

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are listed buildings of all grades in the vicinity of the assessment area. These are typically clustered at Badgeworth, Shurdington and Leckhampton. The church yard cross in Badgeworth Holy Trinity Churchyard is also a Scheduled Monument. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • There are a number of listed buildings in close proximity to the search area these include: <ul style="list-style-type: none"> - The Old Lodge, Church Road GL53 0QJ; - 72 Church Road, GLOS, GL53 0PD); - Greenwode Leghe, Cold Wool Lane, GL51 6JA; - Woodbines Cottage, Sunnyfield Lane, GL51 6JB; - West Lodge, Cold Pool Lane, GLOS, GL51 6JF. 				

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Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> SSSI (Badgeworth) in the north of the assessment area, part of the site is also a GWT nature reserve with priority semi-improved grassland habitat. <p>Assets within 250m:</p> <ul style="list-style-type: none"> No assets within 250m. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI (Leckhampton Hill and Charlton Kings Common) 1.1km southeast. Also contains multiple registered sites of geological importance. SSSI (Crickley Hill and Barrow Wake) 1.8km south. Also designated as a site of geological importance. <p>IRZs:</p> <ul style="list-style-type: none"> The majority of the assessment area is within the residential IRZ for Badgeworth SSSI. The IRZ for this SSSI overlaps with part of the eastern half of the assessment area, up to Shurdington Road (A46). Both 	<p>Any spatial distribution of development in the assessment area will be required to provide suitable avoidance/mitigation measures to ensure that there are no adverse impacts on Badgeworth SSSI. Impacts will need to be mitigated for the nearby Leckhampton Hill and Charlton Kings Common and the Crickley Hill and Barrow Wake SSSIs (both designated for calcareous grassland), as the IRZs overlap with the assessment area. It will also be necessary to ensure supporting transport infrastructure minimises severance of habitats in the area.</p> <p>There are multiple areas of priority habitats throughout the assessment area, including: traditional orchards, several areas of deciduous woodland, and two small areas of unspecified priority habitats in the northeast and southeast.</p> <p>Priority habitats are also found adjacent to the assessment boundary, including deciduous woodland which forms part of wider mosaic of screening and corridor of the M5/A40 junction. Other priority habitats adjacent to the assessment area include orchards and unspecified habitats.</p>	<p style="text-align: center;">*</p>	<p style="text-align: center;">*</p>	<p style="text-align: center;">*</p>

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	<p>flag residential development as a potential risk.</p> <p>Minor negative effects may occur at all development sizes as they will be within 2km of either Badgeworth SSSI or Leckhampton Hill and Charlton Kings Common SSSI, depending on the location of development in the assessment area.</p> <p>Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>				
Soil Quality	<p>The majority of the assessment area is comprised of grade 3 agricultural land. However, there is around 47ha in the westernmost part of the assessment area that is grade 2 agricultural land.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality. The effects are uncertain as there is no data distinguishing whether the majority of the land within the area is grade 3a or the lower quality grade 3b.</p>	<p>There is sufficient space within the assessment area for development at all potential sizes to avoid the pocket of grade 2 agricultural land in the east. However, remaining land within the assessment area is still grade 3 and therefore development at any scale and location has the potential to result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or grade 3b.</p>	?	?	?
Water Quality	<p>The assessment area is not located within any Drinking Water Safeguarding</p>	<p>N/A</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	Zones or Source Protection Zones. As such, negligible effects are anticipated.				
Flood Risk	<p>The majority of the assessment area is greenfield, but there are areas of residential/agricultural development as well as the settlement of Badgeworth in close proximity to the western boundary. There are also multiple local roads distributed throughout the assessment area.</p> <p>There is an area of land to the north of the settlement of Badgeworth that is located within Flood Zone 2 due to the presence of a watercourse (Ham Brook). Additionally, there are further areas of the assessment area located within Flood Zone 2 in the easternmost part of the assessment area due to the presence of further watercourses.</p> <p>However, there is sufficient space to accommodate all development scales in Flood Zone 1 and therefore negligible effects are anticipated.</p>	Land within Flood Zone 2 in the assessment area is restricted to the vicinity of watercourses and therefore there is significant potential for development at all development sizes to avoid being located within Flood Zone 1, reducing flood risk. The potential for an urban extension in the north-east corner of the area is restricted by the presence of Flood Zone. Negligible effects are therefore anticipated.			
Mineral Resources	There is a 94ha pocket of land adjacent to the southern boundary and a 62ha pocket of land adjacent to the	There is significant potential for development at all sizes to avoid the sterilisation of mineral resources as the parts of the assessment area			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>easternmost boundary that are located within a Mineral Safeguarding Area (MSA).</p> <p>However, there is potentially sufficient space to accommodate all development scales outside of MSAs and therefore negligible effects are anticipated.</p>	<p>within MSAs are restricted to small pockets of land in the south and north-east of the assessment area. Negligible effects are therefore anticipated.</p>			
Noise	<p>There is land in the western half and eastern half of assessment area that is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours.</p> <p>However, there is potentially sufficient space to accommodate all development sizes outside of noisy areas and therefore negligible noise effects are anticipated.</p>	<p>There is around 400ha within the central region of the assessment area that is not located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours that could potentially accommodate development at all scales. Suitable mitigation may also be possible to overcome any noise related issues.</p>			
Odour	<p>The assessment area is not located within any Odour Monitoring Zones or Cordon Sanitaire Zones.</p> <p>As such, negligible effects are anticipated in relation to odour.</p>	N/A			

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • Sense of separation provided between the south of Cheltenham and Shurdington/Edgeworth. • Strong rural character. • Overlooked by the adjacent escarpment within the Cotswolds AONB. <p>As such, landscape sensitivity is high for large development options as the key characteristics and qualities of the landscape may be highly sensitive to change from residential development of this scale. Landscape sensitivity is reduced to moderate-high and moderate for small and medium development sizes, as the key characteristics and qualities of the landscape are potentially less sensitive to change from residential development at these scales.</p>	H	M-H	M

Summary of Constraints and Landscape Sensitivity

The majority of the assessment area is classified as grade 2 or 3 agricultural land and therefore any development has the potential to result in loss of high quality soils. It is unknown whether the areas of grade 3 land are grade 3a or the lower quality grade 3b. Aside from this, the central area of the assessment area is the least constrained and could likely accommodate a medium or small urban extension without significant negative effects, although development in these locations would need to protect the pockets of priority habitat. In terms of landscape, the small extension scenario may be the most suitable due to the area having moderate landscape sensitivity to this scale of development, compared to moderate-high and high for the medium and large scale scenarios respectively.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the local highway network via the A46 (Shurdington Rd) to Cheltenham, Up Hatherley Way and the A40, which connects to the M5 Junction 11.</p> <p>M5 / A40 (junction 11) is also adjacent to the north west of the assessment area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate at/beyond 90% of its design capacity in 2031 (at between 89% and 94% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>A40/ B4063 Arle Court Roundabout provides access to M5 Junction 11 and is adjacent to the north of the assessment area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate beyond its design capacity in 2031 (at between 112% and 185% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>The A46 Shurdington Road which runs through the south east of the assessment area contains four 'critical junctions' within or adjacent to the assessment area (A46 / A417 Shurdington Rd Rbt, A46 / Badgeworth Lane, A46 Shurdington Rd / Leckhampton Lane, A46 Shurdington / Up Hatherley Way). The JCS modelling work's Do Nothing and Do Minimum model tests forecast that these junctions will operate at close to, or beyond their design capacity in 2031 (during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 90,415</p> <p>A high number of workplaces (jobs) can be accessed from the assessment area within 45mins during the AM peak by public transport, due primarily to high-frequency bus services along the A40 and A46 corridors to key employment sites.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 287,107</p> <p>Access from the assessment area to employment by Car scores high, due to the assessment area proximity to the strategic road network.</p>	

Criterion	Rationale	Score
Access to other key services and facilities by public transport	TRACC Accessibility Modelling outputs show that the assessment area is accessible to a number of key services (healthcare and education facilities) within 20 mins travel time by public transport services. Urban centres are accessible within 20 – 40 mins.	
Private car use by commuters	<p>% Driving a Car or Van = 68%</p> <p>Car-based trips currently account for an average of 68% of commuter journeys in LSOAs covered by the assessment area, likely due to the development sites proximity to the strategic road network.</p>	
Proximity to sustainable transport networks	The assessment area is within the 5km catchment of Cheltenham Spa Station, providing both local and national connectivity on the mainline route. A high frequency public transport service currently runs along the main arterial routes, between Cheltenham, Brockworth and Gloucester. Whilst the assessment area is not directly on the National Cycle Network, there are walking and cycling routes between the major urban areas, which could be enhanced as part of any future development.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500- 3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	At highest scale of growth reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer.			
	Rail transport	Within 5km of Cheltenham mainline station. Provision of improved bus/cycle linkages could result in higher levels of rail patronage.			
	Bus transport	Within 500m of a high frequency bus route and close enough to Cheltenham to mean that improvements in frequency could result in reasonably high levels of bus patronage. Proximity to M5 J11 would require significant bus network expansion to avoid overloading SRN network with significant additional car traffic. Higher scales of growth increase likelihood of securing the levels of investment needed to deliver bus infrastructure improvements (more so if developed jointly with assessment area 30).			

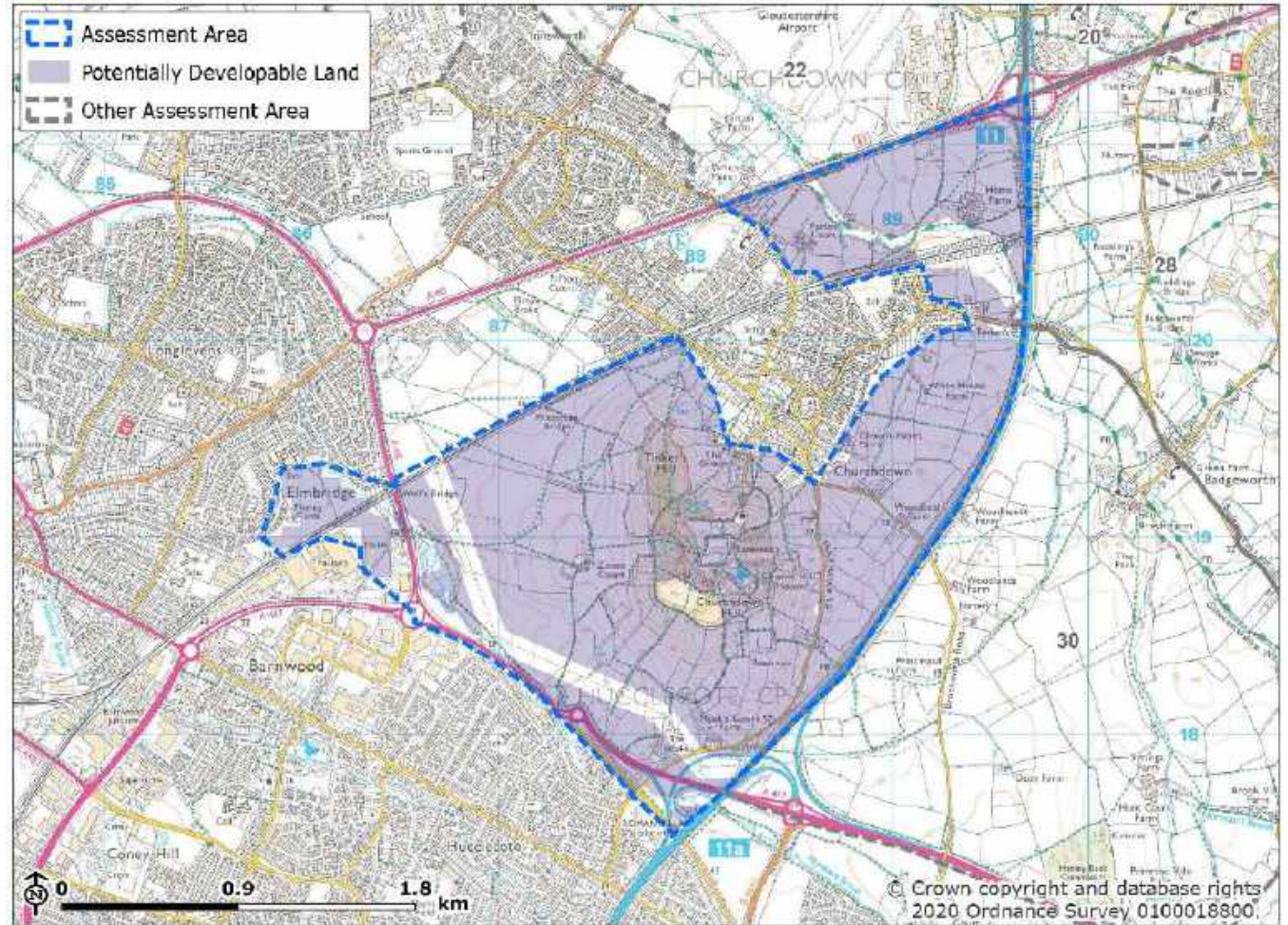
Assessment Area 29 – Urban extension: North East of Gloucester

Assessment Area Ref: 29

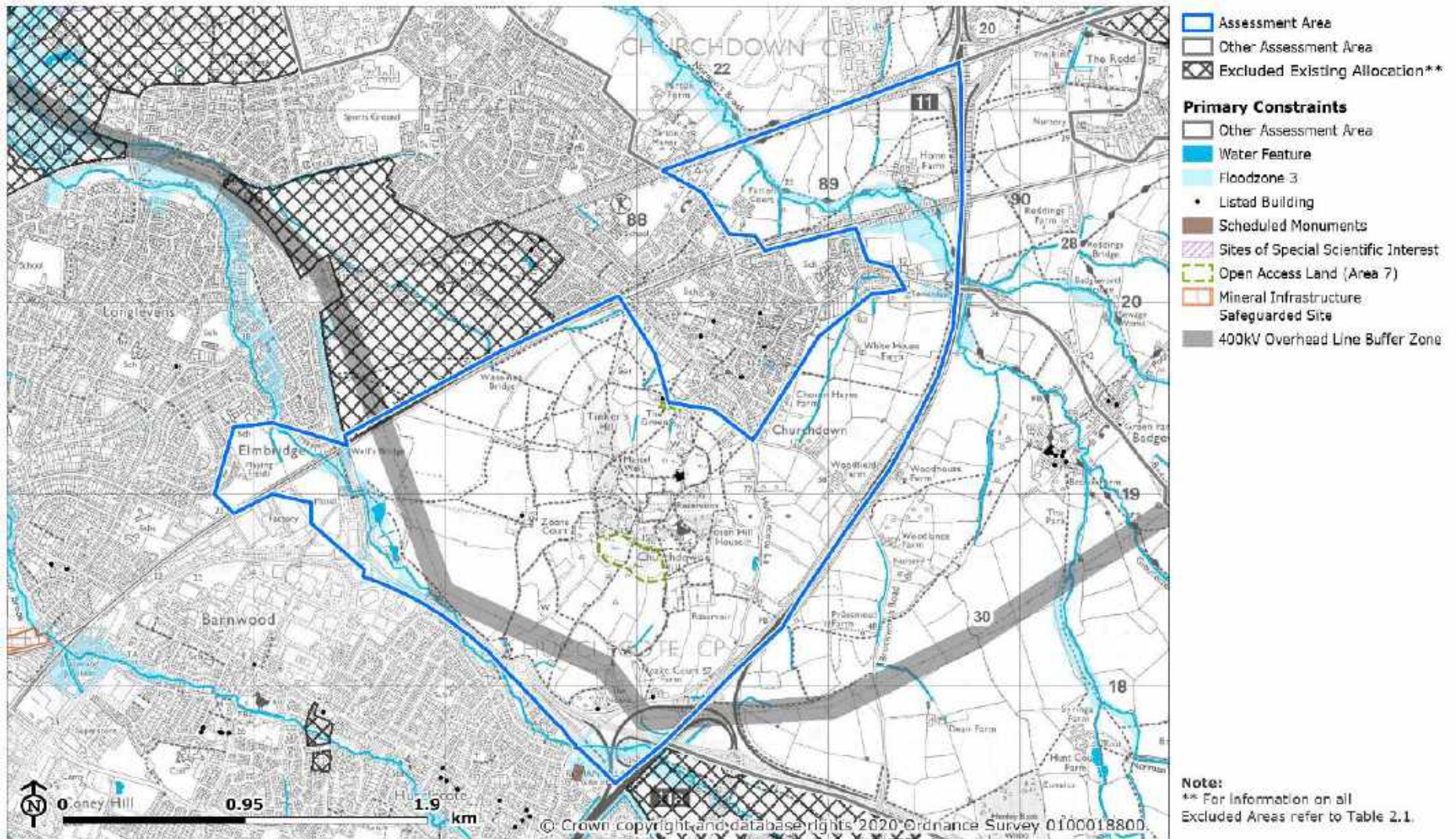
Authority Area: Tewkesbury Borough

Development Typology: Urban Extension

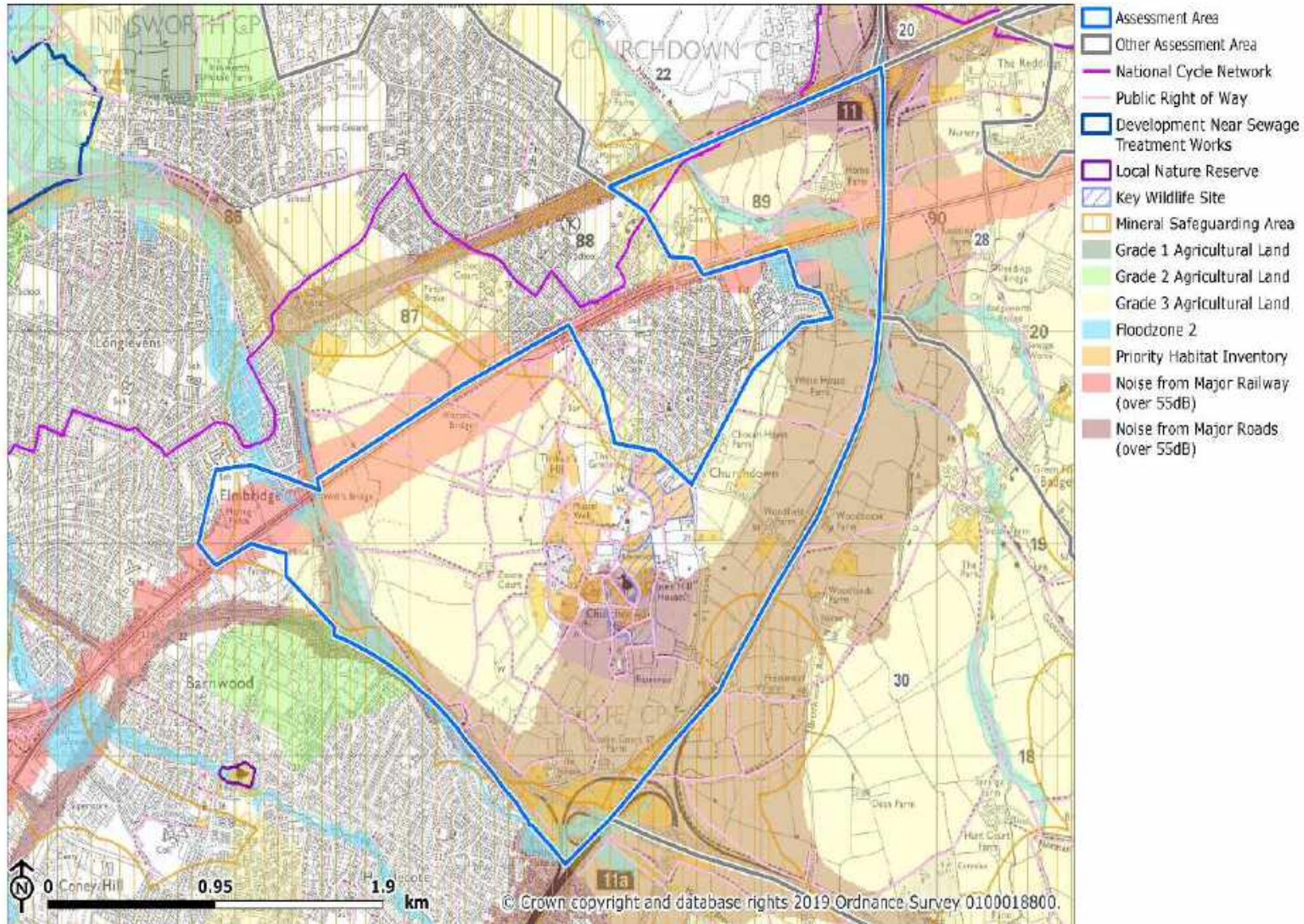
Area: ~567ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> The assessment area contains 12 listed buildings, all grade II except for the grade I Church of St Bartholomew, the parish church for Churchdown and Huccleton. Several of the other listed structures are monuments in the church's graveyard. The remainder are farmhouses or agricultural buildings, and a former school house. All of the listed buildings are located on Chosen Hill or to the west and south of it. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER has records for a large number of non-designated assets within the assessment area. These include but are not limited to: <ul style="list-style-type: none"> Possible hillfort earthworks Churchdown Hill; 	<p>The key sensitivities of the development area are the listed buildings which lie on and around Chosen Hill. The possible hillfort in the same area could also be a major constraint to development - both physically and in terms of setting change - and the potential for further remains of national importance beyond the scheduled Roman villa at Hucclecote cannot be ruled out.</p> <p>It is possible that the north-western corner of the assessment area, towards Elmbridge (beyond the listed Zoons Court) and the north-eastern half of the assessment area may have potential for development without giving rise to significant negative effects on the historic environment. These areas could accommodate a large extension and for this reason the overall score is minor negative.</p>	?	?	?

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	<ul style="list-style-type: none"> - A prehistoric ditch at Churchdown; - A late Iron Age to Roman settlement at White House Farm and Roman settlement's near Well's Bridge and Witcombe Bridge; - A Roman field system and other features near the scheduled villa at Hucclecote; - A medieval deserted settlement at Churchdown; - Earthworks near Hucclecote Roman villa; - Undated palaeochannel; - Cropmarks and extensive ridge and furrow earthworks; and - Multiple WWII sites. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC indicates a primarily agricultural landscape comprised primarily of irregular enclosure but also featuring some less irregular and regular enclosure. The irregular 				

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	<p>enclosure has some time-depth and value in itself and could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are a number of designated assets in the wider area including a scheduled Roman Villa at Hucclecote and several listed buildings – some grade II* and I – at Brockworth Court and Badgeworth and Churchdown. However, it is unlikely that any would experience meaningful setting change as a result of development. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> No non-designated assets recorded by the HER within the wider area have been identified 				

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	as being particularly susceptible to setting change at this stage.				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> Two Key Wildlife Sites (Churchdown Hill Meadows and Chosen Hill Nature Reserve) within the central region (at Churchdown Hill) of the assessment area. One of the key wildlife sites (Churchdown Hill Meadows) encompasses a priority habitat of good quality semi-improved grassland. <p>Assets within 250m:</p> <ul style="list-style-type: none"> No designated assets within 250m. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI (Badgeworth) 1.2km east, also a GWT nature reserve. SSSI (Hucclecote Meadows) 1.3km south. <p>IRZs:</p> <ul style="list-style-type: none"> The IRZ for Badgeworth SSSI overlaps with the at least one third of the assessment area, in 	<p>Though there are no national or international designations within the assessment area, there are several in the surrounding study area with IRZs which overlap significantly with the assessment area. Further assessment may be required to rule out impacts on notified features, as woodlands are a key feature within these designations and within the assessment area.</p> <p>Any spatial distribution of development in the assessment area will be required to provide suitable avoidance/mitigation measures to ensure that the Key Wildlife Sites and adjoining areas of deciduous woodland are maintained or enhanced. It will also be necessary to ensure supporting transport infrastructure minimises severance of habitats in the area.</p> <p>There are multiple areas of deciduous woodland priority habitat within the central part of the area, including some within the Chosen Hill Nature Reserve), southern and north-eastern regions of the assessment area.</p> <p>There are also four areas of traditional orchard priority habitat, two in the central region, one in the south and one in the north.</p>	*		

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	<p>the northeast, which highlights a risk from new residential units.</p> <ul style="list-style-type: none"> The IRZ for Hucclecote Meadows SSSI overlaps nearly half of the assessment area (in the south), highlighting a risk from an increase in residential units. <p>Negligible effects may occur at all development sizes as these scales of development could potentially be accommodated over 250m from local designations and over 2km from international designations.</p> <p>Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>				
Soil Quality	<p>The majority of the assessment area is comprised of grade 3 agricultural land. There is around 84ha in the centre of the assessment area that is grade 4 agricultural land.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality for all development sizes. The effects are uncertain as there is no</p>	<p>There may be potential for development at the smallest size to be located within the area of grade 4 agricultural land, avoiding the loss of potential high quality agricultural land elsewhere in the assessment area. However, the presence of existing development and listed buildings (one of which is grade I listed) within this area of grade 4 agricultural land is likely to mean that, in reality, this area may not be developable.</p> <p>Due to the high proportionate coverage of the grade 3 agricultural land within the assessment</p>	?	?	?

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	data distinguishing whether the land is grade 3a or the lower quality grade 3b.	area, it is unlikely that effects will vary based on developing different areas within it.			
Water Quality	The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones. As such, negligible effects are considered likely in relation to water quality for all development sizes.	N/A			
Flood Risk	<p>The majority of the assessment area is greenfield but there are areas of residential/agricultural development as well as local roads.</p> <p>There is land within the assessment area that is located within Flood Zone 2 due to the presence of a watercourse in the north-eastern corner of the assessment area and a further watercourse adjacent to the south-western boundary.</p> <p>However, the majority of the assessment area is not located within any Flood Zones and therefore negligible effects may occur in relation to flooding.</p>	There is likely sufficient space within the assessment area for all potential development scales to be located outside of Flood Zone 2, reducing flood risk.			

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Mineral Resources	<p>There small pockets of land adjacent to the northern and southern boundaries of the assessment area that are located within Mineral Safeguarding Areas (MSAs).</p> <p>However, the majority of the assessment area is not located within any MSAs. As such, negligible effects may occur in relation to mineral resources.</p>	<p>There is likely to be sufficient space for all potential development scales to be located outside of MSAs as these areas are restricted to small pockets of land adjacent to the assessment area boundaries. It may also be possible to extract mineral resource prior to development.</p>			
Noise	<p>Over 50% of the assessment area is located within an area of high noise Noisy area due to the presence of a railway on the northern boundary and the A40 and M5 on the remaining boundaries of the assessment area.</p> <p>As such, significant negative effects may occur in relation to noise for the development at the large scale, whilst negligible effects may occur for the medium and small sizes.</p>	<p>There may be potential to accommodate the small and medium-sized urban extensions within the western section of the assessment area that is not located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours.</p> <p>Suitable mitigation may also be possible at large development sizes to overcome noise related issues.</p>	*		
Odour		N/A			

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	<p>The assessment area is not located within any Odour Monitoring Zones or Cordon Sanitaire Zones.</p> <p>As such, negligible effects are expected in relation to odour for all development sizes.</p>				

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
<p>Key landscape sensitives:</p> <ul style="list-style-type: none"> The steep landscape feature of Churchdown Hill, which provides panoramic views over the surrounding low-lying landscape. Good provision of ecological habitats including BAP Priority Habitats. Provision of rural setting to existing settlement. Intervisibility with the elevated ridges of the nationally significant Cotswolds AONB. Sense of separation the landscape provides between Gloucester and Churcham. <p>As such, landscape sensitivity is high for all development sizes as the key characteristics and qualities of the landscape may be highly sensitive to development.</p>	H	H	H

Summary of Constraints and Landscape Sensitivity

The area is considered to have high landscape sensitivity to all potential scales of development. The least constrained land in the assessment area is located in the western half (in the vicinity of Zoons Court Farmhouse; however, there is approximately 90ha of land in this area that is constrained by grade 3 agricultural land, a single grade II listed building in the centre of the area and several pockets of priority habitat on the higher ground to the east. This area could potentially accommodate a small or medium urban extension, avoiding the majority of environmental constraints, although, in order to maintain a connection with the urban area to the south this is likely to require development within a noisy area. However, suitable mitigation may make it possible to overcome noise related issues.

The east of the assessment area (in the vicinity of Whitehouse Farm) contains land that is constrained by Grade 3 land and an area of high noiseNoisy area. Small and medium extension types could potentially be accommodated in this location if suitable mitigation is possible to overcome noise related issues. The north-eastern part of the assessment area is subject to similar constraints, but could potentially only accommodate a small extension type due to the presence of Flood Zone 2.

Large extensions are considered likely to have significant negative ecological effects via encroachment on local ecological designations, which indicates a smaller extension scale may be more suitable.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected via the A417 (Brockworth Bypass) and the A40, which provide direct links to Cheltenham and Gloucester.</p> <p>M5 / A417 (junction 11a) is located to the south of the assessment area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate close to its design capacity in 2031 (at between 71% and 95% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>The A417 also includes the 'critical junctions' A417/ Delta Way Roundabout (forecast to function at between 95% and 108% Ratio to Flow Capacity during the AM and PM peak periods) and A417/ Barnett Way/ Corinium Avenue Roundabout (predicted to operate at between 83% and 97% Ratio to Flow Capacity during the AM and PM peak periods) which are also adjacent to the assessment area.</p> <p>M5 / A40 (junction 11) is adjacent to the north of the assessment area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate just within its design capacity in 2031 (at between 89% and 94% Ratio to Flow Capacity during the AM and PM peak periods).</p>	

Criterion	Rationale	Score
Access to employment	Number of workplaces (jobs) accessible within 45 minutes = 87,675 A high number of workplaces (jobs) can currently be accessed by PT from the assessment area.	
	Number of workplaces (jobs) accessible within 30 minutes = 280,743 Access from the assessment area to employment by Car scores high , due to the assessment area's proximity to the strategic road network, providing links to key urban centres.	
Access to other key services and facilities by public transport	TRACC Accessibility Modelling outputs show that the assessment area has poor accessibility to key services and facilities within 60 mins travel time by public transport services.	
Private car use by commuters	% Driving a Car or Van in LSOA = 68% Car mode share for commuter trips accounts for an average of 67% of journeys in LSOAs covered by the assessment area.	
Proximity to sustainable transport networks	The assessment area is within the 5km catchment of both Gloucester Rail Station and Cheltenham Rail Station, however low frequency bus services provide poor integration with these stations and their respective urban centres. The National Cycle Network runs close to the north of the assessment area, with scope to deliver strategic walking / cycling links through development to improve the attractiveness of active trips.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Load is acceptable			
	Rail transport	Southern half of area within 5km of Gloucester branch line station and northern third of area within 5km of Cheltenham mainline station. Provision of improved bus/cycle linkages could result in higher levels of rail patronage.			
	Bus transport	Within 500m of high frequency bus routes to both Cheltenham and Gloucester and close enough to both key destinations that improvements in frequency could result in reasonably high levels of bus patronage. Proximity to M5 J11 would require significant bus network expansion to avoid overloading SRN network with significant additional car traffic. Higher scales of growth increase likelihood of securing the levels of investment needed to deliver bus infrastructure improvements (more so if developed jointly with assessment area 30).			

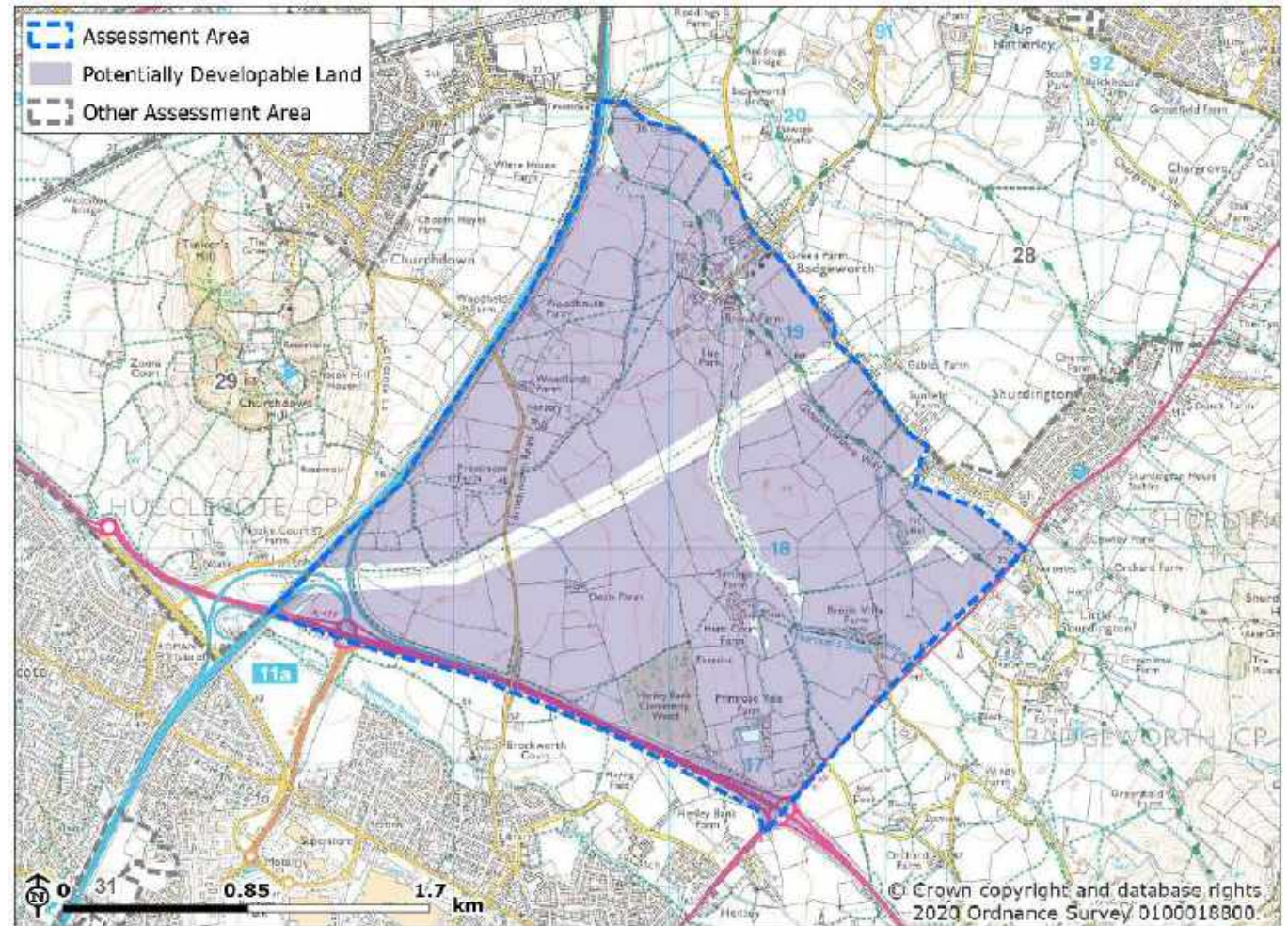
Assessment Area 30 – Urban extension: Northeast of Gloucester (east of M5)

Assessment Area Ref: 30

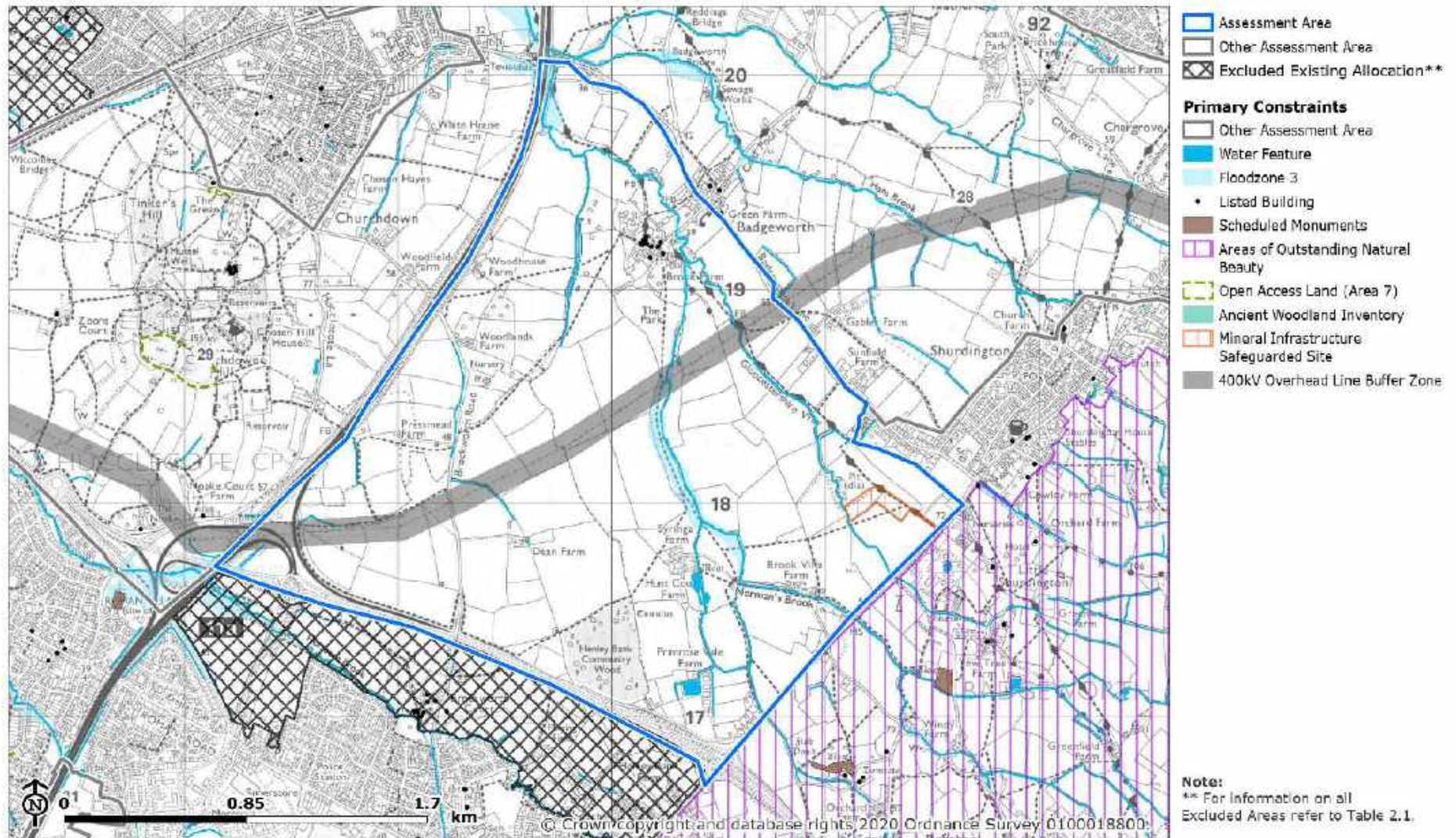
Authority Area: Tewkesbury Borough

Development Typology: Urban Extension

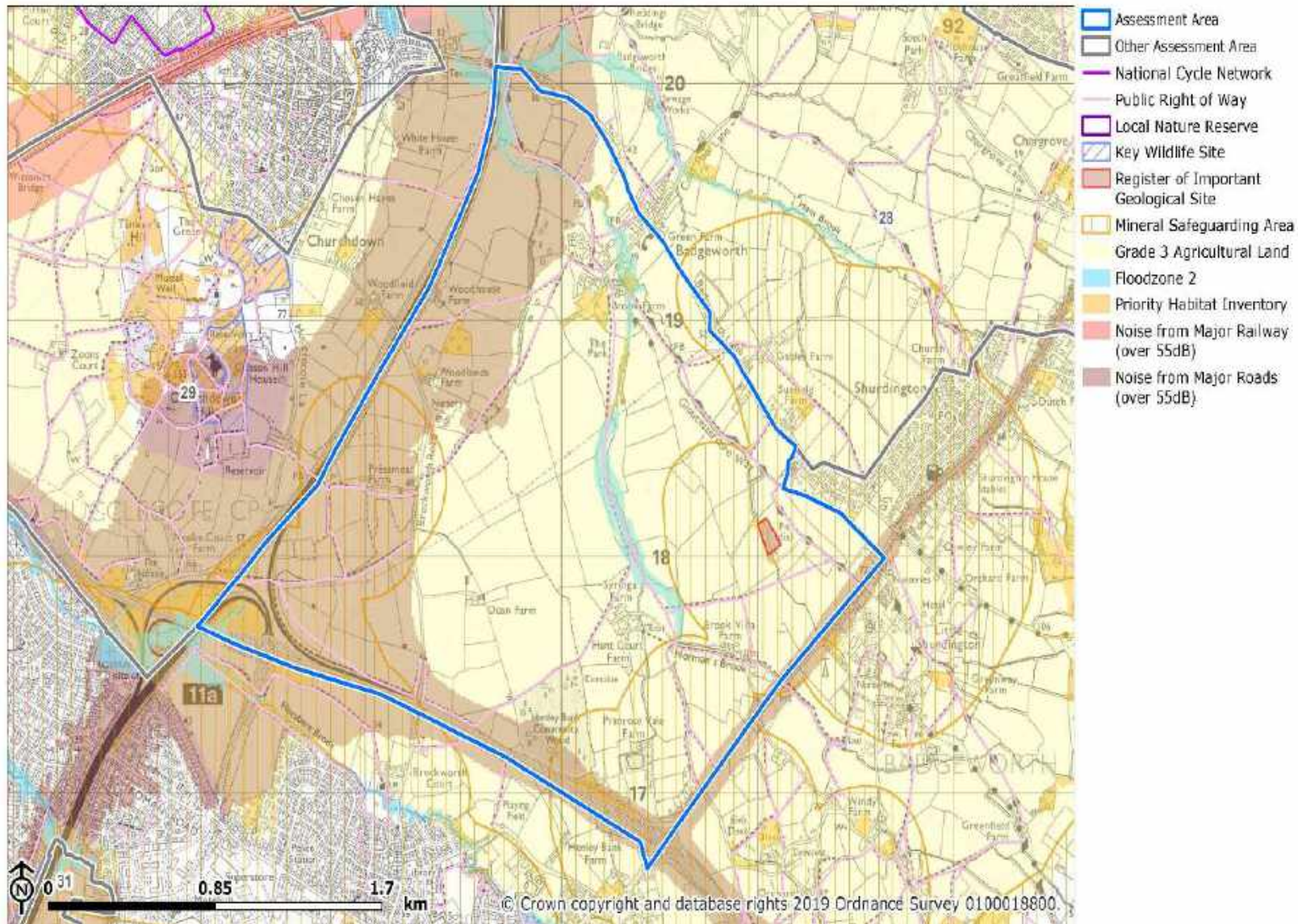
Assessment area: ~554ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 14 listed buildings in the assessment area; these are all grade II save for the grade I Church of Holy Trinity in Badgeworth. Most of the other listed structures are burial monuments in the church's cemetery, others include Badgeworth Manor, Badgeworth Court School and the school lodge, gatepiers and wall. All of the listed buildings lie within Badgeworth. The churchyard cross in the Holy Trinity Church is scheduled as well as listed. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER indicates that there are a number of non-designated heritage assets within the assessment area these include, but are not limited to: <ul style="list-style-type: none"> Prehistoric burial mound in Henley Bank Community 	<p>The key sensitivities of the area are the listed buildings at Badgeworth, to the north of the assessment area. Development could affect the setting of these and affect the identity/ character of the historic rural settlement that they comprise part of. The non-designated former parkland of Badgeworth manor also adds to the sensitivity of this area as it may be considered to be of more than local significance due to its association with a nationally important building. Badgeworth is of further archaeological sensitivity due to the presence of the priory and nunnery, as well as the possible Civil War battle field site, which are all likely to be of more than local significance.</p> <p>The south of the assessment area is also a key area of sensitivity due to the presence of non-designated assets that may be of more than local significance e.g. the moated site at Hunt Court Farm and the potential round barrows around Henley Bank Wood. North of Henley Wood there is a possible aircraft crash site, if remains are present, then they are controlled by the Protection of Military Remains Act 1986. Under this act it is an offence to tamper with, damage, move, or unearth any remains without a licence from the Ministry of Defence.</p>	<p>?</p>	<p>?</p>	<p>?</p>

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>Wood and a possibly two more to the west of it;</p> <ul style="list-style-type: none"> - Various cropmarks and earthworks of uncertain/unknown origin; - Ridge and furrow earthworks; - A moat at Hunt Court; - Sites of a Norman nunnery and a Benedictine Priory near Brockworth; - A possible Civil War battlefield site at Badgeworth; - Several modern military sites, including an aircraft crash site between Dean Farm and Henley Bank Community Wood. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC data indicates that the assessment area is primarily agricultural with historic settlement at Badgeworth and adjacent to the A46 on the southern edge of the assessment area. The agricultural landscape is mainly comprised of a mix of irregular and less irregular enclosures, which have some time-depth and value in themselves and could, include hedgerows that qualify as important under the archaeology 	<p>The east and west are less sensitive areas. The eastern area could likely be developed as large urban extension resulting in only minor negative effects to the historic environment (e.g. there are assets of low significance and the magnitude of effect is likely to substantially harm their significance).</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>and history criteria of The Hedgerow Regulations 1997. In addition to the agricultural landscape there is an area demarcated as the ornamental landscape of the grade II Badgeworth Manor, which retains some legibility.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are a number of designated heritage assets in the wider vicinity of the assessment area. Of these, those most susceptible to meaningful setting change are the grade I Church and grade II* Manor at Brockworth. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • There are a number of non-designated assets in the wider vicinity of the site, including a possible hillfort on Churcham Hill to the northeast. However, none have been identified as being particularly susceptible to meaningful setting change. 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> Site of geological importance (Shurdington Sand & Gravel Pit) in the eastern half. Adjacent to deciduous woodland priority habitat. <p>Assets within 250m:</p> <ul style="list-style-type: none"> No designated assets within 250m. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI (Crickley Hill and Barrow Wake) 1.8km to the southeast. Also a designated nature reserve and a designated site of geological importance. SSSI (Badgeworth) 1km northeast, part of this site is also a designated nature reserve. SSSI (Hucclecote Meadows) 1.6km southwest. <p>IRZs:</p> <ul style="list-style-type: none"> The IRZ for Crickley Hill and Barrow Wake SSSI overlaps with part of the south-eastern edge of the assessment area. The IRZ for Badgeworth SSSI overlaps with a third of the assessment area, in the northeast. The IRZ for Hucclecote Meadows SSSI overlaps the southwest 	<p>Although there are no national or international statutory designated sites within the assessment area, there are several IRZs which overlap with the assessment area.</p> <p>Norma's Brook presents a conduit for connectivity in and out of the assessment area, which could lead to impacts offsite. Any spatial distribution of development in the assessment area will be required to provide suitable avoidance/mitigation measures to ensure that the wooded river corridor network is maintained and a suitable buffering region is established between the site of geological importance and any potential development. It will also be necessary to ensure supporting transport infrastructure minimises severance of habitats in the area.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>corner of the assessment area encompassing Junction 11A.</p> <p>Negligible effects may occur at all scales of development as they could potentially be accommodated over 250m from local designations and over 2km from national designations.</p>				
Soil Quality	<p>The entirety of the assessment area is located on grade 3 agricultural land.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur for all development sizes. The effects are uncertain as there is no data distinguishing whether the land is grade 3a or the lower quality grade 3b.</p>	<p>Due to the high proportionate coverage of the grade 3 agricultural land within the assessment area, it is unlikely that effects will vary based on developing different areas within it.</p>	?	?	?
Water Quality	<p>The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones. As such, negligible effects are considered likely in relation to water quality for all development sizes.</p>	N/A			
Flood Risk	<p>The majority of the assessment area is greenfield, but there are areas of agricultural/residential development throughout as well as part of the settlement of Badgeworth adjacent to the northern boundary. There are also several local roads throughout the assessment</p>	<p>There is likely to be sufficient space within the assessment area for all potential development capacities to be located within Flood Zone 1, resulting in negligible effects.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>area and the A417 is located on the southern boundary.</p> <p>Norman's Brook passes through the centre of the assessment area from north to south and developable land adjacent to this watercourse is located within Flood Zone 2</p> <p>However, the majority of the assessment area is within Flood Zone 1 and therefore negligible effects are considered likely in relation to flood risk at all development capacities.</p>				
Mineral Resources	<p>There is around a third of the assessment area that is located within Mineral Safeguarding Areas (MSAs) on the western, southern and eastern boundaries.</p> <p>However, the majority of the assessment area is not located within any MSAs and therefore negligible effects are likely in relation to mineral resources.</p>	<p>There is sufficient space within the assessment area to accommodate all potential development scales, whilst also avoiding the sterilisation of mineral resources. It may also be possible to extract mineral resources prior to development.</p>			
Noise	<p>All land adjacent to the boundary of the western half of the assessment area is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the M5 and the A417. Additionally, there is land adjacent to the south-eastern boundary of the assessment area that is also within an area recognised</p>	<p>There is a large area (>100ha) of land in the central region of the assessment area to the west of Norman's Brook that could potentially accommodate development at all capacities outside of the area of high noise. Additionally suitable mitigation may also be possible to overcome any noise related issues.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the A46.</p> <p>However, there is sufficient land outside of an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours within the assessment area to accommodate all potential develop scales and therefore negligible effects are considered likely in relation to noise.</p>				
Odour	<p>The assessment area is not located within any Odour Monitoring Zones or Cordon Sanitaire Zones.</p> <p>As such, negligible effects are expected in relation to odour.</p>	N/A			

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> Overlooked by the adjacent escarpment within the Cotswolds AONB. 	H	M-H	M

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
<ul style="list-style-type: none"> Estate character surrounding Badgeworth. Estate character surrounding Badgeworth. Strong rural character. Contribution to the sense of separation between Shurdington, Churchdown and Gloucester. <p>As such, landscape sensitivity is high for the largest development size as the key characteristics and qualities of the landscape may be highly sensitive to development of this scale. Landscape sensitivity is reduced to moderate-high for medium size extensions, and moderate for the smallest size, as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>			

Summary of Constraints and Landscape Sensitivity

The assessment area is bisected by an area of undevelopable area of land due to the presence of an overhead powerline running east-west and the functional floodplain of Norma’s Brook that runs north-south. The least constrained land in the assessment area is potentially to the south of this powerline in the vicinity of Dean farm. This comprises grade 3 agricultural land although it is not known if it is grade 3a or 3b. A large extension could potentially be accommodated in this area to the west of Norman Brook if suitable mitigation is possible to overcome noise related issues associated with the noisy area adjacent to the southern boundary. However, landscape sensitivity is considered to be high under the large extension scenario. To avoid significant adverse impacts on landscape character, the delivery of small extension may be more suitable as the area is considered to be of moderate landscape sensitivity to development of this scale. A medium extension is likely to result in moderate to high adverse effects on landscape.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	The assessment area is connected to the highway network via the A46 (Shurdington Rd) and the A417 (Brockworth Bypass), which links to the M5 - Junction 11A. The A417 / A46 junction is located to the south of the assessment area. The JCS modelling work’s Do Nothing and Do Minimum model tests forecast that this junction will operate beyond its design capacity in 2031 (at between 101% and 108% Ratio to Flow Capacity during the AM and PM peak periods).	

Criterion	Rationale	Score
	<p>The M5 / A417 (junction 11a) is located to the south west of the assessment area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate broadly within its design capacity in 2031 (at between 71% and 95% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>M5 / A40 (junction 11) is adjacent to the north of the assessment area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate just within its design capacity in 2031 (at between 89% and 94% Ratio to Flow Capacity during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 125,239</p> <p>A high number of workplaces (jobs) can currently be accessed by public transport from the assessment area, reflecting that several high-frequency bus services currently operate along key arterial routes.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 289,596</p> <p>Access from the assessment area to employment by Car scores high, due to assessment area's proximity to the strategic road network and key urban centres.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that the assessment area is accessible to education facilities within 20 mins travel time by public transport. Urban centres and healthcare sites are accessible within 20 – 40 mins.</p>	
Private car use by commuters	<p>% Driving a Car or Van = 69%</p> <p>Car based commuter trips currently account for an average of 69% of travel to work journeys in LSOAs covered by the assessment area.</p>	
Proximity to sustainable transport networks	<p>The assessment area is partially within the 5km catchment of Cheltenham Spa Rail Station and is served by several high-frequency bus services. The assessment area is currently divorced from the NCN; however, some local walking and cycle routes are provided, linking the assessment area to both Cheltenham / Brockworth.</p>	

Deliverability/Infrastructure

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Other than at lowest scales of growth, reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer.			
	Rail transport	Northern half of area within 5km of Cheltenham mainline station. Provision of improved bus/cycle linkages could result in higher levels of rail patronage.			
	Bus transport	Within 500m of high frequency bus route and close enough to Cheltenham to mean that improvements in frequency could result in reasonably high levels of bus patronage. Proximity to M5 J11 would require significant bus network expansion to avoid overloading SRN network with significant additional car traffic. Higher scales of growth increase likelihood of securing the levels of investment needed to deliver bus infrastructure improvements (more so if developed jointly with assessment area 29).			

