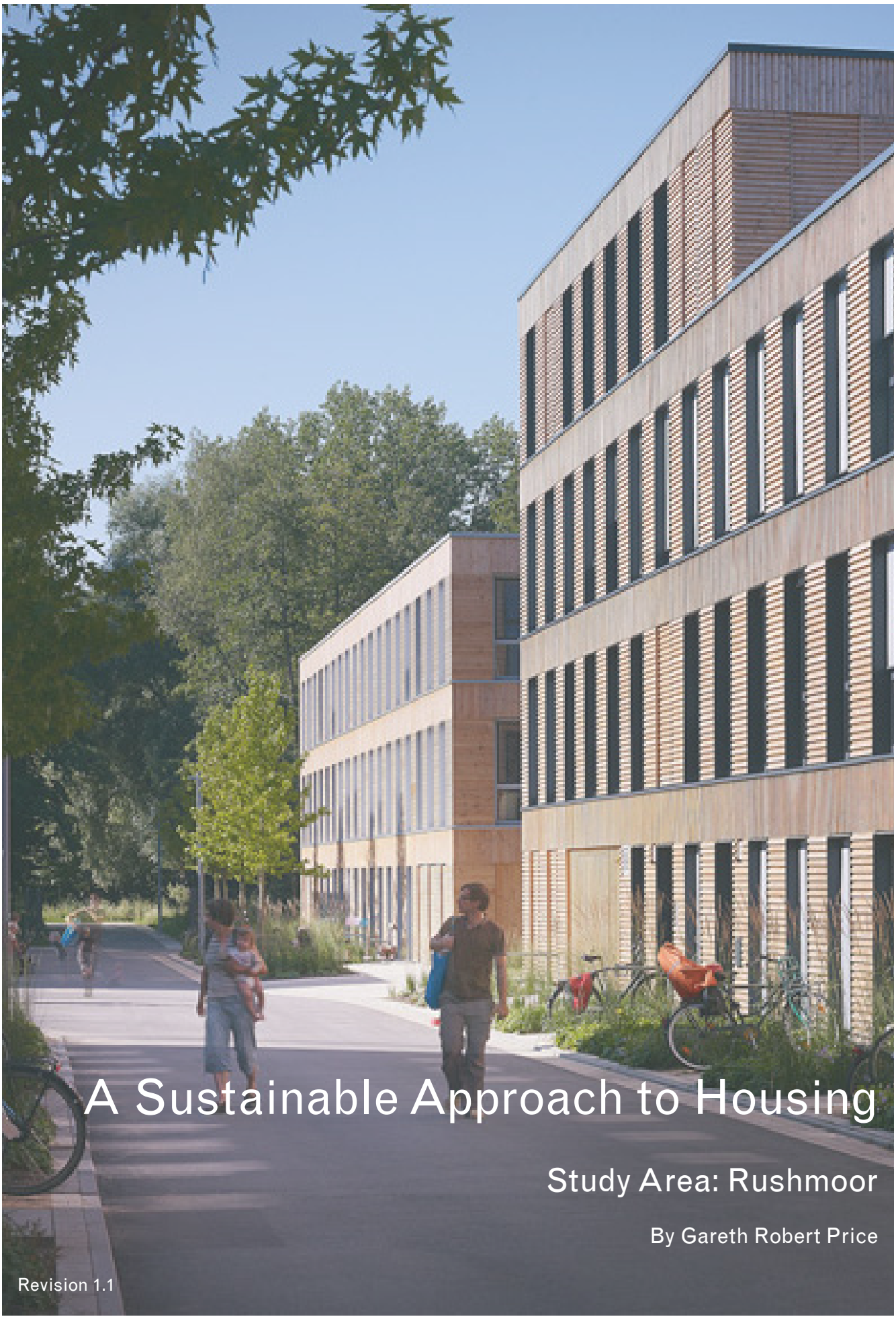


A Sustainable Approach to Housing

Study Area: Rushmoor

By Gareth Robert Price

Revision 1.1

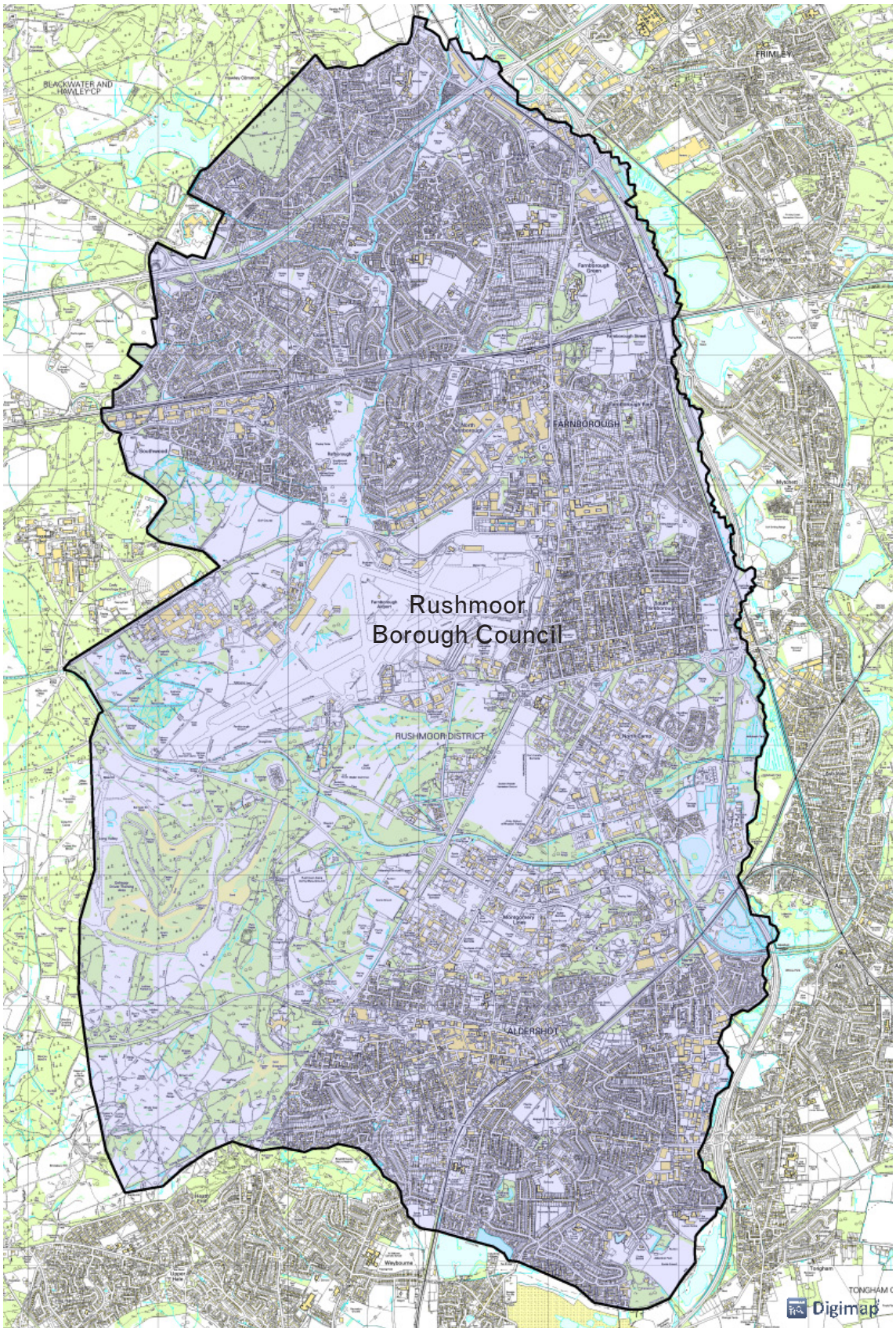
Introduction
Scope of document

This document has been produced to demonstrate how housing needs can be fulfilled sustainably without the destruction of our countryside and way of life.

I hope the document will encourage and demonstrate to communities and councils that the situation is not as bad as currently being suggested and that there are alternatives to the unsustainable decisions currently being made.

Reviewing the Strategic Housing Market Assessment Report presented in December 2014, it becomes clear housing numbers will only increase significantly as jobs and the overall population levels dramatically increase in the South East of England. This document does not seek to discuss whether this is fair or not but seeks only to provide solutions to the supply of housing. As not meeting the housing numbers will only drive house prices up to an unsustainable level for low incomes and first time buyers.

Looking at the growing population of the last 10-15 years, I am personally concerned; we must look towards more sustainable approaches to housing in order to provide homes for our ever increasing population.



Study Area

Map abobe: EDINA, Digimap,[Online mapping], http://digimap.edina.ac.uk/digimap/home (Accessed 01.03.15)

Denser Housing

A brighter future

The Housing shortage in the South East should be seen as nothing but an opportunity to improve our town and village centres by allowing investment from residential development to improve the amenities and services which already exist.

By looking to our town centres it will prevent any green field sites being built on for many years as well as reducing carbon emissions and the stress on our existing highways by reducing the number of cars on the road.

This means looking at alternative housing typologies that step away from the current fake Georgian styled detached houses we have come to know and give space to a modern, productive and sustainable approach by using denser housing types. The apartment block is commonly used on main land Europe by all types of people including families.

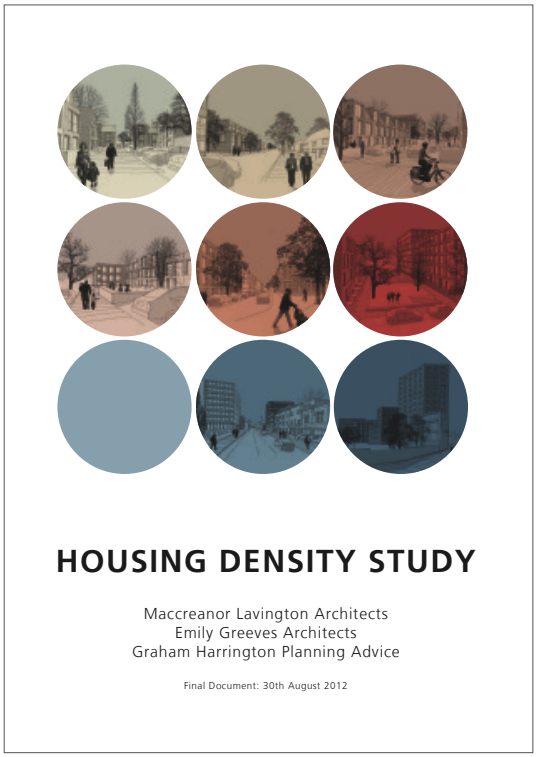
Many towns and cities see this as a natural way of life when living in town centres and generally produce socially thriving communities which would not swap their lifestyles for a more rural location on the outskirts of a town. Furthermore, they generally give more green open space for families and communities.

We must look at the long term future beyond the current 2032 targets. As building plots become rare it is essential to build without ruining what we all love about this area and thus learn to do more with less.

Good architecture and a strong local authority involvement is key in producing good quality housing, and delivering a bright future that I believe can still exist if we change what we perceive to be the only option to a more sustainable approach.

