

Gloucester, Cheltenham and
Tewkesbury Councils

JCS Infrastructure Delivery Plan

Consideration of Additional Strategic
Allocations

Issue | 27 September 2016

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

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Contents

	Page
1	Executive Summary 1
1.1	Identification of Priority Infrastructure 3
2	Winnycroft 5
2.1	Strategic Allocation Key Data 5
2.2	Infrastructure Requirements 8
3	West Cheltenham 15
3.1	Strategic Allocation Key Data 15
3.2	Infrastructure Requirements 18
4	Twigworth 22
4.1	Strategic Allocation Key Data 22
4.2	Infrastructure Requirements 25
5	Fiddington 30
5.1	Strategic Allocation Key Data 30
5.2	Infrastructure Requirements 33
6	Mitton 37
6.1	Proposed Site Key Data 37
6.2	Infrastructure Requirements 40

1 Executive Summary

This statement has been produced to set out the current position in terms of infrastructure requirements for the proposed Site Allocations at Winnycroft, West Cheltenham, Twigworth, Fiddington and Mitton.

The statement draws upon a number of resources including planning application supporting material and provides the basis for discussions with the site promoters and service providers.

The document identifies any risks to the delivery of infrastructure and creates a strategy to mitigate these risks where appropriate. The aim of the document is to inform the inspector at the examination of the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy (JCS).

For the purposes of the examination, the National Planning Practice Guidance (NPPG) only requires specific infrastructure requirements to be identified for the first five years of the plan period. This is set out in paragraph 018, reference 12-018-20140306 (Nov 2015).

“The Local Plan should make clear, for at least the first five years, what infrastructure is required, who is going to fund and provide it, and how it relates to the anticipated rate and phasing of development. For the later stages of the plan period, less detail may be provided as the position regarding the provision of infrastructure is likely to be less certain.”

As such, this statement focuses on the infrastructure required to ensure delivery during the first five years of the plan period, although where information has been available, the longer term needs are presented. Longer term infrastructure requirements may be subject to change due to market forces. Where information was not available, reflecting scheme development, infrastructure needs, triggers and costs have been estimated using available benchmark standards.

The review and consultation undertaken has revealed the following headline issues with regards to infrastructure:

Proposed Allocation	Issues
Winnycroft	<ul style="list-style-type: none"> • Two applications to develop the land at Winnycroft are currently under consideration by the Gloucester City Council. This includes two site promoters / applicants seeking developments of up to 420 dwellings and a 250 dwellings respectively. The proposals take into account the proposed adjacent development and the related infrastructure needs. • Application 14/01063/OUT is at the appeal stage due to affordable housing negotiations. If the appeal is allowed, the developer would provide the following infrastructure: <ul style="list-style-type: none"> - New 3 arm roundabout, new T-Junction and various improvements to the strategic network. - A new bus shelter and the potential diversion of existing bus services - Diversion of existing public rights or way and new pedestrian crossings - A wetland park and SUDs to mitigate flood risk

Proposed Allocation	Issues
	<ul style="list-style-type: none"> - Developer contributions to reinforce existing utilities provision, including a new pumping station and two new substations - S106 contributions of £3.7m for education and library facilities - A new community building, two sports pitches and two play areas - 6.29 hectares of new open space • Application 14/01470/OUT is awaiting decision and if granted, proposes to provide the following infrastructure: <ul style="list-style-type: none"> - A new priority junction and emergency access junction - Diversion of existing PROW routes - Attenuation basins to limit storm water discharge and reduce flood risk from Sud Brook - 1.65 hectares of new open space and a play area - S106 contributions have yet to be finalised but may include education, healthcare and library provisions • Due to the stage of both applications, timescales for delivery and details on reserves matters are yet to be defined. For application 14/01470/OUT, details of a S106 schedule are yet to be determined.
West Cheltenham	<ul style="list-style-type: none"> • The site at Hayden is currently safeguarded land, in which its Green Belt status is removed in order to secure it for future development. • Hayden Sewage Treatment Works, owned by landowner Severn Trent Water, is located on the site and pose a constraint to development, due to the Development Exclusion Zone imposed around it. Development of Phase 1 is dependent on this zone being reduced through upgrades to the works and Severn Trent Water are currently exploring options for this. • Prior to Phase 2 coming forward (which is not being considered in this position statement) the works would need to be relocated. • Phase 1 of the proposed development at Hayden includes a large area of employment land, with housing development of up to 1100 dwellings. • The developers note the potential for planning contributions, particularly in regard to education and sports facilities.
Twigworth	<ul style="list-style-type: none"> • The site at Twigworth has been recommended in the JCS Inspectors Interim Report as being suitable for an allocation of 750 dwellings. The allocation could accommodate up to 1600 dwellings during the plan period and the JCS is in the process of demonstrating the deliverable quantity within the plan period. • There has been one application (ref: 15/01149/OUT) submitted for development of 725 dwellings on the site, in October 2015. • This application was refused by Tewkesbury Borough Council in January 2016 on grounds that it is of inappropriate scale in the green belt. It poses severe and unmitigated impacts to local and strategic highways infrastructure, while failing to provide adequate community, education and health infrastructure. • An appeal was launched for application 15/01149/OUT in July 2016.

Proposed Allocation	Issues
Fiddington	<ul style="list-style-type: none"> The site at Fiddington (OM20) has been recommended by the Interim Inspector's Findings for an allocation of 900 dwellings. A Position Statement was produced in 2014 by Robert Hitchins Ltd and Pegasus Planning to outline proposals for a 900 dwelling development. Details on infrastructure provision for this proposal are limited and no planning application has so far been submitted.
Mitton	<ul style="list-style-type: none"> Interim findings from the Inspector during the JCS examination have recommended that the site is suitable for inclusion in the JCS and that discussions with Wychavon District Council should seek to release the land to contribute to the Tewkesbury housing need. Barratt West and Mactaggart and Mickel have outlined proposals to develop 1,100 dwellings on the site, alongside with a small amount of business/industrial land, a primary school and associated green infrastructure. To date, no applications have been submitted.

1.1 Identification of Priority Infrastructure

In order to identify the infrastructure components that are of most importance in the delivery of the strategic allocation, the various infrastructure sectors and specific projects within them are defined as either critical, essential or desirable infrastructure. This reflects the categories applied in the IDP and seeks in particular to identify infrastructure of most importance in the early phases of the development (e.g. first five years).

- **Critical Infrastructure:** Sectors and projects that the IDP has identified which must happen to enable the delivery of growth within the JCS.
- **Essential Infrastructure:** Sectors and projects that are required if growth is to be achieved in a timely and sustainable manner.
- **Desirable Infrastructure** – Sectors and projects that are required for sustainable growth but are unlikely to prevent development in the short to medium term.

Each infrastructure sector, sub sector and individual projects has been evaluated against these categories. With the use of a simple traffic light system, the position statements identify any gaps or disconnects between the position of the site promoter and service providers (e.g. education) that are deemed critical to delivery. The traffic light system is used as a simple way to summarise the current position and focus the reader's attention to key delivery issues as follows:

- **red** - indicates a significant disconnect and/or difference of opinion between what service providers expect and what site promoters are proposing.
- **amber** - indicates a lack of information from service providers or site promoters, and/or ongoing discussions between parties to reach agreement. Where this is deemed a potential risk to delivery, this is highlight within this position statement.

- **green** - indicates a fully funded package of deliverable solutions is agreed between service providers and promoters for the first 5 years of completions if the infrastructure is deemed critical or a strategy is emerging if the infrastructure is essential or desirable.

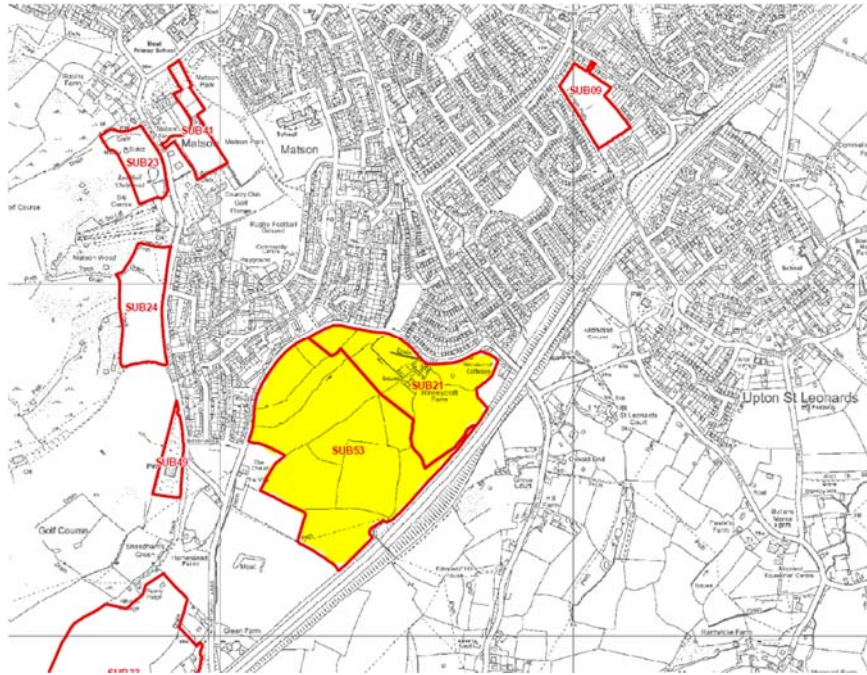
This approach has been taken consistently across the five proposed site allocations.

