

Economic Viability Report

Greenwich Peninsula SE10 – Memorandum of Understanding plots

FOI Exemption Section 41 & 43 (2) Private and Confidential

Prepared for Quintain Estates and Development plc

January 2013



Contents

1	Introduction	3
2	Development description	5
3	Methodology	6
4	Assumptions	7
5	Assessment of the outputs of the appraisal	12
6	Conclusion	13

Appendices

Appendix 1 - Development appraisal

14



1 Introduction

BNP Paribas Real Estate has been commissioned by Quintain Estates and Development plc ('QED') to provide an assessment of the economic viability of the proposed development of ten plots at Greenwich Peninsula, SE10 ("the Development"). Our terms of reference are summarised as follows:

- Assess the Residual Land Value ("RLV") of the Proposed Scheme by way of a development appraisal; and
- Using the outputs of the appraisal, consider an appropriate and economically viable affordable housing package.

1.1 BNP Paribas Real Estate

BNP Paribas Real Estate is a leading firm of chartered surveyors, town planning and international property consultants. The practice offers an integrated service from fourteen offices within the United Kingdom and over sixty offices in key commercial centres in Europe, the United States of America and the Asian and Pacific regions.

BNP Paribas Real Estate has a wide ranging client base, acting for international companies and individuals, banks and financial institutions, private companies, public sector corporations, government departments, local authorities and registered social landlords.

The full range of property services includes:

- Planning and development consultancy;
- Affordable housing consultancy;
- Valuation and real estate appraisal;
- Property investment;
- Agency and Brokerage;
- Property management;
- Building and project consultancy; and
- Corporate real estate consultancy.

This report has been prepared by Nicholas Pell MSc under the supervision of Anthony Lee MRTPI MRICS, RICS Registered Valuer.

The Affordable Housing Consultancy team of BNP Paribas Real Estate advises landowners, developers, local authorities and registered social landlords ("RSLs") on the provision of affordable housing.

In 2007, we were appointed by the GLA to review its Development Control Toolkit Model (commonly referred to as the "Three Dragons" model). This review included testing the validity of the Three Dragons' approach to appraising the value of residential and mixed use developments; reviewing the variables used in the model; and advising on areas that required amendment in the re-worked toolkit. We were recently appointed by the GLA to undertake a further review of the toolkit and other available appraisal models and submitted out report in February 2012.

Anthony Lee is a member of the RICS '*Experts in Planning Service*' panel, which was established in March 2009 to support the Planning Inspectorate on major casework and local development plan work submitted for independent examination. He has assisted the inspectors examining the economic viability of housing policies within the Core Strategies of Stockton Borough Council; Hinckley and Bosworth Council; and East Northants District Council.



FOI Exemption Section 41 & 43 (2) Private and Confidential

In addition, we were recently retained by the Homes and Communities Agency ("HCA") to advise on better management of procurement of affordable housing through planning obligations.

The firm therefore has extensive experience of advising landowners, developers, local authorities and RSLs on the value of affordable housing and economically and socially sustainable residential developments.

1.2 Report structure

This report is structured as follows:

Section 3 provides a description of the proposed Development;

Section 4 describes our methodology and approach to determining the RLV generated by the proposed Development;

Section 5 sets out our assumptions and variables used to complete the appraisal;

Section 6 assesses the outputs of the appraisal and makes recommendations on an economically viable level of affordable housing provision; and

Section 7 sets out our conclusions.

1.3 Disclaimer

The contents of this report do not constitute a valuation, in accordance with Valuation standards 1.1 of the RICS Valuation Standards – Global and UK (May 2011), and should not be relied upon as such. This report is addressed to QED only and its contents should not be reproduced in part or in full without our prior consent.

1.4 Confidentiality

This report is provided to the Royal Borough of Greenwich ("the Council") on a confidential basis. We request that the report not be disclosed to any third parties under the Freedom of Information Act (Sections 41 and 43 (2)).



2 Development description

2.1 Site Description

The Site is located adjacent to the O2 Centre within close proximity to Canary Wharf, the West End and London's City Airport and forms part of a 190 acre masterplan for the Greenwich Peninsula. North Greenwich Underground Station provides access to Central London via the Jubilee Line within 10 minutes.

2.2 Proposed development

The proposed Development will create a new district for London including homes, offices, schools, shops and community facilities.

This report assesses the viability of ten plots within the masterplan, as follows:

- MO103
- MO104
- MO114
- MO115
- MO116
- MO117
 NO601
- NO601NO602
- NO602
 NO607
- NO608

Quintain and the GLA have agreed that the ten plots will provide 25% of habitable rooms as affordable, all of which shall be provided in seven plots in the south of the Peninsula (MO101, MO103, MO104, MO114, MO115, MO116 and MO117). No plot is to contain more than 50% social rented housing or more than 60% affordable housing (i.e. the total of social rent and intermediate tenures). Plots NO601, NO602, NO607 and NO608 are to be provided as 100% private housing. Plot MO101 is excluded from this assessment as the site has been transferred to Bellway.

3 Methodology

We have used *Argus Developer ('Argus')* to appraise development proposals. Argus is a commercially available development appraisal package in widespread use throughout the industry. It has been accepted by a number of local planning authorities for the purpose of viability assessments and has also been accepted at planning appeals. Banks also consider Argus to be a reliable tool for secured lending valuations. Further details can be accessed at www.argussoftware.com.

Argus is essentially a cash-flow model. Such models all work on a similar basis:

- Firstly, the value of the completed development is assessed.
- Secondly, the development costs are calculated, including either the profit margin required or land costs. In our appraisals we include profit as a development cost.

The difference between the total development value and total costs equates to the residual land value ("RLV"). The model is normally set up to run over a development period from the date of the commencement of the project until the project completion, when the development has been constructed and is occupied.

The cash-flow approach allows the finance charges to be accurately calculated over the development period. This approach can accommodate more complex arrangements where a number of different uses are provided or development is phased.