I have included many examples of denser housing types to show how the perception of this typology has been ruined over the years. Please re-consider while there is still time to protect our countryside and improve our urban realms.

The following chapter demonstrates how we can secure our countryside and still increase our housing numbers in a sustainable manner. It looks within the borough and locates possible sites and qualities to provide a realistic indication of the amount of housing available if we are to look towards denser housing types.



Housing Density Study Document published in 2012 by Greater London Authority

Housing Density Study

Reading the following document, it would be fair to indicate that most of Aldershot "Urban" Extension and sites in Farnborough Town centre would come under an accessibility index rating of 4 to 6 and would either be classed as central or urban, suggesting densities of between 160-435 units per hectare.

As half of the Aldershot "Urban Extension" will be more than 10 minutes away from the town centre it would be fair to assume a mid to low selection of 250 units per hectares aa a general rule of thumb. Therefore, I have suggested this as a starting point for each site before finding the ideal density upon further research.

2.9 The original London Plan (2004) (Table 4B.1)

– included Location, Accessibility Index (PTAL), Setting and car parking (related to PTAL, Setting and predominant housing type). See below.

		Car parking provision	High 2 – 1.5 spaces per unit	Moderate 1.5 – 1 space per unit	Low Less than 1 space per unit
		Predominant housing type	Detached and linked houses	Terraced houses & flats	Mostly flats
Location	**Accessibility Index**	**Setting**			
Sites within 10 mins walking distance of a town centre	6 to 4	**Central**			**650 – 1100 hr/ha 240 – 435 u/ha** Ave. 2.7hr/u
		Urban		**200 – 450 hr/ha 55 – 175 u/ha** Ave. 3.1hr/u	**450 – 700 hr/h 165 – 275 u/ha** Ave. 3.0hr/u
		Suburban		**200 – 300 hr/ha 50 – 110 u/ha** Ave. 3.7hr/u	**250 – 350 hr/ha 80 – 120 u/ha** Ave. 3.0hr/u
Sites along transport corridors & sites close to a town centre	3 to 2	**Urban**		**200 – 300 hr/ha 50 – 110 u/ha** Ave. 3.7hr/u	**300 – 450 hr/ha 100 – 150 u/ha** Ave. 3.0hr/u
		Suburban	**150 – 200 hr/ha 30 – 65 u/ha** Ave. 4.4hr/u	**200 – 250hr/ha 50 – 80 u/ha** Ave. 3.8hr/u	
Currently remote sites	2 to 1	**Suburban**	**150 – 200 hr/ha 30 – 50 u/ha** Ave. 4.6hr/u		

2.10 The London Plan (Consolidated with Alterations since 2004) (2008) (Table 3.2) included the following changes, as set out below:

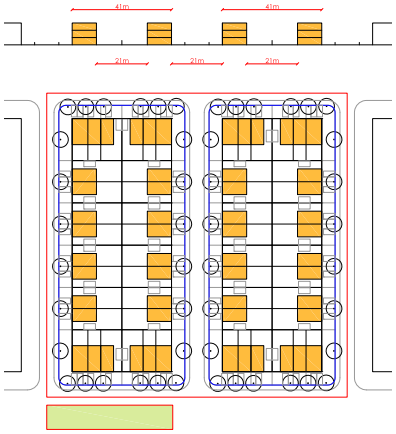
– Location removed (but definition of character Settings increased to refer to 800m walking distance from town centres);
– Character Settings and density ranges in the matrix are expanded to include average dwellings size (with a higher number of habitable rooms per dwelling assumed for lower density development within each Setting); and
– Car parking removed (addressed in Policy 3C.23 and Annex 4).

Setting	**Public Transport Accessibility Level (PTAL)**		
	0 to 1	**2 to 3**	**4 to 6**
Suburban	**150 – 200 hr/ha**	**150 – 250 hr/ha**	**200 – 350 hr/ha**
3.8 – 4.6 hr/unit	35 – 55 u/ha	35 – 65 u/ha	45 – 90 u/ha
3.1 – 3.7 hr/unit	40 – 65 u/ha	40 – 80 u/ha	55 – 115 u/ha
2.7 – 3.0 hr/unit	50 – 75 u/ha	50 – 95 u/ha	70 – 130 u/ha
Urban	**150 – 250 hr/ha**	**200 – 450 hr/ha**	**200 – 700 hr/ha**
3.8 – 4.6 hr/unit	35 – 65 u/ha	45 – 120 u/ha	45 – 185 u/ha
3.1 – 3.7 hr/unit	40 – 80 u/ha	55 – 145 u/ha	55 – 225 u/ha
2.7 – 3.0 hr/unit	50 – 95 u/ha	70 – 170 u/ha	70 – 260 u/ha
Central	**150 – 300 hr/ha**	**300 – 650 hr/ha**	**650 – 1100 hr/ha**
3.8 – 4.6 hr/unit	35 – 80 u/ha	65 – 170 u/ha	140 – 290 u/ha
3.1 – 3.7 hr/unit	40 – 100 u/ha	80 – 210 u/ha	175 – 355 u/ha
2.7 – 3.0 hr/unit	50 – 110 u/ha	100 – 240 u/ha	215 – 405 u/ha

Housing Density Study - Page 3

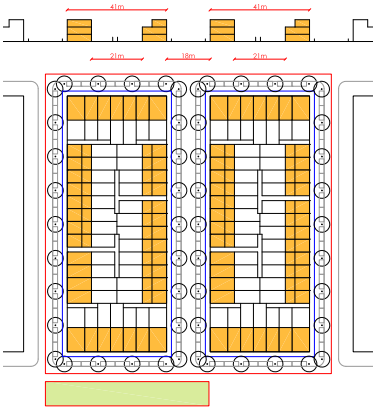
1. Semi-detached houses (3 storeys)

Gross - 35 u/ha, 194hr/ha
Net - 47 u/ha, 262hr/ha
1:1.86 Parking Ratio
9.3m² playspace / dwelling



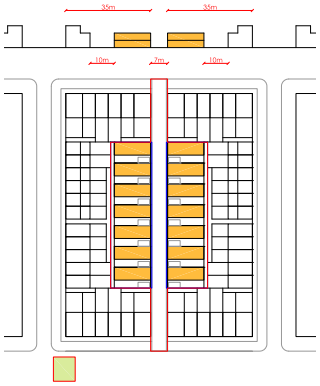
2. Terraced houses (2/3 storeys)

Gross - 50 u/ha, 273hr/ha
Net - 78 u/ha, 427hr/ha
1:1.15 Parking Ratio
8.9m² playspace / dwelling



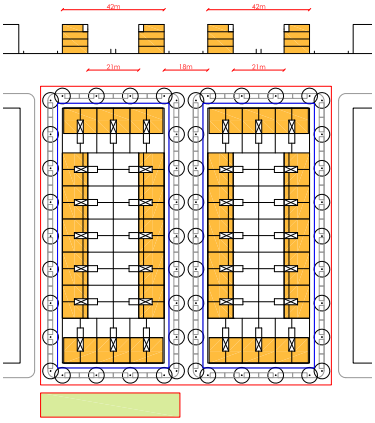
3. Mews / Patio house (2 storeys)

Gross - 48u/ha, 241hr/ha
Net - 67u/ha, 333hr/ha
1:1 Parking Ratio
6.4m² playspace / dwelling



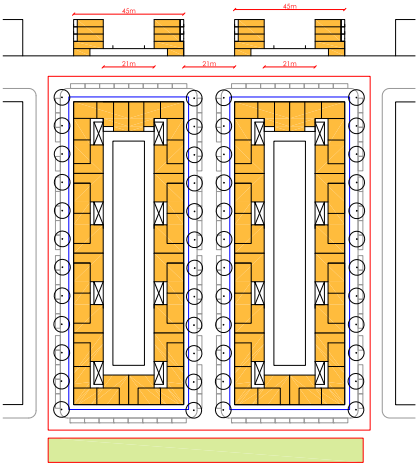
4. Walk-up maisonettes + apartments (4 storeys)

Gross - 99 u/ha, 348hr/ha
Net - 152 u/ha, 512hr/ha
1:0.6 parking ratio
3.9m² playspace / dwelling



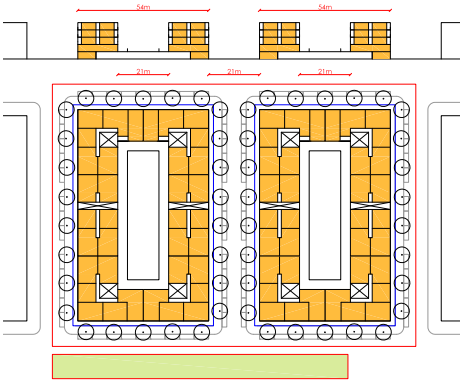
5. Small apartment buildings (5 storeys)

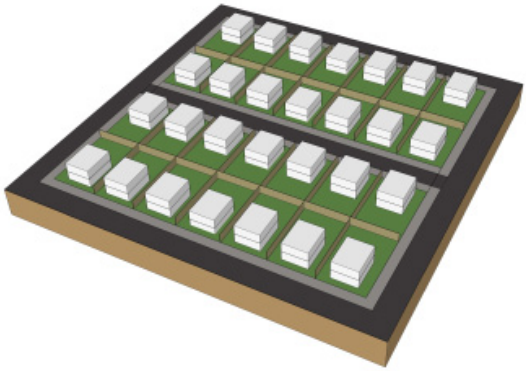
Gross - 162u/ha, 484hr/ha
Net - 263u/ha, 783hr/ha
1: 0.63 Parking Ratio
3.9m² playspace / dwelling



6. Corridor apartment buildings (5 storeys)

Gross - 173u/ha, 509hr/ha
Net - 285u/ha, 840hr/ha
1: 0.56 Parking Ratio
4.0m² playspace / dwelling

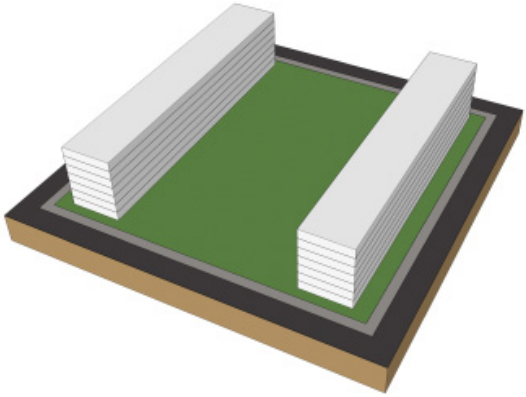




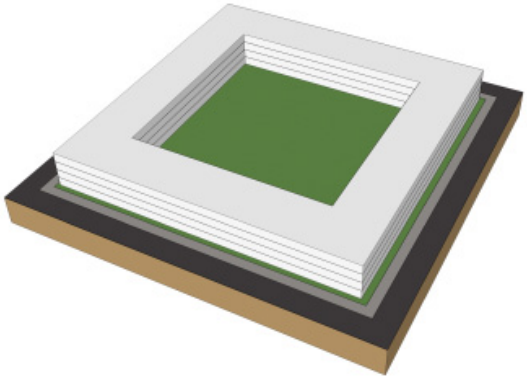
Current Approved Plans

Total:	250 hectares
Built up area:	140 hectares
Total Area:	3850 units
Density:	27.5 (28) per hectare

