Greater Manchester Combined Authority

Viability assessment of Spatial Framework

Strategic Viability Report Stage 1 – Technical Report

September 2020

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The appendices and information contained within do not include a formal land valuation or scheme appraisal. They have been prepared using the Three Dragons Toolkit and is based on local authority level data supplied by GMCA, individual local authorities within Greater Manchester, consultant team inputs and quoted published data sources. The toolkit provides a review of the development economics of illustrative schemes and the results depend on the data inputs provided. This analysis should not be used for individual scheme appraisal.

No responsibility whatsoever is accepted to any third party who may seek to rely on the content of the report unless previously agreed.

Contents

1 Introduction

1. In January 2019, the Greater Manchester Combined Authority (GMCA) published its draft Spatial Framework (GMSF), the Greater Manchester's Plan for Homes, Jobs and the Environment. The team of Three Dragons, Ward Williams Associates and Troy Planning and Design were commissioned to undertake a Viability Assessment of the Spatial Framework (VASF) to test whether the requirements of the National Planning Policy Framework (NPPF) are met, that is that the policy requirements in a plan should not threaten the development viability of the plan as a whole.
2. The VASF comprises two linked reports, setting out the viability position across Greater Manchester, namely:
    - The Strategic Viability Report – plan policy testing of typologies representing site supply in Greater Manchester;
    - The Allocated Sites Viability Report – site specific testing of allocated sites identified in the Greater Manchester Spatial Framework;
3. This Technical Report forms part of the Strategic Viability Report.

Appendix A – Review of GMSF draft Jan 19 policy

1. A review of the policies in the Spatial Framework has been undertaken. The review was purely to identify the possible viability impact of the policies and no comment is made on any other aspect of the policies. The analysis of the viability implications of the policies in the Strategic Framework are set out in the table below along with a commentary about how they will be taken into account in the testing.

Page	Policy	Chapter/Policy / Section heading	Viability implications	Viability testing approach
40	GM-Strat	**Our Strategy**		
43	GM-Strat-Gen	Spatial Strategy	Overall assessment	General
47	GM-Strat 1	Core Growth Area	Overall assessment	General
48	GM-Strat 2	City Centre	Scale/pattern of development	Take account in typologies for testing
50	GM-Strat 3	The Quays	Scale/pattern of development	Take account in typologies for testing
52	GM-Strat 4	Port Salford	Scale/pattern of development	Take account in typologies for testing
54	GM-Strat 5	Inner Areas	Scale/pattern of development	Take account in typologies for testing
56	GM-Strat 6	Northern Areas	Scale/pattern of development	Take account in typologies for testing
58	GM-Strat 7	M62 North-East Corridor	Scale/pattern of development	Take account in typologies for testing - include allocated site
60	GM-Strat 8	Wigan-Bolton Growth Corridor	Scale/pattern of development	Take account in typologies for testing
64	GM-Strat 9	Southern Areas	Scale/pattern of development	Take account in typologies for testing
65	GM-Strat 10	Manchester Airport	Scale/pattern of development	Take account in typologies for testing
68	GM-Strat 11	New Carrington	Scale/pattern of development of strategic allocation	Take account in typologies for testing - include allocated site
70	GM-Strat 12	Main Town Centres	Scale/pattern of development	Take account in typologies for testing
71	GM-Strat 13	Strategic Green Infrastructure	No direct implications but take into account when assessing net developable areas	Take account in typologies for testing and ensure appropriate densities and net developable areas
73	GM-Strat 14	A Sustainable and Integrated Transport Network	May have implications of additional costs for allocated sites and general level of cost per dwelling. Advice to be taken from TfGM	Include additional transport related costs as necessary
74	GM-S	**A Sustainable and Resilient GM (Q28 to 35)**		
75	GM-S 1	Sustainable Development	No direct implications	No specific costs required.

Page	Policy	Chapter/Policy / Section heading	Viability implications	Viability testing approach
77	GM-S 2	Carbon and Energy	GM to be carbon neutral by 2038 New development to be net zero carbon by 2028 New development to achieve 19% reduction against Part L of the Buildings Regulations now Provision electric charging vehicle points to meet long term demand With further details on preferred mechanisms for achieving above objectives	Since publication of the Strategic Framework, the government has announced its intention to update the Building Regulations to achieve significant carbon reduction against the 2013 Building Regulations (The Future Homes Standard, MHCLG, October 2019). Their current intention is to introduce the new Building Regulations in 2020 with effect in 2025 and that local authorities will not have discretion thereafter to operate higher standards. GMCA has sought expert advice on the costs of introducing policy GM-S-2 and how this relates to the Future Homes Standard. The assumptions used in the viability testing will make use of the advice given to GMCA. Costs of vehicle charging points to be included in testing. Will refer to the MHCLG consultation of 19/7/19 - Electric vehicle chargepoints in residential and non-residential buildings and the associated Impact Assessment (Annex A)
79	GM-S 3	Heat and Energy Networks	Requirement to connect to a network or install network solutions	Policy allows for various options to achieve the policy objectives depending on scheme viability. Therefore will not include an additional cost generally but will add cost of installing new networks where this has been identified
89	GM-S 6	Clean Air	General approach - no direct implications	N/a
91	GM-S 7	Resource Efficiency	General approach - no direct implications	N/a
92	GM-S Gen	A Sustainable and Resilient Greater Manchester	General approach - no direct implications	N/a
93	GM-P	**A Prosperous Greater Manchester (Q36 to 40)**		N/a
97	GM-P 1	Supporting Long-Term Economic Growth	General approach - no direct implications	N/a
100/104	GM-P 2	Employment Sites and Premises	Identification scale/type employment sites and premises	Take account in typologies for testing

Page	Policy	Chapter/Policy / Section heading	Viability implications	Viability testing approach
104	GM-P 3	Office Development	Identification scale/type areas for office development	Take account in typologies for testing See Table 6.1 for distribution of offices
105	GM-P 4	Industry and Warehousing Development	Identification scale/type areas for in/warehousing development	Take account in typologies for testing See Table 6.2 for distribution in/warehousing space
105	GM-P Gen	Policies and overall approach proposed in A Prosperous Greater Manchester		
112	GM-H 1	Scale of New Housing Development	201,000 new homes - no direct implications	Take account in typologies for testing - Figure 7.1 sets out distribution by district - Table 7.2 sets out overall phasing
116	GM-H 2	Affordability of New Housing	50,000 affordable homes to be provided - 30,000 as social rent or Affordable Rent. Note – no target for delivery of affordable housing on developer led developments	Testing to consider alternative amounts and mixes of affordable housing in mixed tenure schemes that reflect local plan policies of 10 constituent local authority
118	GM-H 3	Type, Size and Design of New Housing	Range of dwelling types required including for older people. Local plans to determine precise mix Student needs to be addressed in local plans Build to Nationally Defined Space Standards Build to M4(2) standards	Testing to reflect space standards identified in GMSF Residential typologies to be identified for testing that reflect local plan policies about density and mixes of dwellings and requirements for specialist development types.
119	GM-H 4	Density of New Housing	Sets out density of new housing to be achieved To build to highest density in the range shown in the policy	Generic residential typologies to be identified for testing that reflect the density ranges in the policy, with scheme specific densities used for testing the allocated sites

Page	Policy	Chapter/Policy / Section heading	Viability implications	Viability testing approach
	GM-H Gen	Policies and overall approach proposed in Homes for Greater Manchester	General approach - no direct implications	N/a
127	GM-G 1	Valuing Important Landscapes	General approach	No direct implications
130	GM-G 2	Green Infrastructure Network	General approach with no direct viability implications but might affect % of sites that are developable	Testing assumptions to reflect this policy and any other standards generally operated in local plans in assessing the amount of developable area in typologies and allocated sites
135	GM-G 3	River Valleys and Waterways	General approach with no direct viability implications but might affect % of sites that are developable	See GM-G-2 Take account of any flood risk implications for individual allocated sites
136-7	GM-G 4	Lowland Wetlands and Mosslands	General approach with no direct viability implications but might affect % of sites that are developable	See GM-G-2
138-9	GM-G 5	Uplands	General approach with no direct viability implications but might affect % of sites that are developable	See GM-G-2
140-1	GM-G 6	Urban Green Space	General approach with no direct viability implications but might affect % of sites that are developable	See GM-G-2
142-3	GM-G 7	Trees and Woodland	General approach with no direct viability implications but might affect % of sites that are developable	See GM-G-2
144	GM-G 8	Green Infrastructure Opportunity Areas	General approach with no direct viability implications but might affect % of sites that are developable	See GM-G-2
150	GM-G 10	A Net Enhancement of Biodiversity	Net enhancement for bio and geodiversity	Testing to include an allowance for biodiversity net gain. Refer to the Biodiversity net gain and local nature recovery strategies, Impact Assessment, Defra, October 2019. Greenfield - £1,137, brownfield - £242

Page	Policy	Chapter/Policy / Section heading	Viability implications	Viability testing approach
153	GM-G 11	The Greater Manchester Green Belt	No direct implications	N/a
155	GM-G Gen	policies and overall approach proposed in A Greener Greater Manchester	No direct implications	N/a
156	GM-E	**A Greater Manchester for Everyone (Q58 to 64):**		
158-9	GM-E 1	Sustainable Places	No direct implications	N/a
161-2		*Heritage, Retail & Leisure*		
162	GM-E 2	Heritage	No direct implications	N/a
164	GM-E 3	New Retail and Leisure Uses in Town Centres	No direct implications	N/a
167	GM-E 4	Education, Skills and Knowledge	No direct implications	N/a
169	GM-E 5	Health	General requirement for new development	To include in testing depending on details of any requirements set out in local plans
171	GM-E 6	Sport and Recreation	General requirement for new development To meet LA and GM standards Standards to be standardised	To include in testing depending on details of any requirements set out in local plans
173	GM-C	**A Connected Greater Manchester (Q65 to Q73)**		
180	GM-C 1	World-class Connectivity	No direct implications	N/a

Page	Policy	Chapter/Policy / Section heading	Viability implications	Viability testing approach
181-2	GM-C 2	Digital Connectivity	States that developers to share costs of digital connectivity – general costs, no direct implications	
183	GM-C 3	Walking and Cycling Network	No specific viability implications	Testing to include an allowance for this in general development costs
186		High Speed Rail 2 (HS2)	No direct implications	N/a
184-6	GM-C 4	Public Transport Network	Provision of public transport assumed to be funded other than by development	N/a
187-8	GM-C 5	Transport Requirements of New Development	13 separate items listed and to be met by development including provision for parking for disabled people and electric charging points	Some items e.g. electric vehicle charging points dealt discussed above. In addition a general allowance per dwelling for minor transport requirements will be included in the testing as well as costs identified for individual allocated sites
189-90	GM-C 6	Highways Infrastructure Improvements	Relates to Multi Model Strategy	A general allowance per dwelling for minor transport works will be included in the testing as well as costs identified for individual allocated sites.
193	GM-C 8	Streets for All	No direct implications	N/a
195	GM-C Gen	The policies and overall approach proposed in A Connected Greater Manchester	No direct implications	N/a
199	GM-A	**Site Allocations**		Site allocations to be reviewed individually and any additional requirements identified, along with their indicative costs
		Delivering the Plan		

Page	Policy	Chapter/Policy / Section heading	Viability implications	Viability testing approach
368	GM-D 1	Infrastructure Implementation	No direct implications	N/a
374	GM-D 2	Developer Contributions	No direct implications	N/a

Appendix B – Local policy review

1. We undertook an analysis of the most up to date development plan of each authority. The table below shows the date of the extant development plan and progress in updating the plan. As can be seen from the table, some of the extant plans were adopted prior to the publication in 2012 of the National Planning Policy Framework.

Table B1 Development Plans

LA	Current development plan		Emerging Local Plan
Bolton	Core strategy Allocations plan Allocations map*	2011 2014 2014	Not started – draft plan for Jan-Mar 2021
Bury	UDP	1997	Policy directions – consultation closed Nov 18. Draft local plan expected 2020
Oldham	Core strategy and DM policies Extant UPD	2011 2006	Consultations ran from July - August 2017. No available online draft of new local plan.
Rochdale	Core strategy Extant UDP	2016 2006	Draft allocations plan (to replace UDP) – consultation closed Nov 18. Currently being reviewed
Stockport	Core strategy UDP Proposals Map	2011 2006	Public Consultation on Issues Paper, Spatial Portrait, and Sustainability Appraisal ran from July – October 2017. LP work has not yet progressed to preferred option stage
Tameside	UDP	2004	Published an Integrated Assessment Scoping Report in 2017 – consultations ran until April 10 2017. No published progress since.
Trafford	Core Strategy Extant UDP	2012 2006	New local plan – Issues Paper Consultation – July 2018 – no policies 1st draft local plan – expected autumn 2019
Wigan	Core strategy Extant UDP	2013 2006	Consultations on Draft Allocations and Development Management Plan in 2016 but not taken forward due to council decision to progress on GMSF first
Manchester City	Core strategy Extant UDP	2012 1995	Consultation on Vision & Options expected Spring/Summer 2019 Publication expected Autumn/Winter 2020
Salford	UDP (saved policies still operating)	2006	Revised draft Local Plan - Jan 2019 Submission planned Jan 2020

2. The policies assessed were those which potentially will affect development values and/or costs and which were not specified in the GMSF. We assumed that where there were extant policies in local plans and a policy in the draft GMSF, we would use the latter for our testing. Local plan 'topics' assessed were:

- Open space
- Sport recreation provision
- Biodiversity/habitat mitigation measures
- Climate change/energy reduction mitigation measures
- Transport requirements
- Play provision
- Education

- Health
- Density of development, dwelling mix
- Any other development standards e.g. space standards that may have an impact on viability
- Parking
- Affordable housing targets – overall %, 'tenure' of the affordable housing and dwelling mix for affordable housing
- Planning obligations generally

3. The following tables set out each local authority and the review of their local planning policies.

DISCLAIMER

This document contains an overview of the policies which have cost implications within the development plan documents for each of the ten district councils in Greater Manchester. Data was gathered from local plans, development planning documents, community infrastructure levy schedules, emerging plans and supplementary planning documents. Each table details relevant policies, the documents that they originate from, the threshold at which costs must be provided and what these costs are.

Each policy is colour coded based on the age of the document it is from (as shown in the table below). Those that are red were adopted over 10 years ago. Those that are yellow are less than 10 years old but were adopted before the National Planning Policy Framework (NPPF) (2012) was published. Those that are green are recent policies that came into effect after the NPPF was published. Finally, those that are blue, refer to documents that have not yet been adopted.

In addition, each threshold is colour coded based on whether it applies to residential development, non residential development, or both (as shown in the table below).

Policy Legend	
	Policies adopted after NPPF
	Policies less than 10 years old, but adopted before NPPF
	Policies over 10 years old
	Policies that have not yet been adopted

Threshold Legend	
	Residential thresholds
	Non-residential thresholds
	Both

BOLTON

Plan	Year	Status
Core Strategy	2011	In Use
Affordable Housing	2013	In Use
Affordable Housing Supplementary Planning Document	2013	In Use
Accessibility and Transport Supplementary Planning Document	2013	In Use
Infrastructure and Planning Contributions Supplementary Planning Document	2016	In Use
Sustainable Design and Construction Supplementary Planning Document	2016	In Use
Community Infrastructure Schedule	2013	Draft - work has paused

Policy Category	Policy	Threshold	Requirements

OPEN SPACE/SPORT/ RECREATION	Para 4.09 (2016 Planning and Infrastructure Contributions SPD)	Developments of 15 houses or more	0.8 hectares per 1000 population AND of 0.8 hectares for children's play, 0.55 ha should be in the form of informal playing space (amenity open space or similar) with the remaining 0.25 ha being designated (including equipped) playing space AND Developers of affordable housing are not required to pay planning contributions for the provision of open space for residents of the development. However where that development takes place on informal open space, the Core Strategy requires that development should allow for the improvement of remaining green spaces.
BIODIVERSITY/ HABITAT MITIGATION	N/A	N/A	N/A
CLIMATE CHANGE MITIGATION/ ENERGY	CG2 (2011 Core Strategy)	All proposals for 5 or more residential units OR All proposals for 500m_2 or greater non-residential units	Achieve Level 3 of the Code for Sustainable Homes or the "very good" BREEAM rating (or any subsequently adopted set of national sustainable construction standards). Reduce the CO2 emissions of predicted regulated and unregulated energy use by at least 10%

				On brownfield sites the rate of run-off should be 50% less than conditions before development. OR On greenfield sites the rate of run-off should be no worse than the original conditions before development
		All proposals for 5 or more residential units, or 500m2 or greater non-residential units	Network Expansion Area: locations where the proximity of new and existing buildings creates sufficient density to support district heating and cooling.	35% regulatory target 80% unregulated target
			Electricity Intense Area: locations where the predominant building type has an all electric fit-out, creating high associated CO2 emissions	100% regulatory target 80% unregulated target
			Micro Generation Area: locations where lower densities and a fragmented mix of uses mean that only building scale solutions are possible	100% regulatory target 80% unregulated target
TRANSPORT	P5 (2011 Core Strategy)	New Developments		Make provision for vehicle and bicycle parking in line with parking standards (see next table)

EDUCATION	Para 4.24 (2016 Infrastructure and Planning Contributions SPD)	Developments where the new housing will generate a need that cannot be met by existing local facilities in accordance with the following key factors: 1. The number of pupils expected to be generated by the proposed development, based upon the following assumptions: • Primary School age children = 23.2 pupils per 100 dwellings (two bed and above) • Primary School age children = 4 pupils per 100 apartments (excluding 1 bed apartments) • Secondary School age children = 18.7 pupils per 100 dwellings (two bed and above) • Secondary School age children = 1 pupil per 100 apartments (excluding 1 bed apartments) • Elderly person's accommodation, where occupancy is restricted by condition will not be subject to any contribution AND 2. The projected position in relation to the supply and demand situation for school places within a reasonable distance of the proposed development in the case of primary school provision, or in relation to schools where the educational needs of any secondary pupils are likely to be met	£12,833 per primary school place and £16,041 per secondary school place
HEALTH	Para 4.20 (2016 Infrastructure and Planning Contributions SPD)	Proposals that provide additional dwellings in areas where one of the following conditions is met: 1. The primary care facility serving the catchment area within which new housing developments would fall is full; 2. New developments including taking account of any unimplemented planning permissions for new dwellings would result in the total number of patients exceeding the capacity of the primary care facility; 3. Spare capacity in adjacent primary care facilities cannot be used to meet the deficiency of patient places and there are no existing proposals for financing the additional places that are required	£700 per dwelling as starting point for negotiation with NHS providers when development is proposed

DEVELOPMENT STANDARDS	Para 4.31 (2016 Infrastructure and Planning Contributions SPD)	New Residential Developments		Section 106 agreement to link new development to the provision of new community facility
	Para 25.1 (2013 Accessibility and Transport SPD)	Development that has received planning permission from the local planning authority subject to works being carried out on the existing public highway		Section 278 agreement between the developer and the Council as local highway authority
COMMUNITY INFRASTRUCTURE LEVY	Para 5.2 (Community Infrastructure Levy Background Document, 2013) Note: This is a proposed rate. Work has stopped on a CIL for Bolton, and rate has yet to come into force.	Supermarkets		£135/sqm
		Retail warehouses		£45/sqm
		Residential Dwellings and Student Accommodation		£45/sqm
		Affordable housing, education, health, community and emergency services facilities		£0/sqm
		All other chargeable development, unless stated otherwise in this table		£5/sqm
AFFORDABLE HOUSING	SC1 (2011 Core Strategy) AND para 3.4 (2013 Affordable Housing SPD)	All developments which incorporate open market housing and with a capacity of 15 or more dwellings	Previously Developed Land	15% of total provision affordable housing
			Greenfield Land	35% of total provision affordable housing
			Market and Social Rented Housing	50% of dwellings are 3 bedroomed or larger and no more than 20% (for market housing) or 10% (social rented) are 1-bedroomed
			Intermediate Housing	20% of dwellings are 3-bedroomed, and no more than 40% are 1-bedroomed.
			All affordable housing developments	75% for social rent or affordable rent and 25% for intermediate housing
OTHER	Para 4.34 (2016 Infrastructure and Planning Contributions SPD)	All development above one hectare in area OR Construction of buildings containing the threshold of 2500m$_2$		Public Art - indicative figure of 1% of the total development cost should be used as a guideline for the maximum capital value of the works required

Type of development	**Maximum standard for car parking provision (excluding disabled parking)**	**Minimum standard for car parking provision for disabled people**	**Minimum standard for cycle parking provision**	**Minimum standard for motorcycle parking**
				A1 - Shops

>900 sqm Food retail	1 per 25 sqm	Up to 200 bays -3 bays or 6% of total capacity, which ever is greater	1 per 200 sqm –minimum of 2	Individual consideration
<900 sqm Food retail	1 per 16 sqm	Over 200 bays - 4 bays plus 4% of total capacity	1 per 200 sqm	1 per 600 sqm, minimum of2 spaces
A1 - Shops				
Non-food retail <900 sqm	1 per 30 sqm	Up to 200 bays -3 bays or 6% of total capacity, which ever is greater	1 per 200 sqm –minimum of 2	Individual consideration
Non-food retail	1 per 22 sqm	Over 200 bays - 4 bays plus 4% of total capacity	1 per 200 sqm	1 per 900 sqm, minimum of 2 spaces
				A2
Financial and professional services	per 35 sqm	Up to 200 bays -3 bays or 6% of total capacity, which ever is greater Over 200 bays -4 bays plus 4% of total capacity	1 per 400 sqm, minimum of 2 spaces	Individual consideration
A3 - Food & drink				
Restaurants	1 per 7 sqm public floor area	Up to 200 bays -3 bays or 6% of	1 per 140 sqm public floor area – minimum of 2 spaces	1 per 280 sqm public floor area- minimum of 2 spaces

		total capacity, which ever is greater		
Fast Food –Drive Through	1 per 8.5 sqm gross floor area	Over 200 bays - 4 bays plus 4% of total capacity		

B1 - Business				
Stand alone offices	1 per 35 sqm	Up to 200 bays - Individual bays for each disabled employee plus 2 bays or 5% of total capacity, whichever is greater	1 per 400 sqm – minimum of 2 spaces	1 per 1,400 sqm –minimum of 2 spaces
Business Parks	1 per 40 sqm	Over 200 bays - 6 bays plus 2% of total capacity		
B2 - General industry				
	1 per 60 sqm	Up to 200 bays - Individual bays for each disabled employee plus 2 bays or 5% of total	1 per 700 sqm – minimum of 2 spaces	1 per 2,800 sqm –minimum of 2 spaces

		capacity, whichever is greater		
		Over 200 bays -6 bays plus 2% of total capacity		
B8 - Storage or distribution				
	1 per 100 sqm	Up to 200 bays - Individual bays for each disabled employee plus 2 bays or 5% of total capacity, whichever is greater	1 per 850 sqm – minimum of 2 spaces	1 per 4,000 sqm –minimum of 2 spaces
		Over 200 bays -6 bays plus 2% of total capacity		
C1 - Hotels				
Hotels	1 per bedroom including staff –leisure and conference facilities should be considered separately if appropriate	Up to 200 bays -3 bays or 6% of the total capacity, which ever is the greater	1 per 10 bedrooms, minimum 2 spaces	1 per 40 bedrooms –minimum of 2 spaces
		Over 200 bays - 4 bays plus 4% of total capacity		
C2 - Residential institutions				

Hospitals	To be determined through a Transport Assessment	To be determined through a Transport Assessment	To be determined through a Transport Assessment	To be determined through a Transport Assessment
Care / nursing homes	1 per 4 beds	Up to 200 bays -3 bays or 6% of the total capacity, which ever is the greater Over 200 bays - 4 bays plus 4% of total capacity	1 per 40 beds, minimum of 2 spaces	1 per 160 beds –minimum of 2 spaces
C3 - Dwelling houses				
Sheltered Housing	1 per 2 beds	10% of sheltered housing parking should be disabled persons parking standard compliant	1 space per 20 beds	1 space per 50 beds
1 bedroom	1 space		Where parking is located centrally for flat and apartment developments, at least 5% of the car parking spaces should be disabled persons parking standard compliant	Flats and apartments – 1 secure locker per 5 dwellings –minimum of 2 spaces
2 to 3 bedroom	2 spaces			
4+ bedroom	3 spaces			
D1- Non- residential institutions				
Medical or health facility	1 per 2 full time equivalent staff + 3 per consulting room	Up to 200 bays -3 bays or 6% of the total capacity, which ever	1 per 10 full time equivalent staff, minimum of 2 spaces	1 per 40 full time equivalent staff, minimum of 2 spaces

		is the greater		
Crèche, day nursery or day centre	1 per full time equivalent staff	Over 200 bays -4 bays plus 4% of total capacity	1 per 10 full time equivalent staff, minimum of 2 spaces for pupils	No standard
Schools	1.5 spaces per classroom		1 per 10 full time equivalent staff+ 1 per 10 pupils	1 per 40 full time equivalent staff – minimum of 2 spaces
D1- Non- residential institutions				
Higher or further education	1 per 2 full time equivalent staff	Up to 200 bays - 3 bays or 6% of the total capacity, which ever is the greater	1 per 20 full time equivalent staff + 1 per 20 students	1 per 80 full time equivalent staff + 1 per 600 students
Art gallery, museum, exhibition hall or library	1 per 30 sqm public floor area	Over 200 bays - 4 bays plus 4% of total capacity	1 per 300 sqm public floor area – minimum of 2 spaces.	1 per 1200 sqm public floor area – minimum of 2 spaces
Public hall or place of worship	1 per 5 sqm public floor area	Up to 200 bays -3 bays or 6% of total capacity, which ever is greater	1 per 50 sqm public floor area – minimum of 2 spaces	1 per 200 sqm public floor area – minimum of 2 spaces
D2 - Assembly & Leisure				
Cinema, bingo hall or casino, concert hall	1 per 8 seats	Up to 200 bays -3 bays or 6% of total capacity, which ever is greater	1 per 80 seats –minimum of 2 spaces	1 per 320 seats –minimum of 2 spaces

Indoor sports or recreation	1 per 25 sqm	Over 200 bays - 4 bays plus 4% of total capacity	1 per 250 sqm –minimum of 4 spaces	1 per 1,000 sqm –minimum of 2 spaces
Outdoor sports and recreation	Individual consideration.	Individual consideration	Individual consideration	Individual consideration
Miscellaneous				
Stadia/spectator seating	1 space per 18 seats	Up to 200 bays - 3 bays or 6% of total capacity, which ever is greater	1 per 150 seats –minimum of 2 spaces	1 per 600 seats –minimum of 2 spaces
Railway/bus stations	1 coach parking space per 1000 seats (minimum standard)	Over 200 bays - 4 bays plus 4% of total capacity	Minimum of 10 per station	
tram stops	Individual consideration	Individual consideration	Individual consideration for tram stops	Individual consideration

BURY

Plan	Year	Status
Bury Unitary Development Plan	1997	In Use
Affordable Housing Provision in New Residential Developments Supplementary Planning Guidance	2005	In Use
Parking Standards Supplementary Planning Document	2007	In Use
Employment Land and Premises Supplementary Planning Document	2011	In Use
Open Space, Sport and Recreation Provision in New Housing Supplementary Planning Document	2015	In Use
Local Plan	---	Draft Local Plan expected in 2020

Category	Policy	Threshold	Requirements	
OPEN SPACE/SPORT/ RECREATION	Para 2.1 (2015 Open Space, Sport and Recreation Provisions SPD) AND RT2/2 (1997 UDP)	Larger Residential Developments (i.e. 50 or more units AND Council deems "exceptional circumstances"	On-site provision of high qualitative standard space, and commuted sum payment to cover the costs of future maintenance if intended for provision to be managed and maintained by the Council	
		10 dwellings with a maximum combined floorspace of more than 1,000 square metres or 11 dwellings and above (regardless of floorspace)	Per standard detached dwelling	£2,925.54
			Per sheltered detached dwelling	£2852.76
			Per standard semi-detached dwelling	£2,821.06
			Per sheltered semi-detached dwelling	£2744.70
			Per standard terraced dwelling	£2,564.18

			Per sheltered terraced dwelling	£2496.16
			Per standard flat	£1,561.95
			Per sheltered flat	£1545.24
BIODIVERSITY/HABITAT MITIGATION	N/A	N/A	N/A	
CLIMATE CHANGE MITIGATION/ENERGY	N/A	N/A	N/A	
TRANSPORT	HT2/4 (1997 UDP) AND Table 2 (2007 Parking Standards SPD)	New Developments	Make provision for vehicle and bicycle parking in line with parking standards (see next table)	
EDUCATION	N/A	N/A	N/A	
HEALTH	N/A	N/A	N/A	
DEVELOPMENT STANDARDS	Section 3 (2011 Employment Land and Premises SPD)	Site is currently allocated for employment use AND retention of site (either as it stands, following refurbishment or redevelopment to new employment uses) is not financially viable AND site is not appropriate and viable for a mixed use development incorporating an element of employment uses AND developer can demonstrate that a current employment site that is considered suitable in land use terms has no prospects for continued employment use under economic conditions that prevail at that time	Section 106 agreement to compensate for the economic harm arising from the loss of the site Compensation = £390,000 per hectare.	