2 Winnycroft

2.1 Strategic Allocation Key Data

2.1.1 Location & Extent of Allocation

Figure 1



Source: Gloucester City Council Strategic Assessment of Land Availability January 2015

2.1.2 Key Data

Table 1

A - Winnycroft	
Gross Site Area	28.51 hectares
Extent of Residential Area	16.84 hectares
Extent of Employment Area	N/A
Housing Allocation	620 (JCS 2016)
Estimated Total Population (by 2031)	N/A
Developer	Barwood/Linden Homes
Lead Technical Support	WYG / LRM Planning
Joint Developer Working Arrangements (if relevant)	N/A
Site Status	Outline Application submitted by Barwood on 05/09/14. (04/01063/OUT). Application approved by committee subject to s106 to deliver 20% affordable

A - Winnycroft	
	<p>housing. Barwood lodged non-determination appeal and their position at the appeal will be to deliver 0% AH. Committee decided Council position at appeal is to seek not less than 10% affordable housing.</p> <p>Outline Application submitted by Linden Homes on 15/12/2014 (14/01470/OUT). Awaiting consideration by Planning Committee.</p>

2.1.3 Proposed Scale & Mix of Development

The Winnycroft site is identified in the 2012 Gloucester City Council SHLAA as having potential to deliver 450 homes. This was reduced to 400 homes in the 2013 SHLAA report. Most recently, the 2015 Strategic Assessment of Land Availability (SALA) accompanying the emerging Gloucester City Plan identifies 400 homes being delivered across the two sites, labelled SUB53 and SUB21 (see Figure 1).

The proposal from Barwood for outline planning permission (reference 14/01063/OUT) on site SUB53 (reference 14/01470/OUT) is illustrated in Figure 2. The proposal from Linden Homes for outline planning permission on site SUB21 is illustrated in Figure 3. The Barwood application proposes 420 dwellings and the Linden Homes application proposes 210 dwellings, creating a total of 630 dwellings between the two sites.

Barwood additionally propose 6.29 hectares of open space, 2.32 hectares of sports and recreation land use and 0.08 hectares of community land use. Linden homes propose 1.65 hectares of open space and 0.44 hectares of noise mitigation land.

Figure 2



Source: Masterplan submitted with Barwood Design and Access Statement September 2014 (LRM Planning)

Figure 3



Source: Masterplan submitted with Linden Homes Design and Access Statement December 2014 (LRM Planning)

2.1.4 Proposed Build Out Trajectory & Population Growth

The table below shows the phases of development as set out in the JCS Authorities’ Housing Trajectory, June 2016.

Table 2

	Gross Site Capacity	2016-2021 (dwellings)	2021-2026 (dwellings)	2026-2031 (dwellings)
Dwellings	620	150	375	95

Source: JCS Authorities (2016)

The housing trajectory indicates a likely annual completion rate of between 45 and 100 units.

2.2 Infrastructure Requirements

This section of the statement sets out the current position in terms of infrastructure requirements on the site.

The following reference documents and planning application supporting material form the basis of this position statement:

- ***JCS Infrastructure Delivery Plan (IDP)*** (Arup, 2014)
- ***Matter 9 – Other Potential Strategic Allocations*** – Hearing Statement, WYG on Behalf of Barwood Development Securities Ltd (Gloucester City, Cheltenham and Tewkesbury Borough Councils, 2016)
- ***Material Supporting Planning Application 14/01470/OUT***– Planning Statement, Design and Access Statement, Transport Assessment (Alliance Planning, 2014)
- ***Material Supporting Planning Application 14/01063/OUT*** – Planning Statement, Design and Access Statement (LRM Planning, 2014)
- ***Gloucester City Council Planning Committee Report 05th July 2016 Application 14/01063/OUT***– (Gloucester City Council, 2016)

Utilising this information the statements clearly identify where positions are agreed and where inconsistency may exist between site promoters and requirements of service providers (e.g. GCC Highways).

The remainder of Section 2.2 sets out the infrastructure requirements and proposed solutions for each, and provides a RAG rating on the basis of the methodology set out in Section 1.1.

2.2.1 Critical Infrastructure: Transport

Transport	Risk to SA Delivery
Highways – Immediate Site Enabling Works (First 5 years)	
<div style="background-color: #f0f0f0; padding: 10px; margin-bottom: 10px;"> <p>Projects</p> <ul style="list-style-type: none"> New 3-arm roundabout New T-Junction New priority junction on Corncroft Lane Emergency access only junction east of Winnycroft Farm </div> <p>The outline application submitted by Barwood in 2014 (14/01063/OUT) proposes 420 dwellings and two new vehicular access points. These would include a new 3 arm roundabout off the northern section of Winnycroft Lane (opposite 32-34 Winnycroft Lane) and a new priority T-junction on the southern section of Winnycroft Lane (opposite 50-60 Winnycroft Lane).</p> <p>The outline application for the adjacent land submitted in 2014 by Linden Homes (14/01470/OUT) proposes 210 dwellings and one new access point. This would be a priority junction off Corncroft Lane, between Birchall Avenue and Haycroft Drive. A second junction would be constructed east of Winnycroft Farm, to provide access to the site for emergency vehicles only.</p>	
Highways - Strategic Network Improvement Works	
<p>As stated in the Planning Committee report for application 14/01063/OUT, the developer Barwood is expected to contribute £191,697 through S106 agreement for highways works. The reports also set out conditions recommended by the Highways Authority for capacity improvements to the signalised junction of Norbury Avenue and Painswick Road. The Design and Access statement submitted with the application also proposes this improvement, as well as a right turn lane at Painswick Road/Corncroft Road junction.</p> <p>Existing and proposed traffic flow surveys supporting application 14/01470/OUT show that existing highways are suitable to accommodate the proposed development. However, a transport assessment submitted with the application states that if both this and the adjacent proposal for 420 homes are to go ahead, then improvements to the Painswick Road/Upton Hill/Corncroft Lane junction are required, including a separate lane for vehicles turning right. Further analysis and assessment will be undertaken regarding the impact of this site as part of the strategic modelling update currently underway..</p>	
Public Transport	
<div style="background-color: #f0f0f0; padding: 10px; margin-bottom: 10px;"> <p>Projects</p> <ul style="list-style-type: none"> Travel plan Erection of bus shelter at existing stop along Matson Avenue Diversion of existing services and new bus stop infrastructure </div>	

<p>In the Planning Committee reports for application 14/01063/OUT, the suggested S106 agreement requires the developer Barwood to contribute £86,280 and £10,000 to a travel plan and monitoring of the travel plan respectively.</p> <p>A travel plan was submitted by the developer with the application, which aims to reduce dependency on the car through various on-site schemes.</p> <p>The Highways Authority recommends conditions relating to the developer Barwood erecting a bus shelter along Matson Avenue. The developer is still in discussion with Gloucester City Council about diverting existing bus services and the related bus stop infrastructure required on the site.</p> <p>Application 14/01470/OUT does not propose any changes to existing public transport arrangements.</p>	
Walking & Cycling	
<p>Application 14/01063/OUT proposes provision of cycle parking and the retention of PROW through diversions. They would also install new footways and pedestrian crossing points to link the development with existing provision the adjacent proposed site.</p> <p>It is proposed by the developer in application 14/01470/OUT to re-route existing PROW at the east of the site to provide passive surveillance along the length of the path and remove reported crime risks; this would introduce an extra 100m to the PROW. The westerly PROW would be re-routed through public open spaces to minimise contact with vehicles. Shared surfaces would be used to reduce car speed and facilitate a pedestrian friendly development.</p>	

2.2.2 Critical Infrastructure: Flood, Water & Waste Water

Flood, Water & Waste Water	Risk to Delivery
Strategic Flood Defence (Offsite)	
<p>The attenuation basins proposed in application 14/01470/OUT would reduce risk of flooding for residents living downstream from the Sud Brook, an area that has previously flooded.</p>	
Flood Defence (Onsite)	
<p>The Environment Agency confirm that the site is located in Flood Zone 1 but does have an ordinary watercourse running through the site and highlight that this watercourse may mean there is a floodplain on site. This should be established and considered through the site specific FRA.</p> <p>The proposed development set out in application 14/01063/OUT proposes a Sustainable Drainage System to ensure there is no increase in flood risk arising from the proposed development. A flood risk assessment and drainage strategy was submitted with the planning application. The strategy includes provision of interconnected detention basins situated in the low-lying northern area of the site, forming an integral part of the new wetland park.</p> <p>The Flood Risk Assessment submitted as part of application 14/01470/OUT proposes attenuation basins to limit the discharge of storm water during extreme events. These would also reduce risk of flooding further downstream of the development.</p>	
Potable Water Supply	
<p>The application 14/01063/OUT states that the developer would pay contributions to replace and reinforce the existing 4” main located in Winnycroft Lane to serve the development.</p> <p>The Design and Access statement submitted with 14/01470/OUT states that potable water for the site would be provided from existing water routes, confirmed by Severn Trent Water.</p>	