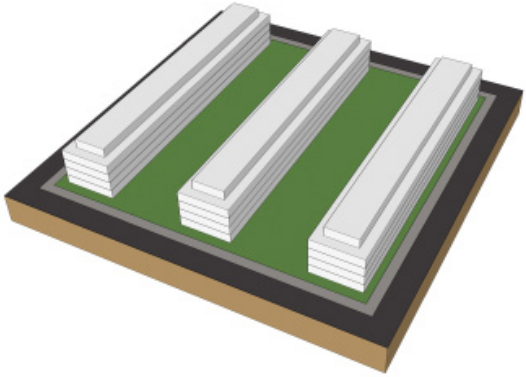
Suggested Density Diagrams



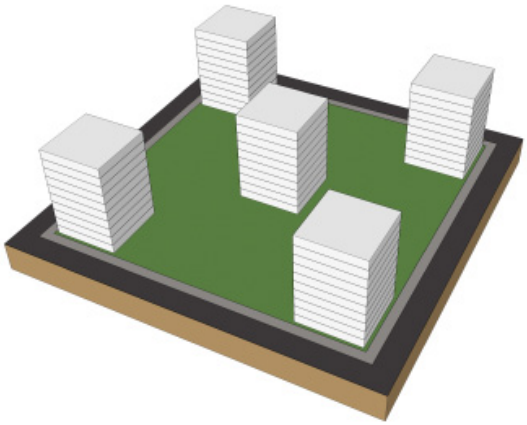
Floors: 6/7
Density: 250 units



Floors: 4
Density: 250 units



Floors: 4/5
Density: 250 units

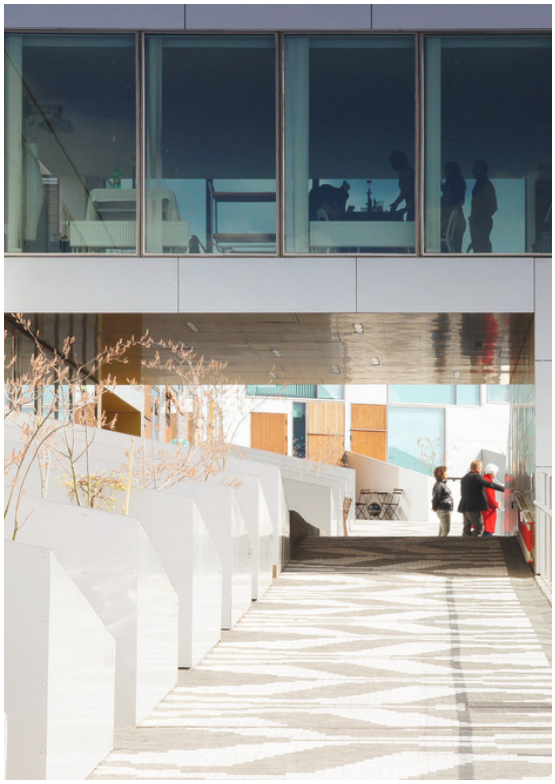


Floors: 10
Density: 250 units

Arundel Square, London - Pollard Thomas Edwards

New City Library and Public Square, Mendrisio - Sergison Bates

Andreas Ensemble, Amsterdam - Tony Fretton



8 Tallet, Copenhagen - Bjarke Ingels Group

Urbana Villor, Malmo, Sweden - Hauschild + Siegel

Neue Hamburger Terrassen, Hamburg - LAN

Claredale Street, London - Karakusevic Carson Architects

Outlook Place, Watford - Pollard Thomas Edwards

Tietgens Ærgelse, Copenhagen - Tony Fretton

Adelaide Wharf, London - Allford Hall Monaghan Morris Architects

Fionia Apartments, Copenhagen - Danielsen architecture

93 Urban housing and crèche, Geneva - Sergison Bates

Ceres, CB1, London - Pollard Thomas Edwards

Rushmoor contains a large amount of brownfield land which could be built on immediately thus putting itself in a strong position. However, it should use this land wisely to preserve this lead and help out surrounding boroughs in the short term, as after this "Urban" Extension it will become extremely difficult to find land to build on without increasing densities in existing built up areas. Therefore in the long term it will need to rely on Hart to release land for development. This is where the two boroughs can work together in short and long term to provide sustainable housing for all.

The Aldershot Urban Extension is very sub-urban in nature and this must be addressed as it holds the key to releasing pressure on the situation for all boroughs in the short term. By looking at denser precedents for housing we can achieve much more with this land than what is currently being proposed. It is well located being close to Aldershot town centre removing the need for car usage every day and big enough to produce its own cultural identity which would only thrive more within a larger population.

Aldershot Town Centre can also play a role in delivering housing, however, this is a complex task and this document does not look to deal with this. Farnborough town centre on the other hand is easier to plan housing in the short to medium term as there is more open land available to build on.

Ideally the urban extension would be used to provide housing in the short term, and be a safety net as town centre led developments take place in the medium to long term. This process should not be rushed and should be led by talented architects to produce better outcomes, benefiting all.

Conclusion:

Urban Extension: Short to long term
Aldershot Town Centre: Medium to long term
Farnborough Town Centre: Medium to long term

Farnborough Town Centre Figures and Ideal Density:

Sites	Units	Area
Site 1:	150	0.57
Site 2a:	100	0.39
Site 2b:	70	0.27
Site 3:	120	0.48
Site 4a:	100	0.37
Site 4b:	100	0.33
Site 5:	N/A	N/A
Site 6a:	65	0.25
Site 6b:	150	0.58
Site 6c:	90	0.35
Site 6d:	130	0.51
Site 7a	725	2.9
Site 7b	150	0.61
Site 7c	230	0.91
Site 8	85	0.33

Area: 8.85 Hectares
Density: 250 Units per hectares

Total Housing Units: 2,265 Units

Aldershot / Urban Extension Figures and Ideal Density:

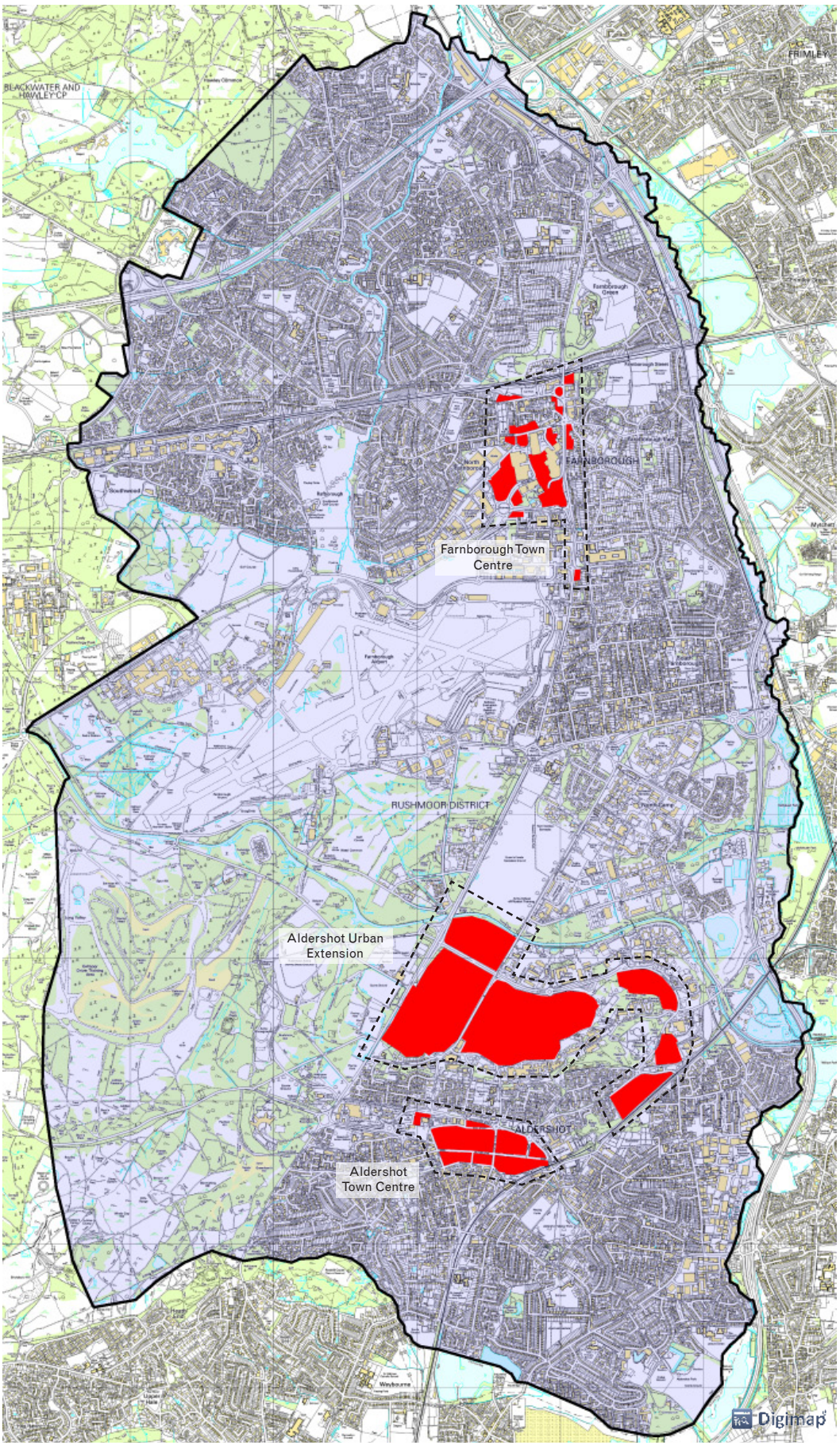
Sites	Units	Area
Site 9:	175	0.7
Site 10:	N/A	N/A
Plot J:	2800	11.2
Plot H+I:	3350	13.4
Plot B:	3875	15.5
Plot G:	825	3.3
Plot L+M:	1875	7.5
Plot N:	2275	9.1
Plot K:	2450	9.8
Plot A+D:	2350	9.4
Plot Q:	1800	6.4
Plot R+S:	2250	9

Area: 101 Hectares
Density: 250 Units per hectares

Total Housing Units: 24,025 Units

Total Figures and Ideal Density:

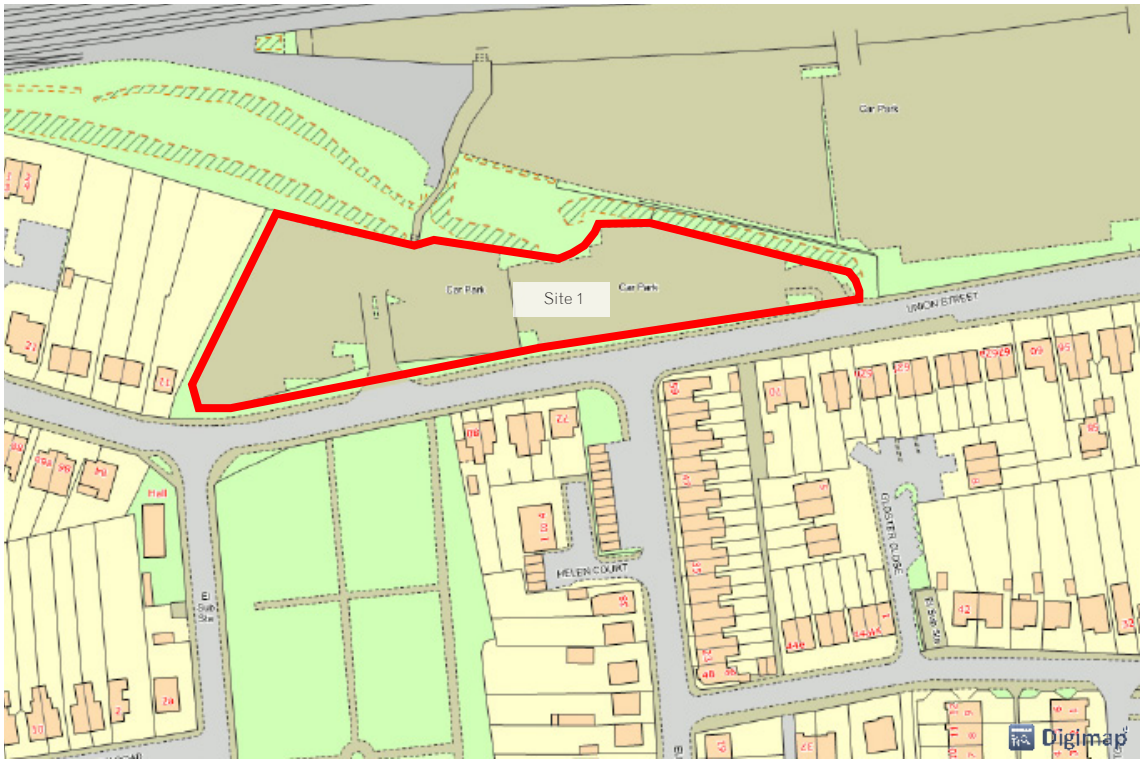
Area: 109.5 Hectares
Total Housing Units: 26,290 Units



Rushmoor Borough Council boundary - Proposed sites for development

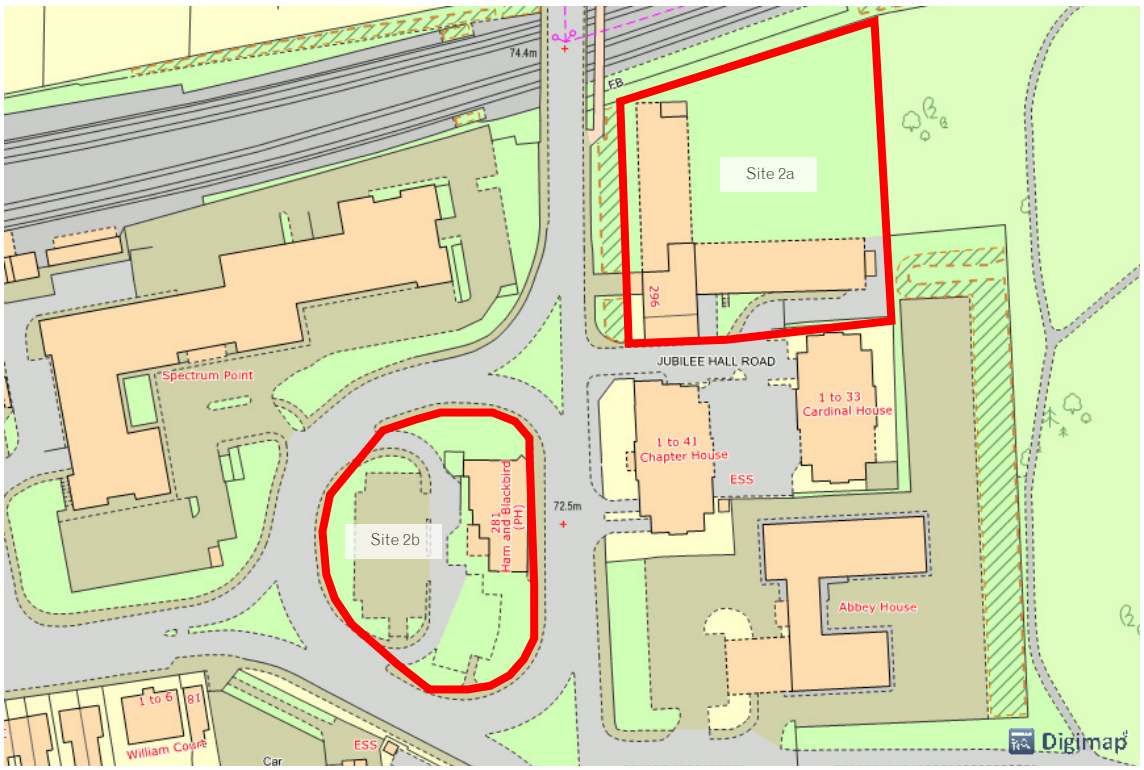
Map above: EDINA, Digimap,[Online mapping], http://digimap.edina.ac.uk/digimap/home (Accessed 01.03.15)

Rushmoor Borough Council
Farnborough Town Centre



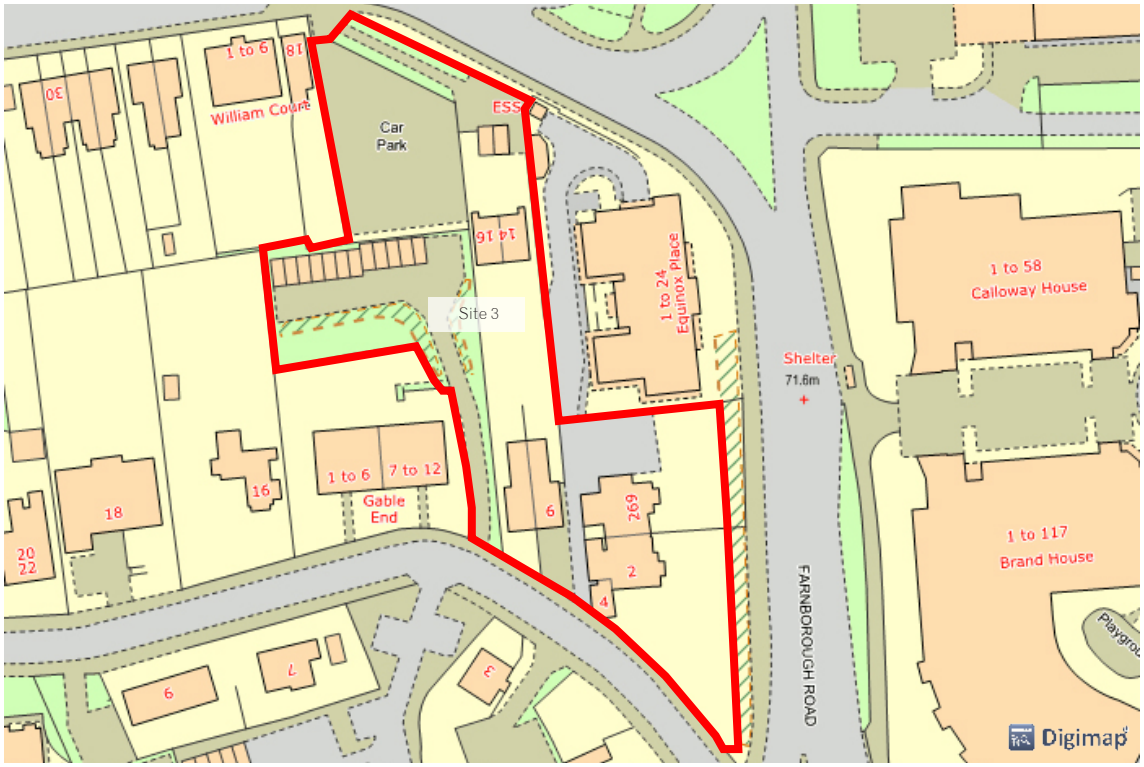
Site 1 - Car Park for Farnborough Main Station / 0.57 Hectares / 150 units

Map above: EDINA, Digimap,[Online mapping], http://digimap.edina.ac.uk/digimap/home (Accessed 01.03.15)



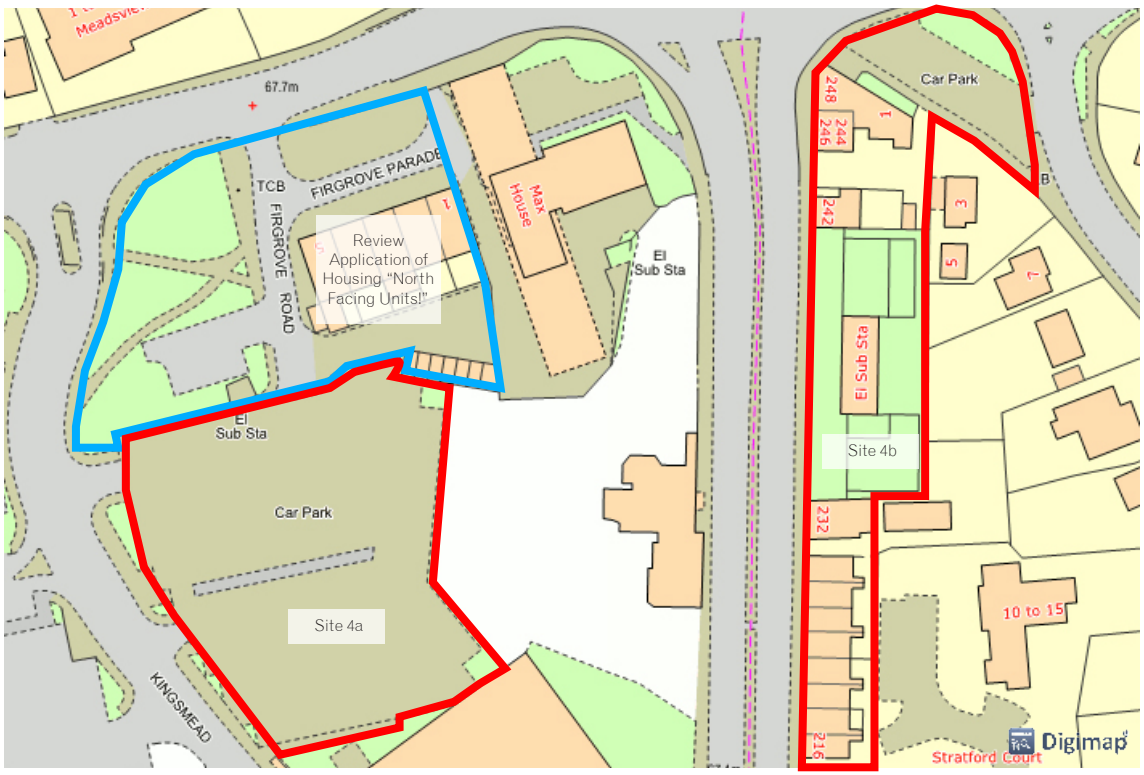
Site 2a - Thomas Local Site / 0.39 Hectares / 100 units Site 2b - Ham and Blackbird Site / 0.27 Hectares / 70 units

