

Rugby Borough Council

South West Rugby

Stage 1 -3: Baseline, Opportunities and Constraints Report

July 2016



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1.0 INTRODUCTION

- 1.1 David Lock Associates (DLA) has been commissioned by Rugby Borough Council (RBC) to provide technical support in relation to land South West of Rugby. South West Rugby is allocated in the Preferred Option Rugby Local Plan (2015) for major development including 5,400 houses and 28 hectares of employment land.
- 1.2 This report summarises the outputs of a technical exercise to review the constraints, opportunities and broad capacity of the SW Rugby area, to inform the emerging allocation and support RBC in their discussions with landowners and developers. This work will underpin a 'development framework' style plan that will form the basis of the future Local Plan allocation, alongside its policy wording.
- 1.3 DLA have undertaken a technical review of the site, drawing together RBC GIS data and all relevant available material to determine the spatial fixes that may influence the development framework. Opportunities and constraints have been mapped and utilised to produce an assessment of broad development potential that will support the proposed allocation.
- 1.4 For the purposes of this study, the SW Rugby area is defined by Figure 3 of the Preferred Option Local Plan: Proposed Urban Edge Allocations and is located, as the name suggests, to the south west of the existing Rugby urban area, between Rugby and Dunchurch. The site lies to the north of the A45 and M45, east of the A4071 and Western Relief Road and south of the Cawston and Bilton areas of Rugby.
- 1.5 The site is currently in multiple ownerships, and includes freehold landowners, those with options on land, and housebuilder interests. Although there is no formal collaboration or land equalisation agreement in place, landowners have put in place informal joint working arrangements and have expressed their clear intention to deliver development at South West Rugby within the timescales envisaged. In the context of this complex landownership pattern, DLA have undertaken this review on a 'boundary blind' basis, viewing the site as one development opportunity.

Methodology

1.6 Production of the SW Rugby constraints plans has involved three stages of work as follows:

Stage 1 Data collation and review

Review of available relevant material including emerging Local Plan policy and supporting material, landowner submitted documents, land ownership plans and submitted / consented planning applications

Stage 2 GIS mapping

Mapping of known site factors based on RBC GIS layers and national baseline data

Stage 3 Opportunities and constraints

Production of themed constraints and opportunities plans and combined key site constraints plan. Buffering of known constraints and consideration of broad development areas, strategic infrastructure and phasing.

- 1.7 This evidence and data is considered of a sufficient level to inform a broad constraints analysis of the site. Any gaps in information and assumptions made on this basis are identified in this report. Additional technical work will be required to be undertaken by the landowner team or Rugby Borough Council to inform a detailed development framework plan, formal site allocation and in due course an outline planning application.
- 1.8 Following client confirmation of the baseline information and parameters contained within this report, concept composite master plan options could be prepared, leading to an indicative development framework.

2.0 BASELINE AND KEY ISSUES

2.1 This section of the report summarises the issues pertinent to SW Rugby resulting from a review of the available baseline evidence. The results of this exercise are presented in the plans at Appendix 1.

Site Context

2.2 The study area is located to the South West of Rugby, between the Rugby urban area and the village of Dunchurch (see Appendix 1). The extent of the SW Rugby area is defined by the Rugby Local Plan Preferred Option (December 2015), an extract of which is reproduced in Figure 1 below.

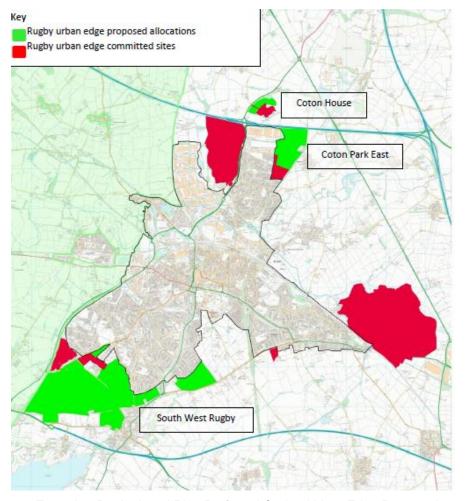


Figure 1 Emerging Rugby Local Plan Preferred Option Urban Edge Proposed Allocations

2.3 The emerging Local Plan proposes to allocate the land shaded in green as an 'urban edge allocation' to provide 5,400 houses, 14.5ha of employment land and 13.5ha of

safeguarded employment land. The two smaller red sites benefit from extant planning permission for residential development (150 and 600 dwellings respectively).