AFFORDABLE HOUSING	Section 3 (2005 Affordable Housing Provision In New Residential Developments SPG) AND H4/1 (1997 UDP)	Housing developments of 25 or more dwellings OR Residential sites of 1 hectare or more, irrespective of the number of dwellings	25% on-site affordable housing provision at 25% of the average market value of the proposed development. OR Off-site provision at 30% of the average market value of the proposed development on a suitable number of dwellings (25%).
OTHER	N/A	N/A	N/A

a) Type of Development	**b) MAXIMUM Standards for car parking provision (excluding disabled parking)**	**c) MIN UM Standards for car parking provision for those who are disabled**	**d) MINIMUM standards for cycle parking provision**	**e) MIN UM standards for TWMVs parking**	**f) Additional Considerations**

1a. Food retail (A1): 900sqm or less	1 per 25 sqm	Up to and including 200 bays: 3 bays or 6% of total capacity, *which ever is the greatest*	1 per 200 sqm – minimum of 2 *Note:* 80% of cycle spaces should be allocated for customers (short-stay) and 20% for staff (long-stay).	Individual consideration	**Car Parking:** Smaller developments, particularly those within local and neighbourhood shopping centres (see Glossary), that are assumed to be more local in nature that are accessible by other modes could have reduced levels of parking requirements (each proposal will be considered on its own merits).
1b. Food retail (A1): over 900 sqm	1 per 16 sqm	Up to and including 200 bays: 3 bays or 6% of total capacity, *which ever is the greatest*	1 per 200sqm	1 per 600 sqm, minimum of 2 spaces	

		Over 200 bays – 4 bays *plus* 4% of total capacity	*Note:* 80% of cycle spaces should be allocated for customers (short-stay) and 20% for staff (long-stay).		
2a. Non-food retail (other A1 uses): 900sqm or less	1 per 30 sqm	Up to and including 200 bays – 3 bays or % of total capacity, *which ever is greater.*	1 per 200 sqm, minimum of 2 *Note:* 80% of cycle spaces should be allocated for customers (short-stay) and 20% for staff (long-stay).	Individual consideration	**Car Parking:** Smaller developments, particularly those within local and neighbourhood shopping centres (see Glossary), that are assumed to be more local in nature that are accessible by other modes could have reduced levels of parking requirements (each proposal will be considered on its own merits).

2b. Non-food retail (other A1 uses): over 900sqm	1 per 22 sqm	Up to and including 200 bays – 3 bays or % of total capacity, *which ever is greater.* Over 200 bays – 4 bays *plus* 4% of total capacity	1 per 200 sqm *Note:* 80% of cycle spaces should be allocated for customers (short-stay) and 20% for staff (long-stay).	1 per 900 sqm, minimum of 2 spaces	
3. Financial a professional services (A2)	1 per 35 sqm	Up to and including 200 bays – 3 bays or % of total capacity, *which ever is greater.* Over 200 bays – 4 bays *plus* 4% of total capacity	1 per 400 sqm, minimum of 2 spaces *Note:* 50% of cycle spaces should be allocated for customers (short-stay) and 50% for staff (long-stay).	Individual consideration	
4a. Food and Drink (A3): Restaurants	1 per 7sqm public floor area	Up to and including 200 bays – 3 bays or % total capacity, *which ever is greater.* Over 200 bays – 4 bays *plus*	1 per 140 sqm public floor area – minimum 2 spaces *Note:* 80% of cycle spaces should be allocated for customers (short-stay) and 20% for	1 per 280 sqm public floor area – minimum of 2 spaces	Restaurants will require adequate levels of off-street parking and will be assessed on an individual basis.

		4% of total capacity	staff (long-stay).		
4b. Food and Drink (A5): Fast food, drive throughs	1 per 8.5 sqm gross floor area	Up to and including 200 bays – 3 bays or % total capacity, *which ever is greater.*	1 per 140 sqm public floor area – minimum 2 spaces *Note:* 80% of cycle spaces should be allocated for customers (short-stay) and 20% for staff (long-stay).	1 per 280 sqm public floor area – minimum of 2 spaces	Car parking for takeaways (A5) will be assessed on an individual basis as they rely on short stay parking in close proximity and the amenity of surrounding properties needs careful consideration.
		Over 200 bays – 4 bays *plus* 4% of total capacity			
5a. Business (B1):	1 per 35 sqm	Up to and including 200 bays	1 per 400 sqm – minimum of 2 spaces	1 per 1,400 sqm – minimum of 2 spaces	Call centres (B1) will need to be assessed individually due to large amounts of staff

Stand alone offices		– *individual bays for each disabled employee* plus 2 bays or 5% total capacity, *which ever is greater.* Over 200 bays – 6 bays *plus* 2% of total capacity	*Note:* 40% of cycle spaces should be allocated for customers (short-stay) and 60% for staff (long-stay).		numbers above general office use.

a) Type of Development	**b) MAXIMUM Standards for car parking provision (excluding disabled parking)**	**c) MINIMUM Standards for car parking provision for those who are disabled**	**d) MINIMUM standards for cycle parking provision**	**e) MINIMUM standards for TWMVs parking**	**f) Additional Considerations**
5b. Business (B1): Business parks	1 per 40 sqm	Up to and including 200 bays – *individual bays for each disabled employee* plus 2 bays or 5% total capacity, *which ever is greater.* Over 200 bays – 6 bays *plus* 2% of total capacity	1 per 400 sqm – minimum of 2 spaces *Note:* 40% of cycle spaces should be allocated for customers (short-stay) and 60% for staff (long-stay).	1 per 1,400 sqm – minimum of 2 spaces	Determined on individual merits of planning application.
Call Centres	Individual consideration.	Individual consideration.	Individual consideration.	Individual consideration.	

6. General Industry (B2)	1 per 60 sqm	Up to and including 200 bays – individual bays for each disabled employee plus 2 bays or 5% total capacity, *which ever is greater.* Over 200 bays – 6 bays *plus* 2% of total capacity	1 per 700 sqm – minimum of 2 spaces *Note:* 10% of cycle spaces should be allocated for customers (short-stay) and 90% for staff (long-stay).	1 per 2,800 sqm – minimum of 2 spaces	
7. Storage or distribution (B8)	1 per 100 sqm	Up to and including 200 bays – individual bays for each disabled employee plus 2 bays or 5% total capacity, *which ever is greater.* Over 200 bays – 6 bays *plus* 2% of total capacity	1 per 850 sqm – minimum of 2 spaces *Note:* 10% of cycle spaces should be allocated for customers (short-stay) and 90% for staff (long-stay).	1 per 4,000 sqm – minimum 2 spaces	See design advice for lorries in Section 6.
8. Hotels (C1)	1 per bedroom incl. staff considered.	Up to and including 200 bays – 3 bays or 6% of total capacity, *which ever is the greater*	1 per 10 bedrooms, minimum of 2 spaces *Note:* 30% of cycle spaces should be	1 per 40 bedrooms – minimum of 2 spaces	Leisure and conference facilities should be considered separately. Proposals for C1 use within

		Over 200 bays – 4 bays *plus* 4% of total capacity	allocated for customers (short-stay) and 70% for staff (long-stay).		Bury Town Centre will be assessed on their own merits and in line with any Transport Assessment.
9a. Residential Institutions (C2): Hospitals	To be determined through a Transport Assessment	To be determined through a Transport Assessment	To be determined through a Transport Assessment	To be determined through a Transport Assessment	
9b. Residential Institutions (C2): Care / nursing homes	1 per 4 beds	Up to and including 200 bays – 3 bays or 6% total capacity, *which ever is greater.* Over 200 bays – 4 bays *plus* 4% of total capacity	1 per 40 beds, minimum of 2 spaces *Note:* 30% of cycle spaces should be allocated for visitors (short-stay) and 70% for staff (long-stay).	1 per 160 beds – minimum of 2 spaces	**Car Parking –** Standards for care/nursing homes are for staff and visitors. Parking standards for care and nursing homes will be considered on their own merits and nature/location of proposal.
10a. Dwelling Houses (C3)		Where parking is located centrally for flat and apartment developments, at least 5% of parking should	Flats and apartments – I space per 5 dwellings. Minimum of 4 spaces. Must be provided in a	Individual consideration	**Car Parking for all types of dwellings:** Visitor parking spaces should be shared.
1 bed	1.0 2.0 per unit				
2 bed	1.5 2.5 per unit				
3 bed	2.0 3.0 per unit				

4 bed and above	3.0 per unit	be for disabled persons.	secure long stay secure compound or locker.		Lower parking thresholds will be applied to areas of high accessibility (see Appendix 1). These residential standards exclude garages.
10b. Sheltered Housing	1 per 3 units	10% of sheltered housing parking should be allocated for disabled people			
11a. Non-Residential Institutions (D1): Medical or health facilities	1 per 2 full-time equivalent staff + 3 per consulting room	Up to and including 200 bays – 3 bays or 6% of the total capacity, *whichever is greater*	1 per 10 full time equivalent staff, minimum of 2 spaces	1 per 40 full time equivalent staff, minimum of 2 spaces	
11b. Non-Residential Institutions (D1): Crèche, day nursery or day centre	1 per full time equivalent staff	Over 200 Bays -4 bays *plus* 4% of total capacity.	1 per 10 full time equivalent staff, minimum of 2 spaces for pupils	No standard.	**Car Parking** – The provision of adequate drop off facilities for parents and for visitors would also need to be individually considered.

a) Type of Development	b) MAXIMUM Standards for car parking provision (excluding disabled parking)	c) MINIMUM Standards for car parking provision for those who are disabled	d) MINIMUM standards for cycle parking provision	e) MINIMUM standards for TWMVs parking	f) Additional Considerations
11c. Non-Residential Institutions (D1): Schools	1.5 spaces per classroom	Up to and including 200 bays – 3 bays or 6% of the total capacity, *whichever is the greater* Over 200 Bays - 4 bays *plus* 4% of total capacity.	1 per 10 full time equivalent staff plus 1 per 10 pupils	1 per 40 full time equivalent staff – minimum of 2 spaces	**Car Parking -** Standard equates to 1 per full time member of staff with limited provision for visitors. *Only operational requirements should be provided for.* It is likely that Transport Assessments and Travel Plans will be required for new or expanded schools - see Development Control Guidance Note 12 – 'Travel Plans in Bury'.

11d. Non-Residential Institutions (D1): Higher or further education	1 per 2 full time equivalent staff	Over 200 Bays - 4 bays *plus* 4% of total capacity.	1 per 20 full time equivalent staff plus 1 per 10 students	1 per 80 full time equivalent staff plus 1 per 600 students	**Car Parking** – *Only operational requirements should be provided for.* It is likely that Transport Assessments and Travel Plans will be required. Separate consideration will be required for parking for associated residential facilities.
11e. Non-residential institutions (D1): Art gallery, museum, exhibition hall or library	1 per 30 sqm public floor area	Up to and including 200 Bays - 3 bays or 6% of the total capacity, *which ever is the greater.*	1 per 300 sqm public floor area – minimum of 2 spaces.	1 per 1200 sqm public floor area – minimum of 2 spaces	
11f. Non-residential institutions (D1): Public hall or place of worship	1 per 5 sqm public floor area	Over 200 Bays – 4 bays *plus* 4% of total capacity.	1 per 50 sqm public floor area – minimum of 2 spaces	1 per 200 sqm public floor area – minimum of 2 spaces	

12a. Assembly & Leisure (D2): Cinema, bingo hall or casino, concert hall	1 per 8 seats	Up to and including 200 Bays -3 bays or 6% of total capacity, *which ever is greater.*	1 per 80 seats – minimum of 2 spaces	1 per 320 seats – minimum of 2 spaces	
12b. Assembly & Leisure (D2): Indoor sports or recreation	1 per 25 sqm	Over 200 Bays - 4 bays *plus* 4% of total capacity	1 per 250 sqm – minimum of 6 spaces	1 per 1,000 sqm – minimum of 2 spaces	
12c. Assembly & Leisure (D2): Outdoor sports and recreation	Individual consideration.	Individual consideration.	Individual consideration.	Individual consideration.	Determined on individual merits of planning application.
13a. Miscellaneous: Stadia/Spectator seating	1 space per 18 seats	Up to and including 200 Bays - 3 bays or 6% of total capacity, *which ever is greater.*	1 per 150 seats – minimum of 2 spaces	1 per 600 seats – minimum of 2 spaces	There is a need to mitigate impact of stadia traffic and on street parking in the vicinity of the stadium.
	1 coach parking space per 1000 seats (this is a minimum standard)	Over 200 Bays - 4 bays *plus* 4% of total capacity	*Note:* 90% of cycle spaces should be allocated for spectators (short-stay) and 10% for staff (long-stay).		Where development is considered major, a travel plan will be required. A Transport Assessment may also be required. Please refer to SPD12 for further information.
13b. Miscellaneous: Railway / Bus stations, and tram stops	Individual consideration.	Individual consideration.	Minimum of 10 per station.	Individual consideration.	Individual consideration should be given

			Individual consideration for tram stops		to car parking to facilitate Park & Ride and drop off places where appropriate and practical.

MANCHESTER

Plan	Year	Status
Guide to Development in Manchester Supplementary Planning Document	2007	In Use
Providing for Housing Choice Supplementary Planning Document	2008	In Use
Core Strategy Development Planning Document	2012	In Use
Local Plan	---	Draft Local Plan expected in 2020

POLICY Category	Policy	Threshold		Requirements
OPEN SPACE/SPORT/ RECREATION	N/A	N/A		N/A
BIODIVERSITY/HABITAT MITIGATION	Para 4.15 (2007 SPD Guide to Development)	New Developments		10% net increase in tree cover
CLIMATE CHANGE MITIGATION/ENERGY	EN6 (2012 Core Strategy)	Residential developments of 10+ units OR Development over 1,000 sqm OR Developments 10< units involving the erection of a building or	Domestic: Network Development Area	CHP/district heating anchor or connection or where not feasible a 15% increase on Part L 2010
			Domestic: Electricity Intense Buildings	+15% increase on Part L 2010
			Domestic: Micro Generation Area	+15% increase on Part L 2010
			Non-Domestic: Network Development Area	CHP/district heating anchor or connection or where not feasible, a 15% increase on Part L 2010

		substantial improvement to an existing building	Non-Domestic: Electricity Intense Buildings	+10% increase on Part L 2010
			Non-Domestic: Micro Generation Area	+15% increase on Part L 2010
TRANSPORT	CC5 (2012 Core Strategy)	New Developments		Make provision for vehicle and bicycle parking in line with parking standards (see next table)
	PA1 (2012 Core Strategy)	Where development has a significant impact on the Strategic Road Network		Section 278 agreements
EDUCATION	N/A	N/A		N/A
HEALTH	N/A	N/A		N/A
DEVELOPMENT STANDARDS	N/A	N/A		N/A
COMMUNITY INFRASTRUCTURE LEVY	N/A	N/A		N/A
AFFORDABLE HOUSING	H8 (2012 Core Strategy)	Residential developments on sites of 0.3 hectares and above OR Where 15 or more units are proposed		20% as a starting point for calculating affordable housing provision 5% of new housing provision will be social or affordable rented and 15% will be intermediate housing
OTHER	N/A	N/A		N/A

Land Use	Maximum number of car parking spaces		Minimum number of spaces required for:-		
	District Centres	Areas not within the City Centre or District Centres	Disabled people's parking as percentage of total (Citywide)		Cycles (Citywide)
			Up to 200 in total	Over 200 in total	
A1: Shops					
Food Retail	1 space per 16sqm	1 space per 14sqm	3 bays or 6% of total capacity whichever is greater	4 bays plus 4% of total capacity	1 space per 140sqm minimum of 2 spaces
Non-food Retail	1 space per 22sqm	1 space per 20sqm	3 bays or 6% of total capacity whichever is greater	4 bays plus 4% of total capacity	1 space per 200sqm minimum of 2 spaces
A3: Restaurants and Cafes					
Restaurant	1 space per 7sqm of public floor area	1 space per 5sqm of public floor area	3 bays or 6% of total capacity whichever is greater	4 bays plus 4% of total capacity	1 space per 50sqm minimum 2 spaces
A5: Hot Food Takeaways					
Fast Food and Drive through	1 space per 8.5sqm of gross floor area	1 space per 7.5sqm of gross floor area	3 bays or 6% of total capacity whichever is greater	4 bays plus 4% of total capacity	1 space per 50sqm minimum 2 spaces

B1: Business					
Stand alone offices	1 space per 35sqm	1 space per 30sqm	Individual bays for each disabled employee plus 2 bays or 5% of total capacity whichever is greater	6 bays plus 2% of total capacity	1 space per 200sqm minimum of 2 spaces
Business Parks	1 space per 40sqm	1 space per 35sqm	Individual bays for each disabled employee plus 2 bays or 5% of total capacity whichever is greater	6 bays plus 2% of total capacity	1 space per 200sqm minimum of 2 spaces
B2: General Industry					
General Industry	1 space per 60sqm	1 space per 45sqm	Individual bays for each disabled employee plus 2	6 bays plus 2% of total capacity	1 space per 450sqm minimum of 2 spaces

B8 Storage and Distribution				
Storage and Distribution			6 bays plus	

	1 space per 100sqm	Individual bays for each disabled employee plus 2 bays or 5% of total capacity whichever is greater	2% of total capacity	1 space per 850sqm minimum of 2 spaces	
C1: Hotels					
Hotels	1 space per bedroom including staff	3 bays or 6% of total capacity whichever is greater	4 bays plus 4% of total capacity	1 space per 10 guest rooms minimum of 2 spaces	
D1: Non-Residential Institutions					
Medical and Health facilities	1 space per 2 staff plus 3 per consulting room	1 space per 2 staff plus 4 per consulting room	3 bays or 6% of total capacity whichever is greater	4 bays plus 4% of total capacity	2 spaces per consulting room
Higher and Further Education	1 space per 2 staff (includes parking for students)		Case by case basis	Case by case basis	1 space per 5 staff plus 1 space per 3 students
D2: Assembly and Leisure					

Cinemas, Theatres and Conference Facilities	1 space per 8 seats	1 space per 5 seats	3 bays or 6% of total capacity whichever is greater	4 bays plus 4% of total capacity	1 per 20 seats minimum of 2 spaces
Other Leisure Facilities	1 space per 25sqm	1 space per 22sqm	3 bays or 6% of total capacity whichever is greater	4 bays plus 4% of total capacity	1 per 140 sqm minimum of 2 spaces
Miscellaneous					
		1 space per 15 seats	3 bays or 6% of total capacity whichever is greater	4 bays plus 4% of total capacity	1 per 20 seats minimum of 2 spaces

OLDHAM

Plan	Year	Status
Extant Unitary Development Plan	2006	In Use
Core Strategy Development Planning Document	2011	In Use
Open Space Interim Planning Position Paper Supplementary Planning Document	2012	In Use

Economy Interim Planning Position Paper Supplementary Planning Document	2012	In Use
Community Infrastructure Schedule	2015	In Use
Local Plan	---	Consultations ran from July - August 2017 No available online draft of new local plan

Policy Category	Policy	Threshold		Requirements
OPEN SPACE/SPORT/ RECREATION	Para 5.4 (2012 Open Space Interim Planning Position Paper SPD) AND Policy 23 (2011 Core Strategy)	All residential developments AND Location of development is in area containing open space deficiencies for one or more of the following open space types	Parks and Gardens quality is less than 70% OR Parks and Gardens quantity is less than 0.26ha/1000 population	£56.45 per bedroom for laying-out of new Open Space £8.76 per bedroom for maintenance of new Open Space for minimum 12 years
			Amenity Greenspace quality is less than 70% OR Amenity Greenspace quantity is less than 1.95ha/1000 population	£167.99 per bedroom for laying-out of new Open Space £15.50 per bedroom for maintenance of new Open Space for minimum 12 years
			Provision for Children quality is less than 70% OR Provision for Children quantity is less than	£688.39 per bedroom for laying-out of new Open Space £34.41 per bedroom for maintenance of new Open Space for minimum 12 years

			0.46ha/1000 population	
			Provision for Young People quality is less than 70% OR Provision for Young People quantity is less than 0.10ha/1000 population	£156.92 per bedroom for laying-out of new Open Space £2.15 per bedroom for maintenance of new Open Space for minimum 12 years
			Outdoor Sports Facilities quality is less than 70% OR Outdoor Sports Facilities quantity is less than 1.35ha/1000 population (excluding golf courses)	£132.44 per bedroom for laying-out of new Open Space £21.20 per bedroom for maintenance of new Open Space for minimum 12 years
			Natural and Semi-Natural quality is less than 70% OR Natural and Semi-Natural quantity is less than 1.95ha/1000 population	Determined by council on case by case basis

			Quality of Cemeteries and Churchyards / Green Corridors / Civic Spaces is less than 70%	Determined by council on case by case basis
BIODIVERSITY/ HABITAT MITIGATION	N/A	N/A	N/A	
CLIMATE CHANGE MITIGATION/ ENERGY	Policy 18 (2011 Core Strategy)	Developments over 1,000 square metres OR Developments ten dwellings and above AND Until such time that all development is required by the Code for Sustainable Homes (63) to achieve zero carbon	Network Development Area - Domestic and Non Domestic	Minimum Co2 reduction requirements - Connect to a Combined Heat and Power (CHP) / district heating network Maximum Co2 reduction requirements - up to 73%
			Domestic: Electricity Intense Buildings	Minimum Co2 reduction requirements - 17% increase on Part L Maximum Co2 reduction requirements - up to 56%
			Domestic: Micro Generation Area	Minimum Co2 reduction requirements -15% increase on Part L Maximum Co2 reduction requirements - up to 49%
			Non-Domestic: Electricity Intense Buildings	Minimum Co2 reduction requirements - 10% increase on Part L Maximum Co2 reduction requirements - up to 28%
			Non-Domestic: Micro Generation Area	Minimum Co2 reduction requirements - 15% increase on Part L Maximum Co2 reduction requirements - up to 42%
TRANSPORT	Policy 5 (2011 Core Strategy)	New Developments		Make provision for vehicle and bicycle parking in line with parking standards from PPG note 13 (see table below)
EDUCATION	N/A	N/A		N/A
HEALTH	N/A	N/A		N/A
DEVELOPMENT STANDARDS	Policy 14 (2011 Core Strategy) AND	Development proposals which result in the loss of an employment site to other uses		Section 106 agreement, details to be agreed with council

	2012 Economy Interim Planning Paper SPD		
COMMUNITY INFRASTRUCTURE LEVY	Para 8.1 (2015 Community Infrastructure Levy - Preliminary Draft Charging Schedule)	Market houses in lower value zone	£0/sqm
		Market houses in moderate value zone	£30/sqm
		Market houses in higher value zone	£80/sqm
		Market apartments in higher value zone	£45/sqm
		Supermarket	£160/sqm
		Retail Warehouse	£70/sqm
		Neighbourhood Convenience Retail	£20/sqm
		All Other Development	£0/sqm
AFFORDABLE HOUSING	Policy 10 (2011 Core Strategy)	All residential development of 15 dwellings and above	7.5% of total development sales value to go towards delivery of affordable housing on site
OTHER	N/A	N/A	N/A

Use	**National Maximum Parking Standard**	**Threshold From and Above Which Standard Applies**
Food Retail	1 space per 14sqm	1000sqm
Non Food Retail	1 space per 20sqm	1000sqm
Cinemas and conference facilities	1 space per 5 seats	1000sqm
D2 (other than cinemas, conference facilities and stadiums	1 space per 22sqm	1000sqm
B1 including offices	1 space per 30sqm	2500sqm
Higher and further education 1 space per 2 staff plus	1 space per 2 staff plus 1 space per 15 students	2500sqm
Hospitals	None given	2500sqm
Stadiums	1 space per 15 seats	1500 seats

ROCHDALE

Plan	Year	Status
Extant Unitary Development Plan	2006	In Use
Affordable Housing Supplementary Planning Document	2008	In Use
Core Strategy Development Planning Document	2016	In Use
Recreational Open Space Supplementary Planning Document	2017	In Use
Local Plan	---	Consultations closed November 2018 Comments currently being reviewed

Policy Category	Policy	Threshold	Requirements		
OPEN SPACE/ SPORT/ RECREATION	C8 (2016 Core Strategy) AND 2017 Provision of Recreational Open Space in New Housing SPD	Residential Developments of more than 10 dwellings (and those of 10 dwellings or less with a combined gross floorspace of more than 1000 square metres) with a total of 99 bedrooms or less	Contribution through off site provision: 1.1ha Outdoor Sports Provision/1000 population AND 1ha Local Open Space/1000 population	Per 1 Bed Dwelling	£983.64
				Per 2 Bed Dwelling	£1967.28
				Per 3 Bed Dwelling	£2950.92
				Per 4 Bed Dwelling	£3934.56
				Per 5+ Bed Dwelling	£4918.20
		Residential developments of 100 bedrooms to 399 bedrooms	Provision on Site of LAP:	Per 1 Bed Dwelling	Laying Out Cost: £231.40
					20 Year Maintenance: £237.00

			1ha Local Open Space/1000 population	Per 2 Bed Dwelling	Laying Out Cost: £462.80
					20 Year Maintenance: £474.00
				Per 3 Bed Dwelling	Laying Out Cost: £694.20
					20 Year Maintenance: £711.00
				Per 4 Bed Dwelling	Laying Out Cost: £925.60
					20 Year Maintenance: £948.00
				Per 5+ Bed Dwelling	Laying Out Cost: £1157.00
					20 Year Maintenance: £1185.00
			Contribution through off site provision: 1.1 ha Outdoor Sports Provision/1000 population	Per 1 Bed Dwelling	£515.24
				Per 2 Bed Dwelling	£1030.48
				Per 3 Bed Dwelling	£1545.72
				Per 4 Bed Dwelling	£2060.96
				Per 5+ Bed Dwelling	£2576.20
		Residential developments of 400 bedrooms to 899 bedrooms	Provision on Site of LEAP + facilities for older children:	Per 1 Bed Dwelling	Laying Out Cost: £231.40
					20 Year Maintenance: £237.00

			1ha Local Open Space/1000 population	Per 2 Bed Dwelling	Laying Out Cost: £462.80
					20 Year Maintenance: £474.00
				Per 3 Bed Dwelling	Laying Out Cost: £694.20
					20 Year Maintenance: £711.00
				Per 4 Bed Dwelling	Laying Out Cost: £925.60
					20 Year Maintenance: £948.00
				Per 5+ Bed Dwelling	Laying Out Cost: £1157.00
					20 Year Maintenance: £1185.00
			Contribution through off site provision: 1.1 ha Outdoor Sports Provision/1000 population	Per 1 Bed Dwelling	£515.24
				Per 2 Bed Dwelling	£1030.48
				Per 3 Bed Dwelling	£1545.72
				Per 4 Bed Dwelling	£2060.96
				Per 5+ Bed Dwelling	£2576.20
		Residential developments of 900+ bedrooms	Provision on Site of NEAP with multi-use games area + facilities for younger children.	Per 1 Bed Dwelling	Laying Out Cost: £231.40
					20 Year Maintenance: £237.00