Map above: EDINA, Digimap,[Online mapping], http://digimap.edina.ac.uk/digimap/home (Accessed 01.03.15)



Site 3 - Clockhouse Road / 0.48 Hectares / 120 units

Map above: EDINA, Digimap,[Online mapping], http://digimap.edina.ac.uk/digimap/home (Accessed 01.03.15)



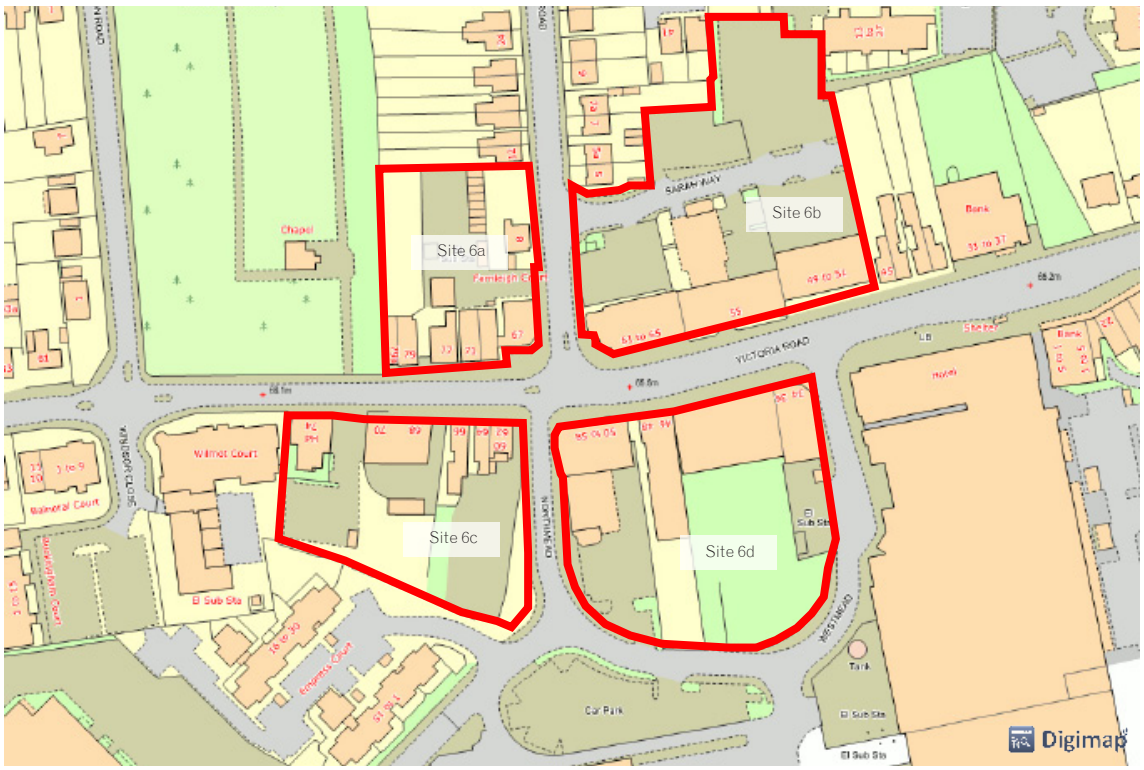
Site 4a - Car Park / 0.37 Hectares / 100 units Site 4b - Farnborough Road / 0.33 Hectares / 100 units

Map above: EDINA, Digimap,[Online mapping], http://digimap.edina.ac.uk/digimap/home (Accessed 01.03.15)

Rushmoor Borough Council
Farnborough Town Centre

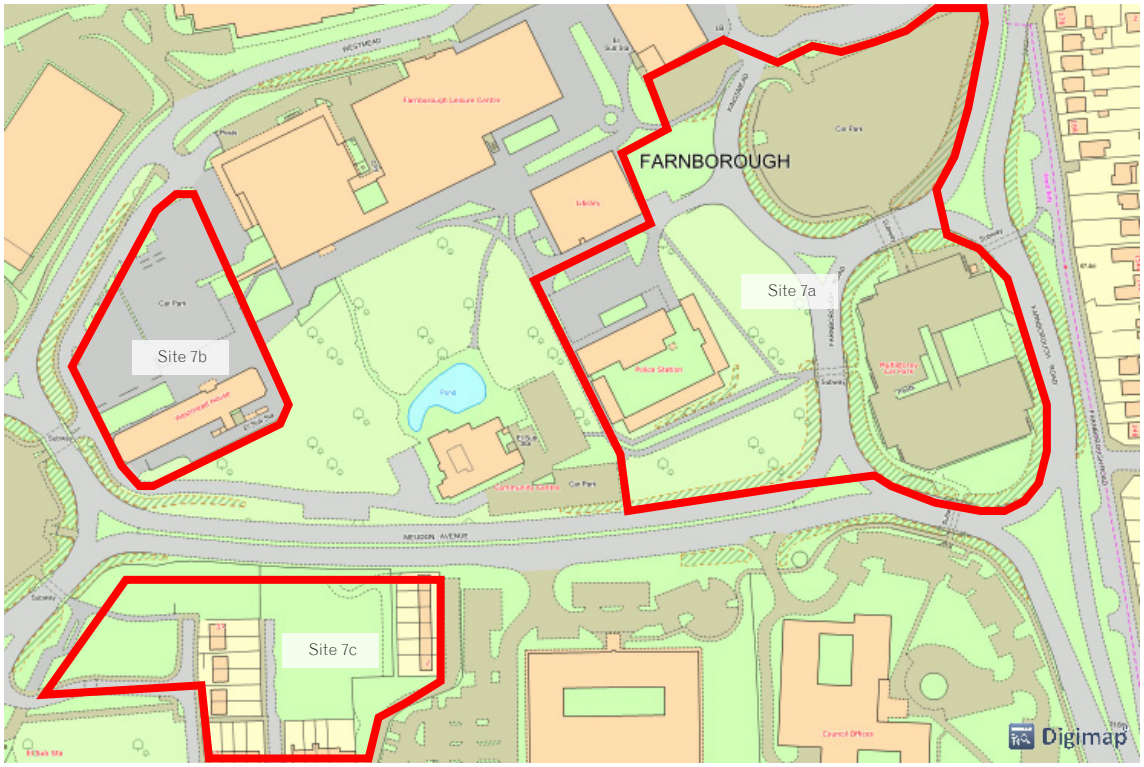
Site 5 - Town Centre needs plan, unrealistic to put number of unit on this site at this stage.

Map above: EDINA, Digimap,[Online mapping], http://digimap.edina.ac.uk/digimap/home (Accessed 01.03.15)



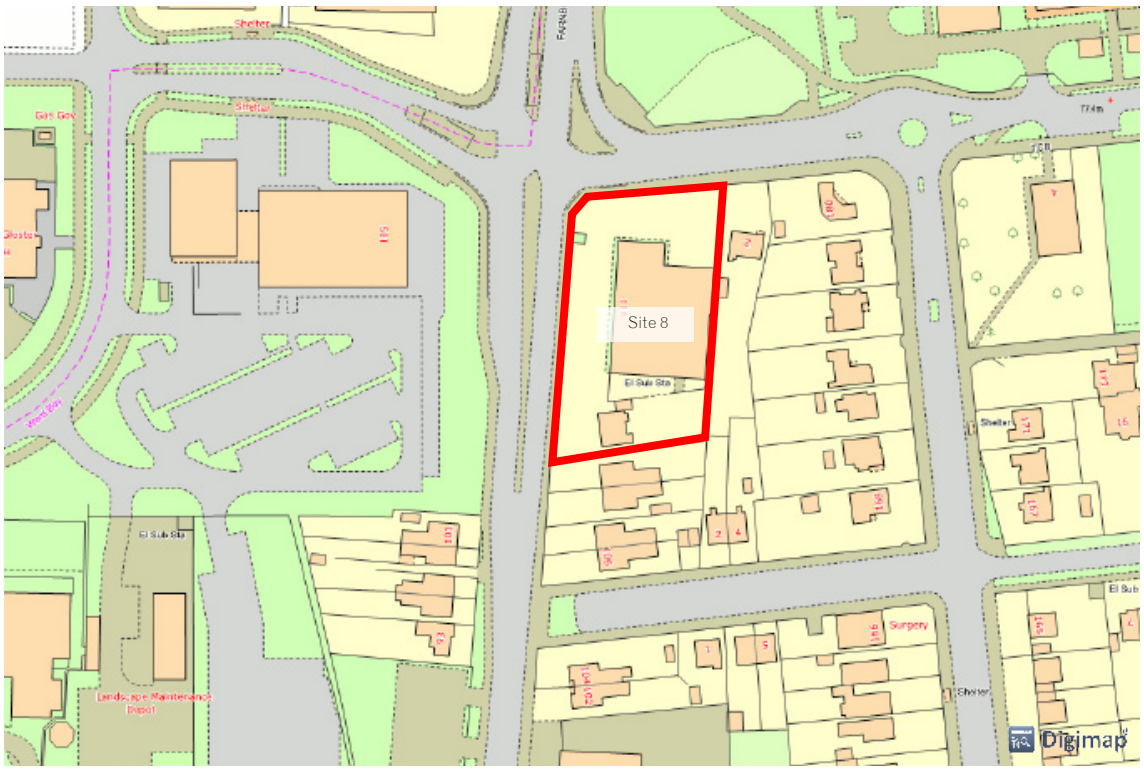
Site 6a: 0.25 hec / 65 units Site 6b: 0.58 hec / 150 Site 6c: 0.35 hec / 90 units Site 6d: 0.51 hec / 130 units

Map above: EDINA, Digimap,[Online mapping], http://digimap.edina.ac.uk/digimap/home (Accessed 01.03.15)