Waste Water	
<p>The Design and Access statement submitted with 14/01063/OUT states that a new pumping station would be provided by the developer to support new housing.</p> <p>The Design and Access statement submitted with 14/01470/OUT proposes that the existing foul water network would be utilised for the development; any reinforcement required would be reviewed with Severn Trent Water.</p> <p>The Environment Agency highlight a requirement from Seven Trent Water to confirm that sufficient capacity exists within the foul drainage network to accommodate the allocation.</p>	

2.2.3 Critical Infrastructure: Education

Education	Risk to Delivery
Early Years & Childcare	
<p>The current schedule of S106 contributions for application 14/01063/OUT at last Planning Committee lists the developer Barwood as contributing £343,745 to pre-school education.</p> <p>The planning statement submitted with the application for 14/01470/OUT states that contributions may include provision for improved education provision.</p> <p>Based upon Spring 2016 GCC Education benchmarks, it is estimated that the development of 620 dwellings would create demand for 86 early years' places at a cost of £1,057,436.</p>	
Primary Education	
<p>The current schedule of S106 contributions for application 14/01063/OUT at last Planning Committee lists the developer Barwood as contributing £1,277,660 to primary education, specifically at Robinswood School.</p> <p>The planning statement submitted with the application for 14/01470/OUT states that contributions may include provision for improved education provision.</p> <p>Based upon Spring 2016 GCC Education benchmarks, it is estimated that a development of 620 dwellings would create demand for 186 primary school places at a cost of £2,298,774.</p>	
Secondary Education	
<p>The current schedule of S106 contributions for application 14/01063/OUT at last Planning Committee lists the developer Barwood as contributing £1,123,416 to secondary education, specifically to Gloucester Academy.</p> <p>The planning statement submitted with the application for 14/01470/OUT states that contributions may include provision for improved education provision.</p> <p>Based upon Spring 2016 GCC Education benchmarks, it is estimated that a development of 620 dwellings would create demand for 102 secondary school places at a cost of £1,928,150. Post 16 education contributions should total £642,717, providing 34 places.</p>	

2.2.4 Critical Infrastructure: Healthcare

Healthcare	Risk to Delivery
Primary Healthcare	
<p>The application 14/01063/OUT does not include provision for primary healthcare.</p> <p>The planning statement submitted with the application for 14/01470/OUT states that contributions may include provision for improved healthcare provision.</p> <p>Based upon Gloucestershire CCG benchmarks, it is estimated that a development of 620 dwellings would create demand for 0.75 GPs at a cost of £225,267 and demand for 0.68 dentists at a cost of £122,996.</p>	

2.2.5 Desirable Infrastructure : Community & Culture

Community & Culture	Risk to Delivery
Libraries	
<p>The current schedule of S106 contributions for application 14/01063/OUT at last Planning Committee lists the developer Barwood as contributing £82,320 to libraries.</p> <p>The planning statement submitted with the application for 14/01470/OUT states that contributions may include provision for improved library provision.</p> <p>Based upon GCC benchmarks, it is estimated that a development of 620 dwellings would create demand for 41m2 of library space at a cost of £154,082.</p>	
Community Centres	
<div style="background-color: #f0f0f0; padding: 10px; margin-bottom: 10px;"> <p>Projects</p> <ul style="list-style-type: none"> • New community building of up to 200sqm </div> <p>The current schedule of S106 contributions for application 14/01063/OUT at last Planning Committee lists the developer Barwood as contributing £260,268 to a community building. In the initial planning application Planning Statement and Illustrative Masterplan, this is proposed by the developer to be up an on-site community building up to 200sqm. Final function of the building would be determined in conjunction with the local community at Reserved Matters stage.</p> <p>The planning statement submitted with the application for 14/01470/OUT states that contributions may include provision for improved community facility provision.</p> <p>Based upon GCC benchmarks, it is estimated that a development of 620 dwellings would create demand for 218m2 of community centre space at a cost of £326,918.</p>	

2.2.6 Desirable Infrastructure: Sports & Outdoor Recreation (Pitches & Play Space), Informal & Natural Open Space

Open Space, Sport and Recreation	Risk to Delivery
Open Space	
<p>Projects</p> <ul style="list-style-type: none"> 7.94 hectares of new open space, including wetland park, community grow park, ribbon park and attenuation pond. <p>The application 14/01063/OUT would provide 6.29 hectares of open space, including a multi-functional wetland park and community grow park (featuring allotments and orchard). The masterplan indicates a ribbon park which would provide informal pedestrian routes on the site. The planning statement submitted with the application for 14/01470/OUT states that the proposal would provide 1.65 hectares of open space, including the attenuation pond. It also states that contributions may include provision for improved open space provision. Based upon benchmarks, it is estimated that development of 620 dwellings would create demand for 0.74ha of informal open space and 1.35ha of natural open space at a cost of £12,637 and £324,384 respectively.</p>	
Sport & Recreation facilities	
<p>Projects</p> <ul style="list-style-type: none"> Two sports pitches, a MUGA, two LEAPs, one NEAP <p>The masterplan and material supporting the submission of application 14/01063/OUT states onsite provision of two sports pitches, a multi-use games area (MUGA) and two children’s play spaces (one LEAP and one NEAP).</p> <p>The application for 14/01470/OUT states planned provision of one LEAP within the development. The planning statement also recognises that contributions may include provision for improved sports facility provision, specifically a contribution to improve sports pitch provision in the surrounding environs. Based upon benchmarks, it is estimated that development of 620 dwellings would create demand for 1.62ha of playing pitches and 0.54ha of outdoor sports facilities at a cost of £158,137 and £528,477 respectively. Contributions towards provision of swimming pools and sports hall are calculated by the Sport Facility Calculator and total £251,642 and £207,316 respectively.</p>	

2.2.7 Essential Infrastructure: Energy

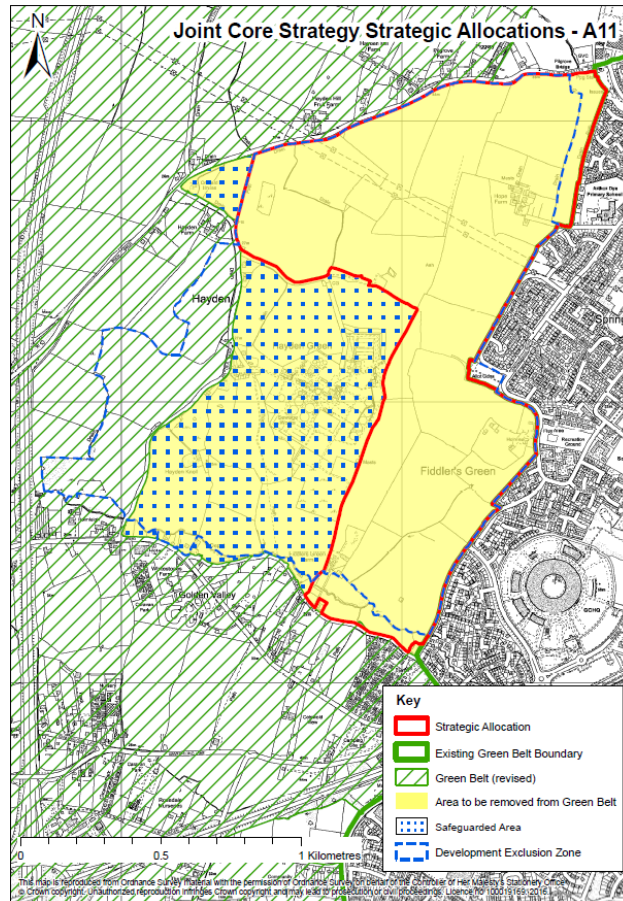
Energy	Risk to Delivery
Electricity Generation	
No onsite energy generation is proposed as part of this development.	
Electricity Transmission & Distribution	
<p>The Design and Access statement submitted with 14/01063/OUT states that the developer Barwood would pay contributions to extend and reinforce the existing 11KV electricity overhead network with two new substations provided in the development area. It would also bear any costs associated with diverting existing lines or installing them underground.</p> <p>The Design and Access statement submitted with 14/01470/OUT states that at the outline stage, there is flexibility to reroute existing power lines through the proposal or underground if required.</p>	

3 West Cheltenham

3.1 Strategic Allocation Key Data

3.1.1 Location & Extent of Allocation

Figure 4



Extent of developable area highlighted within Red Boundary Line (JCS Authorities, Sept 2016)

3.1.2 Key Data

Table 3

B – West Cheltenham	
Gross Site Area	77 hectares
Extent of Residential Area	17 hectares
Extent of Employment Area	45 hectares
Housing Allocation	1,100
Estimated Total Population (by 2031)	N/A

B – West Cheltenham	
Developer	Northern Trust, Barberry Cheltenham Ltd and Midlands Land Portfolio Ltd.
Lead Technical Support	Tetlow King, Hunter Page
Joint Developer Working Arrangements (if relevant)	Joint venture
Site Status	No current application. Latest developer Vision statement February 2016 outlining plans for Phase 1 (potentially deliverable within 5 years) and Phase 2 as site for further development in the future.