In order to assess whether a development scheme can be regarded as being economically viable it is necessary to compare the RLV that is produced with a benchmark land value. If the Development generates a RLV that is higher than the benchmark it can be regarded as being economically viable and therefore capable of providing additional affordable housing. However, if the Development generates a RLV that is lower than the benchmark it should be deemed economically unviable and the quantum of affordable housing should be reduced until viability is achieved.



4 Assumptions

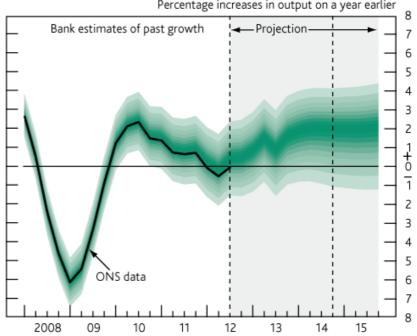
This section of the report sets out the general principles and assumptions which have been used to undertake a development appraisal of the Development.

4.1 Housing Market Commentary

4.1.1 **National Housing Market**

The historic highs achieved in the UK housing market by mid 2007 followed a prolonged period of real house price growth. However, a period of 'readjustment' began in the second half of 2007, triggered initially by rising interest rates and the emergence of the UK sub prime lending problems in the last guarter of 2007. The subsequent reduction in inter-bank lending led to a general "credit crunch" including a tightening of mortgage availability. The real crisis of confidence, however, followed the collapse of Lehman Brothers in September 2008, which forced the government and the Bank of England to intervene in the market to relieve a liquidity crisis.

The combination of successive shocks to consumer confidence and the difficulties in obtaining finance led to a sharp reduction in transactions and significant correction in house prices in the UK, which fell to a level some 21% lower than at their peak in August 2007, according to the Halifax House Price Index. Consequently, residential land values fell by some 50% from peak levels. One element of government intervention involved successive interest rate cuts and as the cost of servicing many people's mortgages is linked to the base rate, this financial burden has progressively eased for those still in employment. This, together with a return to economic growth early 2010 (see November 2012 Bank of England GDP fan chart below) meant that consumer confidence started to improve to some extent.



Percentage increases in output on a year earlier

Source: Bank of England



FOI Exemption Section 41 & 43 (2) Private and Confidential

4.1.2 Local Housing Market

According to Land Registry data, residential sale prices in the London Borough of Greenwich recovered well in mid 2010. However, this has not continued through into 2013. There is little indication that 2013 will see any significant further growth in prices, as sales volumes remain at historically low levels.

Average Price



Source: Land Registry

4.2 Gross Development Value ("GDV")

4.2.1 Residential Sales Values

QED has provided us with anticipated residential sales values ranging from $\pounds 521$ per square foot to $\pounds 671$ per square foot dependent on the location of the unit.

We have researched the local housing market through discussion with active local agents and through review of online internet resources. Through examining the comparable evidence collected we consider the assumption provided to us by QED as reasonable.

4.2.2 Affordable Housing Revenue

The GLA has committed to providing grant funding to support the provision of affordable housing at the scheme. An allocation to London and Quadrant amounts to £90,000 per unit for one and two bed units for rent; £130,000 per unit for three and four bed units for rent; and £30,000 per shared ownership unit. A pre-condition of this funding is that the affordable units are to be transferred to the RSL before 31 March 2013 and that construction has commenced by this date (or another date agreed between the parties).

We have assumed the capital values for the affordable residential units as provided by QED. The adopted values are found in the following table (shown inclusive of grant):

Tenure	Value (£ psf) inclusive of grant
Intermediate Units	£335
Social Rented Units	£193



4.2.3 Ground Rents

We have assumed ground rents at a rental value of £0.47 per square foot capitalised at a yield of 5%.

4.3 Development Costs

4.3.1 Construction Costs

QED has provided us with a total development cost in addition to a breakdown of the construction cost per square foot for the different elements of the proposed Development. It should be noted that the costs shown in the following table are based on a gross external area with a gross to net ratio of 75% and are **inclusive** of professional fees at 13.4% and a contingency of 3%. We have summarised these costs in the following table:

Plot	Total Build Cost (£)	Blended average build cost (£ per square foot) <u>inclusive</u> of professional fees and contingency
N0601	£61,072,560	£320
N0608	£122,249,307	£306
N0602	£139,702,572	£310
N0607	£164,384,115	£299
M0115	£25,535,094	£230
M0117	£36,230,546	£227
M0114	£47,516,333	£234
M0103	£42,344,224	£229
M0116	£25,924,458	£224
M0104	£56,059,793	£227

The proposed development incorporates a range of building heights, including towers of 33 storeys and the costs above are commensurate with this type of building.

Taking into account the nature and constraints of the proposed Development and the provision of car parking facilities we have adopted the construction costs proposed by QED within our appraisal.

4.3.2 Professional Fees

QED has included 13.4% for professional fees within the cost plan. This fee allowance is reflective of the complexities associated with a scheme of this scale.

4.3.3 Contingency

QED has included a 3% contingency within their gross development cost. It should be noted that this is below what we would consider to be a reasonable assumption (5% is the standard assumption).



4.3.4 Interest

Where development finance is available (which is only in a select number of situations) lenders are currently charging up to 5% above LIBOR with minimum rates of at least 7%. High arrangement (1-3%), monitoring (2-5%) and exit fees (1%) are also charged. These onerous lending terms have emerged due to the perceived risk of residential development in the current market.

We have adopted an interest rate of 7%, with no additional allowance for fees, which we consider to be an optimistic assumption for a development of this nature in the current market. It should be noted that although a bank would not provide 100% of the funding required for the proposed Development is conventional to assume finance on all costs in order to reflect the opportunity cost (or in some cases the actual cost) of committing equity to the project.