Land Uses

2.4 The site is comprised predominantly of agricultural land uses: farmland and associated farm buildings, some private houses and a large area of woodland known as Cawston Spinney. Lime Tree Village, a new and expanding community for the elderly, is located within the site between Cawston Lane and the committed development site south of the B462 (see Appendix 1).



Figure 2 SW Rugby Site

- 2.5 Some employment uses are located at the edges of the site, including the Dunchurch Trading Estate located just off the A45. The attractive village of Dunchurch lies to the south east of the site and offers a mix of retail and leisure uses. The junction of the B4429 and the A426 at the heart of the village is at capacity and its layout and the proximity of listed buildings renders it unable to be improved to increase capacity, making it a significant highway constraint in the locality.
- 2.6 The grounds of Bilton Grange School define the south eastern edge of the site, east of Dunchurch. The urban edge of Rugby is characterised by the new build estate at Cawston and the attractive residential streets of Lime Tree Avenue in the north east and Alwyn Road to the east. Fenley Field rugby and hockey club lies within the site, south of Lime Tree Avenue.

Topography and Landscape

2.7 The site is generally flat with little variation in topography, beyond some minor undulations such as down from Coventry Road towards the Spinney (see Appendix 1).



Figure 3 Relatively flat, agricultural landscape

2.8 The landscape is characterised by open grassland and arable fields defined by established hedgerows, individual mature trees (some of which are the subject of Tree Protection Orders) and small copses (see Figure 3). Cawston Spinney visually separates the north and southern parts of the site, forming a complete visual barrier between the two areas (see Figure 4). Field boundaries are well defined and create smaller, more discrete 'parcels' which are visually separate from each other, giving few opportunities to view the site as a whole.



Figure 4 View from Coventry Road south, looking towards Cawston Spinney

- 2.9 The Warwickshire County Council Landscape Character Assessment characterises most of the site of moderate landscape sensitivity and declining condition.
 - Ground Conditions, Utilities, Drainage
- 2.10 The majority of the site comprises of Grade 3 agricultural land with a swathe of Grade 2 on the eastern side. A series of low voltage overhead powerlines traverse the site

(see Appendix 1). Small stretches of undergrounded low voltage powerline are located under the existing highway adjacent to Windmill Farm and Cherry Tree Farms. An underground chalk slurry pipeline is located in the south western corner of the site from the A45 to Station Farm, thought to be associated with the nearby Cemex plants.

2.11 A small reservoir is located west of the spinney, fed by the watercourse running from the north into the site. The vast majority of the site falls within flood zone 1, with small areas of zone 2 and 3 associated with the watercourse and small waterbodies.

Heritage and Ecology

- 2.12 The site does not feature any statutorily designated Sites of Nature Conservation or other ecological sites, with the exception of the Fox Covert and Cawston Spinney Local Wildlife Site. Parts of this woodland are also designated as Ancient Woodland.
- 2.13 Cawston Farm House just off Coventry Road is the only listed building within the site (Grade II). Conservation Areas are located some distance from the site, in Rugby, Thurlaston and Dunchurch. The Bilton Grange School grounds are designated as a Historic Park and Garden, just to the south east of the site.

Transport and access

2.14 The site benefits from proximity to a number of strategic roads, including the M45 and A45 to the south, A4071 to the west, leading to the Western Relief Road and the B462 Coventry Road to the north (see Appendix 1). Cawston Lane, a narrow country lane bounded by established hedgerows on both sides dissects the site, running broadly north to south (see Figure 5).





Figure 5 Cawston Lane and Northampton Lane

2.15 Within the site, Northampton Lane, a narrow track, provides a connection to Windmill Farm and south on to the B4429. It continues as a Public Right of Way through the site. A disused railway runs just to the west of the site boundary. A network of further Public Right of Ways and a National Cycle Route offers a choice of routes through the site. The entire site falls within the Rugby Air Quality Management Area, as does the rest of the Rugby urban area.