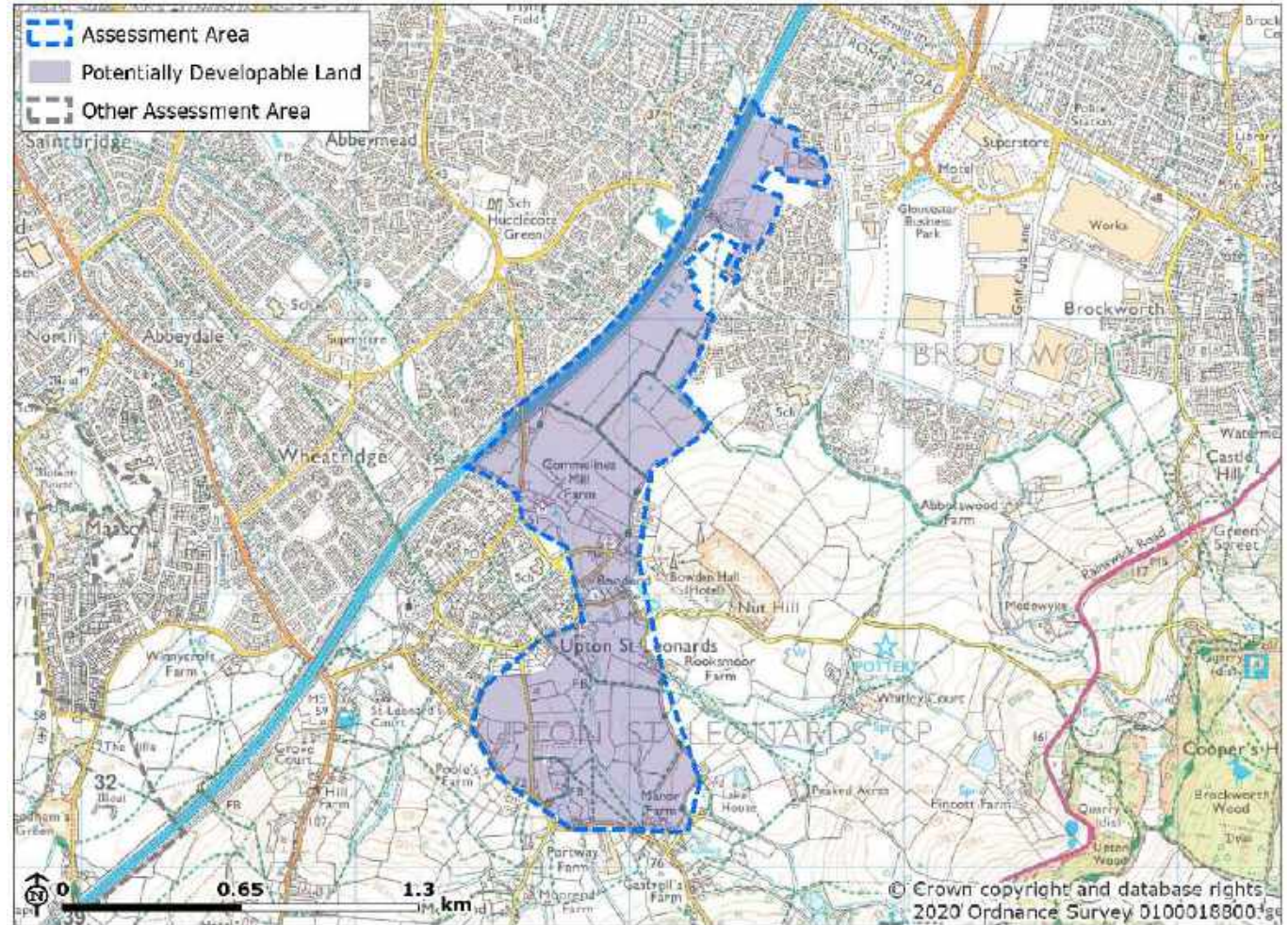
Assessment Area 31 – Urban Extension: East of Gloucester

Assessment Area Ref: 31

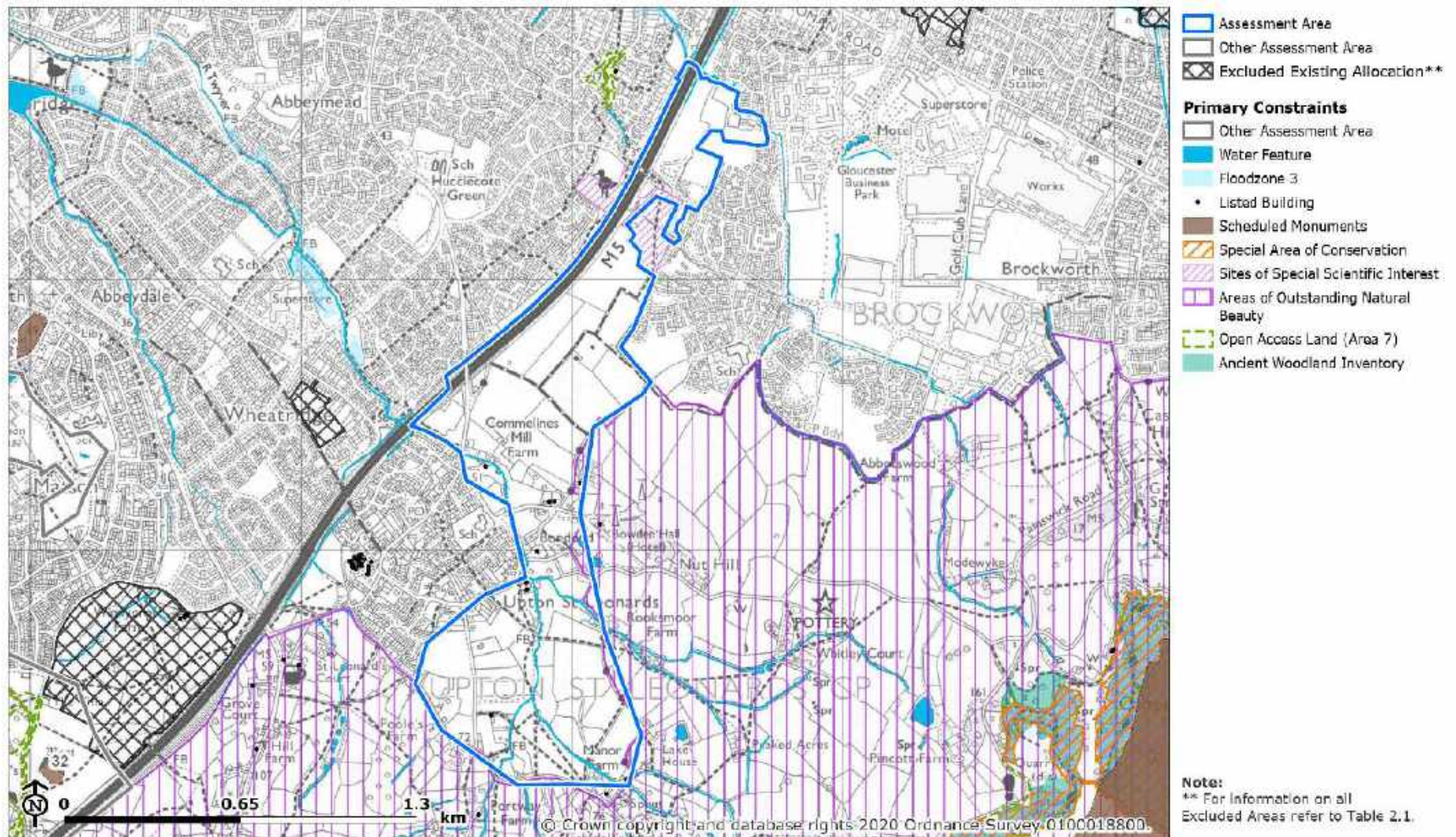
Authority Area: Stroud District and
Tewkesbury Borough

Development Typology: Urban Extension

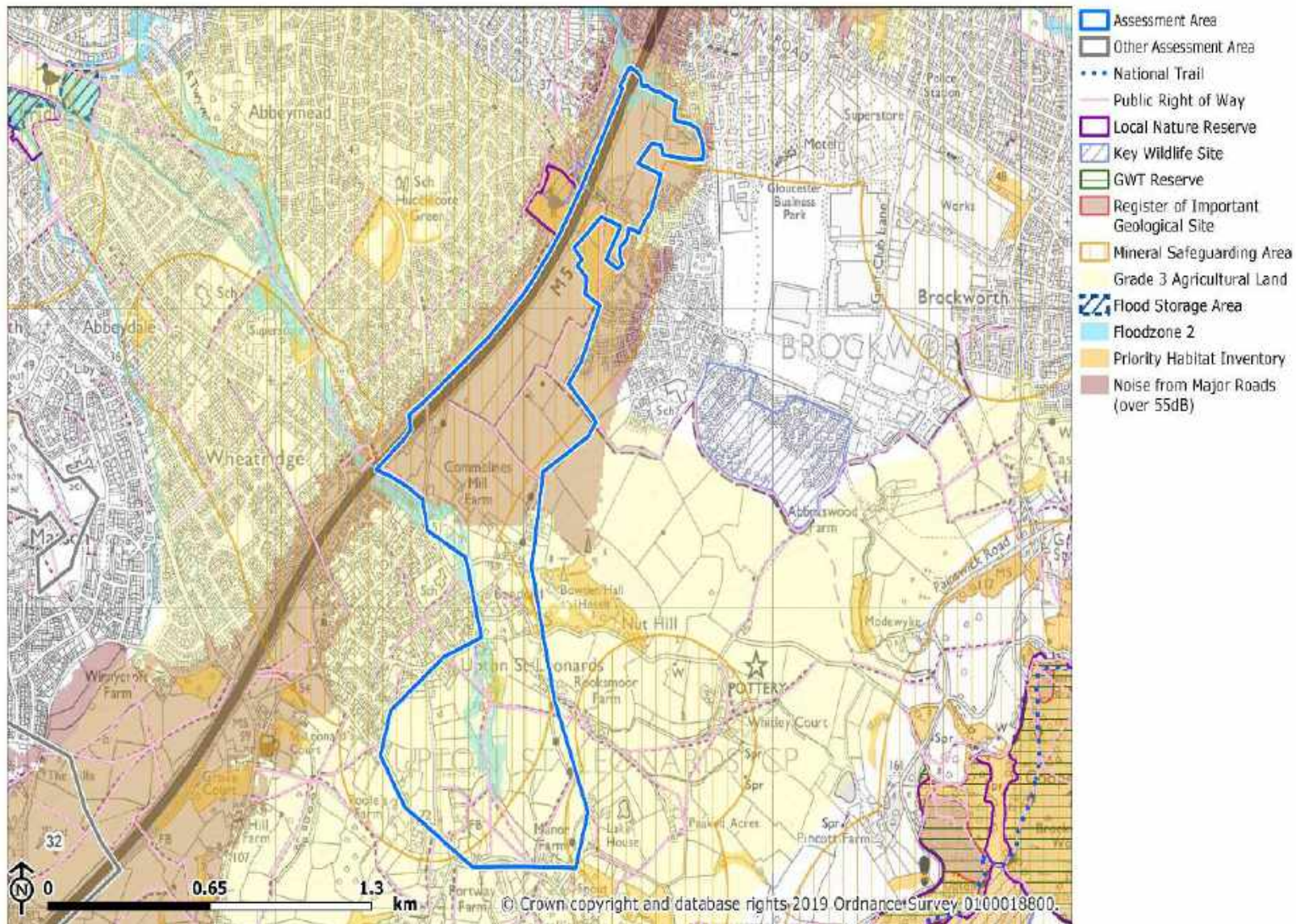
Area: ~288ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are ten listed buildings within the assessment area, all of them grade II listed. The buildings comprise of farmhouses, cottages, agricultural buildings, mills and mill houses and a house. They are all located to the south of the assessment area around Upton St Leonards. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER records a number of non-designated assets in the assessment area. These include, but are not limited to: <ul style="list-style-type: none"> Prehistoric and Roman settlement at the Gloucester Business Park; The Roman Ermine Street and Roman settlements at Upton St Leonards and Brockworth; 	<p>Upton St Leonards is the key area of sensitivity due to the clustering of listed buildings. Adding to the sensitivity of the area is the fact that it includes a small part of Bowden Hall's former designed landscape. Whilst some carefully designed infill may be possible in this area, large, medium and small extensions would all potentially have significant effects.</p> <p>The northern half of the assessment area is less sensitive – although there the setting of the scheduled Iron Age hill fort and the non-designated castle may be affected. However, it is unlikely that this area could accommodate even a small extension without significant negative effects unless built at the lowest end of this development scale (which might result in minor effects). Therefore there is potentially a significant negative effect for all overall development scales.</p>	N/A	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> - Various agricultural features; - Cropmarks and earthworks including a possible mill or moated site at Upton St Leonard's; - Multiple military sites – mainly relating to Brockworth Airfield and the Gloster Aircraft Factory – both of which have been redeveloped. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC indicates a mixed landscape, with active and disused industrial sites to the north alongside an area of former post-medieval designed parkland associated with the grade II listed Bowden Hall, just beyond the assessment area. To the south there is a mix of modern settlement and agricultural land comprised of irregular, less irregular, and less regular enclosures. These could include hedgerows that qualify as important under the archaeology and history criteria 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>of The Hedgerow Regulations 1997.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are a number of listed buildings in the wider vicinity of the assessment area. Of these, those most susceptible to meaningful setting change include the grade II listed Manor Farmhouse and Primrose Cottage (to the south), the grade II listed Bowden Hall Hotel (to the east). • There is a scheduled Iron Age hill fort to the southeast of the assessment area on Cooper's Hill. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • The HER records a number of non-designated heritage assets in the wider vicinity. Of these, those identified as being most susceptible to setting change include the motte and bailey castle on Castle Hill – to the east 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	of the assessment area - and Prinknash Abbey and Park, which lie to the southeast of the assessment area.				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> SSSI (Hucclecote Meadows), part of which is in the central region of the assessment area. The IRZ for this site overlaps two thirds of the assessment area meaning that the development of any additional dwellings poses a risk. Priority habitats within the assessment area include lowland meadows (as the SSSI) and small stands of deciduous woodland in the northern (at Junction 11A) and southernmost (Upton St. Leonards) parts of the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> Part of Hucclecote Meadows SSSI is adjacent to the western boundary, also incorporates a local nature reserve and Key Wildlife Site. This site also includes areas of priority habitat: 	<p>Any spatial distribution of development in the assessment area will be required to provide suitable avoidance/mitigation measures to ensure that the potential for adverse effects on the SSSIs, both within and adjacent, are minimised. It will also be necessary to maintain the wooded river corridors in the north and south. It should also ensure that supporting transport infrastructure minimises severance of habitats in the area.</p> <p>It should also be required to maintain/enhance the networks of priority deciduous woodland habitat surrounding the assessment area. Severance of deciduous must be avoided and connectivity – be it additional woodland or complementary habitats – should be optimised at the landscape scale, especially with respect to the key woodland SSSI features in the study area.</p>	N/A	*	*

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>lowland meadow and good quality semi-improved grassland.</p> <ul style="list-style-type: none"> Key Wildlife Site (Brockworth Park/Oaks) is adjacent to the eastern boundary. <p>International and National assets within 2km:</p> <ul style="list-style-type: none"> SAC/SSSI (Cotswolds Commons and Beechwoods) 1km south-east. <p>IRZs:</p> <ul style="list-style-type: none"> The IRZ for Cotswolds Commons and Beechwoods SAC/SSSI reaches into the assessment area (over half) meaning any net gain of residential units pose a risk. <p>Minor negative effects may occur for a small or medium extension as they could potentially be accommodated over 250m from the national designation, but would still be within 2km. The potential effects of development are likely to be contingent in all cases on detailed development design and other mitigation measures.</p>				
Soil Quality	There is around half of the assessment area in the south and the west that is comprised of grade 3 agricultural land.	Due to the high proportionate coverage of the grade 3 agricultural land within the assessment	N/A	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>The remaining land in the east of the assessment area is classified as non-agricultural due to the presence of an industrial estate and land in the north is classified as urban due to existing residential development on the fringe of Gloucester.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality for all applicable development option sizes. The effects are uncertain as there is no data distinguishing whether the land is grade 3a or the lower quality grade 3b.</p>	<p>area, it is unlikely that effects will vary based on developing different areas within it.</p>			
Water Quality	<p>The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones. As such, negligible effects are expected in relation to water quality.</p>	N/A	N/A		
Flood Risk	<p>The southern half and the majority of the western part of the assessment area are greenfield, with the north being occupied by residential development and the east containing a large industrial estate. There is also some residential development</p>	<p>Development at the small and medium size can avoid the area of Flood Zone 2 by being located in the central and eastern parts of the assessment area.</p>	N/A		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>associated with Upton St Leonards in the southern half of the assessment area.</p> <p>There is around 5ha in the southern part of the assessment area that is located within Flood Zone 2 due to the presence of the River Twyver. There are also similarly sized pockets of land located within Flood Zone 2 in the northern half of the assessment area due to the presence of Wotton Brook and Horsebere Brook.</p> <p>For the small and medium development sizes negligible effects may occur as there is potentially sufficient space to accommodate these scales of development outside of Flood Zone 2.</p>				
Mineral Resources	<p>The majority of land within the assessment area is occupied by Mineral Safeguarding Areas (MSAs).</p> <p>There is potential for development to result in the sterilisation of mineral resources. As such, significant negative effects may occur in relation to mineral resources.</p>	<p>For all applicable development sizes, there is insufficient land available that is not located within a MSA for any potential development to avoid the sterilisation of mineral resources.</p> <p>Suitable mitigation may be possible, such as extraction of mineral resources prior to development.</p>	N/A	*	*
Noise	<p>The majority of the northern half of the assessment area is located within an area recognised as having noise levels in</p>	<p>There is insufficient land outside of an area recognised as having noise levels in exceedance of 55dB at night or 60dB on</p>	N/A	*	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the M5.</p> <p>This area occupies the majority of the undeveloped part of the assessment area and therefore significant negative effects may occur for medium development size. There is 55ha of land in the south not located within an area of high noise and therefore negligible effects may occur for a small urban extension in this location.</p>	<p>average during the period 07:00-23:00 hours for development at the medium and large scale options to be accommodated. However, land in the southernmost part of the assessment area may be able to accommodate a small scale extension outside of an area of high noise Noisy area. In all cases, suitable mitigation may be possible to overcome noise related issues.</p>			
Odour	<p>The assessment area is not located within any Odour Monitoring Zones or Cordon Sanitaire Zones.</p> <p>As such, negligible effects are expected in relation to odour.</p>	N/A	N/A		

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
<p>Key landscape sensitives:</p> <ul style="list-style-type: none"> • Intervisibility with the adjacent Cotswolds AONB escarpment. • Contribution to the rural setting of Gloucester and Upton St Leonards. <p>Landscape sensitivity is low-moderate for both smaller urban extension options as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	N/A	L-M	L-M

Summary of Constraints and Landscape Sensitivity

Overall, there is limited land in the assessment area that is free from constraints. In the north-east of the assessment area, there is potentially an area of land which might potentially accommodate a small urban extension in between existing areas of residential development in Brockworth with lower impact on historic assets and various other constraints. However, this land lies adjacent to Hucclecote Meadows SSSI, which even the smallest scale of small extension might have to 'straddle'.

The area to the north of Upton St Leonards is less constrained in certain respects. This area is occupied by grade 3 agricultural land, an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours and a Mineral Safeguarding Area, but mitigation may be possible in regard to mineral resources and the noisy area and it is not clear if the grade 3 agricultural land is grade 3a or the lower quality grade 3b. However, the vicinity of Upton St Leonards is particularly sensitive with respect to the historic environment, and Upton St Leonards and Hucclecote Meadows SSSI is less than 1km away.

Landscape sensitivity for both a medium and small urban extension is considered to be low-moderate due to the area being located between existing developed areas of land at the fringe of Gloucester.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via urban roads through Abbeymead and Upton St. Leonards. The A417 (Brockworth Bypass), which links to the M5 - Junction 11A and Hucclecote Road provides connections to the wider highway network.</p> <p>A417 / A46 junction is located to the north of the assessment area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate beyond its design capacity in 2031 (at between 101% and 108% Ratio to Flow Capacity during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 69,419</p> <p>A high number of workplaces (jobs) can currently be accessed by public transport from the assessment area, with frequent bus services operating along the key arterial routes in proximity to the site.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 287,830</p> <p>Access from the assessment area to employment by Car scores high, with the assessment area in close proximity to major roads providing direct links to key urban centres.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that the assessment area is accessible to a number of key services (urban centres and healthcare facilities) between 20 and 40 mins travel time by public transport services. Education facilities are within 20 mins public transport travel time from the assessment centre.</p>	
Private car use by commuters	<p>% Driving a Car or Van = 72%</p> <p>Car based commuter trips currently account for an average of 72% of journeys in LSOAs covered by the assessment area, which is likely attributed to the development areas in proximity to the local road network.</p>	
Proximity to sustainable	<p>The majority of the assessment area is within the 5km catchment of Gloucester Rail Station and is served by high-frequency public transport services. The assessment area is</p>	

Criterion	Rationale	Score
transport networks	currently divorced from the NCN; however, some local walking and cycle routes are provided, linking the assessment area to Gloucester City Centre.	

Deliverability/Infrastructure

Criterion	Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)	
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.	N/A		
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).	N/A		
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.	N/A		
	Gas	Load is acceptable.	N/A		
	Rail transport	Within 5km of Gloucester branch line station. Provision of improved bus/cycle linkages could result in higher levels of rail patronage.	N/A		
	Bus transport	Within 500m of high frequency bus route and close enough to Gloucester to mean that improvements in frequency could result in reasonably high levels of bus patronage. Only higher levels of growth likely to be sufficient to	N/A		

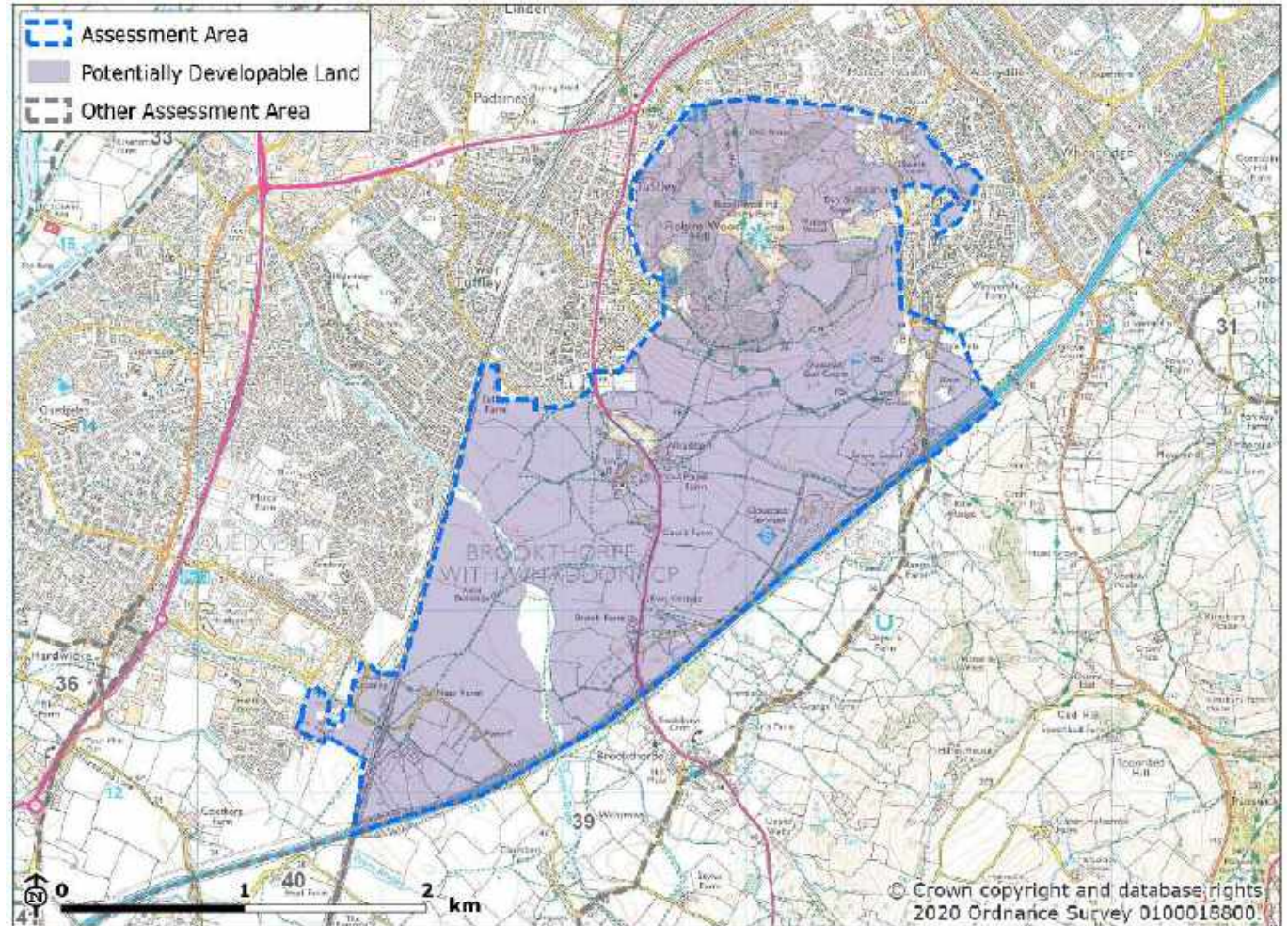
Assessment Area 32 – Urban Extension: South of Gloucester

Assessment Area Ref: 32

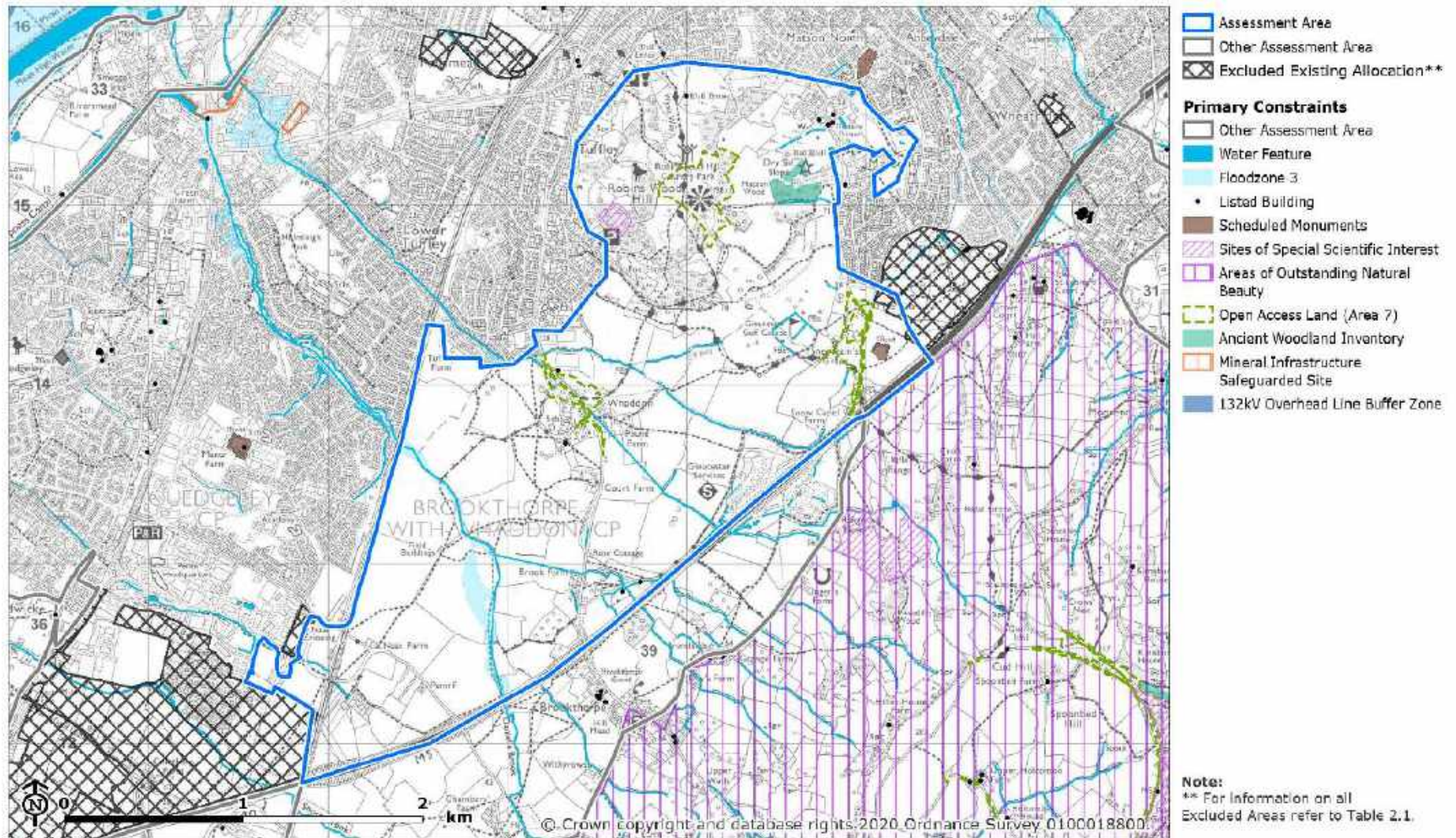
Authority Area: Gloucester City and Stroud District

Development Typology: Urban Extension

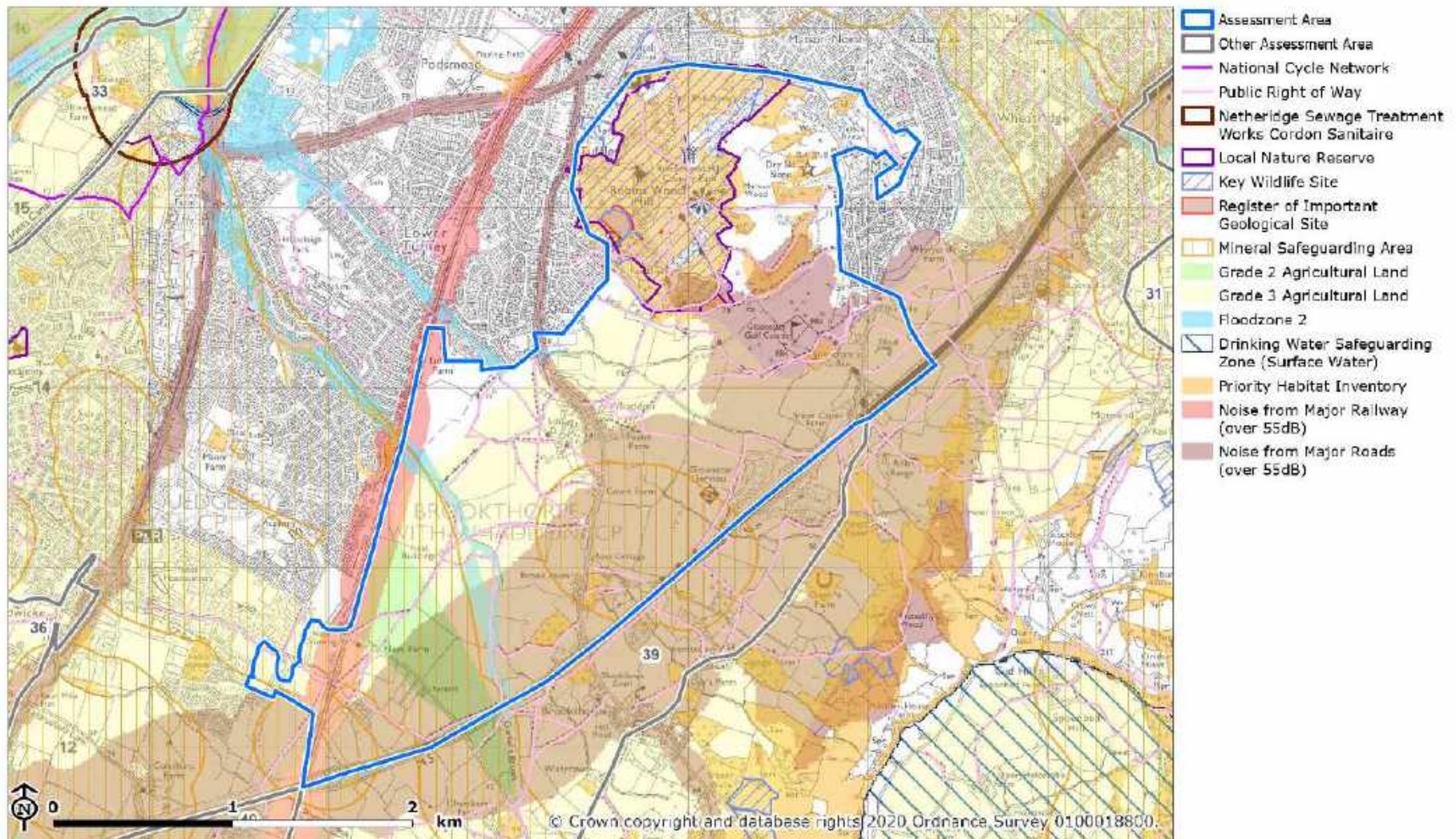
Area: ~692ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Historic Environment	<p>Assets within the search area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 11 listed buildings within the search area; these are all grade II save for the grade II* listed Church of St Margaret, Whaddon and a former Manor house at Matson. The other listed buildings include Farmhouses, cottages, a war memorial, well house and a boundary post. These are typically located to the north of the search area near Robinswood Hill or further south near Whaddon. There is a scheduled moated site to the east of the search area near Snedham's Green. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> There are a large number of non-designated assets recorded by the HER within the search area. These include, but are not limited to: <ul style="list-style-type: none"> Prehistoric finds – and possibly a barrow - on Robins Hill; 	<p>The spatial distribution of the listed buildings makes the southern end of the search area, the area west of Whaddon and Brookthorpe less sensitive to development.</p> <p>The area to the east of Sneedham Green is also highly sensitive due to the presence of the scheduled moated site. This asset lies in an area of irregular enclosures that reflect former unenclosed farming patterns, which makes some contribution to its legibility.</p> <p>In terms of non-designated assets the WWII aircraft site – to the northwest of Whaddon - will be protected under the Protection of Military Remains Act 1986. Potential sites of medium-high significance – and greater sensitivity - include the Church and graveyard of St Catherine near Matson and the walled garden associated with the grade II* Matson House.</p> <p>To avoid/ minimise harm to the historic environment development would need to be sited along the western edge of the assessment area and avoid coalescing with Whaddon. Some development may also be possible to the south of Robin's Hill, provided it does not extend to Whaddon, nor east of Sneedham's Green where the scheduled moat is located. Development in the described areas would be likely to result</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> - Earthworks and cropmarks on and around Robins Hill; - Late Iron Age and Roman settlement near Sneedham's Green; - Roman settlement at Brookthorpe-with-Whaddon; - Roman features at Matson; - St Catherine's Church and Churchyard near Matson; - Earthwork remains of a medieval building and crofts at Robinswood golf course; - A medieval well at Matson; - Post-medieval buildings, sites of former buildings and trackways and agricultural features; - Gardens associated with the listed Matson House; and - A number of modern military sites mainly relating to WWII, including an aircraft crash site. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC data indicates a primarily agricultural landscape comprised of irregular and less irregular enclosure. This has some time-depth and value in itself and could 	<p>in minor negative effects to the historic environment.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. There is also an area of ancient woodland by Matson.</p> <p>Assets beyond the search area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are a number of listed buildings of all grades and scheduled monuments in the wider vicinity of the search area. Most are unlikely to be susceptible to meaningful setting change, however, the grade II* well cross to the north of the search area appears to have a relationship with the grade II well house within the search area that could be affected by development. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • No non-designated assets with the potential for meaningful setting change have been identified at this stage. 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> SSSI (Robinswood Hill Quarry) in the northern part of the assessment area. Also a site of geological importance and in close proximity to three very small sites (part of the Robinswood collection) of geological importance. Two areas of Ancient Woodland (in Matson Wood) in the northern part of the assessment area. A large local nature reserve (Robinswood Hill) occupies around half of the northern area of the assessment area and is also designated as a Key Wildlife Site (Robinswood Hill Country Park). The majority of the northern part of the assessment area (Robinswood Hill) is occupied by deciduous woodland priority habitat. There are also areas of good quality semi-improved grassland priority habitat, traditional orchard, and unspecified priority habitats. <p>Assets within 250 m:</p> <ul style="list-style-type: none"> There are several priority habitats adjacent to the assessment area, including deciduous woodland (along Daniel's Brook, at Hunts Grove, and along the M5). There is 	<p>Any spatial distribution of development in the assessment area should avoid the Robinswood Hill area in order to avoid or minimise impacts on the various designations and priority habitats in this area.</p> <p>Where development cannot be completely avoided, it will be required to provide suitable avoidance/mitigation measures to ensure that the high concentration of designations in the north is maintained.</p> <p>A buffer or targeted mitigation measures may also be required to protect the integrity of Daniel's Brook and riparian deciduous wood which runs towards the west of the assessment area. There is an opportunity for enhancement within any development along this watercourse as well.</p> <p>It will also be necessary to ensure supporting transport infrastructure minimises severance of habitats in the area.</p>	<p style="text-align: center;">*</p>		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>also a traditional orchard on the A4173 at the southern edge of the assessment area.</p> <p>International and National assets within 2km:</p> <ul style="list-style-type: none"> • SSSI (Range Farm Fields) 400m south-east. • SSSI (Hucclecote Meadows) 2km north-east. <p>IRZs:</p> <ul style="list-style-type: none"> • The IRZ for Hucclecote Meadows SSSI overlaps with part of the north of the assessment area. Therefore any residential developments with a total net gain in residential units or any residential developments outside of existing settlements/urban areas with a total net gain in residential units could pose a risk. • The IRZ for Range Farm Fields SSSI overlaps with the majority of the assessment area.# <p>Minor negative effects may occur at the largest development size as this scale of development would likely fall within 2km of the national designation in the north. Negligible effects may occur at the small and medium development sizes as these scales of development could potentially be accommodated over 2km from the national</p>				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	designation. Potential negative effects are likely to be contingent in all cases on detailed development design and other mitigation measures.				
Soil Quality	<p>Over 50% of land within the assessment area is grade 3 agricultural land. However, there is a 38ha area of grade 2 agricultural land located in the south-west of the assessment area. The remaining land within the assessment area is classified as predominantly non-agricultural in the northern part of the assessment area due to the presence of park and wooded land. There is some land adjacent to the northern and western boundaries that is classified as urban as the assessment area is on the fringe of Gloucester.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur at all development sizes. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	<p>Developments of all scales can potentially avoid the loss of grade 2 agricultural land, as grade 2 land is restricted to the south-west of the assessment area and there is sufficient land that is lower than grade 2 to accommodate all potential development sizes. However, the majority of the assessment area is grade 3 agricultural land and therefore development within any part of the assessment area has the potential to result in the loss of high quality land, dependent upon whether it is grade 3a or grade 3b.</p> <p>Land in the north is classified as non-agricultural but is constrained in other respects, in particular with respect to ecology.</p>	?	?	?
Water Quality	The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones. As such, negligible effects are considered likely in relation to water quality.	N/A			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Flood Risk	<p>The majority of the assessment area is greenfield. However, the settlement of Whaddon is located in the central region of the assessment area, the A4173 passes through the centre of the assessment area from north to south and there are also areas of agricultural land as well as local roads within the area.</p> <p>There is land within Flood Zone 2 in the south-west due to Daniels Brook passing through the assessment area.</p> <p>However, the majority of the assessment area is located in Flood Zone 1 and therefore negligible effects are considered likely in relation to flood risk.</p>	<p>There is sufficient space within the assessment area for development at all potential sizes to be accommodated outside Flood Zone 2. For larger extension types, it may not be possible to accommodate a continuous development in the south-west of the assessment area outside Flood Zone 2 (development may also need to take place either side of the associated water course)</p>			
Mineral Resources	<p>There is a 64ha area of land within a Mineral Safeguarding Area (MSA) adjacent to the southern boundary. A further 110ha in the south-west region of the assessment area is also located within a MSA.</p> <p>There is potential for development to result in the sterilisation of mineral resources. However, negligible effects may occur at all development sizes as there is potentially sufficient space to accommodate these scales of development outside of MSAs.</p>	<p>There is potential for development at the small and medium scale to avoid the sterilisation of mineral resources by being located to the east or west of Whaddon. There is potential for development at the largest scale to avoid the sterilisation of mineral resources by being located to the east of Whaddon.</p>			
Noise	<p>Around 50% of land within the assessment area is within an area recognised as having noise levels in exceedance of 55dB at night</p>	<p>There is sufficient space within the assessment area for development at the smallest size to be set back from the areas</p>	*		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>or 60dB on average during the period 07:00-23:00 hours due to the presence of the M5 on the eastern boundary, the A4173 passing through the centre of the area and a railway line of the western boundary.</p> <p>Significant negative effects may occur for the large extension types; negligible effects may occur in relation to the small and medium extension type due to the potential for development to be accommodated outside of an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours.</p>	<p>of high noise Noisy area. For larger extension types, it may be possible to mitigate noise-related effects.</p>			
Odour	<p>The assessment area is not located within any Odour Monitoring Zones or Cordon Sanitaire Zones.</p> <p>As such, negligible effects are expected in relation to odour.</p>	N/A			

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> Prominent landform of Robinswood Hill. Strong rural character despite proximity to Gloucester. Overlooked from the adjacent escarpment within the Cotswolds AONB. <p>As such, landscape sensitivity is moderate-high for the medium and large urban extensions as the key characteristics and qualities of the landscape may be more sensitive to development of these scales. Landscape sensitivity is reduced to moderate for a small urban extension as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	M-H	M-H	M

Summary of Constraints and Landscape Sensitivity

Land to the south-west of Whaddon is free from the majority of constraints. This area is comprised of grade 3 agricultural land but it is not clear if it is grade 3a or the lower quality grade 3b. A small extension could potentially be accommodated in this location. It may not be possible to accommodate a larger development in this location due to the watercourse further south-west and the risk of coalescence with the settlement of Whaddon, which contains listed buildings including a grade 2 listed building. Land to the south of Whaddon could be used in addition to the aforementioned area to accommodate a larger extension. However, this area includes a Noisy area and Mineral Safeguarding Area and therefore it would be necessary to provide suitable mitigation of effects in these respects. Additionally, landscape sensitivity is moderate-high under the medium and large extension scenarios compared to moderate under the small extension scenario. Therefore, it may be more suitable to develop a small extension to avoid significant adverse impacts on the local landscape.

Development to the north of Whaddon may have significant negative effects on ecological designations at Robinswood Hill, and on the setting of the scheduled monument in the north east.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is well connected by the A4173 (Stroud Rd) and the B4073 via the Matson and Robinswood areas, which provide direct links into Gloucester City Centre, Quedgeley and Stroud.</p> <p>St Barnabas Roundabout is located to the north of the assessment area and is considered a 'critical junction' by the JCS Evidence Base. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate within its design capacity in 2031 (at 65% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>Another 'critical junction' located nearby is Cross Keys Roundabout which is located to the west of the assessment area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate beyond its design capacity in 2031 (at 123% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>A final 'critical junction' located nearby is M5 Junction 12 which is located to the south west of the assessment area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate just within its design capacity in 2031 (at between 99% and 88% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>Proximity to the urban centre of Gloucester means that these critical junctions are expected to be less affected by development in the assessment area due to the feasibility of walking, cycling and public transport options for trips to key destinations within Gloucester.</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 87,209</p> <p>A high number of workplaces (jobs) are accessible from the assessment area by public transport, reflecting the proximity of high-frequency bus services operating along the A4173 into Gloucester.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 289,457</p> <p>Access from the assessment area to employment by car scores high, with the assessment area close to major roads providing direct links to key urban centres.</p>	

Criterion	Rationale	Score
Access to other key services and facilities by public transport	TRACC Accessibility Modelling outputs show that the assessment area is accessible to a number of key services (urban centres and healthcare facilities) between 20 and 40 mins travel time by public transport services along the A4173 corridor. Education facilities are accessible within 20 mins along the A4173 corridor. The remaining parts of the assessment area have low levels of public transport accessibility.	
Private car use by commuters	% Driving a Car or Van = 72% Car based trips currently account for an average of 72% of all commuter journeys in LSOAs covered by the assessment area, which reflects its proximity to the strategic road network.	
Proximity to sustainable transport networks	The assessment area is partially within the 5km catchment of Gloucester Rail Station and is served by both high and low-frequency public transport services. The assessment area is currently divorced from the National Cycle Network; however, some local walking and cycle routes are provided, linking the assessment area to Gloucester City Centre.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-			

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
		25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	Part of site served by Tuffley Primary Substation which currently has only between 10% and 25% capacity available. Substation will therefore require expansion which would need to be included in next investment programme.			
	Gas	Load is acceptable.			
	Rail transport	Northern half of area within 5km of Gloucester mainline station. Provision of improved bus/cycle linkages could result in higher levels of rail patronage.			
	Bus transport	Within 500m of high frequency bus route and close enough to Gloucester to mean that improvements in frequency could result in reasonably high levels of bus patronage. Higher scales of growth increase likelihood of securing the levels of investment needed to deliver bus infrastructure improvements (more so if developed jointly with assessment area 39).			
	Cycle transport	Distant from existing cycle network although close enough to Gloucester to mean that significant investment in cycle infrastructure could result in a noticeable increase in the numbers of cycle trips. Higher scales of growth increase likelihood of securing the levels of investment needed to deliver cycle infrastructure improvements (more so if developed jointly with assessment area 39).			

Viability

	Development Type				
	Small Extension		Medium Extension		Large Extension
Dwellings	500	1,000	2,500	3,500	4,500
Indicative developer contributions and affordable housing pool/per unit (£)	20,000	15,000	10,000	10,000	10,000
Viability	Medium	Medium	Medium	Medium	Medium

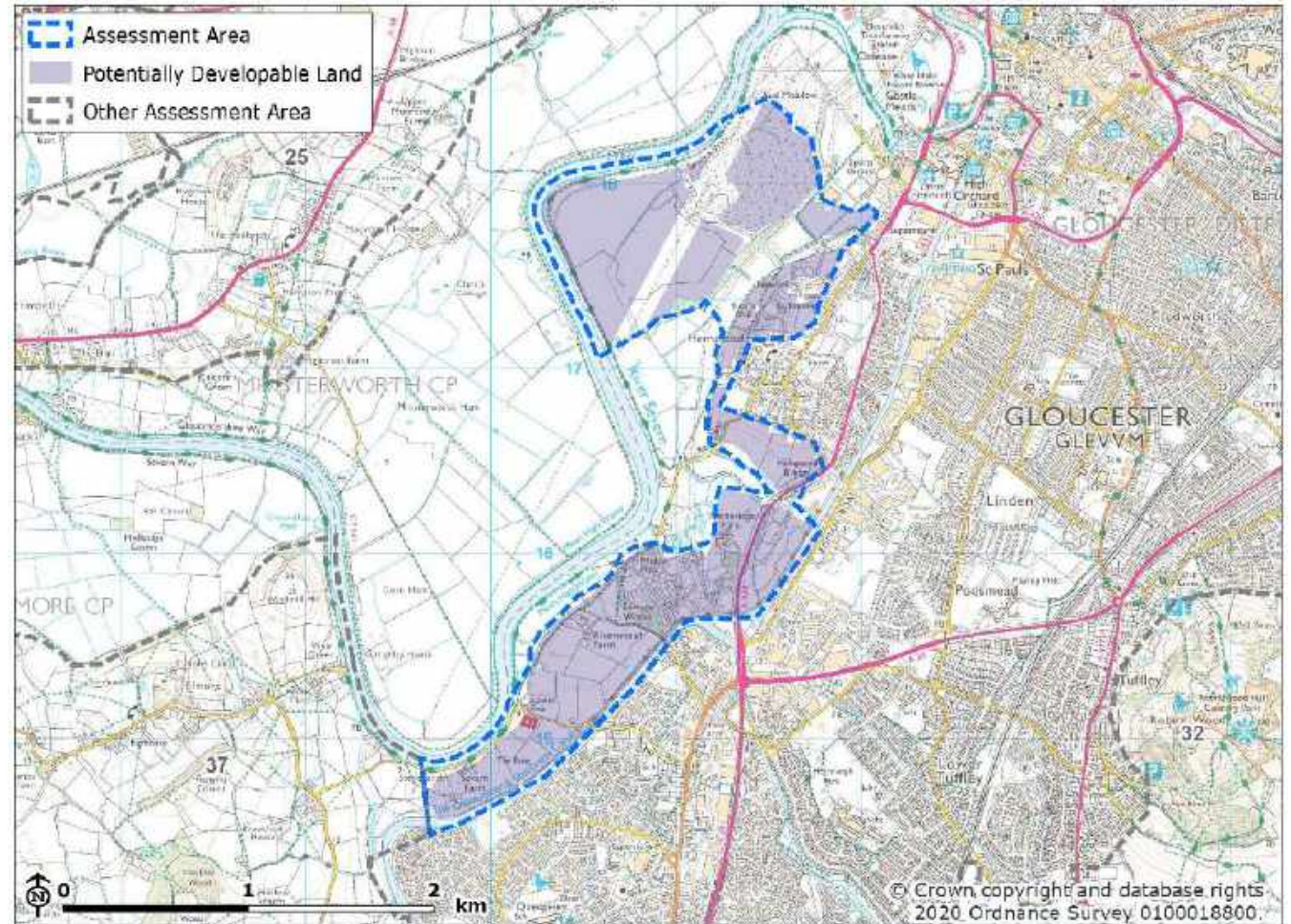
Assessment Area 33 – Urban Extension: West of Gloucester

Assessment Area Ref: 33

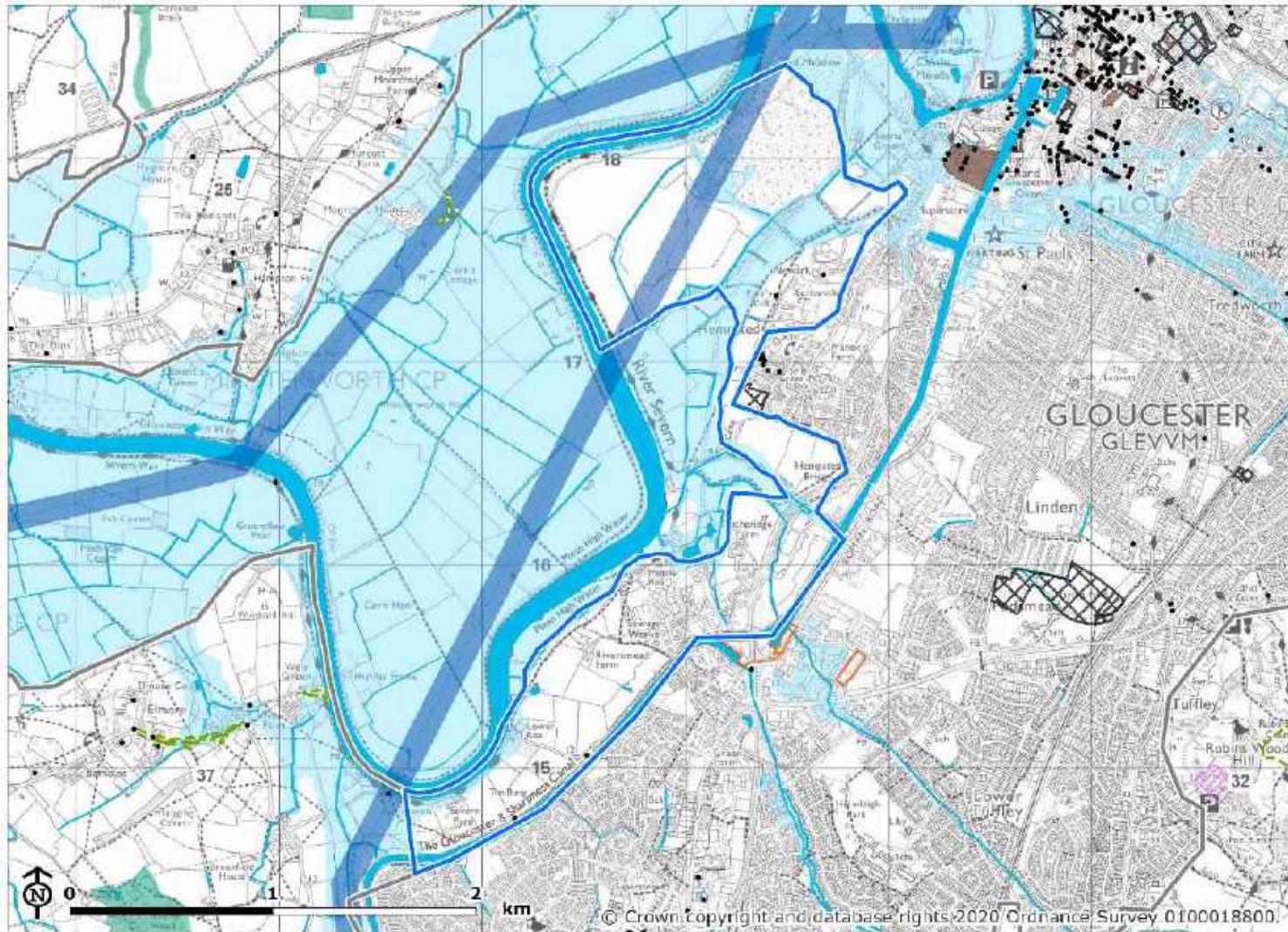
Authority Area: Gloucester City

Development Typology: Urban Extension

Area: ~306ha



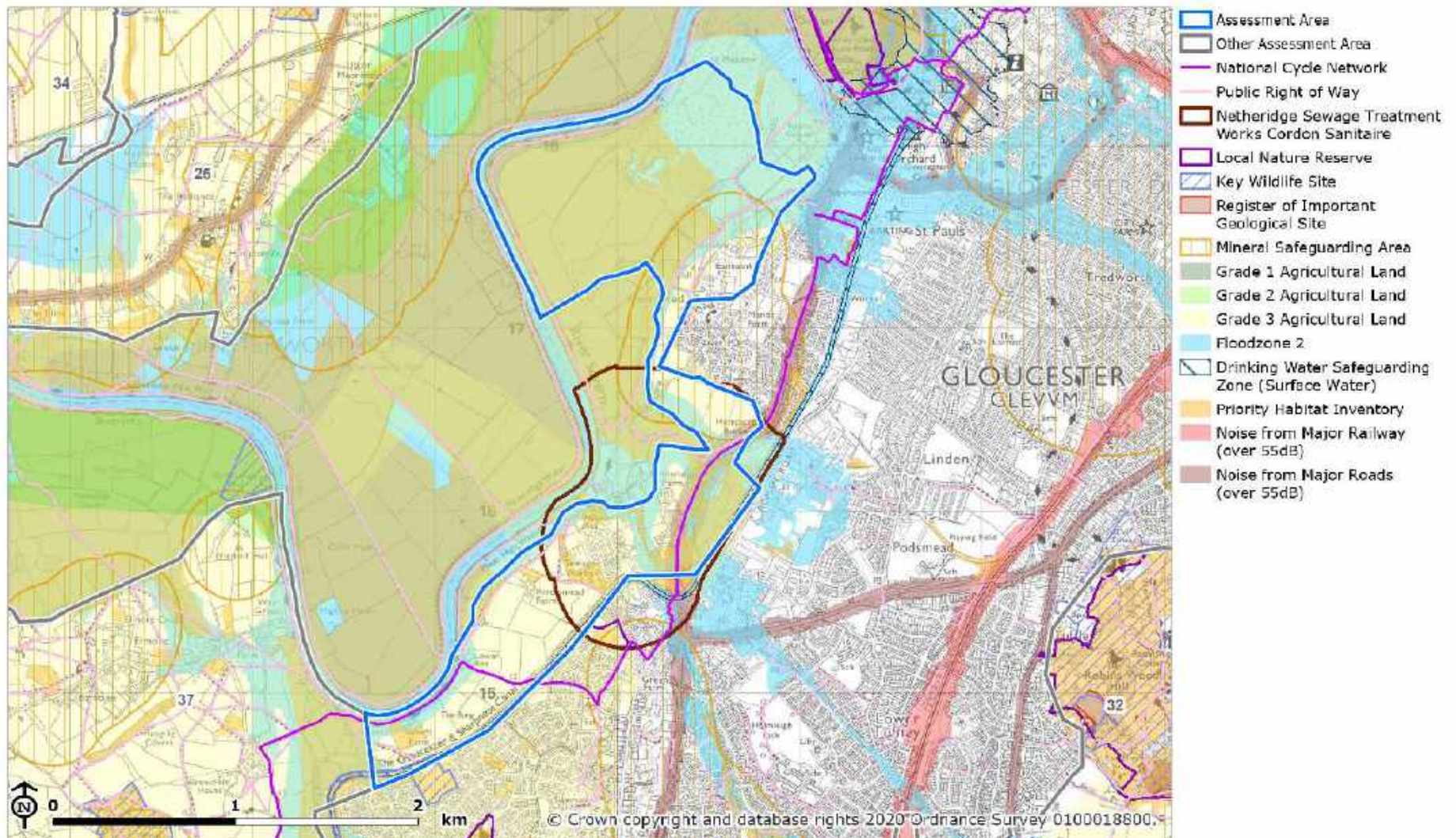
Primary Constraints



- Assessment Area
 - Other Assessment Area
 - Excluded Existing Allocation**
- Primary Constraints**
- Other Assessment Area
 - Water Feature
 - Floodzone 3
 - Listed Building
 - Scheduled Monuments
 - Sites of Special Scientific Interest
 - Open Access Land (Area 7)
 - Ancient Woodland Inventory
 - Mineral Infrastructure Safeguarded Site
 - 132kV Overhead Line Buffer Zone

Note:
 ** For information on all Excluded Areas refer to Table 2.1.

Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
<p>Historic Environment</p>	<p>Assets within the search area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are six listed buildings of all grades within the search area. Many are located near to Hempsted, including Our Lady’s Well (grade I), Newark House and the Church of St Swithun (grade II*) and a chest tomb in its graveyard. The others – a milepost and bridge keepers house - are located further south along the route of the Gloucester and Sharpness Canal. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> There are a limited number of HER records for non-designated assets within the search due to the fact that it mainly comprises an area of land reclaimed in the post-medieval period. These assets include: <ul style="list-style-type: none"> - A Roman settlement at Newark Farm; 	<p>The group of listed buildings within and adjacent to the site at Hempsted (to the north of the search area) are a key sensitivity, particularly the well house, church and Newark House as their significance relates to their rural origin/ function. Development that results in further coalescing these buildings – and the settlement – within Gloucester and changing their semi-rural setting should be avoided. This area is also of greater archaeological sensitivity as it is not reclaimed land and includes archaeological sites from multiple periods.</p> <p>The listed buildings further south both have important relationships with the canal, but it is unlikely that that these would be altered by development. Known archaeology is also less evident in this area, being largely limited to medieval and post-medieval agricultural features.</p>	<p>?</p>	<p>?</p>	<p>?</p>

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> - Medieval earthwork banks; - Medieval-post-medieval agricultural features including ridge and furrow earthworks; - Site of a post-medieval buildings; - The Gloucester and Sharpness Canal; and - Modern military sites. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC data indicates that the area is comprised mainly of Riverine pasture, probably meadows now largely enclosed. Other elements include a former post-medieval designed landscape at Newark and a large area of landfill west of Hempsted. <p>Assets beyond the search area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are a number of designated assets in the wider vicinity; however most do not appear to be particularly susceptible to setting change as a result of development in the search area. The exception is the group of listed buildings adjacent to the search 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>area at Hempsted. Of these those most susceptible to setting change are the ones associated with the Church, as their relationship could be altered by development.</p> <p><i>Non-designated</i></p> <ul style="list-style-type: none"> In the wider area, no non-designated recorded within the HER appear to be particularly susceptible to setting change. 				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> Part of Key Wildlife Site (Gloucester & Sharpness Canal) is within the southernmost part of the assessment area. There are several priority habitats within the assessment area. The majority of these are floodplain grazing marsh, which extends into the area along the Sharpness Canal KWS, dominates the northern portion of the area, and extends into the central section of the area around Netheridge Farm. There are also smaller areas of priority habitat including deciduous woodland in the northern (woodland belts screening the recycling centre) and central (screening the sewage treatment works) 	<p>As the assessment area lies between two important watercourses it will be necessary to minimise any impacts, direct and indirect, that could affect these habitats and potentially cause pathway effects upon the wider countryside. This will be in addition to any effects on the designated sites and priority habitats connected to the site via these watercourses.</p> <p>Any spatial distribution of development in the assessment area will be required to provide suitable avoidance/mitigation measures to ensure that the Key Wildlife Site in the south is maintained/enhanced and that development does not result in severance of the large area of coastal and floodplain grazing marsh habitat associated with the River Severn. It will also be necessary to ensure supporting transport infrastructure minimises severance of habitats in the area.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>regions, as well as stands of traditional orchard in central region and the south, and unspecified habitat in the north and south</p> <p>Assets within 250m:</p> <ul style="list-style-type: none"> Local nature reserve (Green Farm Orchard) adjacent to the south-eastern boundary. Large area of coastal and floodplain grazing marsh priority habitat associated with the River Severn adjacent to the entire western boundary of the assessment area. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> No national designations within 2km. <p>IRZs:</p> <ul style="list-style-type: none"> Several IRZs associated with designations in the area overlap with the assessment area and flag residential development as a potential risk. <p>Negligible effects may occur at all development scales as they could potentially be accommodated over 250m</p>				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	from local designations and over 2km from international/national designations.				
Soil Quality	<p>Almost the entirety of the assessment area is comprised of grade 3 agricultural land. There is around 14ha adjacent to the northern boundary of the assessment area that is grade 4 agricultural land.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur at all development sizes. The effects are uncertain as there is no data distinguishing whether the land is grade 3a or the lower quality grade 3b.</p>	Due to the high proportion coverage of grade 3 agricultural land, it is not expected that effects will vary within the site.	?	?	?
Water Quality	<p>There is a small area on the southern boundary of the assessment area that is located within a drinking water safeguarding zone.</p> <p>However, the majority of the assessment area is not located within any drinking water safeguarding zones and therefore negligible effects are considered likely in relation to water quality for all development sizes.</p>	There is sufficient space within the assessment area for all potential development sizes to be located outside the drinking water safeguarding zone in the south, given that this is a small area of land adjacent to the assessment area boundary.			
Flood Risk	The majority of the assessment area is greenfield, but there are areas of	There is a 67ha area of land in the southern half of the assessment area that is not located within Flood Zone 2 that could potentially			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>residential/agricultural development and local roads distributed throughout region.</p> <p>Over 50% of land within the assessment area is within Flood Zone 2 due to the presence of the River Severn to the west.</p> <p>Significant negative effects may occur for the large development size option and negligible effects may occur for smaller and medium extension types as there is sufficient land outside Flood Zone 2 to accommodate this scale of development.</p>	<p>accommodate a small or medium scale urban extension.</p>			
Mineral Resources	<p>There is around 48ha of land in the northern half of the assessment area that is located within a Mineral Safeguarding Area (MSA).</p> <p>There is potential for development to result in the sterilisation of mineral resources. However, the majority of the assessment area is not located within any MSAs and therefore negligible effects may occur in relation to mineral resources for the small and medium development sizes. Significant negative effects may occur at the largest development size as it may not be possible to accommodate this scale of development without intersecting with MSAs.</p>	<p>Land in the south of the assessment area could potentially accommodate small and medium development sizes outside of MSAs, avoiding the sterilisation of mineral resources.</p> <p>It may also be possible to accommodate larger development sizes if suitable mitigation is provided, such as extraction of mineral resources prior to development.</p>	<div style="background-color: red; color: white; text-align: center; padding: 5px;">*</div>	<div style="background-color: yellow; padding: 5px;"></div>	<div style="background-color: yellow; padding: 5px;"></div>

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Noise	<p>There is around 23ha in the central region of the assessment area that is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the A430.</p> <p>Negligible effects may occur at all development sizes in relation to noise as there is sufficient space outside of the areas of high noise Noisy areato accommodate development.</p>	<p>There is sufficient space to accommodate development of all sizes outside of noisy areas and suitable mitigation may be possible to overcome noise related issues.</p>			
Odour	<p>There is around 80ha in the central region of the assessment area that is located within Netheridge Cordon Sanitaire.</p> <p>As such, significant negative effects may occur at the largest development size option and negligible effects may occur at the lower size options, which could be accommodated outside of the odour buffer.</p>	<p>There is potential for development of a small or medium size extension to be located in the northern part of the assessment area, outside of the Cordon Sanitaire. There is also potential for small size extension to be located in the southernmost part of the assessment area, outside of the Cordon Sanitaire.</p>			

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
<p>Key landscape sensitives:</p> <ul style="list-style-type: none"> • Strong sense of place due to location adjacent to the River Severn. • Rural, pastoral character despite the proximity of Gloucester. • Setting the landscape provides to historic Gloucester Docks area. <p>As such, landscape sensitivity is moderate-high for the largest development size as the key characteristics and qualities of the landscape may be more sensitive to development of these scales. Landscape sensitivity is reduced to moderate at the medium development size, and low-moderate for the smallest size.</p>	M-H	M	L-M

Summary of Constraints and Landscape Sensitivity

The central region and the majority of the south of the assessment area is unlikely to be suitable for development given that it is located within a Cordon Sanitaire of a sewage treatment works, located in the middle of the area. The least constrained land in the assessment area is located to the south of this odour buffer. Development of a small extension in this location could avoid the majority of constraints, although its close proximity to a local wildlife site will need to be managed carefully. Almost the entirety of the assessment area is comprised of grade 3 agricultural land but it is not clear if it is grade 3a or the lower quality grade 3b. It is unlikely that a medium or large extension could be accommodated outside Flood Zone 2, in excess of 250m from the Key Wildlife Site to the far south of the assessment area and outside the Cordon Sanitaire. Additionally, landscape sensitivity is moderate-high under the large extension scenario compared to low-medium under the small extension scenario. Therefore, the delivery of a smaller extension may be more suitable to avoid significant adverse impacts on landscape character.

Development in the north is more highly constrained by Flood Zone 2 and the potential for impacts on the setting of heritage assets e.g.the listed buildings at the rural/urban edge of Hempstead.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected via the A430 (Secunda Way), which provides direct links to Gloucester City Centre, Kingsway and Quedgeley.</p> <p>A430 Hempstead Ln / St Ann Way Jct is located to the north east of the assessment area and is considered a 'critical junction' by the JCS Transport Evidence Base. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate beyond its design capacity in 2031 (at between 111% and 106% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>Another 'critical junction' located nearby is A38 / A430 Cole Avenue which located to the south of the assessment area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate above its design capacity in 2031 (at between 123% and 124% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>The assessment area's proximity to the Gloucester urban centre helps to reduce the likelihood that vehicle-based trips will place further stress on these critical junctions.</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 83,855</p> <p>A high number of workplaces (jobs) can currently be accessed by public transport from the assessment area, which is in proximity to high frequency public transport services.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 292,604</p> <p>Access from the assessment area to employment by Car scores high, with the assessment area in close proximity to major roads providing direct links to key urban centres.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that the assessment area is accessible to education facilities within 20mins travel time and healthcare facilities and urban centres between 20 and 40 mins travel time by public transport services.</p>	

Criterion	Rationale	Score
Private car use by commuters	% Driving a Car or Van = 66% Car based commuter trips currently account for an average of 66% of travel to work journeys in LSOAs covered by the assessment area, likely a result of the assessment area's proximity to the strategic road network.	
Proximity to sustainable transport networks	The majority of the assessment area is within the 5km catchment of Gloucester Rail Station and is served frequent bus services into Gloucester. An existing National Cycle Network route runs along the southern boundary of the assessment area, with potential to develop additional strategic walking / cycling links as part of future development.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	Part of site served by Tuffley Primary Substation which currently has only between 10% and 25% capacity available. Substation will therefore require expansion which would need to be included in next investment programme.			
	Gas	Load is acceptable			

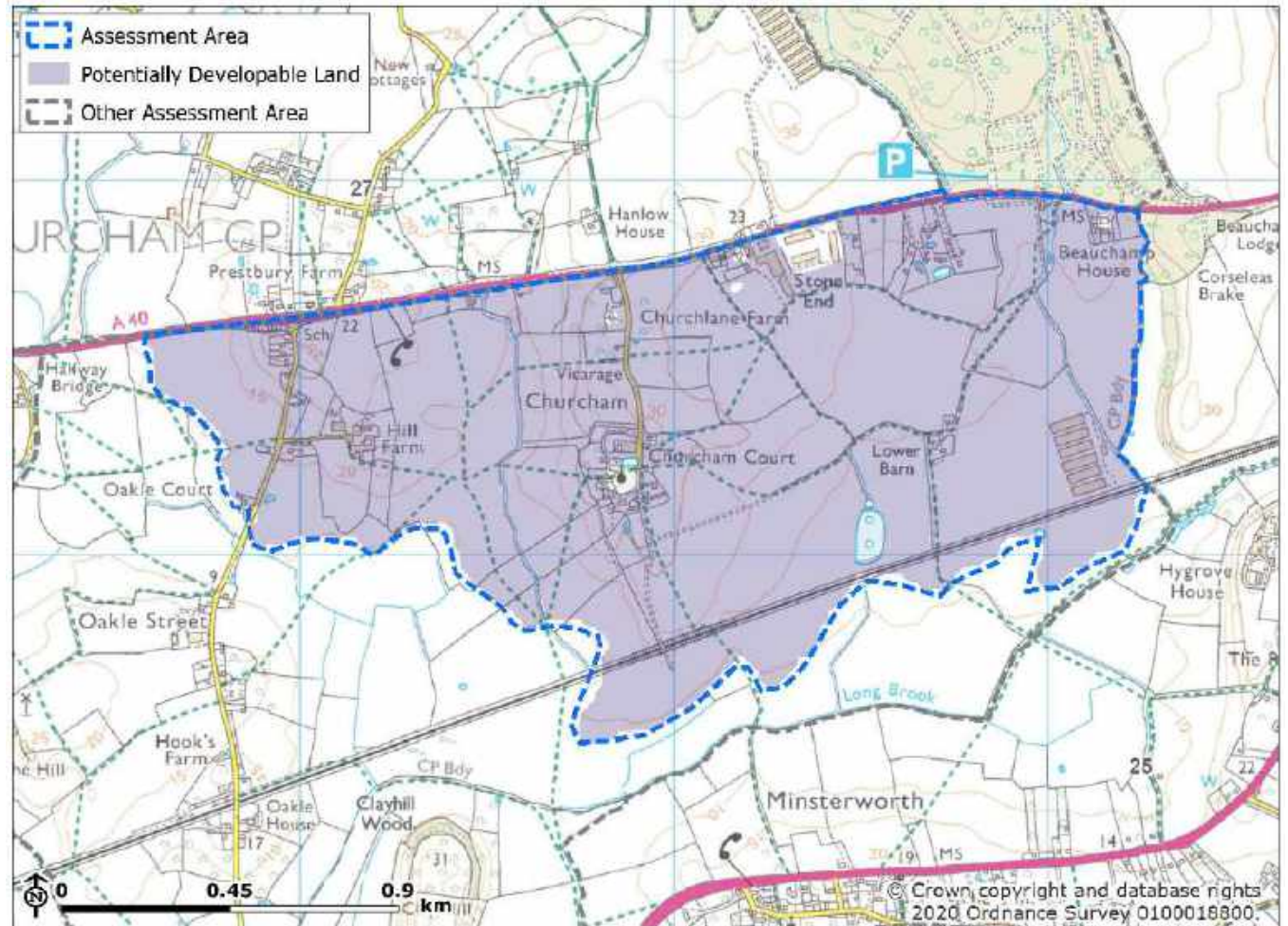
Assessment Area 34 – New Settlement: West of Gloucester (south of A40)

Assessment Area Ref: 34

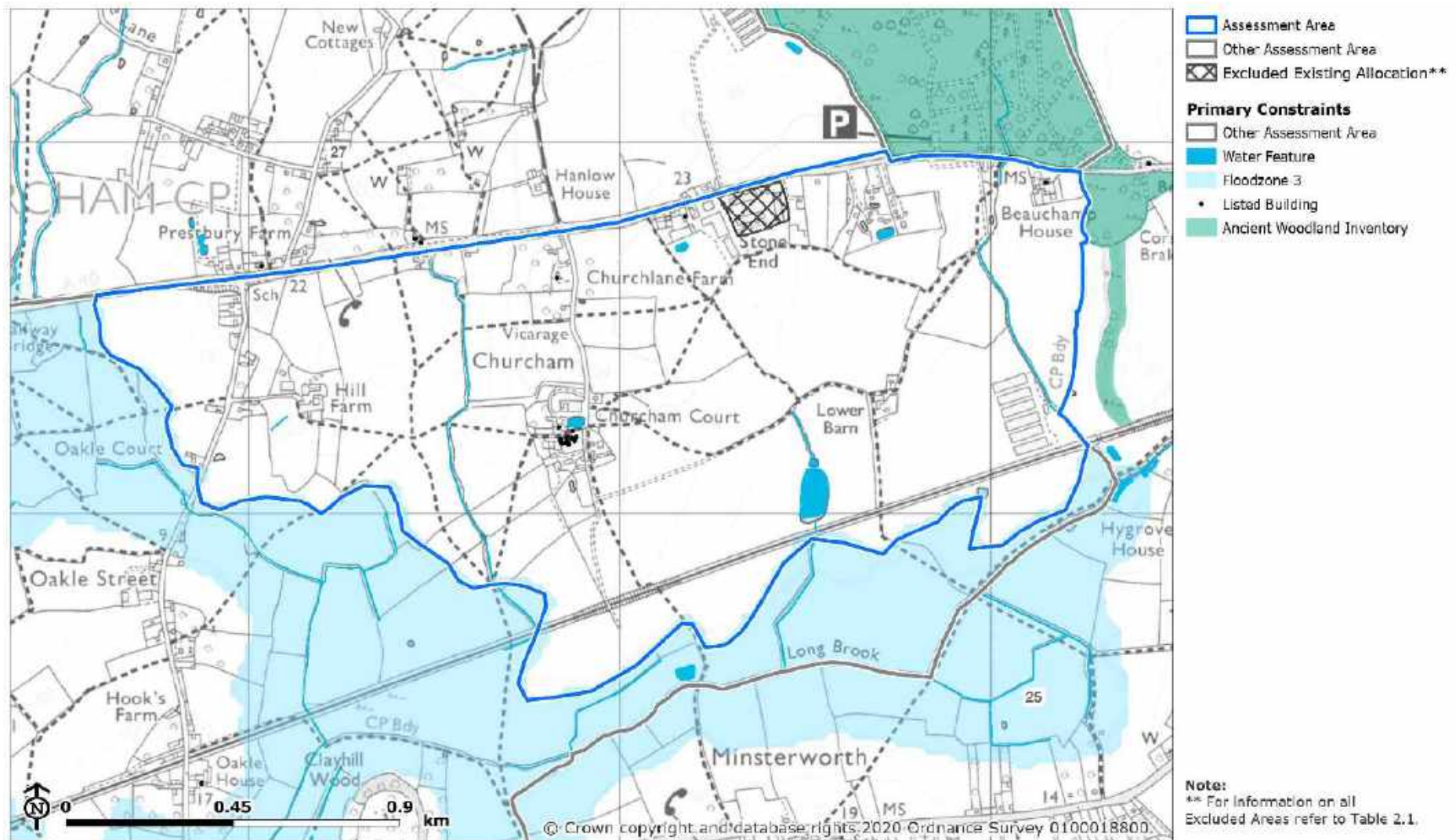
Authority Area: Forest of Dean District

Development Typology: New Settlement

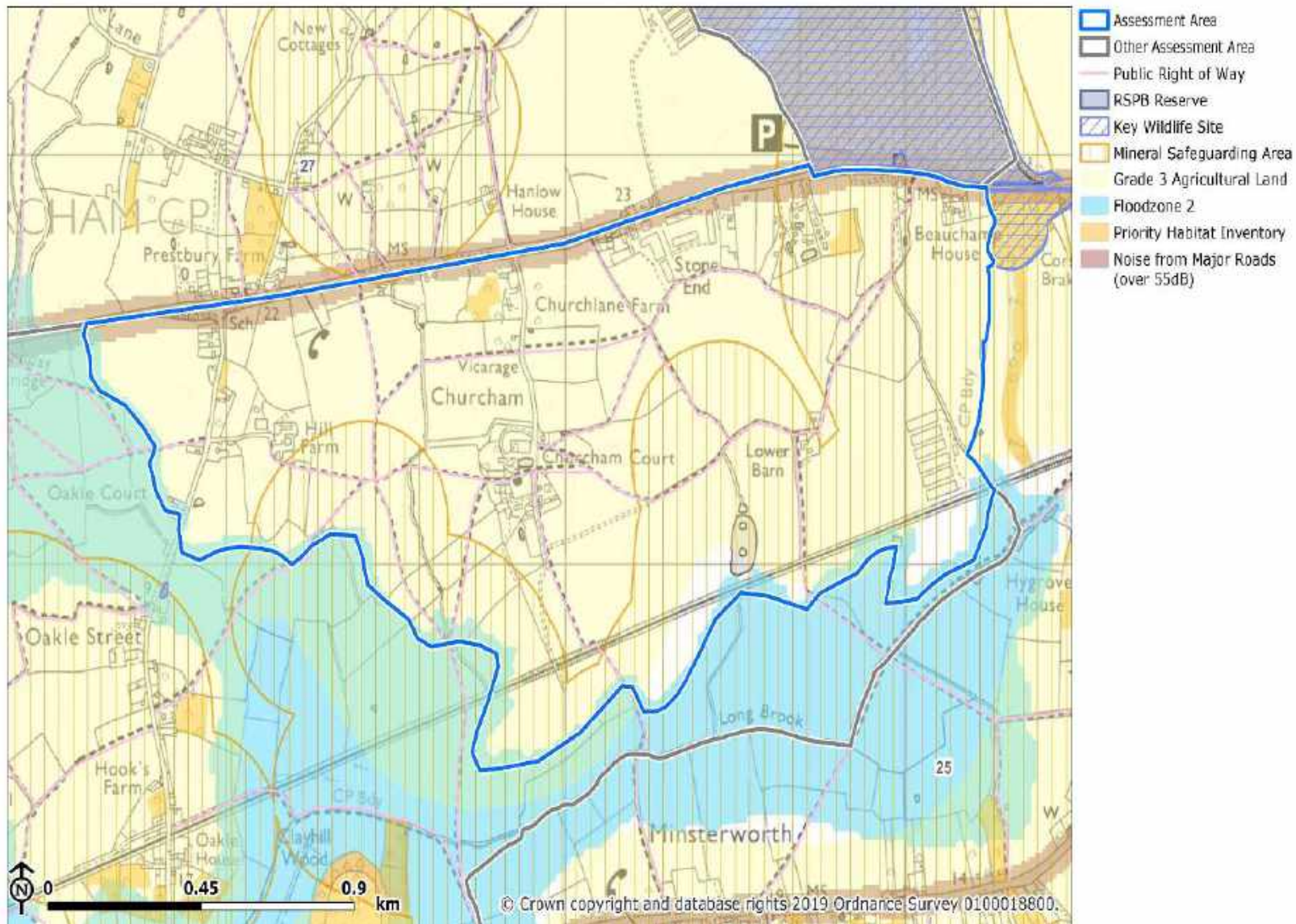
Area: ~233ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
<p>Historic Environment</p>	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 21 listed buildings within the study area; these are all grade II save for the grade II* Church of St Andrew. The grade II listed buildings include four farmhouses; the rest are monuments relating to the church. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER only includes a limited number of non-designated assets within the assessment area. These include: <ul style="list-style-type: none"> - A cropmark of an Iron-Age to Roman enclosure at Long Brook; - A Roman road; - Possible Roman sculpture at Churcham Church; - Civil War earthworks; - Medieval to post-medieval agricultural features; 	<p>The listed buildings are key sensitivities; they are located towards the centre of the assessment area and along the northern boundary. Collectively they highlight the rural character of the existing village.</p> <p>Save for the ridge and furrow earthworks the non-designated heritage assets are typically located either near the church, towards the centre of the assessment area, or around the perimeter of the assessment area. The non-designated civil war earthworks and WWII military remains could potentially be of more than local significance, increasing the scale of effect of development.</p> <p>Given the presence of the existing village and the spatial distribution of the listed buildings it is unlikely that the development of a new village of any size would be possible without resulting in significant negative effects.</p>	N/A	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - A post-medieval railway and turnpike road; - Post-medieval reclaimed land; - Two possible WWII camps east of Churcham; and, - Undated charcoal burning platforms. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC indicates a primarily agricultural landscape comprised of a mix of irregular, less irregular, regular and less regular enclosures. Much of this partly reflects former unenclosed cultivation patterns and so has some time depth and could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p>				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> There are a number of listed buildings in the wider vicinity of the assessment area, however it is unlikely that any would be susceptible to meaningful setting change. Highnam RPG lies to the northeast of the assessment area but it would not be affected by development as it is separated by Highnam Woods (Ancient Woodland). <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER does not record any non-designated heritage assets in the wider vicinity that appear to be susceptible to setting change. 				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> No designations within the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> Large area of Ancient Woodland (Corseleas Brake/Highnam Woods), also priority deciduous woodland, adjacent to the north-eastern boundary, which also incorporates a Key Wildlife Site 	<p>Any spatial distribution of development in the assessment area should be required to provide suitable avoidance/mitigation measures to ensure that priority habitat areas are maintained/enhanced and that the potential for adverse effects on the area of Ancient Woodland to the north are minimised. It will also be necessary to ensure supporting transport infrastructure minimises severance of habitats in the area.</p> <p>It should also be required to maintain/enhance the networks of priority habitat predominantly</p>	N/A	*	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>(Highnam Complex) and a RSPB reserve (Highnam Woods).</p> <ul style="list-style-type: none"> Several areas of high priority habitats are also scattered around the outside of the assessment area, including traditional orchards (Churcham) and non-specified habitat to the north-western boundary. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> No international/national designations within 2km of the assessment area. <p>IRZs:</p> <ul style="list-style-type: none"> Two IRZs associated with designations in the region overlap with the assessment area and flag residential development as a potential risk. <p>Minor negative effects may occur at the medium development size as it is likely this scale of development would fall within 250m of the local designation to the north-east. Negligible effects may occur at the smallest size option as this scale of development could potentially be accommodated over 250m from the local designation. Potential negative effects in all cases are likely to be</p>	<p>in the northeast of the assessment area. Severance of ancient and deciduous woodlands and KWS must be avoided and connectivity – be it additional woodland or complementary habitats – should be optimised at the landscape scale.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	contingent on detailed development design and other mitigation measures.				
Soil Quality	<p>Almost the entirety of the assessment area is comprised of grade 3 agricultural land. There is around 12ha adjacent to the southern boundary of the assessment area that is classified as grade 4 agricultural land.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality for the medium and small development sizes. The effects are uncertain as there is no data distinguishing whether the land is grade 3a or the lower quality grade 3b.</p>	Due to the high coverage of the grade 3 agricultural land within the assessment area, it is unlikely that effects will vary based on developing different areas within it.	N/A	?	?
Water Quality	The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones. As such, negligible effects are considered likely in relation to water quality.	N/A	N/A		
Flood Risk	The majority of the assessment area is greenfield, but there are areas of residential/agricultural development as well as local roads sparsely distributed throughout the assessment area.	There is sufficient space within the assessment area for development of small and medium sizes to be accommodated outside of Flood Zone 2.	N/A		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>Land directly adjacent to the full length of the southern boundary of the assessment area is located within Flood Zone 2.</p> <p>However, the majority of the assessment area is located with Flood Zone 1 and therefore negligible effects are considered likely in relation to flood risk.</p>				
Mineral Resources	<p>Approximately 50% of the assessment area is located within a Mineral Safeguarding Area (MSA), predominantly the southern and eastern parts of the area.</p> <p>There is potential for development to result in the sterilisation of mineral resources. As such, significant negative effects may occur at the medium development size and negligible effects may occur for the small development size as there is potentially space to accommodate this scale of development outside of MSAs.</p>	<p>There is sufficient space in the northern half of the assessment area that is not located within a MSA that could potentially accommodate development of the smallest size. A larger scale development would potentially lead to the sterilisation of some mineral resources in the area. However, it may be possible to avoid the sterilisation of mineral resources through extraction prior to development.</p>	N/A	*	
Noise	<p>Land directly adjacent to the northern boundary of the assessment area is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the A40.</p>	<p>There is potential for development to be set back from the northern boundary of the assessment area, outside of the noisy area. Suitable mitigation may also be possible to overcome any noise related issues.</p>	N/A		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	However, there is sufficient space within the assessment area for both development scales to be accommodated outside of this area and therefore negligible effects may occur in relation to noise.				
Odour	The assessment area is not located within any Odour Monitoring Zones or Cordon Sanitaire Zones.	N/A	N/A		
	As such, negligible effects are expected in relation to odour.				

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key sensitivities include:</p> <ul style="list-style-type: none"> Prominent sloping landform. Long views across the River Severn and Vale of Gloucester towards the Cotswolds AONB. Setting the landscape provides to listed buildings including the grade II* Church of St Andrew Strong rural character. <p>As such, landscape sensitivity is high for both applicable development sizes as the key characteristics and qualities of the landscape may be highly sensitive to development at any of these scales.</p>	N/A	H	H

Summary of Constraints and Landscape Sensitivity

Although there is land that is free from the majority of constraints in the central and west parts of this assessment area, the central part of the area contains a high concentration of listed buildings in the central. A small sized development could be located in the east further from these assets, although it is considered likely at this stage that significant negative effects on the historic environment may still occur. The large area of Ancient Woodland to the north-east would also be an important consideration for any potential development in the east of the assessment area. The area is considered to have high landscape sensitivity to both applicable development scales and therefore significant adverse impacts on landscape character are likely with the delivery of a new settlement.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is well connected via the A40, which runs along the northern boundary of the assessment area.</p> <p>The JCS Transport Evidence base modelling shows three 'critical junctions': the A40 / A417 'Over roundabout', A40/ B4215 Newent Junction, and A40/ A48 Highnam Rbt) located adjacent to the north east of the assessment area.</p> <p>The JCS modelling work's Do Nothing and Do Minimum model tests forecast that the A40 'Over Roundabout' junction will operate over its design capacity in 2031 (at between 115% and 117% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>The modelling work's Do Nothing and Do Minimum model tests forecast that the A40/ B4215 Newent Junction will operate over its design capacity in 2031 (at between 115% and 118% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>Similarly, the modelling work's Do Nothing and Do Minimum model tests forecast that the A40/ A48 Highnam Roundabout will operate beyond its design capacity in 2031 (at between 135% and 140% Ratio to Flow Capacity during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 66,218</p> <p>A high number of workplaces (jobs) can currently be accessed by public transport from the assessment area, with an hourly bus service operating along the A40 providing access to Gloucester and the Forest of Dean District.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 278,987</p>	

Criterion	Rationale	Score
	Access from the assessment area to employment by Car scores high , with the assessment area in close proximity to major roads providing direct links to key urban centres.	
Access to other key services and facilities by public transport	TRACC Accessibility Modelling outputs show that the assessment area is accessible to a number of key services (urban centres and healthcare facilities) between 20 and 40 mins travel time by public transport services along the key highway links (A40). Education facilities are accessible within 20 mins along the A40.	
Private car use by commuters	% Driving a Car or Van = 73% Car based commuter trips currently account for an average of 73% of commuter journeys in LSOAs covered by the assessment area. This reflects the assessment area's proximity to the A40 as its principle access route to key local destinations.	
Proximity to sustainable transport networks	The assessment area is outside of the 5km catchment area for Gloucester Rail Station and is currently divorced from any strategic walking and cycling routes. The assessment area is currently served by public transport services along the A40, as the main arterial route.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000- 10,000 dwellings)	Score: Small village (1,500- 5,000 dwellings)
Strategic Infrastructure	Waste water	Due to the limited existing sewerage network a new network and Sewage Treatment Works should be built. This could potentially be a significant cost to the developer.	N/A		
	Drinking water	Development would require additional work to increase supply in the area and funding would be required. In the short term (2020-2025) there is very limited additional capacity. There is additional headroom in AMP8 (2025 onwards) which could potentially support this growth.	N/A		
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.	N/A		
	Gas	Load is acceptable unless also connected with assessment area 35, in which case reinforcement of pipeline network would be required with the cost of downstream reinforcement to be borne by developer	N/A		
	Rail transport	Not proximate to any rail stations but situated on branch line to Gloucester. Scales of growth unlikely to be able to justify new station provision and possible issues with provision of access for significant additional rail movements at junctions with mainline.	N/A		
	Bus transport	Within 500m of existing high frequency bus route and close enough to Gloucester to mean that improvements in frequency could result in reasonably high levels of bus patronage. Improvements to bus accessibility would be needed along A40 and at junctions with A48 and A417 and only higher scales of growth may possibly be sufficient to enable this and deliver some bus infrastructure improvements.	N/A		

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	Cycle transport	Distant from existing cycle network and key destinations, so cycle improvements unlikely to significantly increase cycle trips.	N/A		

Viability

	Development Type					
	Small Village			Large Village	Town/City	
Dwellings	2,500	3,500	4,500	7,500	10,000 (70% net)	10,000 (60% net)
Indicative developer contributions and affordable housing pool/per unit (£)	0	0	0	0	N/A	N/A
Viability	Low	Low	Low	Low	N/A	N/A

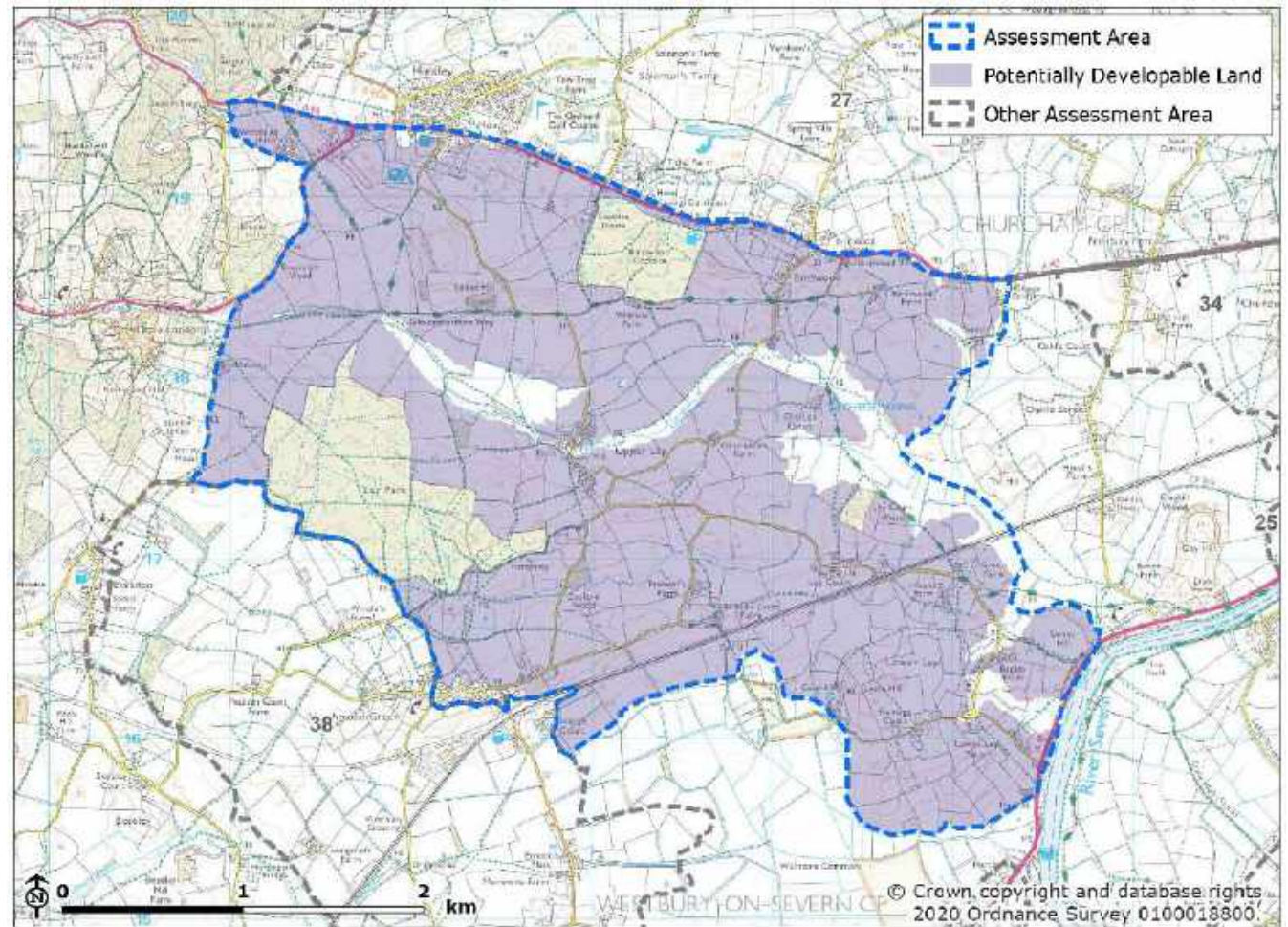
Assessment Area 35 – New Settlement: Upper/Lower Ley

Assessment Area Ref: 35

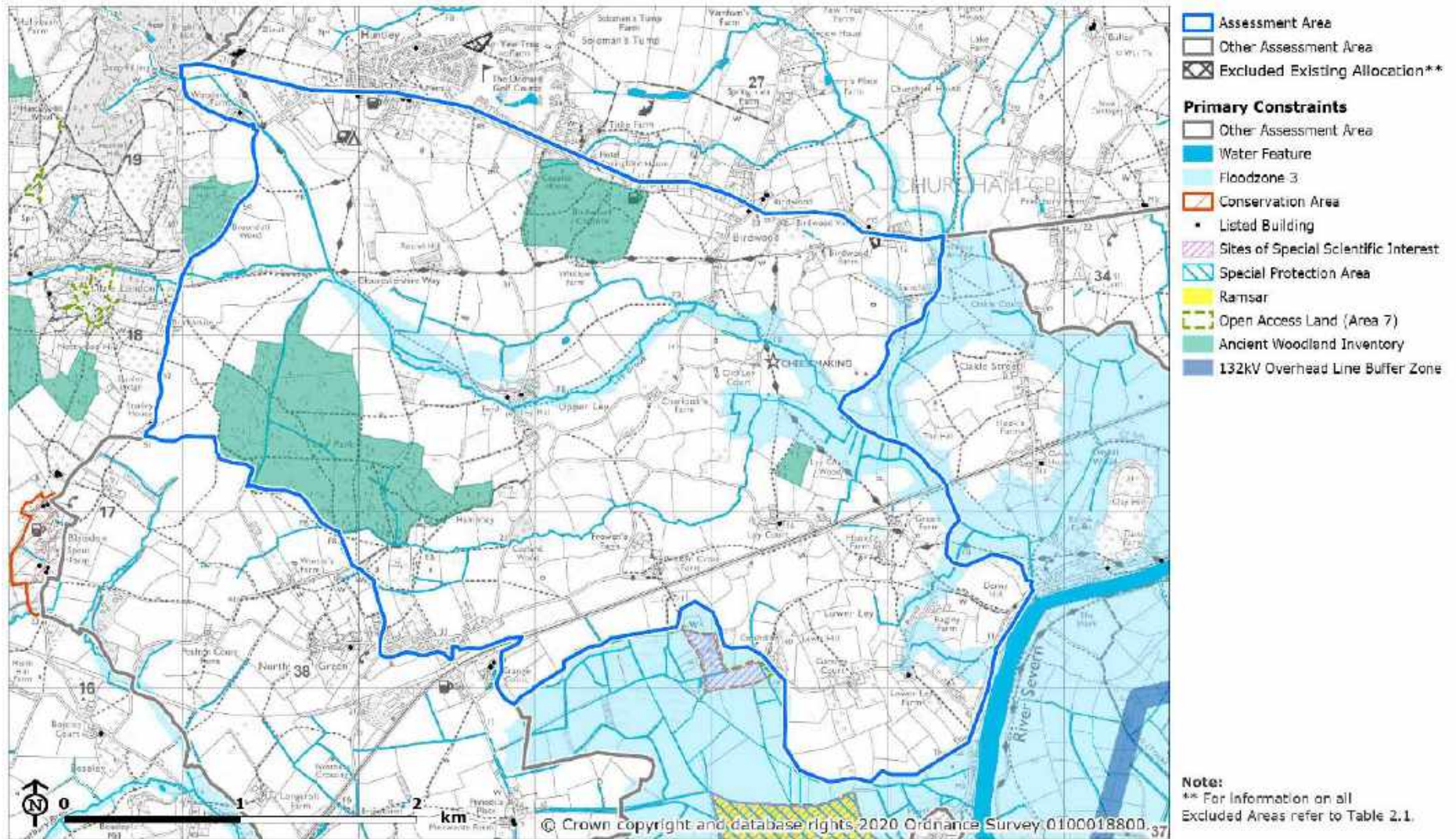
Authority Area: Forest of Dean District

Development Typology: New Settlement

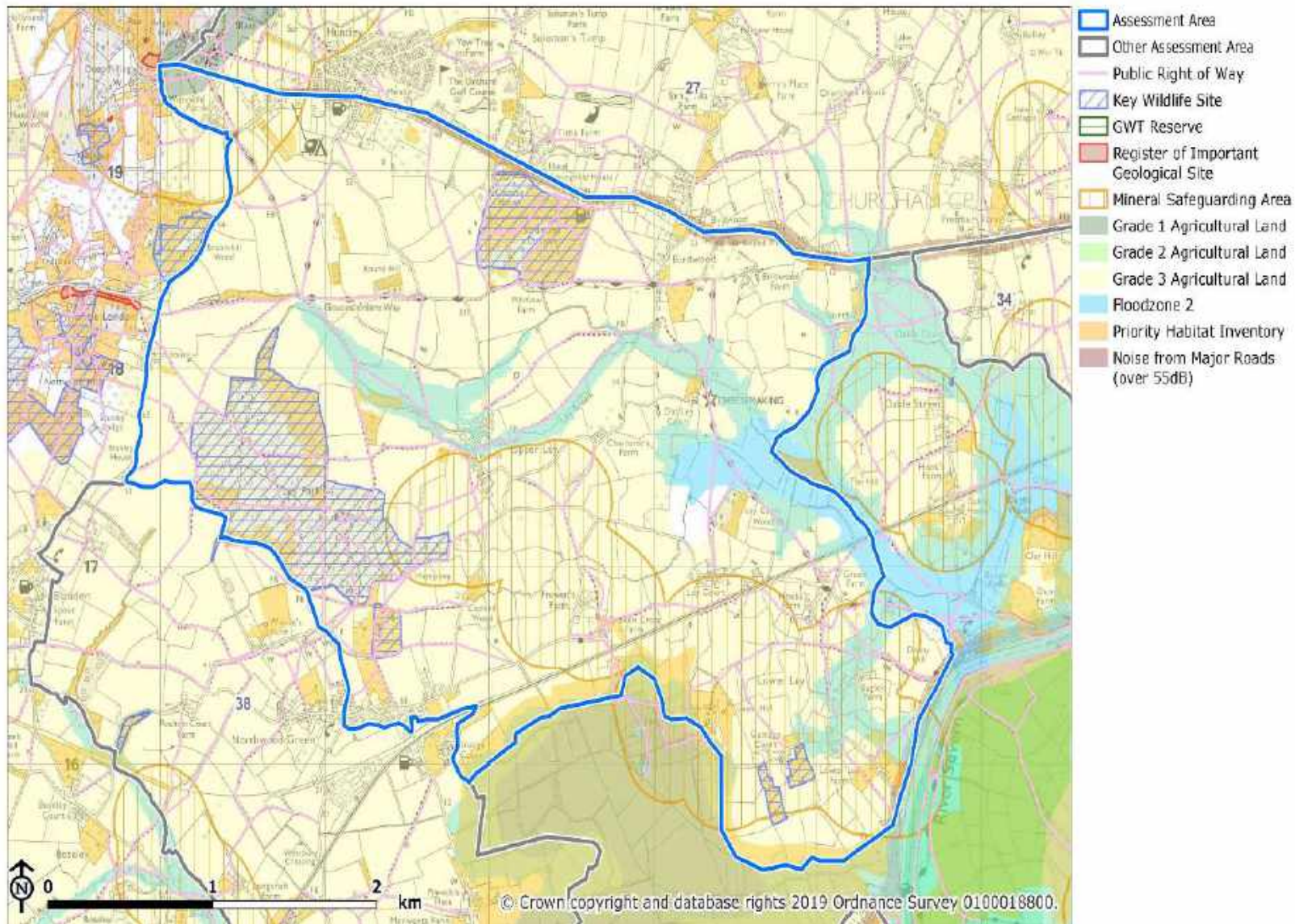
Area: ~1,185ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 12 grade II listed buildings within the assessment area; these are mostly farmhouses and agricultural buildings. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER records a large number of non-designated heritage assets in the assessment area. These include, but are not limited to: <ul style="list-style-type: none"> Undated cropmarks including a possible enclosure on round hill; Roman road; Site of a medieval moat at Bagley Farm, Old Ley Court and Grange Court, as well as a potential one near Halfway Bridge; Site of Walmore Manor (possibly moated); 	<p>The Ancient Woodland reduces the development potential to the east and north of the assessment area.</p> <p>Within the remaining area, the listed buildings are dispersed in such a way as to make any large-scale development likely to result in significant effects.</p> <p>The assessment area also contains non-designated heritage assets that could be of more than local significance (e.g. the moated sites and water meadow) meaning that development could be constrained and/or result in significant negative effects.</p> <p>Due to the distribution of historic environment assets in the assessment area any large-scale development is likely to result in significant negative effects. However, further assessment could be undertaken to explore the options of a small village towards the lower end of the development quantum scale located either to the northeast or southeast of the assessment area.</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Possible medieval or post-medieval settlement at Ley Court; - Medieval – post-medieval mill site south of Huntley; - Water meadow at Sainthill; - Multiple medieval or post-medieval Charcoal burning platforms and areas of ridge and furrow earthworks; - Frocester House – a former inn; - Post-medieval railway; and - WWII military sites. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC data indicates a primarily rural landscape interspersed with some historic (Birdwood and modern settlement and ancient woodland. The rural landscape is primarily agricultural comprising a mix of irregular, less regular and regular enclosure as well as enclosed riverine pasture. The irregular enclosure has some time-depth and value in itself and could include hedgerows that qualify as important under the archaeology and history 				

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	<p>criteria of The Hedgerow Regulations 1997.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are a large number of listed buildings in the wider area of the assessment area. Most are unlikely to be experience meaningful setting change but there are listed farmhouses to the southwest and north that may be adversely affected by development. The church of St John the Baptist near Hadley may also be susceptible to setting change. • There are two conservation areas to the west of the assessment area; however, they do not appear to have a meaningful relationship with the assessment area and separated from it by intervening topography/ vegetation. <p><i>Non-designated</i></p>				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> No non-designated heritage assets recorded by the HER within the wider vicinity of the assessment area have been identified as being particularly susceptible to setting change. 				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> There is a large area of Ancient Woodland (Ley Park/Hampney Woods) in the south-west corner of the assessment area which is also Key Wildlife Site. There is another large area of Ancient Woodland (Birdwood Coppice) adjacent to the northern boundary of the assessment area, which is also a Key Wildlife Site. There is also a smaller area of Ancient Woodland (Leycourt Wood) in close proximity to the eastern boundary of the assessment area. Smaller Key Wildlife Site (Gamage Court) located in the south-east of the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> SPA/Ramsar/SSSI (Walmore Common) 150m south. Ancient Woodland (Broomhill Wood) adjacent to the western 	<p>Any spatial distribution of development in the assessment area will be required to provide suitable avoidance/mitigation measures to ensure that the large areas of Ancient Woodland within the assessment area are maintained and that there are also suitable buffering regions between development and the SSSI to the south. It will also be necessary to ensure supporting transport infrastructure minimises severance of habitats in the area.</p> <p>Provision of landscape connectivity between the Ancient Woodlands within the assessment area, SSSI to the south, and the Ancient Woodlands to the north-west of the assessment area has the potential to achieve a significant ecological enhancement.</p>	*	*	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>boundary, which is also a Key Wildlife Site.</p> <ul style="list-style-type: none"> Key Wildlife Site (Nottwood Hill Meadows) 200m to the west. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SAC/SSSI (Blaisdone Hall) 1.1km south-west. Two SSSIs (Hobb's Quarry, Longhope and Longhope Hill) 1.7km west. SSSI (Wood Green Quarry & Railway Cutting) 1.6km south-west. SSSI (May Hill) 1.7km north-west. <p>IRZs:</p> <ul style="list-style-type: none"> The assessment area lies within multiple SSSI IRZs, which indicate that all planning applications – planning applications of 50 units or more, have the potential to impact the statutory designations within the wider landscape. <p>Minor negative effects may occur at the Town/City and Large Village development sizes as they would fall within 2km of a national designation. Negligible effects may occur at the small village scale as it could potentially be accommodated over 250m from local</p>				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	designations and over 2km from international/national designations. Potential negative effects in all cases are likely to be contingent on detailed development design and other mitigation measures.				
Soil Quality	<p>The vast majority of the assessment area is comprised of grade 3 agricultural land. However, there is approximately 4ha of grade 1 agricultural land in the north-westernmost corner of the assessment area. Additionally, there is approximately 37ha area of land adjacent to the eastern boundary of the assessment area that is grade 4.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality for all development capacities. The effects are uncertain as there is no data distinguishing whether the land is grade 3a or the lower quality 3b.</p>	<p>There is potential for all scales of development to avoid the highest quality agricultural land as grade 1 land is restricted to a small area in the north-westernmost part of the assessment area. However, the majority of land within the assessment area is still grade 3 and therefore development at any location has the potential to result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or grade 3b.</p>	?	?	?
Water Quality	<p>The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones. As such, negligible effects are considered likely in relation to water quality for all development capacities.</p>	N/A			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Flood Risk	<p>The majority of the assessment area is greenfield. However, the settlement of Upper Ley is located in the central region, the settlement of Lower ley is located in the south-eastern corner, part of Northwood Green is located in the south and part of the settlement of Huntley is located in the north-western corner. There are also multiple local roads distributed throughout the area as well as areas of agricultural development.</p> <p>There is approximately 130ha of largely undevelopable land in the central region extending to the eastern boundary due to the presence of Ley Brook. Additionally, there is approximately a further 19ha of land on adjacent to the southern boundary of the assessment area that is also located within Flood Zone 2 due to the presence of the River Severn to the south-east.</p> <p>However, the majority of the assessment area is not located within any Flood Zones and therefore negligible effects are considered likely in relation to flood risk for all development capacities.</p>	<p>There is significant potential for development at all capacities to be located outside Flood Zone 2 as zone 2 is restricted to the vicinity of watercourses in the central and southern regions of the assessment area. However, it may not be possible to achieve a continuous development at the largest size due to the land in Flood Zone 2 bisecting the assessment area.</p>			
Mineral Resources	<p>There is approximately 305ha of land in the south and south-east of the assessment area that is located within a</p>	<p>There is sufficient space in the northern half of the assessment area to accommodate development outside of MSAs at the small and</p>	*		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>Mineral Safeguarding Area (MSA). In addition, there approximately a further 27ha of land in the north-western corner of the assessment area that is also located within a MSA.</p> <p>There is potential for development to result in the sterilisation of mineral resources. However, there is sufficient space outside of MSAs within the assessment area for development to be located outside of MSAs at the smallest and medium scales. As such, negligible effects may occur in relation to mineral resources at these scales. Significant negative effects may occur at the largest development size as it may not be possible to accommodate this scale of development without intersecting with MSAs.</p>	<p>medium development capacities. Development at the smallest development size could also potentially be accommodated in the west and south outside of MSAs.</p> <p>Suitable mitigation may be possible at larger development scales, such as extraction of mineral resources prior to development.</p>			
Noise	<p>Land directly adjacent to the northern and south-eastern boundaries of the assessment area is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the A40 and A48 respectively.</p> <p>However, there is sufficient space within the assessment area for development at all scales to be accommodated outside areas of high noise Noisy area.</p>	<p>Land within areas of high noise Noisy area is restricted to small areas of land in the north and south-east and therefore there is significant potential for development at all scales to be set back from main roads. Suitable mitigation may also be possible to overcome noise related issues.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	Negligible effects are therefore considered likely in relation to noise.				
Odour	The assessment area is not located within any Odour Monitoring Zones or Cordon Sanitaire Zones.	N/A			
	As such, negligible effects are expected in relation to odour.				

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key sensitivities include:</p> <ul style="list-style-type: none"> • Large areas of mixed woodland including Birdwood Coppice and Ley Park. • Undulating topography with a series of ridges and small hills. • Strong sense of place due to the location of the area adjacent to the Forest of Dean District (west) and River Severn (east). <p>As such, landscape sensitivity is high for the medium and largest development options as the key characteristics and qualities of the landscape may be highly sensitive to development of these scales. Landscape sensitivity is reduced to moderate-high for lowest development size option as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	H	H	M-H

Summary of Constraints and Landscape Sensitivity

Parts of the north-west of the assessment area are unaffected by most constraints and could potentially accommodate a small village. This area is comprised of grade 3 agricultural land but it is not clear if it is grade 3a or grade 3b. However, there are a number of listed buildings to the north in the settlement of Huntley. A new settlement in this location could have an impact on the setting and character of Huntley and potentially coalesce with it due to the restricted space available further south where there is a watercourse and the large area of Ancient Woodland to the east.

The historic environment assessment suggests a small village in the south-east or north-east might be able to avoid significant negative effects on heritage assets. However, a development in the south-east could potentially result in significant negative effects on Walmore Common SSSI. In light of this, the north-east may be the least constrained part of the assessment area overall with respect to accommodating a small village.