4.3.5 Developer's Profit

When considering the changing economic climate, financial institutions are tightening their requirement for profit returns on schemes. Banks have raised their expectations in terms of risk and required returns that new developments offer. Consequently developers are currently targeting profits of 20% of GDV for typical development schemes. We have adopted this profit allowance in relation to the private residential accommodation.

Where applicable, we have also adopted a profit rate of 6% on cost for the affordable housing residential units. This is in line with the benchmark value of the GLA Development Control Toolkit model and the HCA's Economic Appraisal tool.

4.3.6 Common costs and planning Obligations

The plots are required to make contributions towards infrastructure serving the entire peninsula, in addition to Section 106 contributions. These costs are allocated on the basis of a rate per square foot, subject to finance costs and indexation. Plots that are brought forward for development later in the programme will clearly bear a higher cost than those brought forward earlier, due to the impact of financing costs and indexation. The common costs for the ten plots amount to £91,380,118 and this allowance has been included in our appraisal.

4.3.7 Mayoral CIL

Developments in the London Borough of Greenwich are required to pay £35 per square metre for Mayoral CIL. We have included the following payments within our appraisal:



FOI Exemption Section 41 & 43 (2) Private and Confidential

Plot	CIL Payment (£)
N0601	£619,779
N0608	£1,298,945
N0602	£1,463,245
N0607	£1,787,309
M0115	£150,366
M0117	£215,784
M0114	£275,285
M0103	£250,184
M0116	£156,727
M0104	£333,646
Total CIL Payment	£6,551,271

4.3.8 Marketing and disposal costs

We have adopted the following cost of sales, which are in line with market assumptions:

- Marketing fees at 3% of market GDV; and
- Purchasers' costs at 5.8%.

4.4 Project timetable

The agreement with the GLA requires that construction of the affordable housing units on plots MO101¹, MO114, MO115 and MO117 is commenced no later than 31 March 2013. The target date for commencing construction on the remaining plots which include affordable housing (MO116, MO103 and MO104) is 31 March 2014. 266 of the 646 affordable housing units are to be completed by 31 March 2015, while the remaining 380 affordable housing units are to be completed by 31 March 2017.

The private housing in the southern plots (MO101, MO103, MO104, MO114, MO115, MO116 and MO117) is to be constructed at the same time as the affordable housing in these plots.

Construction of the private housing only plots is to be completed by 31 December 2019. Our appraisal reflects these requirements.

Plots	Commencement of construction	Completion of construction
MO101, MO114, MO115 MO117 (affordable)	31 March 2013	31 March 2015
MO116, MO103, MO104 (affordable)	31 March 2014	31 March 2017
MO101, MO114, MO115, MO117, MO116, MO103, MO104 (private)	31 January 2014	31 March 2017
NO601, NO602, NO607 and NO608 (private)	No specific date in agreement	31 December 2019

¹ Bellway site – excluded from this assessment.



5 Assessment of the outputs of the appraisal

In this section, we consider the outputs of the appraisals and the implications for the provision of affordable housing at the proposed Development.

5.1 Viability Benchmark

QED has entered into an agreement with the Homes and Communities Agency to develop the plots listed in Section 2. The benefit of this agreement has now passed to the GLA. The agreement sets out a requirement for a minimum land value ('MLV') of £50,131,133. In addition to this land payment, the GLA is entitled to a further land payment if the scheme achieves a minimum of 22% profit on cost. For the purposes of our assessment, we have utilised a viability benchmark of £50 million that disregards the potential further land payment.

5.2 Appraisal Results

We have undertaken an appraisal of the scheme with 25% affordable housing by habitable rooms. Our appraisal (attached as Appendix 1) demonstrates that the proposed Development generates a RLV of minus £23,384,968². When compared with our Viability Benchmark figure of £50,131,133 the proposed Development generates a deficit of £73,516,101.

Residual land value	Benchmark land value	Residual land value less benchmark
-£23,384,968	£50,131,133	£73,516,101

Clearly, therefore, the proposed Development cannot viably provide any additional affordable housing in the current market, nor can it viably make any financial contribution to offsite affordable housing. The scheme relies upon a degree of sales value inflation to become viable against the benchmark land value.

 $^{^2}$ This incorporates a 20% developer's profit as a cost in line with standard convention. In practice, the developer would need to offset the profit against the shortfall.



6 Conclusion

Our appraisal results demonstrate that the viability of the proposed Development is likely to present challenges for delivery in the short term. The viability of the proposed Development is compromised by the introduction of affordable housing units. Although this suggests that the delivery of the proposed Development will be challenging, QED has committed to delivering the scheme in the anticipation of improving sales values, thus allowing them to achieve a normal level of profit. If values increase to a level that profit increases beyond this normal level, the public sector interest is protected through the overage mechanism. This would require an additional land payment to be made to the GLA, which could be included in future grant funding programmes to deliver affordable housing.



Appendix 1 - Development appraisal

BNP Paribas Real Estate

Development Appraisal

Greenwich Peninsula

Quintain

Report Date: 22 January 2013

Prepared by BNPPRE

Greenwich Peninsula Quintain

Timescale (Duration in months)

