cart back	18,000		m <sup>3</sup>	4.00		72,000
c Fill; forming bund around attenuation pond to 1:3 batter all around; site won material	9,000		m <sup>3</sup>	3.00		27,000
d Precast Headwall to suit assumed 225mm diameter pipe including grating	1		Item	5,000.00		5,000
e 225mm outfall pipe from attenuation pond to brook	15		m	150.00		2,250
<b>Foul Water</b>						
f Foulwater drainage excavate trench for 225mm diameter vitrified clay pipe; backfill with imported stone; cart away on site surplus material; 1.50 - 2.00m deep	317		m	100.00		31,700
g 225mm diameter vitrified clay pipe	317		m	35.00		11,095
h Pre cast concrete manhole c/w cast iron cover & frame; assumed 1200mm diameter; 1.50 - 2.00m deep	7		Nr	2,000.00		14,000
j Allowance for Foul pump chamber (scope of work yet to be defined)	1		Item	50,000.00		50,000
k Drainage sundries; incl CCTV + Testing + rockers + branches + bends etc.	1		Item	5,000.00		5,000
l Connection to existing sewer	1		item	5,000.00		5,000
<b>Storm Water</b>						
m Stormwater drainage excavate trench for 300mm diameter vitrified clay pipe; backfill with imported stone; cart away on site surplus material; 1.50 - 2.00m deep	638		m	120.00		76,560
n 300mm diameter vitrified clay pipe	638			45.00		28,710
p Pre cast concrete manhole c/w cast iron cover & frame; assumed 1200mm diameter; 1.50 - 2.00m deep	9		Nr	2,000.00		18,000
q Drainage sundries; incl CCTV + Testing + rockers + branches + bends etc.	1		Item	5,000.00		5,000
r Connection into existing sewer	1		Item	5,000.00		5,000
<b>SUB-TOTAL EXTERNAL DRAINAGE</b>						<b>401,315</b>
<b>Preliminaries @ 15%</b>						<b>60,197</b>
<b>OHP @ 5%</b>						<b>23,076</b>
<b>Inflation from Q1 2016 to Q2 2018 Based on BCIS TPI @ 14.91%</b>						<b>72,252</b>
						<b>TOTAL EXTERNAL DRAINAGE (To Summary) 556,840</b>

**QDC QUEDGELEY PHASE III**
**ENABLING WORKS**
**ORDER OF COST ESTIMATE**

Based on PRC Architects drawings



Base Date: 2Q2018

**Section 2 : MAIN WORKS CALCULATIONS**

	Quantity	Quantity ft <sup>2</sup>	Unit	RATE £	Rate £/ft <sup>2</sup>	TOTAL
<b>5 EXTERNAL SERVICES</b>						
a Notional allowance for capped off services for 32 Nr light industrial units - including gas, electricity, weater and telecommunications	32		Nr	5,000.00		160,000
b Street lighting 9m lamp posts; assumed one every 10m on ring road	48		Nr	4,750.00		228,000
<b><u>Water mains supply</u></b>						
c Excavate trench from formation level; backfill with type 1 stone, cart away excavated material to bunds; 0.75 - 1.00m deep; assumed DN100 ducts (approx. trench 0.45 wide x 0.75 deep)	884		m	25.00		22,100
d Granular B&S to 100mm duct; 150mm cover	884		m			Included
e Pvc ducts; 100mm diameter	884		m	7.00		6,188
f Connection chambers assumed 1200 x 600 x 1.00m deep; assumed 7 Nr	7		Nr	1,750.00		12,250
g Warning tape	884		m	1.00		884
h Notional allowance for connection to existing water supply	1		Item	5,000.00		5,000
<b><u>Electricity mains supply</u></b>						
j Notional allowance for 1 Nr new substation (subject to conformation from utilities consultant) including GRP enclosure and base	1		Nr	110,000.00		110,000
k Excavate trench from formation level; backfill with selected excavated material; 0.50 - 0.70m deep; 2-Way duct system of assumed 150mm diameter ducts (approx. trench 0.60 wide x 0.50 deep)	884		m	20.00		17,680
l Sand B&S for 2-Way chamber of 150mm ducts; 100mm cover; approx. 0.60wd x 0.35dp	884					Included
m Pvc ducts; 150mm diameter	884			6.00		5,304
n HV chamber detail assumed 2400 x 1700 x 2000 deep assumed 7 Nr	7		Nr	2,600.00		18,200
p Warning tape	884		m	0.75		663
q Notional allowance for connection to existing electricity supply	1		Item	2,500.00		2,500
<b><u>Gas mains supply</u></b>						
r Excavate trench from formation level; backfill with type 1 stone, cart away excavate material to bunds; 0.50 - 0.70m deep; assumed DN200 ducts (approx. trench 0.45 wide x 0.50 deep)	884		m	25.00		22,100
s Sand B&S to 200mm duct; 250mm cover	884		m			Included
t Pvc pipework; 200mm diameter	884		m	35.00		30,940
u Warning tape	884		m	0.75		663
v Draw pits assumed 450x450x750 deep; assumed 7 Nr	7		Nr	700.00		4,900
w Notional allowance for connection to existing gas supply	1		Item	2,500.00		2,500
<b><u>Telecommunications and other communication system connections</u></b>						
x Excavated trench from formation level; backfill with selected excavated material; 0.75 - 1.00m deep; assumed 4-Way duct system of 110mm diameter ducts (approx. trench 0.60 wide x 0.75 deep)	884		m	22.50		19,890
y Sand B&S for 4-Way chamber of 110mm ducts; 100mm cover; approx. 0.60 wide x 0.60 deep	884		m			Included
z Pvc ducts assumed 110mm diameter	3,536		m	5.00		17,680
aa Warning tape	884		m	0.75		663
bb Telecom chambers assumed 2.00m x 1.00m x 1.00m deep; assumed 7 Nr	7		Nr	2,000.00		14,000
cc Notional allowance for connection to existing telecommunications supply	1		Item	2,500.00		2,500
<b>SUB-TOTAL EXTERNAL SERVICES</b>						<b>704,605</b>
<b>Preliminaries @ 15%</b>						<b>105,691</b>
<b>OHP @ 5%</b>						<b>40,515</b>
<b>Inflation from Q1 2016 to Q2 2018 Based on BCIS TPI @ 14.91%</b>						<b>126,856</b>
<b>TOTAL EXTERNAL SERVICES (To Summary)</b>						<b>977,666</b>