However, the area has moderate-high landscape sensitivity to the small village scale and therefore the delivery of a new settlement in any location would likely result in significant adverse impacts on landscape character.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via the A40, along the north boundary, the A48 and the A4136, providing links to Mitcheldean, Gloucester and surrounding villages.</p> <p>While no junctions in the immediate vicinity of the area are identified as 'critical' to the function of the highway network, the JCS Transport Evidence base identified three 'critical junctions' that sit between the assessment area and Gloucester/the M5 motorway. The A40 / A417 'Over roundabout', A40/ B4215 Newent Junction, and A40/ A48 Highnam Rbt are all located to the east of the assessment area.</p> <p>The JCS Transport Evidence Base modelling work's Do Nothing and Do Minimum model tests forecast that the A40 'Over Roundabout' junction will operate over its design capacity in 2031 (at between 115% and 117% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>The modelling work's Do Nothing and Do Minimum model tests forecast that the A40/ B4215 Newent Junction will operate over its design capacity in 2031 (at between 115% and 118% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>Similarly, the modelling work's Do Nothing and Do Minimum model tests forecast that the A40/ A48 Highnam Roundabout will operate over its design capacity in 2031 (at between 135% and 140% Ratio to Flow Capacity during the AM and PM peak periods).</p>	

Criterion	Rationale	Score
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 1,689</p> <p>The number of workplaces (jobs) which can currently be accessed by public transport from the assessment area, is scored as low, reflecting limited public transport services across the assessment area.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 262,190</p> <p>Access from the assessment area to employment by Car scores relatively high, due to the well-connected local road network to Tewkesbury and Cheltenham.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that the majority of the assessment area has poor accessibility to key services as a result of low-frequency public transport services (apart from along the key highway links - A40, A48 and A4136 - which show urban centres and healthcare are within 20 – 40 mins and education sites within 20 mins).</p>	
Private car use by commuters	<p>% Driving a Car or Van = 72%</p> <p>Car based commuter trips currently account for an average of 72% of travel to work journeys in LSOAs covered by the assessment area, which is expected given its proximity to the strategic road network and low-frequency public transport services.</p>	
Proximity to sustainable transport networks	<p>The assessment area falls outside of the 5km catchment area of its nearest rail station, whilst the majority of the development area is further than 500m of a low frequency bus route.</p>	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	Due to the limited existing sewerage network a new network and Sewage Treatment Works should be built. This could potentially be a significant cost to the developer.			
	Drinking water	Development would require additional work to increase supply in the area and funding would be required. In the short term (2020-2025) there is very limited additional capacity. There is additional headroom in AMP8 (2025 onwards) which could potentially support this growth.			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	At lower levels of growth, load is acceptable unless also connected with assessment area 35, in which case reinforcement of pipeline network would be required, with the cost of downstream reinforcement to be borne by developer. At highest level of growth, reinforcement will be required, with the cost being borne by the developer.			
	Rail transport	Not proximate to any rail stations but situated on branch line to Gloucester. Growth, other than very highest scales, unlikely to be able to justify new station provision and possible issues with provision of access for significant additional rail movements at junctions with mainline.			
	Bus transport	Within 500m of existing low frequency bus route and close enough to Gloucester to mean that improvements in frequency could result in reasonably high levels of bus patronage. Improvements to bus accessibility would be needed along A40 and at junctions with A48 and A417 and only			

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
		higher scales of growth may possibly be sufficient to enable this and deliver some bus infrastructure improvements.			
	Cycle transport	Distant from existing cycle network and key destinations, so cycle improvements unlikely to significantly increase cycle trips.			

Viability

	Development Type					
	Small Village			Large Village	Town/City	
Dwellings	2,500	3,500	4,500	7,500	10,000 (70% net)	10,000 (60% net)
Indicative developer contributions and affordable housing pool/per unit (£)	0	0	0	0	25,000	15,000
Viability	Low	Low	Low	Low	Medium	Medium

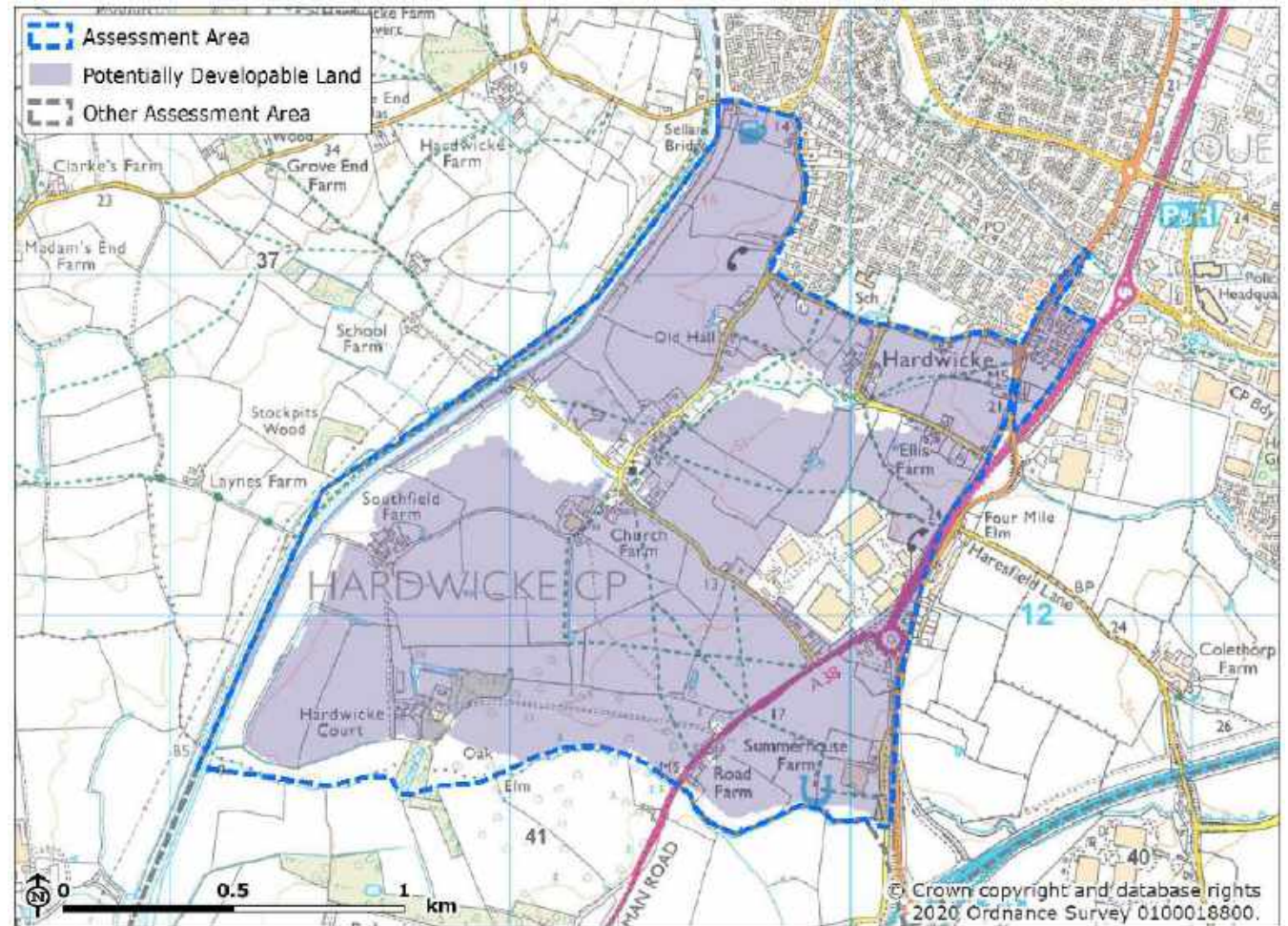
Assessment Area 36 – Urban Extension: South of Gloucester (Quedgeley)

Assessment Area Ref: 36

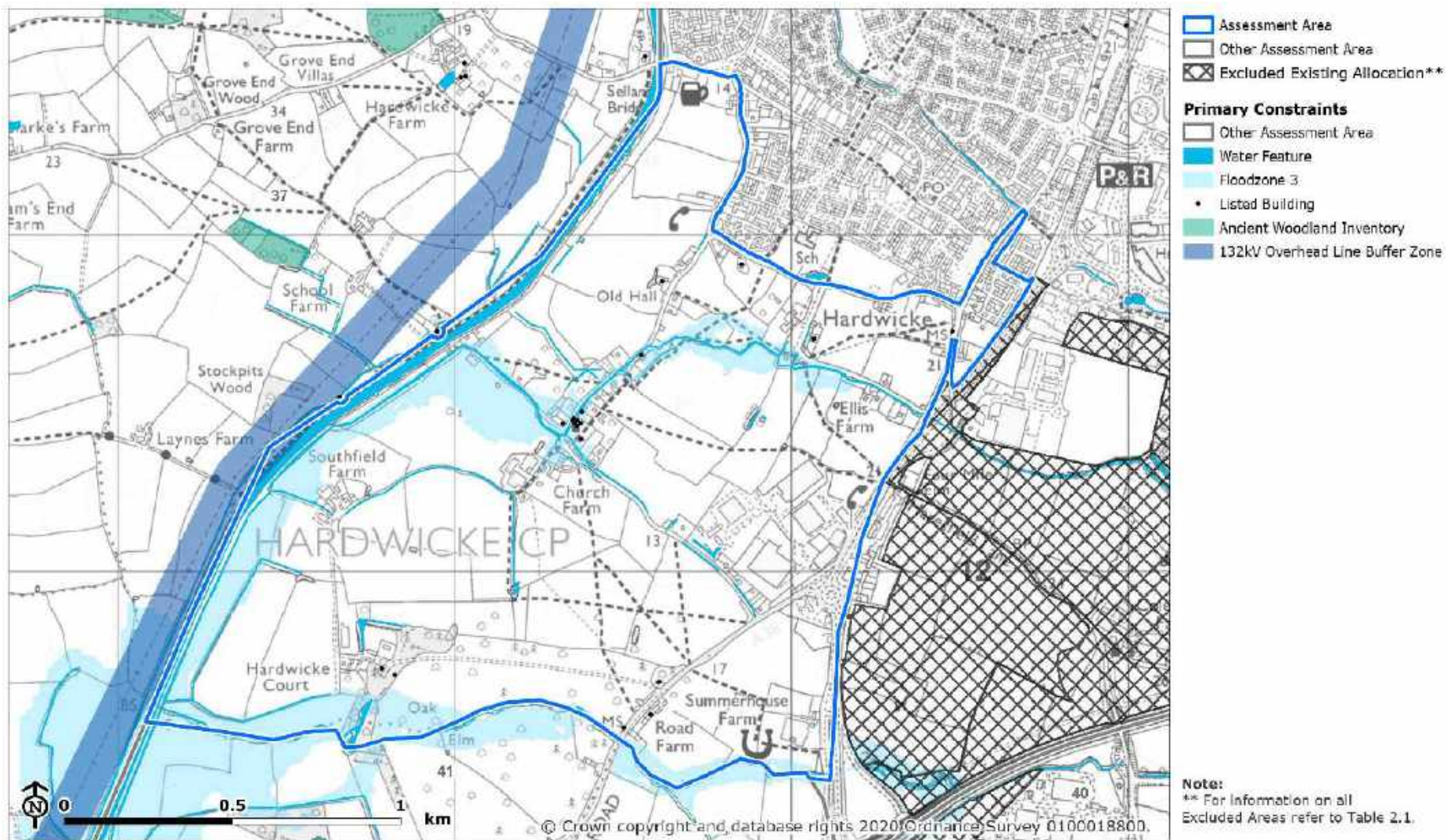
Authority Area: Stroud District

Development Typology: Urban Extension

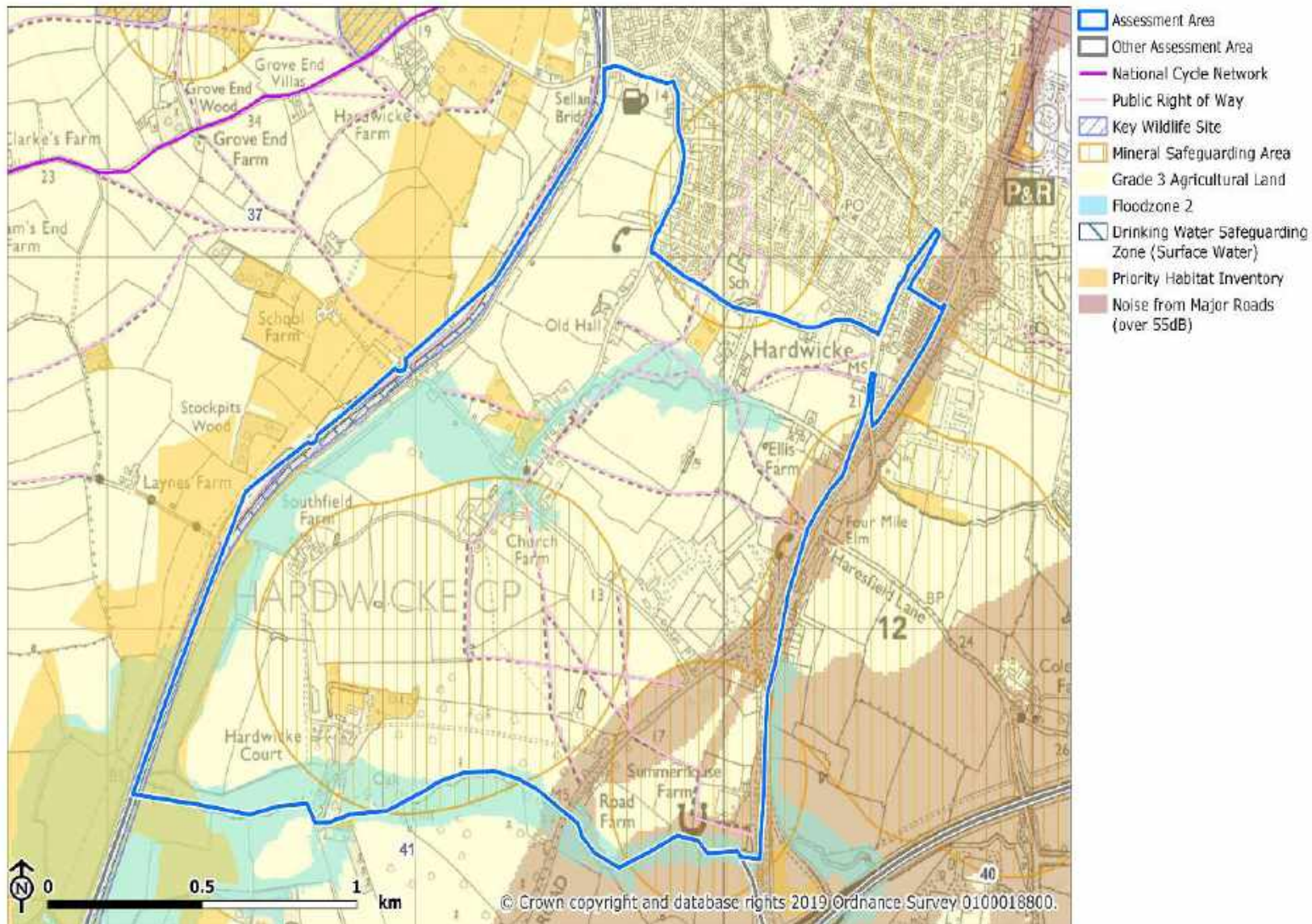
Area: ~521ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
<p>Historic Environment</p>	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 23 listed buildings in the assessment area. These include the grade I Church of St Nicholas in Hardwicke, a grade II* listed monument in its cemetery and the grade II* listed Hardwicke Court. Several of the grade II listed structures are also burial monuments associated with the Church of St Nicholas, the remainder are a mix of cottages, farmhouses, or buildings that otherwise relate to the village of Hardwicke, its church or the country house that replaced the settlement’s manor. As such, most are located within Hardwicke, although Hardwicke Court itself lies to the south along with the grade II listed Road Farm and a milestone. <p><i>Non-designated</i></p>	<p>The key sensitivities of the area are the listed buildings. Amongst these key sensitivities include the parish Church of St Nicholas, Summerhouse Farm and Hardwicke Court - including its listed fountain pool and lodge, as well as its non-designated former parkland. These assets are all located within the southern half of the assessment area.</p> <p>Most of the known archaeological assets are of local importance, but the Saxo-Norman Farm near Church Farm could be of greater significance and if so, potentially require preservation in-situ.</p> <p>Given the sensitivities of the assessment area – particularly the listed buildings – it is unlikely that even a small development could be considered without giving rise to significant negative effects.</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> • The HER records a number of non-designated heritage assets within the assessment area. These include, but are not limited to: <ul style="list-style-type: none"> - A Bronze Age pit; - Iron Age settlement at Mayo's Land; - A Roman burial near Four Mile Elm ; - A Roman road from Seamills to Gloucester (coincides with the A38) and reclaimed land to the south of Hardwicke court; - A Roman settlement east of Summerhouse Farm , as well as Roman ponds and agricultural features at Sellars Farm; - A Saxo-Norman farmstead and remains of the associated agricultural landscape, east of Church Farm; - A medieval ride and parkland boundary at Hardwick Court; - A possible post-medieval windmill mound near Beech House, Hardwicke; 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> - Various post medieval agricultural features; - The Gloucester and Sharpness Canal; - Extant buildings of local interest; - Possible meeting place of the Whitstone Hundred; - Hardwicke Court ornamental gardens; - The Cheltenham and Great Western Union railway and the Bristol and Gloucester Railway and two turnpike roads; - Multiple military sites, mainly relating to WWII. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC data indicates that the assessment area is – with the exception of two disused military sites - primarily agricultural land surrounding the historic settlement of Hardwicke. The agricultural landscape is comprised of a mix of irregular, less irregular 				

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	<p>and regular enclosure as well as riverine pasture. The irregular enclosures could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> Although there a number of designated assets located in the wider vicinity of the assessment area none appear to have a relationship with the assessment area that would be affected by development. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> None of the non-designated heritage assets recorded by the HER appear to be particularly susceptible to setting change at this stage. 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> Key Wildlife Site (Gloucester & Sharpness Canal) extends along the entire western boundary. The assessment area lies within multiple SSSI IRZs, which indicate that residential development resulting in a net gain in units has the potential to impact the statutorily designations within the surrounding landscape. <p>Assets within 250m:</p> <ul style="list-style-type: none"> No designated assets lie within 250m. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> No international/national designations within 2km of the assessment area. <p>IRZs:</p> <ul style="list-style-type: none"> Two IRZs associated with designations in the region overlap with the assessment area and 	<p>Any spatial distribution of development in the assessment area will be required to provide suitable avoidance/mitigation measures to ensure that the Gloucester & Sharpness Canal and associated priority habitat (floodplain grazing marsh, deciduous woodland and traditional orchard) are maintained. It will also be necessary to ensure supporting transport infrastructure minimises severance of habitats in the area.</p> <p>There is the opportunity to enhance the green and blue infrastructure of the canal system to the west.</p> <p>Deciduous woodland occurs throughout the site, along the major road network and, variously, in and around the residential areas of Hardwicke. There is also opportunity to strengthen connectivity (linear habitat or as stepping stones) between the various woodland parcels on site and in the surrounding area be this additional woodland or complementary habitats.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>flag residential development as a potential risk.</p> <p>Negligible effects may occur for all development scales as they can potentially be accommodated over 250m from local designations and over 2km from international/national designations.</p>				
Soil Quality	<p>All agricultural land within the assessment area boundaries is grade 3.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur at all development capacities in relation to soil quality. The effects are uncertain as there is no data distinguishing whether the land is grade 3a or the lower quality grade 3b.</p>	<p>Due to the high proportionate coverage of the grade 3 agricultural land within the assessment area, it is unlikely that effects will vary based on developing different areas within it.</p>	?	?	?
Water Quality	<p>There is some land directly adjacent to the western boundary of the assessment area that is located within a drinking water safeguarding zone.</p> <p>However, the majority of the assessment area is not located within any drinking water safeguarding zones and therefore negligible effects are considered likely at all development capacities.</p>	<p>There is significant potential for development at all capacities to be located outside of drinking water safeguarding zones as this part of the assessment area is restricted to a small section of land directly adjacent to the western boundary.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Flood Risk	<p>The majority of the assessment area is greenfield, but there are also significant areas of existing residential development in the north as well as area of industrial development in the central region of the area. The assessment area is bisected by the B4008 from north to south and there are also multiple local roads throughout the area.</p> <p>There is less than 5ha of developable land in the assessment area that is located within Flood Zone 2.</p> <p>As such, negligible effects are considered likely in relation to flood risk as there is sufficient space to accommodate all development sizes outside of Flood Zone 2.</p>	<p>There is potentially sufficient space in the western half of the assessment area to accommodate development at all sizes outside of Flood Zone 2.</p>			
Mineral Resources	<p>There are large pockets of land within the assessment area that are located within Mineral Safeguarding Areas (MSAs).</p> <p>There is potential for development to result in the sterilisation of mineral resources. Significant negative effects may occur in relation to the medium and small scale extension types. Negligible effects may occur for the small extension type as there is sufficient space to accommodate this scale of development outside of MSAs.</p>	<p>There is potentially sufficient space in the northern half of the assessment area to accommodate a small extension type outside of MSAs.</p> <p>Suitable mitigation may also be possible at larger development scales, such as extraction of mineral resources prior to development.</p>	*	*	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Noise	<p>There is land in the eastern region of the assessment area that is within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the B4008.</p> <p>However, negligible effects are considered likely in relation to noise at development sizes as there is sufficient land in the western half of the assessment area to accommodate development outside of noisy areas.</p>	<p>There is sufficient space in the western half of the assessment area to accommodate development of all sizes outside of noisy areas. Suitable mitigation may also be possible to overcome any noise related issues.</p>			
Odour	<p>The assessment area is not located within any Odour Monitoring Zones or Cordon Sanitaire Zones.</p> <p>As such, negligible effects are expected in relation to odour.</p>	N/A			

Landscape Sensitivity

<p style="text-align: center;">Overview of Sensitivity and Spatial Variation</p>	<p style="text-align: center;">Sensitivity Rating: Large extension (3,500+ dwellings)</p>	<p style="text-align: center;">Sensitivity Rating: Medium extension (1,500-3,500 dwellings)</p>	<p style="text-align: center;">Sensitivity Rating: Small extension (500-1500 dwellings)</p>
<p>Key sensitivities include:</p> <ul style="list-style-type: none"> • Parkland estate character around Hardwicke Court. • Undeveloped setting provided to the south of Gloucester. • Rural character despite the proximity of development and major infrastructure. <p>As such, landscape sensitivity is moderate-high for a large urban extension as the key characteristics and qualities of the landscape may be sensitive to development at this scale. Landscape sensitivity is reduced to moderate for a medium and small scale urban extension as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	<p>M-H</p>	<p>M</p>	<p>M</p>

Summary of Constraints and Landscape Sensitivity

A small or medium urban extension could be accommodated set back from the Key Wildlife Site to the west, with potentially negligible ecological effects occurring in consequence. Although agricultural land is grade 3 throughout it is not known if it is grade 3a or the lower quality grade 3b. Medium and large scale extensions would encroach on MSAs although effects in this regard could be mitigated through the removal of minerals. However, this assessment area is particularly sensitive to impacts on the historic environment at all development scales and in all locations. Additionally, the area has moderate-high landscape sensitivity for a large extension compared to moderate for the smaller scales of development. Therefore, a medium or small scale extension in the north of the area may be most appropriate to avoid significant adverse impacts on landscape character.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the strategic road network via the A38 (Shurdington Rd) and Bristol Road, which links directly into the M5 - Junction 12. To the north it carries traffic into the Gloucester urban area.</p> <p>Cross Keys Roundabout is located to the east of the assessment area and is considered a 'critical junction' by the JCS Evidence Base. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate beyond its design capacity in 2031 (at 123% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>Another 'critical junction' located nearby is M5 Junction 12 which is located to the south of the assessment area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate at or beyond 90% of its design capacity in 2031 (at between 99% and 88% Ratio to Flow Capacity during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 74,700</p> <p>A high number of workplaces (jobs) can currently be accessed by public transport from the development area, via high-frequency bus services operating along the key arterial routes – predominantly towards Gloucester.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that the assessment area is accessible to a number of key services (urban centres and healthcare facilities) between 20 and 40 mins travel time by public transport services and education facilities within 20 mins.</p>	

Criterion	Rationale	Score
Private car use by commuters	% Driving a Car or Van = 70% Car based commuter trips currently account for an average of 70% of commuter journeys in LSOAs covered by the assessment area, which is expected given its proximity to the strategic road network.	
Proximity to sustainable transport networks	The assessment area is located outside of the 5km rail catchment area, but is served by a high frequency bus service which provides direct links to Gloucester, via Kingsway and Quedgeley. The assessment area is not directly on, but has potential to link into, strategic walking / cycling routes.	

Deliverability/Infrastructure

Criterion	Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)	
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	Gas	At all but the lowest levels of growth, reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer	Yellow	Yellow	Light Green
	Rail transport	Not proximate to rail stations or lines.	Red	Red	Red
	Bus transport	Within 500m of existing high frequency bus route and close enough to Gloucester to mean that improvements in frequency could result in reasonably high levels of bus patronage. Proximity to M5 J12 would require significant bus network expansion to avoid overloading SRN network with significant additional car traffic. Higher scales of growth increase likelihood of securing the levels of investment needed to deliver bus infrastructure improvements.	Light Green	Yellow	Red
	Cycle transport	Close to canal towpath which is a National Cycle Route and close to Gloucester	Light Green	Light Green	Light Green

Viability

	Development Type				
	Small Extension		Medium Extension		Large Extension
Dwellings	500	1,000	2,500	3,500	4,500
Indicative developer contributions and affordable housing pool/per unit (£)	20,000	15,000	10,000	10,000	10,000
Viability	Medium	Medium	Medium	Medium	Medium

Assessment Area 37 – New Settlement: Southwest of Gloucester

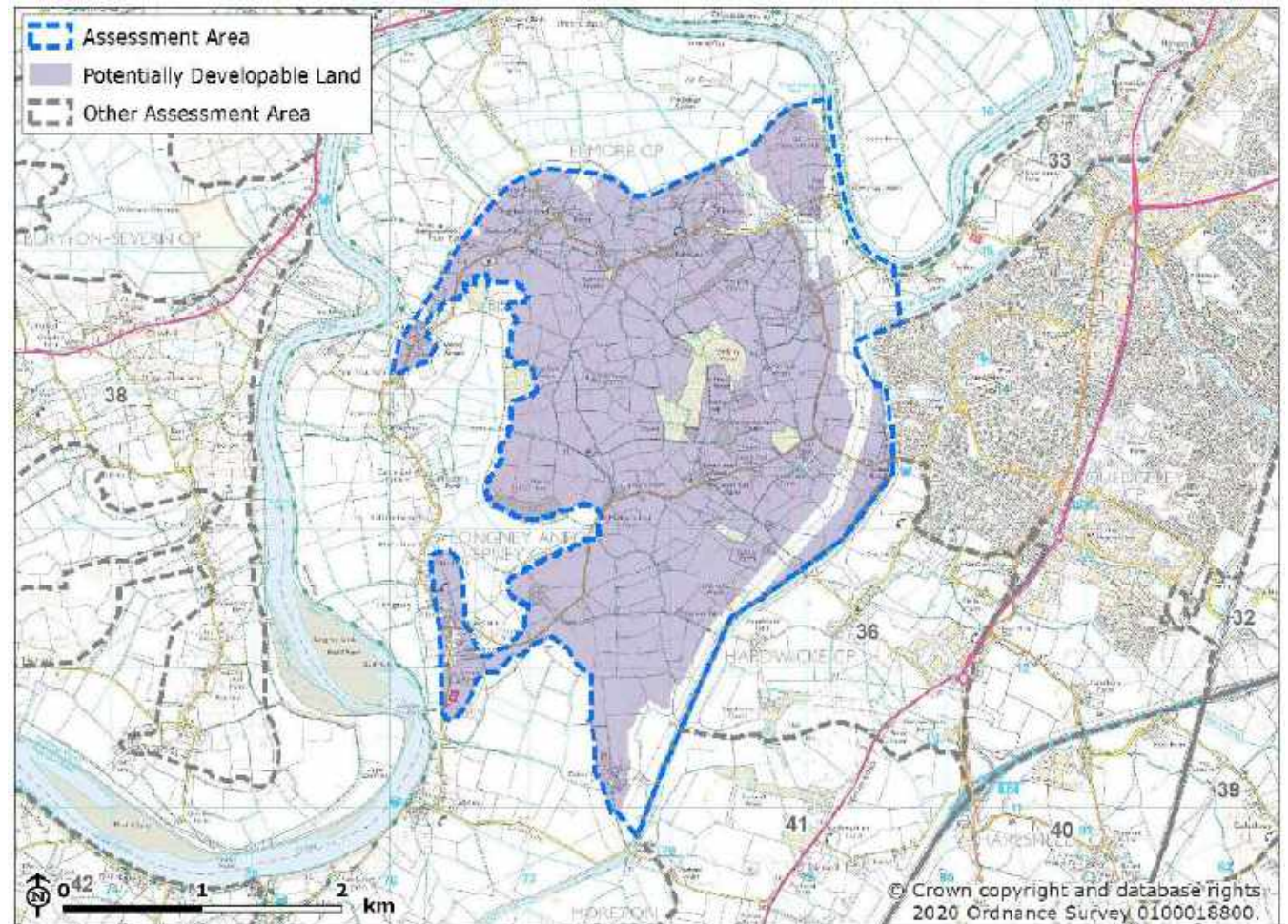
Assessment Area Ref: 37

Authority Area: Stroud District

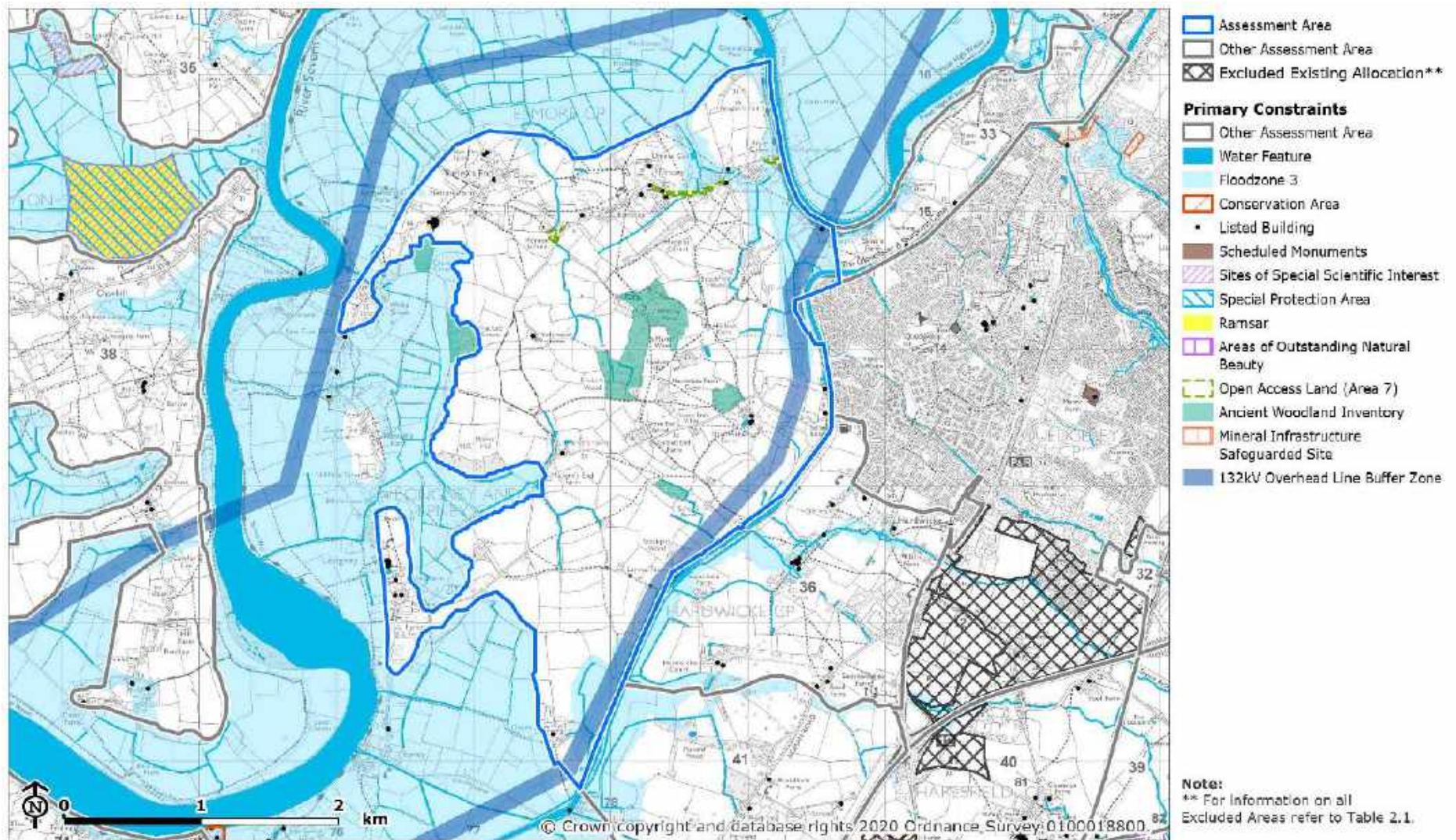
Development Typology: New Settlement

Area: ~972ha

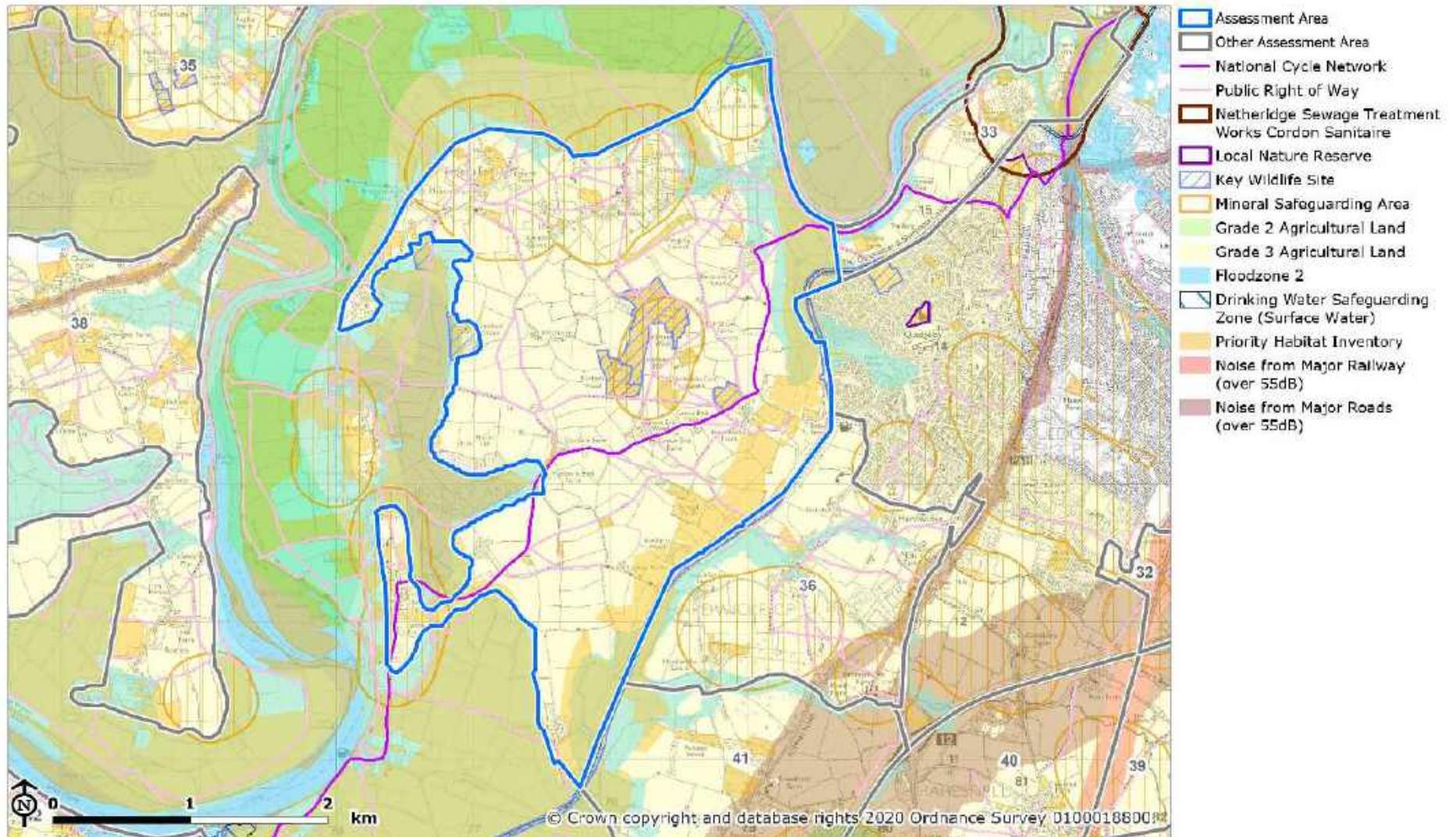
Note on typology: Although development in the western part of this area would take the form of a new settlement and only a small part of the area is directly adjacent to existing development at Quedgeley, development in the eastern part of the assessment area could potentially take the form of an urban extension, potentially contributing to urban extensions in areas 36 or 33.



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
<p>Historic Environment</p>	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 79 listed buildings within the assessment area. These include the grade I listed Churches of St Lawrence and St John the Baptist, both of which have cemeteries that include grade II* listed burial monuments, as well as a high number of grade II memorials. Other grade II* listed buildings include Elmore Court and its gateway. Elmore Court and the Church of St John the Baptist are both located to the north of the assessment area; the church of St Lawrence is in Longney, to the west. The other grade II listed buildings – of which there are around 25 – include a variety of farmhouses and agricultural buildings, timber-framed houses, bridge keepers’ houses, mile/ boundary posts and a war memorial. Many of these are clustered towards areas of settlement e.g. Longney to the 	<p>To avoid/ minimise harm to the historic environment any new development should be located away from Elmore – to the north of the assessment area – and Longney – to the southwest – which are both highly sensitive to development as existing historic rural settlements with a high density of listed buildings, many of which would be susceptible to physical/ setting change in the event of development.</p> <p>The dispersed listed buildings are also key sensitivities, as are the non-designated heritage assets of more than local significance e.g. the possible moated assessment area near Oakey Farm – to the south of the assessment area – and the medieval cross remains at St Lawrence Church, Longney.</p> <p>Overall, the southern half of the assessment area – excluding Longney and Oakey Farm – appears to be a less sensitive area and it is possible that a small village could be accommodated here between the designated assets. As such, the effects in this area could be minor negative as a result of potential change to non-designated assets.</p>	<p>?</p>	<p>?</p>	<p>?</p>

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>southwest and Elmore and Farley's End to the north.</p> <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • Given the size of the assessment area the non-designated heritage assets recorded by the HER are limited. They include, but are not limited to: <ul style="list-style-type: none"> - Extant post-medieval buildings; - Undated cropmarks; - Post-medieval agricultural and industrial features; - Remains of a medieval? Cross, Church of St Lawrence; - A possible medieval moated site south of Oakey Farm; - Medieval to post-medieval house platforms and boundary ditches near Oakey Farm; - A designed landscape and possible medieval deer park associated with Elmore Court; - The Gloucester and Sharpness Canal; - Multiple WWII sites; and - Reclaimed land of Roman-post-medieval date. <p><i>Historic Landscape</i></p>				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> The HLC data indicates a primarily agricultural landscape interspersed with small-scale settlement and ancient woodland. The agricultural landscape is primarily comprised of irregular and less irregular enclosures that have some time-depth and value. They could also include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> Although there are a number of listed buildings in the wider area most do not appear to have a relationship with the assessment area that would make them susceptible to setting change. The exception to this is the grade II Yew Tree Farm, near Wick's Green. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> No non-designated assets with the potential for meaningful setting 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	change have been identified at this stage.				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> A large area of Ancient Woodland (Hockley/Pool Pits Woods) in the central region of the assessment area, and also a smaller area closer to the eastern boundary (Hardwicke Farm Covert) as well as a similarly sized area adjacent to School Farm in the south (Fisher's Wood). Part of Key Wildlife Assessment area (Gloucester and Sharpness Canal) overlaps with the eastern boundary of the assessment area. Large areas of floodplain grazing marsh priority habitat adjacent to the full length of the eastern boundary. Multiple areas of traditional orchard priority habitat adjacent to the eastern, western and northern boundaries of the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> Two areas of Ancient Woodland (Church Covert and Shatford Grove) adjacent to the north-western boundary of the assessment area. Gloucester and Sharpness Canal Key Wildlife Assessment area is adjacent to the majority of the 	<p>Any spatial variation of development in the assessment area will be required to provide suitable avoidance/mitigation measures to ensure that the areas of Ancient Woodland are maintained in the central region of the assessment area and that the network of floodplain priority habitat associated with the Gloucester and Sharpness Canal in the east is also maintained. Large areas of the periphery of the assessment area are listed as floodplain priority habitat; these areas will need to be avoided but provide scope for enhancing green and blue infrastructure within the landscape. It will also be necessary to ensure supporting transport infrastructure minimises severance of habitats in the area.</p> <p>There is the opportunity to provide woodland habitat to provide ecological connectivity to link the isolated ancient woodland parcels within the assessment area and link these further to off-site ancient woodland habitat to the north-west.</p> <p>Development at the small and medium size could potentially be located in the south, avoiding proximity to ecological constraints.</p>	*		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>eastern boundary of the assessment area.</p> <ul style="list-style-type: none"> Key Wildlife Assessment area (Groundless Pool) adjacent to the north-eastern boundary of the assessment area. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SPA/SSSI/Ramsar (Walmore Common) 1.2km to the north-west. <p>IRZs:</p> <ul style="list-style-type: none"> The assessment area lies within multiple SSSI IRZs which indicate that residential developments resulting in a net gain in residential units have the potential to harm statutory designated assessment areas within the wider landscape. <p>Minor negative effects may occur for the largest scale development as there are local designations within and directly adjacent to the assessment area and it is unlikely that this scale of development could be accommodated without falling within 250m of a local designation. Negligible effects may occur at the smallest and medium development size as this development scale could potentially be accommodated over 250m from local designations. Potential negative effects in all cases are likely to be</p>				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	contingent on detailed development design and other mitigation measures.				
Soil Quality	<p>Almost the entirety of the assessment area is comprised of grade 3 agricultural land. There is small area (6.8ha) of grade 2 agricultural land in the northernmost part of the assessment area as well as a smaller area of grade 4 agricultural land adjacent to the south-western boundary of the assessment area.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur for all development sizes in relation to soil quality. The effects are uncertain as there is no data distinguishing whether the land is grade 3a or the lower quality grade 3b.</p>	Due to the large coverage of the grade 3 agricultural land within the assessment area, it is unlikely that effects will vary based on developing different areas within it.	?	?	?
Water Quality	<p>A small section of the Gloucester and Sharpness Canal, which is designated as a drinking water safeguarding zone, overlaps with the eastern boundary of the assessment area.</p> <p>However, the majority of the assessment area is not located within any drinking water safeguarding zones and therefore negligible effects are considered likely for all development sizes.</p>	There is significant potential for all development sizes to be located outside of the drinking water safeguarding zone as this area is restricted to a small section of canal adjacent to the eastern boundary of the assessment area.			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Flood Risk	<p>The majority of the assessment area is greenfield. However, the settlements of Farleys End and Elmore are located in the northernmost part of the assessment area and Longney is located in the south-west. In addition, there are multiple local roads distributed throughout the assessment area as well as areas of agricultural development.</p> <p>There is around 73ha of land in the north-eastern corner of the assessment area that is within Flood Zone 2, as well as a further 26ha adjacent to the southern boundary that is also within Flood Zone 2. There are also smaller areas of Flood Zone 2 in the south-western and north-western corners directly adjacent to the assessment area boundaries. However, the majority of the assessment area is not located within any Flood Zones and therefore negligible effects are considered possible in relation to flood risk for all development size options.</p>	<p>There is significant potential for development at all development option sizes to be located outside Flood Zone 2, as this Flood Zone occupies relatively small areas of land in quite close proximity to the assessment area boundaries.</p>			
Mineral Resources	<p>In the northern part of the assessment area there are two main areas of land within a Mineral Safeguarding Area (MSA), which are in the vicinity of Hockley Hill and adjacent to the settlements of Farleys end and Elmore. These amount to approximately 200ha of land in total. There is also around 27ha of land in the south-west adjacent to Longney that is within a MSA.</p>	<p>There is potentially sufficient land outside MSAs in the west and south to accommodate development at the small and medium size. Suitable mitigation may also be possible at larger size developments, such as extraction prior to development.</p>	*		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>There is potential for development to result in the sterilisation of mineral resources. Significant negative effects may occur at the largest size as there is insufficient space to accommodate this scale of development outside of MSAs. Negligible effects may occur at the small and medium size options as there is potentially sufficient space to accommodate these scales of development outside of MSAs.</p>				
Noise	<p>There is no land within the assessment area that is located within areas of high noise Noisy area and therefore negligible effects have been identified in relation to noise for all the development sizes.</p>	N/A			
Odour	<p>The assessment area is not located within any Odour Monitoring Zones or Cordon Sanitaire Zones. As such, negligible effects have been identified in relation to odour.</p>	N/A			

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • Strong sense of place due to location adjacent to the River Severn. • Locally prominent hills. • Wooded character. • Long views west towards the Forest of Dean. <p>Undeveloped setting provided to the south of Gloucester.</p> <p>As such, landscape sensitivity is high for large and medium size new settlements as the key characteristics and qualities of the landscape may be highly sensitive to development of these scales. Landscape sensitivity is reduced to moderate-high for smallest size option as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	H	H	M-H

Summary of Constraints and Landscape Sensitivity

There are large parts of the western half of the assessment area that are largely unconstrained. However, the potential for large and medium scale new settlements may be restricted by the presence of Elmore in the north and Longney in the south-west, which contain multiple listed buildings. The presence of local ecological designations in the northern half of the assessment area further restricts the scale of development possible in this location. It may be possible to accommodate a small village in the west of the assessment area if sufficiently set back from the settlements in the north and the area of Ancient Woodland. The south of the assessment area also offers potential to accommodate a small village whilst avoiding the majority of constraints if sufficiently set back from the settlement of Longney in the south-west and Oakley Farm in the south. The eastern part of the assessment area in the vicinity of the canal has heightened ecological sensitivity due to the presence of Priority Habitat. In terms of landscape, the area has reduced landscape sensitivity to the small village scenario compared to larger scales of development, but the sensitivity is still considered to be moderate-high.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is currently connected to the highway network via local roads (Elmore Road / Haywicks Lane) to the A38 and B4008 (Bristol Road), which provide links to into Quedgeley, Kingsway and Gloucester. While it does not appear that road links and junctions in the immediate vicinity of the assessment area are subject to capacity issues during AM and PM peak periods, they do lead to 'Critical Junctions' identified through the JCS Transport Evidence Base.</p> <p>Cross Keys Roundabout is located to the east of the assessment area and is one such junction. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction could be required to operate beyond its design capacity in 2031 (at 123% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>Another 'critical junction' located nearby is M5 Junction 12 which located to the south east of the assessment area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate at or beyond 90% of its design capacity in 2031 (at between 99% and 88% Ratio to Flow Capacity during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 20</p> <p>A very low number of workplaces (jobs) can currently be accessed by public transport from the assessment area, due to low frequency bus services only partially serving the northern extent of the assessment area. These would likely be extended and/improved in the event that future development were allocated within this area.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 277,784</p> <p>Access from the assessment area to employment by Car scores high, with the assessment area in close proximity to major roads providing direct links to key urban centres.</p>	

Criterion	Rationale	Score
Access to other key services and facilities by public transport	TRACC Accessibility Modelling outputs show that the assessment area has poor accessibility to key services (urban centres and healthcare facilities) within the defined travel times by public transport. Access to education facilities is possible within 20 mins by public transport.	
Private car use by commuters	% Driving a Car or Van = 70% Car based commuter trips currently account for an average of 70% of commuter journeys in LSOAs covered by the assessment area. This reflects the relatively rural location and lack of access to high frequency public transport services.	
Proximity to sustainable transport networks	The assessment area is outside of the 5km catchment of Gloucester Rail Station and is currently partially served by a low frequency bus route. The assessment area benefits from being directly on a National Cycle Network Route, providing opportunities to further enhance active travel provision, particularly into Gloucester City Centre.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	Electricity	All of assessment area served by Tuffley Primary Substation which currently has only between 10% and 25% capacity available. Substation will therefore require expansion which would need to be included in next investment programme.			
	Gas	At lowest levels of growth, load is acceptable unless also connected with assessment area 40, in which case reinforcement of pipeline network would be required, with the cost of downstream reinforcement to be borne by developer. At all other levels of growth, reinforcement will be required, with the cost being borne by the developer.			
	Rail transport	Not proximate to rail stations or lines.			
	Bus transport	Within 500m of existing low frequency bus route and close enough to Gloucester to mean that improvements in frequency could result in increased bus patronage. Higher scales of growth likely to be sufficient to secure investment need to deliver bus infrastructure improvements.			
	Cycle transport	Distant from existing cycle network and key destinations, so cycle improvements unlikely to significantly increase cycle trips.			