Project commences Phase 1: N0601	Jan 2013					
Stage Name	Duration	Start Date	End Date	Anchored To	Aligne	Offset
Phase Start		Jan 2013				
Pre-Construction	6	Jan 2013	Jun 2013	Purchase	End	0
Construction	16	Jul 2013	Oct 2014	Pre-Construction	End	0
Sale	16	Mar 2014	Jun 2015	Income Flow	End	-8
Phase End	10	Jun 2015	0411 2010		LIIG	0
Phase Length	30	00112010				
r naoo Eongin	00					
Phase 2: N0608						
Stage Name	Duration	Start Date	End Date	Anchored To	Aligne	Offset
Phase Start	24.440	Jan 2013			,ge.	0
Pre-Construction	18	Jan 2013	Jun 2014	Purchase	End	0
Construction	24	Jul 2014	Jun 2016	Pre-Construction	End	0
Sale	40	Nov 2014	Feb 2018	Income Flow	End	-20
Phase End	10	Feb 2018	1002010		LIIG	20
Phase Length	62	1002010				
r hase Eength	02					
Phase 3: N0602						
Stage Name	Duration	Start Date	End Date	Anchored To	Aligne	Offset
Phase Start	Duration	Jan 2013	Ena Dato		7 dignet	Chool
Pre-Construction	6	Jan 2013	Jun 2013	Purchase	End	0
Construction	24	Jul 2013	Jun 2015	Pre-Construction	End	0
Sale	40	Nov 2013	Feb 2017	Income Flow	End	-20
Phase End	40	Feb 2017	1 00 2017	income r iow	LIIG	20
Phase Length	50	1002017				
i nase Lengti	50					
Phase 4: N0607						
Stage Name	Duration	Start Date	End Date	Anchored To	Aligne	Offset
Phase Start		Jan 2013				
Pre-Construction	18	Jan 2013	Jun 2014	Purchase	End	0
Construction	30	Jul 2014	Dec 2016	Pre-Construction	End	0
Sale	52	Nov 2014	Feb 2019	Income Flow	End	-26
Phase End		Feb 2019				
Phase Length	74					
Ŭ						
Phase 5: M0115						
Stage Name	Duration	Start Date	End Date	Anchored To	Aligne	Offset
Phase Start		Jan 2013				
Pre-Construction	12	Jan 2013	Dec 2013	Purchase	End	0
Construction	18	Jan 2014	Jun 2015	Pre-Construction	End	0
Sale	6	Apr 2015	Sep 2015	Income Flow	End	-3
Phase End		Sep 2015				
Phase Length	33					
Phase 6: M0117						
Stage Name	Duration	Start Date	End Date	Anchored To	Aligne	Offset
Phase Start		Jan 2013				
Pre-Construction	12	Jan 2013	Dec 2013	Purchase	End	0
Construction	18	Jan 2014	Jun 2015	Pre-Construction	End	0
Sale	7	Mar 2015	Sep 2015	Income Flow	End	-4
Phase End		Sep 2015				
Phase Length	33					

Greenwich Peninsula Quintain

Timescale (Duration in months)

Phase 7: M0114						
Stage Name	Duration	Start Date	End Date	Anchored To	Aligne	Offset
Phase Start	20.000	Jan 2013	2.1.0 2 0.10		1	0
Pre-Construction	18	Jan 2013	Jun 2014	Purchase	End	0
Construction	24	Jul 2014	Jun 2016	Pre-Construction	End	0
Sale	9	Feb 2016	Oct 2016	Income Flow	End	-5
Phase End		Oct 2016				
Phase Length	46					
Dhana 9: M0102						
Phase 8: M0103 Stage Name	Duration	Start Date	End Date	Anchored To	Aligne	Offset
Phase Start	Duration	Jan 2013	Enu Dale	Anchored To	Alighet	Unset
Pre-Construction	24	Jan 2013	Dec 2014	Purchase	End	0
Construction	24	Jan 2015	Dec 2016	Pre-Construction	End	0
Sale	9	Aug 2016	Apr 2017	Income Flow	End	-5
Phase End	-	Apr 2017				-
Phase Length	52					
Phase 9: M0116					A 11	011
Stage Name	Duration	Start Date	End Date	Anchored To	Aligne	Offset
Phase Start	24	Jan 2013	Dec 2014	Purchase	End	0
Pre-Construction Construction	24 18	Jan 2013 Jan 2015	Dec 2014 Jun 2016	Pre-Construction	End End	0 0
Sale	6	Apr 2016	Sep 2016	Income Flow	End	-3
Phase End	0	Sep 2016	0cp 2010		LIIU	-0
Phase Length	45	000 2010				
J						
Phase 10: M0104						
Stage Name	Duration	Start Date	End Date	Anchored To	Aligne	Offset
Phase Start		Jan 2013		_		
Pre-Construction	24	Jan 2013	Dec 2014	Purchase	End	0
Construction	24	Jan 2015	Dec 2016	Pre-Construction	End	0
Sale	11	Jul 2016	May 2017	Income Flow	End	-6
Phase End Phase Length	53	May 2017				
Fildse Lengti						
Phase 11: M0120						
Stage Name	Duration	Start Date	End Date	Anchored To	Aligne	Offset
Phase Start		Jan 2013				
Pre-Construction	3	Jan 2013	Mar 2013	Purchase	End	0
Construction	12	Apr 2013	Mar 2014	Pre-Construction	End	0
Sale	6	Apr 2014	Sep 2014	Income Flow	End	0
Phase End		Sep 2014				
Phase Length	21					
Phase 12: M0101						
Stage Name	Duration	Start Date	End Date	Anchored To	Aligne	Offset
Phase Start	Daration	Jan 2013			, ingriov	011001
Pre-Construction	3	Jan 2013	Mar 2013	Purchase	End	0
Construction	12	Apr 2013	Mar 2014	Pre-Construction	End	0
Sale	6	Apr 2014	Sep 2014	Income Flow	End	0
Phase End		Sep 2014	-			
Phase Length	21					
.		/ .				
Project Length	74 (Merged Phases - Includes Exit Period)					

Assumptions

Expenditure

Greenwich Peninsula Quintain

Net of Rent Additions/Costs

Assumptions

Professional Fees are based on Construction (Manual relations applied to some Professional Fees) Purchaser's Costs are based on Net Capitalisation Purchaser's Costs Deducted from Sale (Not added to Cost) Sales Fees are based on Net Capitalisation Sales Fees Added to Cost (Not deducted from Sale)