Land Ownership

- 2.16 The site is currently in multiple landownerships (see Appendix 1). Both the public and private sector have interests in the site. Some of the landowners have come together to produce promotional and masterplanning material in support of the proposed allocation, although no formal agreement between landowners is in place.
- 2.17 It has been agreed that for the terms of this commission, the SW Rugby project is being undertaken 'land ownership-blind'. This will ensure the optimum master planning solution for the delivery of the site as a whole can be established.

3.0 TECHNICAL ASSUMPTIONS AND INITIAL SITE CAPACITY TESTING

- 3.1 Having reviewed the baseline information and mapped the technical site constraints (Appendix 2 refers), the next stage of the process is to consider the implications of these constraints and site factors for SW Rugby. This section of the report articulates the results of this process of analysis and presents a series of development constraints and opportunities, as defined by the baseline evidence. This is then used to test development scenarios, applying general development assumptions to generate a series of outline land use budget outputs.
- 3.2 The plans at Appendix 2 express the implications of and any limits on development imposed by individual constraints as follows:
 - Cawston Spinney to be retained in its entirety due to its historic, ecological and landscape value. Buffer of 30m from the edge of the Ancient Woodland designation and 15m buffer from the boundary of the Local Wildlife Site;
 - Flood Zones 10m buffer from the edge of the reservoir, ponds and water course to avoid development in flood zones;
 - Noise 100m buffer applied from edge of A and M roads within vicinity of site, to reduce potential noise impacts of the roads on future development;
 - TPOs it is assumed that groups of TPO trees will be retained where possible;
 - Listed Building a buffer of 20m from the listed building at Cawston Farm has been applied;
 - Strategic Site Infrastructure a 30m corridor within the site has been introduced to incorporate the link road required to service the development.
 This is based upon the alignment provided by Vectos.
- 3.3 For the purposes of this analysis, it is assumed that any other site constraints such as the overhead powerlines, pipeline and easement do not pose an absolute constraint on development and can be addressed at detailed design stage.
- 3.4 The plan at Appendix 2 draws all of the above constraints information and assumptions together into one plan in order to 'sieve' the constraints and determine those areas of the site that, based on the information and advice provided to date, are entirely unconstrained and therefore 'developable'.
- On this basis, 245.83 hectares are defined as 'unconstrained' i.e. do not fall within any of the heritage, noise, ecology or drainage constraints areas shown on the plan

at Appendix 2. These constraints represent a commonly understood starting point for the planning process. However, it is important to note at this stage that:

- a) the above site constraints are yet to be tested by the master planning process or prioritised to determine their relative importance; and
- b) some of the land identified as 'constrained' by the above analysis may in fact serve a useful function in any future master plan. For instance, the noise buffer could also accommodate areas of public open space or sustainable urban drainage features that would otherwise need to be located within the 'developable' area.
- 3.6 These assumptions will need to be tested further in the next stage of master plan work. Using DLA's experience in master planning and delivering sustainable urban extensions, we have built up a standard 'rule of thumb' for SUEs in terms of the relative proportion of a site that is likely to accommodate built development and that is given over to open space and green infrastructure (including on-site mitigation, buffers and screening to minimise impact on the surrounding areas).
- 3.7 This 'rule of thumb' equates to c.60% developable to c.40% non-developable land and is typically made up of the following:
 - 60% developable land: residential, commercial, mixed use, education and community uses (including playing fields), strategic and internal road network and other 'hard infrastructure';
 - 40% non-developable land: strategic open space, existing landscape/water features, sustainable urban drainage and attenuation features, green 'buffers' and landscape screening.
- 3.8 In our experience, most urban extensions in comparable sites are built to a density of 30-40 dwellings per hectare, with variations across the development (higher densities around local and district centres, lower densities in peripheral, semi-rural areas).
- 3.9 The following paragraphs and table consider the overall capacity implications of applying this assumption and a range of densities to the constraints led scenario to generate the notional maximum and minimum capacities of the site.
- 3.10 If the 60:40 ratio were to be applied to that part of the site assumed to be 'unconstrained' (246ha), approximately 148ha would be deemed 'developable' and 98ha 'undevelopable' (falling outside the 'usual' land uses required by the SUE).