			1ha Local Open Space/1000 population	Per 2 Bed Dwelling	Laying Out Cost: £462.80
					20 Year Maintenance: £474.00
				Per 3 Bed Dwelling	Laying Out Cost: £694.20
					20 Year Maintenance: £711.00
				Per 4 Bed Dwelling	Laying Out Cost: £925.60
					20 Year Maintenance: £948.00
				Per 5+ Bed Dwelling	Laying Out Cost: £1157.00
					20 Year Maintenance: £1185.00
			Provision on Site: 1.1ha Outdoor Sports Provision/1000 population	Per 1 Bed Dwelling	Laying Out Cost: £254.54
					20 Year Maintenance: £260.70
				Per 2 Bed Dwelling	Laying Out Cost: £509.08
					20 Year Maintenance: £521.40
				Per 3 Bed Dwelling	Laying Out Cost: £764.62
					20 Year Maintenance: £782.10

				Per 4 Bed Dwelling	Laying Out Cost: £1018.16 20 Year Maintenance: £1042.80
				Per 5+ Bed Dwelling	Laying Out Cost: £1272.70 20 Year Maintenance: £1303.50
BIODIVERSITY/ HABITAT MITIGATION	N/A	N/A	N/A		
CLIMATE CHANGE MITIGATION/ ENERGY	G1 (2016 Core Strategy)	New Developments (Residential and Non-Residential)	Zero carbon, in line with national targets and definitions.		
		Developments on Greenfield Sites	Incorporate SuDS and ensure rate of runoff is not increased.		
		Developments on Brownfield Sites	Incorporate SuDS and ensure rate of runoff is significantly reduced.		
TRANSPORT	T2 (2016 Core Strategy)	New Developments	Make provision for vehicle and bicycle parking in line with parking standards (see next table)		
EDUCATION	DM2 (2016 Core Strategy) AND C7 (2016 Core Strategy)	New Residential Developments without on site provision of educational facilities (including new school places + employment skills and training).	Section 106 Agreement		
HEALTH	DM2 (2016 Core Strategy) AND C6 (2016 Core Strategy)	New Residential Developments	Section 106 Agreement		
DEVELOPMENT STANDARDS	N/A	N/A	N/A		
COMMUNITY INFRASTRUCTURE LEVY	N/A	N/A	N/A		
AFFORDABLE HOUSING	C4 (2016 Core Strategy)	All developments of 15 dwellings or more	7.5% of total development sales value to go towards delivery of affordable housing on site		

OTHER	N/A	N/A	N/A

SALFORD

Plan	Year	Status
Extant Unitary Development Plan	2006	In Use
Nature Conservation and Biodiversity Supplementary Planning Document	2006	In Use
Trees and Development Supplementary Planning Document	2006	In Use
Planning Obligations Supplementary Planning Document	2015	In Use
Greenspace Strategy	2019	In Use
Planning Obligations Supplementary Planning Document	2019	Draft
Revised Local Plan	2019	Draft

Policy Category	Policy	Threshold		Requirements	
OPEN SPACE/SPORT/ RECREATION	H1/H8/R2 (2006 Extant UDP) AND OB2 (2015 Planning Obligations SPD) H1/H8/R2 (2006 Extant UDP) AND GS11 (2019 Greenspace Strategy SPD)	New housing development	Houses	Youth and adult facilities	0.4ha/1000 population OR £743/bed space
				Sports pitches	0.92ha/1000 population OR £168/ bed space

				Equipped Children's Play Areas (LAPS/LEAPS/ NEAPS)	0.25ha/1000 population OR £400/ bed space
				Amenity space	0.4ha/1000 population OR £128/ bed space
			Apartments	Youth and adult facilities	0.4ha/1000 population OR £743/bed space
				Sports pitches	0.92ha/1000 population OR £168/ bed space
				Amenity space	0.4ha/1000 population OR £128/ bed space
		New housing development		Allotments	0.5ha/1000 population
BIODIVERSITY/HABITAT MITIGATION	EN13 (2006 Extant UDP) AND T6D (2006 Trees and Development SPD)	Development that would result in the loss of trees		At least two new trees for each tree lost	

	NCB1 (2006 Nature Conservation and Biodiversity SPD)	Development where negative impacts of development on biodiversity cannot be avoided or adequately mitigated		Appropriate compensatory provision through S106 agreement
CLIMATE CHANGE MITIGATION/ENERGY	N/A	N/A		N/A
TRANSPORT	DEV 5(2006 Extant UDP) AND EHC1 and EHC3 AND OB5 (2015 Planning Obligations SPD)	Developments comprising 11 or more dwellings, or 1,000 square metres or more of non-residential floorspace		S106 agreement, scale of which will be negotiated having regard to site-specific circumstances
	A8 (2006 Extant UDP) AND OB5 (2015 Planning Obligations SPD)	Where development has a significant impact on the Strategic Road Network		S278 agreement
	A10 (2006 Extant UDP)	New Developments		Make provision for vehicle and bicycle parking in line with parking standards (see next table)
EDUCATION	OB3 (2015 Planning Obligations SPD) AND DEV5 (2006 Extant UDP)	New housing development that would result in a net increase of 11 or more houses	Apartments OR One-bedroom houses OR Non-family units (e.g. sheltered housing, student housing, residential institutions, houses in multiple occupation)	No contributions will be sought

		All other residential dwelling types	All other housing types		(Number of non-principal bedrooms within a house)* x 0.11 x £9,525** *Total number of bedrooms minus one **Cost is for 2015/2016. Updated costs published annually by Salford city council
	OB4 (2015 Planning Obligations SPD) AND DEV5 (2006 Extant UDP)	Where it is not practicable for the city council to expand capacity within existing schools sufficient to accommodate the additional requirement for pupil places that will be generated by a development, and there are no alternative solutions available in this regard			Developers to secure the setting aside of land to accommodate a school (typically a one-form entry primary school will require 1 hectare, and a two-form entry primary school will require 2 hectares) AND Financial contribution set out in Policy OB3 will be reduced accordingly to reflect the cost of setting aside the land. Where the value of the land to be set aside falls below the value of the financial contribution as set out in Policy OB3, the developer will be expected to pay the remaining balance of the contribution towards the delivery of the school.
HEALTH	N/A	N/A			N/A
DEVELOPMENT STANDARDS	N/A	N/A			N/A
COMMUNITY INFRASTRUCTURE LEVY	N/A	N/A			N/A
AFFORDABLE HOUSING		Housing developments of 25 or more dwellings, OR All residential sites over 1 hectare which comprise 11 or more dwellings	High residential value area	Houses and Apartments	20% affordable housing AND 75% social / affordable rented, 25% intermediate
	OB1 (2015 Planning Obligations SPD) AND		Mid/high residential value area	Apartments that are not high-density schemes comprising	10% affordable housing AND 100% intermediate

	H4 (2006 Extant UDP)			6 or more storeys	
			Mid residential value area	Houses	10% affordable housing AND 50% social / affordable rented, 50% intermediate
				Apartments	No Requirement
			Low/mid residential value area	Houses	10% affordable housing AND 100% intermediate
				Apartments	No Requirement
			Low residential value area		No Requirement
OTHER	CH3 (2006 Extant UDP) AND OB6 (2015 Planning Obligations SPD)	Relevant* developments comprising 11 or more dwellings, or 1,000 square metres or more of non-residential floorspace *Relevant developments include those in heritage conservation districts			S106 agreement, scale of which will be negotiated having regard to site-specific circumstances

Type of development	Maximum standard for car parking provision (not including provision for disabled people)	Notes
A1 - Shops		
Food retail	1 space per 16m2	
Non-food retail	1 space per 22m2	
A3, A4, A5 - Restaurants and cafes, drinking establishments and hot food take-aways		
Restaurants	1 space per 7m2 of public floor area	
Fast food - drive through	1 space per 8.5m2 of gross floor area	For predominantly drive-through take away establishments. "Drive thru" restaurants featuring significant seating could be considered as a conventional restaurant
B1 - Business		
Stand alone offices	1 space per 35m2	
Business parks	1 space per 40m2	
B2 - General industry		
	1 space per 60m2	

B8 - Storage and distribution		
	1 space per 45m2	
C1 - Hotels		
	1 space per bedroom including staff	Additional facilities such as leisure and conference facilities should be considered separately if appropriate
C3 - Dwelling houses		
	Please refer to Policy A 10 in the Accessibility chapter	
D1 - Non-residential institutions		
1 space per 2 staff + 3 per consulting room		
1 space per 2 staff		To be backed up with a more detailed justification, including Green Transport Plan proposals. Parking for students should be included within this figure. Separate consideration would be required for any parking related to residential facilities.
D2 - Assembly and leisure		
1 space per 8 seats		
1 space per 25m2		

Miscellaneous		
1 space per 18 seats		

STOCKPORT

Plan	Year	Status
Extant Unitary Development Plan	2006	In Use
Parking Standards Supplementary Planning Document	2006	In Use
Sustainable Transport Supplementary Planning Document	2007	In Use
Core Strategy Development Planning Document	2011	In Use
Affordable Housing Requirements Supplementary Planning Document	2015	In Use
Local Plan	---	Not yet progressed to preferred option stage

Policy Category	Policy	Threshold	Requirements
OPEN SPACE/SPORT/ RECREATION	SIE2 (2011 Core Strategy) AND 2003 Recreational Open Space Provision SPG	New Developments 0-49 People EXCEPT Sheltered Housing or Special Needs Housing for Elderly People	Contributions related in scale and kind to the permitted development
		New Developments 50-99 People EXCEPT Sheltered Housing or Special Needs Housing for Elderly People	0.7ha/1000p for children's play and casual recreation + contribution to formal recreation space | £198.35 per person for formal/local open space, £167.31 per person for children's play space | £11.86 per sqm maitenance cost

		New Developments 100+ People EXCEPT Sheltered Housing or Special Needs Housing for Elderly People		1.7ha/1000p for formal recreation and 0.7ha/1000p for children's play and casual recreation | £198.35 per person for formal/local open space, £167.31 per person for children's play space | £11.86 per sqm maitenance cost
BIODIVERSITY/HABITAT MITIGATION	N/A	N/A		N/A
CLIMATE CHANGE MITIGATION/ENERGY	SD3 (2011 Core Strategy)	Domestic: Network Development Area		40% minimum 85% maximum reduction TER 2006
		Commercial: Network Development Area		30% minimum 45% maximum reduction TER 2006
		Domestic: Microgeneration Area		40% minimum 100% maximum reduction TER 2006
		Commercial: Network Development Area		30% minimum 75% maximum reduction TER 2006
	SD4 (2011 Core Strategy)	New development in 'Network Development Areas' where technically feasible and financially viable,	Small developments (less than 100 dwellings or non-residential developments less than 10,000m$_2$)	Connect to any available district heating networks. Where a district heating network does not yet exist, applicants should install heating and cooling equipment that is capable of connection at a later date
			Large and mixed-use developments (over 100 dwellings or non-residential developments over 10,000m$_2$	Install a district heating network to serve the site. Where appropriate, provide land, buildings and/or equipment for an energy centre to serve existing or new development.
	SD6 (2011 Core Strategy)	Brownfield site developments within Critical Drainage areas (CDAs)		Reduce unattenuated runoff by minimum 50%
		Brownfield site developments not within CDAs		Reduce unattenuated runoff by minimum 30%
		Development on Greenfield sites		Ensure runoff rate is not increased
TRANSPORT	T1 (2011 Core Strategy)	New Developments		Make provision for vehicle and bicycle parking in line with parking standards set out in the parking standards SPD (see next table)

	TD1 (2006 Extant UDP) AND ST1 (Sustainable Transport SPD 2007)	New developments in proximity to transportation corridors and bus network		S106 agreement
EDUCATION	N/A	N/A		N/A
HEALTH	N/A	N/A		N/A
DEVELOPMENT STANDARDS	N/A	N/A		N/A
COMMUNITY INFRASTRUCTURE LEVY	N/A	N/A		N/A
AFFORDABLE HOUSING	H3 (2011 Core Strategy)	All Council owned sites to be developed for housing, regardless of size		40% of dwellings Affordable, or as high a level as is viable
		Urban open space or Green Belt sites released for housing		At least 50% of dwellings affordable housing
		Sites providing 15 dwellings (gross) or more and sites of 0.5 hectares or more OR dwellings (gross) in areas with property prices above the Stockport average	Town Centre areas and the other Neighbourhood Renewal Priority Areas	10%-15% affordable housing
			Inner urban areas of the borough	20-25% affordable housing
			Areas with above average property prices	30% affordable housing
			Areas with the highest property prices	40% affordable housing
		All developments with affordable housing provided by developers	Areas with above average housing prices and lack of social rented housing	50% intermediate housing/ 50% social rented housing
			All other areas	75% intermediate housing/ 25% social rented housing
OTHER	N/A	N/A		N/A

TAMESIDE

Plan	Year	Status
Extant Unitary Development Plan	2004	In Use
Trees and Landscaping on Development Sites Supplementary Planning Document	2007	In Use
Residential Design Supplementary Planning Document	2010	In Use
Local Plan	---	Integrated Assessment Scoping Report published in 2017 and consultations ran until April 10 2017. No published progress since.

Policy Category	Policy	Threshold		Requirements	
OPEN SPACE/SPORT/ RECREATION	H5 (2004 UDP) And S106 Technical Guidance	Residential Developments AND Location of development is "deficient" and falls short of one or more of the following specified distance or population thresholds for specified open space category. Population to be calculated by assuming 2.2 people per dwelling.	**Category 1** Play Areas, General Amenity Areas - maximum 0.4km to space, 630 population per open space	On Site provision of one category 1 open space and associated facilities, and maintenance of this space and facilities, for 25 years.	£91.06 per square metre x number of proposed dwellings
				Where location of development is not deficient, or no potential for new green space - contribution to the improvement	£26.38 per square metre x number of proposed dwellings

				and enhancement of a category 1 open space	
			Category 2 Playing Fields, Courts and Greens – maximum 1km to space, 2000 population per open space	Contribution to provision and maintenance of one category 2 open space and associated facilities, and maintenance of this space and facilities, for 25 years.	£14.67 per square metre x number of proposed dwellings
				Where location of development is not deficient, or no potential for new green space - contribution to the improvement and enhancement of a new category 2 open space	£3.83 per square metre x number of proposed dwellings
			Category 3 Urban Parks – maximum 1.5km to space, 8200	Contribution to provision and maintenance of one category 3	£73.00 per square metre x number of

			population per open space	open space and associated facilities, and maintenance of this space and facilities, for 25 years.	proposed dwellings
				Where location of development is not deficient, or no potential for new green space - contribution to the improvement and enhancement of a new category 3 open space	£6.17 per square metre x number of proposed dwellings
			Category 4 Country Parks, Green Corridors and Water Areas Ecological Areas, Allotments and Cemeteries - maximum 2km to space, 1250 population per open space	Contribution to provision and maintenance of one category 4 open space and associated facilities, and maintenance of this space and facilities, for 25 years.	Not applicable – no deficient areas

				Where location of development is not deficient, or no potential for new green space - contribution to the improvement and enhancement of a new category 4 open space	£1.62 per square metre x number of proposed dwellings
BIODIVERSITY/HABITAT MITIGATION	N1b (2004 UDP)	Development that is within, or likely to affect, a Site of Special Scientific Interest		Potential use of conditions or planning obligations to ensure the protection and enhancement of the site's nature conservation interest	
	N2 (2004 UDP)	Development on Site of Biological Importance where loss or damage would occur to the nature conservation value of the site		Habitat re-creation or enhancement of an equivalent or greater area elsewhere within the site or the surrounding area.	
	N3 (2004 UDP)	Development that could have an impact on wildlife, plant life or geological features		Arrangements for subsequent maintenance or management of site, including any opportunities to help create or enhance wildlife habitats and increase biodiversity in both urban and rural locations.	
	N5	Development proposal affecting a site containing trees or woodlands		Full arboriculture impact assessment, survey and method statement to be undertaken and submitted	

					with the planning application
CLIMATE CHANGE MITIGATION/ENERGY	N/A	N/A			N/A
TRANSPORT	T10 (2004 UDP)	New Developments			Make provision for vehicle and bicycle parking in line with parking standards (see next table)
	T13 (2004 UDP) And S106 Technical Guidance	New Developments where additional movements directly generated by a development proposal would place demands on the existing transportation infrastructure, which would not be overcome by existing programmed improvement schemes	New residential development greater than 1 new dwelling	**Daily Trips Generated by Use per Dwelling** Housing (mixed) = 6 daily trips Housing (flats/apartments) = 2.5 daily trips Hotels = 5 daily trips	£118 x number of net trips *Note:* *Net trips = Number of proposed trips from development – number of existing trips from existing development* *Number of existing trips is calculated based on the type of existing development (see adjacent column) and age of the existing development:* • *0 – 5 yrs = 94% of calculated trips* • *6 – 10 yrs = 86% of calculated trips* • *11 – 15 yrs = 82% of calculated trips* • *16 – 20 yrs = 71% of calculated trips* • *21 – 25 yrs = 64% of calculated trips* • *25 + yrs = 53% of calculated trips*
			New non-residential development greater than 250sqm	**Daily Trips Generated by Use per 100sqm** B2 Uses = 14 daily trips Non-food retail (2000-8000sqm) = 150 daily trips B8 Storage = 4 daily trips Pub/Restaurant = 100 daily trips Fast Food = 420 daily trips	

EDUCATION AND HEALTH	H6 (2004 UDP) And S106 Technical Guidance	Residential Developments of 25+ dwellings AND Where schools or other community facilities in the surrounding area would be unable to satisfactorily accommodate the additional demands from the development EXCLUDING Specialised schemes where the occupiers will have no need for education or community facilities.	1 Bedroom Dwellings	£622 per dwelling x 0.4
			2 Bedroom Dwellings	£622 per dwelling x 1.26
			3 Bedroom Dwellings	£622 per dwelling x 1.76
			4+ Bedroom Dwellings	£622 per dwelling x 1.93
DEVELOPMENT STANDARDS	H10 (2004 UDP)	Proposed Housing Developments		Design must meet the needs of potential occupiers, create suitable arrangements for parking and delivery, refuse, emergency vehicles, pedestrians, and cyclists, create suitable landscaping and fencing and mitigate against noise privacy and shadowing or traffic impacts on neighbouring properties
COMMUNITY INFRASTRUCTURE LEVY	N/A	N/A		N/A

AFFORDABLE HOUSING	H4 (2004 UDP)	(Residential Developments 25+ dwellings) OR Residential Developments 1ha+ AND there is a demonstrable lack of affordable, supported or particular types of market housing	Developers to provide an element of subsidised or low-cost market housing
OTHER	N/A	N/A	N/A

Trafford

Plan	Year	Status
Extant Unitary Development Plan	2006	In Use
Core Strategy Development Planning Document	2012	In Use
Parking Standards Supplementary Planning Document	2012	In Use
Community Infrastructure Schedule	2014	In Use
Planning Obligations Supplementary Planning Document	2014	In Use
Local Plan	---	Draft plan expected 2019

Policy Category	Policy	Threshold	Requirements	
OPEN SPACE/SPORT/ RECREATION	L8 AND R5 (2012 Core Strategy DPD) AND 2014 Planning Obligations SPD	New Developments in areas where exists a shortfall, or where development will contribute to a shortfall against the following requirements	Local Open Space	1.35ha/1000 people within 300 metres OR £161.59 per person
			Semi Natural Green Space	2ha/1000 people within 1200 metres
			Provision for children/ young people, including equipped play and teenage provision	0.14ha/1000 people within 240 metres for children and 600 metres for young people OR £378.95 per person

				Outdoor sports	1ha/1000 people within 1800 metres OR £520 per person
				Swimming pools (pay to play)	10.2sqm/1000 people within 1800 metres
				Health and fitness (pay to play)	3.6 stations/1000 people within 1800 metres
				Cemeteries and burial areas	No standard
BIODIVERSITY/HABITAT MITIGATION	2014 Planning Obligations SPD	Residential Apartments		1 tree* per unit	
		Residential Housing		3 trees per unit	
		Industry and Warehousing		1 tree per 80sqm GIA	
		Retail		1 tree per 50sqm GIA	
		Offices		1 tree per 30sqm GIA	
		Hotels, other residential, leisure and community facilities		1 tree per 30sqm GIA	
CLIMATE CHANGE MITIGATION/ENERGY	L5 (2012 Core Strategy DPD)	Residential development equal to or greater than 10 units OR Non-Residential development above a threshold of 1,000m_2 floor area.	Development in Low Carbon Growth Areas	Demonstrate CO2 reduction up to 15% above building regulations	
			Development outside Low Carbon Growth Areas	Demonstrate CO2 reduction up to 5% above building regulations	

TRANSPORT	L8 (2012 Core Strategy DPD) AND 2012 Parking Standards SPD AND 2014 Planning Obligations SPD	New Developments "where appropriate"	Seek developer contributions towards the provision or improvement of highway and public transport schemes, secured as part of the S106 or S278 agreement
		New Developments	Make provision for vehicle and bicycle parking in line with parking standards (see next table)
EDUCATION	2014 Planning Obligations SPD	New Developments	Section 106 Agreement
HEALTH	2014 Planning Obligations SPD	New Developments	Section 106 Agreement
DEVELOPMENT STANDARDS	N/A	N/A	N/A
COMMUNITY INFRASTRUCTURE LEVY	L8 (2012 Core Strategy DPD) AND 2014 CIL Charging Schedule	Private Market House in Cold Charging Zone	£20 per sqm
		Private Market House in Moderate Charging Zone	£40 per sqm
		Private Market House in Hot Charging Zone	£80 per sqm
		Apartments in Cold Charging Zone	£0 per sqm
		Apartments in Moderate Charging Zone	£0 per sqm
		Apartments in Hot Charging Zone	£65 per sqm
		Retail Warehouses	£75 per sqm
		Supermarkets outside defined town centres	£225 per sqm
		Supermarkets within the defined town centres of Altrincham, Sale, Stretford and Urmston	£0 per sqm
		Public/Institutional Facilities as follows: education, health, community & emergency services, public transport	£0 per sqm
		Offices	£0 per sqm
		Industry and Warehousing	£0 per sqm
		Leisure	£10 per sqm

		Hotels			£10 per sqm
		All Other Development			£0 per sqm
AFFORDABLE HOUSING	L2 (2012 Core Strategy DPD) AND 2014 Planning Obligations SPD	Cold Charging Zone	5+ units	Bad market conditions	0% provision
				Moderate market conditions	5% provision
				Good market conditions	10% provision
		Moderate Charging Zone	5+ units	Bad market conditions	10% provision
				Moderate market conditions:	20% provision
				Good market conditions	25% provision
		Hot Charging Zone	15+ units	Bad market conditions	40% provision or decreased as deemed necessary
				Moderate market conditions	40% provision
				Good market conditions	45% provision
	L2 (2012 Core Strategy DPD) AND 2014 Planning Obligations SPD	All affordable housing development			50% intermediate housing, 50% social rented housing
					50% 3 bed units
OTHER	N/A	N/A			N/A

Wigan

Plan	Year	Status
Extant Unitary Development Plan	2006	In Use
Core Strategy Development Planning Document	2013	In Use
Affordable Housing Supplementary Planning Document	2013	In Use
Open Space Supplementary Planning Document	2013	In Use
Community Infrastructure Schedule	2015	Draft
Local Plan	---	Council has decided not to bring forward new local plan until Greater Manchester Spatial Framework has been adopted

Policy Category	Policy	Threshold	Requirements
OPEN SPACE/SPORT/ RECREATION	T13 (2006 Extant UDP	Housing Schemes up to 99 Homes	£557 per dwelling for open space AND £1038 per dwelling for play space Rates are in 2014 pounds and subject to increase via annual rate of inflation as provided each year by office for national statistics

	AND CP18 (2013 Core Strategy DPD) AND Wigan Open Space SPD (2013)	Housing Schemes over 99 Homes	25sqm of public open space per dwelling £13.35 in maintenance costs per sqm of space AND £1038 per dwelling for play space Rates are in 2014 pounds and subject to increase via annual rate of inflation as provided each year by office for national statistics	
	C1B (2006 Extant UDP)	Where there is a shortfall against the following thresholds	Per 4500 people	1 senior football pitch
			Per 5500 people	1 junior football pitch
			Per 9000 people	1 senior rugby pitch
			Per 14000 people	1 mini football pitch and 1 junior rugby pitch
			Per 15000 people	1 mini rugby pitch
BIODIVERSITY/HABITAT MITIGATION	N/A	N/A	N/A	
CLIMATE CHANGE MITIGATION/ENERGY	N/A	N/A	N/A	
TRANSPORT	A1S (2006 Extant UDP)	New Developments	Make provision for vehicle and bicycle parking in line with parking standards (see next table)	
EDUCATION	N/A	N/A	N/A	
HEALTH	N/A	N/A	N/A	
DEVELOPMENT STANDARDS	N/A	N/A	N/A	

COMMUNITY INFRASTRUCTURE LEVY	N/A	N/A	N/A
AFFORDABLE HOUSING	CP6 (2013 Core Strategy DPD) CP3 (2013 Core Strategy DPD)	Sites of 10 Dwellings or Greater Large scale housing developments	Provision of 25% affordable housing WHERE • 50% should be for social or affordable rent and • 50% as intermediate housing for sale.
OTHER			Provision of appropriate community facilities

Appendix C – Development industry workshop

GMSF Viability – Developer Workshop 1 and 2

2-4pm

18th and 30th September 2019

The Studio, The Hive, Lever Street, Manchester

List of Attendees

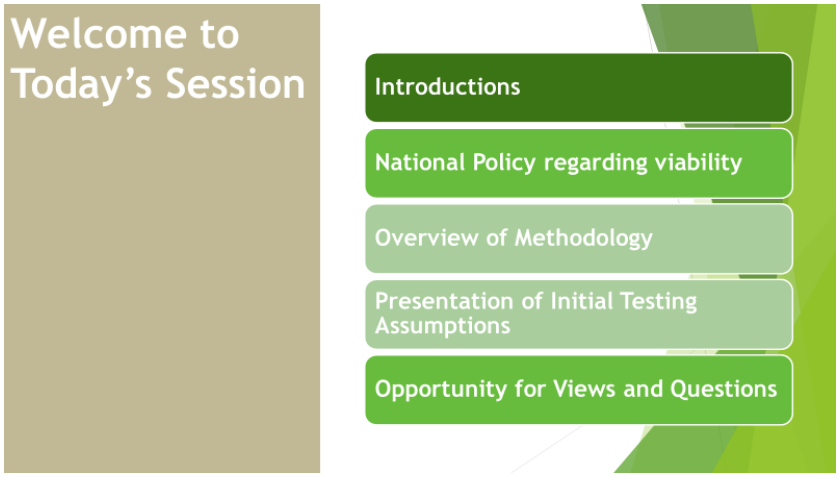
	Workshop 1	**Workshop 2**
Project team	GMCA	GMCA
	Three Dragons	Three Dragons
	Troy Planning & Design	Troy Planning & Design
		Ward Williams and Associates
Participants	Wainhomes	Bolton at Home
	Barratt PLC	Jigsaw Homes
	Richborough Estates	Southway Housing
	Cushman Wakefield	Grasscroft Property
	HIMOR Group	Story Homes
	Turley	Redrow
	Mosscare St Vincents	NJL Consulting
	House Builders Federation	Carter Jonas
	Great Places	Turley
	Harworth Group	Morris Homes
	Stockport MBC	House Builders Federation
	Salford City Council	Pozzoni Architecture

	Arcadis	Strategic Land Group
	Pegasus Group	Seddon Homes
	Moorside Homes	Keepmoat
	Stannybrook	Bury Council
	M J Gleeson	Manchester City Council
	Taylor Wimpey	Vernon & Co
		Far East Consortium
		Russell Homes
		Onward
		Persimmon Homes
		Salford City Council

Please note: this note is ordered in line with the workshop presentation and may not always reflect the order in which issues were discussed.

The remainder of the note shows each of the Powerpoint slides used to guide discussion, followed by a description of the main points raised at the workshops. Some comments were common to both workshops but some were raised in one workshop or the other – where the differences in views are significant, these have been highlighted.

Introduction



All those attending the workshops were welcomed and thanked for their time in contributing to the study. 3D noted that the workshop note would include all the main points of discussion but not attributed to individuals and that the workshop note would be included in the consultants' report of the viability study.

GMCA noted that that following the second round of public consultation there will be further revisions to the GMSF with a third round of public consultation taking place in Summer 2020.

3D explained that two workshops for developers, agents and local authorities are being held, offering an opportunity to agree key assumptions underlying viability analysis of the GMSF. Following on from the workshops, interviews will take place with many of the landowners and agents of the proposed allocated sites in the GMSF when possible. 3D also noted that a range of specialist inputs were being sought to inform the study, including for achieving the carbon reduction policies in the draft plan and the costs of site decontamination.