Section 3 : ABNORMAL COSTS

ABNORMALS	Quantity	Unit	RATE £	TOTAL
<b>SITE PREPARATION WORKS</b>				
1 Notional allowance for contamination removal (based upon site investigations risk of contamination deemed to be minor)	1	Item	50,000.00	50,000
2 Notional allowance for site vegetation strip	81,810	m <sup>2</sup>	0.25	20,453
3 Nominal 300mm strip off existing level	24,543	m <sup>3</sup>	1.50	36,815
4 Cart topsoil on site to temp spoil heaps and later cart back	24,543	m <sup>3</sup>	4.00	98,172
5 Filling topsoil to bunds and soft landscaping areas	24,543	m <sup>3</sup>	2.00	49,086
6 Excavate to required level (Cut)	45,777	m <sup>3</sup>	1.50	68,666
7 Cart subsoil on site to temp spoil heaps and later cart back	45,777	m <sup>3</sup>	4.00	183,108
8 Filling to make up levels	583	m <sup>3</sup>	2.00	1,166
9 Level and compact bottom of excavation	81,810	m <sup>2</sup>	0.50	40,905
10 Notional allowance for forming bunds (scope of works yet to be defined)	1	Item	75,000.00	75,000
<b>ROADS, PATHS, PAVINGS &amp; SURFACINGS</b>				
1 Compacted 6F2 stone spot fill in 150mm layers	28,750	m <sup>3</sup>	35.00	1,006,250
2 Level and compact stone in 150mm layers	189,750	m <sup>2</sup>	0.75	142,313
3 'Spur Road' construction; 45mm rolled asphalt 20mm precast 55mm dense bitumen macadam (20mm) 110mm dense bitumen macadam (40mm) 390mm Type 1 certified crushed on site fill material compacted in max 150 layers on subgrade	3,594	m <sup>2</sup>	70.00	251,580
<b>EXTERNAL DRAINAGE</b>				
1 Cut; excavate pit for base of attenuation basin assumed 1.5m deep	9,000	m <sup>3</sup>	5.00	45,000
2 Cart on site to temp spoil heap + later cart back	18,000	m <sup>3</sup>	4.00	72,000
3 Fill; forming bund around attenuation pond to 1:3 batter all around; site won material	9,000	m <sup>3</sup>	3.00	27,000
4 Allowance for Foul pump chamber (scope of work yet to be defined)	1	Item	50,000.00	50,000
<b>SUB-TOTAL</b>				<b>2,217,512</b>
<b>Preliminaries @ 15%</b>				<b>332,627</b>
<b>OHP @ 5%</b>				<b>127,507</b>
<b>Inflation from Q1 2016 to Q2 2018 Based on BCIS TPI @ 14.91%</b>				<b>399,237</b>
<b>Design Development Risk @ 5%</b>				<b>153,844</b>
<b>Construction Risk @ 5%</b>				<b>161,536</b>
<b>TOTAL ABNORMAL COSTS</b>				<b>3,392,263</b>

**Assumptions**

- 1 Prices based on current day levels with no allowance for Tender Price Inflation.
- 2 Notional Allowances have been included for the following items;
  - Contamination removal
  - Site vegetation strip
  - Forming bunds
  - Capped off services for 32 Nr light industrial units
  - Connection to existing water supply
  - Connection to existing electricity supply
  - Connection to existing gas supply
  - Connection to existing telecommunications supply
- 3 Assumed existing fencing to front of development along 'Davy Way' is sufficient, allowance made for fencing to other 3 sides of development plot
- 4 Assumed site 'ring road' to be constructed to adoptable standards including street lighting
- 5 Assumed there is no requirement for 'cycle path' to site ring road
- 6 Existing trees on site to be retained
- 7 No allowance for removing any obstructions found below the ground
- 8 The measurements contained within this document shall not be relied upon for any purpose other than the formulation of the cost estimate itself
- 9 Cut & Fill quantites based on Clarke Nicholls Marcel section drawings
- 10 Assumed no soil will be removed from site, all excess material will be used to form bunds
- 11 Road and path build up based on 'as built drawings' of spine road section & drainage details from the Quadrant distribution centre project
- 12 Assumed work completed in one continuous phase with no allowance made for phasing the work
- 13 No allowance for service diversions or reinforcements
- 14 Assumed 1 Nr new substation required
- 15 Assumed no requirement for signalisation to new road
- 16 Assumed services route below





**General Exclusions**

- 1 Value Added Tax.
- 2 Land acquisition costs and fees and payments to existing tenants.
- 3 Client finance costs.
- 4 Legal costs.
- 5 Project insurances.
- 6 Marketing costs.
- 7 Design and other professional fees.
- 8 Site investigations and surveys.
- 9 Currency fluctuations.
- 10 Management set up costs, public relations and publicity costs.
- 11 Tenant void periods.
- 12 BREEAM assessment costs.
- 13 Main contractor preliminaries and attendances in the event that the tenant fitout period occurs post the scheme practical completion date.
- 14 Tenant contributions.
- 15 Tenant management costs
- 16 Party wall awards / contributions
- 17 Rights of light payments
- 18 Contributions to public transport
- 19 Park and ride contributions, and contributions to training and employment schemes.

Nr	Item	Addressed in Study	No Allowance within Study
<b><u>INCLUSIONS &amp; EXCLUSIONS</u></b>			
1	VAT	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Professional fee allowance	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Section 106 Works	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Section 278 Works	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	Contaminated land allowances (except where noted)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	Asbestos Removal	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	Archaeological works	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8	General Surveys or works arising from	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9	Legal Costs	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10	Planning fees	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11	Building regulation fees	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	Site acquisition costs	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13	Local Authority & Private infrastructure work outside the boundary of the site	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14	Tender price inflation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15	Ground Water Mitigation Works (pumping or the like)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16	Tenant Fit Out Works	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17	Diversion/Lowering of existing services crossing/access points to the site	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18	Reinforcement of infrastructure off site	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19	Remedial works to ground conditions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20	Disposal of excavated material off site	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21	Cut and Fill across development plot	<input checked="" type="checkbox"/>	<input type="checkbox"/>
22	Adjustment of site levels to achieve formation levels	<input checked="" type="checkbox"/>	<input type="checkbox"/>
23	Fencing / barriers to perimeter of development plot	<input checked="" type="checkbox"/>	<input type="checkbox"/>
24	Diversion of existing services within the site boundary	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25	Demolition of existing buildings	<input type="checkbox"/>	<input checked="" type="checkbox"/>
26	Sustainability Works	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**1 Architect (PRC Architecture)**

**Drawings:**

10352\_FE\_201 November 2015

**Schedules and Reports:**

**2 Structural Engineer (Clarke Nicholls Marcel)**

**Drawings:**

10107 / C-SK100\_X

10107 / C-100\_P1

10107 / C-101\_P1

10107 / C-102\_P1

10107 / C-104\_P1

10107 / C-105\_P1

10107 / C-106\_P1

10107 / C-107\_P1

## **Section 8: Pricing Notes**

### **Pricing profile and market activity**

The pricing basis of this preliminary budget estimate is current market conditions and should be reviewed at regular intervals of no longer than 3 months.

This preliminary budget estimate has been prepared from outline information only and we strongly advise that the consultants should be allowed to develop the brief further before any irrevocable financial commitment is entered into by the Client.

It should be noted that the construction industry is currently experiencing changing market conditions with the supply chain becoming increasingly selective in the opportunities they pursue. This is leading to some pricing volatility with projects being considered based on procurement route, risk apportionment, programme and the robustness of tender documentation. The number of 'major' tier one contractors both suitable and available for sizeable and/or complex schemes is becoming more limited with projects tending to be favoured where price and programme risk are fairly shared. In addition, the lack of contractor in-house resources coupled with the potential cost of tendering may also dissuade contractors from tendering. This is starting to have a knock-on effect generally.

Projects with potential pitfalls, inappropriate risk transfer and nonstandard contract conditions may result in tendering opportunities being declined or they may attract a pricing premium.

It is therefore essential that all aspects of the project profile are fully considered by the client and project team in light of this current volatility. This should help ensure that project procurement is appropriate, project documentation is comprehensive and risk is effectively addressed.