Applying a range of density and open space assumptions to these areas would result in the following site capacities and populations:

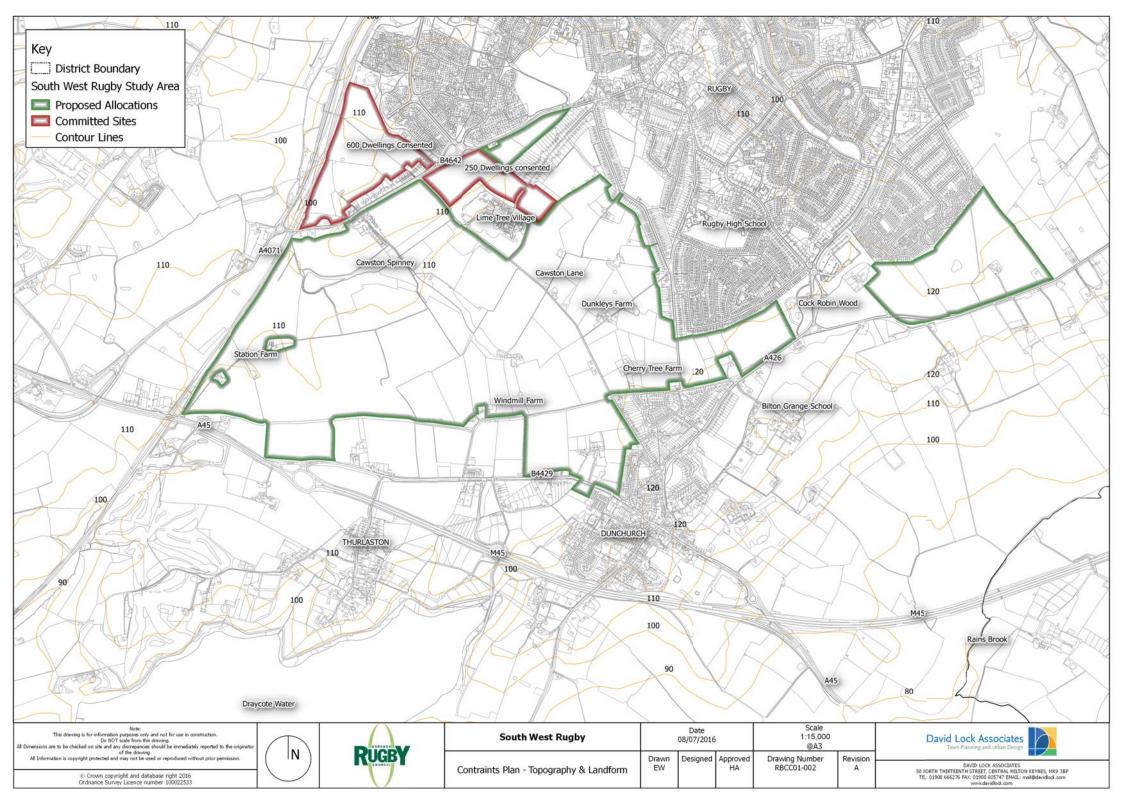
Table 2: Constraints Led Site Capacity Range