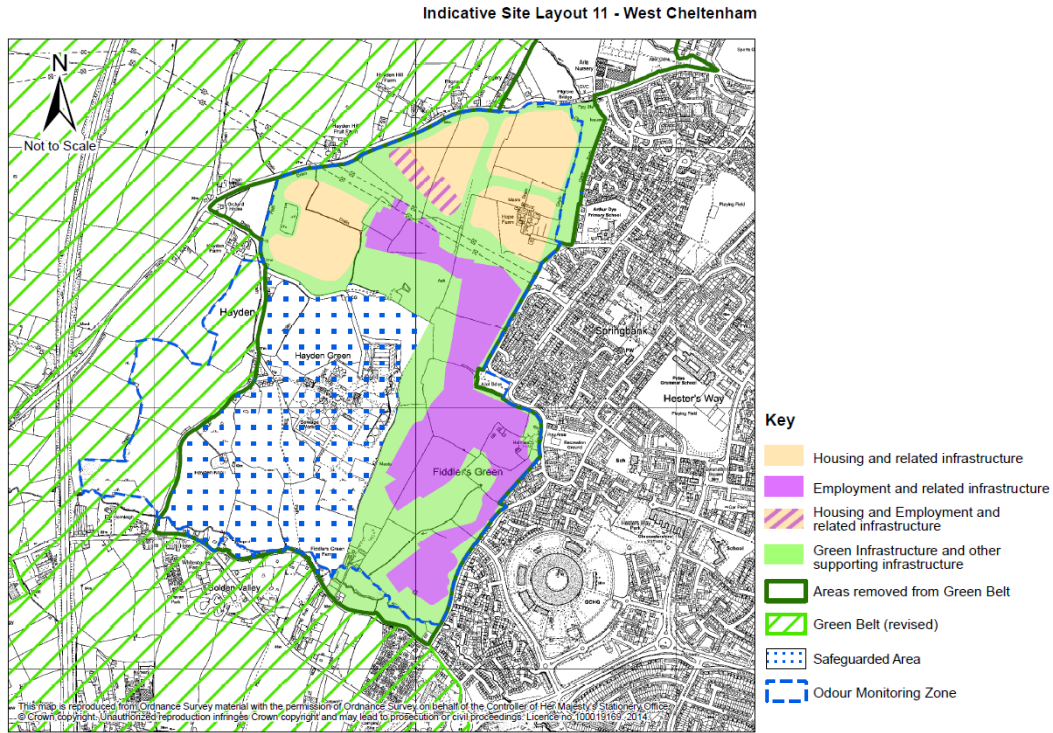
3.1.3 Proposed Scale & Mix of Development

The JCS identifies the site at West Cheltenham as a safeguarded area, to be removed from the Green Belt for future development. Only Phase 1 of the site is being considered as part of this position statement. This would require improvement works to the Hayden Sewage Treatment Works, which currently presents a constraint to development due to its exclusion zone.

The masterplan included in the Vision Statement for the site indicates a mixed-use development with 45ha of employment land, 17ha of residential land and 15ha other uses. The Vision Statement of February 2016 cites this development providing at least 500 new homes.

The development was initially limited by the water treatment works and the associated odour limits. Process improvements at the works has enabled the further release of land for development, and change in the split of the uses on the site. It is now assumed that 1,100 dwellings are deliverable on the site, reflected by the need for houses at Cheltenham, and the decrease of development capacity at Leckhampton. The proposed land uses are illustrated within Figure 5.

Figure 5



Proposed land uses at West Cheltenham (JCS Authorities, Sept 2016)

3.1.4 Proposed Build Out Trajectory & Population Growth

The table below shows the phases of development as set out in the JCS Authorities' Housing Trajectory, June 2016.

Table 4

	Gross Site Capacity	2016-2021 (dwellings)	2021-2026 (dwellings)	2026-2031 (dwellings)
Dwellings	1100 ¹	220	367	513

Source: JCS Authorities (2016)

¹ This figure is based on the June 2016 JCS Housing Trajectory.

3.2 Infrastructure Requirements

This section of the statement sets out the current position in terms of infrastructure requirements on the site.

The following reference documents and planning application supporting material form the basis of this position statement:

- **JCS Infrastructure Delivery Plan (IDP)** (Arup, 2014)
- **Matter 9: Other Potential Strategic Allocations** – Matter 9 Statement – Hunter Page and Tetlow King on Behalf of Northern Trust Company Ltd and Barberry Richborough Estates LLP (Hunter Page and Tetlow King, 2015)
- **Revised Statement of Common Ground: Land At Hayden, West Cheltenham** – Prepared by Tetlow King Planning and Hunter Page Planning for Severn Trent, Northern Trust Company Ltd, Barberry Cheltenham Ltd and JCS Authorities (Tetlow King and Hunter Page, 2016)
- **Hayden West of Cheltenham: Vision Statement February 2016** – Prepared by Pad Design on behalf of Northern Trust, Barberry Cheltenham Limited and Midlands Land Portfolio Limited (Pad Design, 2016)

Utilising this information the statements clearly identify where positions are agreed and where inconsistency may exist between site promoters and requirements of service providers (e.g. GCC Highways).

The remainder of Section 3.2 sets out the infrastructure requirements and proposed solutions for each, and provides a RAG rating on the basis of the methodology set out in Section 1.1.

3.2.1 Critical Infrastructure: Transport

Transport	Risk to SA Delivery
Highways – Immediate Site Enabling Works (First 5 years)	
<div style="border: 1px solid #ccc; padding: 10px; background-color: #f9f9f9;"> <p>Projects</p> <ul style="list-style-type: none"> • New highway connection between the A40 and B4634 • New access points at Fiddler’s Green Lane and the B4634 </div> <p>The proposed development as presented in the vision statement and accompanying masterplan indicate that the development would provide a new highway connection from the A40 to the B4634. It would create a new access point from the existing Fiddler’s Green Lane roundabout and from the B4634 Old Gloucester Road.</p>	
Highways - Strategic Network Improvement Works	
<p>Assessment work in relation to strategic highway improvements is on-going and detail around works required will be picked up through the transport strategy reports.</p>	
Public Transport	

<p>Projects</p> <ul style="list-style-type: none"> • Bus only access points <p>The proposed development would have bus only access points to the development, to encourage sustainable transport.</p>	
Walking & Cycling	
<p>The proposed development would have foot and cycle access points, new cycleways and public rights of way connecting the undeveloped countryside to the development.</p>	
Other	
<p>Central to the development of land at Hayden is the provision of a cyber industries science park. This is underpinned by GCHQ, who have expressed in a letter their strong interest to expand their sector in Cheltenham and supporting development of this site (Exam 100). The masterplan of development would therefore constitute 45ha of employment land.</p>	

3.2.2 Critical Infrastructure: Flood, Water & Waste Water

Flood, Water & Waste Water	Risk to Delivery
Strategic Flood Defence (Offsite)	
<p>No strategic flood defences are detailed.</p>	
Flood Defence (Onsite)	
<p>The Environment Agency confirm that the majority of the site is located in Flood Zone 1 with small areas in Flood Zone 2 associated within the Hatherley Brook at the southern end of the site and the River Chelt at the northern end.</p> <p>A number of ordinary watercourses run through the site which mean there may be further floodplain across the site. This should be considered and established by the site promoter.</p> <p>The masterplan states that the development would include provision of drainage via attenuation sites to control discharge into existing watercourses.</p>	
Potable Water Supply	
<p>No potable water supply works are detailed.</p>	
Waste Water	
<p>No waste water works are detailed. It is worth noting that for this site to be developed, the existing Development Exclusion Zone surrounding the Hayden Sewage Treatment Works would need to be removed or at least reduced.</p> <p>Landowner Severn Trent Water is currently working on improving the works so that the zone can be reduced in order to satisfy the needs for Phase 1 of the development. Plans to offset the odour around the sewage works are included in the masterplan and vision for the site.</p> <p>The Environment Agency highlight a requirement from Seven Trent Water to confirm that sufficient capacity exists within the foul drainage network to accommodate the allocation.</p>	

3.2.3 Critical Infrastructure: Education

Education	Risk to Delivery
Early Years & Childcare	
<p>The developer vision statement recognises that potential planning obligations could include contributions to education.</p> <p>Based upon Spring 2016 GCC Education benchmarks, it is estimated that the development of 1,100 dwellings would create demand for 152 early years' places at a cost of £1,876,096.</p>	
Primary Education	
<p>The developer vision statement recognises that potential planning obligations could include contributions to education.</p> <p>Based upon Spring 2016 GCC Education benchmarks, it is estimated that the development of 1,100 dwellings would create demand for 330 primary school places at a cost of £4,078,470.</p>	
Secondary Education	
<p>The developer vision statement recognises that potential planning obligations could include contributions to education.</p> <p>Based upon Spring 2016 GCC Education benchmarks, it is estimated that the development of 1,100 dwellings would create demand for 182 secondary school places at a cost of £3,420,912.</p>	

3.2.4 Critical Infrastructure: Healthcare

Healthcare	Risk to Delivery
Primary Healthcare	
<p>The developer vision statement recognises that potential planning obligations could include contributions to primary healthcare.</p> <p>Based upon Gloucestershire CCG benchmarks, it is estimated that a development of 1,100 dwellings would create demand for 1.33 GPs at a cost of £399,667 and demand for 1.2 dentists at a cost of £218,218.</p>	

3.2.5 Desirable Infrastructure : Community & Culture

Community & Culture	Risk to Delivery
Libraries	
<p>No details about library provision are provided.</p> <p>Based upon GCC benchmarks, it is estimated that a development of 1,100 dwellings would create demand for 72m2 of library space at a cost of £273,372.</p>	
Community Centres	
<p>No details about community centre provision are provided.</p> <p>Based upon GCC benchmarks, it is estimated that a development of 1,100 dwellings would create demand for 387m2 of community centre space at a cost of £580,016.</p>	