The measurements contained within this document shall not be relied upon for any purpose other than the formulation of the cost estimate itself

**ORDER OF COST ESTIMATE (ADDENDUM)**

**QUEDGELEY PHASE III – ENABLING WORKS**

**for**

**HANSTEEN**

  
**Construction Cost Consultant**  
**Heronry House**  
**78 Eastwick Road**  
**Walton on Thames**  
**Surrey KT12 5AS**

  
**June 2018**

**QDC QUEDGELEY PHASE III  
ENABLING WORKS  
ORDER OF COST ESTIMATE (ADDENDUM)**

**C O N T E N T S**

- 1.0. INTRODUCTION
- 2.0. MAIN SUMMARY
- 3.0. ABNORMAL CONSTRUCTION COSTS
- 4.0. SCHEDULE OF DRAWINGS

**QDC QUEDGELEY PHASE III  
ENABLING WORKS  
ORDER OF COST ESTIMATE (ADDENDUM)**

**SECTION 1 INTRODUCTION**

1. This Addendum Order of Cost Estimate has been prepared to consider the impact on the anticipated construction costs arising from proposed changes to the scheme identified in Gleeds Cost Report Issue 4.0. dated May 2018, and should be considered in conjunction with same.

2. Unless otherwise stated, all assumptions, inclusions, exclusions, and pricing levels used in this report are identical to the aforementioned Gleeds Cost Report.

3. The Gleeds Cost Report was based on the proposed site layout identified on PRC Architecture Planning Drawing No. FE 201 dated November 2015, which showed the site being sub-divided into five separate site sections :

- a) 5.25 acres located to the North West
- b) 4 acres located to the North East
- c) 2 acres located to the East
- d) 2.6 acres located to the South East
- e) 2.7 acres located to the South West

These individual site sections were served by a spine loop road constructed to 'Adoptable' standards.

4. Following consultations, a revised scheme has been prepared by PRC Architecture & Planning, and shown on Drawing No. 10352 FE 202 dated June 2018. The principal changes to the earlier scheme are as follows :

- a) The 5.25 acre site located to the North West remains unchanged, with terraces of small units.
- b) The 4 acre site located to the North East has been amalgamated with the 2 acre site located to the East, with slight modifications to form a revised site of 6.026 acres, on which it is proposed to construct warehouse Unit No. 1 of 9,290 sq.m. (100,000 sq.ft.) GIA.
- c) The 2.6 acre site located to the South East has been modified to form a revised site of 2.372 acres, on which it is proposed to construct warehouse Unit No. 2 of 2,787 sq.m. (30,000 sq.ft.) GIA.

**QDC QUEDGELEY PHASE III  
ENABLING WORKS  
ORDER OF COST ESTIMATE (ADDENDUM)**

**SECTION 1 INTRODUCTION (CONTINUED)**

- d) The 2.7 acre site located to the South West has been modified to form two sites; one of 1,006 acres, on which it is proposed to construct warehouse Unit No. 3 of 1,858 sq.m. (20,000 sq.ft.) GIA; the other of 1,972 acres, on which it is proposed to construct warehouse unit No. 4 of 3,716 sq.m. (40,000 sq.ft.) GIA.

The layout of the spine loop located to the South West remains unchanged.

5. Based on the assumption that, with the exception of Unit No. 1, the formation levels for all of the other units will remain as originally envisaged, it will be necessary to adjust the Gleeds Cost Report to reflect the following changes :

a) Site Preparation Works

Unit No. 1 – Increase the amount of cut and fill earthworks required to reflect the larger single footprint/plateau required for this unit, and incorporate an allowance for piling (based on a soils investigation report prepared by Geotechnical Engineering Ltd dated 2015.

b) Roads, Paths, Pavings and Surfacing

Reduce the extent of the spur roads required in the area now proposed to locate Unit No. 1.

c) External Drainage

Increase provision for attenuation/storage of surface water as a result of the greater area of impervious surface for this scheme.

d) External Services

Include an allowance for an additional electricity sub-station to service Unit No. 1.



**QDC QUEDGELEY PHASE III  
ENABLING WORKS  
ORDER OF COST ESTIMATE (ADDENDUM)**

**SECTION 1 INTRODUCTION (Continued)**

6. The scope of the works covered by this report includes the provision of the following :

Site preparation earthworks, including excavation, filling and levelling to achieve the various formation levels.

Removal of contaminated material.

Foul and surface water infrastructure, including attenuation facilities.

Gas, water, electricity, and telecom mains infrastructure.

Spine loop road (constructed to 'Adoptable' Standards.

No allowances have been included for the cost of construction of the warehouse units or their associated external yards, paved areas and parking facilities.

**QDC QUEDGELEY PHASE III  
ENABLING WORKS  
ORDER OF COST ESTIMATE (ADDENDUM)**

SECTION 2      MAIN SUMMARY

	£
1. Site Preparation Works	1,045,329
2. Roads, Paths, Pavings and Surfacing	2,423,582
3. Fencing	201,783
4. External Drainage	667,843
5. External Services	1,130,295
SUB-TOTAL	<hr/> 5,468,832
6. Main Contractor Costs	
a) Allowance for Preliminaries 15%	included above
b) Allowance for Overheads & Profit 5%	included above
7. Risk and Inflation	
a) Design Development Risk 5%	273,442
b) Construction Risk 5%	287,114
Total Estimated Cost at Current Day (2Q2018)	<hr/> 6,029,388 <hr/>
Total Estimated Cost at Current Day (rounded)	<b><u>6,030,000</u></b>

**QDC QUEDGELEY PHASE III  
ENABLING WORKS  
ORDER OF COST ESTIMATE (ADDENDUM)**

**SECTION 3 ABNORMAL CONSTRUCTION COSTS**

**SITE PREPARATION WORKS**

	<b>Quantity</b>	<b>Unit</b>	<b>Rate £</b>	<b>Total</b>
1. Notional allowance for contamination removal (based upon site investigations risk of contamination deemed to be minor)	1	item	50,000	50,000
2. Notional allowance for site vegetable strip	81,810	sq.m.	0.25	20,453
3. Nominal 300mm strip off existing level	24,543	cu.m.	1.50	36,815
4. Cart topsoil on site to temp spoil heaps and later cart back	24,543	cu.m.	4.00	98,172
5. Filling topsoil to bunds and soft landscaping areas	24,543	cu.m.	2.00	49,086
6. Excavate to required level (Cut)	45,777	cu.m.	1.50	68,666
7. Cart subsoil on site to temp spoil heaps and later cart back	45,777	cu.m.	4.00	183,108
8. Filling to make up levels	583	cu.m.	2.00	1,166
9. Level and compact bottom of excavation	81,810	sq.m.	0.50	40,905
10. Notional allowance for forming bunds (scope of works yet to be defined)	1	item	75,000	75,000
11. Notional allowance for cut and fill, and piling to Unit 1.	1	item	130,000	130,000

**QDC QUEDGELEY PHASE III  
ENABLING WORKS  
ORDER OF COST ESTIMATE (ADDENDUM)**

**SECTION 3 ABNORMAL CONSTRUCTION COSTS (Continued)**

**ROADS, PATHS, PAVINGS & SURFACING**

	<b>Quantity</b>	<b>Unit</b>	<b>Rate £</b>	<b>Total</b>
1. Compacted 6F2 stone spot fill in 150mm layers	28,750	cu.m.	35.00	1,006,250
2. Level and compact stone fill in 150mm layers	189,750	sq.m.	0.75	142,313
3. 'Spur Road' construction; 45mm rolled asphalt 20mm pre-coated 55mm dense bitumen macadam (20mm), 110mm dense bitumen macadam (40mm), 390mm Type 1 certified crushed on site fill material compacted in max 150 layers on sub-grade	2,385	sq.m.	70.00	166,950