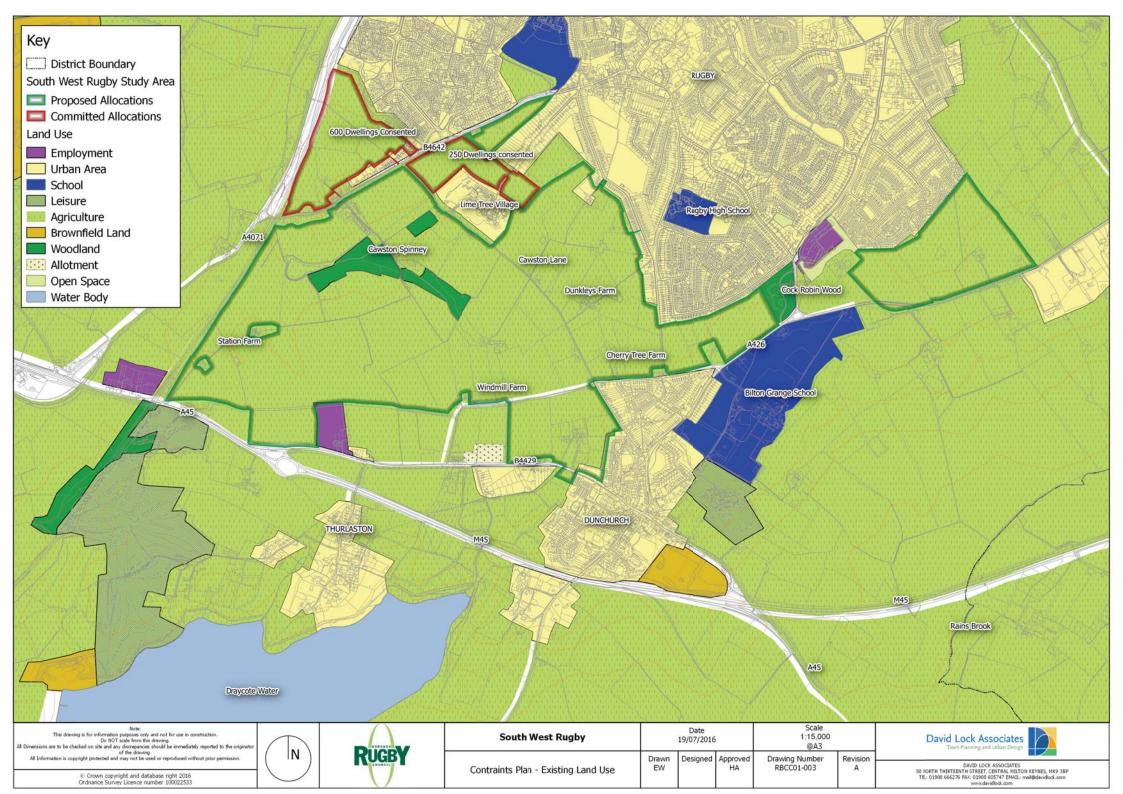
| Density | Dwellings |
|---------|-----------|
| 30 | 4,428 |
| 35 | 5,166 |
| 40 | 5,904 |

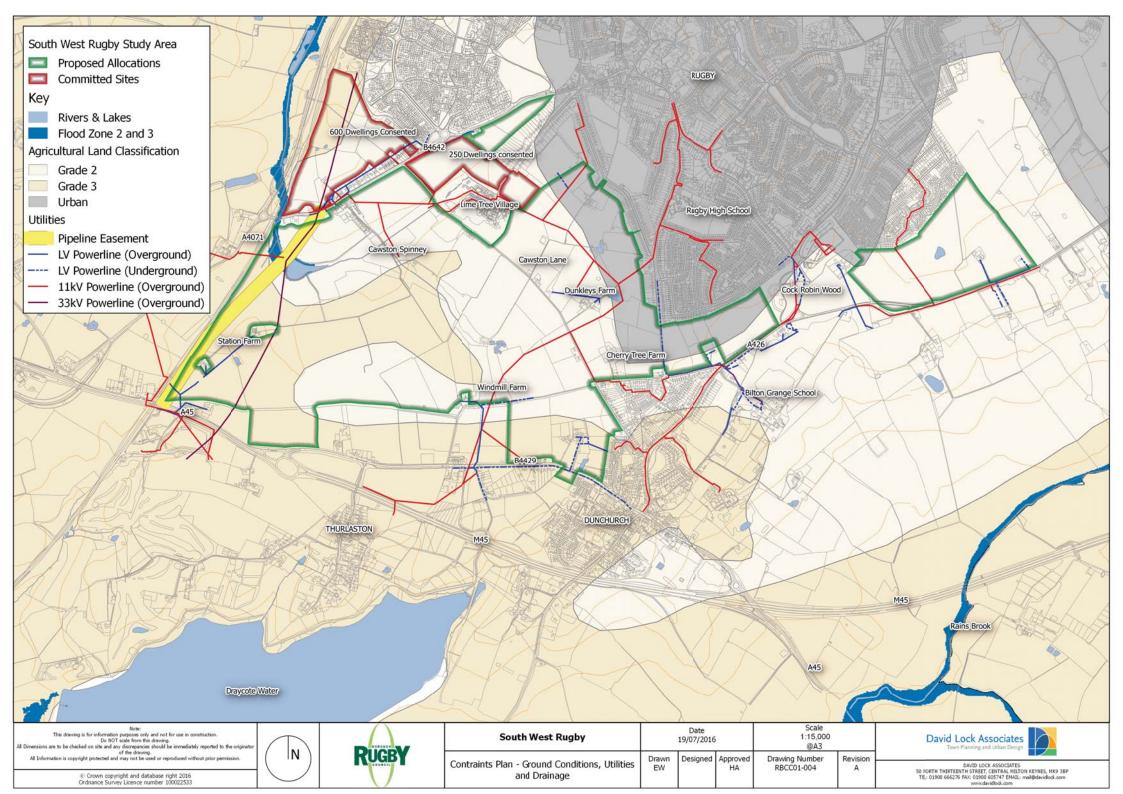
3.11 The final residential capacity of SW Rugby will inevitably fall somewhere between the minimum (4,428) and maximum (5,904) figures and will be design-led, in that it will be determined by the master plan process.