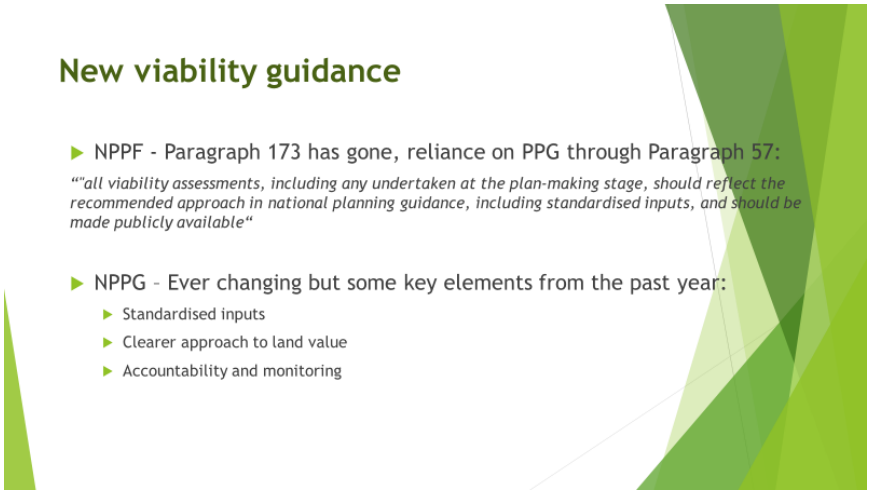
These meeting notes will be in the public domain as they will form part of the Final Report. The discussions will be anonymised for data protection and confidentiality purposes.

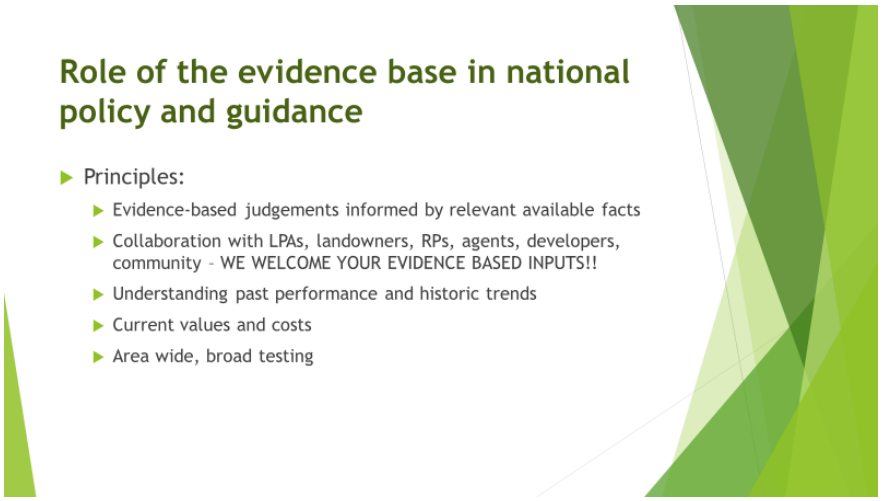
3D invited feedback on the meeting notes – however if any assumptions/typologies are to be challenged – these need to be appropriately evidenced.

Discussion

Workshop participants welcomed the opportunity for dialogue with GMCA.

Policy context for viability assessment of the GMSF





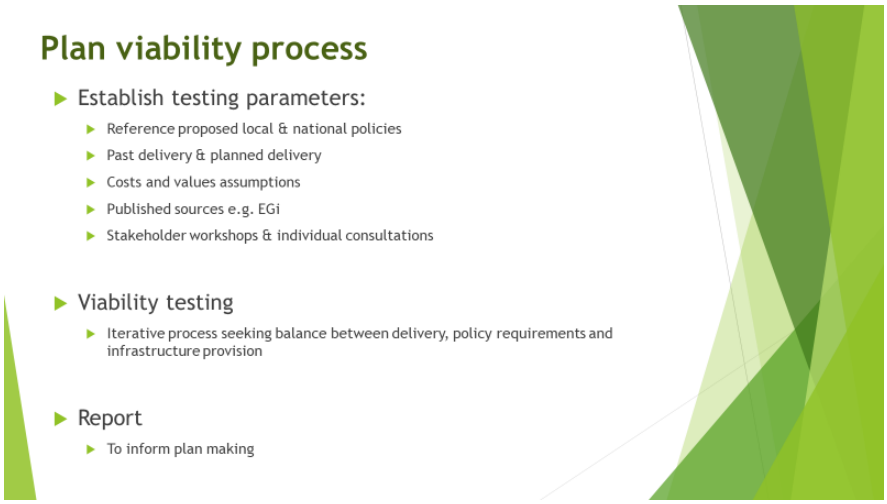
3D reiterated that where possible engagement with developers and site promoters will take place for the proposed allocations in the GMSF.

3D clarified that the viability models will be using current costs and values and will not take into account hypothetical variations, such as in the inflation rate.

Discussion

There was no comment from the workshops

Approach



Approach to viability testing

- Residual value approach
- We will test across 5 value areas - we do not test on an individual local authority basis
- Generic testing will look to both GMSF policy and across local plan policies where relevant
- Allocated sites are tested using the specific local authority policies

Total development value

Minus

Development costs

(incl. build costs and return to developer)

=

Gross residual value

Minus

Planning Obligations (including AH)

=

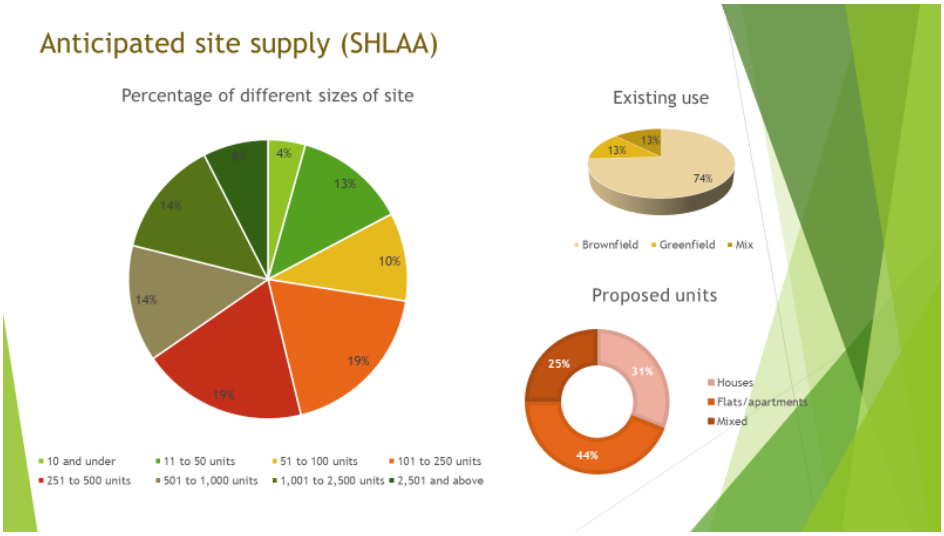
Net residual value

(compare with benchmark land value)

Discussion

There was no comment from the workshops

Anticipated site supply



3D noted that nearly 80% of the SHLAA sites which were put forward to the GMCA exceeded 51 units and that nearly 75% of sites are on brownfield land.

Discussion

Workshop noted that although the SHLAA process identifies significant numbers of sites, they questioned whether the SHLAA process was up to date and able to deliver the proposed numbers. They also identified the shortage and constrained nature of new build sites which meant that volume builders, for many years, had not been able to secure development land in parts of Greater Manchester.

Residential typologies

Residential typologies (1)

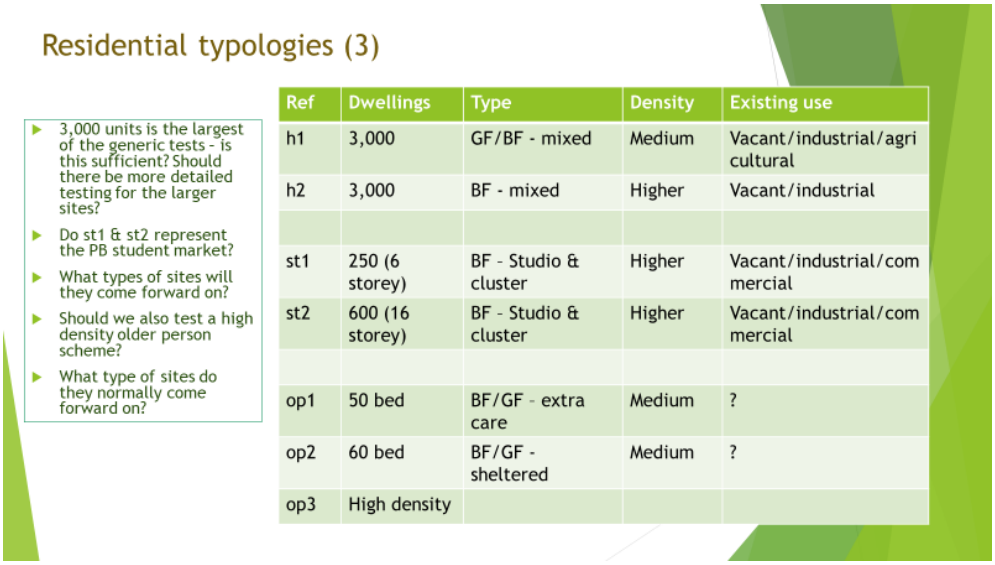
- Separate viability work carried out for allocated sites
- All testing will take account of policy, obligations & infrastructure costs
- Range of densities including policy (GMH4)
  - 200 dph
  - 120 dph
  - 70 dph
  - 50 dph
  - 35 dph

Ref	Dwellings	Type	Density	Existing use
a1	5	GF - houses	Lower	Infill/garden
a2	5	BF - houses	Lower	Residential
a3	5	BF - flats	Higher	Residential
b1	30	GF - houses	Lower	Infill/open space
b2	30	BF - houses	Lower	Vacant/industrial
b3	30	BF - flats	Higher	Vacant/industrial
c1	75	GF - houses	Lower	Infill/open space
c2	75	BF - houses	Medium	Vacant/industrial
c3	75	BF - flats	Medium	Vacant/industrial

Residential typologies (2)

- High density apartment 'tall' typologies will include mixed uses at ground floor (e.g. retail) BUT
- Should tall building include mixes at other levels? (e.g. office, hotel)
- How tall is representative?

Ref	Dwellings	Type	Density	Existing use
d1	150	GF - houses	Lower	Paddock/agricultural
d2	150	BF - houses	Medium	Vacant/industrial
d3	150	BF - flats	Higher	Vacant/industrial
e1	300	BF - flats	Higher	Vacant/industrial
e2	300	BF - mixed	Medium	Vacant/industrial
f1	800	BF - flats	Higher	Vacant/industrial
f2	800	GF - houses	Medium	Paddock/agricultural
g1	1,500	BF - flats	Higher	Commercial
g2	1,500	BF - mixed	Medium	Commercial



Ref	Dwellings	Type	Density	Existing use
h1	3,000	GF/BF - mixed	Medium	Vacant/industrial/agricultural
h2	3,000	BF - mixed	Higher	Vacant/industrial
st1	250 (6 storey)	BF - Studio & cluster	Higher	Vacant/industrial/commercial
st2	600 (16 storey)	BF - Studio & cluster	Higher	Vacant/industrial/commercial
op1	50 bed	BF/GF - extra care	Medium	?
op2	60 bed	BF/GF - sheltered	Medium	?
op3	High density			

3D explained that the above typologies represented a cross section of sites in the land supply over the life of the GMSF; the selection of typologies was based on an analysis of the site supply shown in the SHLAA. The typologies will be the basis for the generic testing and used to help demonstrate the viability of the GMSF. The assessment of the typologies will be complemented by analysis of the proposed allocated sites in the GMSF, which will be tested individually, based on the requirements set out in the GMSF and applicable local policy.

Discussion:

Broad agreement from participants that additional testing of larger SHLAA sites may be useful, although noted that, as there are not that many very large sites, perhaps some of the larger typologies identified by 3D already cover the spectrum of sites in the site supply.

Building heights and apartments

- Flat schemes vary in size. Do not assume that all high rise will have high dwelling counts. Some have low EUV but there is still a market to develop;

- City centre is high density and the heights of buildings shown are about right – with build costs at c £230 per sq ft at tallest buildings (at c40 storeys). There is a 'sweet spot' for tall buildings – just under 12 storeys and very limited interest in schemes above 15-16 storeys. With a shortage of specialist contractors who can build above 16 storeys.

- Commented that Salford masterplan says 9 storeys max.

- However, an alternative view put forward was that it is the apartment mix rather than building height that impacts on viability with examples of taller schemes noted– for example there are 23 storey developments at Exchange Quay and on Ordsall Lane

- Other than for the ground floor, most tall buildings are single use - although there are odd examples with hotels and office or hotels and residential. Circle Square (former BBC Studios) is a good example of recent high-rise mixed-use development. However, there are not many examples. Beetham Tower was the last major one pre 2008 recession.

- Angel Gardens (developer Moda Living) was recently completed and is now letting – 34 storeys and 466 units, mix of studios through to 3 beds, terrace, gym, sports pitch and concierge.

- In areas beyond (Oldham, Rochdale and Tameside were specifically mentioned) the city centres it is different, with building heights generally below 6 storeys – generally considered that tall buildings are not viable in these localities.

Scheme values

- Higher residential sales values do not necessarily mean intention to build residential – residential use competes with commercial or student development and multi-storey carparks

- Flatted PRS market in the city centre, with some limited amounts as houses across the northern towns

Scheme density and mixes

- Houses are the norm in the northern towns – not flats

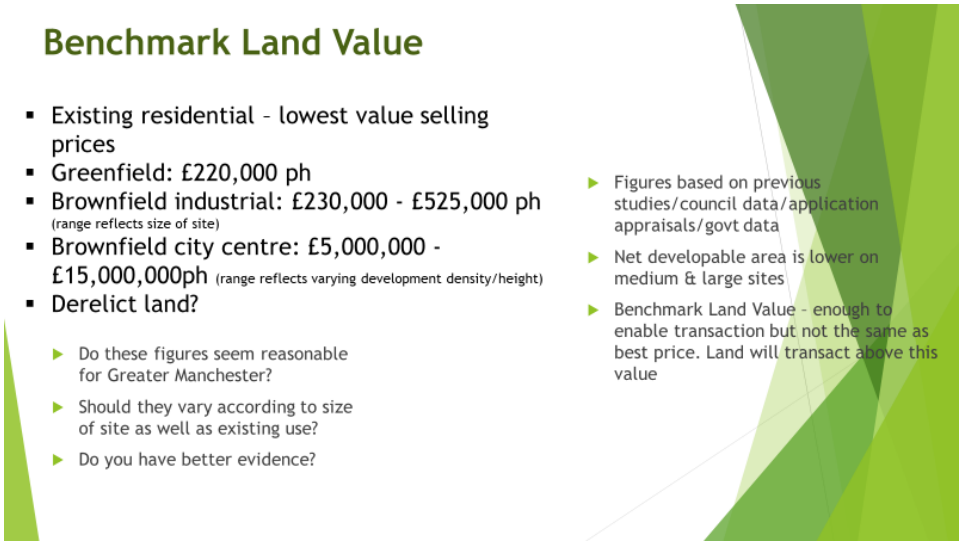
- Low and mid-density schemes in north Manchester compete with retail and offices.

- Mix of housing is important – one comment that 1 bed properties are not viable

Specialist housing types (see later for comments re older persons housing)

- Student housing – 4 beds per cluster is an average which is used in Leeds.
- In Salford, there is the Crescent Masterplan which incorporates purpose-built student living. There is demand for this, particularly to accommodate international students. 6 and 16 storey developments are reasonable scales to model. Accommodation is more geared to studios.
- Historically there have been low rise student villages of 2/3 storey student development.
- Manchester City has been 'clamping down' on bespoke student towers.
- Some studios are 'kitchenettes', which could have less value as their kitchens are not as functional as studios in terms of facilities.

Benchmark land values



3D introduced the discussion on BLV, explaining that current use with a premium uplift (typically 20 - 30%) reflected national policy advice (See PPG). BLV for greenfield land is generally taken as 10 times uplift in value on agricultural land.

Discussion

Points raised by the workshop included:

- Criticism of the greenfield values shown, especially for smaller sites of c 50 units.
- One workshop identified a suitable BLV for large green fields sites of c £100,000 per gross acre minimum (at least £240,000 per hectare) and that on smaller greenfield sites the BMLV should be much higher. The other workshop quoted c£600,000 per hectare gross as suitable BLV on small to medium greenfield sites
- Smaller greenfield sites will be more sensitive to local residential values – if they are higher locally then landowner expectation and therefore the premium should be higher;
- Brownfield land benchmark values also considered to be too low. One participant suggested that for 'Brownfield Industrial' – the BLV is considered in excess in £500,000 per acre (gross) (£1.235 million pha) due to existing use value. It was questioned whether this was realistic across all of GM and whether there is evidence to support such a value.
- Consultant team asked to review transactional data for schemes with planning permission and that are policy compliant (to accord with the latest update of the PPG)
- Consultant team also asked to review treatment of BLV in adjoining areas e.g. Halton/Cheshire East to help identify a suitable (greenfield/large scale) BLV

- Sufficient value needs to be considered for a realistic BMLV, otherwise sites may not come forward, for example on greenfield sites if land is held in families

- There should be more market analysis – suggested that PPG could be interpreted that it advises to look at market evidence. Transactions are considered to be good evidence to use, although it was agreed that these would have to be adjusted to take into account policy compliance and to disregard 'outliers'. It was questioned whether the land market operation in GM had responded yet to changes in PPG about EUV+.

- Greenfield land should be categorised as Green Belt, Protected Open Land and Other Open Land – different values would be applicable to each designation.

- GMSF is reliant on town centre sites coming forward, benchmark land values should include an applicable value, especially for the northern towns.

- With regards derelict land, it was noted that derelict mills are constrained due to access, listed building issues and sometimes high abnormal costs. Some mills are clearly viable to develop; however, others are not. No evidence of recent transactions.

- Some mill sites do have existing value, particularly as there is value in demolition available for developers.

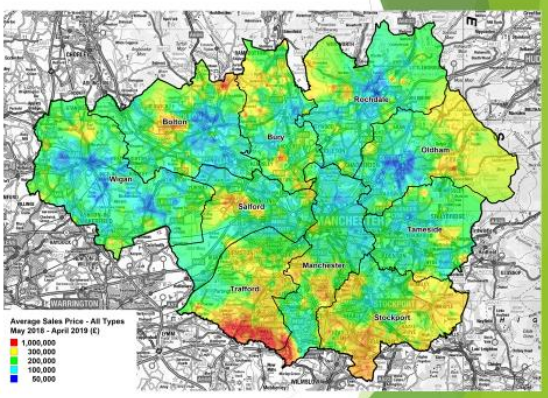
- Specifically for derelict/cleared sites– noted that there is some value in the cleared site e.g. as open storage and this needs to be considered when arriving at suitable BLV for these types of sites;

Workshop participants were requested to forward any evidence to support alternative BLV to those proposed by the consultant team.

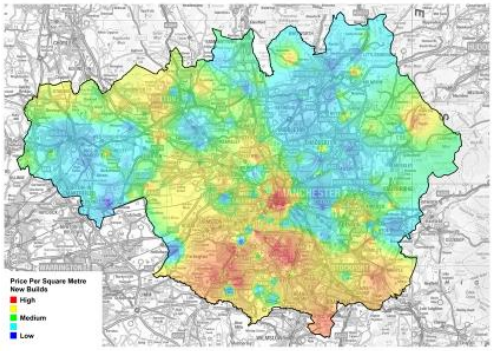
Sales values and market areas

Sales values and market areas

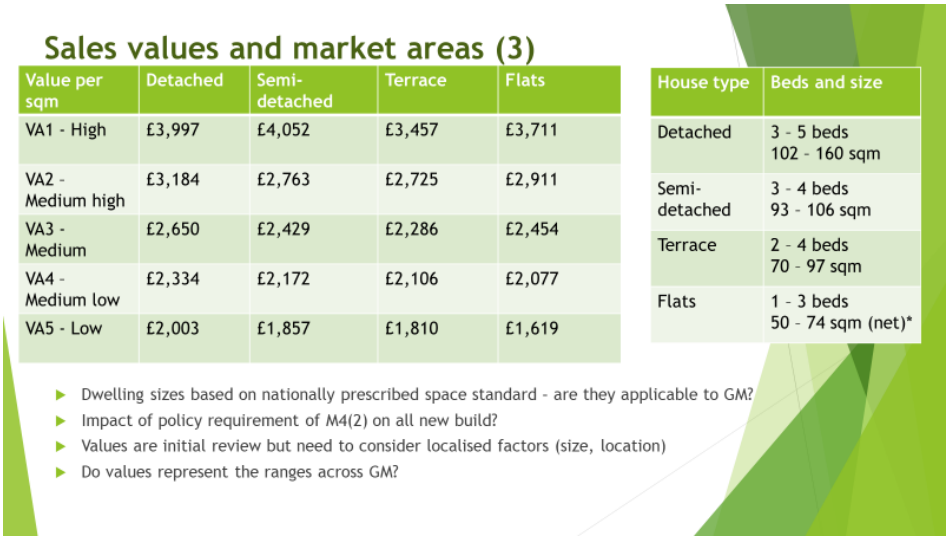
- First stage – all property transactions 2018 - 2019
- Values derived from Land Registry
- Shows hotspots (and cool areas) across Greater Manchester
- All districts have both high and low areas
- But does new dwelling stock follow the same pattern?



Sales values and market areas (2)



- Second stage- all new £psqm transactions 2016 - 2019
- Values derived from Land Registry and matched to EPC records to provide £psqm
- Through statistical analysis 5 broad value areas
- Higher and lower values to be found both across Greater Manchester and within local authority areas
- Development is happening in the lower value areas - are there particular types of development that work better when values are lower?



3D provided a summary of the sales values and value areas which have been identified. These value areas would be used to test the viability of the generic sites. Values are based on Land Registry data for new build properties aligned with EPC certificates to arrive at a per sq m value. There are some areas where new build data is more limited and the data has had to be supplemented with data about second-hand properties. 3D explained that used EPC data against LR values

Discussion

Workshop noted the assumptions used and raised no fundamental objections to the consultant team's approach. However, several specific points were raised by the workshop

In response to a question from the workshop about the relationship between - housing value areas and market areas, 3D explained that the housing value areas are based on a statistical analysis of new build house prices that groups together values within bands and provides an average house price within that band – it not based on local authority boundaries as values within local authorities vary considerably.

In response to a question from the consultant team about building on the edge of a social housing estate and whether this would uplift the value of social housing and or have an impact on the value of the new development; workshop comments as follows:

- This varies with the interactions and linkages between with the new and existing housing stock. Crime is a particular variable which may have influence on this.
- Help to Buy is coming to an end, which may affect house prices.
- School catchment areas also important

In response to a question from the consultant team about the scale of development needed to create it's a separate market identity, workshop comments as follows:

- Differing views on this – some saying will require at least 500 units to achieve this but others thought would be 1,000 units (which will lead to updated infrastructure, transport, community facilities). Depends spatially where this is as well.

- School catchment areas have a significant impact on house prices.

- GMSF needs to provide more incentive to build in these regeneration areas.

- Needs place making input to create value uplift (and this often involves public investment). Policies in the GMSF will need to be affordable to be implemented – introducing the policies will not create value uplift on their own.

- No developer will anticipate value uplift within the appraisal process;

- Schemes quoted as examples of large scale developments in low value areas included West Gorton, Lower Broughton, Charlestown, Oldham town centre.

Also a range of other comments:

- Specific comments on the market values and rents shown:

    - Detached values looked too much of an increase from semi/terrace; and

    - City centre values are lower than found in the market. This may be because City Council policy requires dwellings to be above NDSS standards and so, when multiplied by the £s per sq m shown, will give a higher unit price

- PRS – not particularly strong from capital value perspective in low value areas but generates an early return i.e. multiple units sold to an investor and this can prove an attractive option.

Residential testing

Consultant team explained that further work would be undertaken on assumptions around values to be used in testing.

Discussion

Workshop comments on PRS:

- The first workshop raised that Countryside/Sygma are developing 2-4 bed houses for rent in some of the northern towns. The second workshop raised concerns about the ability of PRS being delivered in low value areas.

- There is no clarity from Manchester City Council on how they appraise viability for Build to Rent. However, it is sensible to have a BTR modelled for this study;

- Salford Council can share information on Build to Rent schemes in Salford.

Workshop comments on National Described Space Standards (NDSS)

- Flats in taller buildings in higher value areas may exceed NDSS. Larger units (3-4 bedroom dwellings) will likely meet NDSS

- In northern town centres and lower value areas NDSS space standards are likely not being met, particularly for smaller units and there is a ceiling on the values that the market will bear (3D asked for evidence to demonstrate how this works in practice);

- Concerns expressed about the impact of NDSS on viability. Argued that at, for example 35 dph, if NDSS introduced then could be difficult to achieve quality developments at this density with NDSS. However, it was noted that many housebuilders (national and regional) already build in excess of NDSS and this issue affected a subset of the market.

- For smaller units, the greater floor space translates into higher costs but does not attract an increase in values – which are set by local market conditions and affordability for buyers. This was seen to impact most on viability in lower value areas

- PPG requires local plans to justify introduction of NDSS and GMCA should note this, especially the need to provide evidence to support the policy and consider dwelling sizes that are currently being built and implications for development density if they choose to introduce NDSS. Also noted that Manchester City Council already has guidance that exceeds the national standards.

- Introduction of NDSS may reduce densities – evidence is to be provided to the consultant team by the workshop participants

- Need to be aware of setting an appropriate and realistic pattern of site coverage - suggested that 'real' schemes are reviewed and used to assess mixes

- Fastest selling sites in north Manchester are predominantly 3 bed units. No one trading up has sufficient equity to be able to buy 5 bed or larger units

Looking at mix – GMSF moving towards flats and away from more traditional mix of houses. Workshop has raised concerns on whether this is viable.

Workshop comments re leasehold development (discussed at one workshop only due to time pressures);

- Leasehold houses are no longer being developed – so any impact on prices has already been captured;

- But - Manchester City Council land is always sold on a leasehold basis so some leasehold development will remain.

Affordable Housing

Affordable Housing policies and testing protocols

- Most AH is provided on stand alone sites with grant funding
- Local authorities report currently achieving policy compliant affordable housing on S106 sites where sought
- Wide variation in LA policies
- GMSF aims to **deliver 50,000 AH units**
- Split 30,000 rent and 20,000 low cost home ownership
- Local authorities will continue to set their own Local Plan policies

Tenure mix for testing	Rent	LCHO
	60%	40%
Affordable rent	75%	
Social rent	25%	

Test at 0% AH
Test with AH in all value areas
at % ranging from 5-40%

Affordable housing rents

	AFFORDABLE RENT 80% OF LHA RATE			
Value area	1 bed	2 bed	3 bed	4 bed
1	£67.20	£80.00	£91.20	£122.08
2	£67.20	£80.00	£91.20	£122.08
3	£67.20	£98.86	£105.60	£126.09
4	£84.29	£105.63	£125.06	£164.87
5	£84.29	£105.63	£125.06	£164.87
SOCIAL RENT				
Value area	1 bed	2 bed	3 bed	4 bed
1	£52.42	£62.40	£71.14	£95.22
2	£52.42	£62.40	£71.14	£95.22
3	£52.42	£77.11	£82.37	£98.35
4	£65.74	£82.39	£97.55	£128.60
5	£65.74	£82.39	£97.55	£128.60

- Affordable rents at 80% of LHA
- Social rent 78% of affordable rent
- Most local authorities in several BRMAs
- Have calculated average AR and SR for each value area

Affordable housing costs

Affordable rent	
Management and maintenance	£1,000 pa
Voids/bad debts	3%
Repairs reserve	£500 pa
Capitalisation	6%
Shared ownership	
Rental factor	2.75% of share
Share size	40%
Capitalisation	6%

Based on national averages which have been found sound at Examination

3D presented the above information and noted that the affordable housing costs are based on national averages which have been found sound at Examination. Rents were averages derived from published local BRMA data and did not reflect any individual schemes.