**EXTERNAL DRAINAGE**

1. Cut, excavate pit for base of attenuation basin assumed 1.5m deep	9,000	cu.m.	5.00	45,000
2. Cart on site to temporary spoil heap + later cart back	18,000	cu.m.	4.00	72,000
3. Fill; forming bund around attenuation pond to 1:3 batter all around; site won material	9,000	cu.m.	3.00	27,000
4. Allowance for foul pump chamber (scope of work yet to be defined)	1	item	50,000	50,000
5. Allowance for additional surface water attenuation	1	item	80,000	80,000

**QDC QUEDGELEY PHASE III  
ENABLING WORKS  
ORDER OF COST ESTIMATE (ADDENDUM)**

**SECTION 3 ABNORMAL CONSTRUCTION COSTS (Continued)**

	<b>Quantity</b>	<b>Unit</b>	<b>Rate £</b>	<b>Total</b>
<b>EXTERNAL SERVICES</b>				
1. Notional allowance for electricity sub-station				
Unit 1	1	item	110,000	110,000
				<hr/>
				<b>SUB-TOTAL</b>
				2,452,885
				Preliminaries @ 15%
				367,932
				OHP @ 5%
				141,040
				Inflation from Q1 2016 to Q2 2018 based on BCIS TPI @ 14.91%
				441,556
				Design Development Risk @ 5%
				170,171
				Construction Risk @ 5%
				178,679
				<b>TOTAL ABNORMAL COSTS</b>
				<b><u>3,752,263</u></b>

**QDC QUEDGELEY PHASE III  
ENABLING WORKS  
ORDER OF COST ESTIMATE (ADDENDUM)**

**SECTION 4      SCHEDULE OF DRAWINGS**

**1.      PRC ARCHITECTURE & PLANNING**

10352 FE 202 JUNE 2018

**2.      CLARKE NICHOLS MARCEL**

10107/C - SK 100 X

10107/C - 100 P1

10107/C - 101 P1

10107/C - 102 P1

10107/C - 104 P1

10107/C - 105 P1

10107/C - 106 P1

10107/C - 107 P1

## Appendix H – C&W ‘Upper Parameter’ Appraisal

Quedgeley Residential 100% Open Market  
Land at Davy Way, Gloucester  
C&W Development Appraisal



**Quedgeley Residential 100% Open Market  
Land at Davy Way, Gloucester  
C&W Development Appraisal**

Summary Appraisal for Phase 1 Open Market

Currency in £

**REVENUE**

Sales Valuation	Units	ft²	Sales Rate ft²	Unit Price	Gross Sales
House Type A	5	12,730	280.00	712,880	3,564,400
House Type B	7	10,549	280.00	421,960	2,953,720
House Type C	3	4,230	280.00	394,800	1,184,400
House Type F	48	55,296	280.00	322,560	15,482,880
House Type G	8	6,976	280.00	244,160	1,953,280
House Type H	45	35,865	280.00	223,160	10,042,200
House Type I (1)	6	2,525	280.00	117,810	706,860
House Type I (2)	6	2,744	280.00	128,044	768,264
House Type J	19	21,679	280.00	319,480	6,070,120
House Type K	13	14,547	280.00	313,320	4,073,160
<b>Totals</b>	<b>160</b>	<b>167,140</b>			<b>46,799,284</b>

**NET REALISATION** **46,799,284**

**OUTLAY**

**ACQUISITION COSTS**

Residualised Price		7,872,764		7,872,764
Stamp Duty	5.00%	393,638		
Agent Fee	1.00%	78,728		
Legal Fee	0.80%	62,982		
				535,348

**CONSTRUCTION COSTS**

Construction	Units	Unit Amount	Cost
Garages - single	7 un	5,000	35,000
Garages - double	<u>5 un</u>	10,000	<u>50,000</u>
<b>Totals</b>			<b>85,000</b>

	ft²	Build Rate ft²	Cost
House Type A	12,730	94.48	1,202,730
House Type B	10,549	94.48	996,670
House Type F	55,296	94.48	5,224,366
House Type G	6,976	94.48	659,092
House Type H	35,865	94.48	3,388,525
House Type I (1)	2,970	108.98	323,671
House Type I (2)	3,228	108.98	351,787
House Type J	21,679	94.48	2,048,232
House Type K	<u>14,547</u>	94.48	<u>1,374,401</u>
<b>Totals</b>	<b>168,070</b>		<b>15,569,474</b>

Construction Contingency 1,095,268

**Other Construction**

Site Preparation Works		716,309	
External Drainage		287,347	
External Services		809,655	
Extra over Services for Residential		491,200	
External Works (Roads, paving etc)		1,871,820	
Tree protection works (allowance)		50,000	
Four New Retention Ponds		320,000	
Environmental Improvements		510,000	
Preliminaries	15.00%	758,450	
Overheads and Profit	7.50%	436,109	
Design Contingency / Risk	5.00%	312,544	
			6,563,434

**PROFESSIONAL FEES**

Professional Fees 1,777,433

**DISPOSAL FEES**

Sales Agent Fee		3.00%	1,403,979
Sales Legal Fee	160 un	500.00 /un	80,000
			1,483,979

**FINANCE**

Debit Rate 6.000%, Credit Rate 0.000% (Nominal)			
Land			2,079,804
Construction			348,961
Other			27,963
Total Finance Cost			2,456,728

**TOTAL COSTS** **37,439,427**

**PROFIT**

**9,359,857**

**Quedgeley Residential 100% Open Market  
Land at Davy Way, Gloucester  
C&W Development Appraisal****Performance Measures**


Profit on Cost%	25.00%
Profit on GDV%	20.00%
Profit on NDV%	20.00%
IRR	20.06%
Profit Erosion (finance rate 6.000)	3 yrs 9 mths

## Appendix I – New Build Residential Sales Comparable Evidence

PHOTO	PROPERTY	DESCRIPTION	GIA (SQ FT)	DATE	PRICE
<b>1. Hunts Grove Gate, Hardwicke, Gloucester – Crest Nicholson</b>					
First phase of the large scale development by Crest Nicholson located directly to the south east of the Site.					
	The Hartley, Hunts Grove Gate, Hardwicke, Gloucester	3-bedroom semi-detached house. Double garage and driveway parking.	966	FOR SALE	£265K (£273 psf)
	The Calder, Hunts Grove Gate, Hardwicke, Gloucester	4 bedroom detached home. Double garage and driveway parking.	1,429	FOR SALE	£390K (£272 psf)
	The Welwyn, Hunts Grove Gate, Hardwicke, Gloucester	4-bedroom semidetached house.	1,218	FOR SALE	£355K - £365K (£291 - £300 psf)
	The Monmouth, Hunts Grove Gate, Hardwicke, Gloucester	Plot 34, 4- bedroom detached house. Single garage and driveway parking.	1,109	RESER- VED	£315K (£284 psf)
<b>2. Lassington Reach, Lassington Lane, Highnam – Bellway Homes</b>					
Development of 3, 4 ad 5 bedroom homes, located to the north west of Gloucester city centre, north of the village of Highnam.					
	The Shipton, Lassington Reach, Highnam	3 bedroom end of terrace house.	1,006	FOR SALE	£280K (£278 psf)
	The Wilbury, Lassington Reach, Highnam	4 bedroom detached house.	1,181	FOR SALE	£350K (£296 psf)
	The Willcott, Lassington Reach, Highnam	4 bedroom detached house.	1,188	FOR SALE	£355K (£299 psf)

**3. Hardwicke Grange, Bristol Road, Hardwicke, Gloucester – Bellway Homes**

Development of 3 and 4 bedroom homes in Hardwicke, 5 miles to the south of Gloucester city centre.