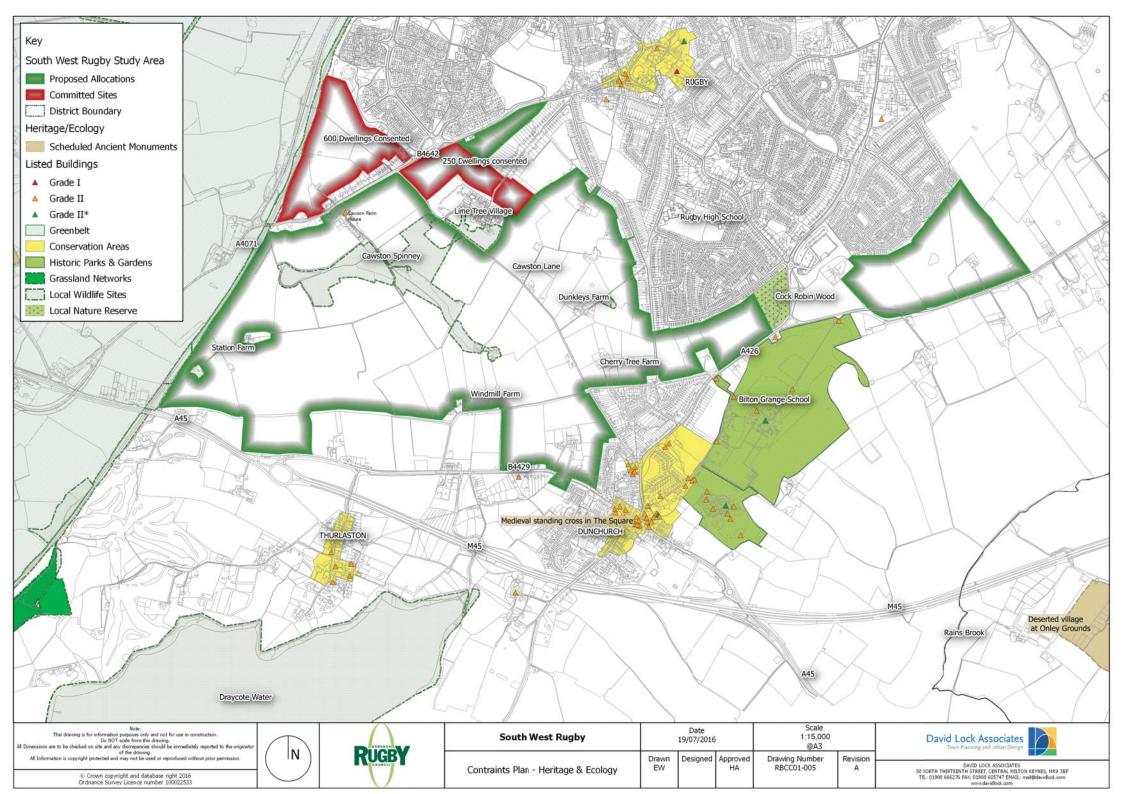
APPENDIX 1 SITE CONTEXT PLANS