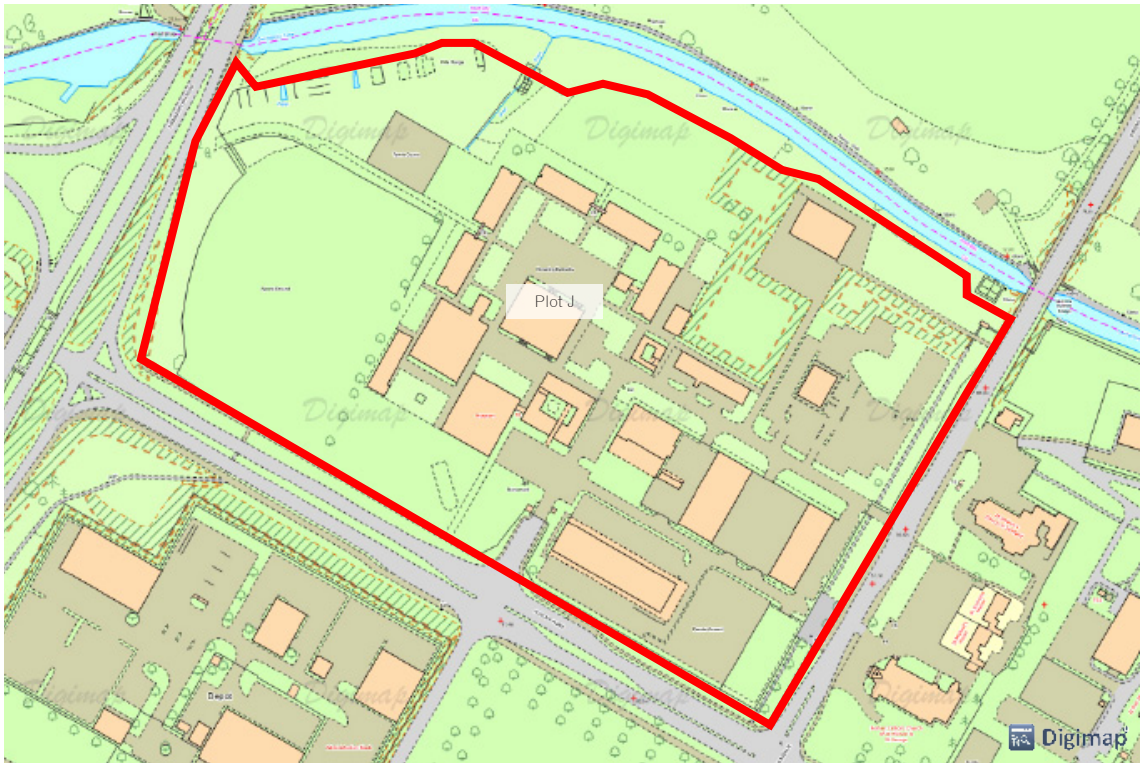
Site 7a: / 2.9 hectares 750 units Site 7b: / 0.61 hectares / 150 units Site 7c: / 0.91 hectares / 230 units

Map above: EDINA, Digimap,[Online mapping], http://digimap.edina.ac.uk/digimap/home (Accessed 01.03.15)



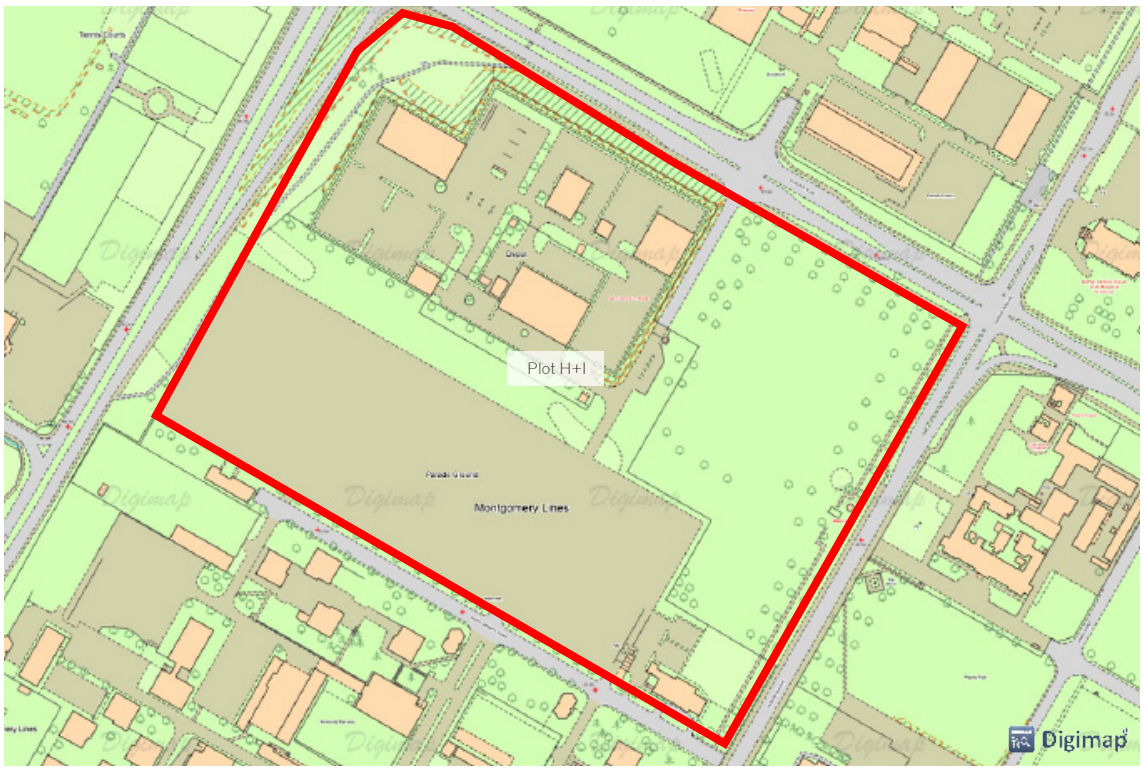
Site 8: - 0.33 hectares / 85 units

Map above: EDINA, Digimap,[Online mapping], http://digimap.edina.ac.uk/digimap/home (Accessed 01.03.15)



Plot J - 11.2 hectares / 2800 units

Map above: EDINA, Digimap,[Online mapping], http://digimap.edina.ac.uk/digimap/home (Accessed 01.03.15)

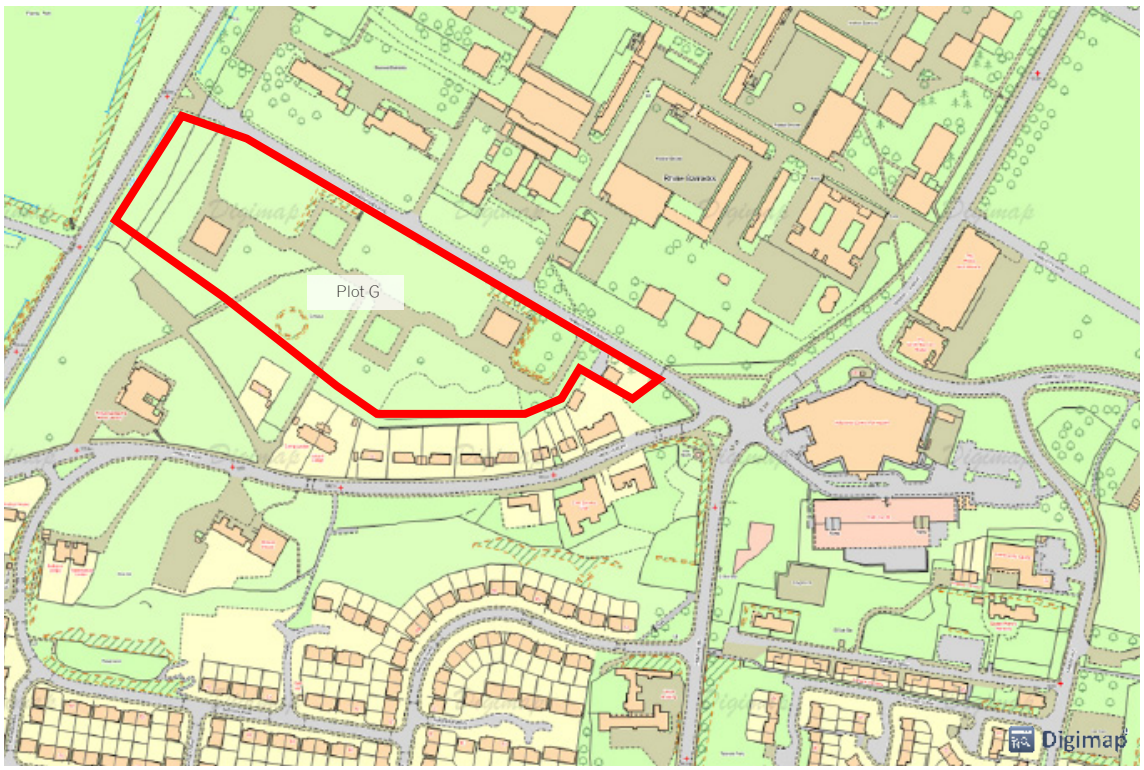


Plot H+I - 13.4 hectares / 3350 units

Map above: EDINA, Digimap,[Online mapping], http://digimap.edina.ac.uk/digimap/home (Accessed 01.03.15)

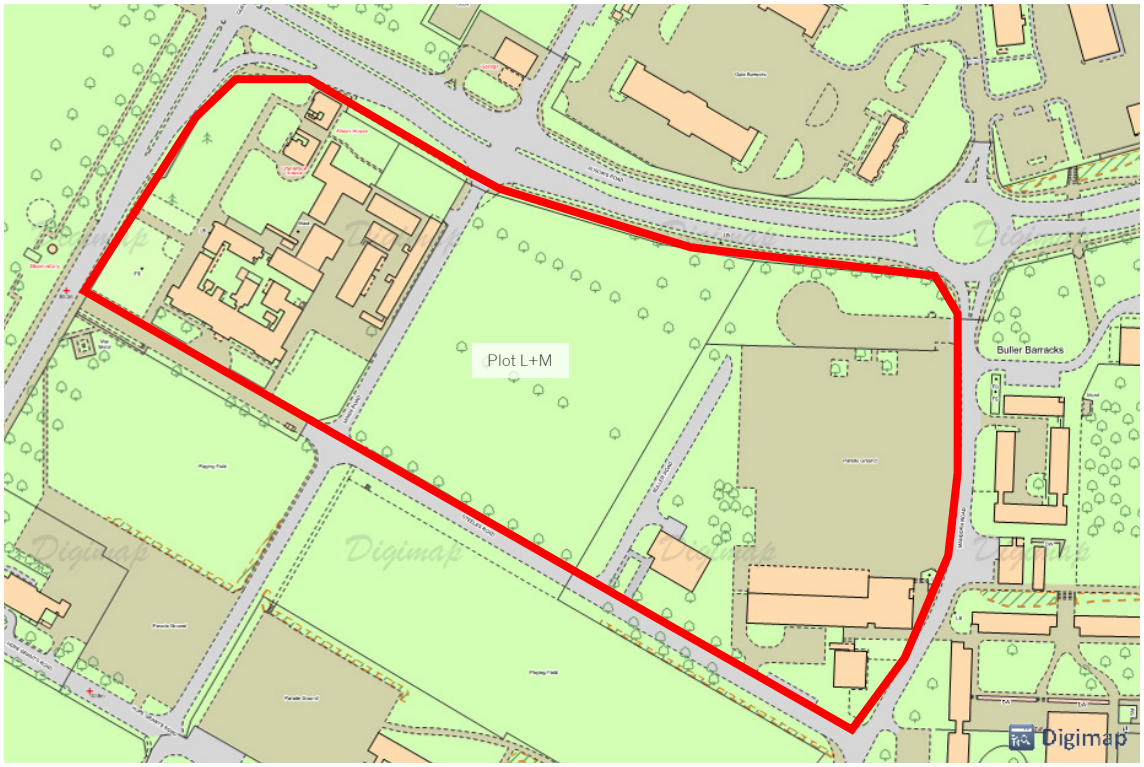
Plot B - 15.5 hectares / 3875 units

Map above: EDINA, Digimap,[Online mapping], http://digimap.edina.ac.uk/digimap/home (Accessed 01.03.15)