3.2.6 Desirable Infrastructure: Sports & Outdoor Recreation (Pitches & Play Space), Informal & Natural Open Space

Open Space, Sport and Recreation	Risk to Delivery
Open Space	
<p>The vision statement and masterplan state that the development would provide green corridors and a landscape buffer between the development and existing sewer works.</p> <p>Based upon benchmarks, it is estimated that development of 1,100 dwellings would create demand for 1.32ha of informal open space and 2.4ha of natural open space at a cost of £22,421 and £575,520 respectively.</p>	
Sport & Recreation facilities	
<p>The developer vision statement states that the development would provide play areas. It also recognises that potential planning obligations could include contributions to sports and recreation facilities such as sports pitches.</p> <p>Based upon benchmarks, it is estimated that development of 1,100 dwellings would create demand for 2.88ha of playing pitches and 0.96ha of outdoor sports facilities at a cost of £280,566 and £955,363 respectively.</p> <p>Contributions towards provision of swimming pools and sports hall are calculated by the Sport Facility Calculator and total £427,414 and £349,103.</p>	

3.2.7 Essential Infrastructure: Energy

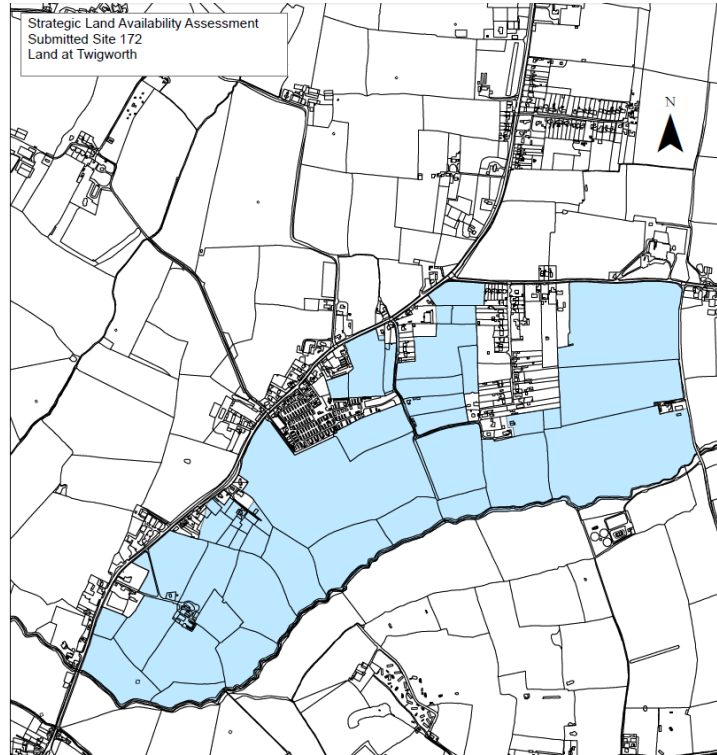
Energy	Risk to Delivery
Electricity Generation	
<p>No details about on-site electricity provision are provided.</p>	
Electricity Transmission & Distribution	
<p>The vision statement indicates that existing power lines would be redirected underground.</p>	

4 Twigworth

4.1 Strategic Allocation Key Data

4.1.1 Location & Extent of Allocation

Figure 6



Twigworth site boundary. Source: 2014 Assessment of Land Availability – Appendix 4 Submitted Sites Maps (Tewkesbury Borough Council)

4.1.2 Key Data

Table 5

C - Twigworth	
Gross Site Area	102 hectares approx. (32.5 hectares application site)
Extent of Residential Area	30.42 hectares (relating to App 15/01149/OUT – 725 dwellings)
Extent of Employment Area	N/A
Housing Allocation	Up to 1,363
Estimated Total Population (by 2031)	N/A
Developer	Robert Hitchins Ltd
Lead Technical Support	Pegasus Planning

C - Twigworth	
Joint Developer Working Arrangements (if relevant)	N/A
Site Status	Application 15/01149/OUT submitted in October 2015. Application was refused in January 2016 on various grounds including inappropriate development in green belt, unacceptable affordable housing provision and potential impacts on highway network. An application to appeal via public inquiry has been submitted to PINs by Pegasus on behalf of Robert Hitchins on 16 July 2016.

4.1.3 Proposed Scale & Mix of Development

The application site at Twigworth was previously proposed to be part of strategic allocation A1 (Innsworth and Twigworth) in the 2013 JCS Consultation Draft, for 3,568 dwellings, of which 3,075 would be delivered in the plan period.

The Twigworth section was subsequently removed from the Pre-Submission JCS following the identification of reduced objectively assessed housing need by the JCS authorities. The Interim Inspectors Report noted that the latest JCS housing supply estimates suggest Twigworth has potential for 2,318 dwellings, of which approximately 1,363 are deliverable during the plan period.

The application for outline permission submitted under reference 15/01149/OUT proposes the development of 725 dwellings across 30.42 hectares, 0.33 hectares comprising a local centre, 3.2ha of formal open space and 1.54 hectares of a primary school (see Fig. 7).

Figure 7



Source: *Twigworth Design and Access Statement Application 15/01149/OUT (Pegasus Planning, 2015)*

4.1.4 Proposed Build Out Trajectory & Population Growth

The table below shows the phases of development as set out in the JCS Authorities’ Housing Trajectory, June 2016.

Table 6

	Gross Site Capacity	2016-2021 (dwellings)	2021-2026 (dwellings)	2026-2031 (dwellings)
Dwellings	1363	64	660	639

Source: *JCS Authorities (2016)*

4.2 Infrastructure Requirements

This section of the statement sets out the current position in terms of infrastructure requirements on the site.

The following reference documents and planning application supporting material form the basis of this position statement:

- **JCS Infrastructure Delivery Plan (IDP)** (Arup, 2014)
- **Material Supporting Planning Application 15/01149/OUT** – Planning Statement, Design and Access Statement, Environmental Statement, Utilities Statement (Pegasus Planning, 2015)
- **Decision Notice for Application 15/01149/OUT** – Tewkesbury Borough Council dated 19.01.2016

Utilising this information the statements clearly identify where positions are agreed and where inconsistency may exist between site promoters and requirements of service providers (e.g. GCC Highways).

The remainder of Section 4.2 sets out the infrastructure requirements and proposed solutions for each, and provides a RAG rating on the basis of the methodology set out in Section 1.1.

4.2.1 Critical Infrastructure: Transport

Transport	Risk to SA Delivery
Highways – Immediate Site Enabling Works (First 5 years)	
<div style="background-color: #f0f0f0; padding: 10px; margin-bottom: 10px;"> <p>Projects</p> <ul style="list-style-type: none"> • New access point and roundabout on A38 Tewkesbury road. </div> <p>Application 15/01149/OUT proposes that primary access to the development would be via construction of a new access point (depicted in plans as a roundabout) on the A38 Tewkesbury road at the south end of the existing Twigworth settlement.</p> <p>Further detail is considered necessary to demonstrate that this proposal adequately mitigates potential impacts.</p>	
Highways - Strategic Network Improvement Works	
<p>The transport assessment submitted with application 15/01149/OUT states that a financial contribution would be made towards the JCS ‘Transport Mitigation Strategy’ which aims to minimise transport impacts of JCS growth. For this site, this would include highway improvement schemes for Longford Roundabout, the B4063 Cheltenham Road/Innsnorth Lane/Parton Road traffic signals and the A38 Estcourt Road/St Oswalds Road/A430 Kingsholm Roundabout. On line improvements to the A38 need to be considered as well as consideration to strategic public transport links to Gloucester. Transport mitigation to support housing growth is included within the GFirst Growth Deal 3 (Appendix 5: Longford Housing - A40 Longford Traffic Mitigations to support the JCS Strategic Allocations. A road link between Innsnorth and the A40 is being considered to enable housing growth.</p>	

Public Transport
<p>Projects</p> <ul style="list-style-type: none"> • Diversion of 71 Service and new bus stop and bus turning area <p>Following initial discussions with operator Stagecoach, the proposed development would aim to divert the existing 71 service onto the site and construct a bus stop and bus turning area to facilitate this. Financial contributions would also be made towards public transport.</p>
Walking & Cycling
<p>The transport assessment submitted with application 15/01149/OUT outlines plans to improve pedestrian and cyclist facilities along the A38 Tewkesbury road. The masterplan submitted with the Design and Access Statement also indicates the construction of dedicated pedestrian and cycle routes throughout the proposed site.</p>