3D clarified that the testing undertaken would not be used to identify a single affordable housing target across Greater Manchester (for the GMSF). Individual local authorities would continue to set their own affordable housing targets and would need to undertake their own viability studies.

Workshop discussion

- Affordable rents – suggested that these should be set at 100%of LHA. Other figures broadly agreed;

- Push social rent tenure towards the top (which reflects the government's position), then shared ownership, then help to buy then affordable rent.

- Worshop set out the varying AH targets and approaches across GM, citing examples such as Oldham/Rochdale with 7.5% of GDV per site is to be used for affordable housing – consultant team reiterated that a range of AH percentages would be tested according to value area, representing the range of targets set out in plans, also noting that whilst targets are in place there is a mixed picture in terms of policy compliance.

- HAs have difficulty with Affordable Rent and social rent on the same scheme (because of rent differences when letting properties). Explained that the intention was to test AR first and then add in SR if schemes worked with AR. The mixing of tenures and issues this may cause is more of an issue for individual planning applications rather than broad viability testing.

- Five GM Local Authorities do not have access to grants to construct social housing (Bolton, Oldham. Rochdale, Tameside, Wigan) as difference between social and market rents is marginal, with the remaining able to because of their higher market values.

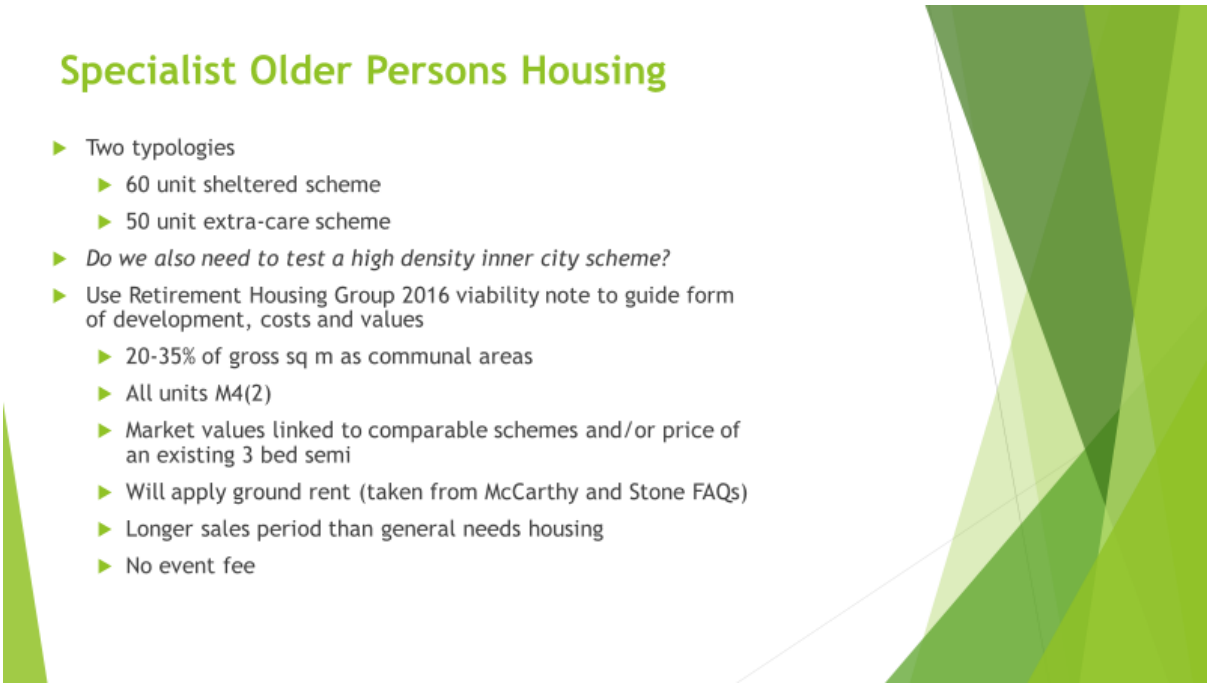
- Some S106 contributions has been used to fund affordable housing in lower value areas – however the delivery has been very low.

- Noted that the current draft of the GMSF does not set a % target for AH but does indicate overall numbers required and that AH is to be delivered through various mechanisms. GMCA noted that the GMSF is not relying on S106 to deliver AH. Workshop noted this but still commented on need to ensure that this level of AH (25%) ask was tested;

- Voids and bad debts are being affected by Universal Credit and rent arrears are increasing. 4% void and bad debts put forward as a more reliable level based on local experiences;

- Based on RP experience suggested that the testing should use 35% SO share size in lower value areas and 40% in higher values – or could compromise at 35% across Greater Manchester for this study.

Specialist older persons housing



3D highlighted the assumptions for specialist older persons housing proposed and use the RHG guide and include additional non saleable space and build costs (https://retirementhousinggroup.com/rhg-publications/)

Discussion

Workshops generally agreed with the assumptions with following specific comments

- (Private) Older person housing – more likely to be found in the south of Greater Manchester and would expect larger developments than shown above as Op1 - at c 60 – 80 units and could be up to 100. (in 3/3.5 storey developments). Extra care schemes tend to be predominantly 2 bed units

- Sites for older persons housing were traditionally in more suburban locations but increasingly moving towards locations with high levels of accessibility and may be found on former industrial land or other uses e.g. ex car dealerships

It is acknowledged that in London that this increases to 120 bed and located within centres, however no evidence in Manchester of elderly accommodation in the city centre. Costs to incorporate elderly persons housing within multi storey open market residential schemes are likely to make it unviable.

Construction Costs

Construction costs - base build

Flats and apartments	Cost/sq m GIA
Flats (1-2 storeys)	£1,270
Flats (3-5 storeys)	£1,310
Flats (6 storey)	£1,610
Tower blocks (7 -15 storeys)	£2,280
Tower blocks (16- 29 storeys)	£2,700
Tower blocks (30 - 49 storeys)	£3,200

Houses	Cost/sq m GIA
Terrace house	£1,200
Semi detached houses	£1,130
Detached houses	£1,280

Other residential	Cost/sq m GIA
PB student	£1,750
Extra care	£1,550
Sheltered	£1,270

- Build costs based on benchmarking exercise by cost consultants
- GM averages shown - potential to vary according to value area being explored

Construction costs - externals and site prep/enabling

Type	Cost	Measure
Externals (plot works)	7%	of base build costs
Externals ('tall' buildings)	£1m	per building
Opening up, land preparations and site infrastructure (GF)	25%	of base build costs
Demolition, decontamination, remediation and site wide infrastructure (BF)	30%	of base build costs
Garages	£8,500	per detached unit

Construction costs - other standard costs

Type	Cost	Measure
Professional fees	7%	of build costs
Finance	6%	of development costs
Marketing fees	3%	of GDV
Developer return	17.5%	of GDV
Contractor return (affordable housing)	6%	of base build costs
Agents and legal	1.75%	land value
SDLT	Prevailing rate	land value

Construction costs - policy and s106 costs

Type	Cost	Measure
Accessibility (M4(2))	£1,500	per unit
Electric charging points	£750	per unit
Education	£3,000	per unit
Open space/play	£3,000	per unit
Transport	£1,000	per unit
Net biodiversity gain	£500	per unit
Carbon reduction	Awaiting figures	

3D explained that cost consultants (Ward Williams Associates) are team members and that they had arrived at the build and associated costs through benchmarking across their own database of comparable schemes. WWA explained their background and basis for the build costs used and referencing BCIS. It was explained by 3D and WWA that the figures presented were an initial review and presented for comment as to their appropriateness for testing and would be considered further as more information from the development industry was forthcoming.

Other development costs are based on national guidance and averages and have been found sound at local plan examinations.

The policy and s106 costs are an average based on a review of planning policy and analysis of signed s106 agreements across the GM local authorities.

Noted that one LA has CIL and this will be considered in the testing. Potential future CIL not taken into account – dealing with current values and costs.

Discussion

Would like to see differentiation in costs between large and small sites – local developers building a 30 unit scheme will have a much higher costs than volume housebuilders;

- Figures for build costs for 7storey + blocks look high. There are a limited number of contractors who can undertake this sort of development and those that do, have established supply chains which keep costs down. Costs shown are about 10% too high – £2500 per sq m maximum for the tallest. BtR costs could be slightly higher, reflecting a higher spec.

- Half of allocated sites may not be deliverable based on these calculations;

- External works –both workshops described as low – one workshop quoting 10-15% of build costs and the other12-13% of base build costs. But there was some uncertainty about what is included as 'external works' and list below is for clarification.

- Garages may need to be split between double garage/single garage - Proportion of double garages in low density schemes will increase as % detached in the scheme increases;

- Developer return – higher return needed in more challenging regeneration areas and for SMEs – 3D agreed to review for SMEs. Development in GM described as 'risky' and therefore 20% is a minimum and was said to be used by Manchester City Council;

- 6% return for AH contractors is too low but this does depends on payment profile for the site and HAs/LAs working on stage payments which supports a 6% return although others saying that contractors return of 8/9% more typical. Consultant team requested to Look at neighbouring local authority viability studies for accepted levels of returns.

- One workshop commented that contingency costs should be factored in – 3% on greenfield, 5% on brownfield. The other workshop was silent on this;

- Electrical charging points per unit or per parking space, these are likely to be trickle charge rather than the expensive quick charge;

- Net biodiversity gain – only applied for certain areas. GMEU can provide assistance on Biodiversity Net Gain and has tested the Defra metric for biodiversity net gain on within recent planning applications. Calculator available to assist;

- No comments on the allowances for opening up and strategic infrastructure but participants wary of commenting until have had the opportunity to consider further and have been able to review the schedule of costs included as part of the external works and those allocated to opening up costs (as shown in this note).

- Volume house builders do not have cost consultants – this work will be done in house.

- Developer return – stronger return in challenging market areas. Smaller developers may require a stronger developer return, suggested at 25%. They also do not benefit from a competitive finance rate (due to economies of scale).

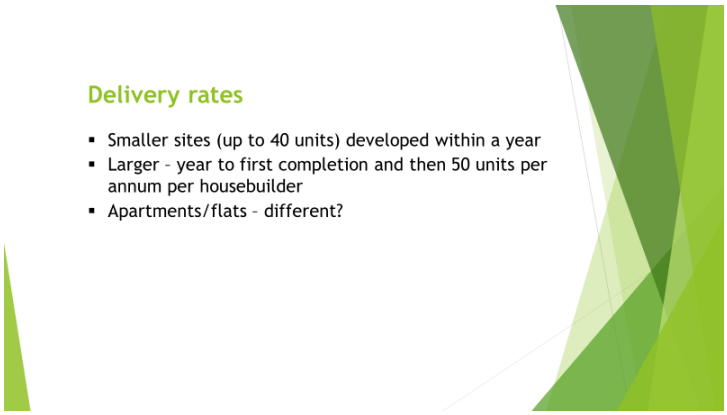
- There was a suggestion that 6% return is not enough for the affordable housing contractor return – Consultant team explained that this figure has been tested at numerous examinations.

- It was suggested that there could be inconsistency with area wide viability testing in other authorities in the north west e.g. Lancaster

3D clarified that CIL will be included as a cost for allocated sites if applicable. For the generic testing, as CIL is only raised by one local authority, it will not be appropriate to include within the base testing. If there is a significant difference between the S106 allowance and the combined S106 ask and CIL then a sensitivity test may be considered.

3D confirmed that land value (based on the BLV) would be included within the cashflow analysis.

Delivery Rates



Workshop discussion

Discussion focussed on the rate of delivery and number of developers on site. The following ratios were suggested by the workshops:

- 2 flags over a certain number of units - 250 at one workshop, 500 at the other
- 4 flags 3,000 + units

Sales rates for flats vary by type of development.

50 units per annum for each flag considered to be acceptable (if includes AH) for larger schemes but is an optimistic rate for smaller schemes (say schemes of 50 units and below) which won't complete within 1 year. Consultant team confirmed that the assessment starts on 'breaking ground'

Non residential uses

Following a query from the workshop, the consultant team noted that would also be considering viability of non-residential uses on allocated sites following same principles as set out for residential uses.

Close of workshop

The consultant team thanked those attending the workshop for their contributions and noted that a note of the combined workshops would be circulated for comment, with a request for workshop participants to provide additional evidence to the consultant team, to support any alternative assumptions they wished to put forward.

The workshop will be given two to three weeks to review the draft notes once these have been distributed.

Where agreed site promoters and developers for the allocations in the GMSF will be contacted shortly to initialise discussion – with interviews to take place in October - December to establish further information about their relevant sites which will need to be considered in the viability testing.

Breakdown of plot (externals) and site infrastructure/ opening costs

There were requests at the workshop to include a breakdown of what was included within the plot externals and other site infrastructure and opening up costs set out in the presentation. The breakdown is that used for the figures set out in the presentation although following further discussion is potentially subject to change:

Plot (external) works on greenfield sites only (7%)

1. Front garden wall (OR 4, below)
2. Front grass/seeding
3. Back garden grass/seeding
4. Drive = 24m2 (Unlit) (OR 1, above)
5. Fencing (one side + rear and 1 side of front)
6. Single Access Gate
7. Path
8. Incoming services/connections (Excluded)
9. Service Trenching Only (Cables/Pipes included in connection charges)
10. Drainage - foul to front and surface to front and rear (Manholes/Pipework/Connections/RWPs/SVPs' etc. (Under building in housing. Connections out to road elsewhere)

NB:-

a) The above varies in terms of DAS requirements and may exclude drives but include front garden walls etc. but it does NOT include the often quoted ''half road frontage''. ALL roads are included in Infrastructure uplift.

b) Garages are itemised separately.

Infrastructure and land preparation on greenfield sites

We have previously carried out exercises to determine this percentage uplift on Housing for the land preparation and site wide Infrastructure over a wide range of schemes and it does range from

22% to as high as 45%, although most are within the 20 to 30% range. This calculation normally excludes S278 Works, S106 Costs and Abnormals. The first two are separately costed and guidance suggests abnormals should come out of land value. The percentage refers to the addition to base build cost for providing 'normal' Site Works, Drainage, External Services including:-

1. Site Clearance & Tree Protection Fencing (Excludes Demolitions)
2. On Site Carriageways (Secondary & Tertiary) whether full of half frontage including, topsoil strip, road construction, blacktop, kerbs, lighting and trenching.
3. On Site Main Foul & Surface Water Drainage for Site and Roads (Up to Plot Connection)
4. Site wide services (Gas, Water, Electricity, Telecomms) including connections.
5. General site wide landscaping including planting.
6. Open space which may include Buffer Zones and Ecological Corridors depending on extent.
7. Non-Adoptable Parking Spaces in Residential Land Allocation
8. Site Wide Walls & Fencing (Plot Boundary Works In Housing)
9. Landscaping to Common Areas in Residential Land Allocation
10. Adoption & Maintenance Costs for Site Wide Highways & Drainage

NB:-

a) Some items dip in and out of ‘’measured works’’ by sometimes being included in S106 figures (e.g. play space) elsewhere or are additional measures such as SANG land or other mitigation, which is one of the reasons the above percentages vary so much.

Appendix D – Technical detail

1.1 Residential values

1. Greater Manchester has a large range of newbuild residential sales values reflecting the different levels of demand (and household spending power) in different neighbourhoods, a wide geography, and a wide range of dwelling sizes and build types.
2. For this study we have analysed recent prices paid by floor area to produce five value bands (VA1 to VA5) for financial viability testing.
3. It is important to note that within a particular area, metropolitan borough or city there may be wide variation of value per square metre, for example an area that has an average high value may include some localised lower sales values, and vice versa.
4. The set of the market values in Greater Manchester was derived from an analysis of Land Registry data for the period 2016 and 2019 adjusted to July 2019. It is recognised that there are issues in using Land Registry data wholesale because it lags in registering newbuild sales by 3 to 9 months, and dwellings are categorised as being of four types (Detached, Semi-detached, Terraced, and Flats). These four types do not distinguish by dwelling size (floor area) or by build type (especially height). In city centre areas of Greater Manchester prices paid are potentially driven more by floor area and storey height for a given location.

Detailed methodology for market sales values

5. Price Paid Data for all transactions (over 100,000 recorded transactions) in Greater Manchester for the period 2016 - 2019 was downloaded in summer 2019 from the Land Registry website and included addresses, postcodes, Borough/Cities, and type of dwelling as well as the transaction date. The resultant listing of prices paid was inflation adjusted using ONS House Price Index data for Greater Manchester for each transaction date to July 2019.
6. Floor areas for all new build dwellings inspected for an Energy Performance Certificate in Greater Manchester over the same period was also downloaded from the full dataset on the England EPC website and included addresses, postcodes, Boroughs/Cities, and types of dwelling.
7. Measurements for EPCs are required to meet the Net Internal Floor area definition (see EPC website), whereas all financial viability testing values and costs for this report have been based on Gross Internal Area (GIA) as defined by RICS. The differences in area definition can be significant for commercial buildings but for the self-contained space of a residential dwelling is small enough for NIA to be taken to be almost the same as GIA.
8. An algorithm was prepared to match the addresses in both data sets. A total of nearly 9,000 addresses of new build sales in Greater Manchester were matched to EPC addresses. Data that did not match was for a number of reasons, either difficult address formats, flat numbering changes on scheme completion, new postcodes issued for developments after EPC inspection and sometimes after sale, and obvious data entry errors. This was supplemented through manual checking on larger sites to increase the overall rate of success in matching the two databases.
9. These figures were presented at the development industry workshop, with both the broad distribution of value areas and values per dwelling type within each value area. Following the development industry workshop, further work to refine the value was undertaken. Removed from the data set were 'Category B' entries. Category B transactions are non-standard transactions and described by Land Registry as *"Additional Price Paid Entry including transfers*

under a power of sale/repossessions, buy to lets (where they can be identified by a mortgage) and transfers to non-private individuals"[1]. Also, a small number of outliers were removed from the matched data set (less than 0.5% of matches) where either prices, floor areas, or price per square metre were at extremely low or extremely high figures.

10. The full dataset was then sorted into five bands using the Jenks Natural Break Classification method which is a data clustering method designed to determine the best arrangement of values into groups that are statistically distinct from each other and ensures a statistically consistent distribution of values within bands and across the whole data set.[2]

11. Data ranged from c. £1,410 psqm to c. £4,930 psqm, and is shown in the figure below, with the occurrence pattern and as a table with the full range by value area band set out below:

Figure D1 Data range and occurrence

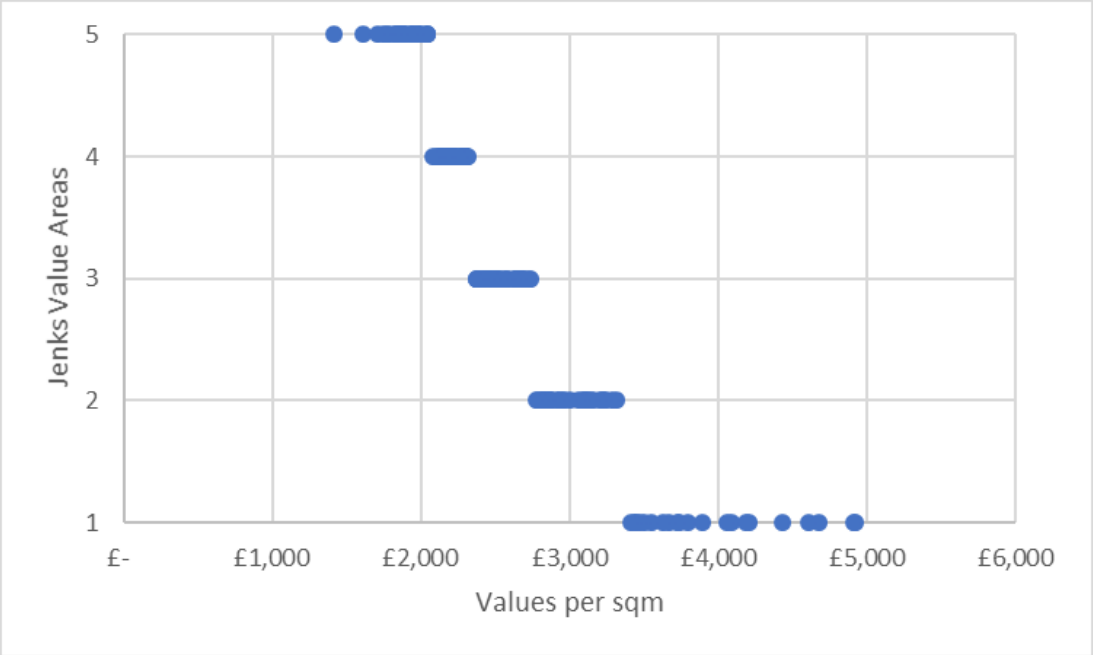


Table D1 Value area band and range of values by £psqm

Value Area band	Value range (£ per sqm)	Class
VA1	£3,400 - £4,930	Higher
VA2	£2,770 - £3,400	Medium high
VA3	£2,370 - £2,770	Medium
VA4	£2,070 - £2,370	Medium low
VA5	£1,410 - £2,070	Lower

1 https://www.gov.uk/guidance/about-the-price-paid-data#explanations-of-column-headers-in-the-ppd
2 A full definition for Jenks is as follows: The Jenks optimization method, also called the Jenks natural breaks classification method, is a data clustering method designed to determine the best arrangement of values into different classes. This is done by seeking to minimize each class's average deviation from the class mean, while maximizing each class's deviation from the means of the other groups. In other words, the method seeks to reduce the variance within classes and maximize the variance between classes.

12. During the course of the study, consultation with Bury Borough Council suggested that market sales within their area were lower than expected. Further analysis undertaken by the council found that the Land Registry had recorded 75 new build transactions at market sale but were known to the council as discounted market sale (with a 25% reduction) and counted as affordable housing by the council. To test the impact, the relevant records were updated with the original sales price prior to the reduction. The effect on property types within values areas is shown in the table below, noting that transactions were in VA2, VA3 and VA4.

Table D2 Sales value adjustment

House type	VA2 % change	VA3% change	VA4 % change
Terrace	0.1%	0.3%	0.0%
Semi	0.5%	0.8%	0.2%
Detached	0.1%	0.1%	0.0%

13. The impact of revising the data is very limited and in real terms only represents on average a £6 increase in values. Therefore, whilst it is recognised that the Land Registry data includes discount market sale for its records in Bury, it is not significant enough to prompt a change to the values or value areas.

1.2 Approach to identifying typologies

14. The testing to be undertaken in the VASF is of two types – a series of generic typologies to represent the general housing supply identified in the GMSF and the sites allocated through the GMSF. In terms of the allocations the details are set out separately in the *'Allocated Sites Viability Report'*. The focus of this report is the remaining site supply, effectively that identified through the GM SHLAA process and any windfall sites that come forward over the life of the GMSF.

15. The generic typologies were identified through analysis of the SHLAA data (2018) supplied by the 10 local authorities within GM. The SHLAA[3] data covers a total of 4,222 sites which comprise approximately 197,300 units (extends beyond the GMSF period) across a wide range of site sizes. This report does not seek to test the validity of the SHLAA data but draws on the SHLAA data to come to a view as to a suitable range of sites to test. The SHLAA data has been analysed in a number of ways to help ensure the typologies selected are a representation in terms of both types and sizes of sites as well as location.

Sites by value area

16. Nearly half of the SHLAA supply is anticipated to come forward in the highest value areas (VA1 and VA2), however just over a third is from the lowest value areas (VA4 and VA5).

Table D3 SHLAA site supply within GMSF period

Site size	Total units	% within VA 1	% within VA 2	% within VA 3	% within VA 4	% within VA 5
Value area split	181,041	33%	14%	15%	19%	18%

[3] The 2018 edition of the SHLAA has been used to inform the approach, it is understood that this was updated during the course of this study and that a 2019 version is now available.

Size of sites

17. In the following table it can be seen that only 4% of the supply from SHLAA sites is anticipated on sites of 10 and under dwellings. Nearly 40% is on sites of 101 to 500 and nearly 35% on sites of over 500 dwellings. The distribution of site sizes within each of the value area bands is varied and other than in value areas VA4 and VA5 there are no similarities or distinct patterns.

Table D4 SHLAA site supply – size of sites

Site size	% of total units	% within VA 1	% within VA 2	% within VA 3	% within VA 4	% within VA 5
10 and under	4%	2%	5%	8%	5%	5%
11 to 50 units	13%	5%	12%	23%	15%	18%
51 to 100 units	10%	4%	8%	20%	12%	13%
101 to 250 units	19%	15%	19%	23%	18%	21%
251 to 500 units	19%	29%	18%	16%	13%	12%
501 to 1000 units	14%	22%	10%	3%	14%	8%
1,001 plus	22%	23%	28%	6%	23%	23%

Site types

18. The SHLAA data provides information as to whether sites are greenfield, brownfield or a mix. Nearly three quarters of the SHLAA supply is anticipated to come forward on brownfield sites. Where there is greenfield supply this is mainly on small to medium and very large sites. On 'mixed' sites it is understood from the local authorities that most of the land is brownfield with small pockets of greenfield and often 'reclaimed' greenfield, with limited value, rather than more traditional greenfield agricultural areas.

Table D5 SHLAA site supply – site types by site size

Site size	Brownfield	Greenfield	Mixed
All	**74%**	**13%**	**13%**
10 and under	78%	17%	4%
11 to 50 units	73%	19%	8%
51 to 100 units	71%	18%	11%
101 to 250 units	76%	16%	8%
251 to 500 units	86%	10%	4%
501 to 1000 units	75%	12%	13%

19. As well as analysing the types of sites by size, it is also useful to review by value area, as shown in the following table. In VA1 the supply is nearly exclusively on brownfield sites, the highest proportion of greenfield within the value areas is VA3 at 26%. Whilst in VA2, VA4 and VA5 there is a wider mix, it is still predominantly brownfield.

Table D6 SHLAA site supply – site types by value area

Site types	% within VA1	% within VA2	% within VA3	% within VA4	% within VA5
Brownfield	97%	73%	64%	55%	62%
Greenfield	1%	19%	26%	20%	14%
Mixed	2%	8%	10%	25%	24%

Mix

20. The mix in terms of houses, flats or a mix of both is also an important consideration. The following tables show the mix by both site size and value areas. Unlike areas outside major conurbations, on the larger SHLAA sites it is planned that there will be a higher proportion of flatted development, whereas on the smaller sites, houses tend to be the more favoured mix. This reflects the SHLAA reliance on large higher density schemes, especially in the higher value areas. Houses tend to dominate in the lower value areas, with flat only schemes more limited.

Table D7 SHLAA site supply – site mix by site size

Site size	House only	Flat only	Mixed
10 and under	57%	37%	6%
11 to 50 units	54%	33%	13%
51 to 100 units	54%	32%	14%
101 to 250 units	37%	39%	24%
251 to 500 units	24%	59%	17%
501 to 1000 units	19%	61%	20%

Table D8 SHLAA site supply – site mix by value area

Site size	House only	Flat only	Mixed
All sites	31%	44%	25%
VA1	2%	85%	13%
VA2	13%	46%	41%
VA3	62%	17%	21%
VA4	51%	17%	33%
VA5	48%	21%	31%

21. For sites of over 1,000 dwellings, they are fewer than in the other size categories but due to their size and overall contribution to the housing supply they require further consideration in terms of their characteristics as set out in the following table. The table is informed by consultation with each of the local authorities with sites of 1,001 plus within their area.