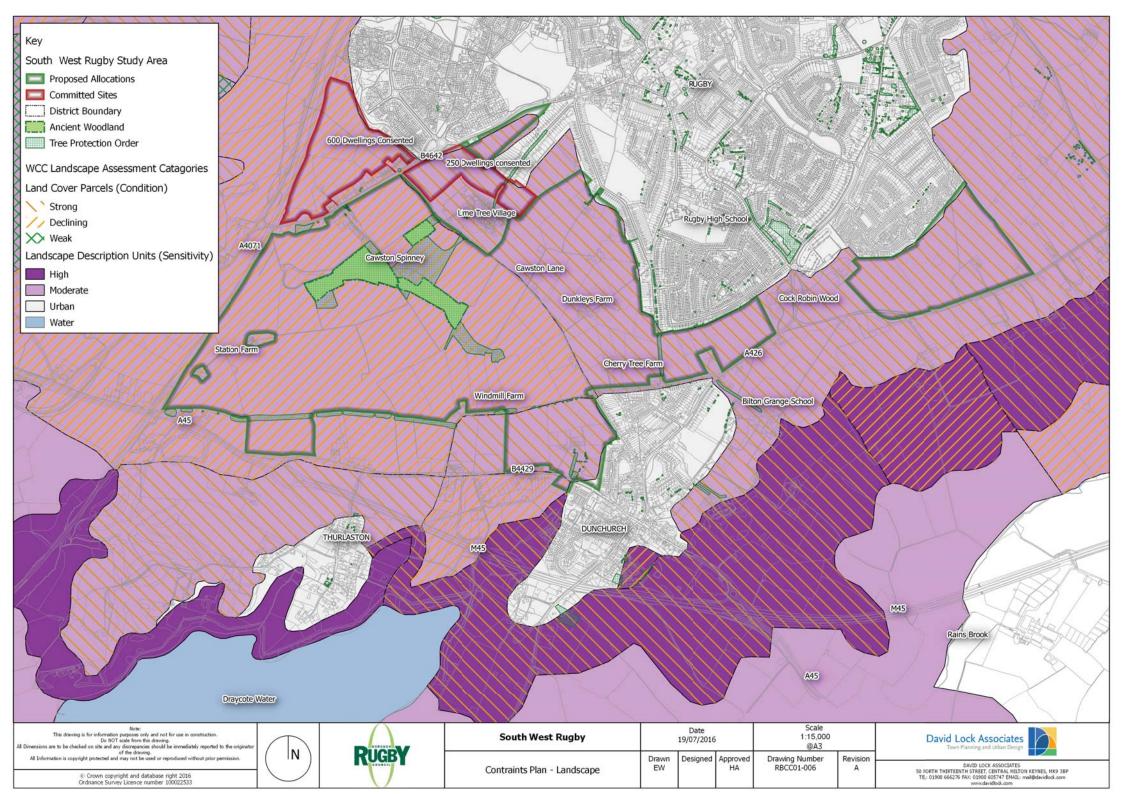


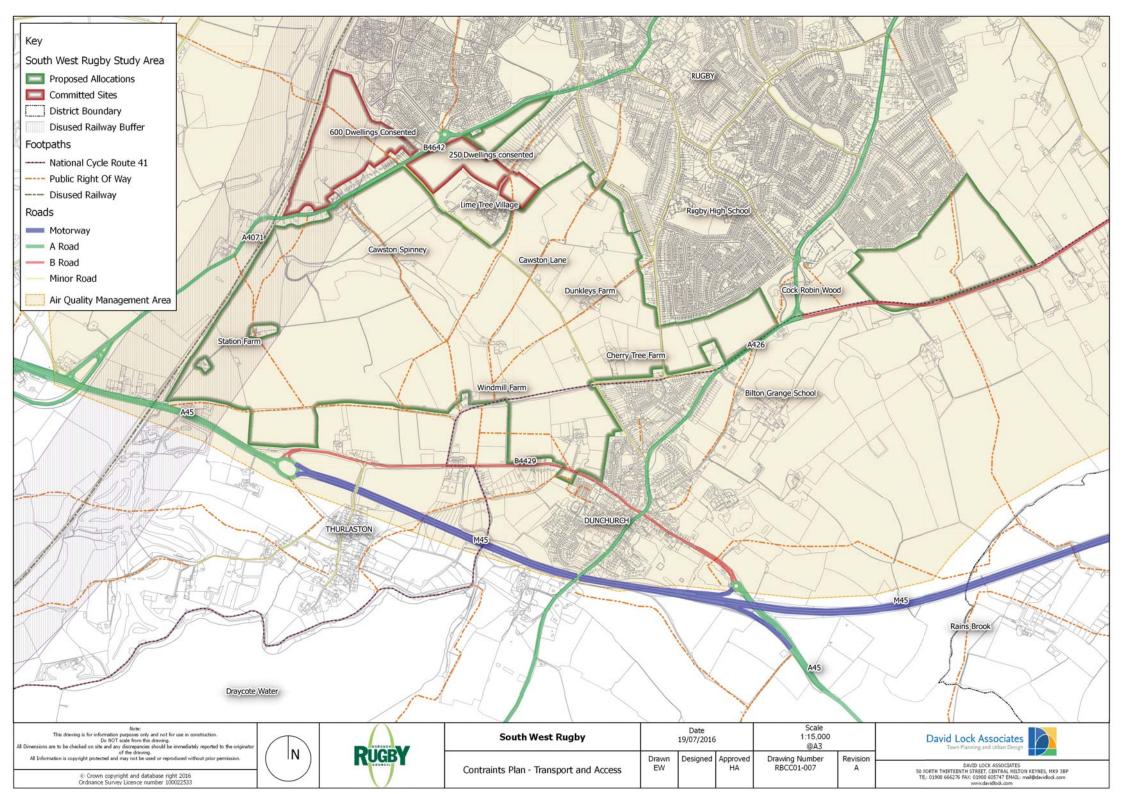