4.2.2 Critical Infrastructure: Flood, Water & Waste Water

Flood, Water & Waste Water	Risk to Delivery
Strategic Flood Defence (Offsite)	
No strategic flood defences are detailed as required.	
Flood Defence (Onsite)	
<p>The Environment Agency have not identified any ‘show stoppers’ associated with the site. The majority of the site is in Flood Zone 1 with a portion of the site in Flood Zone 2, associated with the Hatherley Brook. The Environment agency have confirmed that they made no objection to the current planning application on the site.</p> <p>The utilities statement submitted with application 15/01149/OUT details the use of SUDS on the proposed site, such as permeable paving and attenuation ponds.</p>	
Potable Water Supply	
<p>The utilities statement submitted with application 15/01149/OUT states that the existing 4-inch cast iron main pipe along the A38 would not be sufficient to serve the development. There would therefore be a need to extend a reinforcement main which has recently been laid by Severn Trent Water to serve North Gloucestershire. It is also likely that the existing 4-inch main pipe would need lowering and diverting.</p>	
Waste Water	
<p>The proposed development would require an upgrade to the local waste water pumping station. The Environment Agency highlight a requirement from Seven Trent Water to confirm that sufficient capacity exists within the foul drainage network to accommodate the allocation.</p>	

4.2.3 Critical Infrastructure: Education

Education	Risk to Delivery
Early Years & Childcare	
<p>Projects</p> <ul style="list-style-type: none"> • New day nursery on site <p>The proposed development would include provision of a day nursery, built as part of the primary school site.</p> <p>Based upon Spring 2016 GCC Education benchmarks, it is estimated that the development of 1,363 dwellings would create demand for 188 early years' places at a cost of £2,324,654.</p> <p>Agreement would need to be reached with GCC.</p>	
Primary Education	
<p>Projects</p> <ul style="list-style-type: none"> • New primary school on 1.54 hectares of the site <p>The masterplan and planning statement for application 15/01149/OUT indicates the provision of a primary school as part of the development, consisting of around 1.54 hectares.</p> <p>Based upon Spring 2016 GCC Education benchmarks, it is estimated that a development of 1,363 dwellings would create demand for 409 primary school places at a cost of £5,053,595.</p> <p>Agreement would need to be reached with GCC.</p>	
Secondary Education	
<p>The proposed S106 contributions schedule for the application at Twigworth states that a contribution of £2,049,720 would be required to cover the costs of expansion for 109 extra children at Churchdown Academy.</p> <p>Based upon Spring 2016 GCC Education benchmarks, it is estimated that a development of 1,363 dwellings would create demand for 225 secondary school places at a cost of £4,238,821. Post 16 education contributions should total £1,412,940, providing 75 places.</p> <p>Agreement on contributions would need to be reached with GCC. As part of revised LEA position discussed when developing the statements for Innsworth, North Churchdown and South Churchdown in September 2015, GCC Education stated that provision of educational facilities will be required, but taken as part of the cluster of allocations (A1, A2 and A3). Given the proximity of Twigworth to Innsworth, the proposed SA would form part of this cluster.</p>	

4.2.4 Critical Infrastructure: Healthcare

Healthcare	Risk to Delivery
Primary Healthcare	
<p>The masterplan of the proposed development designates 0.33 hectares to construction of a local centre. The developers suggest that this could include a healthcare facility but all other matters are reserved at outline stage.</p> <p>Based upon Gloucestershire CCG benchmarks, it is estimated that a development of 1,363 dwellings would create demand for approximately 1.65 GPs at a cost of £495,223 and demand for 1.49 dentists at a cost of £270,392.</p>	

4.2.5 Desirable Infrastructure : Community & Culture

Community & Culture	Risk to Delivery
Libraries	
<p>The proposed S106 contributions schedule for the application at Twigworth states that a contribution of £142,100 would be made by the developer to increase library capacity in the area.</p> <p>Based upon GCC benchmarks, it is estimated that a development of 1,363 dwellings would create demand for 89m2 of library space at a cost of £338,733.</p>	
Community Centres	
<p>The masterplan of the proposed development designates 0.33 hectares to construction of a local centre. The developers suggest that this could include a community facility but all other matters are reserved at outline stage.</p> <p>Based upon GCC benchmarks, it is estimated that a development of 1,363 dwellings would create demand for 479m2 space at a cost of £718,693.</p>	

4.2.6 Desirable Infrastructure: Sports & Outdoor Recreation (Pitches & Play Space), Informal & Natural Open Space

Open Space, Sport and Recreation	Risk to Delivery
Open Space	
<p>The Design and Access Statement of the proposed development indicates that green infrastructure is a ‘fundamental component’ of the masterplan. The development would be linked by a strategically planned network of formal and informal green space, including a large ‘gateway’ green space at the entrance to the development.</p> <p>Based upon benchmarks, it is estimated that development of 1,363 dwellings would create demand for 1.63ha of informal open space and 2.97ha of natural open space at a cost of £27,782 and £713,122 respectively.</p>	
Sport & Recreation facilities	
<div style="background-color: #f0f0f0; padding: 10px; margin-bottom: 10px;"> <p>Projects</p> <ul style="list-style-type: none"> • 3.2 hectares of formal open space to include sports pitches, changing rooms and 2 LEAPs </div> <p>Within the wider plans for green infrastructure, application 15/01149/OUT states there would have 3.2 hectares of formal open space including sports pitches with changing rooms and 2 play areas (LEAPs).</p> <p>Based upon benchmarks, it is estimated that development of 1,363 dwellings would create demand for 3.57ha of playing pitches and 1.19ha of outdoor sports facilities at a cost of £347,647 and £1,183,782 respectively.</p> <p>Contributions towards provision of swimming pools and sports hall are calculated by the Sport Facility Calculator and total £552,980 and £455,574 respectively.</p>	

4.2.7 Essential Infrastructure: Energy

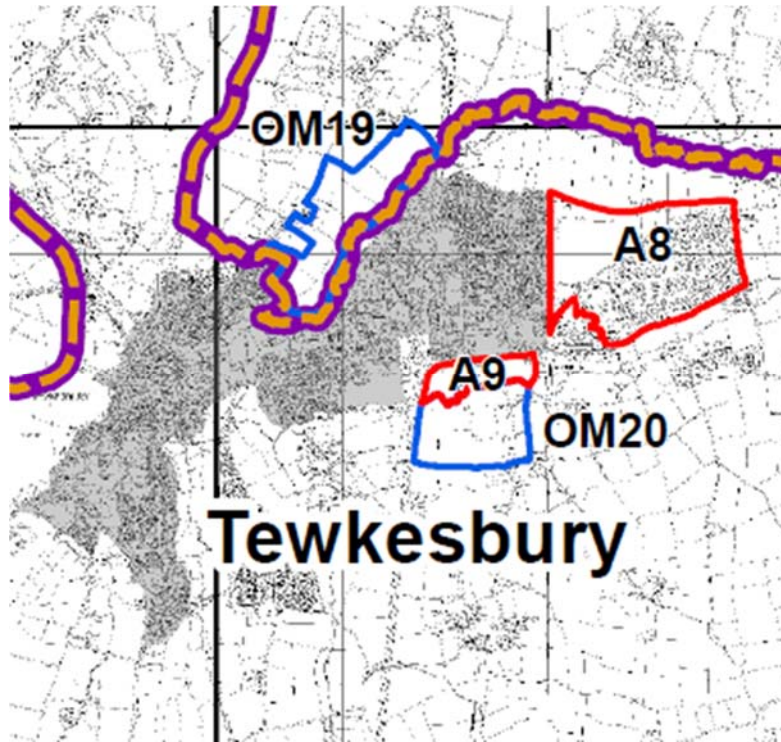
Energy	Risk to Delivery
Electricity Generation	
No details about on-site electricity provision are provided.	
Electricity Transmission & Distribution	
The utilities statement submitted with the application states that three additional substations would be required for the development, along with the extension of the high voltage network into the development. It state that discussions with Western Power Distribution would be required following the approval of outline permission and that reinforcements to the network may also be required.	

5 Fiddington

5.1 Strategic Allocation Key Data

5.1.1 Location & Extent of Allocation

Figure 8



*Strategic Allocations and Omissions Sites Map showing the Fiddington site at OM20.
 (Source: JCS, 2015)*

5.1.2 Key Data

Table 7

D – Fiddington	
Gross Site Area	46.4 hectares
Extent of Residential Area	23.7 hectares
Extent of Employment Area	N/A
Housing Allocation	900
Estimated Total Population (by 2031)	N/A
Developer	Robert Hitchins Ltd
Lead Technical Support	Pegasus Planning
Joint Developer Working Arrangements (if relevant)	N/A

D – Fiddington	
Site Status	A Position Statement was produced by Pegasus Planning on behalf of Robert Hitchins Ltd in 2014 to set out the nature of their proposals for the site, in response to the Pre-Submission JCS Plan of 2014.

5.1.3 Proposed Scale & Mix of Development

The site identified at Fiddington has previously been considered for development by the Broad Locations Report (EBLO100) in October 2011, in which the council labelled the site Broad Location T3.

In the Interim Inspector’s Report during the JCS examination, OM20 was recommended as the only appropriate site for further allocation in Tewkesbury and was recommended for 900 dwellings. The inspector did note the issue of flood risk on the site due to the land north of Tirlle Brook lying within Flood Zones 2, 3a and 3b.

Robert Hitchins Ltd and CGMS Consulting submitted a successful application to develop Strategic Allocation A9 for employment/commercial land in 2013. In 2014 Robert Hitchins Ltd and Pegasus Planning produced a Position Statement for development of OM20. This proposed 900 dwellings on 23.7 hectares, a local centre of 0.6 hectares, a primary school on 1.75 hectares and 20.35 hectares of green infrastructure. It anticipated that construction could start in 2019 and be completed by 2031.