Table D9 SHLAA site supply – large site (1,000 plus dwellings) characteristics

Site reference	Local authority	Dwellings	Mix and type	Commentary	Typology
1894-01	Trafford	3000	Flats greenfield	Site has outlined consent	Given site is permitted no need to be considered within the typologies
19-BOL	Bolton	1588	Mixed brownfield	Site now has outline consent, part reserved matters and under construction	Given site is under construction no need to be considered within the typologies
111719/FO/2016/C1	Manchester	1508	Flats brownfield	Site is under construction	Given site is under construction no need to be considered within the typologies
Chee_Cap_003 – Lower Irk Northern Gateway	Manchester	3000 – revised to 4,052	Very high density flats and maisonettes, mainly low value brownfield	These sites are part of the Northern Gateway, a planned regeneration area of around 16,000 new homes and supporting employment, infrastructure and services. The Northern Gateway is being delivered through a joint venture between Manchester City Council and the Far East Consortium. Areas closer to the city centre and around proposed transport hub will be high density. Values should reflect proximity to city centre rather than current housing stock.	Brownfield flat led 2,500 dwellings
Chee_Cap_900 – New Town Northern Gateway	Manchester	2000 – revised to 4,286	Very high density flats and maisonettes, mainly low value brownfield		Brownfield flat led 2,500 dwellings
Mile_Cap_701 – Collyhurst South Northern Gateway	Manchester	1500 – revised to 1,185	High density housing and flats, mainly low value brownfield		Brownfield mixed 1,500 dwellings
Harp_Cap_502 – Collyhurst Village Northern Gateway	Manchester	2000 – revised to 1,794	High density housing and flats, mainly low value brownfield		Brownfield mixed 1,500 dwellings
Vauxhall Gardens Harp_Cap_1000 – Northern Gateway	Manchester	1250 – revised to 1,657	Very high density flats and maisonettes, mainly low value brownfield		Brownfield flat led 2,500 dwellings

Brad_Cap_800	Manchester	4148	Mixed brownfield	Site entry reviewed and now considered beyond GMSF period	Site has been removed, so no need to be considered within the typologies
CC_Cap_002a	Manchester	1242	Flats brownfield	Very high density Manchester City Centre, higher value existing use	Brownfield flats 1,500 dwellings
CC_Cap_005	Manchester	1390	Flats brownfield	Very high density Manchester City Centre, higher value existing use	Brownfield flats 1,500 dwellings
CC_Cap_007	Manchester	1300	Flats brownfield	High density mixed existing uses	Brownfield flat led 2,500 dwellings
CC_Cap_705	Manchester	2204	Flats brownfield	Very high density Manchester City Centre, higher value existing use	Brownfield flats 1,500 dwellings
CC_Cap_906	Manchester	1391	Flats brownfield	High density mixed existing uses	Brownfield flat led 2,500 dwellings
S/LAN/057	Salford	1166	Mixed brownfield	Public sector led regeneration scheme, already has the benefit of outline planning and part reserved matter permission	Given the wider site is started no need to be considered within the typologies
S/ORD/012a	Salford	1395	Flats brownfield	Part of the wider Media City development and benefits from Resrved Matters permission	Given the wider site is started no need to be considered within the typologies
S/ORD/014	Salford	1500	Flats brownfield	Hybrid application approved, understood part of the site will be started imminently	Given the site shortly to commence no need to be considered with thin the typologies
SHLAA0001	Wigan	1350	Houses brownfield	Planning permission in place and land	Given site is permitted no

				recently purchased by a developer	need to be considered within the typologies
SHLAA0002	Wigan	1750	Houses brownfield	Public sector led development in partnership with a developer	Given site is permitted no need to be considered within the typologies
SKH17000	Stockport	3521	Mixed brownfield	Site is across the town centre, likely to be bought forward as smaller development parcels	Given site is likely to be 'broken' up no need to be considered within the typologies as the smaller site typologies are already considered within the testing

22. The updated information suggests that since the 2018 SHLAA was compiled over half the of the sites have advanced to gaining planning permission and in many cases have either started on site or are due to commence shortly. For the purposes of testing the plan policies it is considered important to focus the typology representation on the sites that do not yet benefit from planning permission as these are more likely to be impacted by the GMSF policies moving forward.
23. Five of the remaining ten sites are within the Northern Gateway, which is located adjacent and to the north of Manchester City Centre. The site covers approximately 155 hectares to the north of Manchester city centre between Victoria Station, NOMA and the Northern Quarter in the southwest, and Queens Park and the intermediate Ring Road (Queens Road) to the north-east.
24. A Regeneration Framework has been prepared by Manchester City Council (MCC) to guide the future development of one of the largest regeneration projects in the UK, which will include over 15,000 new homes, employment opportunities and associated services and facilities. In April 2017, MCC appointed Far East Consortium International Limited (FEC) as its selected investment and delivery partner to bring forward the regeneration of the Northern Gateway. MCC and FEC will work together on a Joint Venture basis to deliver the regeneration of the Northern Gateway on land controlled by the investment partnership and will work closely with local stakeholders to ensure a comprehensive and co-ordinated approach to delivery, in accordance with the SRF Vision and SRF Development Framework.
25. The regeneration frameworks sets out broad parameters for development across the Northern Gateway, including for the sites listed in Table 4.8. In consultation with MCC it has helped establish the testing assumptions for the high level viability assessment – this includes an understanding that the land cost will be taken at the end of the development period, the

expectation that values adjacent to the city centre will be higher than those to the north, but that the development should be able to sustain its own value uplift and not reflect the lower values that are currently experienced to the north, west and east of the area.

26. In considering the above, two typologies are used to reflect the Northern Quarter and two other sites in the city centre that have similar characteristics. A high density scheme of 1,500 units with a mix of housing and flats and a very high density scheme of 2,500 units which is largely led with flats but likely to include some larger units in the form of maisonettes and/or terraces. A further typology is also included to reflect very high density schemes within the city centre but outside the Northern Quarter. These are all located within the Deansgate ward, so it the values that apply specifically to Deansgate are used in the testing.

1.3 Viability appraisals

27. The GM authorities have made available viability appraisals that have been submitted to support planning applications. These have been provided on a confidential basis and have therefore been annoymised in the table below. Also set out are details on fees and developer return, which have been used to help inform the figures used in the testing.

Table D9 Viability appraisal summary

Viability appraisal Ref.	Benchmark land value (per hectare)	BLV notes	Professional fees (%)	Sales & Marketing	Assumed Profit (%)	Finance (%)
1	Not stated		7.50%	£1020 per unit	Profit given as an output	5.75%
2	Not stated		10.00%	2.00%	15%	not stated
3	£1,096,491	AUV for general resi uses (although no resi permission)	10.00%	4.00%	20%	6%
4	£1,585,006		10.00%	5.50%	20%	6%
5	£1,000,000		7.00%	3.50%	20%	6.00%
6	£741,316		7.50%	3.50%	18.5%	6.5%
7	£741,316	£300,000 per gross dev acre (£1,090,200 per gross dev ha)	7.50%	Not stated	18.14%	6.50%
8	£655,000		7.50%	3.50%	19.16%	6.50%

9	£739,796	based on EUV "with a suitable premium"	7.50%	3.50%	18.00%	6.50%
10	£983,854		10.00%	2.00%	20.00%	7.00%
11	£9,151,423	EUV + 20% uplift	8.00%	3.00%	20.00%	6.50%
12	£3,062,000	No justification for high BLV	7.03%	2.50%	Profit given as an output	6.94%
13	£2,187,500		8.00%	£1000 per unit	20.00%	7.00%
14	£971,845		7.50%	none included	11%	6.50%
15	£595,238	EUV plus premium, accounting for abnormal	10.00%	£1000 per unit	Profit given as an output	7.00%
16	£887,709	EUV + 30% uplift	7.50%	3.50%	18%	6.50%
17	£1,112,762	Based on local comparables	7.00%	4.00%	20%	6.55%
18	£371,642	Based on local councils assessment of employment land	7.50%	3.75%	20%	6.50%
19	£0					
20	£1,250,000	Based on existing use of the pub	8.00%	£1000 per unit	20%	12.00%
21	£284,404		6.00%	3.50%	17.5%	6.00%
22	£322,455		6.00%	Not stated	20.0%	6.00%
23	£588,235	Clients purchase price in 2017	not stated	Not stated	15.0%	7.00%
24	Not stated		Not stated	Not stated	Not stated	Not stated

25	£403,225.81	sold to RMBC in 2008 for £1.8m, then more recently sold on to Guiness for £500K	6.00%	3.00%	18.0%	7.00%
26	£285,171.10		6.50%		9.0%	6.50%
27	£27,323.38		Not stated	£5K plot	Not stated	Not stated
28	£300,000.00		8.00%	3.50%	17.5%	Not stated
29	£249,150.62		7.00%	3.00%	17.5%	7.00%
30	Not stated		Not stated	Not stated	Not stated	Not stated
31	£972,972.97		6.00%	3.00%	20.0%	6.75%
32	£1,185,714.29	BLV based on price already paid for the land.	not specified	not specified	13.4%	not specified
33	£750,000	Based on PBA CIL study for Oldham	8.00%	1.50%	20.0%	7.00%
34	£772,177	Based on Agent's judgement + 25% - despite agent's EUV calculations coming up with c.£440,000/ha	4.00%	1.00%	20.0%	not included
35	£309,980	Unevidenced "extremely conservative"	7.00%	£3,000/unit incentive	5.10%	6.50%
36	£15,416,666.67	Used 20% over estimated EUV (ind - city centre)	7.00%	2.50%	16.6% on GDV, 20% on costs	5.00%
37	£15,760,869.57	Did a 'proper' EUV calc then said - this is what the land	8.00%	2% for agents and legals plus £1,000	20% GDV	7.00%

		is worth as resi and plumped for £1.45m! Used £20k a plot as a 'going rate'		per unit for marketing		

Appendix E – Summary of testing results

Scheme Details								Housing Details						Scheme Results	
Value Area	Scheme Ref	Test Ref	Scheme Type	Greenfield/ Brownfield	Dwgs	Gross Ha	Net Ha	Mkt%	Total AH %	Social Rent %	Affordable Rent %	Shared ownership %	Low Cost Home ownership %	**Scheme RV less Dev & Cont Rtn**	Scheme RV less Dev & Cont Rtn PER DWELLING
VA1	A2	Test 1	Houses	Brownfield	5	0.13	0.13	100.00%	0.00%					**919,436**	£183,887
VA1	A3	Test 1	Flats	Brownfield	5	0.04	0.04	100.00%	0.00%					**279,018**	£55,804
VA1	B2	Test 1	Houses	Brownfield	30	1.04	0.79	100.00%	0.00%					**5,427,816**	£180,927
VA1	B2	Test 2	Houses	Brownfield	30	1.04	0.79	90.00%	10.00%	10.00%				**4,566,167**	£152,206
VA1	B2	Test 3	Houses	Brownfield	30	1.04	0.79	90.00%	10.00%		6.00%	4.00%		**4,761,665**	£158,722
VA1	B2	Test 3	Houses	Brownfield	30	1.04	0.79	80.00%	20.00%		12.00%	8.00%		**4,165,363**	£138,845
VA1	B3	Test 1	Flats	Brownfield	30	0.08	0.08	100.00%	0.00%					**1,461,007**	£48,700
VA1	B3	Test 2	Flats	Brownfield	30	0.08	0.08	90.00%	10.00%	10.00%				**1,134,412**	£37,814
VA1	B3	Test 3	Flats	Brownfield	30	0.08	0.08	90.00%	10.00%		6.00%	4.00%		**1,253,852**	£41,795
VA1	B3	Test 3	Flats	Brownfield	30	0.08	0.08	80.00%	20.00%		12.00%	8.00%		**1,046,696**	£34,890
VA1	C3	Test 1	Flats	Brownfield	75	0.13	0.13	100.00%	0.00%					**3,809,002**	£50,787
VA1	C3	Test 2	Flats	Brownfield	75	0.13	0.13	90.00%	10.00%	10.00%				**2,964,157**	£39,522
VA1	C3	Test 3	Flats	Brownfield	75	0.13	0.13	90.00%	10.00%		6.00%	4.00%		**3,271,714**	£43,623
VA1	C3	Test 3	Flats	Brownfield	75	0.13	0.13	80.00%	20.00%		12.00%	8.00%		**2,734,427**	£36,459
VA1	D3	Test 1	Flats	Brownfield	150	0.24	0.24	100.00%	0.00%					**2,376,241**	£15,842
VA1	D3	Test 2	Flats	Brownfield	150	0.24	0.24	90.00%	10.00%	10.00%				**626,081**	£4,174
VA1	D3	Test 3	Flats	Brownfield	150	0.24	0.24	90.00%	10.00%		6.00%	4.00%		**1,259,827**	£8,399
VA1	D3	Test 3	Flats	Brownfield	150	0.24	0.24	80.00%	20.00%		12.00%	8.00%		**143,412**	£956
VA1	E1	Test 1	Flats	Brownfield	300	0.28	0.28	100.00%	0.00%					**-9,100,878**	-£30,336
VA1	E1	Test 2	Flats	Brownfield	300	0.28	0.28	90.00%	10.00%	10.00%				**-12,817,246**	-£42,724
VA1	E1	Test 3	Flats	Brownfield	300	0.28	0.28	90.00%	10.00%		6.00%	4.00%		**-11,473,703**	-£38,246
VA1	E2	Test 1	Mixed	Brownfield	300	0.31	0.31	100.00%	0.00%					**21,372,106**	£71,240
VA1	E2	Test 2	Mixed	Brownfield	300	0.31	0.31	90.00%	10.00%	10.00%				**16,985,794**	£56,619
VA1	E2	Test 3	Mixed	Brownfield	300	0.31	0.31	90.00%	10.00%		6.00%	4.00%		**18,747,138**	£62,490
VA1	E2	Test 3	Mixed	Brownfield	300	0.31	0.31	80.00%	20.00%		12.00%	8.00%		**16,115,227**	£53,717
VA1	F1	Test 1	Flats	Brownfield	800	1.08	0.87	100.00%	0.00%					**-28,196,115**	-£35,245
VA1	F1	Test 2	Flats	Brownfield	800	1.08	0.87	90.00%	10.00%	10.00%				**-39,760,557**	-£49,701
VA1	F1	Test 3	Flats	Brownfield	800	1.08	0.87	90.00%	10.00%		6.00%	4.00%		**-35,766,991**	-£44,709
VA1	G1a	Test 1	Mixed	Brownfield	1,500	25.00	20.00	100.00%	0.00%					**53,970,233**	£35,980
VA1	G1a	Test 2	Mixed	Brownfield	1,500	25.00	20.00	90.00%	10.00%	10.00%				**36,094,285**	£24,063
VA1	G1a	Test 3	Mixed	Brownfield	1,500	25.00	20.00	90.00%	10.00%		6.00%	4.00%		**43,703,144**	£29,135
VA1	G1a	Test 3	Mixed	Brownfield	1,500	25.00	20.00	80.00%	20.00%		12.00%	8.00%		**33,339,754**	£22,227
VA1	G2a	Test 1	Flats	Brownfield	1,500	1.58	1.42	100.00%	0.00%					**22,320,072**	£14,880
VA1	G2a	Test 2	Flats	Brownfield	1,500	1.58	1.42	90.00%	10.00%	10.00%				**-2,626,192**	-£1,751
VA1	G2a	Test 3	Flats	Brownfield	1,500	1.58	1.42	90.00%	10.00%		6.00%	4.00%		**1,033,345**	£689
VA1	G2a	Test 3	Flats	Brownfield	1,500	1.58	1.42	80.00%	20.00%		12.00%	8.00%		**-22,426,677**	-£14,951
VA1	H1a	Test 1	Mixed	Brownfield	2,500	12.50	10.00	100.00%	0.00%					**52,135,624**	£20,854
VA1	H1a	Test 2	Mixed	Brownfield	2,500	12.50	10.00	90.00%	10.00%	10.00%				**27,444,367**	£10,978
VA1	H1a	Test 3	Mixed	Brownfield	2,500	12.50	10.00	90.00%	10.00%		6.00%	4.00%		**42,373,511**	£16,949
VA1	H1a	Test 3	Mixed	Brownfield	2,500	12.50	10.00	80.00%	20.00%		12.00%	8.00%		**32,369,824**	£12,948

Scheme Details								Housing Details						Scheme Results	
Value Area	Scheme Ref	Test Ref	Scheme Type	Greenfield/ Brownfield	Dwgs	Gross Ha	Net Ha	Mkt%	Total AH %	Social Rent %	Affordable Rent %	Shared ownership %	Low Cost Home ownership %	**Scheme RV less Dev & Cont Rtn**	Scheme RV less Dev & Cont Rtn PER DWELLING
VA2	A2	Test 1	Houses	Brownfield	5	0.16	0.16	100.00%	0.00%					**264,159**	£52,832
VA2	A3	Test 1	Flats	Brownfield	5	0.04	0.04	100.00%	0.00%					**102,584**	£20,517
VA2	B2	Test 1	Houses	Brownfield	30	0.82	0.63	100.00%	0.00%					**1,878,617**	£62,621
VA2	B2	Test 2	Houses	Brownfield	30	0.82	0.63	95.00%	5.00%	5.00%				**1,596,886**	£53,230
VA2	B2	Test 3	Houses	Brownfield	30	0.82	0.63	95.00%	5.00%		3.00%	2.00%		**1,662,758**	£55,425
VA2	B2	Test 3	Houses	Brownfield	30	0.82	0.63	90.00%	10.00%		6.00%	4.00%		**1,522,574**	£50,752
VA2	B3	Test 1	Flats	Brownfield	30	0.18	0.18	100.00%	0.00%					**333,476**	£11,116
VA2	B3	Test 2	Flats	Brownfield	30	0.18	0.18	95.00%	5.00%	5.00%				**220,277**	£7,343
VA2	B3	Test 3	Flats	Brownfield	30	0.18	0.18	95.00%	5.00%		3.00%	2.00%		**264,837**	£8,828
VA2	B3	Test 3	Flats	Brownfield	30	0.18	0.18	90.00%	10.00%		6.00%	4.00%		**196,196**	£6,540
VA2	C3	Test 1	Flats	Brownfield	75	0.25	0.25	100.00%	0.00%					**1,108,136**	£14,775
VA2	C3	Test 2	Flats	Brownfield	75	0.25	0.25	95.00%	5.00%	5.00%				**815,087**	£10,868
VA2	C3	Test 3	Flats	Brownfield	75	0.25	0.25	95.00%	5.00%		3.00%	2.00%		**929,825**	£12,398
VA2	C3	Test 3	Flats	Brownfield	75	0.25	0.25	90.00%	10.00%		6.00%	4.00%		**751,541**	£10,021
VA2	D2	Test 1	Houses	Brownfield	150	7.63	5.11	100.00%	0.00%					**3,888,069**	£25,920
VA2	D2	Test 2	Houses	Brownfield	150	7.63	5.11	95.00%	5.00%	5.00%				**2,368,999**	£15,793
VA2	D2	Test 3	Houses	Brownfield	150	7.63	5.11	95.00%	5.00%		3.00%	2.00%		**2,718,515**	£18,123
VA2	D2	Test 3	Houses	Brownfield	150	7.63	5.11	90.00%	10.00%		6.00%	4.00%		**1,987,742**	£13,252
VA2	D3	Test 1	Flats	Brownfield	150	0.26	0.26	100.00%	0.00%					**1,250,833**	£8,339
VA2	D3	Test 2	Flats	Brownfield	150	0.26	0.26	95.00%	5.00%	5.00%				**640,705**	£4,271
VA2	D3	Test 3	Flats	Brownfield	150	0.26	0.26	95.00%	5.00%		3.00%	2.00%		**877,073**	£5,847
VA2	D3	Test 3	Flats	Brownfield	150	0.26	0.26	90.00%	10.00%		6.00%	4.00%		**503,435**	£3,356
VA2	E1	Test 1	Flats	Brownfield	300	0.53	0.42	100.00%	0.00%					**2,485,396**	£8,285
VA2	E1	Test 2	Flats	Brownfield	300	0.53	0.42	95.00%	5.00%	5.00%				**1,265,143**	£4,217
VA2	E1	Test 3	Flats	Brownfield	300	0.53	0.42	95.00%	5.00%		3.00%	2.00%		**1,737,999**	£5,793
VA2	E1	Test 3	Flats	Brownfield	300	0.53	0.42	90.00%	10.00%		6.00%	4.00%		**990,600**	£3,302
VA2	E2	Test 1	Mixed	Brownfield	300	5.34	3.38	100.00%	0.00%					**7,901,036**	£26,337
VA2	E2	Test 2	Mixed	Brownfield	300	5.34	3.38	95.00%	5.00%	5.00%				**6,072,279**	£20,241
VA2	E2	Test 3	Mixed	Brownfield	300	5.34	3.38	95.00%	5.00%		3.00%	2.00%		**6,703,457**	£22,345
VA2	E2	Test 3	Mixed	Brownfield	300	5.34	3.38	90.00%	10.00%		6.00%	4.00%		**5,473,198**	£18,244

Scheme Details								Housing Details						Scheme Results	
Value Area	Scheme Ref	Test Ref	Scheme Type	Greenfield/ Brownfield	Dwgs	Gross Ha	Net Ha	Mkt%	Total AH %	Social Rent %	Affordable Rent %	Shared ownership %	Low Cost Home ownership %	**Scheme RV less Dev & Cont Rtn**	Scheme RV less Dev & Cont Rtn PER DWELLING
VA3	A1	Test 1	Houses	Greenfield	5	0.11	0.11	100.00%	0.00%					**209,553**	£41,911
VA3	A2	Test 1	Houses	Brownfield	5	0.11	0.11	100.00%	0.00%					**159,864**	£31,973
VA3	B1	Test 1	Houses	Greenfield	30	0.88	0.67	100.00%	0.00%					**1,027,493**	£34,250
VA3	B1	Test 3	Houses	Greenfield	30	0.88	0.67	95.00%	5.00%		3.00%	2.00%		**851,317**	£28,377
VA3	B2	Test 1	Houses	Brownfield	30	0.88	0.67	100.00%	0.00%					**623,533**	£20,784
VA3	B2	Test 3	Houses	Brownfield	30	0.88	0.67	95.00%	5.00%		3.00%	2.00%		**447,357**	£14,912
VA3	C2	Test 1	Houses	Brownfield	75	1.96	1.39	100.00%	0.00%					**1,544,415**	£20,592
VA3	C2	Test 3	Houses	Brownfield	75	1.96	1.39	95.00%	5.00%		3.00%	2.00%		**1,087,664**	£14,502
VA3	C3	Test 1	Flats	Brownfield	75	0.56	0.45	100.00%	0.00%					**-1,065,325**	-£14,204
VA3	D1	Test 1	Houses	Greenfield	150	4.68	3.13	100.00%	0.00%					**1,403,925**	£9,360
VA3	D1	Test 3	Houses	Greenfield	150	4.68	3.13	95.00%	5.00%		3.00%	2.00%		**-4,274**	-£28
VA3	D2	Test 1	Houses	Brownfield	150	4.68	3.13	100.00%	0.00%					**641,909**	£4,279
VA3	D2	Test 3	Houses	Brownfield	150	4.68	3.13	95.00%	5.00%		3.00%	2.00%		**-322,126**	-£2,148

Scheme Details								Housing Details						Scheme Results	
Value Area	Scheme Ref	Test Ref	Scheme Type	Greenfield/ Brownfield	Dwgs	Gross Ha	Net Ha	Mkt%	Total AH %	Social Rent %	Affordable Rent %	Shared ownership %	Low Cost Home ownership %	**Scheme RV less Dev & Cont Rtn**	Scheme RV less Dev & Cont Rtn PER DWELLING
VA4	A1	Test 1	Houses	Greenfield	5	0.11	0.11	100.00%	0.00%					**85,358**	£17,072
VA4	A2	Test 1	Houses	Brownfield	5	0.11	0.11	100.00%	0.00%					**63,692**	£12,738
VA4	B1	Test 1	Houses	Greenfield	30	0.88	0.67	100.00%	0.00%					**273,492**	£9,116
VA4	B2	Test 1	Houses	Brownfield	30	0.88	0.67	100.00%	0.00%					**86,875**	£2,896
VA4	C1	Test 1	Houses	Greenfield	75	1.99	1.41	100.00%	0.00%					**597,595**	£7,968
VA4	C2	Test 1	Houses	Brownfield	75	1.99	1.41	100.00%	0.00%					**127,932**	£1,706
VA4	D1	Test 1	Houses	Greenfield	150	5.10	3.42	100.00%	0.00%					**-2,425,940**	-£16,173
VA4	D2	Test 1	Houses	Brownfield	150	5.10	3.42	100.00%	0.00%					**-2,129,277**	-£14,195
VA4	E1	Test 1	Flats	Brownfield	300	2.05	1.64	100.00%	0.00%					**-10,473,937**	-£34,913
VA4	E2	Test 1	Mixed	Brownfield	300	10.44	6.62	100.00%	0.00%					**-5,529,189**	-£18,431
VA4	F2	Test 1	Houses	Greenfield	800	50.13	29.37	100.00%	0.00%					**-19,025,391**	-£23,782

Scheme Details								Housing Details						Scheme Results	
Value Area	Scheme Ref	Test Ref	Scheme Type	Greenfield/ Brownfield	Dwgs	Gross Ha	Net Ha	Mkt%	Total AH %	Social Rent %	Affordable Rent %	Shared ownership %	Low Cost Home ownership %	**Scheme RV less Dev & Cont Rtn**	Scheme RV less Dev & Cont Rtn PER DWELLING
VA5	A1	Test 1	Houses	Greenfield	5	0.09	0.09	100.00%	0.00%					**-20,357**	-£4,071
VA5	A2	Test 1	Houses	Brownfield	5	0.09	0.09	100.00%	0.00%					**-37,709**	-£7,542
VA5	B1	Test 1	Houses	Greenfield	30	0.78	0.60	100.00%	0.00%					**-363,981**	-£12,133
VA5	B2	Test 1	Houses	Brownfield	30	0.78	0.60	100.00%	0.00%					**-512,144**	-£17,071
VA5	C1	Test 1	Houses	Greenfield	75	1.76	1.25	100.00%	0.00%					**-1,047,809**	-£13,971
VA5	C2	Test 1	Houses	Brownfield	75	1.76	1.25	100.00%	0.00%					**-1,455,609**	-£19,408
VA5	D1	Test 1	Houses	Greenfield	150	4.81	3.22	100.00%	0.00%					**-5,960,134**	-£39,734
VA5	D2	Test 1	Houses	Brownfield	150	4.81	3.22	100.00%	0.00%					**-5,577,495**	-£37,183
VA5	F2	Test 1	Houses	Greenfield	800	28.15	16.49	100.00%	0.00%					**-32,217,632**	-£40,272

Appendix F – Example appraisal summaries

An illustrative sample of appraisal summaries has been selected and included with this appendix. The summaries include an example of all schemes and examples from all value areas.