Receipts

Show tenant's true income stream	On
Offset income against development costs	Off
Rent payment cycle	Quarterly (Adv)
Apply rent payment cycle to all tenants	On
Renewal Void and Rent Free apply to first renewal only	Off
Initial Yield Valuation Method	Off
Default Capitalisation Yield	0.0000%
Apply Default Capitalisation to All Tenants	Off
Default stage for Sale Date	Off
Align end of income stream to Sale Date	Off
Apply align end of income stream to all tenants	On
When the Capital Value is modified in the cash flow	Recalculate the Yield
Valuation Tables are	Annually in Arrears
Rent Free method	Defer start of Tenant's Rent
Finance Financing Method Interest Compounding Period Interest Charging Period Nominal rates of interest used Calculate interest on Payments/Receipts in final period Include interest and Finance Fees in IRR Calculations Automatic Inter-account transfers Manual Finance Rate for Profit Erosion	Basic (Interest Sets) Quarterly Monthly Off Off Off Off
Calculation Site Payments Other Payments Negative Land Receipts	In Arrears In Arrears In Advance In Advance
Initial IRR Guess Rate	8.00%
Minimum IRR	-100%
Maximum IRR	99999%
Manual Discount Rate	Off
IRR Tolerance	0.001000
Letting and Rent Review Fees are calculated on	Net of Deductions
Development Yield and Rent Cover are calculated on	Rent at Sale Date(s)
Include Tenants with no Capital Value	On
Include Turnover Rent	Off
Net of Non-Recoverable costs	On
Net of Ground Rent deductions	Off

Off

Greenwich Peninsula Quintain

Assumptions

Value Added Tax

Global VAT Rate Global Recovery Rate Recovery Cycle every 1st Recovery Month VAT Calculations in Cash Flow

Residual

Land Cost Mode Multi-Phasing Target Type 0.00% 0.00% 2 months 2 (Feb 2013) On

S-Curve Single curve Monthly curve

Residualised Land Value Separate Land Residual for each phase Profit on Cost

Phase Number	Target Value	Locked	Treat Neg Land
		Value	as Revenue
1. N0601	0.00%	No	No
2. N0608	0.00%	No	No
3. N0602	0.00%	No	No
4. N0607	0.00%	No	No
5. M0115	0.00%	No	No
6. M0117	0.00%	No	No
7. M0114	0.00%	No	No
8. M0103	0.00%	No	No
9. M0116	0.00%	No	No
10. M0104	0.00%	No	No
11. M0120	0.00%	No	No
12. M0101	0.00%	No	No

Distribution

Construction Payments are paid on	
Sales Receipts are paid on	
Sales Deposits are paid on	

Interest Sets

Interest Set 1

Debit Rate	Credit Rate	Months	Start Date	
7.00%	0.00%	Perpetuity	Jan 2013	

Inflation and Growth

Growth Sets

Growth Set 1

Inflation/Growth for this set is calculated in advance This set is not stepped

Rate	Months	Start Date
0.00%	Perpetuity	Jan 2013

Inflation Sets

Inflation Set 1

Inflation/Growth for this set is calculated in advance This set is not stepped

Rate	Months	Start Date
0.00%	Perpetuity	Jan 2013

File: G:\Development & Residential Consulting\Jobs\Affordable Housing\122257 - Quintain - Greenwich Peninsula\Greenwich Peninsula.wcf ARGUS Developer Version: 4.05.001 Date: 22/01/2013