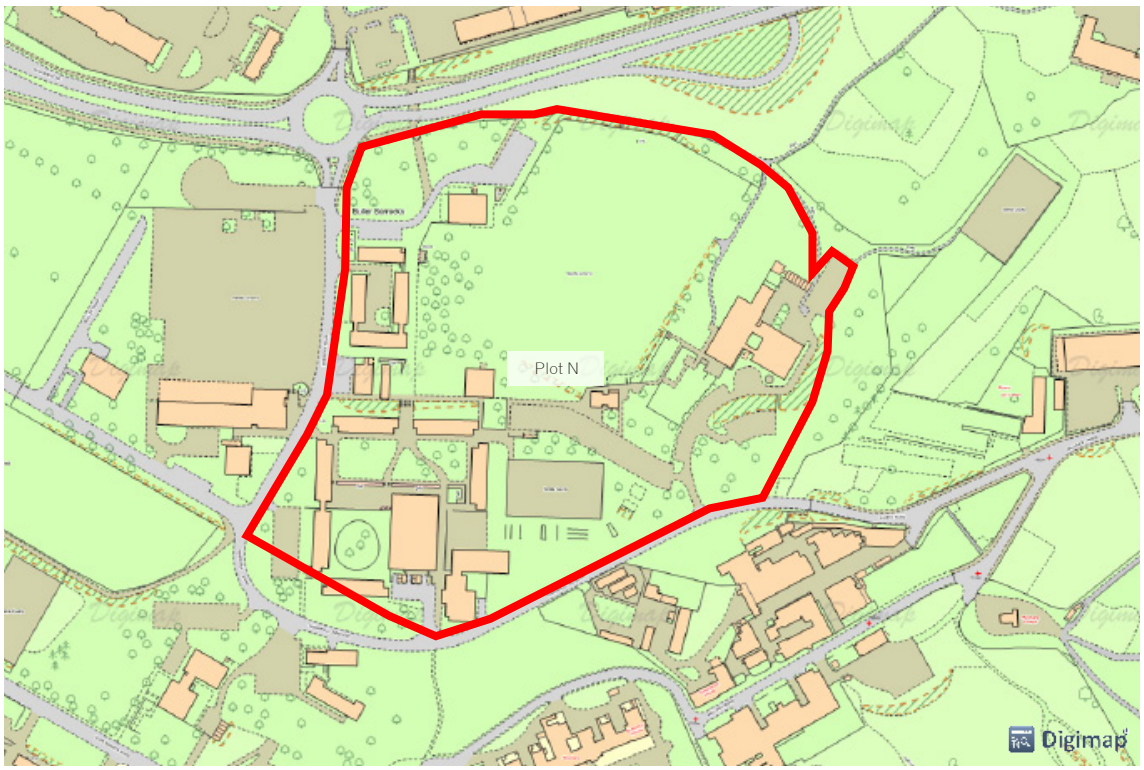
Plot G: - 3.3 hectares / 825 units

Map above: EDINA, Digimap,[Online mapping], http://digimap.edina.ac.uk/digimap/home (Accessed 01.03.15)



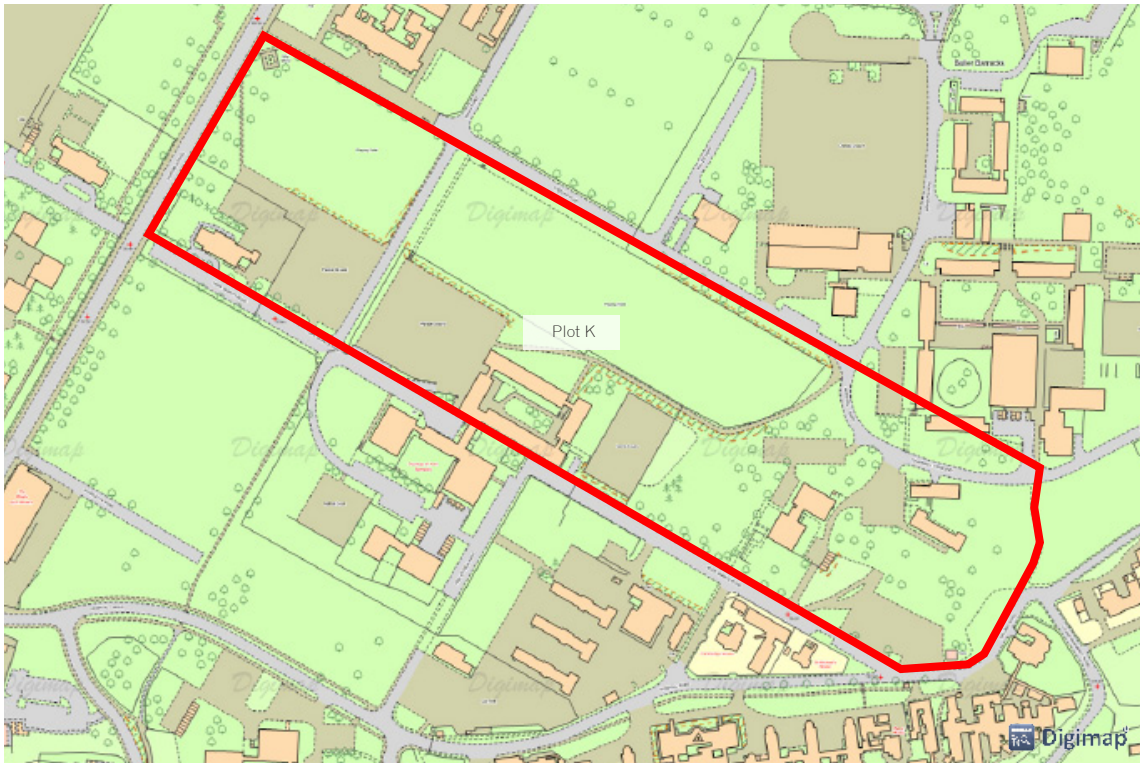
Plot L / M - 7.5 hectares / 1875 units

Map above: EDINA, Digimap,[Online mapping], http://digimap.edina.ac.uk/digimap/home (Accessed 01.03.15)



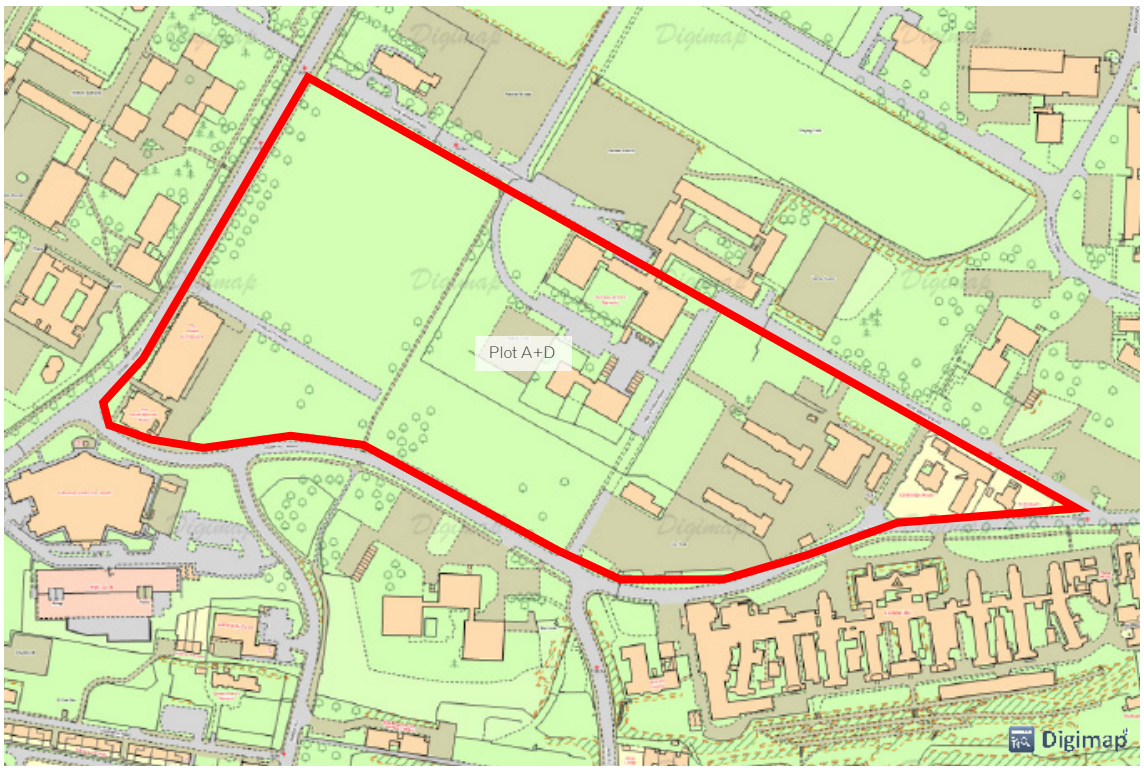
Plot N - 9.1 hectares / 2275 units

Map above: EDINA, Digimap,[Online mapping], http://digimap.edina.ac.uk/digimap/home (Accessed 01.03.15)