VA3 A1 Test 1

Summary Results

Site Details	GMCA Testing - November 2019	Site Address		Site Reference	VA3, updated 26/11/19
				Application No	Scheme A1 Test 1 0%AH
Scheme Description	Houses, Greenfield, Exclude residual s106 & transport costs	Notes			
				Date Saved	04/12/2019

Site Details		
Gross Area	0.11	ha
Net Area	0.11	ha
Net to Gross Ratio	100.0%	
Density	45.45	dwgs per net ha

	Dwellings		GIA (sq m)
Total	5.00		482.1
Market Housing	5.00		482.1
Affordable Housing	-		-
% Affordable Housing	0.00%		

Scheme Revenue

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership
Total No of Dwellings	5.00	5.00	-	-	-	-	-
Total GIA (sq m)	482.1	482.1	-	-	-	-	-
Tenure Split (by % dwellings)		100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue	1,230,200	1,230,200	-	-	-	-	-
Average Revenue per unit	*246,040*	*246,040*	-	-	-	-	-
Average Revenue per sq m GIA	*2,552*	*2,552*	-	-	-	-	-
Total Capital Contributions	-						
Total Commercial Elements	-						
Total Scheme Revenue	**1,230,200**						

Scheme Development Costs

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership	*Per dwelling*	*per sq m*	
Build Cost (inc external works & contingency)	540,860	540,860	-	-	-	-	-	*108,172*	*1,122*	
Additional Dwelling Standards	-	-	-	-	-	-	-	-	-	
Professional Fees	43,269	43,269	-	-	-	-	-	*8,654*	*90*	8.0% *build costs*
Marketing Costs (market housing)	36,906	36,906						*7,381*	*77*	3.0% *market revenue*
Marketing Costs (aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! affordable revenue*
Exceptional Development Costs	138,690	138,690	-	-	-	-	-	*27,738*	*288*	
Planning Obligations Costs	13,185							*2,637*	*27*	
Commercial Elements Costs	-									
Community Infrastructure Levy	-									0.0% *CIL as %Revenue* £0.00 *per market sq m* 0.0% *CIL as %Dev Costs*
Developer's Return for Risk and Profit										
Developer's Return (Market housing)	-							-	-	0.0% *market revenue*
Contractor's Return (Aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! aff build & prof fees*
Total Development Costs	**772,910**							*154,582*	*1,603*	
Total Operating Profit	**457,290**							*91,458*	*949*	

Finance Costs and Residual Value

DCF Period	No DCF	years
Debit Interest Rate	No DCF	
Credit Interest Rate	No DCF	
Annual Discount Rate	No DCF	
Revenue and Capital Contributions	1,230,200	
Total Development Cost	772,910	
Finance Cost	32,452	
Annual Discount Rate Cost	-	
Total Dev Cost, Finance Cost & ADR Cost	805,362	
Gross Residual Value	**424,838**	
Agents Fees	5,178	1.25% residual value (post SDLT)
Legal Fees	2,071	0.50% residual value (post SDLT)
Stamp Duty	10,750	Based on HMRC SDLT rates
Net Residual Value	**406,839**	
per gross ha	*3,698,537*	
per net ha	*3,698,537*	
per dwelling	*81,368*	
per market dwelling	*81,368*	

Notes: *(use Alt+Enter to start a new line)*

VA3 A2 Test 1

Summary Results

Site Details	GMCA Testing - November 2019	Site Address		Site Reference	VA3, updated 26/11/19
Scheme Description	Houses, Brownfield, Exclude residual s106 & transport costs	Notes		Application No	Scheme A2 Test 1 0%AH
				Date Saved	04/12/2019

Site Details		
Gross Area	0.11	ha
Net Area	0.11	ha
Net to Gross Ratio	100.0%	
Density	45.45	dwgs per net ha

	Dwellings	GIA (sq m)
Total	5.00	482.1
Market Housing	5.00	482.1
Affordable Housing	-	-
% Affordable Housing	0.00%	

Scheme Revenue

			Affordable Housing				
	Total	Market	Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership
Total No of Dwellings	5.00	5.00	-	-	-	-	-
Total GIA (sq m)	482.1	482.1	-	-	-	-	-
Tenure Split (by % dwellings)		100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue	1,230,200	1,230,200	-	-	-	-	-
Average Revenue per unit	*246,040*	*246,040*	-	-	-	-	-
Average Revenue per sq m GIA	*2,552*	*2,552*	-	-	-	-	-
Total Capital Contributions	-						
Total Commercial Elements	-						
Total Scheme Revenue	**1,230,200**						

Scheme Development Costs

			Affordable Housing							
	Total	Market	Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership	*Per dwelling*	*per sq m*	
Build Cost (inc external works & contingency)	540,860	540,860	-	-	-	-	-	*108,172*	*1,122*	
Additional Dwelling Standards	-	-	-	-	-	-	-	-	-	
Professional Fees	43,269	43,269	-	-	-	-	-	*8,654*	*90*	*8.0% build costs*
Marketing Costs (market housing)	36,906	36,906						*7,381*	*77*	*3.0% market revenue*
Marketing Costs (aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! affordable revenue*
Exceptional Development Costs	192,854	192,854	-	-	-	-	-	*38,571*	*400*	
Planning Obligations Costs	8,710							*1,742*	*18*	
Commercial Elements Costs	-									
Community Infrastructure Levy	-									*0.0% CIL as %Revenue* *£0.00 per market sq m* *0.0% CIL as %Dev Costs*
Developer's Return for Risk and Profit										
Developer's Return (Market housing)	-							-	-	*0.0% market revenue*
Contractor's Return (Aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! aff build & prof fees*
Total Development Costs	**822,599**							*164,520*	*1,706*	
Total Operating Profit	**407,601**							*81,520*	*846*	

Finance Costs and Residual Value

DCF Period	No DCF	years
Debit Interest Rate	No DCF	
Credit Interest Rate	No DCF	
Annual Discount Rate	No DCF	
Revenue and Capital Contributions	1,230,200	
Total Development Cost	822,599	
Finance Cost	32,452	
Annual Discount Rate Cost	-	
Total Dev Cost, Finance Cost & ADR Cost	855,051	
Gross Residual Value	**375,149**	
Agents Fees	4,584	1.25% residual value (post SDLT)
Legal Fees	1,834	0.50% residual value (post SDLT)
Stamp Duty	8,250	Based on HMRC SDLT rates
Net Residual Value	**360,481**	
per gross ha	*3,277,103*	
per net ha	*3,277,103*	
per dwelling	*72,096*	
per market dwelling	*72,096*	

Notes: *(use Alt+Enter to start a new line)*

VA3 B1 Test 1

Summary Results

Site Details	GMCA Testing - November 2019	Site Address		Site Reference	VA3, updated 26/11/19
Scheme Description	Houses, Greenfield,	Notes		Application No	Scheme B1 Test 1 0%AH
				Date Saved	26/11/2019

Site Details		
Gross Area	0.88	ha
Net Area	0.67	ha
Net to Gross Ratio	76.1%	
Density	44.78	dwgs per net ha

	Dwellings		GIA (sq m)
Total	30.00		2,892.3
Market Housing	30.00		2,892.3
Affordable Housing	-		-
% Affordable Housing	0.00%		

Scheme Revenue

			Affordable Housing				
	Total	Market	Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership
Total No of Dwellings	30.00	30.00	-	-	-	-	-
Total GIA (sq m)	2,892.3	2,892.3	-	-	-	-	-
Tenure Split (by % dwellings)		100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue	7,381,200	7,381,200	-	-	-	-	-
Average Revenue per unit	*246,040*	*246,040*	-	-	-	-	-
Average Revenue per sq m GIA	*2,552*	*2,552*	-	-	-	-	-
Total Capital Contributions	-						
Total Commercial Elements	-						
Total Scheme Revenue	**7,381,200**						

Scheme Development Costs

			Affordable Housing							
	Total	Market	Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership	*Per dwelling*	*per sq m*	
Build Cost (inc external works & contingency)	3,245,161	3,245,161	-	-	-	-	-	*108,172*	*1,122*	
Additional Dwelling Standards	-	-	-	-	-	-	-	-	-	
Professional Fees	259,613	259,613	-	-	-	-	-	*8,654*	*90*	*8.0% build costs*
Marketing Costs (market housing)	221,436	221,436						*7,381*	*77*	*3.0% market revenue*
Marketing Costs (aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! affordable revenue*
Exceptional Development Costs	904,468	904,468	-	-	-	-	-	*30,149*	*313*	
Planning Obligations Costs	236,610							*7,887*	*82*	
Commercial Elements Costs	-									
										0.0% CIL as %Revenue
Community Infrastructure Levy	-									*£0.00 per market sq m*
										0.0% CIL as %Dev Costs
Developer's Return for Risk and Profit										
Developer's Return (Market housing)	-							-	-	*0.0% market revenue*
Contractor's Return (Aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! aff build & prof fees*
Total Development Costs	**4,867,287**							*162,243*	*1,683*	
Total Operating Profit	**2,513,913**							*83,797*	*869*	

Finance Costs and Residual Value

DCF Period	No DCF	years
Debit Interest Rate	No DCF	
Credit Interest Rate	No DCF	
Annual Discount Rate	No DCF	
Revenue and Capital Contributions	7,381,200	
Total Development Cost	4,867,287	
Finance Cost	194,710	
Annual Discount Rate Cost	-	
Total Dev Cost, Finance Cost & ADR Cost	5,061,997	
Gross Residual Value	**2,319,203**	
Agents Fees	27,669	1.25% residual value (post SDLT)
Legal Fees	11,068	0.50% residual value (post SDLT)
Stamp Duty	105,450	Based on HMRC SDLT rates
Net Residual Value	**2,175,016**	
per gross ha	*2,471,609*	
per net ha	*3,246,292*	
per dwelling	*72,501*	
per market dwelling	*72,501*	

Notes: *(use Alt+Enter to start a new line)*

VA3 B2 Test 1

Summary Results

Site Details	GMCA Testing - November 2019	Site Address		Site Reference	VA3, updated 26/11/19
Scheme Description	Houses, Brownfield,	Notes		Application No	Scheme B2 Test 1 0%AH
				Date Saved	26/11/2019

Site Details	
Gross Area	0.88 ha
Net Area	0.67 ha
Net to Gross Ratio	76.1%
Density	44.78 dwgs per net ha

	Dwellings		GIA (sq m)
Total	30.00		2,892.3
Market Housing	30.00		2,892.3
Affordable Housing	-		-
% Affordable Housing	0.00%		

Scheme Revenue

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership
Total No of Dwellings	30.00	30.00	-	-	-	-	-
Total GIA (sq m)	2,892.3	2,892.3	-	-	-	-	-
Tenure Split (by % dwellings)		100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue	7,381,200	7,381,200	-	-	-	-	-
Average Revenue per unit	*246,040*	*246,040*	-	-	-	-	-
Average Revenue per sq m GIA	*2,552*	*2,552*	-	-	-	-	-
Total Capital Contributions	-						
Total Commercial Elements	-						
Total Scheme Revenue	**7,381,200**						

Scheme Development Costs

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership	*Per dwelling*	*per sq m*	
Build Cost (inc external works & contingency)	3,245,161	3,245,161	-	-	-	-	-	*108,172*	*1,122*	
Additional Dwelling Standards	-	-	-	-	-	-	-	-	-	
Professional Fees	259,613	259,613	-	-	-	-	-	*8,654*	*90*	*8.0% build costs*
Marketing Costs (market housing)	221,436	221,436						*7,381*	*77*	*3.0% market revenue*
Marketing Costs (aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! affordable revenue*
Exceptional Development Costs	1,335,278	1,335,278	-	-	-	-	-	*44,509*	*462*	
Planning Obligations Costs	209,760							*6,992*	*73*	
Commercial Elements Costs	-									
Community Infrastructure Levy	-									*0.0% CIL as %Revenue* *£0.00 per market sq m* *0.0% CIL as %Dev Costs*
Developer's Return for Risk and Profit										
Developer's Return (Market housing)	-							-	-	*0.0% market revenue*
Contractor's Return (Aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! aff build & prof fees*
Total Development Costs	**5,271,247**							*175,708*	*1,823*	
Total Operating Profit	**2,109,953**							*70,332*	*730*	

Finance Costs and Residual Value

DCF Period	No DCF	years
Debit Interest Rate	No DCF	
Credit Interest Rate	No DCF	
Annual Discount Rate	No DCF	
Revenue and Capital Contributions	7,381,200	
Total Development Cost	5,271,247	
Finance Cost	194,710	
Annual Discount Rate Cost	-	
Total Dev Cost, Finance Cost & ADR Cost	5,465,957	
Gross Residual Value	**1,915,243**	
Agents Fees	22,872	1.25% residual value (post SDLT)
Legal Fees	9,149	0.50% residual value (post SDLT)
Stamp Duty	85,250	Based on HMRC SDLT rates
Net Residual Value	**1,797,972**	
per gross ha	*2,043,150*	
per net ha	*2,683,541*	
per dwelling	*59,932*	
per market dwelling	*59,932*	

Notes: *(use Alt+Enter to start a new line)*

VA4 C1 Test 1

Summary Results

Site Details	GMCA Testing - November 2019	Site Address		Site Reference	VA4, updated 26/11/19
Scheme Description	Houses, greenfield	Notes		Application No	Scheme C1 Test 1 0%AH
				Date Saved	26/11/2019

Site Details		
Gross Area	1.99	ha
Net Area	1.41	ha
Net to Gross Ratio	70.9%	
Density	53.19	dwgs per net ha

	Dwellings		GIA (sq m)
Total	75.00		6,581.6
Market Housing	75.00		6,581.6
Affordable Housing	-		-
% Affordable Housing	0.00%		

Scheme Revenue

			Affordable Housing				
	Total	Market	Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership
Total No of Dwellings	75.00	75.00	-	-	-	-	-
Total GIA (sq m)	6,581.6	6,581.6	-	-	-	-	-
Tenure Split (by % dwellings)		100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue	14,561,625	14,561,625	-	-	-	-	-
Average Revenue per unit	*194,155*	*194,155*	-	-	-	-	-
Average Revenue per sq m GIA	*2,212*	*2,212*	-	-	-	-	-
Total Capital Contributions	-						
Total Commercial Elements	-						
Total Scheme Revenue	**14,561,625**						

Scheme Development Costs

			Affordable Housing							
	Total	Market	Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership	*Per dwelling*	*per sq m*	
Build Cost (inc external works & contingency)	7,213,461	7,213,461	-	-	-	-	-	*96,179*	*1,096*	
Additional Dwelling Standards	-	-	-	-	-	-	-	-	-	
Professional Fees	577,077	577,077	-	-	-	-	-	*7,694*	*88*	*8.0% build costs*
Marketing Costs (market housing)	436,849	436,849						*5,825*	*66*	*3.0% market revenue*
Marketing Costs (aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! affordable revenue*
Exceptional Development Costs	2,015,642	2,015,642	-	-	-	-	-	*26,875*	*306*	
Planning Obligations Costs	591,525							*7,887*	*90*	
Commercial Elements Costs	-									
										0.0% CIL as %Revenue
Community Infrastructure Levy	-									*£0.00 per market sq m*
										0.0% CIL as %Dev Costs
Developer's Return for Risk and Profit										
Developer's Return (Market housing)	-							-	-	*0.0% market revenue*
Contractor's Return (Aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! aff build & prof fees*
Total Development Costs	**10,834,554**							*144,461*	*1,646*	
Total Operating Profit	**3,727,071**							*49,694*	*566*	

Finance Costs and Residual Value

DCF Period	3	years
Debit Interest Rate	6.0%	
Credit Interest Rate	0.0%	
Annual Discount Rate	0.0%	
Revenue and Capital Contributions	14,561,625	
Total Development Cost	10,834,554	
Finance Cost	581,192	
Annual Discount Rate Cost	-	
Total Dev Cost, Finance Cost & ADR Cost	11,415,746	
Gross Residual Value	**3,145,879**	
Agents Fees	37,489	1.25% residual value (post SDLT)
Legal Fees	14,995	0.50% residual value (post SDLT)
Stamp Duty	146,794	Based on HMRC SDLT rates
Net Residual Value	**2,946,601**	
per gross ha	*1,480,704*	
per net ha	*2,089,788*	
per dwelling	*39,288*	
per market dwelling	*39,288*	

Notes: *(use Alt+Enter to start a new line)*

VA4 C2 Test 1

Summary Results

Site Details	GMCA Testing - November 2019	Site Address		Site Reference	VA4, updated 26/11/19
Scheme Description	Houses, brownfield	Notes		Application No	Scheme C2 Test 1 0%AH
				Date Saved	26/11/2019

Site Details		
Gross Area	1.99	ha
Net Area	1.41	ha
Net to Gross Ratio	70.9%	
Density	53.19	dwgs per net ha

	Dwellings		GIA (sq m)
Total	75.00		6,581.6
Market Housing	75.00		6,581.6
Affordable Housing	-		-
% Affordable Housing	0.00%		

Scheme Revenue

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership
Total No of Dwellings	75.00	75.00	-	-	-	-	-
Total GIA (sq m)	6,581.6	6,581.6	-	-	-	-	-
Tenure Split (by % dwellings)		100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue	14,561,625	14,561,625	-	-	-	-	-
Average Revenue per unit	*194,155*	*194,155*	-	-	-	-	-
Average Revenue per sq m GIA	*2,212*	*2,212*	-	-	-	-	-
Total Capital Contributions	-						
Total Commercial Elements	-						
Total Scheme Revenue	**14,561,625**						

Scheme Development Costs

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership	*Per dwelling*	*per sq m*	
Build Cost (inc external works & contingency)	7,213,461	7,213,461	-	-	-	-	-	*96,179*	*1,096*	
Additional Dwelling Standards	-	-	-	-	-	-	-	-	-	
Professional Fees	577,077	577,077	-	-	-	-	-	*7,694*	*88*	8.0% *build costs*
Marketing Costs (market housing)	436,849	436,849						*5,825*	*66*	3.0% *market revenue*
Marketing Costs (aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! affordable revenue*
Exceptional Development Costs	2,498,866	2,498,866	-	-	-	-	-	*33,318*	*380*	
Planning Obligations Costs	524,400							*6,992*	*80*	
Commercial Elements Costs	-									
Community Infrastructure Levy	-									0.0% *CIL as %Revenue* *£0.00 per market sq m* 0.0% *CIL as %Dev Costs*
Developer's Return for Risk and Profit										
Developer's Return (Market housing)	-							-	-	0.0% *market revenue*
Contractor's Return (Aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! aff build & prof fees*
Total Development Costs	**11,250,653**							*150,009*	*1,709*	
Total Operating Profit	**3,310,972**							*44,146*	*503*	

Finance Costs and Residual Value

DCF Period	3	years
Debit Interest Rate	6.0%	
Credit Interest Rate	0.0%	
Annual Discount Rate	0.0%	
Revenue and Capital Contributions	14,561,625	
Total Development Cost	11,250,653	
Finance Cost	634,756	
Annual Discount Rate Cost	-	
Total Dev Cost, Finance Cost & ADR Cost	11,885,409	
Gross Residual Value	**2,676,216**	
Agents Fees	31,911	1.25% residual value (post SDLT)
Legal Fees	12,765	0.50% residual value (post SDLT)
Stamp Duty	123,311	Based on HMRC SDLT rates
Net Residual Value	**2,508,229**	
per gross ha	*1,260,417*	
per net ha	*1,778,886*	
per dwelling	*33,443*	
per market dwelling	*33,443*	

Notes: *(use Alt+Enter to start a new line)*

VA2 C3 Test 1

Summary Results

Site Details	GMCA Testing - November 2019	Site Address		Site Reference	VA2, updated 26/11/19
Scheme Description	flats, Brownfield, 4 storeys, 3 blocks	Notes		Application No	Scheme C3 Test 1 0%AH
				Date Saved	26/11/2019

Site Details			Dwellings		GIA (sq m)
Gross Area	0.25	ha	Total	75.00	4,588.5
Net Area	0.25	ha	Market Housing	75.00	4,588.5
Net to Gross Ratio	100.0%		Affordable Housing	-	-
Density	300.00	dwgs per net ha	% Affordable Housing	0.00%	

Scheme Revenue

			Affordable Housing				
	Total	Market	Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership
Total No of Dwellings	75.00	75.00	-	-	-	-	-
Total GIA (sq m)	4,588.5	4,588.5	-	-	-	-	-
Tenure Split (by % dwellings)		100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue	11,625,000	11,625,000	-	-	-	-	-
Average Revenue per unit	*155,000*	*155,000*	-	-	-	-	-
Average Revenue per sq m GIA	*2,534*	*2,534*	-	-	-	-	-
Total Capital Contributions	-						
Total Commercial Elements	-						
Total Scheme Revenue	**11,625,000**						

Scheme Development Costs

			Affordable Housing							
	Total	Market	Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership	*Per dwelling*	*per sq m*	
Build Cost (inc external works & contingency)	5,597,970	5,597,970	-	-	-	-	-	*74,640*	*1,220*	
Additional Dwelling Standards	-	-	-	-	-	-	-	-	-	
Professional Fees	447,838	447,838	-	-	-	-	-	*5,971*	*98*	8.0% *build costs*
Marketing Costs (market housing)	348,750	348,750						*4,650*	*76*	3.0% *market revenue*
Marketing Costs (aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! affordable revenue*
Exceptional Development Costs	1,163,581	1,163,581	-	-	-	-	-	*15,514*	*254*	
Planning Obligations Costs	524,400							*6,992*	*114*	
Commercial Elements Costs	-									
Community Infrastructure Levy	-									{ 0.0% *CIL as %Revenue* £0.00 *per market sq m* 0.0% *CIL as %Dev Costs*
Developer's Return for Risk and Profit										
Developer's Return (Market housing)	-							-	-	0.0% *market revenue*
Contractor's Return (Aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! aff build & prof fees*
Total Development Costs	**8,082,539**							*107,767*	*1,761*	
Total Operating Profit	**3,542,461**							*47,233*	*772*	

Finance Costs and Residual Value

DCF Period	3	years	
Debit Interest Rate	6.0%		
Credit Interest Rate	0.0%		
Annual Discount Rate	0.0%		
Revenue and Capital Contributions	11,625,000		
Total Development Cost	8,082,539		
Finance Cost	399,950		
Annual Discount Rate Cost	-		
Total Dev Cost, Finance Cost & ADR Cost	8,482,489		
Gross Residual Value	**3,142,511**		
Agents Fees	37,449	1.25%	residual value (post SDLT)
Legal Fees	14,979	0.50%	residual value (post SDLT)
Stamp Duty	146,626		Based on HMRC SDLT rates
Net Residual Value	**2,943,458**		
per gross ha	*11,773,832*		
per net ha	*11,773,832*		
per dwelling	*39,246*		
per market dwelling	*39,246*		

Notes: *(use Alt+Enter to start a new line)*

VA3 C3 Test 1

Summary Results

Site Details	GMCA Testing - November 2019	Site Address		Site Reference	VA3, updated 26/11/19
Scheme Description	Flats, Brownfield, 5 storeys, 3 blocks	Notes		Application No	Scheme C3 Test 1 0%AH
				Date Saved	26/11/2019

Site Details			Dwellings		GIA (sq m)
Gross Area	0.56 ha	Total	75.00		5,735.3
Net Area	0.45 ha	Market Housing	75.00		5,735.3
Net to Gross Ratio	80.4%	Affordable Housing	-		-
Density	166.67 dwgs per net ha	% Affordable Housing	0.00%		

Scheme Revenue

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership
Total No of Dwellings	75.00	75.00	-	-	-	-	-
Total GIA (sq m)	5,735.3	5,735.3	-	-	-	-	-
Tenure Split (by % dwellings)		100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue	11,625,000	11,625,000	-	-	-	-	-
Average Revenue per unit	*155,000*	*155,000*	-	-	-	-	-
Average Revenue per sq m GIA	*2,027*	*2,027*	-	-	-	-	-
Total Capital Contributions	-						
Total Commercial Elements	-						
Total Scheme Revenue	**11,625,000**						

Scheme Development Costs

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership	*Per dwelling*	*per sq m*	
Build Cost (inc external works & contingency)	6,997,005	6,997,005	-	-	-	-	-	*93,293*	*1,220*	
Additional Dwelling Standards	-	-	-	-	-	-	-	-	-	
Professional Fees	559,760	559,760	-	-	-	-	-	*7,463*	*98*	8.0% *build costs*
Marketing Costs (market housing)	348,750	348,750						*4,650*	*61*	3.0% *market revenue*
Marketing Costs (aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! affordable revenue*
Exceptional Development Costs	1,635,699	1,635,699	-	-	-	-	-	*21,809*	*285*	
Planning Obligations Costs	524,400							*6,992*	*91*	
Commercial Elements Costs	-									
Community Infrastructure Levy	-									0.0% *CIL as %Revenue* £0.00 *per market sq m* 0.0% *CIL as %Dev Costs*
Developer's Return for Risk and Profit										
Developer's Return (Market housing)	-							-	-	0.0% *market revenue*
Contractor's Return (Aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! aff build & prof fees*
Total Development Costs	**10,065,614**							*134,208*	*1,755*	
Total Operating Profit	**1,559,386**							*20,792*	*272*	

Finance Costs and Residual Value

DCF Period	3 years		
Debit Interest Rate	6.0%		
Credit Interest Rate	0.0%		
Annual Discount Rate	0.0%		
Revenue and Capital Contributions	11,625,000		
Total Development Cost	10,065,614		
Finance Cost	590,335		
Annual Discount Rate Cost	-		
Total Dev Cost, Finance Cost & ADR Cost	10,655,950		
Gross Residual Value	**969,050**		
Agents Fees	11,639	1.25%	residual value (post SDLT)
Legal Fees	4,655	0.50%	residual value (post SDLT)
Stamp Duty	37,953		Based on HMRC SDLT rates
Net Residual Value	**914,803**		
per gross ha	*1,633,578*		
per net ha	*2,032,897*		
per dwelling	*12,197*		
per market dwelling	*12,197*		

Notes: *(use Alt+Enter to start a new line)*

VA3 D1 Test 1

Summary Results

Site Details	GMCA Testing - November 2019	Site Address		Site Reference	VA3, updated 26/11/19
Scheme Description	Houses, greenfield,	Notes		Application No	Scheme D1 Test 1 0%AH
				Date Saved	26/11/2019

Site Details	
Gross Area	4.68 ha
Net Area	3.13 ha
Net to Gross Ratio	66.9%
Density	47.92 dwgs per net ha

	Dwellings	GIA (sq m)
Total	150.00	14,461.5
Market Housing	150.00	14,461.5
Affordable Housing	-	-
% Affordable Housing	0.00%	

Scheme Revenue

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership
Total No of Dwellings	150.00	150.00	-	-	-	-	-
Total GIA (sq m)	14,461.5	14,461.5	-	-	-	-	-
Tenure Split (by % dwellings)		100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue	36,906,000	36,906,000	-	-	-	-	-
Average Revenue per unit	*246,040*	*246,040*	-	-	-	-	-
Average Revenue per sq m GIA	*2,552*	*2,552*	-	-	-	-	-
Total Capital Contributions	-						
Total Commercial Elements	-						
Total Scheme Revenue	**36,906,000**						

Scheme Development Costs

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership	*Per dwelling*	*per sq m*	
Build Cost (inc external works & contingency)	16,225,803	16,225,803	-	-	-	-	-	*108,172*	*1,122*	
Additional Dwelling Standards	-	-	-	-	-	-	-	-	-	
Professional Fees	1,298,064	1,298,064	-	-	-	-	-	*8,654*	*90*	*8.0% build costs*
Marketing Costs (market housing)	1,107,180	1,107,180						*7,381*	*77*	*3.0% market revenue*
Marketing Costs (aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! affordable revenue*
Exceptional Development Costs	7,910,456	7,910,456	-	-	-	-	-	*52,736*	*547*	
Planning Obligations Costs	1,183,050							*7,887*	*82*	
Commercial Elements Costs	-									
										0.0% CIL as %Revenue
Community Infrastructure Levy	-									*£0.00 per market sq m*
										0.0% CIL as %Dev Costs
Developer's Return for Risk and Profit										
Developer's Return (Market housing)	-							-	-	*0.0% market revenue*
Contractor's Return (Aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! aff build & prof fees*
Total Development Costs	**27,724,553**							*184,830*	*1,917*	
Total Operating Profit	**9,181,447**							*61,210*	*635*	

Finance Costs and Residual Value

DCF Period	4 years	
Debit Interest Rate	6.0%	
Credit Interest Rate	0.0%	
Annual Discount Rate	0.0%	
Revenue and Capital Contributions	36,906,000	
Total Development Cost	27,724,553	
Finance Cost	1,318,971	
Annual Discount Rate Cost	-	
Total Dev Cost, Finance Cost & ADR Cost	29,043,525	
Gross Residual Value	**7,862,475**	
Agents Fees	93,498	1.25% residual value (post SDLT)
Legal Fees	37,399	0.50% residual value (post SDLT)
Stamp Duty	382,624	Based on HMRC SDLT rates
Net Residual Value	**7,348,954**	
per gross ha	*1,570,289*	
per net ha	*2,347,909*	
per dwelling	*48,993*	
per market dwelling	*48,993*	

Notes: *(use Alt+Enter to start a new line)*

VA3 D2 Test 1

Summary Results

Site Details	GMCA Testing - November 2019	Site Address		Site Reference	VA3, updated 26/11/19
Scheme Description	Houses, brownfield,	Notes		Application No	Scheme D2 Test 1 0%AH
				Date Saved	26/11/2019

Site Details		
Gross Area	4.68	ha
Net Area	3.13	ha
Net to Gross Ratio	66.9%	
Density	47.92	dwgs per net ha

	Dwellings		GIA (sq m)
Total	150.00		14,461.5
Market Housing	150.00		14,461.5
Affordable Housing	-		-
% Affordable Housing	0.00%		

Scheme Revenue

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership
Total No of Dwellings	150.00	150.00	-	-	-	-	-
Total GIA (sq m)	14,461.5	14,461.5	-	-	-	-	-
Tenure Split (by % dwellings)		100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue	36,906,000	36,906,000	-	-	-	-	-
Average Revenue per unit	*246,040*	*246,040*	-	-	-	-	-
Average Revenue per sq m GIA	*2,552*	*2,552*	-	-	-	-	-
Total Capital Contributions	-						
Total Commercial Elements	-						
Total Scheme Revenue	**36,906,000**						