	The Walton, Hardwicke Grange, Bristol Road, Hardwick	4 bedroom detached house. Garage and parking.	1,353	FOR SALE	£350K (£259 psf)
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**4. Augustus Park, Coopers Edge, Gloucester – Bovis Homes**




Development of 3, 4 and 5 bedroom homes, located 5 miles north east of Gloucester city centre within an established residential development area.

	The Sheringham, Augustus Park, Gloucester	3 bedroom semi-detached house. Garage.	846	FOR SALE	From £280K (£331 psf)
	The Oxford, Augustus Park, Gloucester	5 bedroom, detached house. Garage.	1,618	FOR SALE	From £395K (£243 psf)
	The Southwold, Augustus Park, Gloucester	3 bedroom semi-detached house. Garage.	839	FOR SALE	From £250K (£298 psf)
	The Cranham, Augustus Park, Gloucester	3 bedroom, terraced house. Garage.	838	FOR SALE	From £252K (£301 psf)

**5. Imperial Place / Centurion View, Coopers Edge, Gloucester – Bovis Homes**





Two developments of 2, 3, 4 and 5 bedroom homes, located 5 miles north east of Gloucester city centre within an established residential development area.

	The Southwold, Imperial Park, Gloucester	3 bedroom semi-detached house. Garage.	839	FOR SALE	From £250K (£298 psf)
	The Slimbridge, Imperial Park, Gloucester	3 bedroom semi-detached house. Garage.	954	FOR SALE	From £270K (£283 psf)

	The Sheringham, Augustus Park, Gloucester	3 bedroom semi-detached house. Garage.	846	FOR SALE	From £270K (£319 psf)
	The Epsom, Centurion View, Gloucester	3 bedroom detached house. Garage and / or allocated parking.	942	FOR SALE	From £295K (£313 psf)
	The Cambridge, Centurion Way, Gloucester	4 bedroom detached house. Garage.	1,268	FOR SALE	From £374K (£295 psf)


#### 6. Kings Copse, Boulmer Avenue Kingsway, Quedgeley, Gloucester – Taylor Wimpey

A development of 2, 3, 4 and 5 bedroom homes in Kingsway Village, 3 miles south of Gloucester city centre.

	The Gosford, Boulmer Avenue Kingsway, Quedgeley, Gloucester	Plot 893, 3 bedroom terraced house. Allocated parking.	866	FOR SALE	£225,000 (£254 psf)
	The Brampton, Boulmer Avenue Kingsway, Quedgeley, Gloucester	Plot 887, 3 bedroom semi- detached house. Garage and allocated parking.	1,149	FOR SALE	£265K (£230 psf)
	The Midford, Boulmer Avenue Kingsway, Quedgeley, Gloucester	Plot 890, 4 bedroom detached house. Garage and allocated parking.	1,170	FOR SALE	£270K (£231 psf)
	The Shelford, Boulmer Avenue Kingsway, Quedgeley, Gloucester	Plot 891, 4 bedroom detached house. Garage and allocated parking.	1,378	FOR SALE	£315K (£229 psf)

#### 7. Nuthill Green, Donaldson Drive, Brockworth, Gloucester - Persimmon



A development of 3 and 4 bedroom homes in Kingsway Village, to the north east of Gloucester city centre.

	The Cheltenham, Nuthill Green, Brockworth	Plot 88, 3 bedroom detached house.	863	FOR SALE	£280K (£325 psf)
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	The Cirencester, Nuthill Green, Brockworth	Plot 94, 4 bedroom semi- detached house.	846	FOR SALE	£270K (£319 psf)
	The Ledbury, Nuthill Green, Brockworth	Plot 83, 4 bedroom detached house.	1,293	FOR SALE	£370K (£286 psf)
	The Stroud, Nuthill Green, Brockworth	Plot 78, 3 bedroom semi- detached house.	794	FOR SALE	£250K (£314 psf)
	The Worcester, Nuthill Green, Brockworth	Plot 73, 3 bedroom, 3 storey town house.	1,078	FOR SALE	£296K (£275 psf)

**8. Saxon Gate, Marsh Lane, Leonard Stanley, Stonehouse – Barratt Homes**

A development of 2, 4 and 5 bedroom homes approximately 12 miles south of Gloucester city centre (south of Stonehouse).

	The Kingsley, Saxon Gate, Marsh Lane, Leonard Stanley	Plot 68, 4 bedroom detached house. Garage and two parking spaces.	1,139	FOR SALE	£345K (£303 psf)
	The Radleigh, Saxon Gate, Marsh Lane, Leonard Stanley	Plot 67, 4 bedroom detached house. Garage and two parking spaces.	1,313	FOR SALE	£410K (£312 psf)

## Appendix J – BCIS Summary Sheet – Residential

£/m2 study

**Description:** Rate per m2 gross internal floor area for the building Cost including prelims.

**Last updated:** 23-Jun-2018 12:20

› Rebased to South West Region ( 98; sample 867 )

**Maximum age of results:** Default period

Building function (Maximum age of projects)	£/m <sup>2</sup> gross internal floor area						Sample
	Mean	Lowest	Lower quartiles	Median	Upper quartiles	Highest	
<b>New build</b>							
810. Housing, mixed developments (15)	1,210	577	1,051	1,180	1,338	2,729	1204
<b>810.1 Estate housing</b>							
Generally (15)	1,188	576	1,017	1,153	1,308	4,044	1809
Single storey (15)	1,329	670	1,134	1,274	1,499	4,044	294
2-storey (15)	1,156	576	1,006	1,131	1,265	2,279	1375
3-storey (15)	1,175	747	948	1,122	1,318	2,428	136
4-storey or above (15)	2,317	1,250	-	2,128	-	3,761	4
810.11 Estate housing detached (15)	1,523	904	1,175	1,347	1,569	4,044	20
<b>810.12 Estate housing semi detached</b>							
Generally (15)	1,184	592	1,025	1,153	1,303	2,220	424
Single storey (15)	1,353	836	1,160	1,323	1,501	2,220	76
2-storey (15)	1,151	592	1,016	1,126	1,273	2,027	328
3-storey (15)	1,079	802	899	1,023	1,178	1,736	20
<b>810.13 Estate housing terraced</b>							
Generally (15)	1,209	576	1,017	1,158	1,343	3,761	386
Single storey (15)	1,330	904	1,111	1,254	1,542	1,967	45
2-storey (15)	1,184	576	1,006	1,153	1,323	2,279	281
3-storey (15)	1,189	758	948	1,098	1,273	2,428	59
4-storey or above (5)	3,761	-	-	-	-	-	1
<b>816. Flats (apartments)</b>							
Generally (15)	1,403	688	1,173	1,338	1,586	4,764	970
1-2 storey (15)	1,335	814	1,138	1,281	1,469	2,518	238
3-5 storey (15)	1,384	688	1,170	1,326	1,579	2,728	647
6+ storey (15)	1,752	1,029	1,425	1,690	1,863	4,764	82