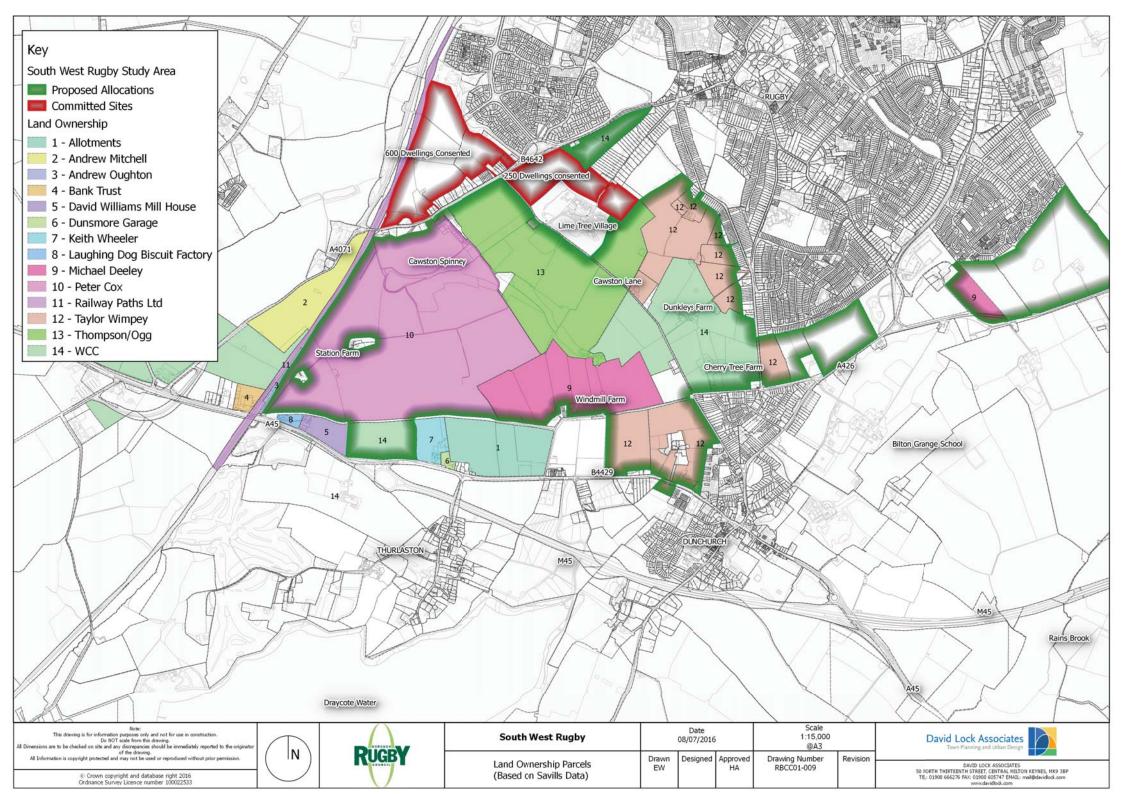












APPENDIX 2 SITE CONSTRAINTS AND SIEVE MAPPING PLANS