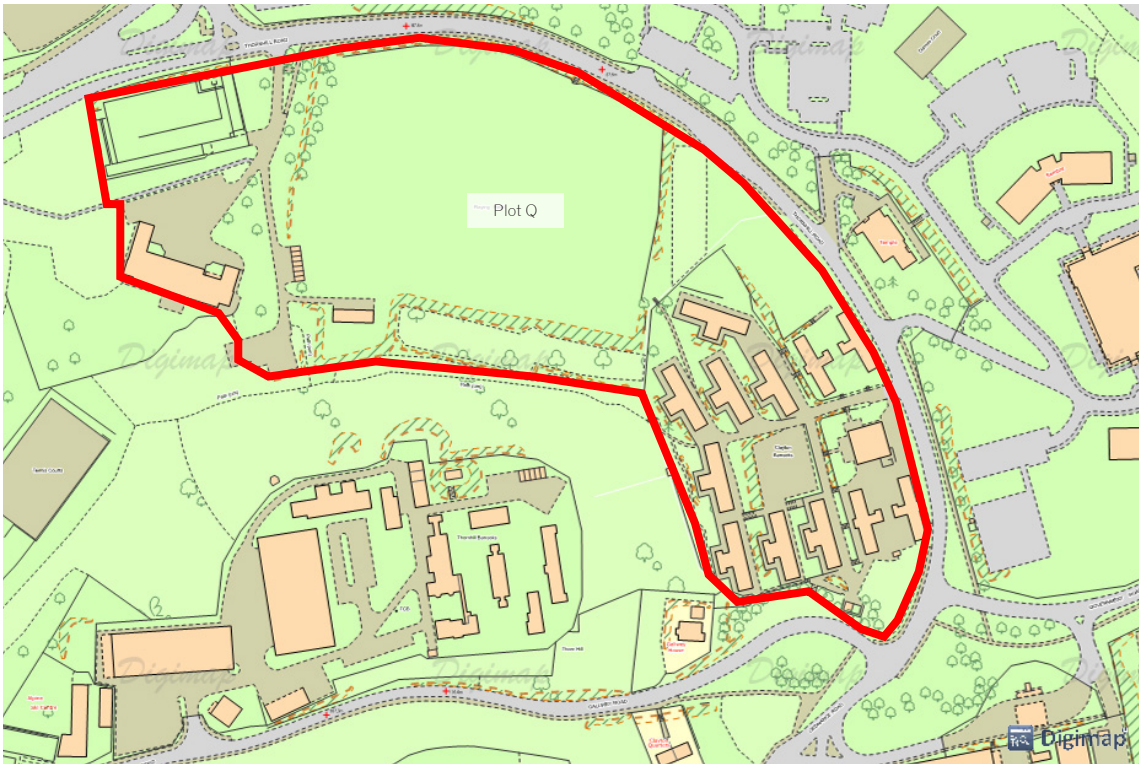
Plot K - 9.8 hectares / 2450 units

Map above: EDINA, Digimap,[Online mapping], http://digimap.edina.ac.uk/digimap/home (Accessed 01.03.15)



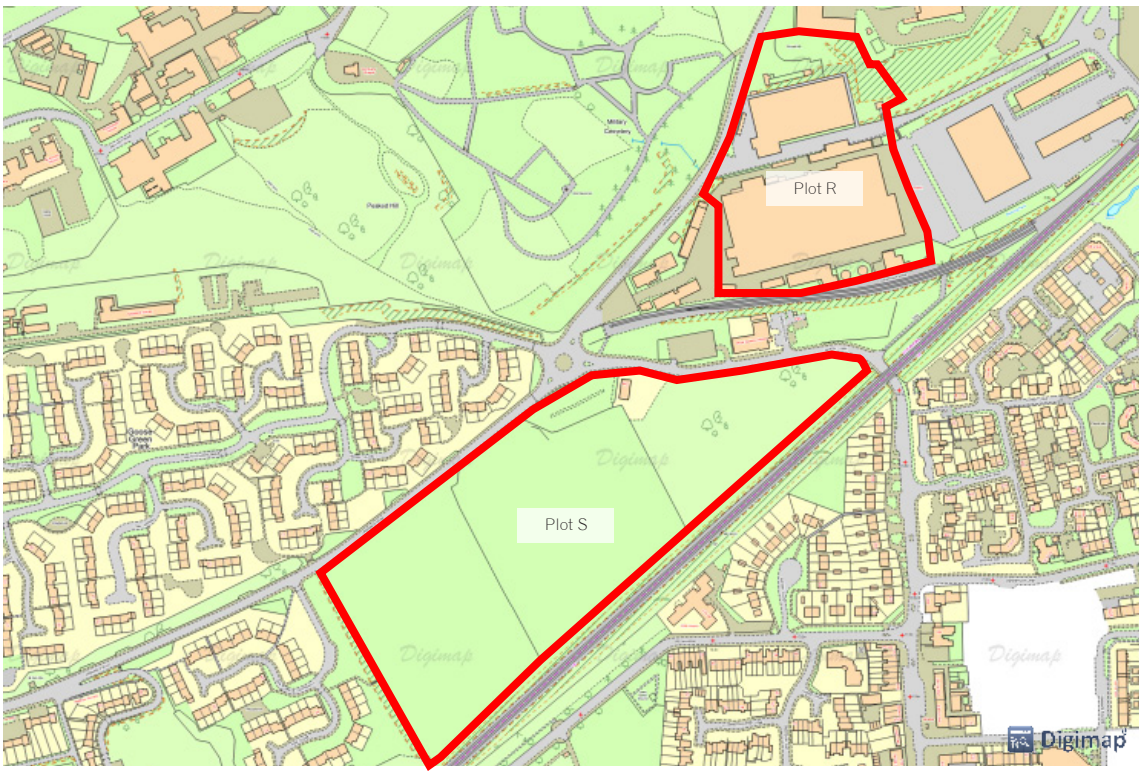
Plot A + D: - 9.4 hectares / 2350 units

Map above: EDINA, Digimap,[Online mapping], http://digimap.edina.ac.uk/digimap/home (Accessed 01.03.15)



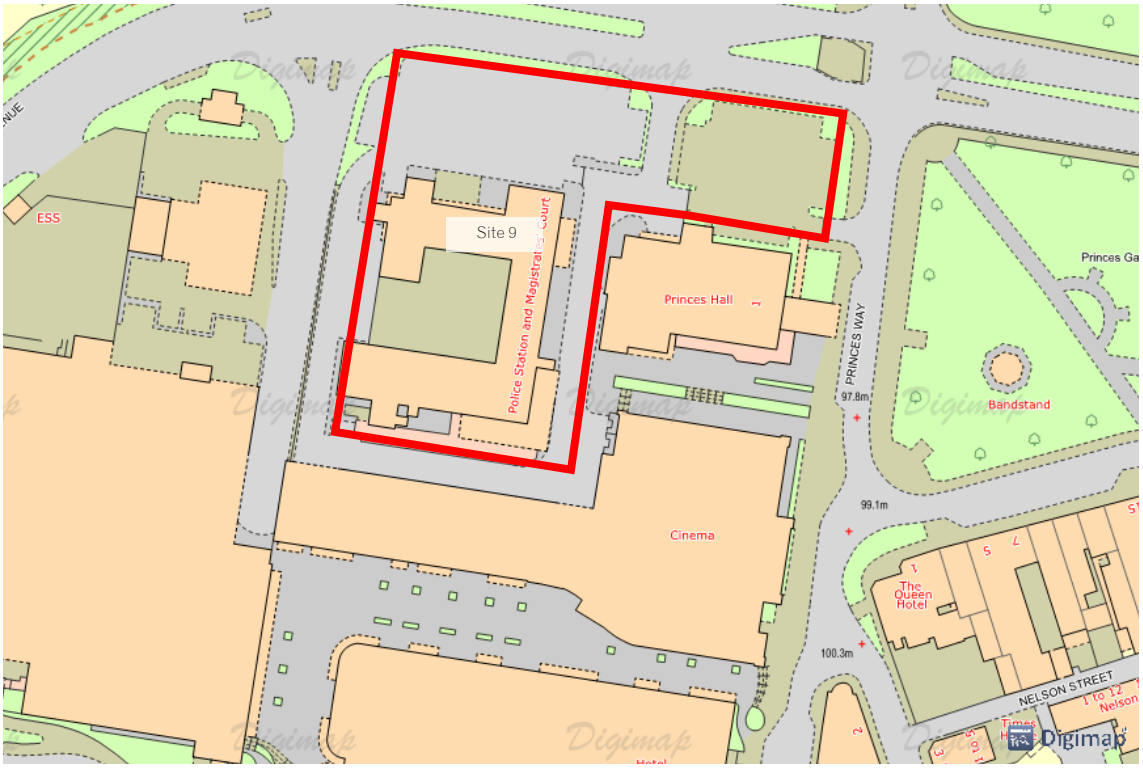
Plot Q - 6.4 hectares / 1600 units

Map above: EDINA, Digimap,[Online mapping], http://digimap.edina.ac.uk/digimap/home (Accessed 01.03.15)



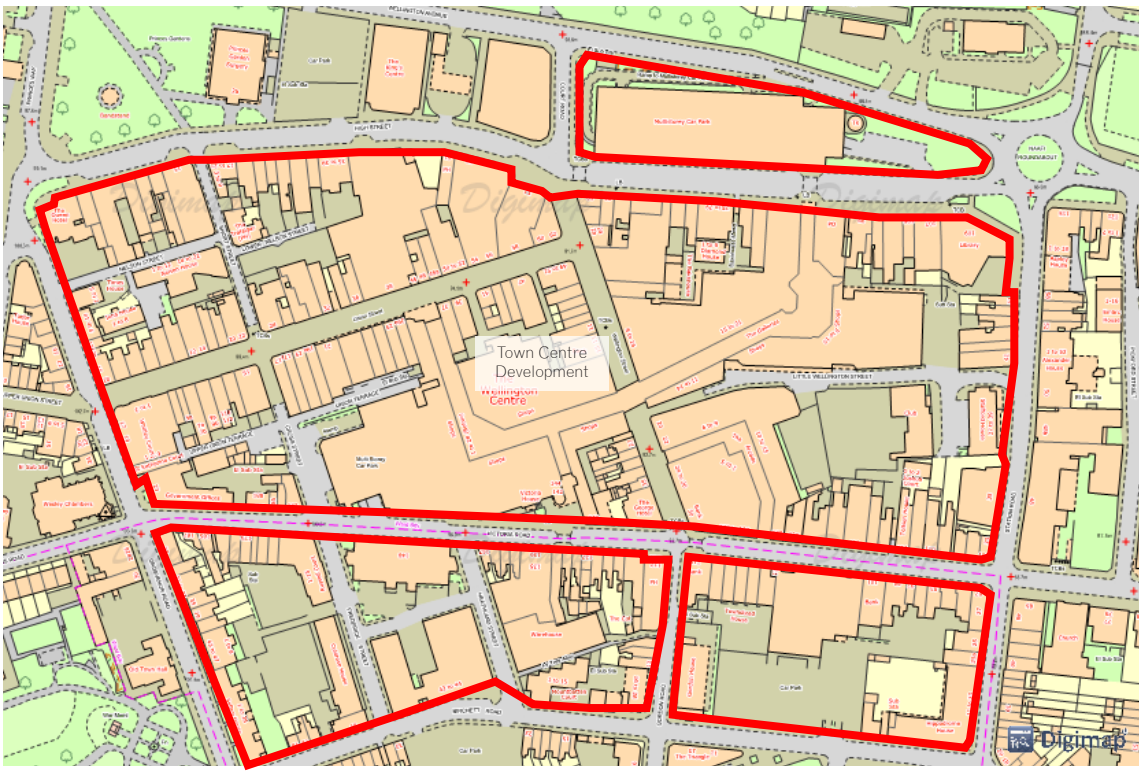
Plot R + S - 9 hectares / 2250 units

Map above: EDINA, Digimap,[Online mapping], http://digimap.edina.ac.uk/digimap/home (Accessed 01.03.15)



Site 9 - 0.7 hectares / 175 units

Map above: EDINA, Digimap,[Online mapping], http://digimap.edina.ac.uk/digimap/home (Accessed 01.03.15)



Site 10 - Town Centre needs plan, unrealistic to put number of unit on this site at this stage.

Map above: EDINA, Digimap,[Online mapping], http://digimap.edina.ac.uk/digimap/home (Accessed 01.03.15)

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