## Appendix K – Alium Group Feasibility Estimate (July 2018)

# Feasibility Estimate

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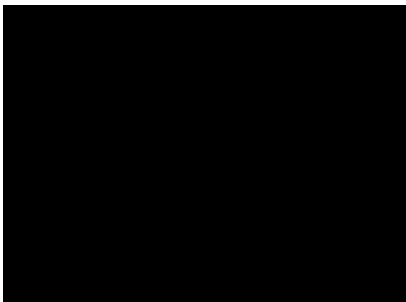
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## Quedgeley, Gloucester

for

## Cushman & Wakefield

Report Nr: 2      Date: 06 July 2018



## 1. Introduction

- 1.1 This feasibility cost estimate has been prepared on behalf of Cushman & Wakefield for the site works and abnormals associated with the creation of 160 new private sale homes located in Quedgeley, Gloucester.
- 1.2 The estimate represents the anticipated construction cost at current prices using a competitive method of procurement and a contractor design form of contract.
- 1.3 We have based the costs for site preparation, site drainage and external drainage on the cost previously submitted by Gleeds in their enabling works cost estimate dated January 2016. We have adjusted the costs to be in line with 2Q2018.
- 1.4 We have used the resi masterplan drawing to complete our take off for the roads, footpaths and made an allowance of £3,500 per plot for garden/plot landscaping. An allowance of £30,000 was included for the play space area. A breakdown is shown in the breakdown section.
- 1.5 Main contractor preliminaries have been allowed at 15%. Main contractor OH&P has been priced at 7.5%, this is in line with other recent tendered projects.
- 1.6 We have allowed for a 5% design contingency. We would recommend this is the minimum level of contingency at the current design stage.
- 1.7 Professional fees have been allowed for within the Cushman and Wakefield report
- 1.8 We have allowed for removal/treatment of localised contamination as identified within SI reports. We note that lime stabilisation has previously taken place - so our allowance is for any additional that may be required. Further investigations would be required.
- 1.9 Environmental improvements have been allowed based upon the Phase 1 Environmental report issued by ITP Energised.

## 2. Exclusions

The following items are not included in this estimate of construction cost and allowance should be made elsewhere:

- 2.1 VAT
- 2.2 Removal of obstructions and excessive contaminated land
- 2.3 Site acquisition costs including land, agents and legal fees
- 2.4 Local Authority charges, costs of planning approval (CIL/S106);
- 2.5 Finance charges / Finance Costs.
- 2.6 Asbestos in any areas.
- 2.7 Inflation beyond 2Q2018.
- 2.8 Rights of Light / Sunlight analysis.
- 2.9 Sales and marketing costs .

2.10 Piling or abnormal foundations. We note that lime stabilisation has previously taken place and we have made an allowance to any additional stabilisation that may be required.

### **3. Information used**

The below information has been used within this report:

Accommodation schedule 17050 (sk) 202A dated 8th November 2017  
Proposed masterplan 17050 (sk) 202 dated 1st November 2017  
Quedgeley Pre App dated 11th November 2016  
Pre app cost estimate prepared by Gleeds dated January 2016.  
Ground Investigation Report, ref 30722 dated 24/06/2015  
Phase 1 Environmental Assessment by ITP Energised dated Feb 2018

	Area (m2)	Cost (£)	Total (£)	£ / m2 <sup>2</sup> GIFA
<b>Site Works/Abnormals</b>				
Site preparation works		716,309	716,309	46
External drainage		287,347	287,347	18
External services		809,655	809,655	52
Extra over services above for connections to houses		491,200	491,200	31
External Works; roads, paving, gardens etc		1,871,820	1,871,820	120
Tree protection works; allowance		50,000	50,000	3
Four new retention ponds - £80k per pond		320,000	320,000	20
Environmental improvements; refer to breakdown		510,000	510,000	33
		<b>£</b>	<b>5,056,331</b>	<b>324</b>
<b>Other Costs</b>				
Preliminaries	15%		758,450	49
Overheads and Profit	7.5%		436,109	28
Design Contingency/Risk	5%		312,544	20
		<b>£</b>	<b>1,507,103</b>	<b>97</b>
<b>Total £</b>			<b>6,563,434</b>	<b>£420 /m2</b>

### Order of Cost Range

On the basis of the project brief and the limited design information available, we anticipate that the outturn construction cost for the elements listed above, at current prices will be in the range of: £5.9m and £7.2m (± 10%)

### Floor Areas

Gross internal floor area	15,612 m2	168,042 sq ft
Cost per unit	160 unit	£41,021 per unit
Cost per ft2		£39 per ft2

<b>1</b>	<b>External works</b>				<b>1,871,819.50</b>
	Main estate ring road - tarmac	2991	m2	85.00	254,209.50
	Spur roads; block paved	6625	m2	110.00	728,750.00
	Footpaths;	4981	m2	60.00	298,860.00
	Plot landscaping, incl fence, turf, car park spaces	160	nr	3,500.00	560,000.00
	Play space; allowance	1	Psum	30,000.00	30,000.00
<b>2</b>	<b>Services connections</b>				<b>491,200.00</b>
	Water connection charge per house	160	nr	550.00	88,000.00
	Sewerage connection charge per house	160	nr	550.00	88,000.00
	Electric meter and connection charge per house	160	nr	1,500.00	240,000.00
	Gas meter and connection charge per house	160	nr	350.00	56,000.00
	BT connection charge per house	160	nr	120.00	19,200.00
<b>3</b>	<b>Environmental Improvements</b>				<b>510,000.00</b>
	Further investigation works	1	Psum	40,000.00	40,000.00
	Allowance to protect hydrocarbon ingress - upgrade materials	1	Psum	50,000.00	50,000.00
	Allowance for hotspot removal	1	Psum	20,000.00	20,000.00
	Capping garden areas with geotextile	1	Psum	300,000.00	300,000.00
	Abnormal foundations/lime stabilisation	1	Psum	100,000.00	100,000.00

## Appendix L – C&W Policy Compliant Appraisal

Quedgeley Residential Policy Compliant  
Land at Davy Way, Gloucester  
C&W Development Appraisal

Development Appraisal  
Cushman & Wakefield (Europe)  
10 July 2018



**Quedgeley Residential Policy Compliant  
Land at Davy Way, Gloucester  
C&W Development Appraisal**

Summary Appraisal for Merged Phases 1 2

Currency in £

**REVENUE**

Sales Valuation	Units	ft²	Sales Rate ft²	Unit Price	Gross Sales
House Type A	4	10,184	280.00	712,880	2,851,520
House Type B	5	7,535	280.00	421,960	2,109,800
House Type C	2	2,820	280.00	394,800	789,600
House Type F	34	39,168	280.00	322,560	10,967,040
House Type G	6	5,232	280.00	244,160	1,464,960
House Type H	31	24,707	280.00	223,160	6,917,960
House Type I (1)	4	1,683	280.00	117,810	471,240
House Type I (2)	4	1,829	280.00	128,044	512,176
House Type J	13	14,833	280.00	319,480	4,153,240
House Type K	9	10,071	280.00	313,320	2,819,880
House Type A	1	2,546	140.00	356,440	356,440
House Type B	2	3,014	140.00	210,980	421,960
House Type C	1	1,410	140.00	197,400	197,400
House Type F	14	16,128	140.00	161,280	2,257,920
House Type G	2	1,744	140.00	122,080	244,160
House Type H	14	11,158	140.00	111,580	1,562,120
House Type I (1)	2	842	140.00	58,905	117,810
House Type I (2)	2	915	140.00	64,022	128,044
House Type J	6	6,846	140.00	159,740	958,440
House Type K	4	4,476	140.00	156,660	626,640
<b>Totals</b>	<b>160</b>	<b>167,140</b>			<b>39,928,350</b>