Viability

	Development Type					
	Small Village			Large Village	Town/City	
Dwellings	2,500	3,500	4,500	7,500	10,000 (70% net)	10,000 (60% net)
Indicative developer contributions and affordable housing pool/per unit (£)	40,000	40,000	40,000	40,000	25,000	15,000
Viability	High	High	High	High	High	Medium

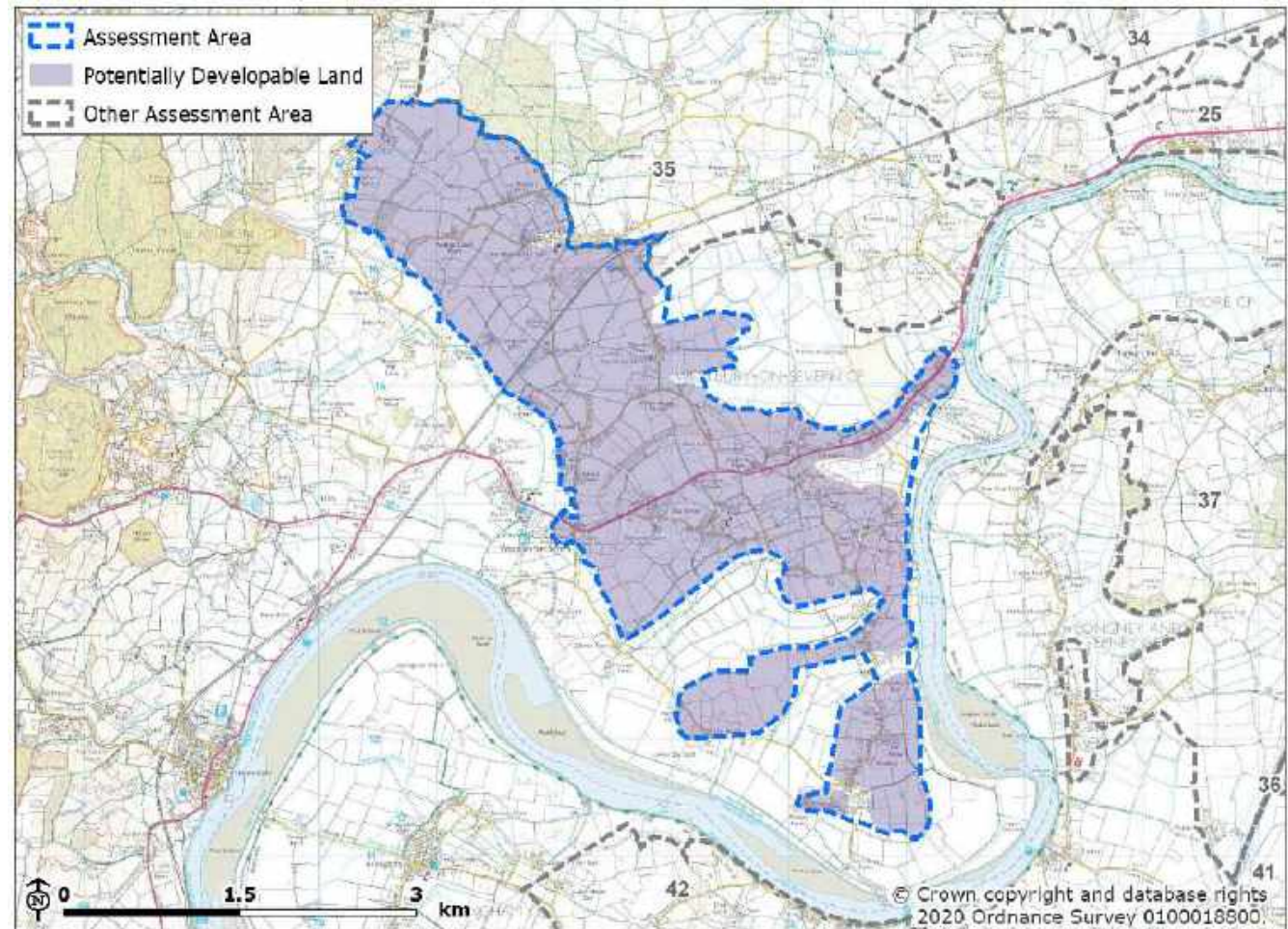
Assessment Area 38 – New Settlement: West of Gloucester (A38 corridor)

Assessment Area Ref: 38

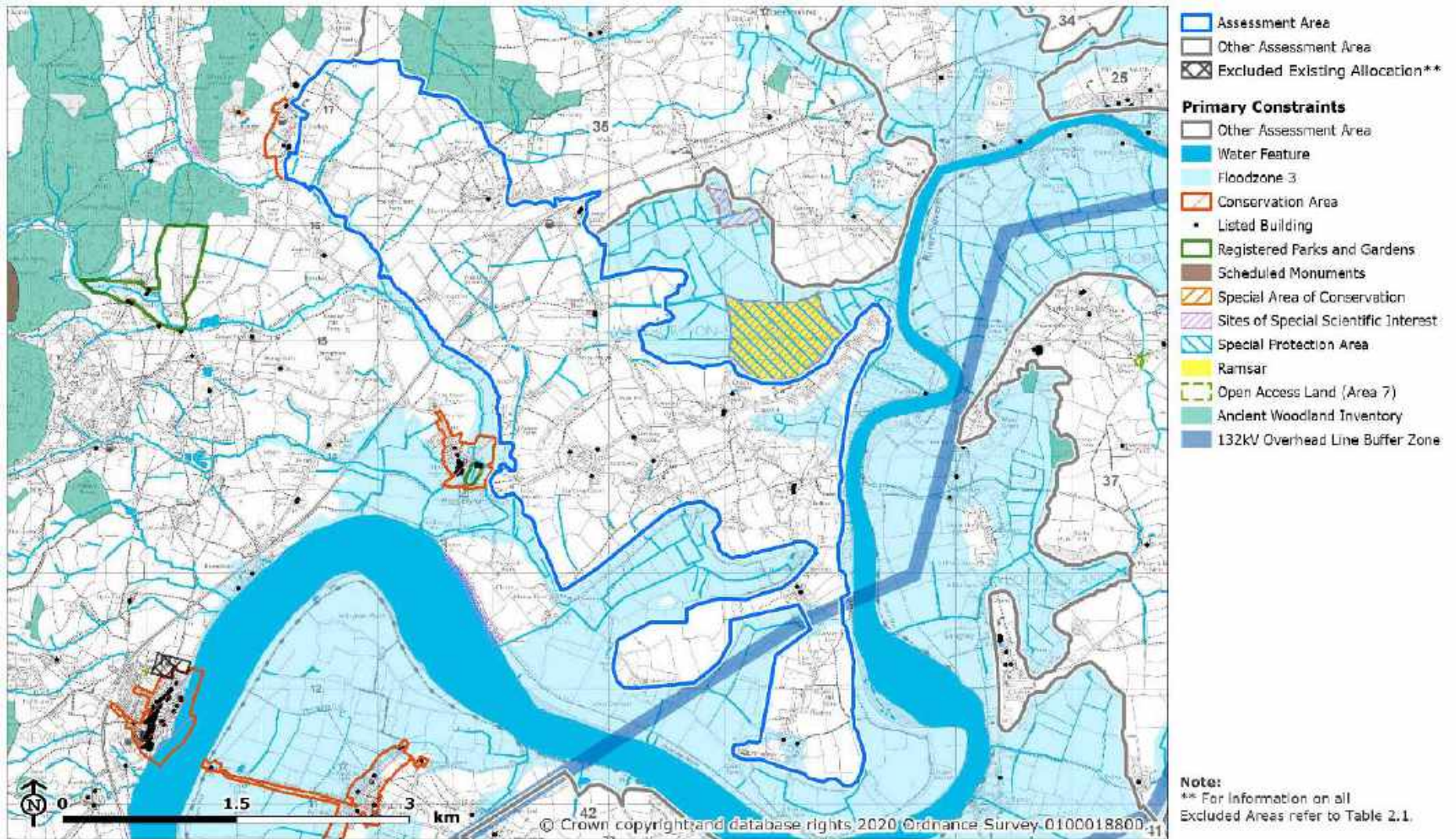
Authority Area: Forest of Dean District

Development Typology: New Settlement

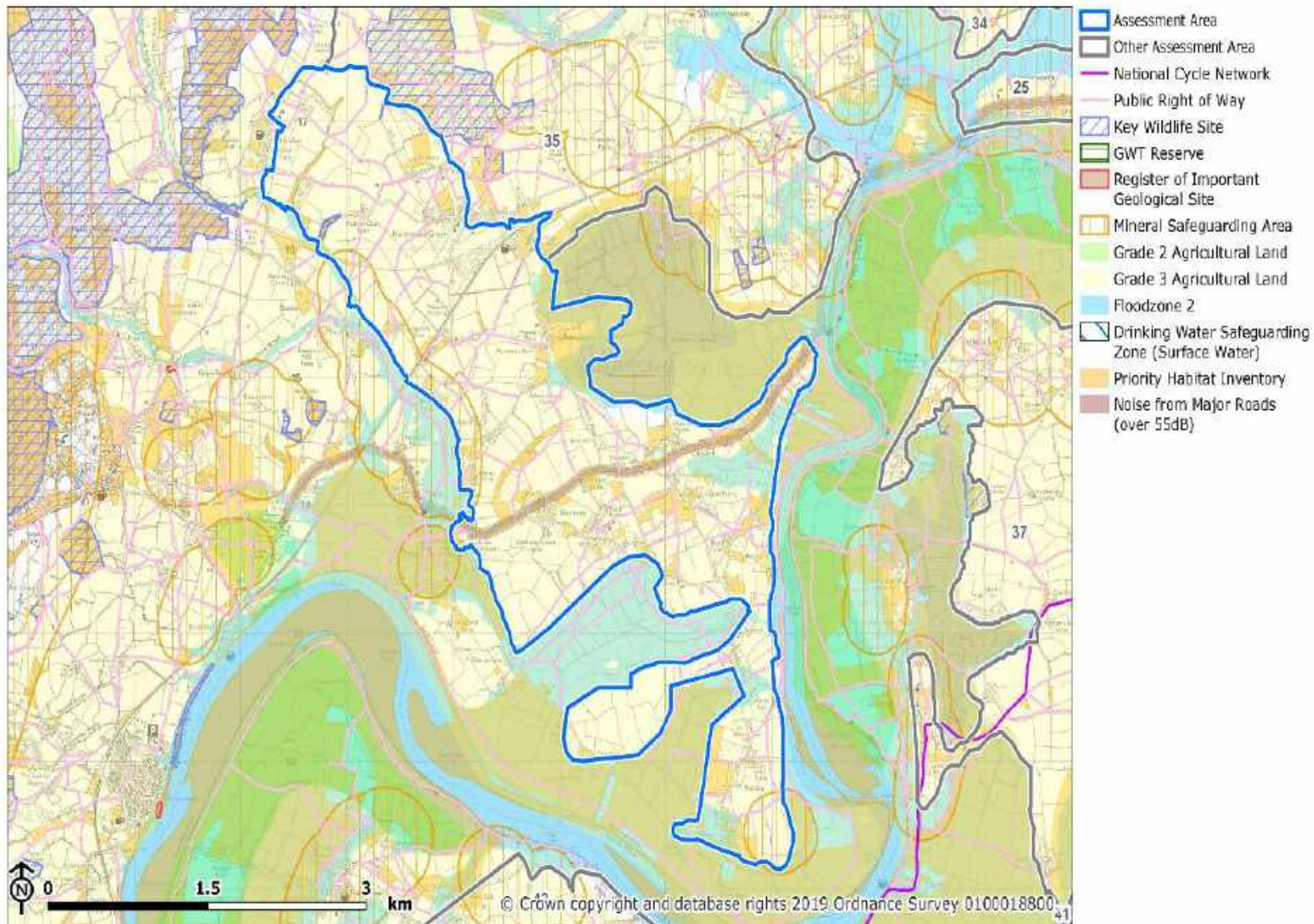
Area: ~1200ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the assessment that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 22 grade II listed buildings within the assessment. The majority are farmhouses or agricultural related buildings, but there are also some detached houses and a milestone. Many of the listed buildings are located near Stantway, along the A48, with some outliers to both the north and south. The scheduled remains of a wayside cross stand at the crossroads near Six Bells Farm, to the west of the assessment. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER indicates that there are a large number of non-designated heritage assets within the assessment. These include, but are not limited to: <ul style="list-style-type: none"> Multi-period site at Chaxhill; 	<p>The spatial distribution of designated assets within and adjacent to the assessment is such that the development of a town/ city or village is highly likely to result in significant negative effects.</p> <p>Save for the moated site at Court Farm – to the south – most of the known archaeology is likely to be of local importance. However, this area is already highly sensitive due to the presence of a number of listed buildings.</p> <p>The largest area of least sensitivity lies either side of the railway south of Northwood Green – and the listed Northwood House and Grange Court - and extends south towards Brook Farm. This area might be able to accommodate a small village at the lower end of the considered size scale.</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Areas of land reclamation possibly from the Roman period onwards; - Multiple medieval – post-medieval charcoal burning platforms; - A probable moat south of Court Farm; - A medieval to post-medieval house platform and boundary ditch or moat at Bays Court; - Medieval to post-medieval agricultural and industrial features; - The site of a former manor, farmhouse church and mill. - An ex-situ cross base at Chaxhill; - Multiple extant historic buildings; and - Two post-medieval railways – one extant and the other disused. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC data indicates a primarily agricultural land interspersed with small-scale settlement. The agricultural landscape is comprised of irregular and less irregular enclosures that have some time- 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>depth and value. They could also include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997.</p> <p>Assets beyond the assessment that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • Westbury on Severn Conservation Area is located immediately west of the assessment and Blaisdon Conservation Area immediately adjoins it to the northeast. Both of these – and potentially some of the listed buildings within them – would be highly susceptible to setting change in the event of development. • In addition to the listed buildings in the Conservation Areas there are a number of others in the wider vicinity of the assessment that could be susceptible to setting change. These include the grade II listed Ardens Farm – located on the western boundary – the grade II* Blaisdon Hall – to the northwest – and the grade II 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>church of St Michael's and All Angels.</p> <ul style="list-style-type: none"> The grade II* Registered Park and Garden - Westbury Court – lies to the west of the assessment, within Westbury on Severn conservation area. It may be susceptible to setting change. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> None of the non-designated heritage assets recorded by the HER within the wider vicinity of the assessment appear to be particularly susceptible to setting change. 				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> Key Wildlife Site/GWT nature reserve (Poulton Wood) in the north-western corner of the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> SPA/Ramsar/SSSI (Walmore Common) adjacent to the eastern boundary of the assessment area. Large area of Ancient Woodland (Ley Park/Hampney Woods) adjacent to the northern boundary of the assessment area, which is also a Key Wildlife Site. 	<p>Any spatial distribution of development in the assessment area will be required to provide suitable avoidance/mitigation measures to ensure that networks of priority habitat within the assessment area are maintained and that suitable buffering regions are included around the nature reserve onsite and the SPA/Ramsar/SSSI that is adjacent to the assessment area. It will also be necessary to ensure supporting transport infrastructure minimises severance of habitats in the area.</p> <p>There is the potential for significant landscape-scale enhancement through provision of ecological connectivity north to south, and</p>	<p>*</p>	<p>*</p>	<p></p>

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> Large area of Ancient Woodland (Blaisdon Wood) 230m north-west, which is also a Key Wildlife Site. <p>International and National assets within 2km:</p> <ul style="list-style-type: none"> SSSI (Garden Cliff) adjacent to the south-western boundary. SAC/SSSI scattered to the north-east include Blaisdon Hall (c450m) Wood Green Quarry & Railway Cutting (c750m) and Longhope Hill (c1.5km). SSSI (further part of Walmore Common) 600m north east. <p>IRZs:</p> <ul style="list-style-type: none"> The assessment area lies within multiple SSSI IRZs. Those closest to SSSI (i.e. Walmore Common) indicate any rural residential development, and all residential developments of 10 units or more have the potential to impact statutory designated sites within the wider area. IRZ closest to Garden Cliff SSSI indicates rural residential development of 10+ units or residential of 50+ units may impact on the designation. 	<p>linkage of the SSSI to the north with the SPA to the south.</p> <p>There are multiple areas of traditional orchard priority habitat in the central region of the assessment area and in the southernmost area. There are several areas of deciduous woodland priority habitat in the central and northern region of the assessment area.</p> <p>There is floodplain grazing marsh priority habitat adjacent to western boundary, parts of the north eastern boundary and the majority of the southern boundary of the assessment area, as land falls away to the Severn.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>Minor negative effects may occur at the largest and medium scale of development as they cannot be accommodated over 2km from international/national designations. Negligible effects may occur at the small village scale as this scale of development could potentially be accommodated over 250m from local designations and over 2km from international/national designations. Potential negative effects in all cases are likely to be contingent on detailed development design and other mitigation measures.</p>				
Soil Quality	<p>Almost the entirety of the assessment area is classified as grade 3 agricultural land. There is around 22ha of land adjacent to the eastern boundary of the assessment area that is grade 4 agricultural land.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality for all potential development sizes. The effects are uncertain as there is no data distinguishing whether the land is grade 3a or the lower quality grade 3b.</p>	<p>Due to the extensive coverage of the grade 3 agricultural land within the assessment area, it is unlikely that effects will vary based on developing different areas within it.</p>	?	?	?
Water Quality	<p>The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones. As such,</p>	N/A			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	negligible effects are expected in relation to water quality.				
Flood Risk	<p>The majority of the assessment area is greenfield. The settlement of Rodley is located adjacent to the southern boundary, Stantway Gatwick and Chaxhill are located in the central region and Northwood Green is located in the north. The A38 bisects the assessment area from west to east and there are multiple local roads distributed throughout the assessment area as well as areas of agricultural development.</p> <p>There is around 70ha of land in close proximity to the eastern boundary that is within Flood Zone 2 due to the presence of the River Severn to the east. There is approximately a further 60ha of land in Flood Zone 2 adjacent to the western and southern boundary due to the River Severn being present in close proximity to these boundaries also.</p> <p>However, the majority of the assessment area is not located within Flood Zone 2 and therefore negligible effects are considered likely in relation to flood risk for all development sizes.</p>	There is significant potential for development at all scales to be located outside of Flood Zone 2 as these areas are restricted to land adjacent to the assessment area boundaries.			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Mineral Resources	<p>There is approximately 54ha of land adjacent to the western boundary of the assessment area that is located within a Mineral Safeguarding Area (MSA). In addition, there is approximately 20ha of land adjacent to the southernmost boundary of the assessment area that is also located within a MSA.</p> <p>However, the majority of the assessment area is not located within any MSAs and therefore negligible effects are considered likely in relation to mineral resources for all development sizes.</p>	<p>There is significant potential for development to avoid the sterilisation of mineral resources as the parts of the assessment area within MSAs are relatively small compared to the overall area. It may also be possible to avoid the sterilisation of mineral resources through extraction prior to development.</p>			
Noise	<p>Land directly adjacent to the A38, which bisects the assessment area from west to east, is located in an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours.</p> <p>However, there is sufficient space available for development at all scales to be located outside of this noisy area and therefore negligible effects are considered likely in relation to noise.</p>	<p>There is sufficient space within the assessment area for all development scales to be accommodated outside of noisy areas and suitable mitigation may be possible to overcome noise related issues. However, it may not be possible to accommodate a continuous development at the largest size to the south of the A38.</p>			
Odour	<p>The assessment area is not located within any Odour Monitoring Zones or Cordon Sanitaire Zones.</p> <p>As such, negligible effects are expected in relation to odour.</p>	N/A			

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key sensitivities include:</p> <ul style="list-style-type: none"> • Strong rural character with limited modern influences. • Sense of place due to the location of the area adjacent to the Forest of Dean District and River Severn. • Sparsley settled, with small villages and scattered farmsteads. • Areas of mixed woodland and orchards amongst the farmland. <p>As such, landscape sensitivity is high under the medium and largest new settlement options as the key characteristics and qualities of the landscape may be highly sensitive to development of these scales. Landscape sensitivity is reduced to moderate-high for the smallest option as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	H	H	M-H

Summary of Constraints and Landscape Sensitivity

The part of the assessment area with lowest historic sensitivity is south of Northwood Green in the north of the area in the vicinity of the railway, where it might be possible to develop a small village without significant negative effects on the historic environment (all other parts of the assessments are considered highly sensitive to development at all scales with respect to the historic environment). This part of the assessment area is also generally of lower sensitivity in other respects also, although there is an MSA to the west and all land is grade 3. It is, however, unknown whether the land is grade 3a or the poorer quality 3b. Walmore Common, however, is a key ecological sensitivity, perhaps particularly (but not exclusively) for development in the central/eastern part of the assessment area, and impacts upon this asset would need careful consideration. In terms of landscape, the area has reduced landscape sensitivity to the small village scenario compared to the larger scales of development. However, sensitivity is still moderate-high at this scale.

Accessibility

Criterion	Rationale	Score
Size of the road network	<p>The assessment area is well connected via the A48, which runs through the centre of the assessment area, and provides direct links to Westbury-on-Severn, Minsterworth and Gloucester. The immediate vicinity of the assessment area does not contain any 'Critical Junctions' – as identified in the JCS Transport Evidence Base – but traffic generated by development in this area could impact upon three such junctions that are distant from the site and further along the A40:</p> <p>The JCS Transport Evidence Base's Do Nothing and Do Minimum model tests forecast that the A40 'Over Roundabout' junction will operate beyond its design capacity in 2031 (at between 115% and 117% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>The same Do Nothing and Do Minimum model tests forecast that the A40/ B4215 Newent Junction will also be required to operate above its design capacity in 2031 (at between 115% and 118% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>Similarly, the modelling work's Do Nothing and Do Minimum model tests forecast that the A40/ A48 Highnam Roundabout will operate beyond its design capacity in 2031 (at between 135% and 140% Ratio to Flow Capacity during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 74,752</p> <p>A high number of workplaces (jobs) can be accessed by public transport from the assessment area, with high-frequency bus services currently operating along the arterial routes to key urban centres.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 266,441</p> <p>Access from the assessment area to employment by Car scores relatively high, with the assessment area in close proximity to major roads providing direct links to the Forest of Dean District and Gloucester.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that the site is accessible to some education facilities within 20mins travel time, whilst urban centres and healthcare facilities are largely between 20 and 40 mins travel time using public transport. Locations within the assessment area that are closest to the A48 demonstrate highest levels of accessibility.</p>	

Criterion	Rationale	Score
Private car use by commuters	% Driving a Car or Van = 72% Car based commuter trips currently account for an average of 72% of travel to work journeys in LSOAs covered by the assessment area.	
Proximity to sustainable transport networks	The assessment area is outside of the 5km catchment area of a rail station, but is partially served by a high-frequency bus service along the A48 arterial route into Gloucester. There are currently no National Cycle Network routes close to the assessment area.	

Deliverability/Infrastructure

Criterion	Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)	
Strategic Infrastructure	Waste water	Due to the limited existing sewerage network a new network and Sewage Treatment Works should be built. This could potentially be a significant cost to the developer.			
	Drinking water	Development would require additional work to increase supply in the area and funding would be required. In the short term (2020-2025) there is very limited additional capacity. There is additional headroom in AMP8 (2025 onwards) which could potentially support this growth.			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer.			

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	Rail transport	Not proximate to any rail stations but situated on branch line to Gloucester. Growth, other than very highest scales, unlikely to be able to justify new station provision and possible issues with provision of access for significant additional rail movements at junctions with mainline.			
	Bus transport	Within 500m of existing low frequency bus route but may be too far from Gloucester to mean that improvements in frequency result in any meaningful increase in bus patronage.			
	Cycle transport	Distant from existing cycle network and key destinations, so cycle improvements unlikely to significantly increase cycle trips.			

Viability

	Development Type					
	Small Village			Large Village	Town/City	
Dwellings	2,500	3,500	4,500	7,500	10,000 (70% net)	10,000 (60% net)
Indicative developer contributions and affordable housing pool/per unit (£)	0	0	0	0	25,000	15,000
Viability	Low	Low	Low	Low	Medium	Medium

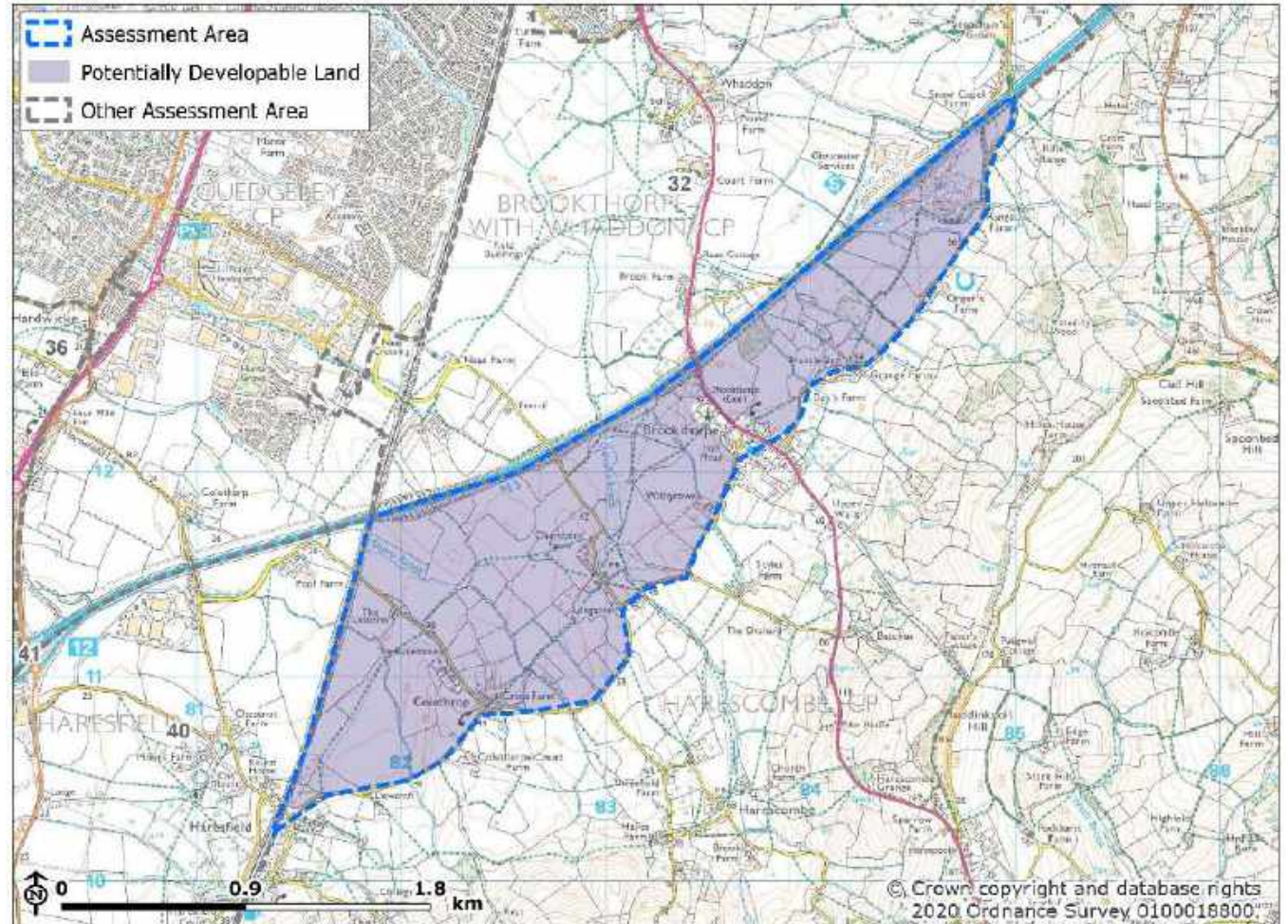
Assessment Area 39 – New Settlement: South of Gloucester (A4173 corridor)

Assessment Area Ref: 39

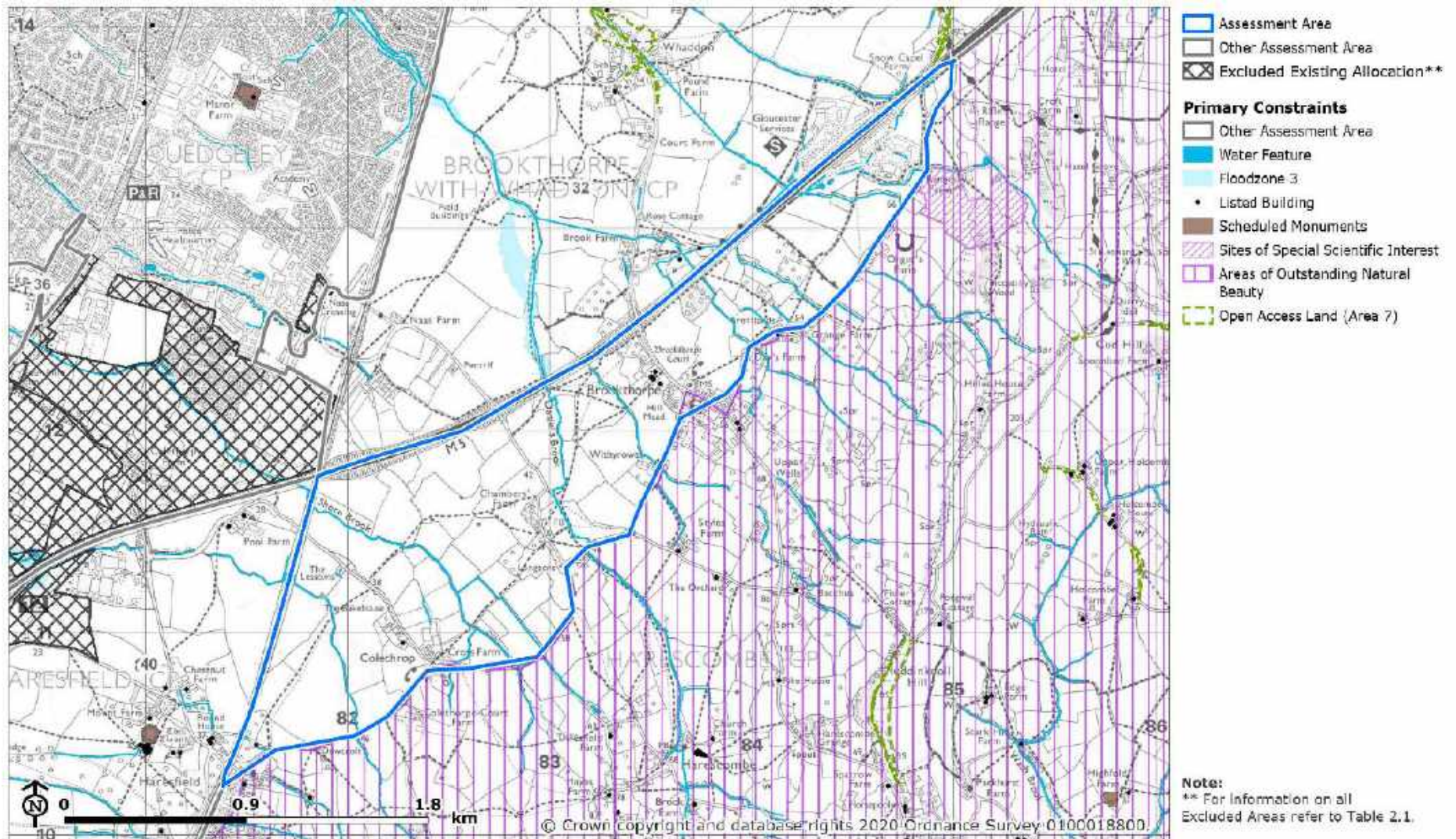
Authority Area: Stroud District

Development Typology: New Settlement

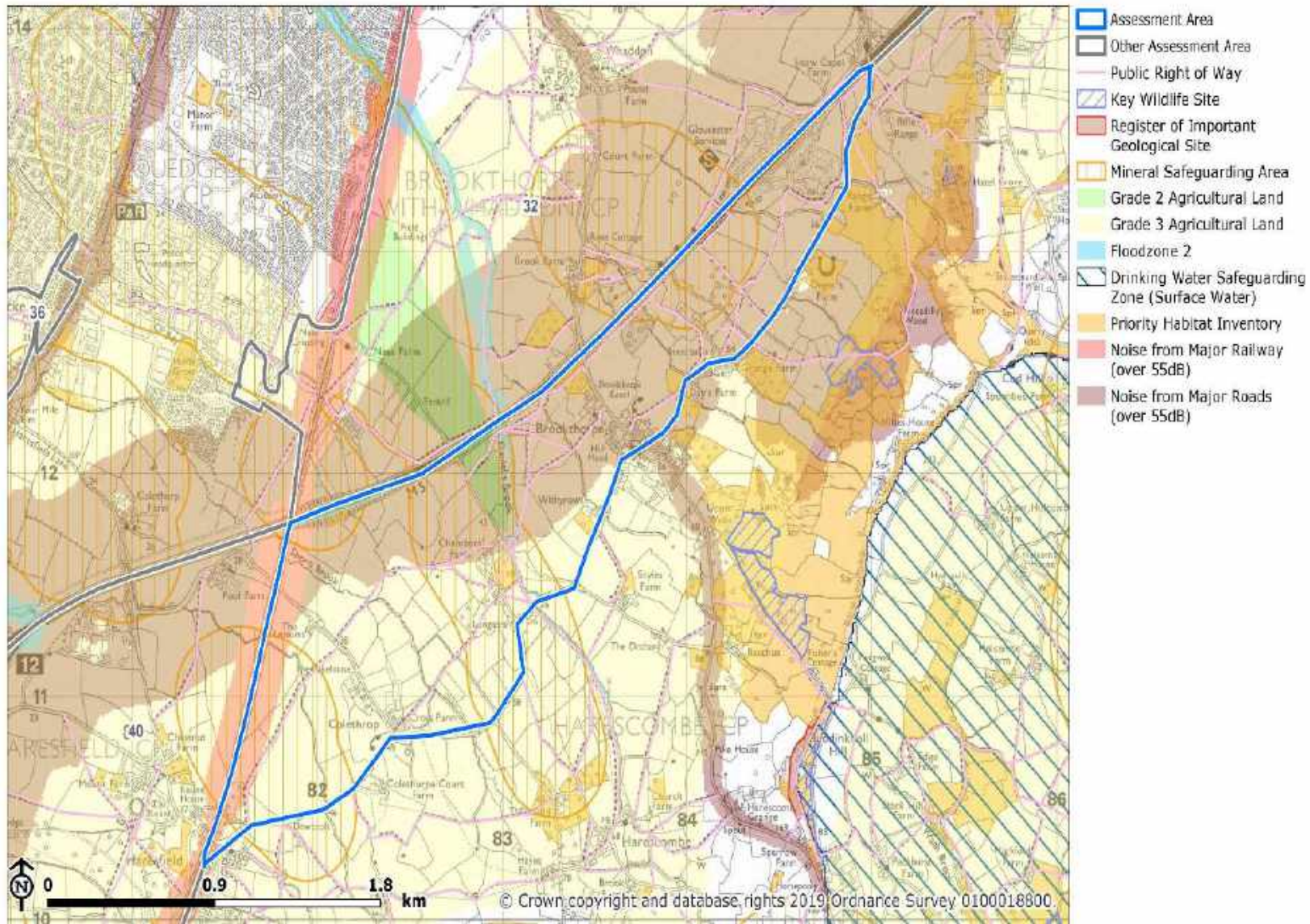
Area: ~316ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
<p>Historic Environment</p>	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 12 listed buildings within the assessment area; these are all grade II save for the grade II* Brookthorpe Court and Church of Swithin, which are both in Brookthorpe. Five of the grade II listed structures are burial monuments in the church’s cemetery. The rest comprise a vicarage and several cottages; the latter being dispersed to the south of Brookthorpe. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER records a limited number of non-designated heritage assets within the assessment area. These include: <ul style="list-style-type: none"> Roman settlement at Brookthorpe and possibly near Colethrop; 	<p>The key sensitivities of the assessment area are the listed buildings, which for the most part are clustered towards Brookthorpe. This area is of further sensitivity due to the presence of non-designated heritage assets that may be of more than local significance e.g. the former church house and the Civil War skirmish site.</p> <p>To the north of Brookthorpe there are two grade II listed farmhouses on the eastern edge of the assessment area, the significance of which could be harmed by development.</p> <p>To the south of Brookthorpe there are a series of dispersed listed buildings –mainly cottages – which could also be harmed in the event of development.</p> <p>The historic settlement of Haresfield lies to the southwest of the assessment area; it contains listed buildings that could be susceptible to setting change as a result of development within the very southern end of the assessment area.</p> <p>Coalescence of Brookthorpe and the historic component of Haresfield should be avoided in order to maintain their separate character/ identity and preserve the setting of the listed buildings that contribute to this. To a large extent the existing railway acts as a barrier to their conflation.</p>	N/A	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Roman trackway and enclosures near Range Farm; - Site of a Civil War skirmish, Brookthorpe; - Remains of a late medieval church house associated with the grade II* Church of St Swithin; - Medieval ridge and furrow; - The sites of former buildings in Colethrop and Brookthorpe; - An ex-situ medieval village cross socket; - An undated enclosure; - Extant historic buildings at Brookthorpe; - Medieval and post-medieval tracks/roads; and - Railways. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC data indicates a rural landscape interspersed with settlement at Brookthorpe, Colethrop and Haresfield. The rural landscape is comprised of a mix of irregular, less irregular and less regular enclosures. These could 	<p>Given the sensitivities of the assessment area it is unlikely that a new settlement could be accommodated without giving rise to significant negative effects.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are a number of listed buildings in the wider vicinity of the assessment area. Of these, those which may be susceptible to setting change include: <ul style="list-style-type: none"> - The grade II* church of St Peter; - The grade II listed Haresfield Court; - The grade II Starmead Farmhouse and cottage 2 metres to north east; - The grade II* Hillies House; - The grade II listed Grange Farmhouse; - The grade II listed Brentlands Farmhouse. • There are a number of scheduled monuments in the wider vicinity of the assessment area; 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>however, it is unlikely that these would be meaningfully affected by its development.</p> <p><i>Non-designated</i></p> <ul style="list-style-type: none"> No non-designated assets with the potential for meaningful setting change have been identified at this stage. 				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> No assets within the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> SSSI (Range Farm Fields) adjacent to the north-eastern boundary. Approximately 50% of the SSSI is within 250m of the assessment area. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI (Robinswood Hill Quarry) 1.6km north. <p>IRZs:</p> <ul style="list-style-type: none"> The assessment area lies within multiple SSSI IRZs, which indicate that all planning applications and residential applications with a total net gain in residential units have the 	<p>Any spatial distribution of development in the assessment area will be required to provide suitable avoidance/mitigations measures to ensure that the networks of priority habitat (traditional orchard) within the assessment area are maintained. There will need to be a suitable buffer zone between any potential development and the SSSI adjacent to the assessment area. It will also be necessary to ensure supporting transport infrastructure minimises severance of habitats in the area.</p> <p>There is the potential to provide green infrastructure in the north to connect to offsite woodlands and the adjacent SSSI.</p> <p>The smallest scale of development could potentially be accommodated with negligible effects by being located in the north-west of the assessment area.</p>	N/A	*	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>potential to impact the statutory designated sites within the local area.</p> <p>Minor negative effects may occur at the medium development size as this scale of development could potentially be accommodated over 250m from the national designation, but still within 2km. Negligible effects may occur in the small village scenario as there is potential to accommodate this scale of development over 250m from local designations and over 2km from international/national designations. Potential negative effects in all cases are likely to be contingent on detailed development design and other mitigation measures.</p>				
Soil Quality	<p>The majority of the assessment area is comprised of grade 3 agricultural land. However, there is approximately an 8ha area of grade 2 agricultural land adjacent to the northern boundary of the assessment area</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality at all development sizes. The effects are uncertain as there is no data distinguishing whether the land is grade 3a or the lower quality grade 3b.</p>	<p>There is significant potential for all development sizes to avoid the area of grade 2 agricultural land as it is restricted to 8ha of land adjacent to the northern boundary of the assessment area. However, the remaining land in the assessment area is still grade 3 and therefore development in any area has the potential to result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or the lower quality grade 3b.</p>	N/A	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Water Quality	The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones. As such, negligible effects are expected in relation to water quality.	N/A	N/A		
Flood Risk	<p>The majority of the assessment area is greenfield. However, the settlement of Brookthorpe is located in the central region of the assessment area and the settlement of Colethrop is located in the south. The assessment area is bisected by the A4173 and there are also multiple local roads as well as areas of agricultural development throughout the assessment area.</p> <p>There is a small area of land located in Flood Zone 2 in the central part of the assessment area due to the presence of Daniel's Brook passing from north to south through the assessment area. There is a further small area of land in Flood Zone 2 in the north-western corner adjacent to the M5.</p> <p>Negligible effects may occur at the smallest and medium development size as these scale of development could potentially be accommodated outside Flood Zone 2.</p>	There area of Flood Zone 2 bisects the assessment area and therefore it may not be possible to deliver a large village as a continuous development.	N/A		
Mineral Resources	Around 50% of land to the west of the A4173 is located within Mineral Safeguarding Areas. To the east of the	There are significant areas of land that are not located within a MSA to the north of Colethrop, in the central region in the vicinity of	N/A	*	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>A4173, there is a 20ha pocket of land adjacent to the M5 that is also located within a MSA.</p> <p>There is potential for development at the medium development size option to result in the sterilisation of mineral resources as there is likely to be insufficient space outside of MSAs to accommodate this scale of development. Significant negative effects may occur in relation to mineral resources at this development size. For a small development, negligible effects may occur in relation to mineral resources as there is potentially space outside MSAs that could accommodate these scales.</p>	<p>Brookthorpe, and in the northernmost part of the assessment area. There is potential for a small scale development to be located in these areas, avoiding the sterilisation of mineral resources.</p> <p>Suitable mitigation may also be possible for larger scale developments, such as the extraction of mineral resources prior to development.</p>			
Noise	<p>Over 50% of the assessment area is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the M5 to the north of the assessment area.</p> <p>Significant negative effects may occur in relation to noise at the medium scale development sizes as there is insufficient space to accommodate this scale of development outside noisy areas. Negligible effects may occur for the small development size option as there is potentially space to accommodate this</p>	<p>Land in the south-west of the assessment area may offer potential for the small scale development option to be accommodated outside of the noisy area. Suitable mitigation to overcome noise related issues may also be possible for larger scale developments.</p>	N/A	*	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	scale of development outside of any noisy areas.				
Odour	The assessment area is not located within any Odour Monitoring Zones or Cordon Sanitaire Zones. As such, negligible effects are expected in relation to odour.	N/A	N/A		

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> Overlooked from the adjacent escarpment within the Cotswolds AONB. Rural, sparsely settled character. <p>Landscape sensitivity is moderate-high for the medium and smallest size option as the key characteristics and qualities of the landscape are sensitive to development at these scales.</p>	N/A	M-H	M-H

Summary of Constraints and Landscape Sensitivity

Overall, the least constrained part of the assessment area is located to the north of Colethrop in the south-west. Development would likely intersect in this location with a noisy area in the north and a Mineral Safeguarding Area to the east and therefore mitigation may be required to avoid noise pollution and the sterilisation of mineral resources. The area's historic environment sensitivity is, however, considered to be high throughout the assessment area and for all development scales. The area is considered to have moderate-high landscape sensitivity to both applicable scales of development. Therefore, the delivery of a new settlement would likely result in significant adverse impacts on landscape character.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected via the A4173 (Stroud Road), which provides access to Whaddon and Gloucester to the north, and Painswick and Stroud to the south. Haresfield Lane and Colethrop Lane, provide local access to the south of the assessment area.</p> <p>St Barnabas Roundabout is located to the north of the assessment area and is considered a 'critical junction' by the JCS Transport Evidence Base. The JCS modelling work's Do Nothing and Do Minimum scenario tests forecast that this junction will operate within its design capacity in 2031 (at 65% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>Another 'critical junction' located nearby is Cross Keys Roundabout which located to the west of the assessment area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate beyond its design capacity in 2031 (at 123% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>Another 'critical junction' located nearby is M5 Junction 12, to the south west of the assessment area. The JCS modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate close to its design capacity in 2031 (at between 99% and 88% Ratio to Flow Capacity during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 84,476</p> <p>A high number of workplaces (jobs) can currently be accessed by public transport from the assessment area, with bus services operating along the A4173 corridor to Gloucester.</p>	

Criterion	Rationale	Score
	<p>Number of workplaces (jobs) accessible within 30 minutes = 284,810</p> <p>Access from the assessment area to employment by Car scores high, with the assessment area in close proximity to major roads providing direct links to key urban centres / employment sites.</p>	
<p>Access to other key services and facilities by public transport</p>	<p>TRACC Accessibility Modelling outputs show that urban centres and healthcare facilities are between 20 and 40 mins travel time by public transport services, while education facilities are accessible within 20 mins across most of the assessment area.</p>	
<p>Private car use by commuters</p>	<p>% Driving a Car or Van = 72%</p> <p>Car based commuter trips currently account for an average of 72% commuter journeys in LSOAs covered by the assessment area.</p>	
<p>Proximity to sustainable transport networks</p>	<p>The assessment area is beyond a 5km catchment area of a rail station, and is partially served by a high-frequency bus service into Gloucester. There are currently no strategic walking or cycling routes close to the assessment area.</p>	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	Due to the limited existing sewerage network a new network and Sewage Treatment Works should be built. This could potentially be a significant cost to the developer.	N/A		
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).	N/A		
	Electricity	All of site served by Tuffley Primary Substation which currently has only between 10% and 25% capacity available. Substation will therefore require expansion which would need to be included in next investment programme.	N/A		
	Gas	Reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer	N/A		
	Rail transport	Not proximate to any rail stations but situated on mainline. All scales of growth unlikely to be sufficient to justify new mainline station.	N/A		
	Bus transport	Within 500m of existing low frequency bus route and close enough to both Gloucester and Stroud to mean that improvements in frequency could result in reasonably high levels of bus patronage (particularly if developed jointly with assessment area 32). Higher scales of growth may be sufficient to secure levels of investment needed to deliver improvements to bus services.	N/A		

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	Cycle transport	Distant from existing cycle network and both Gloucester and Stroud just outside reasonable cycling distance, so cycle improvements unlikely to significantly increase cycle trips.	N/A		

Viability

	Development Type					
	Small Village			Large Village	Town/City	
Dwellings	2,500	3,500	4,500	7,500	10,000 (70% net)	10,000 (60% net)
Indicative developer contributions and affordable housing pool/per unit (£)	40,000	40,000	40,000	40,000	N/A	N/A
Viability	High	High	High	High	N/A	N/A

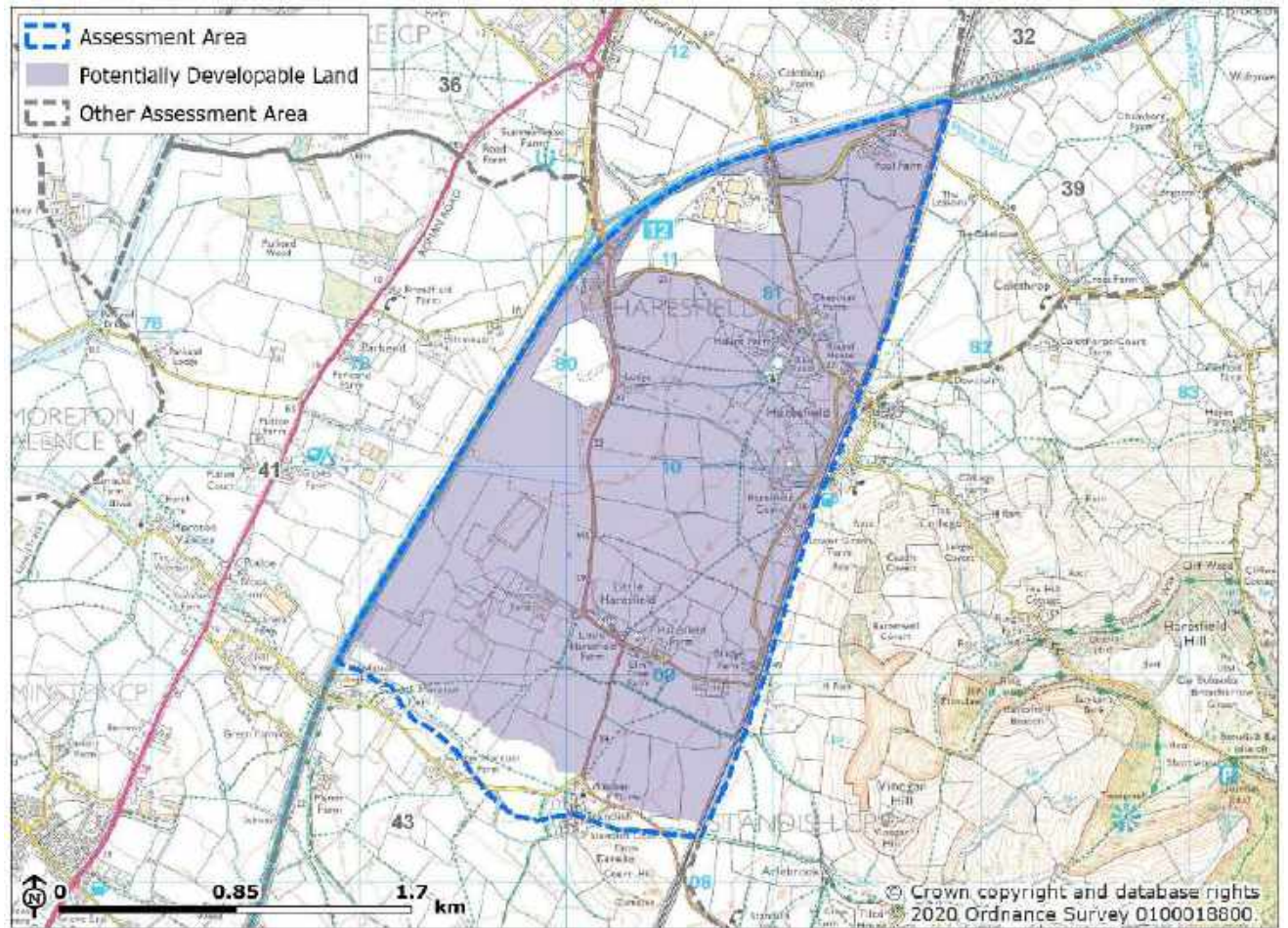
Assessment Area 40 – New Settlement: South of Gloucester (East of M5)

Assessment Area Ref: 40

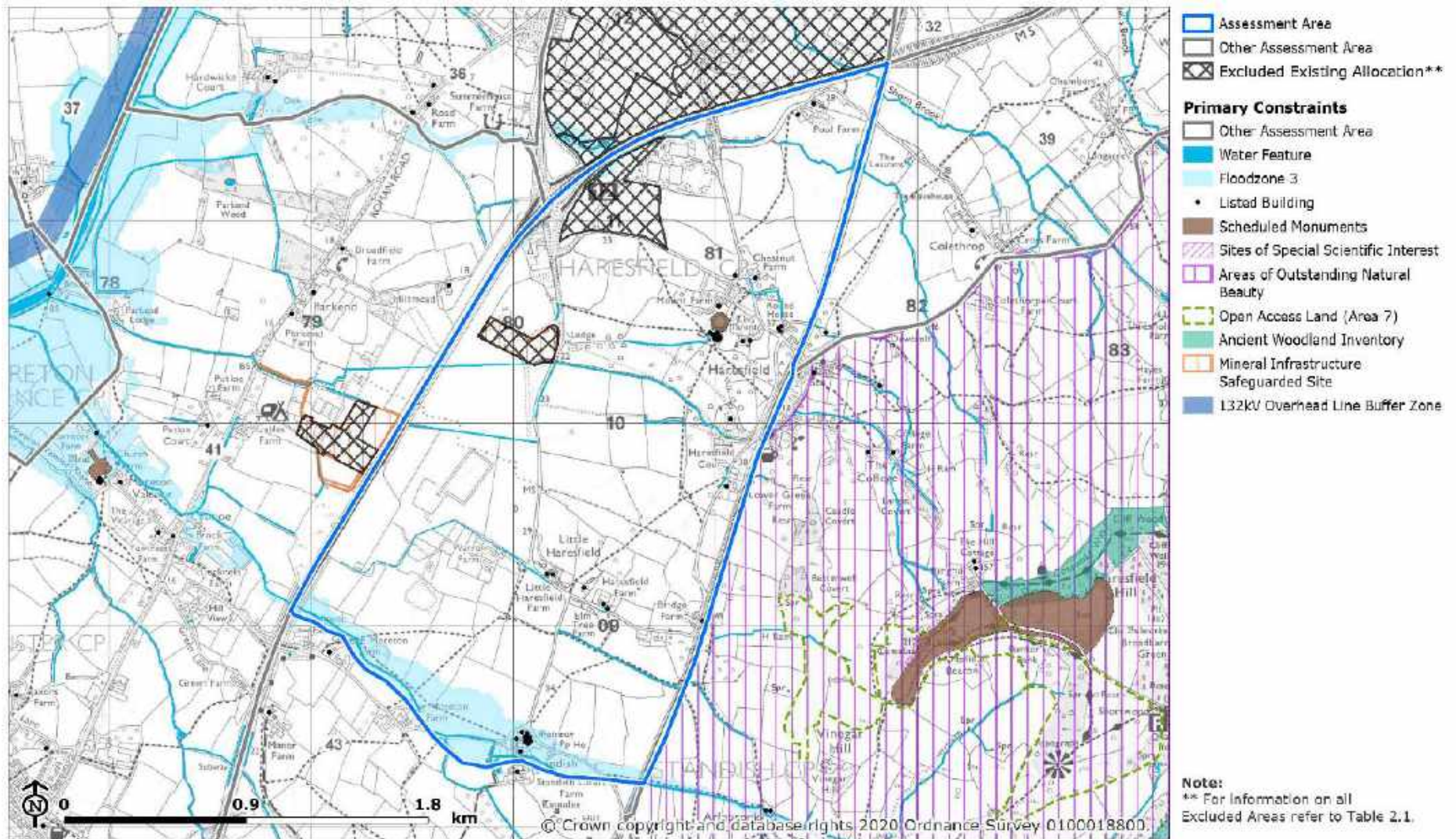
Authority Area: Stroud District

Development Typology: New Settlement

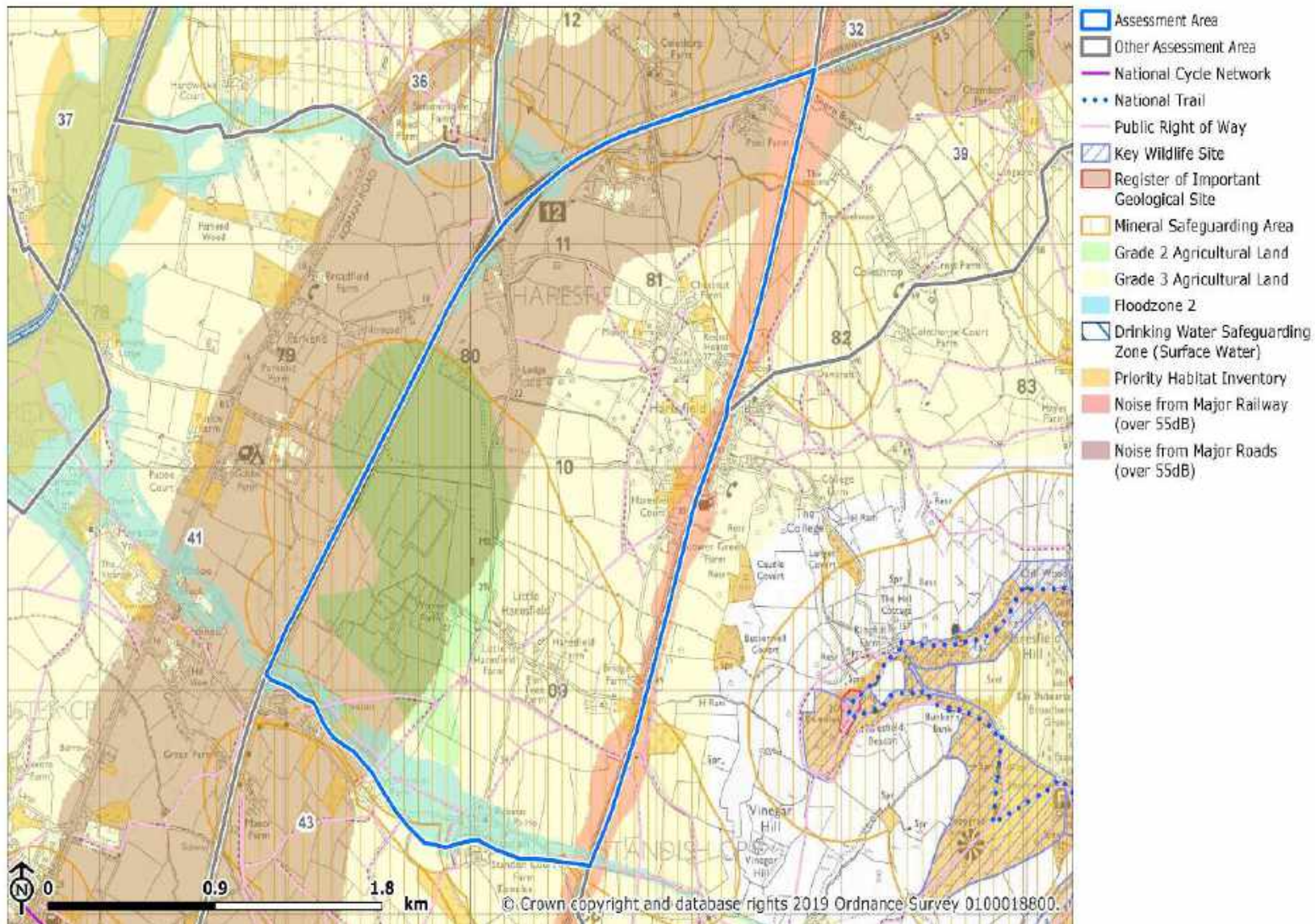
Area: ~548ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 32 listed buildings in the assessment area. These include five grade II* buildings, the Church of St Peter in Haresfield and several of its burial monuments. Several other monuments are grade II listed. The remaining grade II buildings include Farmhouses, cottages and agricultural buildings, two former vicarages, a former country house (Haresfield Court), and a railway bridge. Most of the listed buildings are located within and around Haresfield or little Haresfield, save for Pool Farmhouse and Cottage which are outliers to the north and Quintons Cottages (now a house) to the south. There is a scheduled moat site within Haresfield. 	<p>The historic rural settlement of Haresfield is particularly sensitive to development as it contains both listed and scheduled assets. The grade II listed Haresfield Court lies to the south of the settlement and, along with its non-designated former parkland and lodge, which are of more than local significance, represents another key sensitivity of the assessment area. The moated manor site at Haresfield and the Saxon burial markers are also likely to be of more than local significance.</p> <p>The area north of Haresfield is also sensitive due to the listed buildings at Pool Farm and the presence of a medieval settlement and possible moated site that may be of more than local significance.</p> <p>The listed buildings at Little Haresfield, and beyond the assessment area at Standish, mean that the southern end of the assessment area is also sensitive to development. The medieval settlement in this area could also be of more than local significance.</p> <p>The least sensitive part of the assessment area therefore appears to be the western stretch immediately adjacent to the M5. However, development in this area could not accommodate a small village unless at the very lowest end of the scale. Given this, the assessment area has been assessed as being</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p><i>Non-designated</i></p> <ul style="list-style-type: none"> • The HER indicates that there are a number of non-designated heritage assets within the assessment area. These include, but are not limited to: <ul style="list-style-type: none"> - Prehistoric or Roman enclosures; - A Roman cemetery at Haresfield; - Possible Saxon burial markers in Haresfield Churchyard; - The sites of Netheridge Manor and a moated manor at Haresfield; - The sites of a mill, toll-house, a medieval to post-medieval settlement near Standish; - Possible medieval potteries near Haresfield; - A medieval settlement and possible moated site near Pool Farm; - The former parkland associated and an extant lodge house associated 	likely to result in significant negative effects to the historic environment.			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>with the listed Haresfield Court;</p> <ul style="list-style-type: none"> - Former roads and trackways of Roman to post-medieval date; - Extant and disused railways; - Modern military sites including the site of the WII airfield at Moreton Valance and an RAF station. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC data indicates a primarily agricultural land interspersed with historic settlements at Haresfield, Little Haresfield and Standish Moreton. The agricultural landscape comprises a mix of irregular, less irregular, regular and less regular enclosure. The irregular and less regular enclosures have some time-depth and value in themselves and could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>Regulations 1997. There is also an area of surviving post-medieval ornamental parkland associated with Haresfield Court and to the west of this a disused airfield.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are a large number of listed buildings within the wider vicinity of the assessment area. However, of these, the most susceptible to meaningful setting change appears to be the grade I Church of St Nicholas in Standish. • There are also a number of scheduled monuments in the wider vicinity of the assessment area. Of these, those most susceptible to setting change as a result of development are: <ul style="list-style-type: none"> - Two bowl barrows on Court Hill; and - Haresfield Hill camp and ring hill earthworks. 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER records a number of non-designated heritage assets in the wider vicinity of the assessment area. However, none have been identified as being particularly susceptible to setting change. 				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> No assets within the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> There are no international, national or local designations within 250m of the assessment area. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI (Haresfield Beacon) 1km east. Also a designated site of geological importance and located adjacent to two large Key Wildlife Sites (Cliff Wood and Haresfield Hill) as well as Ancient Woodland (Cliff Wood). <p>IRZs:</p> <ul style="list-style-type: none"> The assessment area lies within three SSSI IRZ, which indicate 	<p>Any spatial distribution of development in the assessment area will be required to provide suitable avoidance/mitigation measures to ensure that the networks or traditional orchard and deciduous woodland priority habitat (north and south west of the assessment area) are maintained. It will also be necessary to ensure supporting transport infrastructure minimises severance of habitats in the area.</p> <p>The stepping stones of woodland and interlinking hedgerows through the assessment areas should be safeguarded. There is an opportunity to extend and connect these features to provide enhancement.</p> <p>There is also the opportunity for development to provide green infrastructure which could link to the woodlands offsite to the east.</p> <p>The small village scale of development could potentially be accommodated with negligible effects in the north-east or north-west corners of the assessment area.</p>	<p style="text-align: center;">*</p>	<p style="text-align: center;">*</p>	<p style="text-align: center;">*</p>

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>that residential developments with a total net gain in residential units have the potential to impact statutory designations within the wider area.</p> <p>Minor negative effects may occur for the medium and large scale of development as it is likely that they could not be accommodated without falling within 2km of a national designation. Negligible effects may occur in the small village scenario as this scale of development could be accommodated over 2km from the national designation. Potential negative effects in all cases are likely to be contingent on detailed development design and other mitigation measures.</p>				
Soil Quality	<p>The majority of the assessment area is comprised of grade 3 agricultural land. However, there is a large area of grade 2 agricultural land in the south-west and west of the assessment area, comprising approximately 106ha.</p> <p>There is potential for development to result in the loss of high quality agricultural land. The effects are uncertain as there is no data distinguishing whether the majority of</p>	<p>There is potential for development at the small and medium scale to avoid the loss of grade 2 agricultural land as this grade is restricted to the west and south-west. The development of a larger settlement would likely result in the loss of some Grade 2 land. However, the remaining land in the assessment area is still grade 3 and therefore development in any location has the potential to result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or grade 3b.</p>		?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	the land in the assessment area is grade 3a or the lower quality grade 3b.				
Water Quality	The assessment area is not located within any Drinking Water Safeguarding Zones or Source Protection Zones. As such, negligible effects are expected in relation to water quality.	N/A			
Flood Risk	<p>The majority of the assessment area is greenfield. However, the settlement of Little Haresfield is located in the south and part of the settlement of Haresfield is located in the north. There are also multiple local roads distributed throughout the area as well as areas of agricultural development.</p> <p>There is approximately 24ha of land in the southernmost part of the assessment area that is located within Flood Zone 2 due to the presence of a watercourse (Epney Rhyne) passing through the area from west to east. In addition, there are also smaller areas of land located within Flood Zone 2 directly adjacent to the north-western boundary of the assessment area.</p> <p>Negligible effects may occur for all development sizes as there is potentially sufficient space to</p>	There is potential for all scales of development to be located outside the area of Flood Zone 2 in the south of the assessment area.			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	accommodate these scales of development outside of Flood Zone 2.				
Mineral Resources	<p>Over 50% of land within the assessment area is located within Mineral Safeguarding Areas (MSAs).</p> <p>There is potential for development at the largest and medium sizes to result in the sterilisation of mineral resources and therefore significant negative effects may occur at this scale. Negligible effects may occur in relation to mineral resources for a small development as there is potentially sufficient space to accommodate this scale of development outside MSAs.</p>	<p>The majority of the northern half of the assessment area is not located within a MSA and therefore development at the small size could be accommodated outside MSAs.</p> <p>Suitable mitigation may be possible at larger scales of development, such as extraction of mineral resources prior to development.</p>	*	*	
Noise	<p>All of the land in the western half of the assessment area falls within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the M5 on the western boundary. In addition, land directly adjacent to eastern boundary is also within a noisy area due to the presence of a railway line.</p> <p>Significant negative effects may occur for the largest development size in relation to noise as there is insufficient space to accommodate this scale</p>	<p>There is approximately 254ha of land in the eastern half of the assessment area that is not located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours that could potentially accommodate development at the small and medium scales. Suitable mitigation may also be possible to overcome noise related issues in larger scale Development Types.</p>	*		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	outside of noisy areas. Negligible effects may occur in relation to noise for the medium and small development sizes as there is potentially sufficient space to accommodate these scales outside of noisy areas.				
Odour	The assessment area is not located within any Odour Monitoring Zones or Cordon Sanitaire Zones.	N/A			
	As such, negligible effects are expected in relation to odour.				