APPRAISAL SUMMARY

1,343,786

2,816,343

Greenwich Peninsula Quintain

Summary Appraisal for Merged Phases 1 2 3 4 5 6 7 8 9 10 11 12

REVENUE

	Unite		Crease Cales	
Sales Valuation	Units	Unit Amount	Gross Sales	
Car Parking	40 units at	£18,000	720,000	
Car Parking	100 units at	£18,000	1,800,000	
Car Parking	118 units at	£18,000	2,124,000	
Car Parking	144 units at	£18,000	2,592,000	
Car Parking	12 units at	£18,000	216,000	
Car Parking	18 units at	£18,000	324,000	
Car Parking	23 units at	£18,000	414,000	
Car Parking	21 units at	£18,000	378,000	
Car Parking	13 units at	£18,000	234,000	
Car Parking	28 units at	£18,000	504,000	
Totals			9,306,000	
	ft²	Rate ft ²	Gross Sales	
Private Residential Units	142,956	£671.00	95,923,476	
Private Residential Units	299,611	£641.00	192,050,651	
Private Residential Units	337,508	£650.00	219,380,200	
Private Residential Units	412,256	£650.00	267,966,400	
Private Residential Units	34,683	£520.00	18,035,160	
Affordable - Intermediate	14,592	£335.00	4,888,320	
Affordable - SFR	34,048	£193.00	6,571,264	
Private Residential Units	49,722	£520.00	25,855,440	
Affordable - Intermediate	20,941	£335.00	7,015,235	
Affordable - SFR	48,861	£193.00	9,430,173	
Private Residential Units	63,497	£520.00	33,018,440	
Affordable - Intermediate	26,715	£335.00	8,949,525	
Affordable - SFR	62,335	£193.00	12,030,655	
Private Residential Units	57,707	£520.00	30,007,640	
Affordable - Intermediate	24,279	£335.00	8,133,465	
Affordable - SFR	56,651	£193.00	10,933,643	
Private Residential Units	56,651 36,150	£193.00 £520.00	10,933,643 18,798,000	
Private Residential Units Affordable - Intermediate	56,651 36,150 15,209	£193.00 £520.00 £335.00	10,933,643 18,798,000 5,095,015	
Private Residential Units Affordable - Intermediate Affordable - SFR	56,651 36,150 15,209 35,489	£193.00 £520.00 £335.00 £193.00	10,933,643 18,798,000 5,095,015 6,849,377	
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units	56,651 36,150 15,209 35,489 76,958	£193.00 £520.00 £335.00 £193.00 £520.00	10,933,643 18,798,000 5,095,015 6,849,377 40,018,160	
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units Affordable - Intermediate	56,651 36,150 15,209 35,489 76,958 32,378	£193.00 £520.00 £335.00 £193.00	10,933,643 18,798,000 5,095,015 6,849,377	
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units	56,651 36,150 15,209 35,489 76,958	£193.00 £520.00 £335.00 £193.00 £520.00	10,933,643 18,798,000 5,095,015 6,849,377 40,018,160 10,846,630 14,581,150	
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units Affordable - Intermediate	56,651 36,150 15,209 35,489 76,958 32,378	£193.00 £520.00 £335.00 £193.00 £520.00 £335.00	10,933,643 18,798,000 5,095,015 6,849,377 40,018,160 10,846,630	1,055,684,019
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units Affordable - Intermediate Affordable - SFR	56,651 36,150 15,209 35,489 76,958 32,378 75,550	£193.00 £520.00 £335.00 £193.00 £520.00 £335.00	10,933,643 18,798,000 5,095,015 6,849,377 40,018,160 10,846,630 14,581,150	1,055,684,019
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units Affordable - Intermediate Affordable - SFR Totals Rental Area Summary	56,651 36,150 15,209 35,489 76,958 32,378 75,550 <u>1,958,096</u> Units ft ²	£193.00 £520.00 £193.00 £520.00 £335.00 £193.00 £193.00	10,933,643 18,798,000 5,095,015 6,849,377 40,018,160 10,846,630 14,581,150 <u>1,046,378,019</u> Gross MRV Gross MRV	1,055,684,019
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units Affordable - Intermediate Affordable - SFR Totals	56,651 36,150 15,209 35,489 76,958 32,378 75,550 <u>1,958,096</u> Units ft ² 142,956	£193.00 £520.00 £193.00 £520.00 £335.00 £193.00 £193.00	10,933,643 18,798,000 5,095,015 6,849,377 40,018,160 10,846,630 14,581,150 <u>1,046,378,019</u> Gross MRV Gross MRV 67,189	1,055,684,019
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units Affordable - Intermediate Affordable - SFR Totals Rental Area Summary Ground Rents Ground Rents	56,651 36,150 15,209 35,489 76,958 32,378 75,550 <u>1,958,096</u> Units ft ² 142,956 299,611	£193.00 £520.00 £335.00 £520.00 £335.00 £193.00 Unit Amount Rate ft ² £0.47 £0.47	10,933,643 18,798,000 5,095,015 6,849,377 40,018,160 10,846,630 14,581,150 <u>1,046,378,019</u> Gross MRV 67,189 140,817	1,055,684,019
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units Affordable - Intermediate Affordable - SFR Totals Rental Area Summary Ground Rents	56,651 36,150 15,209 35,489 76,958 32,378 75,550 <u>1,958,096</u> Units ft ² 142,956 299,611 337,508	£193.00 £520.00 £335.00 £520.00 £335.00 £193.00 £193.00 Unit Amount Rate ft ² £0.47	10,933,643 18,798,000 5,095,015 6,849,377 40,018,160 10,846,630 14,581,150 <u>1,046,378,019</u> Gross MRV Gross MRV 67,189	1,055,684,019
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units Affordable - Intermediate Affordable - SFR Totals Rental Area Summary Ground Rents Ground Rents	56,651 36,150 15,209 35,489 76,958 32,378 75,550 <u>1,958,096</u> Units ft ² 142,956 299,611	£193.00 £520.00 £335.00 £520.00 £335.00 £193.00 Unit Amount Rate ft ² £0.47 £0.47	10,933,643 18,798,000 5,095,015 6,849,377 40,018,160 10,846,630 14,581,150 <u>1,046,378,019</u> Gross MRV 67,189 140,817	1,055,684,019
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units Affordable - Intermediate Affordable - SFR Totals Rental Area Summary Ground Rents Ground Rents Ground Rents Ground Rents	56,651 36,150 15,209 35,489 76,958 32,378 75,550 <u>1,958,096</u> Units ft ² 142,956 299,611 337,508	£193.00 £520.00 £335.00 £335.00 £335.00 £193.00 Unit Amount Rate ft ² £0.47 £0.47 £0.47	10,933,643 18,798,000 5,095,015 6,849,377 40,018,160 10,846,630 14,581,150 <u>1,046,378,019</u> Gross MRV 67,189 140,817 158,629	1,055,684,019
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units Affordable - Intermediate Affordable - SFR Totals Rental Area Summary Ground Rents Ground Rents Ground Rents Ground Rents Ground Rents	56,651 36,150 15,209 35,489 76,958 32,378 75,550 <u>1,958,096</u> Units ft ² 142,956 299,611 337,508 412,256	£193.00 £520.00 £335.00 £335.00 £193.00 £335.00 £193.00 Unit Amount Rate ft ² £0.47 £0.47 £0.47 £0.47	10,933,643 18,798,000 5,095,015 6,849,377 40,018,160 10,846,630 14,581,150 <u>1,046,378,019</u> Gross MRV 67,189 140,817 158,629 193,760	1,055,684,019
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units Affordable - Intermediate Affordable - SFR Totals Rental Area Summary Ground Rents Ground Rents Ground Rents Ground Rents Ground Rents Ground Rents Ground Rents Ground Rents Ground Rents	56,651 36,150 15,209 35,489 76,958 32,378 75,550 <u>1,958,096</u> Units ft² 142,956 299,611 337,508 412,256 34,683	£193.00 £520.00 £335.00 £335.00 £193.00 £193.00 £193.00 Unit Amount Rate ft ² £0.47 £0.47 £0.47 £0.47 £0.47	10,933,643 18,798,000 5,095,015 6,849,377 40,018,160 10,846,630 14,581,150 <u>1,046,378,019</u> Gross MRV 67,189 140,817 158,629 193,760 16,301	1,055,684,019