Scheme Development Costs

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership	*Per dwelling*	*per sq m*	
Build Cost (inc external works & contingency)	16,225,803	16,225,803	-	-	-	-	-	*108,172*	*1,122*	
Additional Dwelling Standards	-	-	-	-	-	-	-	-	-	
Professional Fees	1,298,064	1,298,064	-	-	-	-	-	*8,654*	*90*	*8.0% build costs*
Marketing Costs (market housing)	1,107,180	1,107,180						*7,381*	*77*	*3.0% market revenue*
Marketing Costs (aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! affordable revenue*
Exceptional Development Costs	8,609,140	8,609,140	-	-	-	-	-	*57,394*	*595*	
Planning Obligations Costs	1,048,800							*6,992*	*73*	
Commercial Elements Costs	-									*0.0% CIL as %Revenue*
Community Infrastructure Levy	-									*£0.00 per market sq m*
Developer's Return for Risk and Profit										*0.0% CIL as %Dev Costs*
Developer's Return (Market housing)	-							-	-	*0.0% market revenue*
Contractor's Return (Aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! aff build & prof fees*
Total Development Costs	**28,288,987**							*188,593*	*1,956*	
Total Operating Profit	**8,617,013**							*57,447*	*596*	

Finance Costs and Residual Value

DCF Period	4	years
Debit Interest Rate	6.0%	
Credit Interest Rate	0.0%	
Annual Discount Rate	0.0%	
Revenue and Capital Contributions	36,906,000	
Total Development Cost	28,288,987	
Finance Cost	1,516,554	
Annual Discount Rate Cost	-	
Total Dev Cost, Finance Cost & ADR Cost	29,805,541	
Gross Residual Value	**7,100,459**	
Agents Fees	84,449	1.25% residual value (post SDLT)
Legal Fees	33,780	0.50% residual value (post SDLT)
Stamp Duty	344,523	Based on HMRC SDLT rates
Net Residual Value	**6,637,707**	
per gross ha	*1,418,314*	
per net ha	*2,120,673*	
per dwelling	*44,251*	
per market dwelling	*44,251*	

Notes: *(use Alt+Enter to start a new line)*

VA2 D3 Test 1

Summary Results

Site Details	GMCA Testing - November 2019	Site Address		Site Reference	VA2, updated 26/11/19
Scheme Description	Flats, Brownfield, 5 storeys, 2 blocks	Notes		Application No	Scheme D3 Test 1 0%AH
				Date Saved	26/11/2019

Site Details		
Gross Area	0.26	ha
Net Area	0.26	ha
Net to Gross Ratio	100.0%	
Density	576.92	dwgs per net ha

	Dwellings		GIA (sq m)
Total	150.00		9,177.0
Market Housing	150.00		9,177.0
Affordable Housing	-		-
% Affordable Housing	0.00%		

Scheme Revenue

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership
Total No of Dwellings	150.00	150.00	-	-	-	-	-
Total GIA (sq m)	9,177.0	9,177.0	-	-	-	-	-
Tenure Split (by % dwellings)		100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue	23,250,000	23,250,000	-	-	-	-	-
Average Revenue per unit	*155,000*	*155,000*	-	-	-	-	-
Average Revenue per sq m GIA	*2,534*	*2,534*	-	-	-	-	-
Total Capital Contributions	-						
Total Commercial Elements	-						
Total Scheme Revenue	**23,250,000**						

Scheme Development Costs

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership	*Per dwelling*	*per sq m*	
Build Cost (inc external works & contingency)	11,195,940	11,195,940	-	-	-	-	-	*74,640*	*1,220*	
Additional Dwelling Standards	-	-	-	-	-	-	-	-	-	
Professional Fees	895,675	895,675	-	-	-	-	-	*5,971*	*98*	8.0% *build costs*
Marketing Costs (market housing)	697,500	697,500						*4,650*	*76*	3.0% *market revenue*
Marketing Costs (aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! affordable revenue*
Exceptional Development Costs	3,347,942	3,347,942	-	-	-	-	-	*22,320*	*365*	
Planning Obligations Costs	1,048,800							*6,992*	*114*	
Commercial Elements Costs	-									
Community Infrastructure Levy	-									0.0% *CIL as %Revenue* *£0.00 per market sq m* 0.0% *CIL as %Dev Costs*
Developer's Return for Risk and Profit										
Developer's Return (Market housing)	-							-	-	0.0% *market revenue*
Contractor's Return (Aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! aff build & prof fees*
Total Development Costs	**17,185,857**							*114,572*	*1,873*	
Total Operating Profit	**6,064,143**							*40,428*	*661*	

Finance Costs and Residual Value

DCF Period	4	years
Debit Interest Rate	6.0%	
Credit Interest Rate	0.0%	
Annual Discount Rate	0.0%	
Revenue and Capital Contributions	23,250,000	
Total Development Cost	17,185,857	
Finance Cost	744,560	
Annual Discount Rate Cost	-	
Total Dev Cost, Finance Cost & ADR Cost	17,930,417	
Gross Residual Value	**5,319,583**	
Agents Fees	63,301	1.25% residual value (post SDLT)
Legal Fees	25,321	0.50% residual value (post SDLT)
Stamp Duty	255,479	Based on HMRC SDLT rates
Net Residual Value	**4,975,482**	
per gross ha	*19,136,468*	
per net ha	*19,136,468*	
per dwelling	*33,170*	
per market dwelling	*33,170*	

Notes: *(use Alt+Enter to start a new line)*

VA1 E1 Test 1

Summary Results

Site Details	GMCA Testing - November 2019	Site Address		Site Reference	VA1, updated 26/11/19
Scheme Description	Flats, Brownfield, 10 storey, 2 blocks	Notes		Application No	Scheme E1 Test 1 0%AH
				Date Saved	26/11/2019

Site Details		
Gross Area	0.28	ha
Net Area	0.28	ha
Net to Gross Ratio	100.0%	
Density	1,071.43	dwgs per net ha

	Dwellings	GIA (sq m)
Total	300.00	20,625.0
Market Housing	300.00	20,625.0
Affordable Housing	-	-
% Affordable Housing	0.00%	

Scheme Revenue

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership
Total No of Dwellings	300.00	300.00	-	-	-	-	-
Total GIA (sq m)	20,625.0	20,625.0	-	-	-	-	-
Tenure Split (by % dwellings)		100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue	61,200,000	61,200,000	-	-	-	-	-
Average Revenue per unit	*204,000*	*204,000*	-	-	-	-	-
Average Revenue per sq m GIA	*2,967*	*2,967*	-	-	-	-	-
Total Capital Contributions	-						
Total Commercial Elements	-						
Total Scheme Revenue	**61,200,000**						

Scheme Development Costs

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership	*Per dwelling*	*per sq m*	
Build Cost (inc external works & contingency)	42,281,250	42,281,250	-	-	-	-	-	*140,938*	*2,050*	
Additional Dwelling Standards	-	-	-	-	-	-	-	-	-	
Professional Fees	3,382,500	3,382,500	-	-	-	-	-	*11,275*	*164*	8.0% *build costs*
Marketing Costs (market housing)	1,836,000	1,836,000						*6,120*	*89*	3.0% *market revenue*
Marketing Costs (aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! affordable revenue*
Exceptional Development Costs	6,402,915	6,402,915	-	-	-	-	-	*21,343*	*310*	
Planning Obligations Costs	2,097,600							*6,992*	*102*	
Commercial Elements Costs	-									
Community Infrastructure Levy	-									0.0% *CIL as %Revenue* *£0.00 per market sq m* 0.0% *CIL as %Dev Costs*
Developer's Return for Risk and Profit										
Developer's Return (Market housing)	-							-	-	0.0% *market revenue*
Contractor's Return (Aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! aff build & prof fees*
Total Development Costs	**56,000,265**							*186,668*	*2,715*	
Total Operating Profit	**5,199,735**							*17,332*	*252*	

Finance Costs and Residual Value

DCF Period	4	years
Debit Interest Rate	6.0%	
Credit Interest Rate	0.0%	
Annual Discount Rate	0.0%	
Revenue and Capital Contributions	61,200,000	
Total Development Cost	56,000,265	
Finance Cost	3,590,613	
Annual Discount Rate Cost	-	
Total Dev Cost, Finance Cost & ADR Cost	59,590,878	
Gross Residual Value	**1,609,122**	
Agents Fees	19,240	1.25% residual value (post SDLT)
Legal Fees	7,696	0.50% residual value (post SDLT)
Stamp Duty	69,956	Based on HMRC SDLT rates
Net Residual Value	**1,512,231**	
per gross ha	*5,400,824*	
per net ha	*5,400,824*	
per dwelling	*5,041*	
per market dwelling	*5,041*	

Notes: *(use Alt+Enter to start a new line)*

VA1 E2 Test 1

Summary Results

Site Details	GMCA Testing - November 2019	Site Address		Site Reference	VA1, updated 26/11/19
Scheme Description	Mixed, Brownfield, Flats - 5 storey, 2 blocks	Notes		Application No	Scheme E2 Test 1 0%AH
				Date Saved	26/11/2019

Site Details			Dwellings	GIA (sq m)
Gross Area	2.00 ha	Total	300.00	24,227.0
Net Area	1.80 ha	Market Housing	300.00	24,227.0
Net to Gross Ratio	90.0%	Affordable Housing	-	-
Density	166.67 dwgs per net ha	% Affordable Housing	0.00%	

Scheme Revenue

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership
Total No of Dwellings	300.00	300.00	-	-	-	-	-
Total GIA (sq m)	24,227.0	24,227.0	-	-	-	-	-
Tenure Split (by % dwellings)		100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue	83,550,000	83,550,000	-	-	-	-	-
Average Revenue per unit	*278,500*	*278,500*	-	-	-	-	-
Average Revenue per sq m GIA	*3,449*	*3,449*	-	-	-	-	-
Total Capital Contributions	-						
Total Commercial Elements	-						
Total Scheme Revenue	**83,550,000**						

Scheme Development Costs

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership	*Per dwelling*	*per sq m*	
Build Cost (inc external works & contingency)	28,963,096	28,963,096	-	-	-	-	-	*96,544*	*1,195*	
Additional Dwelling Standards	-	-	-	-	-	-	-	-	-	
Professional Fees	2,317,048	2,317,048	-	-	-	-	-	*7,723*	*96*	8.0% *build costs*
Marketing Costs (market housing)	2,506,500	2,506,500						*8,355*	*103*	3.0% *market revenue*
Marketing Costs (aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! affordable revenue*
Exceptional Development Costs	10,355,904	10,355,904	-	-	-	-	-	*34,520*	*427*	
Planning Obligations Costs	2,097,600							*6,992*	*87*	
Commercial Elements Costs	-									
Community Infrastructure Levy	-									0.0% *CIL as %Revenue* £0.00 *per market sq m* 0.0% *CIL as %Dev Costs*
Developer's Return for Risk and Profit										
Developer's Return (Market housing)	-							-	-	0.0% *market revenue*
Contractor's Return (Aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! aff build & prof fees*
Total Development Costs	**46,240,148**							*154,134*	*1,909*	
Total Operating Profit	**37,309,852**							*124,366*	*1,540*	

Finance Costs and Residual Value

DCF Period	4 years	
Debit Interest Rate	6.0%	
Credit Interest Rate	0.0%	
Annual Discount Rate	0.0%	
Revenue and Capital Contributions	83,550,000	
Total Development Cost	46,240,148	
Finance Cost	1,316,496	
Annual Discount Rate Cost	-	
Total Dev Cost, Finance Cost & ADR Cost	47,556,644	
Gross Residual Value	**35,993,356**	
Agents Fees	427,552	1.25% residual value (post SDLT)
Legal Fees	171,021	0.50% residual value (post SDLT)
Stamp Duty	1,789,168	Based on HMRC SDLT rates
Net Residual Value	**33,605,615**	
per gross ha	*16,802,807*	
per net ha	*18,669,786*	
per dwelling	*112,019*	
per market dwelling	*112,019*	

Notes: *(use Alt+Enter to start a new line)*

VA1 F1 Test 1

Summary Results

Site Details	GMCA Testing - November 2019	Site Address		Site Reference	VA1, updated 26/11/19, corrected 05/12/19
Scheme Description	Flats, Brownfield, Flats - 14 storey, 4 blocks	Notes		Application No	Scheme F1 Test 1 0%AH
				Date Saved	26/11/2019

Site Details		
Gross Area	0.96	ha
Net Area	0.87	ha
Net to Gross Ratio	90.6%	
Density	919.54	dwgs per net ha

	Dwellings		GIA (sq m)
Total	800.00		55,000.0
Market Housing	800.00		55,000.0
Affordable Housing	-		-
% Affordable Housing	0.00%		

Scheme Revenue

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership
Total No of Dwellings	800.00	800.00	-	-	-	-	-
Total GIA (sq m)	55,000.0	55,000.0	-	-	-	-	-
Tenure Split (by % dwellings)		100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue	163,200,000	163,200,000	-	-	-	-	-
Average Revenue per unit	*204,000*	*204,000*	-	-	-	-	-
Average Revenue per sq m GIA	*2,967*	*2,967*	-	-	-	-	-
Total Capital Contributions	-						
Total Commercial Elements	-						
Total Scheme Revenue	**163,200,000**						

Scheme Development Costs

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership	*Per dwelling*	*per sq m*	
Build Cost (inc external works & contingency)	112,750,000	112,750,000	-	-	-	-	-	*140,938*	*2,050*	
Additional Dwelling Standards	-	-	-	-	-	-	-	-	-	
Professional Fees	9,020,000	9,020,000	-	-	-	-	-	*11,275*	*164*	*8.0% build costs*
Marketing Costs (market housing)	4,896,000	4,896,000						*6,120*	*89*	*3.0% market revenue*
Marketing Costs (aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! affordable revenue*
Exceptional Development Costs	19,561,500	19,561,500	-	-	-	-	-	*24,452*	*356*	
Planning Obligations Costs	5,593,600							*6,992*	*102*	
Commercial Elements Costs	-									
Community Infrastructure Levy	-									*0.0% CIL as %Revenue* *£0.00 per market sq m* *0.0% CIL as %Dev Costs*
Developer's Return for Risk and Profit										
Developer's Return (Market housing)	-							-	-	*0.0% market revenue*
Contractor's Return (Aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! aff build & prof fees*
Total Development Costs	**151,821,100**							*189,776*	*2,760*	
Total Operating Profit	**11,378,900**							*14,224*	*207*	

Finance Costs and Residual Value

DCF Period	7 years
Debit Interest Rate	6.0%
Credit Interest Rate	0.0%
Annual Discount Rate	0.0%
Revenue and Capital Contributions	163,200,000
Total Development Cost	151,821,100
Finance Cost	11,015,015
Annual Discount Rate Cost	-
Total Dev Cost, Finance Cost & ADR Cost	162,836,115
Gross Residual Value	**363,885**
Agents Fees	4,452
Legal Fees	1,781
Stamp Duty	7,694
Net Residual Value	**349,957**
per gross ha	*364,539*
per net ha	*402,249*
per dwelling	*437*
per market dwelling	*437*

1.25% residual value (post SDLT)
0.50% residual value (post SDLT)
Based on HMRC SDLT rates

Notes: *(use Alt+Enter to start a new line)*

VA5 F2 Test 1

Summary Results

Site Details	GMCA Testing - November 2019	Site Address		Site Reference	VA5
				Application No	Scheme F2 Test 1 0%AH
Scheme Description	Houses, greenfield,	Notes			
				Date Saved	22/11/2019

Site Details		
Gross Area	28.15	ha
Net Area	16.49	ha
Net to Gross Ratio	58.6%	
Density	48.51	dwgs per net ha

	Dwellings		GIA (sq m)
Total	800.00		69,456.0
Market Housing	800.00		69,456.0
Affordable Housing	-		-
% Affordable Housing	0.00%		

Scheme Revenue

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership
Total No of Dwellings	800.00	800.00	-	-	-	-	-
Total GIA (sq m)	69,456.0	69,456.0	-	-	-	-	-
Tenure Split (by % dwellings)		100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue	131,172,000	131,172,000	-	-	-	-	-
Average Revenue per unit	*163,965*	*163,965*	-	-	-	-	-
Average Revenue per sq m GIA	*1,889*	*1,889*	-	-	-	-	-
Total Capital Contributions	-						
Total Commercial Elements	-						
Total Scheme Revenue	**131,172,000**						

Scheme Development Costs

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership	*Per dwelling*	*per sq m*	
Build Cost (inc external works & contingency)	75,984,864	75,984,864	-	-	-	-	-	*94,981*	*1,094*	
Additional Dwelling Standards	-	-	-	-	-	-	-	-	-	
Professional Fees	6,078,789	6,078,789	-	-	-	-	-	*7,598*	*88*	*8.0% build costs*
Marketing Costs (market housing)	3,935,160	3,935,160						*4,919*	*57*	*3.0% market revenue*
Marketing Costs (aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! affordable revenue*
Exceptional Development Costs	37,462,692	37,462,692	-	-	-	-	-	*46,828*	*539*	
Planning Obligations Costs	6,309,600							*7,887*	*91*	
Commercial Elements Costs	-									
Community Infrastructure Levy	-									*0.0% CIL as %Revenue*; *£0.00 per market sq m*; *0.0% CIL as %Dev Costs*
Developer's Return for Risk and Profit										
Developer's Return (Market housing)	-							-	-	*0.0% market revenue*
Contractor's Return (Aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! aff build & prof fees*
Total Development Costs	**129,771,105**							*162,214*	*1,868*	
Total Operating Profit	**1,400,895**							*1,751*	*20*	

Finance Costs and Residual Value

DCF Period	7	years
Debit Interest Rate	6.0%	
Credit Interest Rate	0.0%	
Annual Discount Rate	0.0%	
Revenue and Capital Contributions	131,172,000	
Total Development Cost	129,771,105	
Finance Cost	10,663,427	
Annual Discount Rate Cost	-	
Total Dev Cost, Finance Cost & ADR Cost	140,434,532	
Gross Residual Value	**(9,262,532)**	
Agents Fees	-	0.00% residual value (post SDLT)
Legal Fees	-	0.00% residual value (post SDLT)
Stamp Duty	-	Based on HMRC SDLT rates
Net Residual Value	**(9,262,532)**	
per gross ha	*(329,042)*	
per net ha	*(561,706)*	
per dwelling	*(11,578)*	
per market dwelling	*(11,578)*	

Notes: *(use Alt+Enter to start a new line)*

VA1 G1a Test 1

Summary Results

Site Details	GMCA Testing - March 2020	Site Address		Site Reference	MCC very large sites
Scheme Description	Mixed, Brownfield, Flats - 14 storey, 5 blocks	Notes		Application No	Scheme G1a Test 1 0%AH
				Date Saved	26/11/2019

Site Details			Dwellings		GIA (sq m)
Gross Area	25.00	ha	Total	1,500.00	131,827.5
Net Area	20.00	ha	Market Housing	1,500.00	131,827.5
Net to Gross Ratio	80.0%		Affordable Housing	-	-
Density	75.00	dwgs per net ha	% Affordable Housing	0.00%	

Scheme Revenue

			Affordable Housing				
	Total	Market	Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership
Total No of Dwellings	1,500.00	1,500.00	-	-	-	-	-
Total GIA (sq m)	131,827.5	131,827.5	-	-	-	-	-
Tenure Split (by % dwellings)		100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue	404,010,000	404,010,000	-	-	-	-	-
Average Revenue per unit	*269,340*	*269,340*	-	-	-	-	-
Average Revenue per sq m GIA	*3,065*	*3,065*	-	-	-	-	-
Total Capital Contributions	-						
Total Commercial Elements	-						
Total Scheme Revenue	**404,010,000**						

Scheme Development Costs

			Affordable Housing							
	Total	Market	Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership	*Per dwelling*	*per sq m*	
Build Cost (inc external works & contingency)	202,394,093	202,394,093	-	-	-	-	-	*134,929*	*1,535*	
Additional Dwelling Standards	-	-	-	-	-	-	-	-	-	
Professional Fees	16,191,527	16,191,527	-	-	-	-	-	*10,794*	*123*	8.0% *build costs*
Marketing Costs (market housing)	12,120,300	12,120,300						*8,080*	*92*	3.0% *market revenue*
Marketing Costs (aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! affordable revenue*
Exceptional Development Costs	35,113,169	35,113,169	-	-	-	-	-	*23,409*	*266*	
Planning Obligations Costs	10,488,000							*6,992*	*80*	
Commercial Elements Costs	-									
Community Infrastructure Levy	-									0.0% *CIL as %Revenue* £0.00 *per market sq m* 0.0% *CIL as %Dev Costs*
Developer's Return for Risk and Profit										
Developer's Return (Market housing)	-							-	-	0.0% *market revenue*
Contractor's Return (Aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! aff build & prof fees*
Total Development Costs	**276,307,089**							*184,205*	*2,096*	
Total Operating Profit	**127,702,911**							*85,135*	*969*	

Finance Costs and Residual Value

DCF Period	11	years
Debit Interest Rate	6.0%	
Credit Interest Rate	0.0%	
Annual Discount Rate	0.0%	
Revenue and Capital Contributions	404,010,000	
Total Development Cost	276,307,089	
Finance Cost	3,030,929	
Annual Discount Rate Cost	-	
Total Dev Cost, Finance Cost & ADR Cost	279,338,017	
Gross Residual Value	**124,671,983**	
Agents Fees	1,480,611	1.25% residual value (post SDLT)
Legal Fees	592,244	0.50% residual value (post SDLT)
Stamp Duty	6,223,099	Based on HMRC SDLT rates
Net Residual Value	**116,376,028**	
per gross ha	*4,655,041*	
per net ha	*5,818,801*	
per dwelling	*77,584*	
per market dwelling	*77,584*	

Notes: *(use Alt+Enter to start a new line)*

VA1 G2a Test 1

Summary Results

Site Details	GMCA Testing - November 2019	Site Address		Site Reference	VA1, updated 06/04/20
Scheme Description	Flats, Brownfield, Flats - 15 storey, 6 blocks	Notes		Application No	Scheme G2a Test 1 0%AH
				Date Saved	26/11/2019

Site Details			Dwellings		GIA (sq m)
Gross Area	1.58	ha	Total	1,500.00	103,125.0
Net Area	1.42	ha	Market Housing	1,500.00	103,125.0
Net to Gross Ratio	89.9%		Affordable Housing	-	-
Density	1,056.34	dwgs per net ha	% Affordable Housing	0.00%	

Scheme Revenue

			Affordable Housing				
	Total	Market	Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership
Total No of Dwellings	1,500.00	1,500.00	-	-	-	-	-
Total GIA (sq m)	103,125.0	103,125.0	-	-	-	-	-
Tenure Split (by % dwellings)		100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue	376,500,000	376,500,000	-	-	-	-	-
Average Revenue per unit	*251,000*	*251,000*	-	-	-	-	-
Average Revenue per sq m GIA	*3,651*	*3,651*	-	-	-	-	-
Total Capital Contributions	-						
Total Commercial Elements	-						
Total Scheme Revenue	**376,500,000**						

Scheme Development Costs

			Affordable Housing							
	Total	Market	Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership	*Per dwelling*	*per sq m*	
Build Cost (inc external works & contingency)	211,406,250	211,406,250	-	-	-	-	-	*140,938*	*2,050*	
Additional Dwelling Standards	-	-	-	-	-	-	-	-	-	
Professional Fees	16,912,500	16,912,500	-	-	-	-	-	*11,275*	*164*	*8.0% build costs*
Marketing Costs (market housing)	11,295,000	11,295,000						*7,530*	*110*	*3.0% market revenue*
Marketing Costs (aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! affordable revenue*
Exceptional Development Costs	32,039,750	32,039,750	-	-	-	-	-	*21,360*	*311*	
Planning Obligations Costs	10,488,000							*6,992*	*102*	
Commercial Elements Costs	-									*0.0% CIL as %Revenue*
Community Infrastructure Levy	-									*£0.00 per market sq m*
										0.0% CIL as %Dev Costs
Developer's Return for Risk and Profit										
Developer's Return (Market housing)	-							-	-	*0.0% market revenue*
Contractor's Return (Aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! aff build & prof fees*
Total Development Costs	**282,141,500**							*188,094*	*2,736*	
Total Operating Profit	**94,358,500**							*62,906*	*915*	

Finance Costs and Residual Value

DCF Period	11	years	
Debit Interest Rate	6.0%		
Credit Interest Rate	0.0%		
Annual Discount Rate	0.0%		
Revenue and Capital Contributions	376,500,000		
Total Development Cost	282,141,500		
Finance Cost	6,150,928		
Annual Discount Rate Cost	-		
Total Dev Cost, Finance Cost & ADR Cost	288,292,428		
Gross Residual Value	**88,207,572**		
Agents Fees	1,047,596	1.25%	residual value (post SDLT)
Legal Fees	419,038	0.50%	residual value (post SDLT)
Stamp Duty	4,399,879		Based on HMRC SDLT rates
Net Residual Value	**82,341,059**		
per gross ha	*52,114,594*		
per net ha	*57,986,661*		
per dwelling	*54,894*		
per market dwelling	*54,894*		

Notes: *(use Alt+Enter to start a new line)*

VA1 H1a Test 1

Summary Results

Site Details	GMCA Testing - November 2019	Site Address		Site Reference	VA1, updated 06/04/20
Scheme Description	Flats, Brownfield, Flats - 15 storey, 10 blocks	Notes		Application No	Scheme H1a Test 1 0%AH
				Date Saved	26/11/2019

Site Details	
Gross Area	12.50 ha
Net Area	10.00 ha
Net to Gross Ratio	80.0%
Density	250.00 dwgs per net ha

	Dwellings	GIA (sq m)
Total	2,500.00	188,610.0
Market Housing	2,500.00	188,610.0
Affordable Housing	-	-
% Affordable Housing	0.00%	

Scheme Revenue

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership
Total No of Dwellings	2,500.00	2,500.00	-	-	-	-	-
Total GIA (sq m)	188,610.0	188,610.0	-	-	-	-	-
Tenure Split (by % dwellings)		100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue	600,200,000	600,200,000	-	-	-	-	-
Average Revenue per unit	*240,080*	*240,080*	-	-	-	-	-
Average Revenue per sq m GIA	*3,182*	*3,182*	-	-	-	-	-
Total Capital Contributions	-						
Total Commercial Elements	-						
Total Scheme Revenue	**600,200,000**						

Scheme Development Costs

	Total	Market	Affordable Housing: Social Rent	Affordable Rent	Intermediate Rent	Equity Share	Shared Ownership	*Per dwelling*	*per sq m*	
Build Cost (inc external works & contingency)	333,561,750	333,561,750	-	-	-	-	-	*133,425*	*1,769*	
Additional Dwelling Standards	-	-	-	-	-	-	-	-	-	
Professional Fees	26,684,940	26,684,940	-	-	-	-	-	*10,674*	*141*	8.0% *build costs*
Marketing Costs (market housing)	18,006,000	18,006,000						*7,202*	*95*	3.0% *market revenue*
Marketing Costs (aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! affordable revenue*
Exceptional Development Costs	42,032,791	42,032,791	-	-	-	-	-	*16,813*	*223*	
Planning Obligations Costs	17,480,000							*6,992*	*93*	
Commercial Elements Costs	-									
Community Infrastructure Levy	-									0.0% *CIL as %Revenue* £0.00 *per market sq m* 0.0% *CIL as %Dev Costs*
Developer's Return for Risk and Profit										
Developer's Return (Market housing)	-							-	-	0.0% *market revenue*
Contractor's Return (Aff housing)	-		-	-	-	-	-	*#DIV/0!*	*#DIV/0!*	*#DIV/0! aff build & prof fees*
Total Development Costs	**437,765,481**							*175,106*	*2,321*	
Total Operating Profit	**162,434,519**							*64,974*	*861*	

Finance Costs and Residual Value

DCF Period	11 years	
Debit Interest Rate	6.0%	
Credit Interest Rate	0.0%	
Annual Discount Rate	0.0%	
Revenue and Capital Contributions	600,200,000	
Total Development Cost	437,765,481	
Finance Cost	5,263,895	
Annual Discount Rate Cost	-	
Total Dev Cost, Finance Cost & ADR Cost	443,029,376	
Gross Residual Value	**157,170,624**	
Agents Fees	1,866,532	1.25% residual value (post SDLT)
Legal Fees	746,613	0.50% residual value (post SDLT)
Stamp Duty	7,848,031	Based on HMRC SDLT rates
Net Residual Value	**146,709,447**	
per gross ha	*11,736,756*	
per net ha	*14,670,945*	
per dwelling	*58,684*	
per market dwelling	*58,684*	

Notes: *(use Alt+Enter to start a new line)*