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> Overlooked from the adjacent escarpment within the Cotswolds AONB. Parkland estate character around Haresfield. Sparsely settled with the small village of Haresfield and scattered farms. Rural character despite its location adjacent to the M5. 	H	M-H	M-H

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
As such, landscape sensitivity is high for the largest development size as the key characteristics and qualities of the landscape may be highly sensitive to development at this scale. Landscape sensitivity is reduced to moderate-high for the large and small village development options.			

Summary of Constraints and Landscape Sensitivity

The eastern part of the assessment area is particularly sensitive in terms of the historic environment due to the presence of the historic settlements of Haresfield in the north and Little Haresfield in the south. The western half of the assessment area is significantly constrained by grade 2 agricultural land, limiting the scale of development that can be accommodated without significant adverse effects upon soils. This part of the assessment area is also affected by the M5 noisy area and MSAs, although mitigation may be possible in these respects. The assessment area is also sensitive in terms of landscape. Landscape sensitivity is reduced under the small village and large village scenarios compared to the largest scale of development. However, landscape sensitivity is still considered to be moderate-high at these scales.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is well connected via the B4008 (Gloucester Road), which links directly into Junction 12 of the M5 and provides highway connections to the urban centres of Gloucester and Cheltenham.</p> <p>M5 Junction 12 is located to the north of the assessment area and is considered a 'critical junction' by the JCS/SADC Transport Evidence Base. The JCS/SADC modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate just within its design capacity in 2031 (at between 99% and 88% Ratio to Flow Capacity during the AM and PM peak periods).</p>	

Criterion	Rationale	Score
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 102,384</p> <p>A high number of workplaces (jobs) can currently be accessed by public transport from the assessment area, which is currently served by high frequency bus services.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 279,219</p> <p>Access from the assessment area to employment by Car scores high, with the assessment area in close proximity to major roads providing direct links to key urban centres / employment sites.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that the assessment area is accessible to urban centres and healthcare facilities within 20 to 40 mins travel time by public transport, while education facilities are generally within 20 mins.</p>	
Private car use by commuters	<p>% Driving a Car or Van = 70%</p> <p>Car based commuter trips currently account for an average of 70% of commuter journeys in LSOAs covered by the assessment area.</p>	
Proximity to sustainable transport networks	<p>The majority of the assessment area is located within the 5km catchment of Stonehouse Rail Station and is served by several high-frequency bus routes that serve Gloucester. The assessment area is currently divorced from strategic walking / cycling routes.</p>	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	Due to the limited existing sewerage network a new network and Sewage Treatment Works should be built. This could potentially be a significant cost to the developer.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	All of assessment area served by Tuffley Primary Substation which currently has only between 10% and 25% capacity available. Substation will therefore require expansion which would need to be included in next investment programme.			
	Gas	At lowest levels of growth, load is acceptable unless also connected with assessment area 37, in which case reinforcement of pipeline network would be required, with the cost of downstream reinforcement to be borne by developer. At all other levels of growth, reinforcement will be required, with the cost being borne by the developer.			
	Rail transport	Southern half of area within 5km of Stonehouse branch line station which serves the key destinations of Stroud and Gloucester. Improvements to the capacity of rail services to Gloucester may be restricted due to limitations on branch line access to the mainline at junctions.			

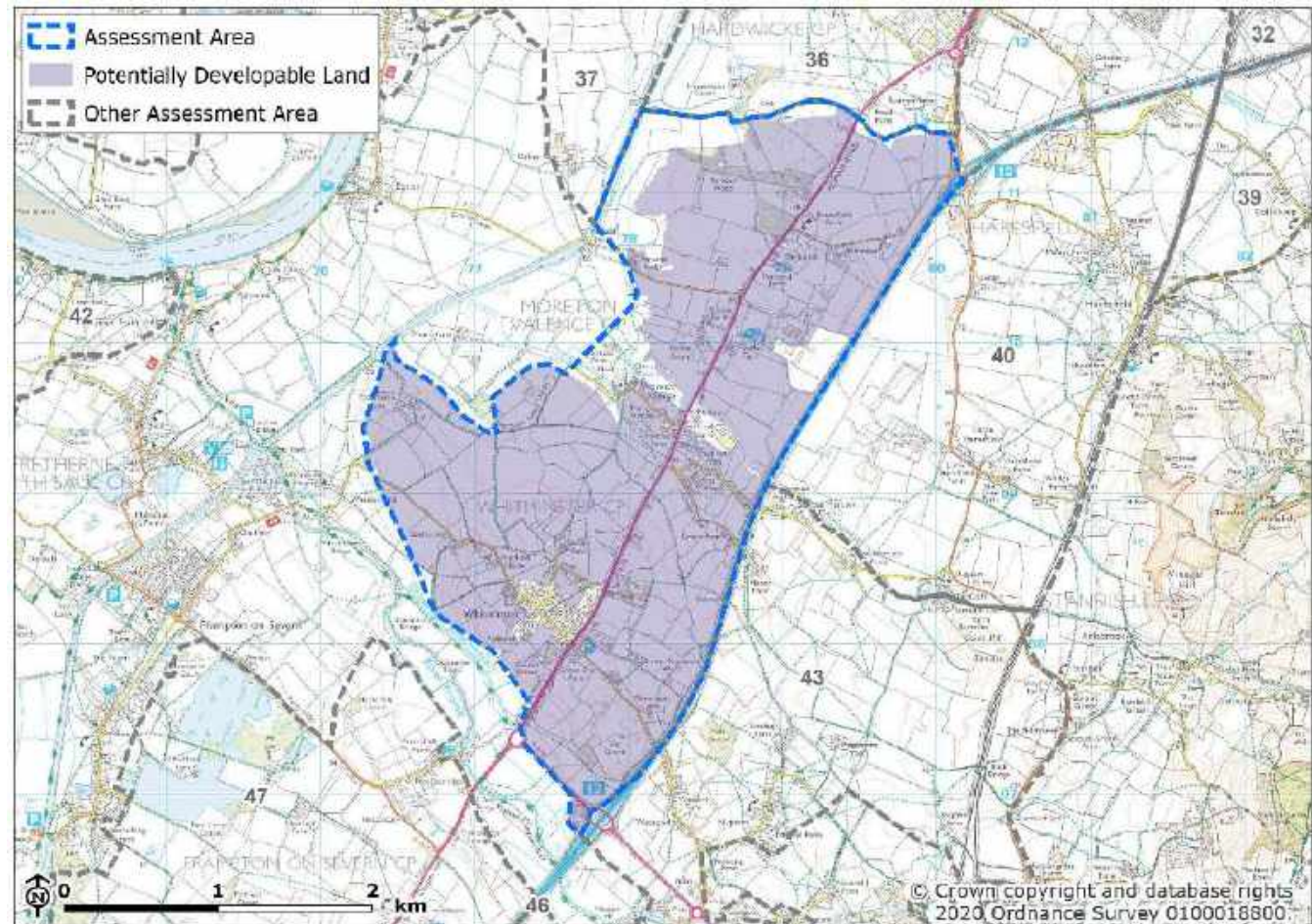
Assessment Area 41 – New Settlement: South of Gloucester (West of M5, A38 corridor)

Assessment Area Ref: 41

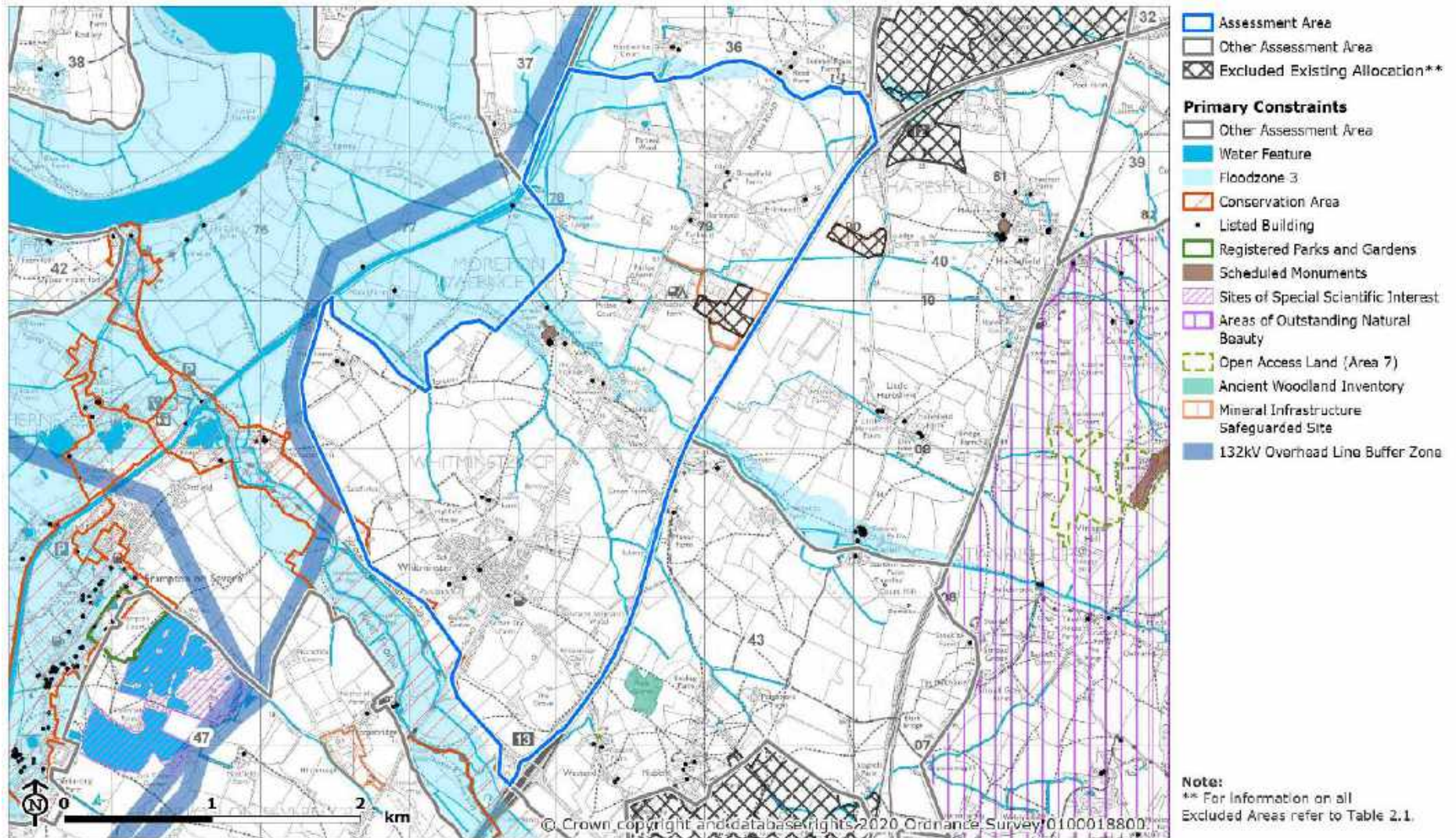
Authority Area: Stroud District

Development Typology: New Settlement

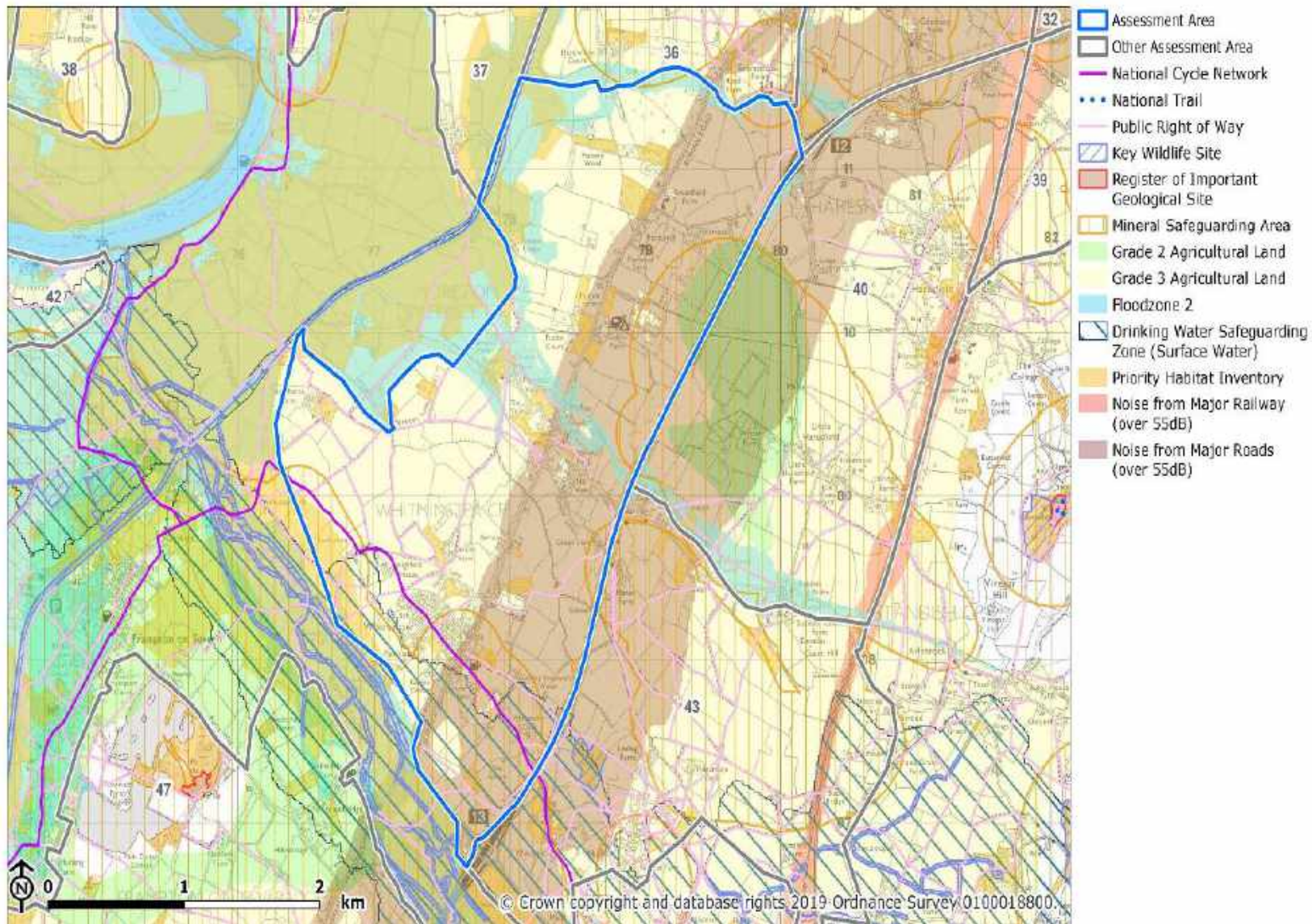
Area: ~851ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> The southwestern edge of the assessment area overlaps and abuts Stroud's Industrial Heritage Conservation Area. There are 23 listed buildings in the assessment area. These are all grade II listed except for the grade I Church of St Stephen in Moreton Valance, a number of the burial monuments in its cemetery are also listed. The remaining grade II structures include farmhouses, cottages, houses, and an inn. These are typically associated with the settlements of Whitminster or Moreton Valance, or located alongside the A38. There is a scheduled moated site at Church Farm, Moreton Valance. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER records a number of non-designated heritage assets within the assessment area. 	<p>The southern end of the assessment area is highly sensitive to development due to the conservation area and listed buildings within and around Whitminster, a historic settlement that has been expanded in modern times.</p> <p>The historic settlement of Moreton Valance and the listed buildings and scheduled monument therein lie at the centre of the assessment area. Further sensitivities of this area include the non-designated possible site of the church house.</p> <p>The northern part of the assessment area is sensitive to development due to the listed buildings associated with Parkend and just beyond the assessment area at Hardwicke Court. The non-designated former parkland of this country house extends into the assessment area and may be considered to be of more than local significance due to its association with a nationally important building. The possible Roman villa by Parkend Bridge could also be of regional or greater significance.</p> <p>There is insufficient room to accommodate a new settlement between these historic rural settlements and the historic environment sensitivities associated with them. For this reason, a significant negative effect is predicted in relation to a new development of any size.</p>	?	?	?




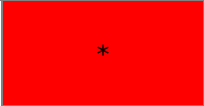


Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>These include, but are not limited to:</p> <ul style="list-style-type: none"> - A possible Iron Age settlement near Broadfield Farm; - A possible Roman villa at Parkend Bridge; - Roman land reclamation; - Site of Haresfield deer park; - Possible early medieval to medieval settlement near Brook Farm, Moreton Valance; - Possible site of a Church House, Moreton Valance; - Various post-medieval building sites, industrial features and agricultural features; - Hardwicke Court gardens/parkland; - Canal and associated features; - Roads and trackways of various dates; - Various modern military sites. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC indicates a mixed landscape comprised of historic 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>settlement at Whitminster, Moreton Valance, Putloe, and Parkend, a disused airfield and agricultural land. The agricultural landscape is comprised of a mix of irregular, less irregular, regular and less regular enclosures, as well as some enclosed riverine pasture. The irregular and less regular enclosures are likely to have some time-depth and value in themselves. They could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are a number of listed buildings in the wider vicinity of the assessment area. Of these, those most susceptible to setting change include the grade II* Hardwicke Court, as well as some grade II farmhouses to the north and east. 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER indicates that there are a number of non-designated heritage assets in the wider vicinity of the assessment area. Of these, the former area of ornamental parkland (associated with the listed Hardwicke Court) to the north appears to be the most susceptible to setting change. 				
<p>Ecological and Geological Environment</p>	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> Part of the Gloucester and Sharpness Canal, which is designated as a Key Wildlife Site, overlaps with the north-western boundary of the assessment area. There are multiple areas of traditional orchard priority habitat in the south and central region of the assessment area. There are areas of floodplain grazing marsh and deciduous woodland priority habit in the north-west of the assessment area. There is also further floodplain grazing marsh adjacent to the southern boundary. <p>Assets within 250m:</p>	<p>Any spatial distribution of development in the assessment area will be required to provide suitable avoidance/mitigation measures to ensure that the wooded river corridor along the southern and western boundaries of the assessment area is maintained, the severance priority habitats in the north and south is minimised and a suitable buffering region is established between development and the Gloucester and Sharpness Canal. It will also be necessary to ensure supporting transport infrastructure minimises severance of habitats in the area.</p> <p>Development in or adjacent to floodplain grazing marsh will be tightly constrained. Whilst avoidance as the first stage of the Mitigation Hierarchy should be emphasised, this habitat type offers opportunity for enhancement.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> Ancient Woodland (Mole Grove) 160m south-east, which is also a Key Wildlife Site. The Gloucester and Sharpness Canal Key Wildlife Site is adjacent to sections of the southern and western boundaries of the assessment area. Key Wildlife Site (River Frome Mainstream and Tributaries) lies to the south and west of the assessment area. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI (Frampton Pools) 1.2km south-west. <p>IRZs:</p> <ul style="list-style-type: none"> The assessment area lies within a number of SSSI IRZs, which indicate that a total net gain in residential units has the potential to impact the statutory designations within the wider area. <p>Negligible effects may occur in all development scenarios as there is potential to accommodate them over 250m from local designations and over 2km from international/national designations.</p>	<p>The river and floodplain forms a key component of the habitat connectivity through the wider landscape of assessment area and its functionality should be maintained regardless of any development proposals.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Soil Quality	<p>The majority of the assessment area is comprised of grade 3 agricultural land. However, there is approximately 16ha of land adjacent to the north-eastern boundary of the assessment area that is grade 2 agricultural land.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur at all development sizes. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	<p>There is significant potential for all development scales to avoid the area of grade 2 agricultural land as this area is a relatively small area adjacent to the assessment area boundary. However, the remaining land within the assessment area is still grade 3 and therefore there is potential for development at any location in the assessment area to result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or grade 3b.</p>	?	?	?
Water Quality	<p>There is approximately 101ha of land adjacent to the southern boundary of the assessment area that is located within a drinking water safeguarding zone.</p> <p>Significant negative effects may occur at the largest development size as it may not be possible to accommodate this scale of development without encroaching on the drinking water safeguarding zone. Negligible effects may occur at the smallest and medium development sizes as there is potentially sufficient space to accommodate these scales of development outside the drinking water safeguarding zone.</p>	<p>Development at the small and medium sizes could potentially avoid the drinking water safeguarding zone to the south by being located to the north of Whitminster.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Flood Risk	<p>The majority of the assessment area is greenfield. However, the settlement of Whitminster is located in the south, Moreton Valence is located in the central portion and Parkend is located in the north. Additionally, the A38 bisects the assessment area from north to south and there are a number of local roads as well as areas of agricultural development distributed throughout the area.</p> <p>There are also smaller areas of Flood Zone 2 on developable land in the central and northern parts of the assessment area.</p> <p>Significant negative effects may occur at the largest development size as it may not be possible to accommodate this scale of development without encroaching into areas of Flood Zone 2. Negligible effects may occur at the smallest and medium development sizes as these scales of development could potentially be accommodated outside Flood Zone 2.</p>	<p>There is potential for development at the small and medium sizes to be located to the north of Whitminster, avoiding Flood Zone 2, or for the small village development size to be located in the northern half of the area outside of Flood Zone 2.</p>			
Mineral Resources	<p>There is approximately 141ha of land in adjacent to the southern boundary of the assessment area that is located within a Mineral Safeguarding Area (MSA). There is approximately 63ha of land adjacent to the eastern boundary that is also located within MSA.</p>	<p>Development at the small and medium sizes could potentially be accommodated outside MSAs to the north of Whitminster, or development at the smallest size could potentially be accommodated outside MSAs in the north of the area.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>There is potential for development to result in the sterilisation of mineral resources. Significant negative effects may occur at the largest development size as it is unlikely this scale of development could be accommodated without intersecting with MSAs. Negligible effects may occur at the small and medium development options sizes as these scales of development could potentially be accommodated outside of MSAs.</p>	<p>Suitable mitigation may be possible at larger development scales, where extraction occurs prior to development.</p>			
Noise	<p>The entirety of the eastern half of the assessment area is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to presence of the M5 on the eastern boundary and in part due to the A38 that bisects the assessment area.</p> <p>Significant negative effects may occur at the largest development option size in relation to noise as there is potentially insufficient space to accommodate this scale of development outside noisy areas. Negligible effects may occur in relation to noise at the medium and small development sizes as there is potentially sufficient space to accommodate these scales outside noisy areas.</p>	<p>The western half of the assessment area does not contain any land located areas of high noise Noisy area. This area could potentially accommodate developments at the medium and small scales outside noisy areas.</p> <p>Suitable mitigation may be possible at larger development sizes to overcome noise- related issues.</p>	*		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Odour	The assessment area is not located within any Odour Monitoring Zones or Cordon Sanitaire Zones.	N/A			
	As such, negligible effects are expected in relation to odour.				

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • Parkland estate character associated with Hardwicke Court. • Sparsely settled with intact rural character (away from major roads). • Important historic features including the grade I Listed Church of St Stephen in Moreton Valence and a scheduled moated site. <p>As such, landscape sensitivity is high for the largest development option size, as the key characteristics and qualities of the landscape may be highly sensitive to development at this scale. Landscape sensitivity is reduced to moderate-high for smaller development sizes as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	H	M-H	M-H

Summary of Constraints and Landscape Sensitivity

There is land in the south western half of the assessment area that is unaffected by the majority of constraints present elsewhere in the area, including the Flood Zone through the centre of the area, and noisy area covering the eastern half of the area. However, even a small village in the south west has the potential to negatively affect the setting of the conservation area to the south, which contains multiple historic assets. Due to further historic settlements in the central region and north, there is considered to be limited potential for any new settlement in the assessment area that avoids significantly adverse effects on the historic environment. Additionally, the assessment area is also highly sensitive in terms of landscape character. Landscape sensitivity is reduced under the medium and small settlement scenarios. However, even at these scales, the landscape sensitivity is considered to be moderate-high.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The area is connected to the highway network via the A38 (Bristol Road), which runs through the centre of the assessment area and provides a link into Kingsway, Quedgeley and the south of Gloucester.</p> <p>M5 Junction 12 is located directly to the north of the assessment area and is considered a 'critical junction' by the JCS/SADC Transport Evidence Base. The JCS/SADC modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate just within its design capacity in 2031 (at between 99% and 88% Ratio to Flow Capacity during the AM and PM peak periods).</p> <p>M5 Junction 13 is also located to the south of the assessment area and considered a 'critical junction' by the JCS/SADC Transport Evidence Base. The JCS/SADC modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate within its design capacity in 2031 (at 88% Ratio to Flow Capacity during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 92,059</p> <p>A high number of workplaces (jobs) can currently be accessed by public transport from the assessment area, reflecting the high frequency bus services that operate on roads close to the assessment area.</p>	

Criterion	Rationale	Score
	<p>Number of workplaces (jobs) accessible within 30 minutes = 277,234</p> <p>Access from the assessment area to employment by Car scores high, with the site in close proximity to major roads providing links to key urban centres / employment sites.</p>	
<p>Access to other key services and facilities by public transport</p>	<p>TRACC Accessibility Modelling outputs show that the assessment area is between 40 and 60 mins travel time by public transport to accessible to urban centres and healthcare facilities. Education facilities are accessible within 20 mins by public transport services.</p>	
<p>Private car use by commuters</p>	<p>% Driving a Car or Van = 76%</p> <p>Car based trips currently account for an average of 76% of commuter journeys in LSOAs covered by the assessment area, likely reflecting its proximity to the M5 Motorway.</p>	
<p>Proximity to sustainable transport networks</p>	<p>The majority of the assessment area is located within the 5km catchment of Stonehouse Rail Station and is served by a high-frequency bus services which operate along the A38. The assessment area is in close proximity to strategic walking and cycling (NCN) routes in the south, with opportunities to improve links through future development.</p>	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	Due to the limited existing sewerage network a new network and Sewage Treatment Works should be built. This could potentially be a significant cost to the developer.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Load is acceptable, although easement would require high pressure pipeline diversion which would incur a cost to developer.			
	Rail transport	Southern half of assessment area within 5km of Stonehouse branch line station which serves the key destinations of Stroud and Gloucester. Improvements to the capacity of rail services to Gloucester may be restricted due to limitations on branch line access to the mainline at junctions.			
	Bus transport	Within 500m of existing high frequency bus route and close enough to Stroud to mean that improvements in frequency could result in reasonably high levels of bus patronage. Proximity to M5 J12 and J13 would require major bus network expansion to avoid overloading SRN network with significant additional car traffic. Higher scales of growth increase likelihood			

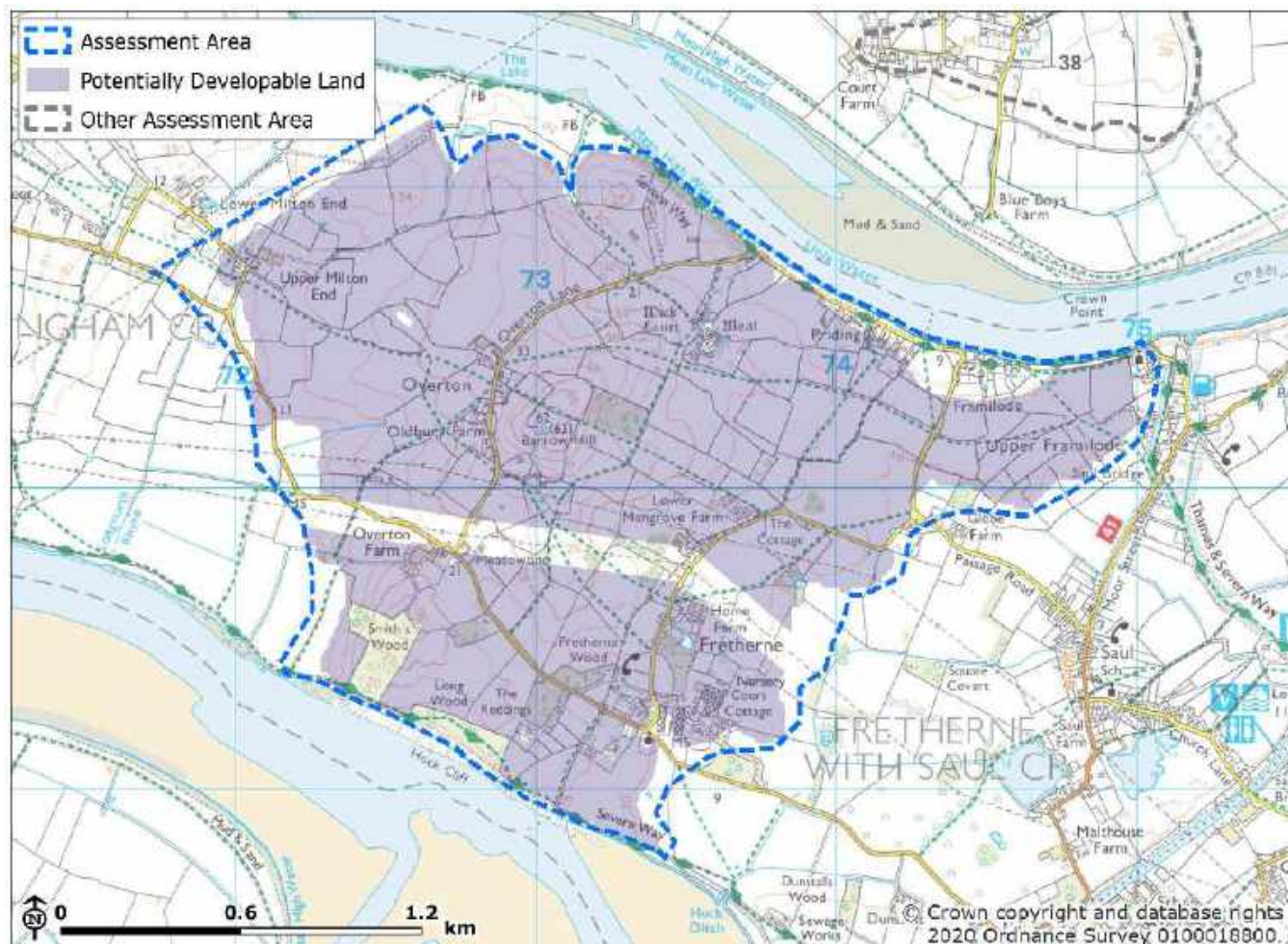
Assessment Area 42 – New Settlement: Land at Overton

Assessment Area Ref: 42

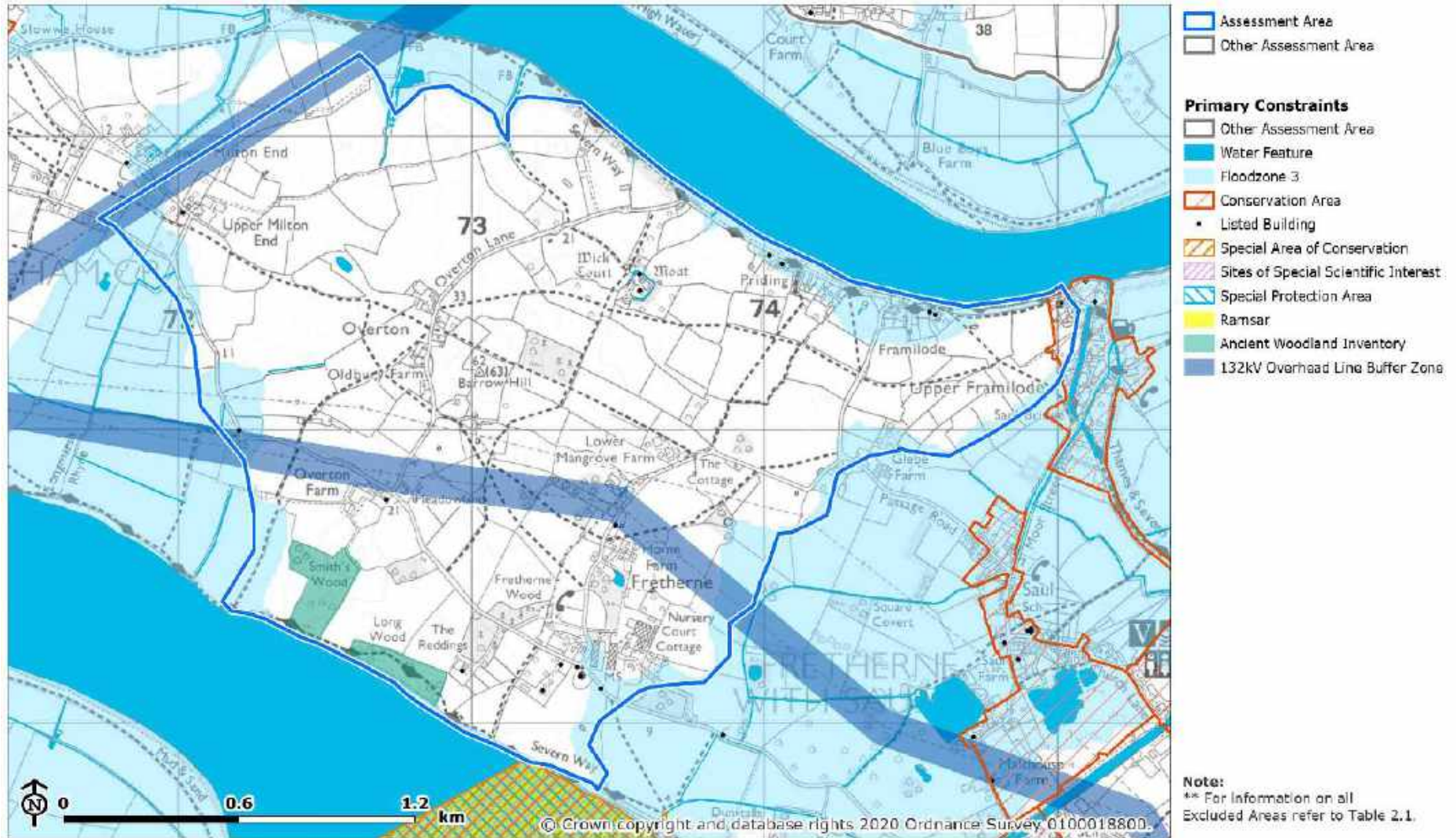
Authority Area: Stroud District

Development Typology: New Settlement

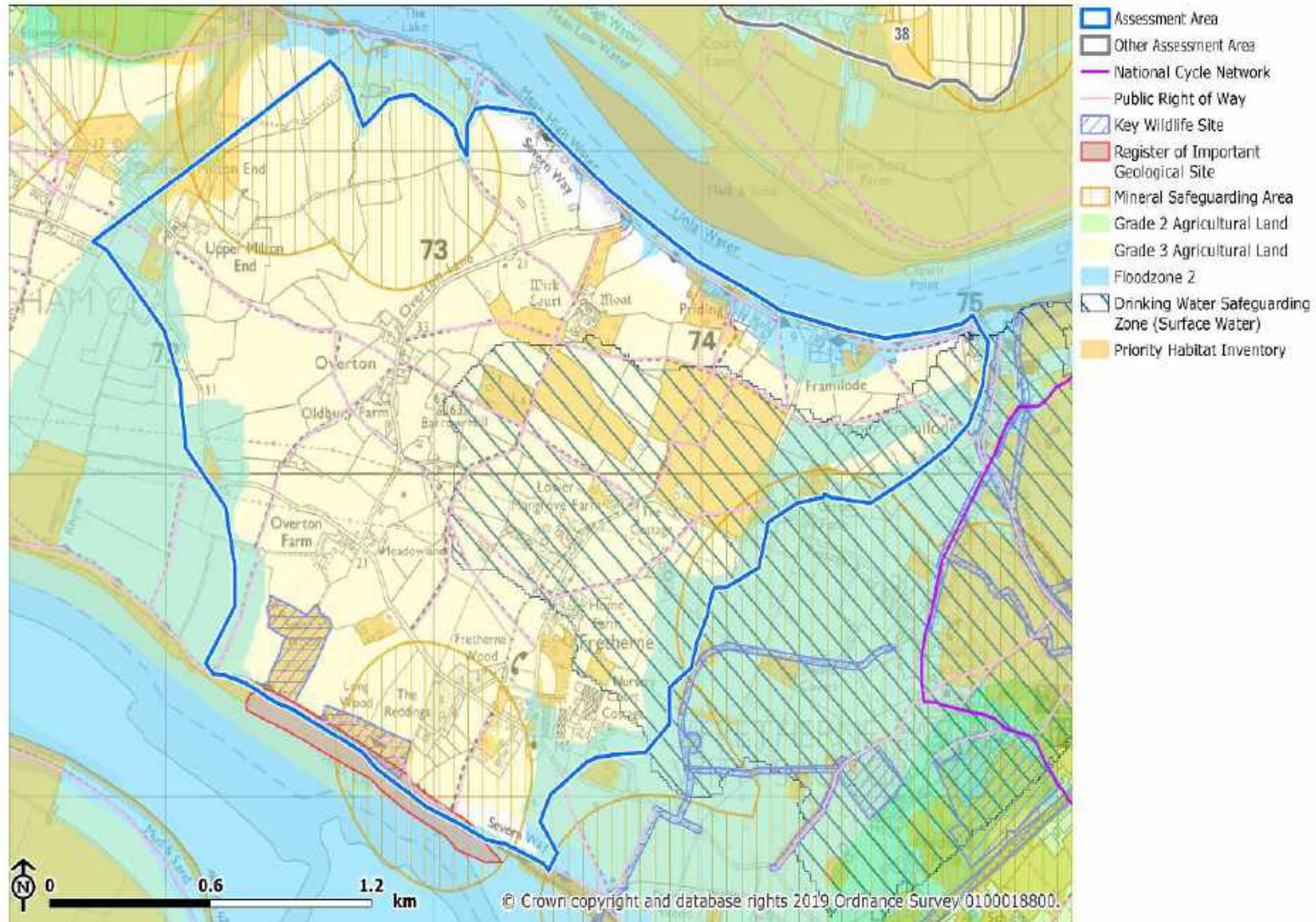
Area: ~431ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 17 listed buildings in the assessment area. These are all grade II listed, except for the grade II* Wick Court and Church of St Mary. The grade II listed buildings include: farmhouses, agricultural buildings, houses, two former mill houses, a former tea room, a lodge (associated house no longer extant), a war memorial, milestones, and a church. The north-eastern tip of the assessment area overlaps and adjoins the Stroud Industrial Heritage Conservation Area. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER records many non-designated assets within the assessment area. These include: <ul style="list-style-type: none"> Wentlodge Peats, which have potential for Mesolithic archaeology, along the 	<p>The listed buildings are a key sensitivity of the assessment area; there are several in Fretherne (to the south-east), but the rest are dispersed and isolated, mainly to the east of Barrow Hill. The Stroud Industrial Conservation Area also lies along the eastern edge of the assessment area.</p> <p>The assessment area includes several non-designated assets that may be of more than local significance, meaning that physical/setting change could result in significant negative effects. These assets include the Wentlodge peats and ancient woodland (to the south), the possible long barrow (central), the medieval moat at the listed Wick Court (to the north), and the DMV (to the east).</p> <p>Given these sensitivities it is unlikely that any sized new settlement could be accommodated to the east of Overton Lane/ Overton Farm without giving rise to significant negative effects. To the west similar effects would be likely unless it was a small village built at the lowest end of the development quantum. Such a development – located to the west of Overton Lane and extending towards Upper Milton – would result in minor negative effects, provided it does not extend to encompass the Overton and Upper Milton End Farmhouses and alter their agricultural settings. Care would be needed to preserve the setting of Wick Court</p>	N/A	?	??





Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>northern bank of the Severn;</p> <ul style="list-style-type: none"> - A possible Neolithic long barrow, Barrow Hill; - A Roman road; - Roman and post-medieval reclaimed land; - A medieval moat associated with the grade II* listed Wick Court - A medieval to post-medieval ring bank in Overton; - Medieval to post-medieval settlement in Framilode and earthwork enclosures near Upper Milton End; - Deserted medieval settlement (DMV) at Benhall; - Two medieval Holloway's, east of Home Farm Fretherne and a third near Overton; - Extensive ridge and furrow earthworks; - Medieval to post-medieval sea defences along the northern bank of the Severn; - Post-medieval agricultural features near Upper Milton 	<p>and barn and the non-designated moat associated with them. Since the full quantum of development for a small village cannot be fulfilled the score remains significant negative, albeit more uncertain.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>End, Overton and Wick Court;</p> <ul style="list-style-type: none"> - Post-medieval boundary stone at Hock Cliff; - Post-medieval turnpike road; - Cropmarks and earthworks south-west of Home Farm, Fretherne with further cropmarks to the southeast; - Earthwork enclosures south of Fretherne; - Multiple WWII searchlight battery sites between Fretherne and Overton. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC indicates a primarily agricultural landscape comprised of a mix of irregular, less irregular, and regular enclosures. The irregular and less irregular enclosures have some time depth and could include hedgerows that qualify as important under the archaeology and history criteria of 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>The Hedgerow Regulations 1997.</p> <ul style="list-style-type: none"> The HLC also indicates the presence of some early woodland (classified as ancient). <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are two conservation areas to the east of the assessment area: Saul Conservation Area and Frampton on Severn. A third – Arlingham Conservation Area -lies to the west. None of the listed buildings in the wider vicinity appear to be particularly susceptible to setting change as a result of development within the assessment area. <p><i>Non-designated</i></p> <p>No non-designated assets within the HER have been identified as being</p>				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	particularly susceptible to setting change.				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> Two Key Wildlife Sites (Long Wood and Smith's Wood) in the south-west of the assessment area to the south Overton. Register of Important Geological Site (Hock Cliff) overlaps with the southern boundary. The River Severn flows along, and slightly overlaps, the northern boundary of the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> SSSI/SAC/SPA/Ramsar (Upper Severn Estuary adjacent to the southern boundary of the assessment area. . The remainder of Hock Cliff Register of Geological Importance Site is adjacent to the southern boundary. Key Wildlife Site (River Frome Mainstream and Tributaries) adjacent to the south-eastern boundary. Areas of floodplain grazing marsh priority habitat are adjacent to the north-western and north-eastern boundaries of 	<p>Any spatial distribution of development in the assessment area should be required to provide suitable avoidance/mitigation measures to ensure that the local designations within the assessment area are maintained.</p> <p>There is potential for a small or large village to be located in the northern half of the assessment area, avoiding intersection with the local designations in the south and the immediate vicinity of the SSSI to the south.</p> <p>Any development would require sensitive design to avoid impact on designated and priority habitats, either directly or which lie downstream i.e. international designation to the south lie downstream of potential development in the north. Implementation of buffers between any development or recreational access and watercourses would be appropriate.</p> <p>Development and supporting access infrastructure should respect the mosaic of copses, orchards and conservation grassland habitats, and the network of interlinking hedgerows and ditches. Augmenting this mosaic offers opportunity for enhancement.</p>	N/A	*	*

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>the assessment area and provide habitat connectivity with national designations in the area.</p> <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> • SSSI (Garden Cliff) 1.3km north-east. • SSSI (Frampton Pools) 2.1km south-east. <p>IRZs:</p> <ul style="list-style-type: none"> • The IRZ for the Sever Estuary SSSI/SAC/SPA Ramsar overlaps with the whole of the assessment area and is for all planning applications <p>Minor negative effects may occur at the small and medium development sizes as these scales of development could potentially be accommodated over 250m from local designations but still within 2km of national designations. Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>				
Soil Quality	The vast majority of the assessment area is comprised of grade 3 agricultural land. However, there is approximately 3ha of grade 4 agricultural land in the southernmost part of the assessment area and approximately 11ha of	Due to the high proportionate coverage of grade 3 agricultural land within the assessment area, it is unlikely that effects will vary based on developing different areas within it.	N/A	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>unclassified land adjacent to the northern boundary.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality for all applicable development sizes. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>				
Water Quality	<p>There is approximately 98ha of developable land in the eastern half of the assessment area that is located within a drinking water safeguarding zone.</p> <p>Significant negative effects may occur at the medium development size as this scale of development could not be accommodated without intersecting with the drinking water safeguarding zone. Negligible effects may occur under the smallest development size option as there is potentially sufficient space to accommodate this scale of development outside of the drinking water safeguarding zone.</p>	<p>There is potentially sufficient space outside of the drinking water safeguarding zone in the western half of the assessment area to accommodate a small village.</p>	N/A		
Flood Risk	<p>The assessment area is greenfield apart from the settlement of Overton in the southern half and smaller residential</p>	<p>There is potential for development under the small size option to be located outside of Flood Zone 2 by avoiding land in the east to the</p>	N/A		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>development throughout the assessment area. There are also several local roads and areas of agricultural development within the assessment area.</p> <p>There is approximately 10ha of developable land adjacent to the eastern boundary that is located within Flood Zone 2. In addition, there are smaller areas (<5ha) of developable land in Flood Zone 2 adjacent to the majority of the boundaries of the assessment area, due to the presence of the River Severn to the north, west and south.</p> <p>Negligible effects may occur under the smallest and medium development size option as these scales of development could potentially be accommodated within the assessment area outside of Flood Zone 2.</p>	<p>south of Framilode and land in close proximity the assessment areas boundaries. There is also potential to accommodate a large village outside of Flood Zone 2, but it would likely be broken up by the presence of powerlines.</p>			
Mineral Resources	<p>There is approximately 45ha of developable land in the north-west of the assessment area that is located within a Mineral Safeguarding Area (MSA). In addition, there is further pocket of approximately 26ha of land adjacent to the southern boundary that is located within a MSA.</p> <p>There is potential for development to result in the sterilisation of mineral resources. Significant negative effects may occur under the medium development option size as it is unlikely</p>	<p>A small village could potentially be accommodated outside of MSAs to the north of Overton, or in the east to the south-west of Framilode.</p> <p>Suitable mitigation may also be possible to accommodate larger development sizes by extracting mineral resources prior to development</p>	N/A	*	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	that this scale of development could be accommodated without intersecting with MSAs. Negligible effects may occur under the small development option as there is potentially sufficient space to accommodate this scale of development within the assessment area outside of MSAs.				
Noise	The assessment area is not located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours. As such, negligible effects are considered likely in relation to all noise for all development sizes.	N/A	N/A		
Odour	No odour-related spatial policies apply to the assessment area. As such, negligible effects are considered likely in relation to odour for all development sizes.	N/A	N/A		

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • Visual prominence of Barrow Hill which rise above the adjacent low lying plain. • Significant areas of ancient woodland, including sites with are locally designated for biodiversity. • Rural setting provided to historic settlements and buildings including Arlingham Conservation Area and the Grade II* Listed Church of St Mary in Fretherne. • Strong rural character as a result of limited modern development. Open and expansive with long views across the River Severn to the Forest of Dean District and the Malvern Hills. <p>As such, landscape sensitivity is high under the medium and largest development size options as the key characteristics and qualities of the landscape may be highly sensitive to development of these scales. Landscape sensitivity is reduced to moderate-high for the small village scenario as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	H	H	M-H

Summary of Constraints and Landscape Sensitivity

<p>Overall, the least constrained land within the assessment area is located within the western half (west of Overton Lane). There is potential to accommodate a small village in this location that would avoid a number of constraints within the assessment area. However, there is still potential for significant negative effects on the setting of listed building to the west in Arlingham and the setting of listed buildings in the south and east of the assessment area. The area is also occupied by grade 3 agricultural land and some land within a Mineral Safeguarding Area, but it is not clear if this land is grade 3a or the lower quality grade 3b, and there may be potential to extract mineral resources prior to any development.</p> <p>A larger Development Type would likely encroach into the south and east and may not be suitable within the assessment area due to the following: areas of existing development and listed buildings in the east; local biodiversity designations in the south and international designations adjacent to the south-eastern boundary; land within a drinking water safeguarding zone in the east; a powerline separating the southern section from the rest of the assessment area. Additionally, landscape sensitivity is higher under the larger scales of development compared to the small village scenario. However, landscape sensitivity is still considered to be moderate-high at the smallest scale.</p>
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Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is currently connected to the highway network via the B4071 and a number of local access roads, which link to the A38, providing onward connections to Stonehouse, Stroud and south of Gloucester.</p> <p>The local highways network in the vicinity of the assessment area currently experience few capacity issues, but the relatively rural nature of the assessment area will likely result in additional car-based mode share.</p> <p>M5 Junction 13 is located approximately 4 miles to the east of the assessment area and is considered a 'critical junction' by the JCS/SADC Transport Evidence Base. The JCS/SADC modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate within its design capacity in 2031 (at 88% Ratio to Flow Capacity during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 7,710</p> <p>A very low number of workplaces (jobs) can currently be accessed by public transport from the assessment area.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 254,631</p> <p>Access from the assessment area to employment by Car scores relatively high.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that the assessment area is within 40-60 mins public transport journey time of urban centres and healthcare facilities. Education facilities are accessible within 20 mins by public transport.</p>	
Private car use by commuters	<p>% Driving a Car or Van = 73%</p> <p>Car based trips currently account for an average of 73% of commuter journeys in LSOAs covered by the assessment area. A high car mode share is expected due to the assessment area's relatively rural location and limited alternatives to driving for many everyday journeys.</p>	

Criterion	Rationale	Score
Proximity to sustainable transport networks	The assessment area is currently outside of a 5km catchment of any rail station, but is within 500m of a bus route. The assessment area is not directly on, but is linked to strategic walking / cycling routes, including the National Cycle Network.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	Due to the limited existing sewerage network a new network and Sewage Treatment Works should be built. This could potentially be a significant cost to the developer.	N/A		
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25).	N/A		
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.	N/A		
	Gas	Reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer.	N/A		
	Rail transport	Not proximate to rail stations or lines.	N/A		