Figure 9



Source: *Masterplan, Ashchurch/Fiddington Position Statement (Pegasus Planning, 2014).*

5.1.4 Proposed Build Out Trajectory & Population Growth

The table below shows the phases of development as set out in the JCS Authorities’ Housing Trajectory, June 2016.

Table 8

	Gross Site Capacity	2016-2021 (dwellings)	2021-2026 (dwellings)	2026-2031 (dwellings)
Dwellings	900	0	381	519

Source: JCS Authorities (2016)

5.2 Infrastructure Requirements

This section of the statement sets out the current position in terms of infrastructure requirements on the site.

The following reference documents and planning application supporting material form the basis of this position statement:

- **JCS Infrastructure Delivery Plan (IDP)** (Arup, 2014)
- **Matter 9: Other Potential Strategic Allocations Omission Sites** – Tewkesbury, Land at Fiddington – Pegasus on Behalf of Robert Hitchins Ltd. (Pegasus Planning, 2015)
- **Ashchurch/Fiddington Position Statement** – Pegasus Planning on Behalf of Robert Hitchins Ltd (Pegasus Planning, 2014)

Utilising this information the statements clearly identify where positions are agreed and where inconsistency may exist between site promoters and requirements of service providers (e.g. GCC Highways).

The remainder of Section 5.2 sets out the infrastructure requirements and proposed solutions for each, and provides a RAG rating on the basis of the methodology set out in Section 1.1.

5.2.1 Critical Infrastructure: Transport

Transport	Risk to SA Delivery
Highways – Immediate Site Enabling Works (First 5 years)	Green
<p>Projects</p> <ul style="list-style-type: none"> • New access point via junction for A46 <p>The masterplan included with the Position Statement depicts access for the proposed residential development via the A46 road, linked to an access point created for the commercial development at Strategic Allocation A9. No other information is provided.</p>	Green
Highways - Strategic Network Improvement Works	Red
<p>Assessment work in relation to strategic highway improvements is on-going and detail around works required will be picked up through the transport strategy reports Funding is being sought through the HCA and SEP. It is unlikely that the development could fund they type of improvements to the junction and A46 being sought on its own given the quantum of housing proposed. Highways England have recognised the A46 as an important cross-country route and funding could be secured as part of future Route Improvement Strategies. Early analysis has indicated an “off-line” bypass parallel to the A46 could be an option to release development in this location depending on more detailed viability assessment.</p>	Red
Public Transport	Green
No details are provided about public transport infrastructure for this site.	Green

Walking & Cycling	
The masterplan submitted with the Position Statement appears to suggest that new pedestrian routes and cycle paths would be constructed as part of the development.	

5.2.2 Critical Infrastructure: Flood, Water & Waste Water

Flood, Water & Waste Water	Risk to Delivery
Strategic Flood Defence (Offsite)	
No strategic flood defences are detailed.	
Flood Defence (Onsite)	
<p>The Environment Agency identify a significant area of Flood Zone 3 at this location deriving from the Tirlle Brook and advise that development would need to avoid the floodplain. This should be considered further through the site specific FRA.</p> <p>The Position Statement details that the development would use SUDS to mitigate flood risk, with potential use of attenuation basins, ponds and swales.</p>	
Potable Water Supply	
No details about potable water infrastructure are available.	
Waste Water	
<p>The Position Statement states that Severn Trent Water have confirmed that there is adequate capacity within their existing foul sewerage infrastructure for the proposed development.</p> <p>The Environment Agency consider that confirmation is required from Severn Trent as to which sewage treatment works the development would drain to and whether sufficient capacity exists to accommodate the allocation.</p>	

5.2.3 Critical Infrastructure: Education

Education	Risk to Delivery
Early Years & Childcare	
<p>No details are provided by the site promoter.</p> <p>Based upon Spring 2016 GCC Education benchmarks, it is estimated that the development of 900 dwellings would create demand for 124 early years' places at a cost of £1,534,988.</p>	
Primary Education	
<div style="background-color: #d3d3d3; padding: 10px;"> <p>Projects</p> <ul style="list-style-type: none"> • New primary school </div> <p>The proposals in the Position Statement include the provision of a primary school on 1.75 hectares of the site. It would be constructed after 275 dwellings are completed.</p> <p>Based upon Spring 2016 GCC Education benchmarks, it is estimated that a development of 900 dwellings would create demand for 270 primary school places at a cost of £3,336,930.</p>	

Secondary Education	
<p>No details are provided by the site promoter.</p> <p>Based upon Spring 2016 GCC Education benchmarks, it is estimated that a development of 900 dwellings would create demand for 149 secondary school places at a cost of £2,798,928. Post 16 education contributions should total £932,976, providing 50 places.</p>	

5.2.4 Critical Infrastructure: Healthcare

Healthcare	Risk to Delivery
Primary Healthcare	
<p>No details are provided by the site promoter.</p> <p>Based upon Gloucestershire CCG benchmarks, it is estimated that a development of 650 dwellings would create demand for 1.09 GPs at a cost of £327,000 and demand for 0.98 dentists at a cost of £178,542.</p>	

5.2.5 Desirable Infrastructure : Community & Culture

Community & Culture	Risk to Delivery
Libraries	
<p>No details are provided by the site promoter.</p> <p>Based upon GCC benchmarks, it is estimated that a development of 900 dwellings would create demand for 59m2 of library space at a cost of £223,668.</p>	
Community Centres	
<p>The Position Statement details a local centre of 0.6 hectares and makes reference to ‘social and community facilities’ but does provide any more further detail.</p> <p>Based upon GCC benchmarks, it is estimated that a development of 900 dwellings would create demand for 316m2 of library space at a cost of £474,559.</p>	

5.2.6 Desirable Infrastructure: Sports & Outdoor Recreation (Pitches & Play Space), Informal & Natural Open Space

Open Space, Sport and Recreation	Risk to Delivery
Open Space	
<p>The Position Statement allocates 20.35 hectares to green infrastructure, to include formal and informal green space, as well as SUDS infrastructure.</p> <p>Based upon benchmarks, it is estimated that development of 900 dwellings would create demand for 1.08ha of informal open space and 1.96ha of natural open space at a cost of £18,345 and £470,880 respectively.</p>	

Sport & Recreation facilities
<p>Projects</p> <ul style="list-style-type: none"> • Sports pitches • Play Areas – NEAPS, LEAPs and LAPs
<p>The masterplan submitted with the Position Statement indicates that the formal green space provision would include sports pitches and play areas. It lists varied types of play area, to include at least one NEAP, a couple of LEAPs and several LAPs throughout the site; however, no specific quantities are given anywhere in the statement.</p> <p>Based upon benchmarks, it is estimated that development of 900 dwellings would create demand for 2.35ha of playing pitches and 0.78ha of outdoor sports facilities at a cost of £229,554 and £781,661 respectively.</p> <p>Contributions towards provision of swimming pools and sports hall are calculated by the Sport Facility Calculator and total £349,702 and £285,629 respectively.</p>

5.2.7 Essential Infrastructure: Energy

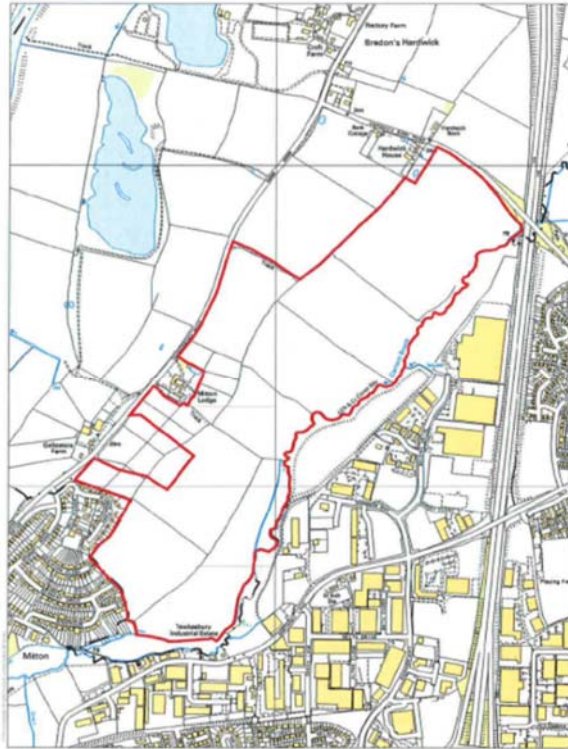
Energy	Risk to Delivery
Electricity Generation	
No details provided.	
Electricity Transmission & Distribution	
No details provided.	

6 Mitton

6.1 Proposed Site Key Data

6.1.1 Location & Extent of Site

Figure 10



Mitton site boundary. Source: Matter 9 Statement: Other Potential Strategic Allocations (RPS/Carter Jonas, 2015).

6.1.2 Key Data

Table 9

E – Mitton (OM19)	
Gross Site Area	74.35 hectares
Extent of Residential Area	37.06 hectares
Extent of Employment Area	0.74 hectares
Housing Capacity	500 ²
Estimated Total Population (by 2031)	N/A
Developer	Barratt West, Mactaggart & Mickel

² The Inspector’s Interim Findings suggest that the sites could deliver up to 1,100 homes. It is expected that 500 homes would be delivered within the Plan Period up to 2031 (JCS Housing Trajectory 2016).