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units Affordable - Intermediate Affordable - SFR Totals Rental Area Summary Ground Rents Ground Rents	56,651 36,150 15,209 35,489 76,958 32,378 75,550 <u>1,958,096</u> Units ft² 142,956 299,611 337,508 412,256 34,683 49,722 63,497	£193.00 £520.00 £335.00 £335.00 £193.00 £193.00 £193.00 Unit Amount Rate ft ² £0.47 £0.47 £0.47 £0.47 £0.47 £0.47	10,933,643 18,798,000 5,095,015 6,849,377 40,018,160 10,846,630 14,581,150 <u>1,046,378,019</u> Gross MRV 67,189 140,817 158,629 193,760 16,301 23,369	1,055,684,019
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units Affordable - Intermediate Affordable - SFR Totals Rental Area Summary Ground Rents Ground Rents	56,651 36,150 15,209 35,489 76,958 32,378 75,550 <u>1,958,096</u> Units ft² 142,956 299,611 337,508 412,256 34,683 49,722 63,497 57,707	£193.00 £520.00 £335.00 £193.00 £335.00 £193.00 Unit Amount Unit Amount Rate ft² £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47	10,933,643 18,798,000 5,095,015 6,849,377 40,018,160 10,846,630 14,581,150 <u>1,046,378,019</u> Gross MRV 67,189 140,817 158,629 193,760 16,301 23,369 29,844 27,122	1,055,684,019
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units Affordable - Intermediate Affordable - SFR Totals Rental Area Summary Ground Rents Ground Rents	56,651 36,150 15,209 35,489 76,958 32,378 75,550 <u>1,958,096</u> Units ft ² 142,956 299,611 337,508 412,256 34,683 49,722 63,497 57,707 36,150	£193.00 £520.00 £335.00 £193.00 £335.00 £193.00 Unit Amount Rate ft² £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47	10,933,643 18,798,000 5,095,015 6,849,377 40,018,160 10,846,630 14,581,150 <u>1,046,378,019</u> Gross MRV Gross MRV 67,189 140,817 158,629 193,760 16,301 23,369 29,844 27,122 16,991	1,055,684,019
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units Affordable - Intermediate Affordable - SFR Totals Rental Area Summary Ground Rents Ground Rents	56,651 36,150 15,209 35,489 76,958 32,378 75,550 <u>1,958,096</u> Units ft² 142,956 299,611 337,508 412,256 34,683 49,722 63,497 57,707	£193.00 £520.00 £335.00 £193.00 £335.00 £193.00 Unit Amount Unit Amount Rate ft² £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47	10,933,643 18,798,000 5,095,015 6,849,377 40,018,160 10,846,630 14,581,150 <u>1,046,378,019</u> Gross MRV 67,189 140,817 158,629 193,760 16,301 23,369 29,844 27,122	1,055,684,019
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units Affordable - Intermediate Affordable - SFR Totals Rental Area Summary Ground Rents Ground Rents	56,651 36,150 15,209 35,489 76,958 32,378 75,550 <u>1,958,096</u> Units t ² 142,956 299,611 337,508 412,256 34,683 49,722 63,497 57,707 36,150 76,958	£193.00 £520.00 £335.00 £193.00 £335.00 £193.00 Unit Amount Rate ft² £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47	10,933,643 18,798,000 5,095,015 6,849,377 40,018,160 10,846,630 14,581,150 <u>1,046,378,019</u> Gross MRV Gross MRV 67,189 140,817 158,629 193,760 16,301 23,369 29,844 27,122 16,991 36,170	1,055,684,019
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units Affordable - Intermediate Affordable - SFR Totals Rental Area Summary Ground Rents Ground Rents	56,651 36,150 15,209 35,489 76,958 32,378 75,550 <u>1,958,096</u> Units t ² 142,956 299,611 337,508 412,256 34,683 49,722 63,497 57,707 36,150 76,958	£193.00 £520.00 £335.00 £193.00 £335.00 £193.00 Unit Amount Rate ft² £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47	10,933,643 18,798,000 5,095,015 6,849,377 40,018,160 10,846,630 14,581,150 <u>1,046,378,019</u> Gross MRV Gross MRV 67,189 140,817 158,629 193,760 16,301 23,369 29,844 27,122 16,991 36,170	1,055,684,019
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units Affordable - Intermediate Affordable - SFR Totals Rental Area Summary Ground Rents Ground Rents Totals	56,651 36,150 15,209 35,489 76,958 32,378 75,550 <u>1,958,096</u> Units t ² 142,956 299,611 337,508 412,256 34,683 49,722 63,497 57,707 36,150 76,958 <u>1,511,048</u>	$\begin{array}{c} \pounds 193.00\\ \pounds 520.00\\ \pounds 335.00\\ \pounds 193.00\\ \pounds 520.00\\ \pounds 335.00\\ \pounds 193.00\\ \end{array}$ Unit Amount Rate ft ²	10,933,643 18,798,000 5,095,015 6,849,377 40,018,160 10,846,630 14,581,150 <u>1,046,378,019</u> Gross MRV Gross MRV 67,189 140,817 158,629 193,760 16,301 23,369 29,844 27,122 16,991 36,170	1,055,684,019
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units Affordable - Intermediate Affordable - SFR Totals Rental Area Summary Ground Rents Ground Rents Totals	56,651 36,150 15,209 35,489 76,958 32,378 75,550 <u>1,958,096</u> Units t ² 142,956 299,611 337,508 412,256 34,683 49,722 63,497 57,707 36,150 76,958	£193.00 £520.00 £335.00 £193.00 £335.00 £193.00 Unit Amount Rate ft² £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47	10,933,643 18,798,000 5,095,015 6,849,377 40,018,160 10,846,630 14,581,150 <u>1,046,378,019</u> Gross MRV 67,189 140,817 158,629 193,760 16,301 23,369 29,844 27,122 16,991 36,170 <u>710,193</u>	
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units Affordable - Intermediate Affordable - SFR Totals Rental Area Summary Ground Rents Ground Rents Totals	56,651 36,150 15,209 35,489 76,958 32,378 75,550 <u>1,958,096</u> Units ft ² 142,956 299,611 337,508 412,256 34,683 49,722 63,497 57,707 36,150 76,958 <u>1,511,048</u>	£193.00 £520.00 £193.00 £520.00 £335.00 £193.00 Unit Amount Rate ft ² £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47 £0.47	10,933,643 18,798,000 5,095,015 6,849,377 40,018,160 10,846,630 14,581,150 <u>1,046,378,019</u> Gross MRV Gross MRV 67,189 140,817 158,629 193,760 16,301 23,369 29,844 27,122 16,991 36,170 <u>710,193</u>	20.0000
Private Residential Units Affordable - Intermediate Affordable - SFR Private Residential Units Affordable - Intermediate Affordable - SFR Totals Rental Area Summary Ground Rents Ground Rents Totals Investment Valuation Ground Rents Current Rent Ground Rents	56,651 36,150 15,209 35,489 76,958 32,378 75,550 <u>1,958,096</u> Units t ² 142,956 299,611 337,508 412,256 34,683 49,722 63,497 57,707 36,150 76,958 <u>1,511,048</u>	$\begin{array}{c} \pounds 193.00\\ \pounds 520.00\\ \pounds 335.00\\ \pounds 193.00\\ \pounds 520.00\\ \pounds 335.00\\ \pounds 193.00\\ \end{array}$ Unit Amount Rate ft ²	10,933,643 18,798,000 5,095,015 6,849,377 40,018,160 10,846,630 14,581,150 <u>1,046,378,019</u> Gross MRV 67,189 140,817 158,629 193,760 16,301 23,369 29,844 27,122 16,991 36,170 <u>710,193</u>	