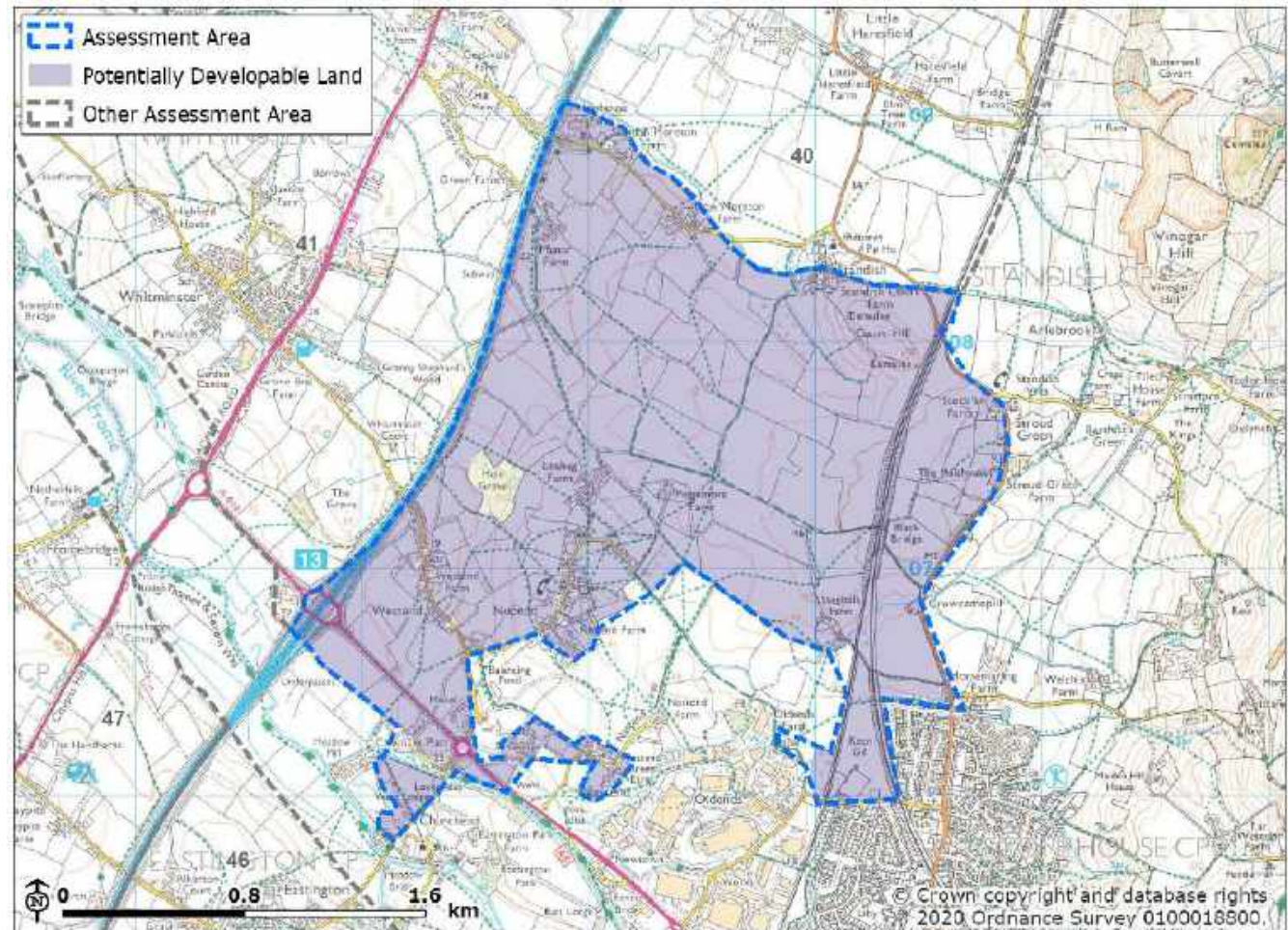
Assessment Area 43 – Urban Extension: North of Stonehouse

Assessment Area Ref: 43

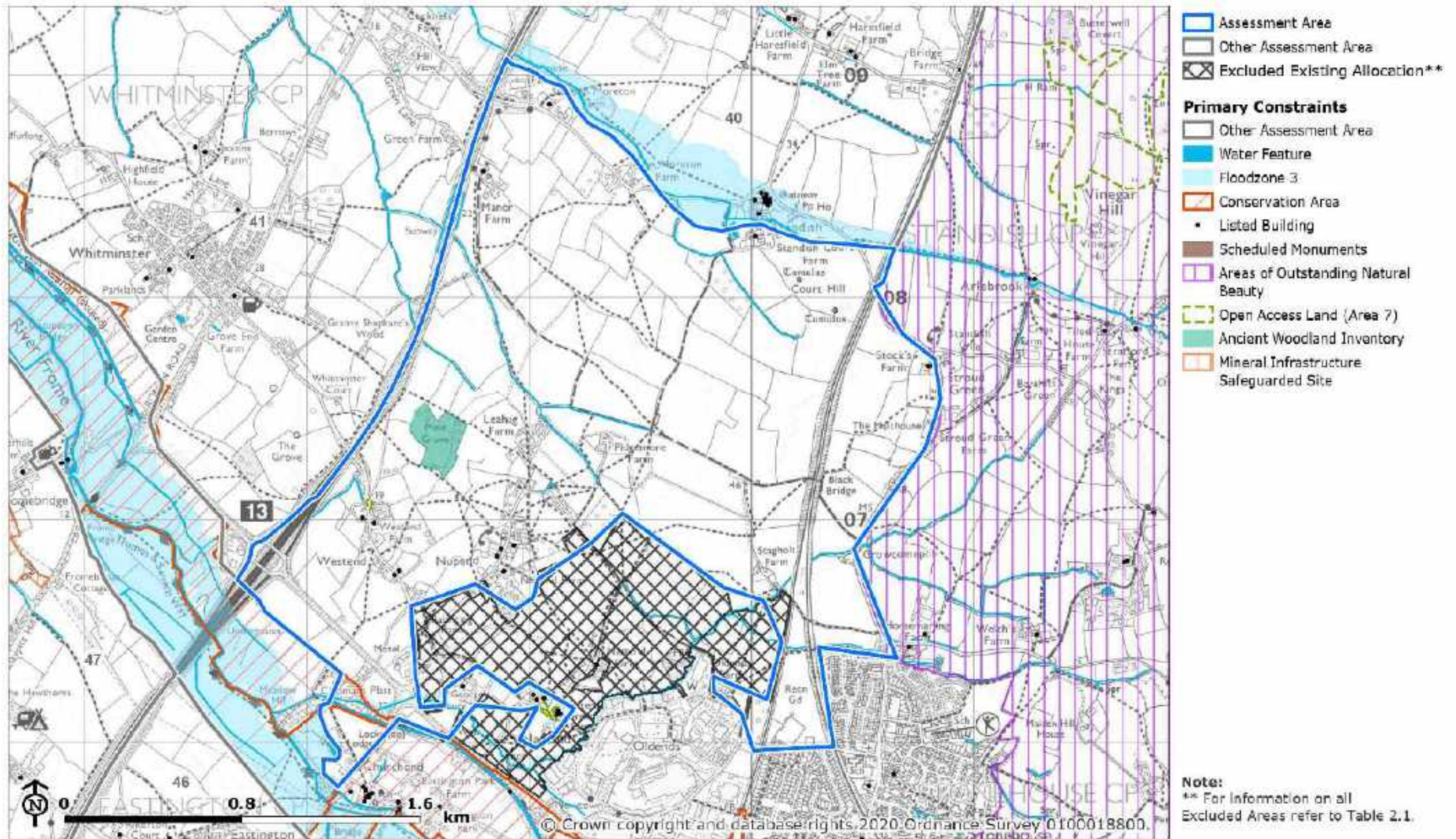
Authority Area: Stroud District

Development Typology: Urban Extension

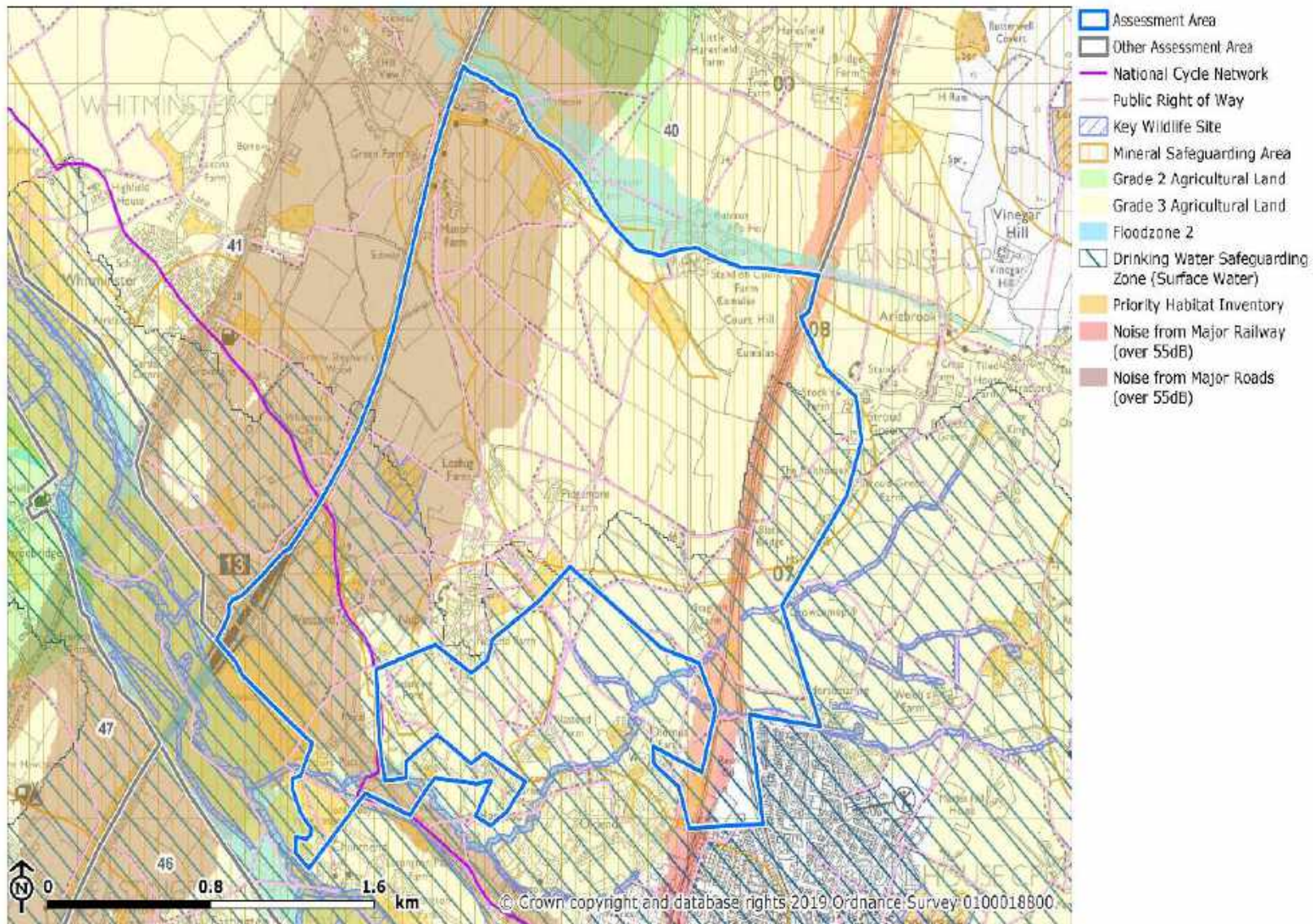
Area: ~495ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 43 listed buildings in the assessment area. These include the grade I Church of St Nicholas – which has a grade II* and numerous grade II burial monuments in its cemetery – and the grade II* Nastend House and Almory Gateway. The other listed buildings include Farmhouses, cottages, houses, agricultural buildings, a milestone, a former vicarage and a church house. The listed buildings are typically located within or around the settlements at Westend, Nupend and Nastend to the south and Standish to the north. Manor Farm and Stock Farm are outliers to the north. The assessment area overlaps and abuts the Stroud Industrial Heritage Conservation Area, but 	<p>The southwestern part of the assessment area is highly sensitive to development due to the presence of a number of listed buildings within it – and beyond it around Churchend - and the conservation area. There are also a number of non-designated heritage assets in this area that could be of more than local importance meaning that physical or setting change could result in a significant negative effect. These assets include the parkland associated with the grade II Eastington Park, the possible Roman villa site and the WWII features associated with the canal.</p> <p>Another key area of sensitivity is Standish and Court Hill to the very north of the assessment area, where there are a number of listed buildings and scheduled monuments. The scheduled monuments are prehistoric burial monuments that could have a relationship with the prehistoric monuments in the wider vicinity, putting these at risk of harm too.</p> <p>The grade II listed Stocks and Manors Farms, extend the sensitivity of the northern perimeter to the east and west. While the area to the southeast that adjoins Stroud is also sensitive due to the potential for harming the significance of the grade II listed Oldends Farm and Horsemarling Farm, which are adjacent to the assessment area.</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>does not include any listed buildings associated with it.</p> <ul style="list-style-type: none"> • The grade II* Almory gate is also scheduled. There are also two scheduled bowl barrows on Court Hill. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • The HER records a number of non-designated heritage assets within the assessment area. These include, but are not limited to: <ul style="list-style-type: none"> - An Iron Age to Roman settlement at Nastend; - A possible Roman villa at Whitminster and a settlement site at Pidgemore Farm; - A medieval buildings site at Manor Farm; - The sites of various post-medieval buildings; - An extant post-medieval industrial building that positively contribute to the special interest and character of the conservation and extant post-medieval railways; 	<p>Provided that where it adjoins Stroud the extension is kept between the railway lines and west of the B4008, a small or medium extension that gives rise to minor negative effects to the historic environment may be possible.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> - Post-medieval industrial features; - Extant WWII pillbox and earthworks associated with the defence of the canal. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC indicates a primarily agricultural landscape interspersed with small historic settlements and an area of ancient woodland. The agricultural landscape is comprised of less irregular enclosure and large modern fields. The irregular enclosure has some time depth and value in itself. They could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p>				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> There are a number of listed buildings in the wider vicinity of the assessment area. Most are unlikely to be susceptible to meaningful setting change as a result of the assessment areas development but those that may be include the grade II Quintons, Horsemarling Farm and cottage farmhouse; Oldends Farmhouse; Eastington Park; and the grade II* Church of St Michaels and Angels, Churchend. The scheduled Haresfield Hill fort lies to the northeast of the assessment area it includes further ring barrows. There are also further scheduled prehistoric burial monuments to the east of the assessment area in Standish Wood. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER records a number of non-designated heritage assets in the wider vicinity. Those identified as susceptible to meaningful setting change include: non-designated parkland associated with the grade II Eastington Park Country 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	House abuts the southern side of the assessment area.				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> • Ancient Woodland and Key Wildlife Site (Mole Grove) in the western half of the assessment area. • Parts of a Key Wildlife Site (River Frome Mainstream & Tributaries) in the south-west and south-east of the assessment area. • Key Wildlife Site (Stroud Water Canal – Stonehouse) lies within the south of the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> • Parts of the River Frome Mainstream and Tributaries Key Wildlife Site are adjacent to the southern and eastern boundary. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> • SSSI (Haresfield Beacon) 1.6km north-east. • SSSI (Frampton Pools) 1.9km west. <p>IRZs:</p>	<p>Any spatial distribution of development in the assessment area will be required to provide suitable avoidance/mitigation measures to ensure that that the Ancient Woodland and areas of priority habitat onsite (traditional orchard near Westend and by the northern boundary) are maintained and that there is a suitable buffer between development and the River Frome in the south-west and south-east. It will also be necessary to ensure supporting transport infrastructure minimises severance of habitats in the area.</p> <p>There are opportunities to provide ecological enhancements in the form of habitat linkages which would improve landscape-scale connectivity.</p> <p>The central and north portion of assessment area 43 is the least constrained, and all extension types could potentially be located over 250m from the local designations in these locations</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> The assessment area lies within five SSSI IRZs – overlapping the east, south and western portions of Area 43. All state that any increase in residential development (rural or otherwise) has the potential to cause impacts. <p>The central and north portion of Area 43 lies outside the IRZ and is least constrained in this regard. All extension types could potentially be located over 250m from the local designations within the assessment area.</p> <p>Potential negative effects in all cases are likely to be contingent on detailed development design and other mitigation measures.</p>				
Soil Quality	<p>Almost the entirety of land within the assessment area is classified as grade 3 agricultural land. There is approximately 8ha of land in the south-east of the assessment area adjacent to Stonehouse that is classified as urban land.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality at all development scales. The effects are uncertain as there is no</p>	<p>Due to the extensive coverage of the grade 3 agricultural land within the assessment area, it is unlikely that effects will vary based on developing different areas within it.</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	data distinguishing whether the land is grade 3a or the lower quality grade 3b.				
Water Quality	<p>There is approximately 211ha of land in the south and east of the assessment area that is located within a drinking water safeguarding zone.</p> <p>However, there is potentially sufficient space outside this area to accommodate development at all sizes and therefore negligible effects may occur in relation to water quality.</p>	There is a significant amount of land in the north of the assessment area that is not located within a drinking water safeguarding zone that could potentially accommodate development at all scales.			
Flood Risk	<p>The majority of the assessment area is greenfield. However, the settlement of Standish is located in the north, part of Stroud Green is located in the north-east, Westend and Nupend are located in the south-west and part of Nastend is located in the south. There are several local roads and areas of agricultural development within the area and part of the A419 is located in the south-west of the area.</p> <p>There is approximately 10ha of land adjacent to the northern boundary of the assessment area that is located within Flood Zone 2 due to the presence of a watercourse (Epney Rhyne). There is a small additional area (<1ha) in the</p>	There is significant potential for all development sizes to be located outside Flood Zone 2 as these areas are restricted to small pockets of land in the north and south-west.			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>south-west of the assessment area that is also located within Flood Zone 2.</p> <p>However, the majority of the assessment area is not located within Flood Zone 2 and therefore negligible effects may occur in relation to flood risk at all development sizes.</p>				
Mineral Resources	<p>The majority of the assessment area is located within Mineral Safeguarding Areas (MSAs).</p> <p>There is potential for development to result in the sterilisation of mineral resources. As such, significant negative effects may occur at the largest development size as there is insufficient space outside MSAs for development of that scale to be accommodated. Negligible effects may occur at the medium and small scales as there is potentially sufficient space to accommodate development at these scales outside MSAs.</p>	<p>There is land in the south-west of the assessment area not located within an MSA that could potentially accommodate development at the small and medium scales, avoiding the sterilisation of mineral resources. Additionally, land in the south-east of the assessment area may also be able to accommodate development at these scales outside MSAs. There is likely to be insufficient space to accommodate the largest development option size as a continuous development without encroaching on MSAs. Suitable mitigation may be possible at larger scales of development, such as extraction of mineral resources prior to development.</p>	*		
Noise	<p>The majority of the western half of the assessment area is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the M5 on the western boundary and the A419 in the south-west region of the area. In</p>	<p>There is potentially sufficient land in the central region of the assessment area to accommodate development at sizes outside of noisy areas. Suitable mitigation may also be possible to overcome any noise related issues.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>addition, there is land in the eastern half of the assessment area located within a noisy area due to the presence of a railway line.</p> <p>However, there is sufficient space outside noisy areas to accommodate all development sizes and therefore negligible effects may occur in relation to noise.</p>				
Odour	<p>The assessment area is not located within any Odour Monitoring Zones or Cordon Sanitaire Zones.</p> <p>As such, negligible effects are expected in relation to odour.</p>	N/A			

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> Strong rural character. Sense of separation between Stonehouse and rural settlements including Nupend and Standish. High levels of intervisibility with the Cotswolds AONB. 	H	M-H	M

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
As such, landscape sensitivity is high for the largest urban extension as the key characteristics and qualities of the landscape may be highly sensitive to development at this scale. Landscape sensitivity is reduced to moderate-high for a medium sized urban extension and moderate for a small scale extension.			

Summary of Constraints and Landscape Sensitivity

Generally, the part of this assessment area least affected by constraints is in the centre in the vicinity of Pidgemore Farm; although a larger extension in this location would likely encroach upon the drinking water safeguarding zone in the east, and also potentially harm the setting of historic environment assets to the south (it would also likely encroach upon the noisy area to the west, although noise impacts could potentially be mitigated). In addition, development in this location would be considered a new settlement rather than an urban extension due to the degree of separation from Stonehouse. It is only to the east of the railway line where potential has currently been identified for an extension with minor rather than significant impacts on historic assets. Almost the entirety of this part of the assessment area falls within the drinking water safeguarding zone. Development of a small extension may be more suitable as the area has moderate landscape sensitivity to this scale of development compared to moderate-high and high for the medium and large scale extensions respectively.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is primarily connected to the highway network via the B4008 (Gloucester Road), Grove Lane and the A419, which provides a direct link to the M5 - Junction 13.</p> <p>M5 Junction 13 is located to the south west of the assessment area and is considered a 'critical junction' by the JCS/SADC Transport Evidence Base. The JCS/SADC modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate within its design capacity in 2031 (at 88% Ratio to Flow Capacity during the AM and PM peak periods).</p>	

Criterion	Rationale	Score
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 37</p> <p>A very low number of workplaces (jobs) can currently be accessed by public transport from the assessment area.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 273,131</p> <p>Access from the assessment area to employment by Car scores high, with the assessment area in close proximity to major roads providing direct links to key urban centres.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that the assessment area has poor accessibility to key services within the defined travel time periods. Limited parts of the area - located along the B4008 - demonstrate marginally better public transport accessibility to urban centres and health/education facilities.</p>	
Private car use by commuters	<p>% Driving a Car or Van = 73%</p> <p>Car based commuter trips currently account for an average of 73% of commuter journeys in LSOAs covered by the assessment area. A high car mode share is expected due to the assessment area's distance from public transport routes with high frequency services.</p>	
Proximity to sustainable transport networks	<p>The assessment area is partially within the 2.5km catchment of Stonehouse Rail Station which provide a rail service to Stroud and Cheltenham. The assessment area is currently divorced from the NCN; however, some local walking and cycle routes are provided, linking the assessment area to both Cheltenham / Brockworth.</p>	

Deliverability/Infrastructure

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Load is acceptable.			
	Rail transport	Within 2.5km of Stonehouse branch line station. If the area north of Standish Junction is considered appropriate for a new station, then this would have a positive impact at the highest levels of growth.			
	Bus transport	Within 500m of existing high frequency bus route and close enough to Stroud and Stonehouse station to mean that improvements in frequency could result in reasonably high levels of bus patronage. Proximity to M5 J13 would require major bus network expansion to avoid overloading SRN network with significant additional car traffic. Higher scales of growth increase likelihood that this will be sufficient to secure levels of investment needed to deliver bus infrastructure improvements. This will be further improved when west of Stonehouse allocation is completed.			

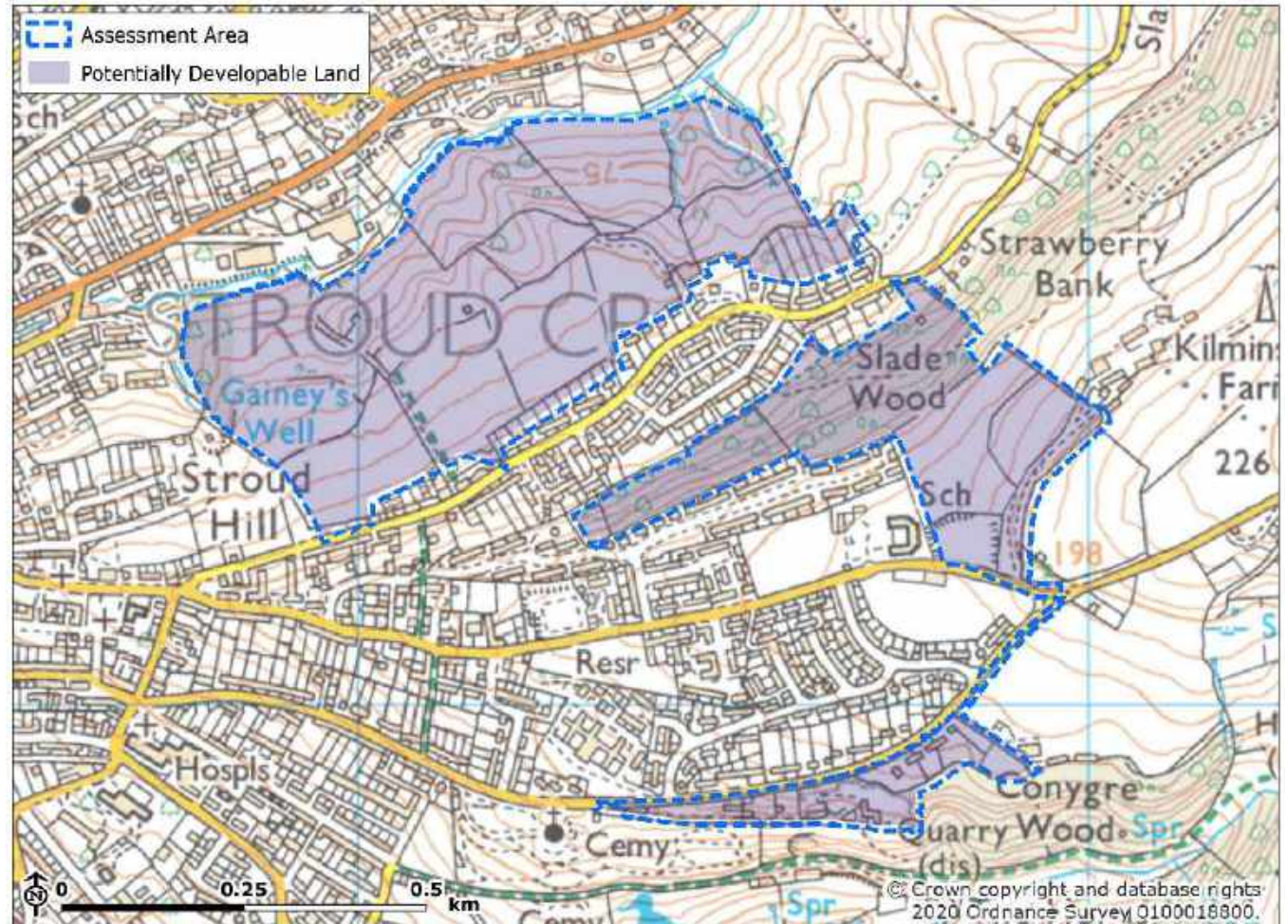
Assessment Area 44 – Urban Extension: East of Stroud

Assessment Area Ref: 44

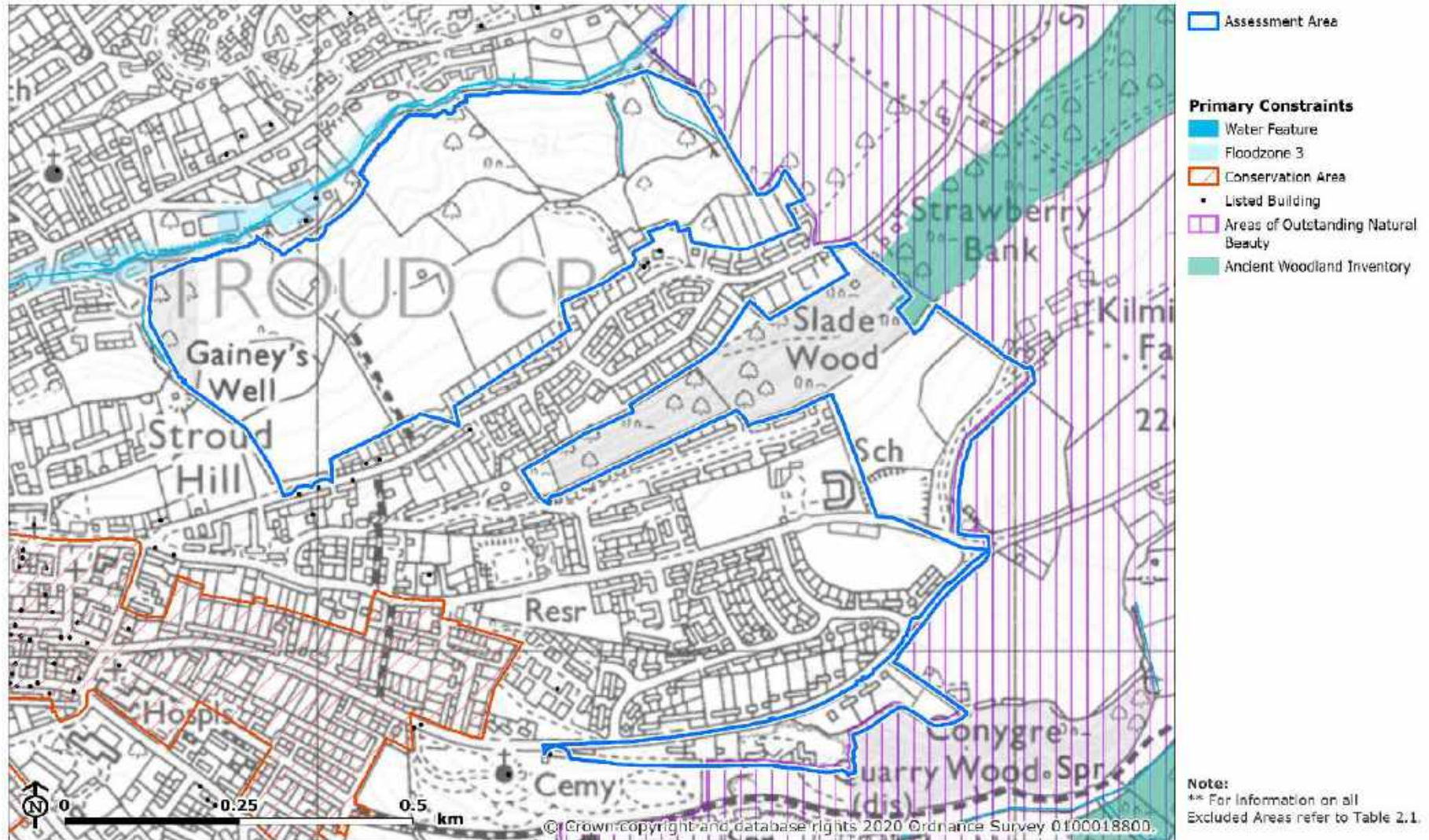
Authority Area: Stroud District

Development Typology: Urban Extension

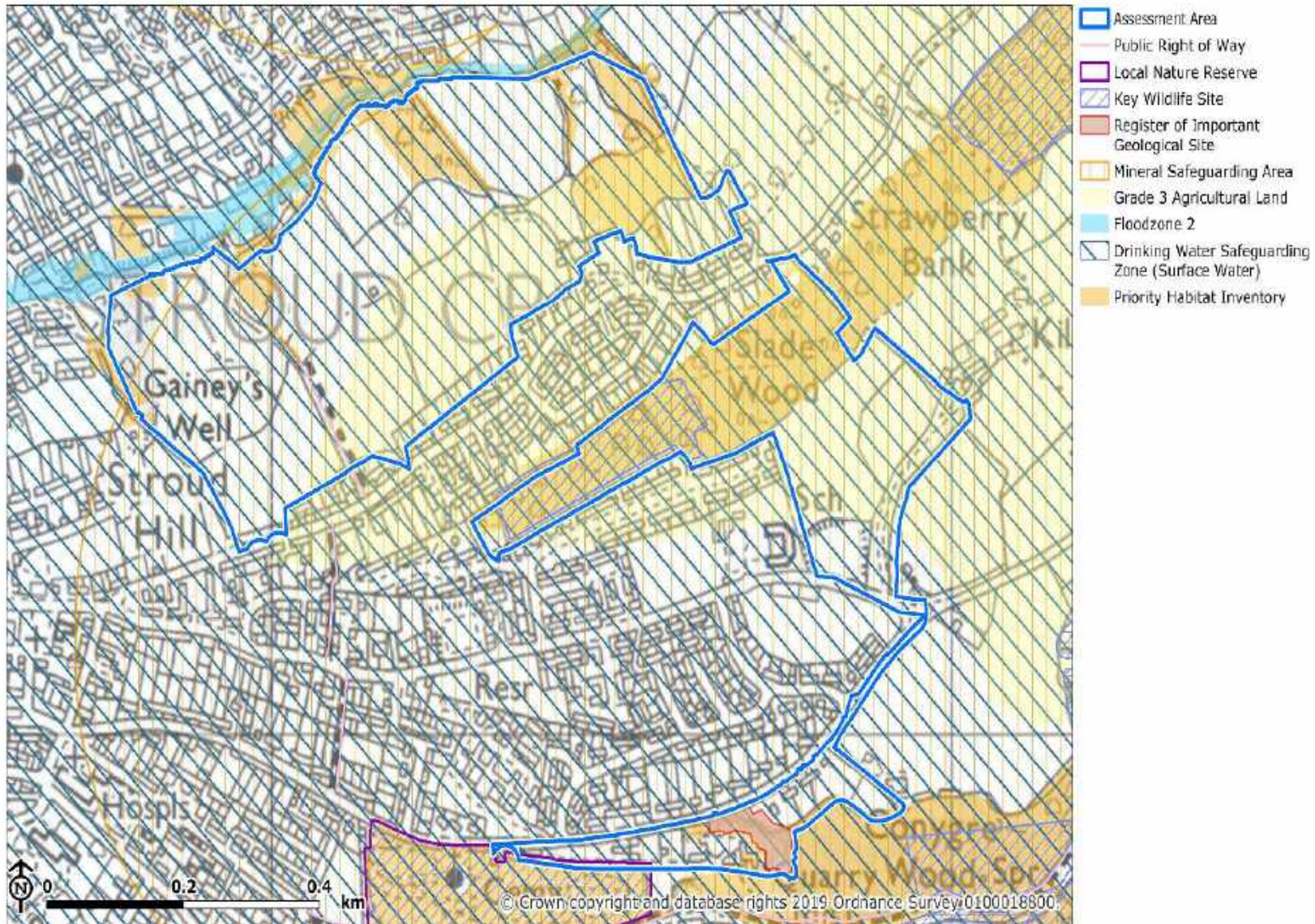
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Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are no designated assets within the assessment area. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER records only a limited number of non-designated assets within the assessment area. These include: <ul style="list-style-type: none"> Probable prehistoric settlement south of Slade Wood; Site of a toll house, junction of Bisley Road and Old Bisley Road; Undated enclosures; 19th century turnpike road; Site of estate of modern pre-fabricated houses. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> The HLC indicates an agricultural landscape primarily comprised of 	<p>The assessment area contains no designated assets and the non-designated assets appear to be of local importance, so effects to them would be of minor negative effect. However, the assessment area has some historic landscape value as a coherent area of irregular enclosures with some surviving early woodland maintaining time-depth.</p> <p>The assessment area does not appear to contribute to their significance/ legibility of most designated assets in its wider vicinity. The exception being Slade House and its associated stables and cottage, which lie to the east of the northernmost part of the assessment area.</p> <p>It seems likely that all bar the eastern part of the assessment area to the rear of the grade II* listed Slade House, and potentially could be developed with minor negative effects. However, there is some uncertainty surrounding the effect to the historic landscape, and this is reflected in the scores. This area would enable a small extension.</p>	N/A	N/A	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>irregular enclosures. These reflect former unenclosed cultivation patterns and so could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997.</p> <ul style="list-style-type: none"> Slade Wood is indicated to be surviving early woodland (but the part within the assessment area is not ancient woodland), while the area to the south of it is classified as probable assarting of early woodland. <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> The listed buildings in the wider vicinity that may be susceptible to setting change include the grade II* Slade House and its 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>associated grade II stables and cottage.</p> <ul style="list-style-type: none"> Stroud Top of Town Conservation Area lies to the west and Lypiat grade II* registered park and garden to the east. Neither appears to have a relationship with the assessment area that contributes to their significance or legibility. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> No non-designated assets within the HER have been identified as being particularly susceptible to setting change. 				
Ecological and Geological Environment	<p>Assets with the assessment area:</p> <ul style="list-style-type: none"> Key Wildlife Site (Slade Wood) located in the north of the southern parcel of the assessment area. Register of Important Geological Site (Conygere Quarry) located in the southern half of the southern parcel of the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> The southern boundary of the southern parcel of the assessment area overlaps 	<p>A small extension type could be located in the northern parcel of the assessment area, which would avoid intersection with the local designation in the southern parcel.</p> <p>Any development in the northern parcel should avoid fragmentation or severance of the woodland and hedgerow habitats. The steep topography that would need to be accommodated in any development design may offer opportunity to enhance ecological connectivity in the north.</p>	N/A	N/A	*

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>intersects with a Key Wildlife Site (Bisley Road Cemetery), which is also a Local Nature Reserve.</p> <ul style="list-style-type: none"> • Key Wildlife Site (River Frome Mainstream & Tributaries) 120m south and 200m south-east. • Key Wildlife Site (The Horns Bank) 80m south-east. • Ancient Woodland (Proud Grove/Abbey Wood) adjacent to the north-eastern boundary. • Ancient Woodland 240m south-east. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> • SSSI/SAC (Rodborough Common) located 1.3km south-west of the assessment area. • SSSI (Swift's Hill) 1.3km north-east of the assessment area. <p>IRZs:</p> <ul style="list-style-type: none"> • The whole of the site falls within an IRZ associated with national designations to the south for all planning applications. Residential development resulting in any net increase in units is listed as a land use of risk for both the 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>north and southern parcels of Assessment Area 44.</p> <p>There is potential to accommodate a small extension type in the assessment area without intersecting with local designations. However, it would still fall within 2km of national designations and therefore minor negative effects are expected. Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>				
Soil Quality	<p>The assessment area is comprised of predominantly grade 3 and 4 agricultural land. There is approximately 17ha of grade 4 agricultural land in the north-west of the northern parcel of the assessment area and approximately 9ha of grade 3 agricultural land in the south-eastern part of the northern parcel. In the southern parcel of the assessment area, there is approximately 10ha of grade 3 agricultural land in the north and the south is comprised of approximately 4ha of urban classified land as well as smaller areas (<1ha) of grade 5 agricultural land adjacent to the southernmost boundary.</p> <p>There is potential for development at the applicable development size to result in the loss of high quality agricultural land. As such, significant negative effects may</p>	<p>There is almost sufficient land in the northern parcel that is grade 4 that accommodate a small extension, potentially avoiding the loss of high quality agricultural land. However, it is likely that a small extension of 500+ dwellings would intersect with the grade 3 agricultural land in this location, which may result in negative impacts on soil quality, dependent on whether it is grade 3a or the lower quality grade 3a.</p> <p>Land in the south that is classified as urban could contribute towards a small extension, avoiding the loss of high quality agricultural land, but a large proportion of the area is already occupied by residential development.</p>	N/A	N/A	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	occur in relation to soil quality. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.				
Water Quality	<p>The entirety of the assessment area is located within a drinking water safeguarding zone.</p> <p>As such, there is potential for the applicable development option to result in significant negative effects in relation to water quality.</p>	N/A	N/A	N/A	
Flood Risk	<p>The majority of the assessment area is greenfield. However, there is some land in the southern parcel of the assessment area that is occupied by residential development.</p> <p>The assessment area does not contain any land that is located within Flood Zone 2.</p> <p>As such, negligible effects are considered for the applicable development size in relation to flood risk.</p>	N/A	N/A	N/A	
Mineral Resources		There is approximately 1ha adjacent to the north-western boundary of the assessment area that is not located within a MSA.	N/A	N/A	*

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>The vast majority of the assessment area is located within a Mineral Safeguarding Area.</p> <p>There is potential for the applicable development size to result in the sterilisation of mineral resources. As such, significant negative effects may occur in relation to mineral resource.</p>	<p>However, this is not sufficient space to accommodate a small urban extension.</p> <p>It may be possible to accommodate a small extension that does not result in the sterilisation of mineral resources by extracting them prior to development.</p>			
Noise	<p>The assessment area is not located within any areas of high noise Noisy area.</p> <p>As such, negligible effects are considered likely for the applicable development size in relation to noise.</p>	N/A	N/A	N/A	
Odour	<p>No odour-related spatial policies apply to the assessment area.</p> <p>As such, negligible effects are considered likely in relation to odour for the applicable development size.</p>	N/A	N/A	N/A	

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
<p>Key landscape sensitivities include:</p> <ul style="list-style-type: none"> • Steeply sloping and visually prominent landform which provides a distinctive setting and sense of place to the adjacent town of Stroud, including the historic core. • Semi-natural habitats including locally designated BAP Priority Habitat deciduous woodlands. • Extensive views across Stroud between areas of elevated land. • High levels of tranquillity, despite the proximity of development. • The location of the areas adjacent to the nationally protected landscape of the Cotswolds AONB. <p>The northern section forms an integral part of the Slad valley and that the scenic qualities of the valley and the literary connection with Laurie Lee attract visitors to the area.</p> <p>As such, landscape sensitivity is high under the small development size option as the key characteristics and qualities of the landscape may be highly sensitive to development of this scale.</p>	N/A	N/A	H

Summary of Constraints and Landscape Sensitivity

Only the northern section of the assessment has sufficient space to accommodate a small extension type of at least 500 dwellings as a continuous development. The historic environment assessment suggests that development in this location may be best placed in the western half due to the grade II listed Slade Housing being adjacent to the eastern half. The easternmost part of this area is comprised of grade 4 agricultural land, which may limit the impacts of development on soil quality. The remaining land is comprised of grade 3a agricultural land, but it is not clear if it is grade 3a or the lower quality grade 3b. In addition, further constraints to development are a drinking water safeguarding zone, which occupies the whole of the assessment area and a Mineral Safeguarding Area, which occupies the vast majority of the assessment area. There may be opportunities to extract mineral resources prior to development. The assessment area also has high landscape sensitivity to the small extension scale of development.

The mid and southern sections of the assessment area offer potential for infill development, but there is potential for adverse impacts on biodiversity in these locations due to local biodiversity designation within the mid-section and further local biodiversity designations adjacent to the southern section.

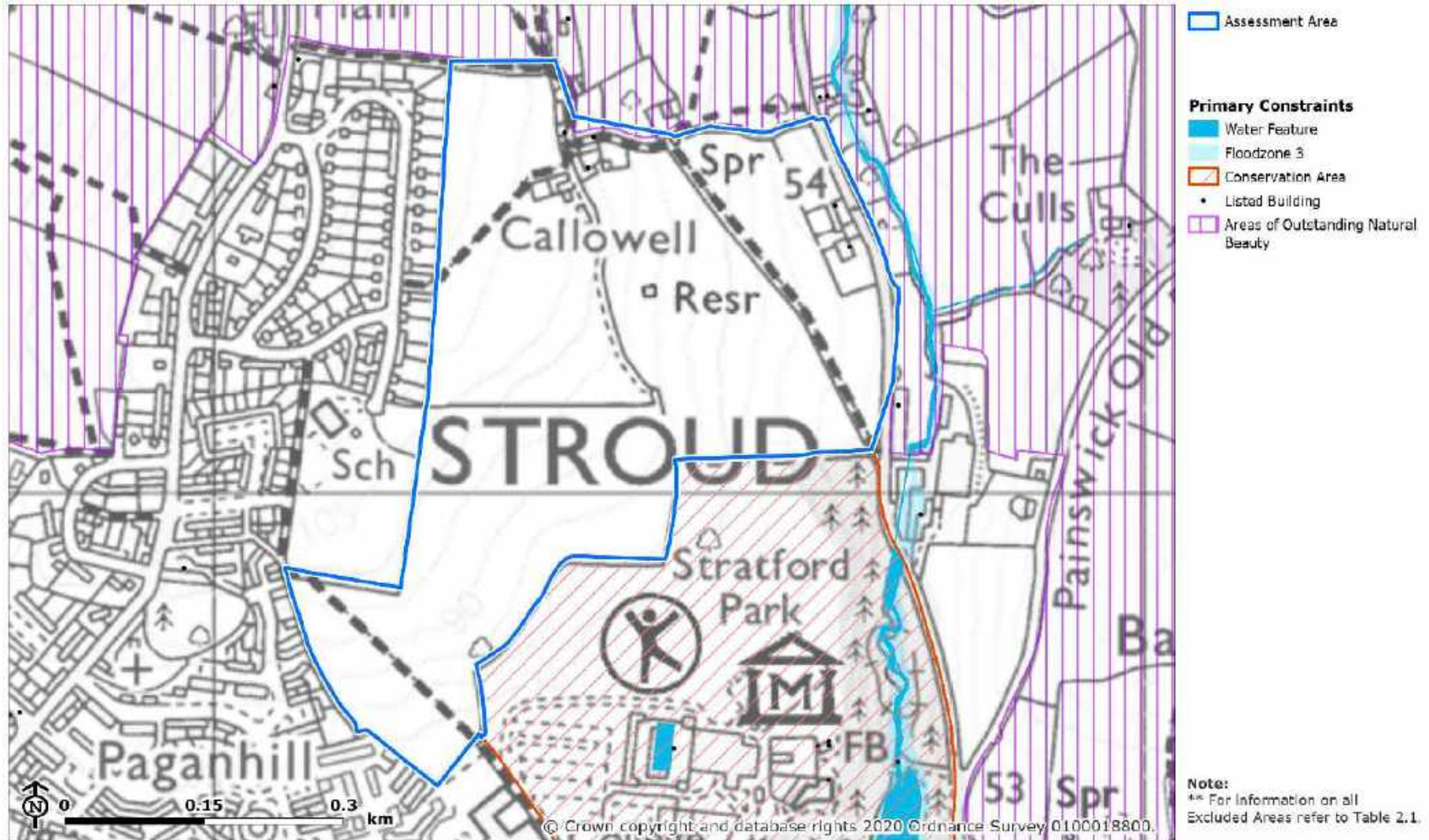
Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via the B4070 (Slad Road) and several local roads that provide direct links to Stroud town centre.</p> <p>Localised traffic congestion is currently experienced along the B4070 towards Merrywalks during the AM / PM peaks and may be impacted as a result of significant development. The assessment area is not near to any 'critical junctions' as defined by the JCS/SADC Transport Evidence Base Modelling.</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 12,758</p> <p>A low number of workplaces (jobs) can currently be accessed by public transport, which primarily reflects a lack of high frequency services in the area.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 270,245</p> <p>Access from the assessment area to employment by Car scores relatively high, due to the well-connected local road network to key urban centres / employment sites.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that the assessment area has good accessibility to key services (urban centres, healthcare and education facilities) within 20 mins travel time by public transport services.</p>	
Private car use by commuters	<p>% Driving a Car or Van = 61%</p> <p>Car based commuter trips currently account for an average of 61% of commuter journeys in LSOAs covered by the assessment area, which is relatively low compared to other urban extension locations.</p>	
Proximity to sustainable transport networks	<p>The assessment area is within the 2.5km catchment of Stroud Rail Station and is served by some bus transport services. The assessment area is currently divorced from the NCN; however, there are a number of existing local walking and cycle routes in close proximity that could be linked through development.</p>	

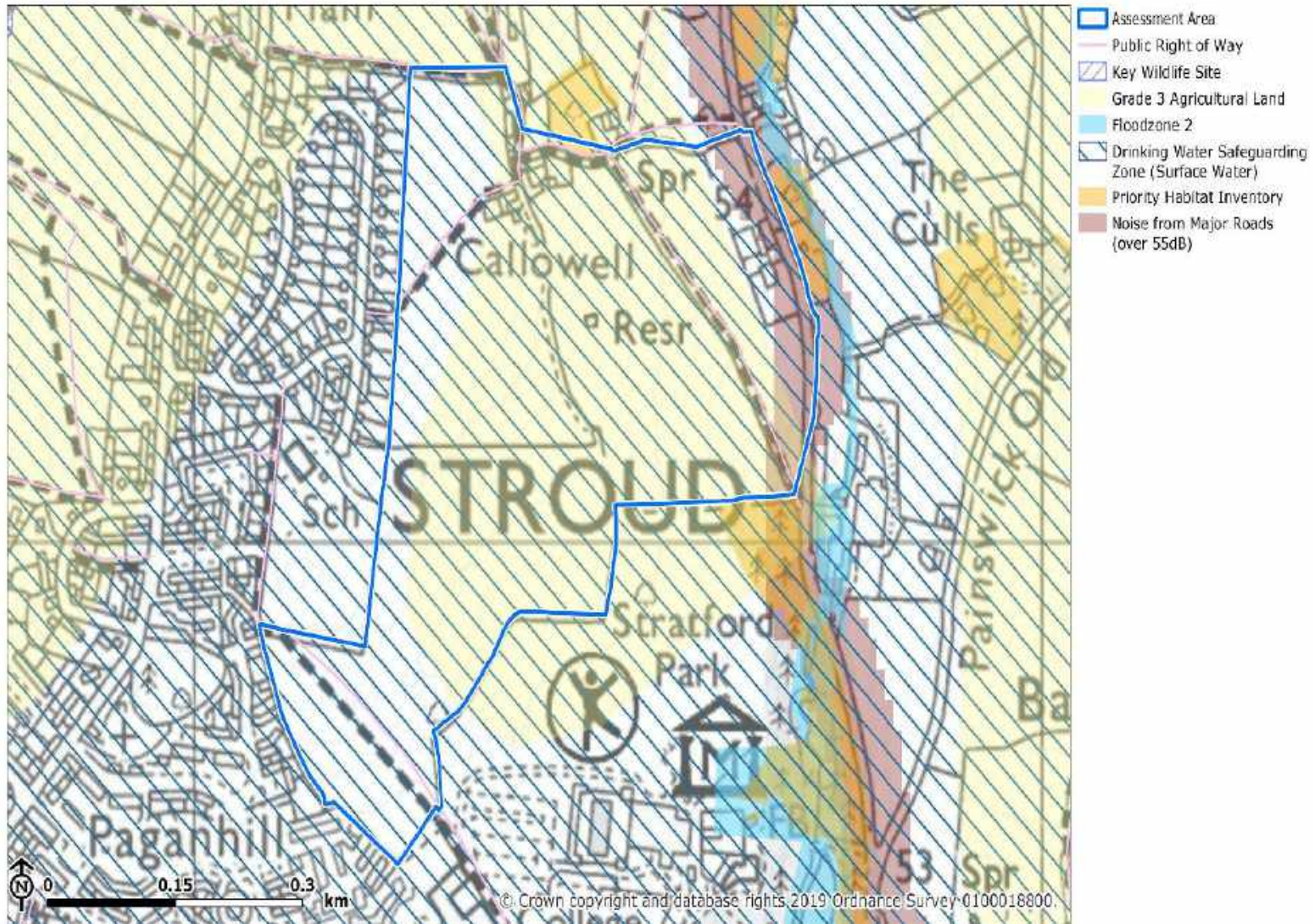
Deliverability/Infrastructure

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.	N/A	N/A	
	Drinking water	Development would require additional work to increase supply in the area and funding would be required. In the short term (2020-2025) there is very limited additional capacity. There is additional headroom in AMP8 (2025 onwards) which could potentially support this growth.	N/A	N/A	
	Electricity	All of assessment area served by Dudbridge Primary Substation which currently has only between 10% and 25% capacity available. Substation will therefore require expansion which would need to be included in Western Power's next investment programme.	N/A	N/A	
	Gas	Reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer.	N/A	N/A	
	Rail transport	Within 2.5km of Stroud branch line station.	N/A	N/A	
	Bus transport	Within 500m of existing high frequency bus route and close enough to Stroud and to Stroud station to mean that improvements in frequency could result in reasonably high levels of bus patronage. Higher scale of growth increases prospect of securing investment needed to deliver significant bus infrastructure improvements.	N/A	N/A	
	Cycle transport	Distant from existing cycle network but proximity to Stroud and to Stroud station means that investment in cycle infrastructure would have the potential to increase cycle trips. Higher scale of growth increases prospect of	N/A	N/A	

Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
<p>Historic Environment</p>	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are six grade II listed buildings within the assessment area. These include a group of buildings associated with Callowell Farmhouse and a house and series of terraced properties along the A46. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER records only a limited number of non-designated assets within the assessment area. These include: <ul style="list-style-type: none"> Limited ridge and furrow earthworks; Site of a post-medieval mill; and A turnpike road. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> The HLC indicates a mixed landscape of less regular enclosures that partly reflect former 	<p>The listed buildings at Callowell are the key sensitivity within the assessment area. These include a farmhouse and agricultural building, which would be susceptible to harm as a result of the loss of their agricultural setting. The settlement is also historically rural, meaning that an extension could affect its character.</p> <p>The undeveloped nature of the assessment area is also important to the Stratford Park Conservation Area to the south, as it aids in the legibility of the park’s origin as a country estate.</p> <p>The known non-designated assets appear to be of local significance.</p> <p>Development of the assessment area would result in significant negative effects to the listed buildings at Callowell and the Stratford Park Conservation Area.</p>	N/A	N/A	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>unenclosed patterns and an active recreational site – Stratford Park. The latter was formerly a designed ornamental parkland associated with the grade II Stratford House.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> The Stratford Park Conservation Area abutts the southern edge of the assessment area. It includes several grade II listed buildings. The grade II listed Callowell House stands north of the assessment area; it is unclear if it has some group value with the other listed buildings in Callowell. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> No non-designated assets within the HER have been identified as being particularly susceptible to setting change. 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> No assets within the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> No assets within 250m of the assessment area. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI/SAC (Rodborough Common) 1.5km to the south, beyond Stroud town. <p>IRZs:</p> <ul style="list-style-type: none"> The assessment area falls within IRZs for the surrounding international sites, and encompass all residential planning applications. <p>Minor negative effects may occur for the applicable development size as it would fall within 2km of the national designation to the south. Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>	<p>The assessment area comprises a relatively low number of large agricultural fields. Any small scale development should easily respect and augment existing boundary features, potentially as part of future green infrastructure.</p> <p>Appropriate enhancement may include strengthening retained habitat corridors, include that which extends through Stratford Park.</p>	N/A	N/A	*
Soil Quality	<p>The majority of the assessment area is comprised of grade 3 agricultural land. However, there is approximately 7ha of</p>	<p>Due to the extensive coverage of grade 3 agricultural land within the assessment area, it</p>	N/A	N/A	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>urban classified land adjacent to the western boundary and approximately 1.6ha of grade 4 agricultural land adjacent to the eastern boundary.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality under the applicable development size. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	is unlikely that effects will vary based on developing different areas within it.			
Water Quality	<p>The entirety of the assessment area is located within a drinking water safeguarding zone.</p> <p>As such, significant negative effects may occur for the applicable development size in relation to water quality.</p>	N/A	N/A	N/A	
Flood Risk	<p>The assessment area is greenfield. There is one local road located in the north-east of the assessment area.</p> <p>The assessment area does not contain any land located in Flood Zone 2.</p> <p>As such, negligible effects are considered likely for the applicable development size in relation to flood risk.</p>	N/A	N/A	N/A	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Mineral Resources	<p>The assessment area is not located within any Mineral Safeguarding Areas (MSAs).</p> <p>As such, negligible effects are considered likely for the applicable development size in relation to mineral resources.</p>	N/A	N/A	N/A	
Noise	<p>There is approximately 2.7ha of land adjacent to the north-eastern boundary that is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours.</p> <p>However, there is potentially sufficient space to accommodate the applicable development size outside of noisy areas. As such, negligible effects may occur in relation to noise.</p>	<p>There is potentially sufficient space set back from the eastern boundary of the assessment area to accommodate the applicable development size outside of the noisy area.</p> <p>Suitable mitigation may also be possible to overcome any noise related issues.</p>	N/A	N/A	
Odour	<p>No odour-related spatial policies apply to the assessment area.</p> <p>As such, negligible effects are considered likely in relation to odour for all development sizes.</p>	N/A	N/A	N/A	