**NET REALISATION**

**39,928,350**

**OUTLAY**

**ACQUISITION COSTS**

Residualised Price	4,782,289	
Residualised Price (Negative land)	(1,030,569)	
	3,751,721	
Stamp Duty	5.00%	239,114
Agent Fee	1.00%	47,823
Legal Fee	0.80%	38,258
		325,196

**CONSTRUCTION COSTS**

Construction	Units	Unit Amount	Cost
Garages - single	7 un	5,000	35,000
Garages - double	5 un	10,000	50,000
<b>Totals</b>			<b>85,000</b>

	ft²	Build Rate ft²	Cost
House Type A	10,184	94.48	962,184
House Type B	7,535	94.48	711,907
House Type F	39,168	94.48	3,700,593
House Type G	5,232	94.48	494,319
House Type H	24,707	94.48	2,334,317
House Type I (1)	1,980	108.98	215,780
House Type I (2)	2,152	108.98	234,525
House Type J	14,833	94.48	1,401,422
House Type K	10,071	94.48	951,508
House Type A	2,546	94.48	240,546
House Type B	3,014	94.48	284,763
House Type F	16,128	94.48	1,523,773
House Type G	1,744	94.48	164,773
House Type H	11,158	94.48	1,054,208
House Type I (1)	990	108.98	107,890
House Type I (2)	1,076	108.98	117,262
House Type J	6,846	94.48	646,810
House Type K	4,476	94.48	422,892
<b>Totals</b>	<b>168,070</b>		<b>15,569,474</b>

**15,654,474**

Construction Contingency	5.00%	1,095,268	
CIL	118,062 ft²	7.84 /ft²	925,608
			2,020,876

**Other Construction**

Site Preparation Works	501,416	
External Drainage	201,143	
External Services	566,759	
Extra over Services for Residential	343,840	
External Works (Roads, paving etc)	1,310,274	
Tree protection works (allowance)	35,000	
Four New Retention Ponds	224,000	
Environmental Improvements	357,000	
Preliminaries	15.00%	530,915
Overheads and Profit	7.50%	305,276

**Quedgeley Residential Policy Compliant  
Land at Davy Way, Gloucester  
C&W Development Appraisal**

Design Contingency / Risk	5.00%	218,781	
Site Preparation Works		214,893	
External Drainage		86,204	
External Services		242,897	
Extra over Services for Residential		147,360	
External Works (Roads, paving etc)		561,546	
Tree protection works (allowance)		15,000	
Four New Retention Ponds		96,000	
Environmental Improvements		153,000	
Preliminaries	15.00%	227,535	
Overheads and Profit	7.50%	130,833	
Deisng Contingency / Risk	5.00%	93,763	
			6,563,435

**PROFESSIONAL FEES**

Professional Fees	8.00%	1,777,433	
			1,777,433

**DISPOSAL FEES**

Sales Agent Fee	3.00%	991,722	
Sales Legal Fee	112 un	500.00 /un	56,000
Sales Legal Fee			10,000
			1,057,722

**FINANCE**

Debit Rate 6.000%, Credit Rate 0.000% (Nominal)			
Total Finance Cost			1,652,843

**TOTAL COSTS**

**32,803,699**

**PROFIT**

**7,124,651**

**Performance Measures**

Profit on Cost%	21.72%
Profit on GDV%	17.84%
Profit on NDV%	17.84%
IRR	23.04%
Profit Erosion (finance rate 6.000)	3 yrs 4 mths

## Appendix M – C&W Sensitivity Testing

Quedgeley Residential 20% AH  
Land at Davy Way, Gloucester  
C&W Development Appraisal

**Quedgeley Residential 20% AH  
Land at Davy Way, Gloucester  
C&W Development Appraisal**

Summary Appraisal for Merged Phases 1 2

Currency in £

**REVENUE**

Sales Valuation	Units	ft²	Sales Rate ft²	Unit Price	Gross Sales
House Type A	4	10,184	280.00	712,880	2,851,520
House Type B	6	9,042	280.00	421,960	2,531,760
House Type C	2	2,820	280.00	394,800	789,600
House Type F	38	43,776	280.00	322,560	12,257,280
House Type G	6	5,232	280.00	244,160	1,464,960
House Type H	36	28,692	280.00	223,160	8,033,760
House Type I (1)	5	2,104	280.00	117,810	589,050
House Type I (2)	5	2,287	280.00	128,044	640,220
House Type J	15	17,115	280.00	319,480	4,792,200
House Type K	10	11,190	280.00	313,320	3,133,200
House Type A	1	2,546	140.00	356,440	356,440
House Type B	1	1,507	140.00	210,980	210,980
House Type C	1	1,410	140.00	197,400	197,400
House Type F	10	11,520	140.00	161,280	1,612,800
House Type G	2	1,744	140.00	122,080	244,160
House Type H	9	7,173	140.00	111,580	1,004,220
House Type I (1)	1	421	140.00	58,905	58,905
House Type I (2)	1	457	140.00	64,022	64,022
House Type J	4	4,564	140.00	159,740	638,960
House Type K	<u>3</u>	<u>3,357</u>	140.00	156,660	<u>469,980</u>
<b>Totals</b>	<b>160</b>	<b>167,140</b>			<b>41,941,417</b>

**NET REALISATION**

**41,941,417**

**OUTLAY**

**ACQUISITION COSTS**

Residualised Price	5,221,084	
Residualised Price (Negative land)	(537,140)	
	<b>4,683,944</b>	
Stamp Duty	5.00%	261,054
Agent Fee	1.00%	52,211
Legal Fee	0.80%	41,769
		<b>355,034</b>

**CONSTRUCTION COSTS**

Construction	Units	Unit Amount	Cost
Garages - single	7 un	5,000	35,000
Garages - double	<u>5 un</u>	10,000	<u>50,000</u>
<b>Totals</b>			<b>85,000</b>

	ft²	Build Rate ft²	Cost
House Type A	10,184	94.48	962,184
House Type B	9,042	94.48	854,288
House Type F	43,776	94.48	4,135,956
House Type G	5,232	94.48	494,319
House Type H	28,692	94.48	2,710,820
House Type I (1)	2,475	108.98	269,725
House Type I (2)	2,690	108.98	293,156
House Type J	17,115	94.48	1,617,025
House Type K	11,190	94.48	1,057,231
House Type A	2,546	94.48	240,546
House Type B	1,507	94.48	142,381
House Type F	11,520	94.48	1,088,410
House Type G	1,744	94.48	164,773
House Type H	7,173	94.48	677,705
House Type I (1)	495	108.98	53,945
House Type I (2)	538	108.98	58,631
House Type J	4,564	94.48	431,207
House Type K	<u>3,357</u>	94.48	<u>317,169</u>
<b>Totals</b>	<b>168,070</b>		<b>15,569,474</b>