File: G:\Development & Residential Consulting\Jobs\Affordable Housing\122257 - Quintain - Greenwich Peninsula\Greenwich Peninsula.wcf ARGUS Developer Version: 4.05.001 Date: 22/01/2013

APPRAISAL SUMMARY				BNP PAF	RIBAS REAL	ESTATE
Greenwich Peninsula						
Quintain						
Current Rent	158,629	YP @	5.0000%	20.0000	3,172,575	
Ground Rents	100 700		5 00000/	00.0000	0.075.000	
Current Rent Ground Rents	193,760	YP @	5.0000%	20.0000	3,875,206	
Current Rent	16,301	YP @	5.0000%	20.0000	326,020	
Ground Rents	,	_			,	
Current Rent	23,369	YP @	5.0000%	20.0000	467,387	
Ground Rents Current Rent	29,844	YP @	5.0000%	20.0000	596,872	
Ground Rents	23,044		0.000070	20.0000	550,072	
Current Rent	27,122	YP @	5.0000%	20.0000	542,446	
Ground Rents	10.001		F 00000/	~~~~~	000.040	
Current Rent Ground Rents	16,991	YP @	5.0000%	20.0000	339,810	
Current Rent	36,170	YP @	5.0000%	20.0000	723,405	
	, -	C			14,203,851	
GROSS DEVELOPMENT VALUE				1,069,887,870		
Purchaser's Costs NET DEVELOPMENT VALUE		5.80%	(73,667)	<u>1,069,814,203</u>		
Income from Tenants						
Ground Rents			72,788			
Ground Rents			222,961			
Ground Rents			251,162			
Ground Rents Ground Rents			403,667 2,717			
Ground Rents			3,895			
Ground Rents			7,461			
Ground Rents			6,781			
Ground Rents			2,832			
Ground Rents			12,057	986,320		
NET REALISATION				1,070,800,523		
OUTLAY						
ACQUISITION COSTS						
Residualised Price			(23,384,968)			
Stamp Duty		4.80%	1,010,151			
Agent Fee Legal Fee		1.00% 0.50%	210,448 105,224			
Legartee		0.0078	105,224	(22,059,145)		
CONSTRUCTION COSTS						
CIL Payments			6,551,270			
Common Costs			91,380,120	97,931,390		
Other Construction				97,951,590		
Development Costs			61,072,560			
Development Costs			122,249,307			
Development Costs			139,702,572			
Development Costs Development Costs			164,384,115 25,535,094			
Development Costs			36,230,546			
Development Costs			47,516,333			
Development Costs			42,344,224			
Development Costs			25,924,458			
Development Costs			56,059,793	721,019,002		
MARKETING & LETTING		2 000/	20 224 607			
Marketing		3.00%	28,231,607	28,231,607		
				-, -,		

APPRAISAL SUMMARY			BNP PARIBAS REAL ESTA
Greenwich Peninsula			
Quintain			
Additional Costs			
Profit on Affordable	6.00%	687,575	
Profit on Affordable	6.00%	986,724	
Profit on Affordable	6.00%	1,258,811	
Profit on Affordable	6.00%	1,144,026	
Profit on Affordable	6.00%	716,664	
Profit on Affordable	6.00%	1,525,667	
Profit on Private	20.00%	19,597,452	
Profit on Private	20.00%	39,333,399	
Profit on Private	20.00%	44,300,840	
Profit on Private	20.00%	54,886,721	
Profit on Private	20.00%	3,715,436	
Profit on Private	20.00%	5,329,365	
Profit on Private	20.00%	6,805,862	
Profit on Private	20.00%	6,185,617	
Profit on Private	20.00%	3,874,362	
Profit on Private	20.00%	8,249,113	
i foit off fivete	20.0070	0,240,110	198,597,636
FINANCE			100,007,000
Debit Rate 7.00% Credit Rate 0.00% (Nominal)			
Total Finance Cost			39,767,165
			00,101,100
TOTAL COSTS			1,063,487,655
PROFIT			
			7,312,868
Performance Measures			
Profit on Cost%	0.69%		
Profit on GDV%	0.68%		
Profit on NDV%	0.68%		
Development Yield% (on Rent)	0.07%		
Equivalent Yield% (Nominal)	5.00%		
Equivalent Yield% (True)	5.16%		
Gross Initial Yield%	5.00%		
Net Initial Yield%	5.00%		
	7.30%		
Rent Cover	10 yrs 4 mths		
Profit Erosion (finance rate 7.000%)	0 yrs 1 mths		