E – Mitton (OM19)	
Lead Technical Support	RPS Planning, Carter Jonas
Joint Developer Working Arrangements (if relevant)	Barratt West and Mactaggart & Mickel joint promotion of land.
Site Status	No applications submitted. A Delivery Statement was produced in 2015 by RPS Planning on behalf of Barratt, and Carter Jonas on behalf of the Croome Estate Trustees and Mactaggart and Mickel.

6.1.3 Proposed Scale & Mix of Development

The land at Mitton has come forward following the Inspector’s Interim Report for the JCS. The site, located in Wychavon, was initially omitted from the JCS as a Strategic Allocation and cannot be allocated through the JCS as it is outside the administrative area. However, the Interim Report recommended joint working on a Memorandum of Agreement to bring the site forward.

The Inspector’s Interim Report states that the site lies outside the Green Belt, in an area of mainly medium to low landscape sensitivity which is unaffected by AONB. Although there are flooding concerns in the Tewkesbury area, the South Worcestershire Strategic Flood Risk Assessment shows the site to mostly lie within Flood Zone 1. The Inspector therefore recommended that the JCS authorities seek an agreement with Wychavon District Council on the release of land to contribute toward the Tewkesbury housing requirement.

A Delivery Statement for the site was produced in 2015 by RPS Planning and Carter Jonas LLP on behalf of Barratt Homes (West), the Croome Estate Trustees and Mactaggart and Mickel. They propose that a combined development would produce 1,100 dwellings on 37.06 hectares of residential land, 0.74 hectares of business/light industrial use and 31.41 hectares of open space.

Figure 11



Mitton site masterplan. Source: Matter 9 Statement: Other Potential Strategic Allocations (RPS/Carter Jonas, 2015.)

6.1.4 Proposed Build Out Trajectory & Population Growth

The table below shows the phases of development as set out in the JCS Authorities’ Housing Trajectory, June 2016.

Table 10

	Gross Site Capacity	2016-2021 (dwellings)	2021-2026 (dwellings)	2026-2031 (dwellings)
Dwellings	500 ³	107	339	54

Source: JCS Authorities (2016)

³ The Inspector’s Interim Findings suggest that the sites could deliver up to 1,100 homes.

6.2 Infrastructure Requirements

This section of the statement sets out the current position in terms of infrastructure requirements on the site.

The following reference documents and planning application supporting material form the basis of this position statement:

- JCS Infrastructure Delivery Plan (IDP) (Arup, 2014)
- Matter 9 Statement: Other Potential Strategic Allocations prepared by RPS Planning & Development (RPS) on behalf of Barratt, and Carter Jonas LLP on behalf of the Croome Estate Trustees (the Trustees) and Mactaggart & Mickel (RPS/Carter Jonas, 2015).
- Land at Mitton Delivery Statement (Appendix A of the Matter 9 Statement as listed above) (RPS/Carter Jonas, 2015).
- Utilising this information the statements clearly identify where positions are agreed and where inconsistency may exist between site promoters and requirements of service providers (e.g. Highways).

The remainder of Section 6.2 sets out the infrastructure requirements and proposed solutions for each, and provides a RAG rating on the basis of the methodology set out in Section 1.1.

6.2.1 Critical Infrastructure: Transport

Transport	Risk to SA Delivery
Highways – Immediate Site Enabling Works (First 5 years)	
<p>Projects</p> <ul style="list-style-type: none"> • Two new access points on Bredon Road and one new access from Hardwick Bank Road <p>The Delivery Statement proposes that a north and south access point would be to the site from Bredon Road. A third access point would be from Hardwick Bank Road.</p>	
Highways - Strategic Network Improvement Works	
<p>The view of Wychavon District Council is that they consider there are no substantive infrastructure costs for strategic highways links relating to the site. This view is re-enforced by the sites close proximity to services and opportunities to improve local links and public transport services. Connections to the town centre, employment sites and strategic public transport links using walking, cycling and public transport are important in this regard. This site is also part of the assessment work in relation to strategic highway improvements is on-going and detail around works required will be picked up through the transport strategy reports.</p>	

Public Transport	
<p>Projects</p> <ul style="list-style-type: none"> • Diversion of existing bus service <p>A Transport Strategy by Phil Jones Associates in 2012 is quoted by the Delivery Statement as demonstrating that the site is well linked to local facilities, cycle routes and bus services. There is still proposed scope to expand sustainable transport provision by diverting bus services to go through the site.</p>	
Walking & Cycling	
<p>Projects</p> <ul style="list-style-type: none"> • New pedestrian and cycle access on Derwent Drive <p>Pedestrian and cycle access is proposed off Derwent Drive, with links going through the development.</p>	

6.2.2 Critical Infrastructure: Flood, Water & Waste Water

Flood, Water & Waste Water	Risk to Delivery
Strategic Flood Defence (Offsite)	
The Delivery Statement indicates that flood defence strategies on the site would also prevent additional flooding risk in Tewkesbury. It suggest that flood risk improvements to the wider area could also be provided, such as improvement to the conveyance of the Bredon Road bridge, flood water attenuation and assisting development of a detailed flood model of Tewkesbury.	
Flood Defence (Onsite)	
The Environment Agency have highlighted the reasonably large areas of Flood Zone 3 and 2 at this site, deriving from the Carrant Brook. Providing that the development avoids the floodplain the EA consider there to be no other ‘show stoppers’ that would restrict development on the site. The proposed development would include attenuation ponds on site.	
Potable Water Supply	
No details have been provided by the site promoter.	
Waste Water	
No details have been provided by the site promoter. The Environment Agency highlight a requirement from Seven Trent Water to confirm that sufficient capacity exists within the foul drainage network to accommodate the allocation.	

6.2.3 Critical Infrastructure: Education

Education	Risk to Delivery
Early Years & Childcare	
<p>No details provided by the site promoter.</p> <p>Based upon Spring 2016 Gloucestershire County Council (GCC) Education benchmarks, it is estimated that the development of 500 dwellings would create demand for 69 early years' places at a cost of £82,771.⁴</p>	
Primary Education	
<p>Projects</p> <ul style="list-style-type: none"> • New primary school <p>The Delivery Statement includes provision of a primary school on 1.5 hectares of the site. Based upon discussions with Wychavon District Council in August 2016, it is estimated that a development of 500 dwellings would create demand for both primary and secondary school places at a cost of between £3,000,000 and £3,500,000.</p>	
Secondary Education	
<p>No details provided by the site promoter.</p> <p>Based upon discussions with Wychavon District Council in August 2016, it is estimated that a development of 500 dwellings would create demand for both primary and secondary school places at a cost of between £3,000,000 and £3,500,000.</p>	

6.2.4 Critical Infrastructure: Healthcare

Healthcare	Risk to Delivery
Primary Healthcare	
<p>The Delivery Statement suggests that the development could include a healthcare facility or a care home. If this wasn't included, the land would instead be of residential use.</p> <p>Based upon NHS England benchmarks, it is estimated that a development of 500 dwellings would create demand for 0.61 GPs at a cost of £181,667 and demand for 0.55 dentists at a cost of £99,190.</p>	

6.2.5 Desirable Infrastructure : Community & Culture

Community & Culture	Risk to Delivery
Libraries	
<p>No details provided by the site promoter.</p> <p>Based upon benchmark standards (Arts Council), it is estimated that a development of 500 dwellings would create demand for 33m2 of library space at a cost of £124,260.</p>	

⁴ Calculations have been undertaken using Gloucestershire County Council benchmarks, and not those of the South Worcestershire Authority.

Community Centres	
No details provided by the site promoter. Based upon benchmark standards, it is estimated that a development of 700 dwellings would create demand for 176m ² of community centre space at a cost of £263,644.	

6.2.6 Desirable Infrastructure: Sports & Outdoor Recreation (Pitches & Play Space), Informal & Natural Open Space

Open Space, Sport and Recreation	Risk to Delivery	
Open Space		
The Delivery Statement proposes 31.41 hectares of open space provided within the masterplan. 3.34 hectares of this is listed as formal recreation space, while the rest would act as informal recreation space, a buffer to the development and a location for ecological habitats. Based upon benchmarks, it is estimated that development of 500 dwellings would create demand for 0.6ha of informal open space and 1.09ha of natural open space at a cost of £10,192 and £261,600 respectively.		
Sport & Recreation facilities		
<table border="1" style="width: 100%; background-color: #f0f0f0;"> <tr> <td> Projects <ul style="list-style-type: none"> • Sports pitches, one NEAP and three LEAPS </td> </tr> </table> <p>There would be 3.34 hectares of formal recreational space as part of the proposed development, to include sports pitches and play areas consisting of one NEAP and three LEAPs. Based upon benchmarks, it is estimated that development of 500 dwellings would create demand for 1.31ha of playing pitches and 0.44ha of outdoor sports facilities at a cost of £127,530 and £434,256 respectively. Contributions towards provision of swimming pools and sports hall are calculated by the Sport Facility Calculator and total £186,768 and £152,704 respectively.</p>		Projects <ul style="list-style-type: none"> • Sports pitches, one NEAP and three LEAPS
Projects <ul style="list-style-type: none"> • Sports pitches, one NEAP and three LEAPS 		

6.2.7 Essential Infrastructure: Energy

Energy	Risk to Delivery
Electricity Generation	
No details provided.	
Electricity Transmission & Distribution	
No details provided.	