**15,654,474**

Construction Contingency	5.00%	1,095,268	
CIL	132,441 ft²	7.84 /ft²	1,038,339
			<b>2,133,608</b>

**Other Construction**

Site Preparation Works	573,047	
External Drainage	229,878	
External Services	647,724	
Extra over Services for Residential	392,960	
External Works (Roads, paving etc)	1,497,456	
Tree protection works (allowance)	40,000	
Four New Retention Ponds	256,000	
Environmental Improvements	408,000	
Preliminaries	15.00%	606,760
Overheads and Profit	7.50%	348,887

**Quedgeley Residential 20% AH  
Land at Davy Way, Gloucester  
C&W Development Appraisal**

Deisng Contingency / Risk	5.00%	250,036	
Site Preparation Works		143,262	
External Drainage		57,469	
External Services		161,931	
Extra over Services for Residential		98,240	
External Works (Roads, paving etc)		374,364	
Tree protection works (allowance)		10,000	
Four New Retention Ponds		64,000	
Environmental Improvements		102,000	
Preliminaries	15.00%	151,690	
Overheads and Profit	7.50%	87,222	
Deisng Contingency / Risk	5.00%	62,509	
			6,563,434

**PROFESSIONAL FEES**

Professional Fees	8.00%	1,777,433	
			1,777,433

**DISPOSAL FEES**

Sales Agent Fee	3.00%	1,112,507	
Sales Legal Fee	127 un	500.00 /un	63,500
Sales Legal Fee			10,000
			1,186,007

**FINANCE**

Debit Rate 6.000%, Credit Rate 0.000% (Nominal)			
Total Finance Cost			1,792,007

**TOTAL COSTS**

**34,145,939**

**PROFIT**

**7,795,478**

**Performance Measures**

Profit on Cost%	22.83%
Profit on GDV%	18.59%
Profit on NDV%	18.59%
IRR	22.58%
Profit Erosion (finance rate 6.000)	3 yrs 5 mths

Quedgeley Residential 22% AH  
Land at Davy Way, Gloucester  
C&W Development Appraisal

**Quedgeley Residential 22% AH  
Land at Davy Way, Gloucester  
C&W Development Appraisal**

Summary Appraisal for Merged Phases 1 2

Currency in £

**REVENUE**

Sales Valuation	Units	ft²	Sales Rate ft²	Unit Price	Gross Sales
House Type A	4	10,184	280.00	712,880	2,851,520
House Type B	5	7,535	280.00	421,960	2,109,800
House Type C	2	2,820	280.00	394,800	789,600
House Type F	37	42,624	280.00	322,560	11,934,720
House Type G	6	5,232	280.00	244,160	1,464,960
House Type H	35	27,895	280.00	223,160	7,810,600
House Type I (1)	5	2,104	280.00	117,810	589,050
House Type I (2)	5	2,287	280.00	128,044	640,220
House Type J	15	17,115	280.00	319,480	4,792,200
House Type K	10	11,190	280.00	313,320	3,133,200
House Type A	1	2,546	140.00	356,440	356,440
House Type B	2	3,014	140.00	210,980	421,960
House Type C	1	1,410	140.00	197,400	197,400
House Type F	11	12,672	140.00	161,280	1,774,080
House Type G	2	1,744	140.00	122,080	244,160
House Type H	10	7,970	140.00	111,580	1,115,800
House Type I (1)	1	421	140.00	58,905	58,905
House Type I (2)	1	457	140.00	64,022	64,022
House Type J	4	4,564	140.00	159,740	638,960
House Type K	<u>3</u>	<u>3,357</u>	140.00	156,660	<u>469,980</u>
<b>Totals</b>	<b>160</b>	<b>167,140</b>			<b>41,457,577</b>

**NET REALISATION**

**41,457,577**

**OUTLAY**

**ACQUISITION COSTS**

Residualised Price	5,080,112	
Residualised Price (Negative land)	(589,343)	
	<b>4,490,769</b>	
Stamp Duty	5.00%	254,006
Agent Fee	1.00%	50,801
Legal Fee	0.80%	40,641
		<b>345,448</b>

**CONSTRUCTION COSTS**

Construction	Units	Unit Amount	Cost
Garages - single	7 un	5,000	35,000
Garages - double	<u>5 un</u>	10,000	<u>50,000</u>
<b>Totals</b>			<b>85,000</b>

	ft²	Build Rate ft²	Cost
House Type A	10,184	94.48	962,184
House Type B	7,535	94.48	711,907
House Type F	42,624	94.48	4,027,116
House Type G	5,232	94.48	494,319
House Type H	27,895	94.48	2,635,520
House Type I (1)	2,475	108.98	269,725
House Type I (2)	2,690	108.98	293,156
House Type J	17,115	94.48	1,617,025
House Type K	11,190	94.48	1,057,231
House Type A	2,546	94.48	240,546
House Type B	3,014	94.48	284,763
House Type F	12,672	94.48	1,197,251
House Type G	1,744	94.48	164,773
House Type H	7,970	94.48	753,006
House Type I (1)	495	108.98	53,945
House Type I (2)	538	108.98	58,631
House Type J	4,564	94.48	431,207
House Type K	<u>3,357</u>	94.48	<u>317,169</u>
<b>Totals</b>	<b>168,070</b>		<b>15,569,474</b>

**15,654,474**

Construction Contingency	5.00%	1,095,268	
CIL	128,985 ft²	7.84 /ft²	1,011,244
			<b>2,106,513</b>

**Other Construction**

Site Preparation Works	558,721	
External Drainage	224,131	
External Services	631,531	
Extra over Services for Residential	383,136	
External Works (Roads, paving etc)	1,460,020	
Tree protection works (allowance)	39,000	
Four New Retention Ponds	249,600	
Environmental Improvements	397,800	
Preliminaries	15.00%	591,591
Overheads and Profit	7.50%	340,165



**Quedgeley Residential 22% AH  
Land at Davy Way, Gloucester  
C&W Development Appraisal**

Deisng Contingency / Risk	5.00%	243,785	
Site Preparation Works		157,588	
External Drainage		63,216	
External Services		178,124	
Extra over Services for Residential		108,064	
External Works (Roads, paving etc)		411,800	
Tree protection works (allowance)		11,000	
Four New Retention Ponds		70,400	
Environmental Improvements		112,200	
Preliminaries	15.00%	166,859	
Overheads and Profit	7.50%	95,944	
Deisng Contingency / Risk	5.00%	68,760	
			6,563,434

**PROFESSIONAL FEES**

Professional Fees	8.00%	1,777,433	
			1,777,433

**DISPOSAL FEES**

Sales Agent Fee		3.00%	1,083,476	
Sales Legal Fee	124 un	500.00 /un	62,000	
Sales Legal Fee			10,000	
				1,155,476

**FINANCE**

Debit Rate 6.000%, Credit Rate 0.000% (Nominal)			
Total Finance Cost			1,708,312

**TOTAL COSTS**

**33,801,858**

**PROFIT**

**7,655,719**

**Performance Measures**

Profit on Cost%	22.65%
Profit on GDV%	18.47%
Profit on NDV%	18.47%

IRR 22.95%

Profit Erosion (finance rate 6.000) 3 yrs 5 mths