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • Steeply sloping and visually prominent landform which provides a distinctive setting and sense of place to the adjacent town of Stroud, including the historic core. • Semi-natural habitats including locally designated BAP Priority Habitat deciduous woodlands. • Extensive views across Stroud between areas of elevated land. • High levels of tranquillity, despite the proximity of development. • The location of the areas adjacent to the nationally protected landscape of the Cotswolds AONB. <p>As such, landscape sensitivity is high under the small development size option as the key characteristics and qualities of the landscape may be highly sensitive to development at this scale.</p>	N/A	N/A	H

Summary of Constraints and Landscape Sensitivity

Stratford Park Conservation Area adjacent to the southern boundary and a number of listed buildings within and around the rural settlement of Callowell on the northern boundary of the assessment area make the historic environment a notable sensitivity in this assessment area. Even a small extension type at the lower end of the spectrum would result in significant negative effects on the historic environment due to the rural setting that the space between these two areas provides. Additionally, even a small extension would likely have significant adverse impacts on landscape character due to the high sensitivity of the area. The area is also located within a drinking water safeguarding zone and is comprised of grade 3 agricultural land. However, it is not clear if it is grade 3a or the lower quality grade 3b.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via the A4171 (Stratford Road) and the A46 (Painswick Road), providing links into Stroud town centre and north to Gloucester.</p> <p>Some localised traffic congestion is experienced on the approach to the Painswick Road / Stratford Road / Beeches Green Roundabout during the AM / PM peaks, which may be worsened with significant development in the vicinity. The assessment area is not near to any 'critical junctions' as defined by the JCS/SADC Transport Evidence Base Modelling.</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 26,133</p> <p>A relatively high number of workplaces (jobs) can currently be accessed by public transport from the assessment area.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 279,407</p> <p>Access from the assessment area to employment by Car scores high, due to the assessment area's proximity to the strategic road network.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that the site has good accessibility to key services (urban centres, healthcare and education facilities) within 20 mins travel time by public transport services.</p>	
Private car use by commuters	<p>% Driving a Car or Van = 67%</p> <p>Car based commuter trips currently account for an average of 67% of commuter journeys in LSOAs covered by the assessment area, which is relatively low when compared with other assessment areas.</p>	
Proximity to sustainable transport networks	<p>The assessment area is within the 2.5km catchment of Stroud Rail Station and is close to high-frequency bus services. The assessment area is currently divorced from the National Cycle Network; however, a number of existing walking and cycling routes provide active mode links to Stroud town centre.</p>	

Deliverability/Infrastructure

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.	N/A	N/A	
	Drinking water	Development would require additional work to increase supply in the area and funding would be required. In the short term (2020-2025) there is very limited additional capacity. There is additional headroom in AMP8 (2025 onwards) which could potentially support this growth.	N/A	N/A	
	Electricity	All of assessment area served by Dudbridge Primary Substation which currently has only between 10% and 25% capacity available. Substation will therefore require expansion which would need to be included in Western Power's next investment programme.	N/A	N/A	
	Gas	Reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer.	N/A	N/A	
	Rail transport	Within 2.5km of Stroud branch line station.	N/A	N/A	
	Bus transport	Within 500m of existing high frequency bus route although proximity to Stroud and to Stroud station means that buses less likely to be the focus of an increase in sustainable travel journeys.	N/A	N/A	
	Cycle transport	Distant from existing cycle network but proximity to Stroud and to Stroud station means that investment in cycle infrastructure would have the potential to increase cycle trips.	N/A	N/A	

Viability

	Development Type					
	Small Extension			Medium Extension		Large Extension
Dwellings	500	1,000	2,500	500	1,000	2,500
Indicative developer contributions and affordable housing pool/per unit (£)	40,000	40,000	N/A	40,000	40,000	N/A
Viability	High	High	N/A	High	High	N/A

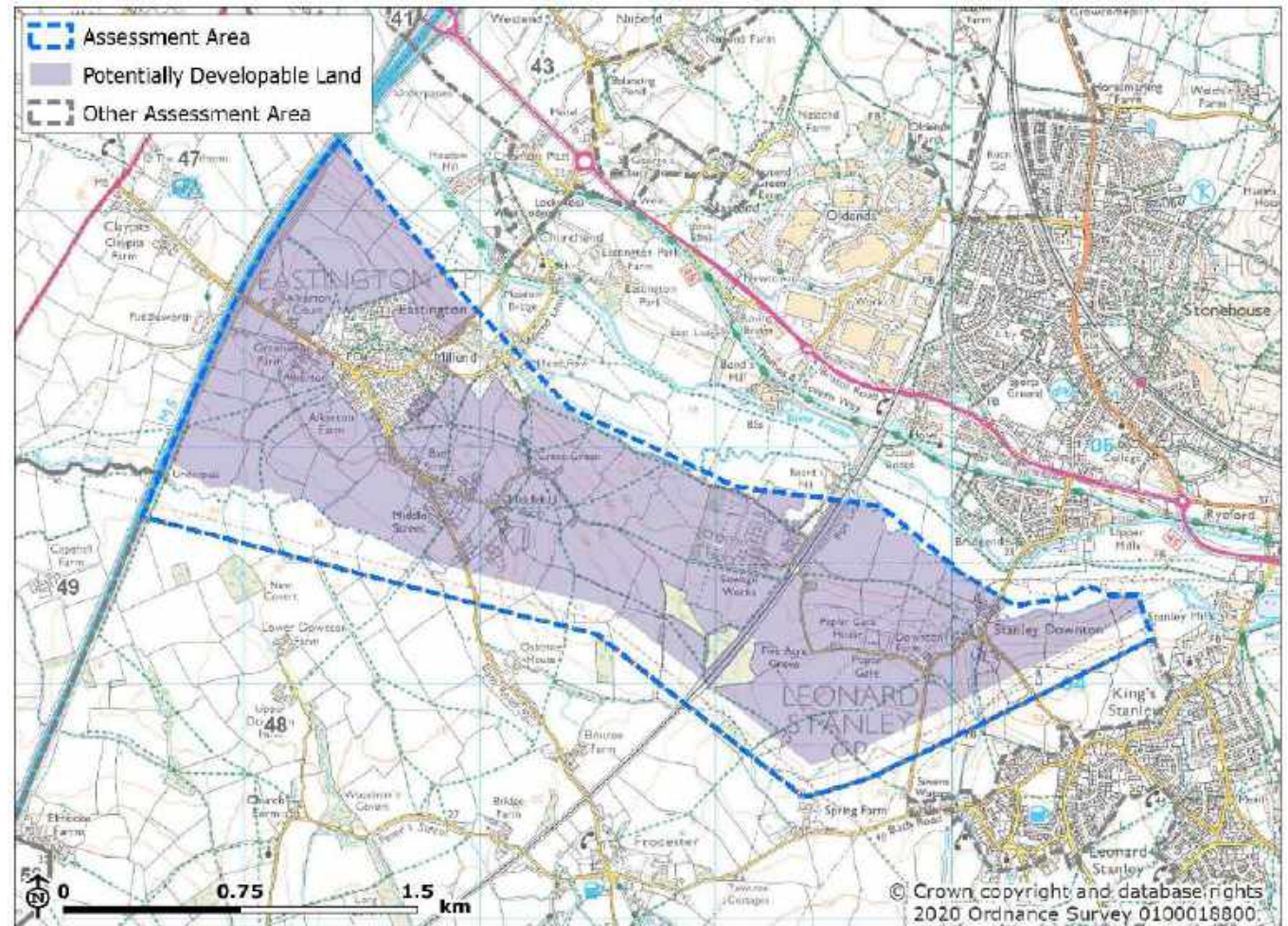
Assessment Area 46 – New Settlement: Land South West of Stonehouse

Assessment Area Ref: 46

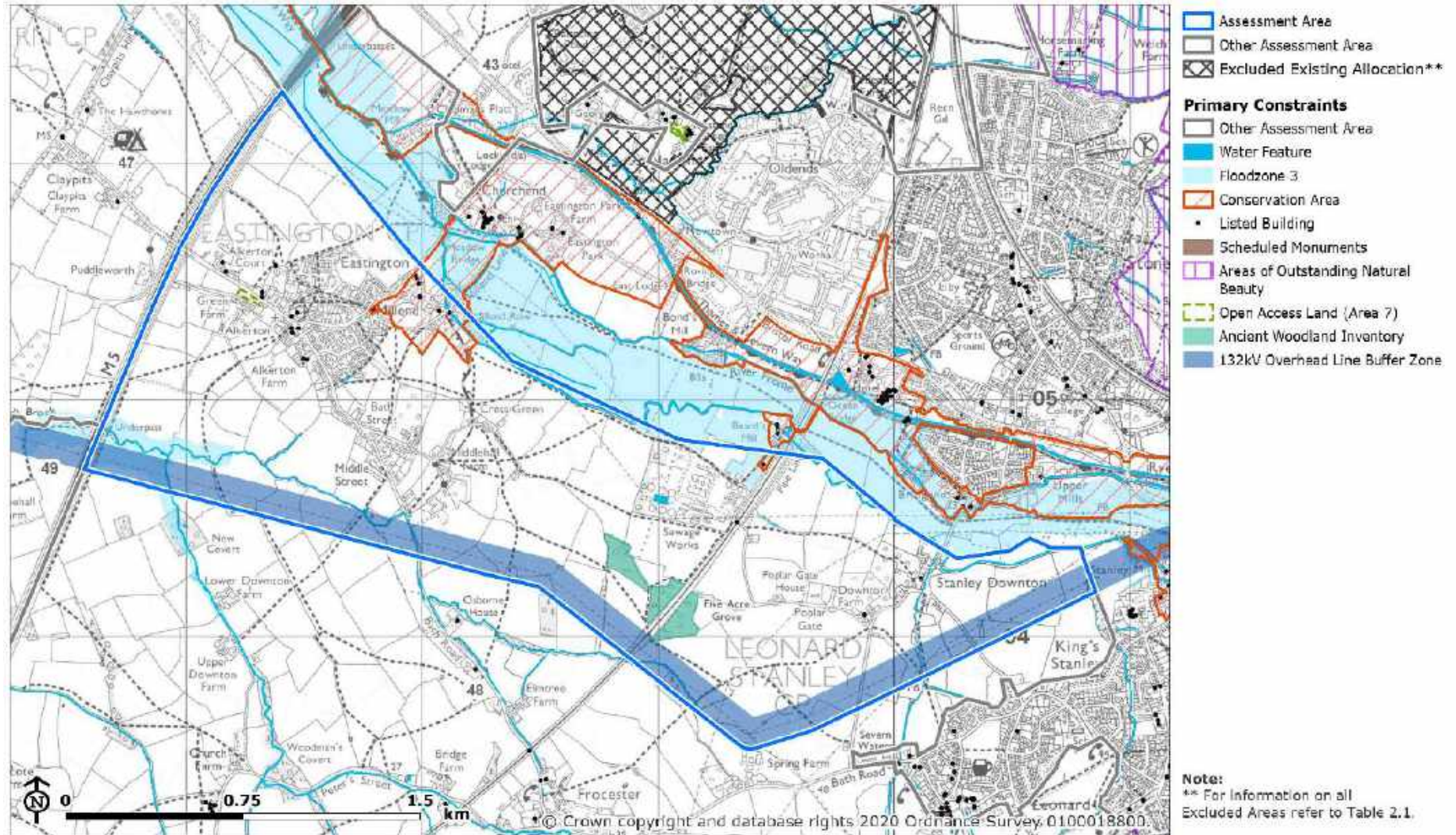
Authority Area: Stroud District

Development Typology: Urban Extension

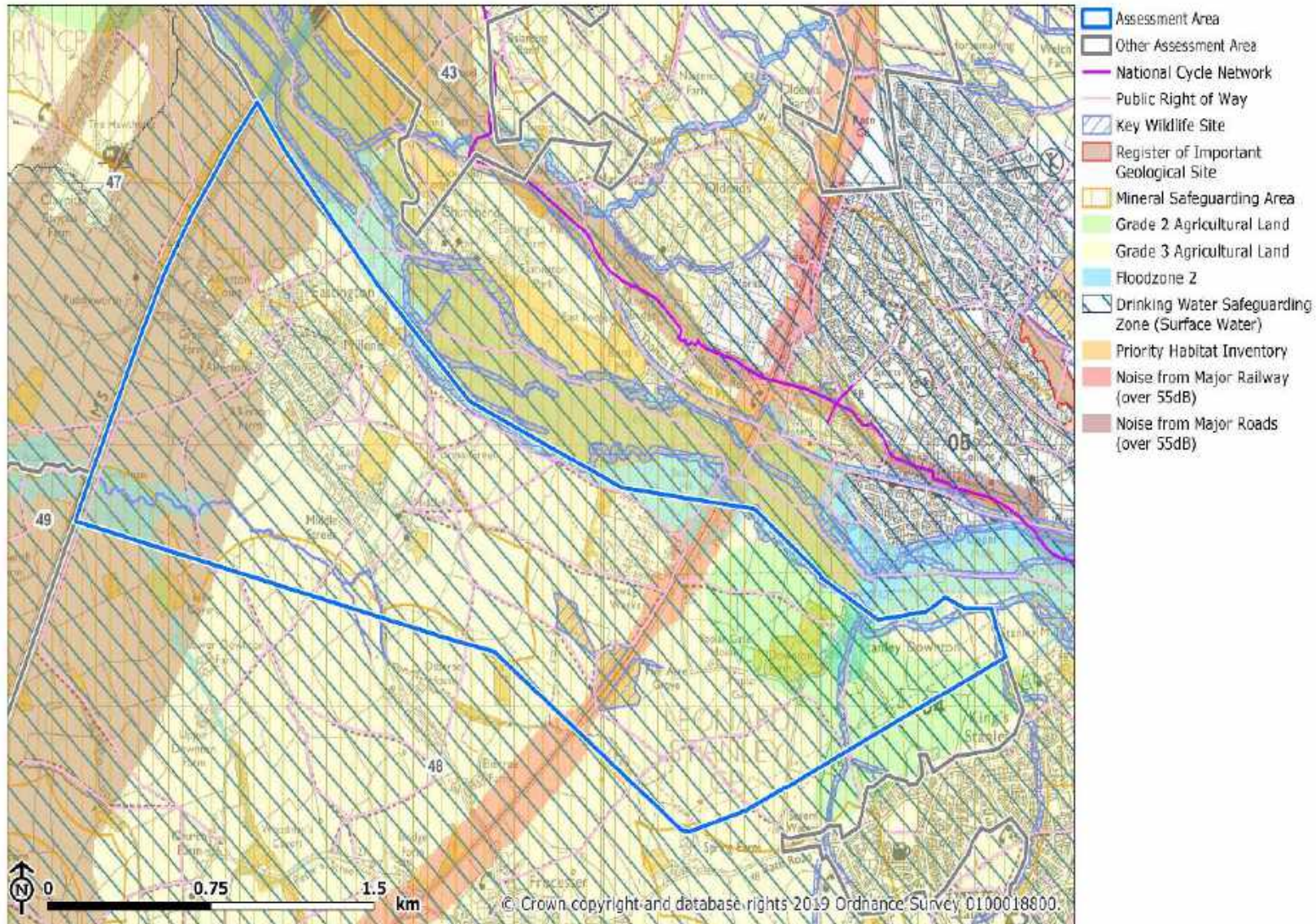
Area: ~423ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 23 listed buildings in the assessment area; all are grade II save for the grade II* listed Alkerton Farmhouse and the summerhouse at Alkerton Grange. The grade II assets include: farmhouses, houses, cottages, agricultural buildings, pubs, a mill, a railway bridge and a signpost. Part of the Stroud Industrial Conservation Area extends into the assessment area and otherwise runs, at a short distance, parallel to its northern edge. Several of the listed buildings in the assessment area are included in the conservation area. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER only includes a limited number of non-designated assets within the assessment area. These include: 	<p>Most of the listed buildings are in Alkerton (Eastington), a historic settlement that has expanded in modern times. Those most susceptible to setting change include the grade II listed Alkerton Farm and its barn, as well as Alkerton Court. However, as a historic rural settlement its agricultural setting also aids in the legibility of the settlement.</p> <p>The Stroud Industrial Conservation Area adjoins Eastington, making this area even more sensitive. The conservation area also extend into the assessment area by the Beard's Mill and the sewage works.</p> <p>Development within the conservation area could affect its character and special interest. Generally setting is less likely to be an issue given the special interest of the conservation area, however, at Eastington the conservation area includes the houses of wealthy mill owners that demonstrate their aspirations towards landed gentry, meaning that the landscape setting may be important.</p> <p>In addition to the listed buildings in Eastington, there are two listed farmhouses in Stanley Downton. These would be susceptible to setting change in the event of development. There is also the area of ancient woodland either side of the railway.</p> <p>In terms of the non-designated assets, there a couple that could be of more than local</p>	N/A	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Possible Mesolithic settlement with Neolithic and Roman material to the southwest of Downton Farm; - A Roman road and milestone; - Possible medieval moated site in Eastington; - Possible site of medieval chapel, Alkerton; - Medieval ditches and track, as well as undated features Bath Street, Eastington; - Fairly extensive ridge and furrow earthworks across the assessment area; - Water meadow systems near the sewage works; - A medieval to post-medieval park associated with Stonehouse Court, Stonehouse; - Site of a post-medieval farmhouse south of the sewage works and of a Priory Mill at Stanley Downton; - Post-medieval turnpike road and milestone; 	<p>significance meaning that development may result in significant negative effects. These assets include the possible Mesolithic settlement in the south-eastern corner of the assessment area, and potentially the water meadow system by the sewage works.</p> <p>Given the sensitivities of the assessment area, any development would probably be best placed between Alkerton (Eastington) and Stanley Downton. If located to avoid assets of medium or high significance and their settings, this area could probably accommodate a small village built at the lowest end of the development dwelling scale with minor negative effects. However, given the limited space, the score for a small village development remains significant negative, albeit more uncertain.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Cropmarks to the west of Stanley Downton and to the west of Meadow Mill, Eastington; - Post-medieval railway (extant) and modern mineral railways (not extant). <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • Other than the existing settlement, the HLC indicates a primarily agricultural landscape comprised of a mix of irregular and less irregular enclosures. These have some time depth and could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. • The HLC also records an area of surviving early woodland (Five Acres Grove); this is classified as ancient woodland. 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> Listed buildings in the wider area that may be susceptible to setting change appear to be limited to the grade I Church of St George, King's Stanley. <p><i>Non-designated</i></p> <p>No non-designated assets within the HER have been identified as being particularly susceptible to setting change.</p>				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> Key Wildlife Site (River Frome Mainstream & Tributaries) overlaps the northern boundary and crosses the eastern half of the site to the east of Stanley Downton. Key Wildlife Site (Wickster's Brook and Ditch) in the south-west of the assessment area, to the south of Eastington. Key Wildlife Site (Five Acre Grove) south-west of Stanley Downton, which is also Ancient Woodland. Flood plain grazing marsh that flanks the channels of the Frome 	<p>Any development, and associated access infrastructure, must respect the braided channels of the Frome and surrounding wetland habitats which principally lie in the north and east of the assessment area.</p> <p>Similarly, any development in the south-west would need to respect the Wickster's Brook corridor; development in the far south-western tip may be restricted.</p> <p>There is opportunity to connect stepping stone habitats, and potentially create distinction east/west within the assessment area, as part of future green infrastructure provision.</p> <p>It may be possible to accommodate a small settlement with negligible effects in the</p>	N/A	*	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>overlaps the northwest-most corner of the assessment area.</p> <p>Assets within 250m:</p> <ul style="list-style-type: none"> Multiple channels of the River Frome Tributaries Key Wildlife Site are adjacent to the northern, north-eastern and eastern boundary. Flood plain grazing marsh interlinking the channels of the Frome extends alongside the north eastern boundary. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI (Selsley Common) 1.9km to the east. SSSI (Frampton Pools) 1.8km north-west. <p>IRZs:</p> <ul style="list-style-type: none"> The assessment area is located within IRZs that address all residential planning applications. <p>Minor negative effects may occur under the medium development size as this scale of development would likely fall within 250m of local designations within the assessment area. Negligible effects may occur under the smallest development scale as there is potential to accommodate a small village over</p>	<p>western half of the assessment area around the village of Eastington.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	250m from local designations. Detailed development design and other mitigation measures may reduce the potential for adverse effects.				
Soil Quality	<p>The majority of the assessment area is comprised of grade 3 agricultural land. However, there is approximately 50ha of grade 2 agricultural land adjacent to the eastern boundary.</p> <p>There is potential for development to result in the loss of high quality agricultural land. Significant negative effects may occur in relation to soil quality at all applicable development sizes. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	<p>There is potential for both applicable development sizes to avoid the grade 2 agricultural land in the east. However, the remaining land is still grade 3 and therefore development at any location in the assessment area has the potential to result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or grade 3b.</p>	N/A	?	?
Water Quality	<p>The entirety of the assessment area is located within a drinking water safeguarding zone.</p> <p>As such, significant negative effects may occur in relation to water quality for all applicable development sizes.</p>	N/A	N/A		
Flood Risk	The majority of the assessment area is greenfield. However, the settlement of Eastington is located in the western half	There is potentially sufficient space in the central region of the assessment area to	N/A		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>of the assessment area and the smaller settlement of Stanley Downton is located in the eastern half.</p> <p>There is approximately 4ha of land to the north of Stanley Downton that is located within Flood Zone 2. In addition, there are smaller areas (<1ha) of developable land located in the south-west and adjacent to the northern boundary.</p> <p>However, there is potentially sufficient space within the assessment area outside of Flood Zone 2 to accommodate both applicable development sizes. As such, negligible effects may occur in relation to flood risk.</p>	<p>accommodate a small or large village outside of Flood Zone 2.</p>			
Mineral Resources	<p>The majority of the assessment area is located within a Mineral Safeguarding Area (MSA).</p> <p>There is potential for development to result in the sterilisation of mineral resources. As such, significant negative effects may occur for the applicable development sizes in relation to mineral resources.</p>	<p>There is land to the south of Eastington that is not located within a MSA. However, there is insufficient space to accommodate a small settlement in this location.</p> <p>It may be possible to avoid the sterilisation of mineral resources in the assessment area by extracting minerals prior to development.</p>	N/A	*	*
Noise	<p>There is approximately 70ha of developable land adjacent to the western boundary that is located within a</p>	<p>A small settlement could be located in the central region of the assessment area outside of noisy areas. In addition, suitable mitigation</p>	N/A		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>Strategic Noise Buffer due to the presence of the M5. In addition, there is approximately a further 14ha of land within a noisy area in the eastern half of the assessment area due to a railway line passing through the area from north to south.</p> <p>However, there is potentially sufficient space for the applicable development sizes to be accommodated outside of noisy areas. As such, negligible effects may occur in relation to noise.</p>	<p>may also be possible to overcome any noise related issues.</p>			
Odour	<p>No odour-related spatial policies apply to the assessment area.</p> <p>As such, negligible effects are considered likely in relation to odour for all applicable development sizes.</p>	N/A	N/A		

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • A well-wooded agricultural character with Elm hedgerows, mature oak trees and blocks of mixed woodlands. • A well developed and interconnected network of public rights of way. • Some areas in the east possess a continuation of the special qualities of the Cotswolds AONB such as high levels of tranquillity and accessibility. <p>As such, landscape sensitivity is high under the medium development size option as the key characteristics and qualities of the landscape may be highly sensitive to development of this scale. Landscape sensitivity is reduced to moderate-high for a small village as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	N/A	H	M-H

Summary of Constraints and Landscape Sensitivity

Overall, there is little potential for development of a new settlement to avoid the majority of constraints in the assessment area. The historic environment assessment suggests that the most appropriate location for a small village may be in the central region of the assessment area, between the settlements of Alkerton (Eastington) and Stanley Downton, which are located in the west and east of the assessment area respectively. These settlements contain a number of designated assets which the development of a new settlement may cause disturbance to the setting of. In addition, the Stroud Industrial Heritage Conservation Area is adjacent to Eastington on the northern boundary, increasing the potential for development in western half of the area to result in significant negative effects on the local historic environment.

The central region of the assessment area is occupied by a drinking water safeguarding zone and a Key Wildlife Site (Five Acre Grove), which is also an area of Ancient Woodland. Furthermore, the River Frome Mainstream & Tributaries Key Wildlife Site is also adjacent to the northern boundary. There is potential for development to result in significant negative effects associated with these constraints. Additionally, this area is also occupied by some land within a Mineral Safeguarding Area and is comprised of grade 3 agricultural land. However, there may be potential to extract mineral resources prior to development and it is not clear if the land is grade 3a or the lower quality grade 3b. Landscape sensitivity is reduced for the small village scenario compared to a larger scale of development. However, even at the small village scale, the landscape sensitivity is still considered to be moderate-high.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via Bath Road which links to the A38, and the A419 to the north of the assessment area, which provides links to Stroud and M5 Junction 13.</p> <p>M5 Junction 13 is located to the north of the assessment area and is considered a 'critical junction' by the JCS/SADC Transport Evidence Base. The JCS/SADC modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate just within its design capacity in 2031 (at 88% Ratio to Flow Capacity during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 19,924</p> <p>A low number of workplaces (jobs) can currently be accessed by public transport from the assessment area, which is currently served by a low-frequency public transport service.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 263,511</p> <p>Access from the assessment area to employment by Car scores relatively high, due to the assessment area's proximity to the strategic road network.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that urban centres and healthcare facilities are within 20 to 40 mins travel time by public transport services, while education facilities are within 20 mins.</p>	
Private car use by commuters	<p>% Driving a Car or Van = 73%</p> <p>Car based trips currently account for an average of 73% of all commuter journeys in LSOAs covered by the assessment area, which is considered to reflect proximity to the strategic road network.</p>	

Criterion	Rationale	Score
Proximity to sustainable transport networks	The assessment area is within the 2.5km catchment of Stonehouse Rail Station and the majority of the area is within the 5km catchment of Cam and Dursley Rail Station. The assessment area is close to reasonably frequent bus services along arterial routes, whilst a National Cycle Network Route is located nearby to the north of the assessment area, with opportunities to develop additional walking and cycling links to connect it in future.	

Deliverability/Infrastructure

Criterion	Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)	
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.	N/A		
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).	N/A		
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.	N/A		
	Gas	Load is acceptable.	N/A		
	Rail transport	Within 2.5km of Stonehouse branch line station.	N/A		

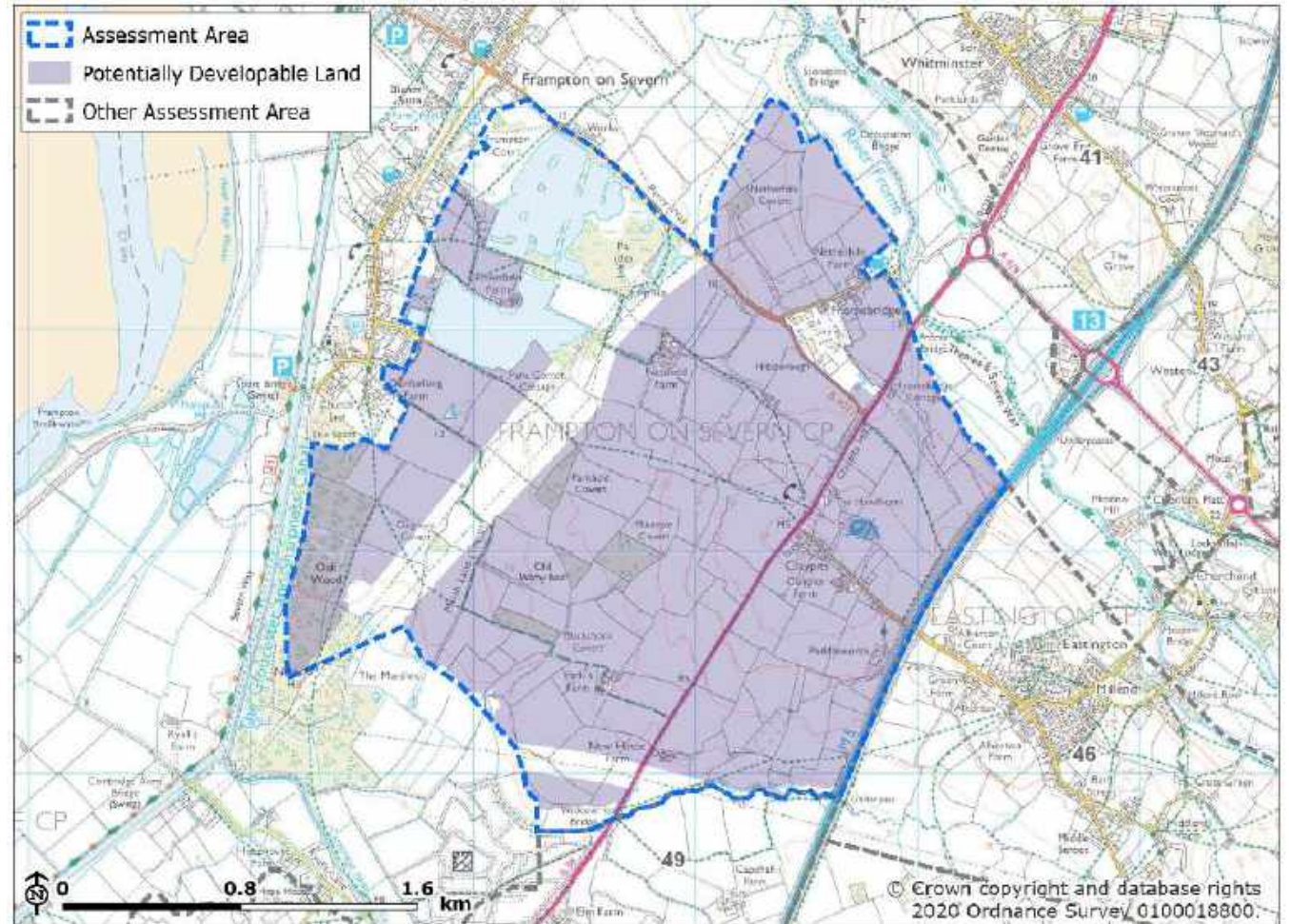
Assessment Area 47 – New Settlement: Land East of Frampton on Severn

Assessment Area Ref: 47

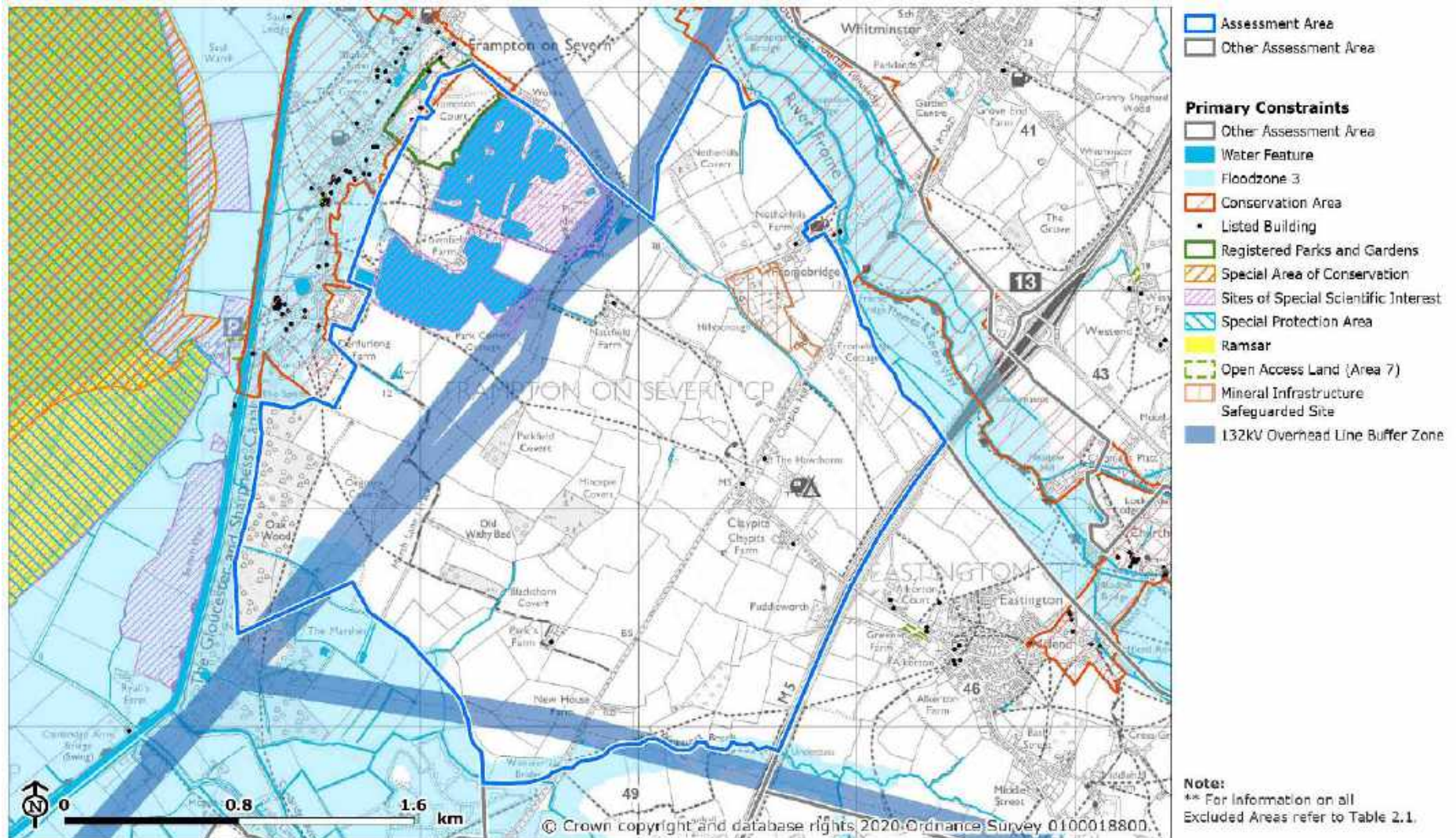
Authority Area: Stroud District

Development Typology: Urban Extension

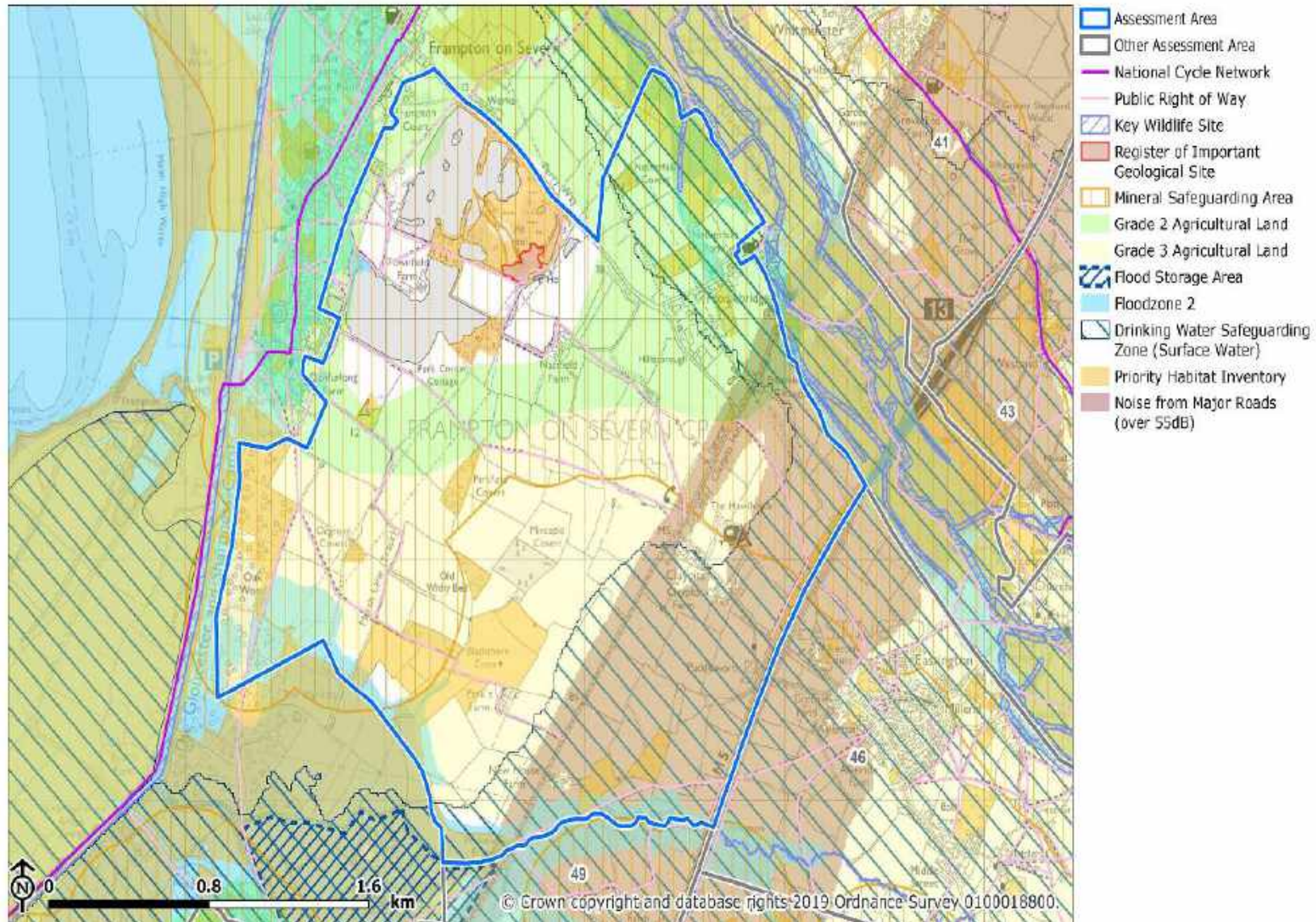
Area: ~688ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are nine listed buildings in the assessment area; all of which are grade II listed save for the gate piers and gate to Frampton Court (a grade I listed building at the boundary of the assessment area). The grade II listed buildings are mainly farmhouses but there are also a couple of houses – one belonging to a mill owner – and a milestone. The grade II* Frampton Court registered park and garden is largely overlapped by the northern tip of the assessment area. The Frampton on Severn Conservation Area is overlapped and immediately adjacent to the northern-western boundary, while the north-eastern boundary overlaps the Stroud Industrial Conservation Area. 	<p>The north-western edge of the assessment area is very sensitive to development due to the presence of Frampton Conservation Area and some of the listed buildings within it especially the grade I Frampton Court. The grounds associated with this country house are also a grade II* RPG.</p> <p>The north-eastern edge is also sensitive as it overlaps the Stroud Industrial Conservation Area. Setting is likely to be much less of an issue in relation to the part of the conservation area adjacent to the assessment area, but there is the potential for harm to the grade II listed building it contains.</p> <p>The listed buildings within the assessment area are a key sensitivity. Several are farmhouses and therefore likely to be susceptible to setting change as a result of the loss of their agricultural hinterland and/ or associated outbuildings (if any).</p> <p>There are a few non-designated assets that may be of more than local significance, depending on their survival. For example, the water meadows and moated site. The prehistoric and Roman settlements and associated cemeteries – especially the barrow cemetery - could also potentially be of medium importance, but they appear to lie in an area that has been heavily quarried meaning that little may remain.</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p><i>Non-designated</i></p> <ul style="list-style-type: none"> • The HER lists many non-designated assets within the assessment area. These include: <ul style="list-style-type: none"> - Prehistoric settlement including Neolithic pits and Neolithic or Bronze hengiform enclosure to the west of Fromebridge; - Bronze Age Round barrow cemetery, Fromebridge; - Late Iron Age to Roman cemetery, Fromebridge; - Undated burials near Fromebridge (possibly relating to the nearby barrow cemetery or late Iron Age to Roman cemetery); - The routes of two Roman roads; - Roman settlement, east of Townfield Farm Frampton; - Possible settlement earthworks Puddleworth; - Fairly extensive areas of ridge and furrow earthworks; - Possible moated site south of Puddleworth; 	<p>The WWII crash site at Home Farm is another key sensitivity as it will be protected by the Military Remains Act 1986. However, the HER notes that most of the remains were recovered immediately following the crash and that the site was due to be excavated in 1994 (pending MOD permissions).</p> <p>The distribution of the key sensitivities is such that significant negative effects are likely for any sized new settlement other than a small village built at the lower end of the development scale. Since the whole building quantum (1, 500 – 5000) cannot be accommodated a significant negative score has been given, but this is highlighted as doubly uncertain given that a development at the lower end may be feasible.</p>			




Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Water management earthworks at Fromebridge and a water meadow near New House Farm; - Cropmarks northeast of Nastfield Farm, by Townfield Farm, Frampton and northeast of Mincepie Covert; - The route of three turnpike roads; - Post-medieval and modern quarries; - Ponds at Claypits and in and around The Hawthorns; - Site of multiple post-medieval buildings at Claypits and Netherhills, Eastington; - Historic pathway, Eastington and former road at Puddleworth; - Modern mineral railway (no longer extant); - A WWII pillbox by the A38; - A WWII Spitfire crash site at Park's Farm. <ul style="list-style-type: none"> • The HER also records a few extant post-medieval buildings: 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Frome cottages, Fromebridge; - A former beer house, Claypits; and - Claypits Villa. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • Other than the historic settlement at Frampton and Claypits the HLC indicates that much of the assessment area is agricultural land comprised of a mix of irregular, less irregular, regular and less regular enclosures, as well as some riverine pasture. Some of the enclosures have time depth and could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. • A significant portion adjacent to Frampton is also highlighted to have 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>been an industrial (quarrying) area.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • Frampton Conservation Area contains listed buildings that could be susceptible to setting change, particularly the grade I listed Frampton Court and grade II listed Oregrove Farmhouse, and farm buildings in Church End. • The Stroud Industrial Conservation Area also contains a listed building - the grade II Fromebridge Hill - that may be susceptible to setting change. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • No non-designated assets within the HER have been identified as being particularly susceptible to setting change. 				
Ecological and	Assets within the assessment area:	There is potential to locate a small village in the south-east of the assessment area, which	*	*	*

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Geological Environment	<ul style="list-style-type: none"> SSSI (Frampton Pools) located in the north-western corner of the assessment area. Key Wildlife Site (River Frome Mainstream & Tributaries) overlaps the northern boundary of the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> Part of the Upper Severn Estuary SSSI is 125m from the south-western boundary of the assessment area. Multiple sections of the River Frome Mainstream & Tributaries Key Wildlife Site are adjacent to the northern boundary of the assessment area. Gloucester & Sharpness Canal Key Wildlife Site located 150m from the south-western boundary. Wickster's Brook and Ditch Key Wildlife Site adjacent to the south-eastern boundary. RSPB (Slimbridge) reserve located 150m to the south-west. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI/SAC/SPA/Ramsar (Upper Severn Estuary) located 400m from the western boundary. 	<p>would be located over 2km from national designations to the west.</p> <p>Any development potentially impacting the large open agricultural fields across the assessment area will need to consider, not only value as priority grassland but also as supporting habitat to qualifying bird species of the nearby designations.</p> <p>A comprehensive green infrastructure strategy is likely to form part of the mitigation package for recreational activity associated with any future residents.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>IRZs:</p> <ul style="list-style-type: none"> The assessment area falls within multiple IRZs for all planning applications. <p>Significant negative effects may occur under the largest development size option as this scale of development could not be accommodated without being within 250m of the national designation within the assessment area. Minor negative effects may occur under the medium and small development size options as these scales of development could be accommodated over 250m from the national designation, but would still be within 2km. Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>				
Soil Quality	<p>The majority of the southern half of the assessment area is comprised of grade 3 agricultural land. There is over 100ha of developable land in the northern half of the assessment area that is grade 2 agricultural land. There is approximately 30ha of developable land in three pockets that is classified as non-agricultural. In addition there is a small area (10ha) of grade 4 agricultural land adjacent to the southern boundary.</p>	<p>There is potential for development under the small and medium development size options to avoid the loss of grade 2 agricultural land by being situated outside the northernmost part of the assessment area. However, the majority of remaining land in the assessment area is still grade 3 and therefore development at any location has the potential to result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or the lower quality grade 3b.</p>		?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>There is potential for development to result in the loss of high quality agricultural land. Significant negative effects may occur in relation to soil quality at all development sizes. The effects are uncertain in the case of the small and medium development size options as these scales could potentially be accommodated on the grade 3 land where it is uncertain if it is grade 3a or the lower quality grade 3b. In the case of the large development size option, there is no uncertainty in the potential effects as this scale of development could not be accommodated without intersecting with the grade 2 agricultural land.</p>				
Water Quality	<p>There is approximately 180ha of land in the eastern half of the assessment area that is located within a drinking water safeguarding zone.</p> <p>Significant negative effects may occur under the largest size option in relation to water quality as this scale of development could not be accommodated without intersecting with safeguarded zone. Negligible effects may occur under the small and medium development size options as these scales of development could potentially be accommodated within the assessment area outside of the safeguarded zone.</p>	<p>There is potentially sufficient space within the central region of the assessment area to accommodate development at the small and medium size outside of the drinking water safeguarding zone.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Flood Risk	<p>The assessment area is greenfield apart from the small settlement of Claypits in the eastern half. In addition, the A49 passes through the eastern half of the assessment area from north to south and intersects with the B4071 in the northern half.</p> <p>There is approximately 12ha of land adjacent to the northern boundary of the assessment area that is located in Flood Zone 2. In addition, there is approximately a further 16ha of land within Flood Zone 2 that is distributed along the southern boundary of the assessment area.</p> <p>Negligible effects may occur under the small and medium development sizes as there is potentially sufficient space within the assessment area to accommodate these scales of development outside of Flood Zone 2. Significant negative effects may occur under the largest size option as this scale of development is unlikely to be accommodated without intersecting with Flood Zone 2.</p>	<p>There is potential for development under the small and medium size options to be located in the central region of the assessment area, outside of Flood Zone 2.</p>			
Mineral Resources		<p>There is potential to accommodate a small village in the south-east of the assessment</p>	*	*	

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>Over 50% of the assessment area is located within a Mineral Safeguarding Area (MSA).</p> <p>There is potential for development to result in the sterilisation of mineral resources. Significant negative effects may occur under the medium and large development size options as there is insufficient space to accommodate these scales of development outside of MSAs. Negligible effects may occur under the smallest development size option as there is potentially sufficient space to accommodate this scale of development outside of MSAs.</p>	<p>area, avoiding the sterilisation of mineral resources.</p> <p>It may also be possible to accommodate larger developments without the sterilisation of mineral resources by extracting minerals prior to development.</p>			
Noise	<p>There is approximately 160ha of land adjacent to the eastern boundary that is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the M5.</p> <p>Significant negative effects may occur under the largest development size option as this scale of development could not be accommodated without intersecting with the noisy area. Negligible effects may occur in relation to noise under the small and medium size options as these scales of</p>	<p>There is potentially sufficient space in the central region of the assessment area to accommodate development under the small and medium size outside of the noisy area in the east. In addition, a small village could potentially be accommodated in the south-west of the assessment area outside of noisy areas.</p> <p>Suitable mitigation may also be possible to overcome any noise related issues.</p>	*		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	development could potentially be accommodated outside of the noisy area.				
Odour	No odour-related spatial policies apply to the assessment area. As such, negligible effects are considered likely in relation to odour for all development sizes.	N/A			

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> A well-wooded agricultural character with Elm hedgerows, mature oak trees and blocks of mixed woodlands. Rural setting provided to the existing settlement and features of historic interest including Scheduled Monuments, Registered Buildings and Registered Parks and Gardens. Rural and removed agricultural character. <p>As such, landscape sensitivity is high under the largest development size option as the key characteristics and qualities of the landscape may be highly sensitive to development of this scale. Landscape sensitivity is</p>	H	M-H	M

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
reduced to moderate-high and moderate for the villages as the key characteristics and qualities of the landscape are potentially less sensitive to development at these scales.			

Summary of Constraints and Landscape Sensitivity

The west of the assessment area (to the west of the powerline) may be the least suitable for development. This is due to Frampton Pools SSSI being located in the north-western corner and Frampton on Severn Conservation Area on the western boundary, which contains multiple listed buildings as well as Frampton Court Registered Park and Garden on the north western boundary. The area is also comprised of grade 2 and grade 3 agricultural land and is located within a Mineral Safeguarding Area (MSA), although there may be potential to extract minerals prior to development and it is not clear if the grade land is grade 3a or the lower quality grade 3b.

The central region of the assessment area (to the west of the A38) may be able to accommodate a small village with less potential for adverse impacts compared to the west of the area. The northern half of the central region is occupied by grade 2 agricultural land so development may be best placed to the south of this. This area is still comprised of grade 3 agricultural land and some land within a MSA, but as previously mentioned, it may be possible to mitigate adverse impacts on these constraints. In terms of the wider area, this location is within 2km of the internationally designated Severn Estuary (SAC/SPA/Ramsar/SSSI) to the west and therefore residential development at this location has the potential to result in negative impacts.

Land to the east of the A38 could also potentially accommodate a small settlement to the south of Claypits. However, this area is located within a drinking water safeguarding zone, an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours, grade 3 agricultural land and there are a listed buildings located within Claypits and Eastington further to the east. It may be possible to provide suitable mitigation to overcome any noise related issues and it is not clear if the grade 3 land is grade 3a or the lower quality grade 3b.

At either location, development may be most appropriate at the small village scale due to moderate landscape sensitivity compared to moderate-high and high landscape sensitivity for the medium and large scales of development respectively.

Accessibility

Criterion	Rationale for Score	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via the A38, which runs through the centre of the site and provides strategic connections to Stonehouse, Stroud and M5 Junction 13.</p> <p>M5 Junction 13 is located to the north of the assessment area and is considered a 'critical junction' by the JCS/SADC Transport Evidence Base. The JCS/SADC modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate just within its design capacity in 2031 (at 88% Ratio to Flow Capacity during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 21,228</p> <p>A relatively low number of workplaces (jobs) can currently be accessed by public transport from the assessment area.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 270,301</p> <p>Access from the assessment area to employment by car scores relatively high, due to local road links to Stroud and other nearby urban centres.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that the assessment area is within 20 to 40 mins public transport travel time from urban centres and healthcare facilities, while education facilities are within 20 mins.</p>	
Private car use by commuters	<p>% Driving a Car or Van = 76%</p> <p>Car based trips currently account for an average of 76% of commuter journeys in LSOAs covered by the assessment area, reflecting its proximity to the strategic road network and distance to key urban centres.</p>	

Criterion	Rationale for Score	Score
Proximity to sustainable transport networks	The assessment area is within the 5km catchment of Cam & Dursley Rail Station and Stonehouse Rail Station and is served by low-frequency bus services. The assessment area is close to a number of strategic walking and cycle networks, including the National Cycle Network Route and the Gloucester – Sharpness Canal towpath, providing active mode links to Gloucester and other urban centres.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Load is acceptable, although easement would require high pressure pipeline diversion which would incur a cost to developer.			
	Rail transport	Within 5km of Cam & Dursley mainline station and Stonehouse branch line station. Higher scale of growth may be sufficient to support expansion of mainline rail capacity.			

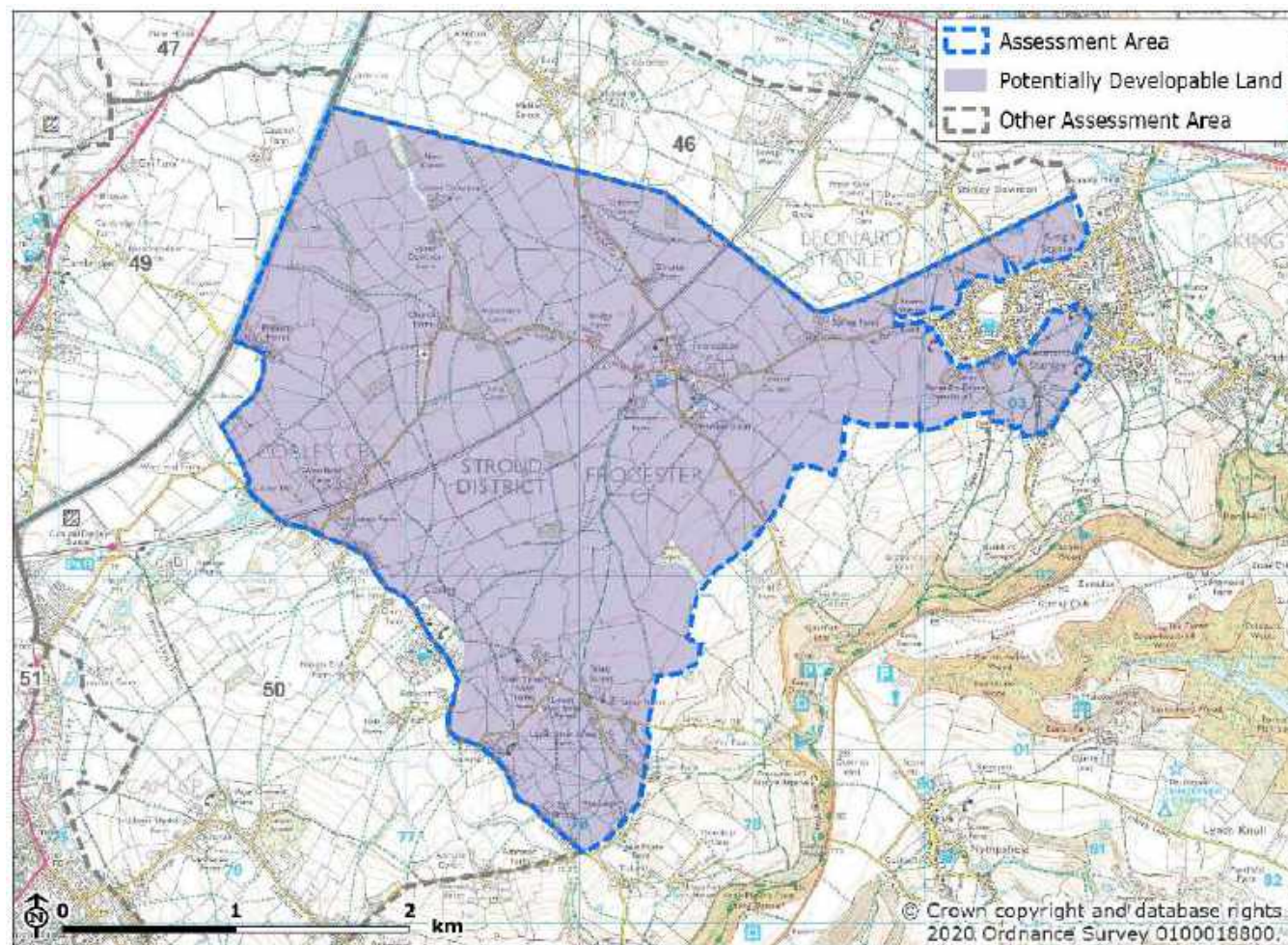
Assessment Area 48 – New Settlement: Land at Frocester and Silver Street

Assessment Area Ref: 48

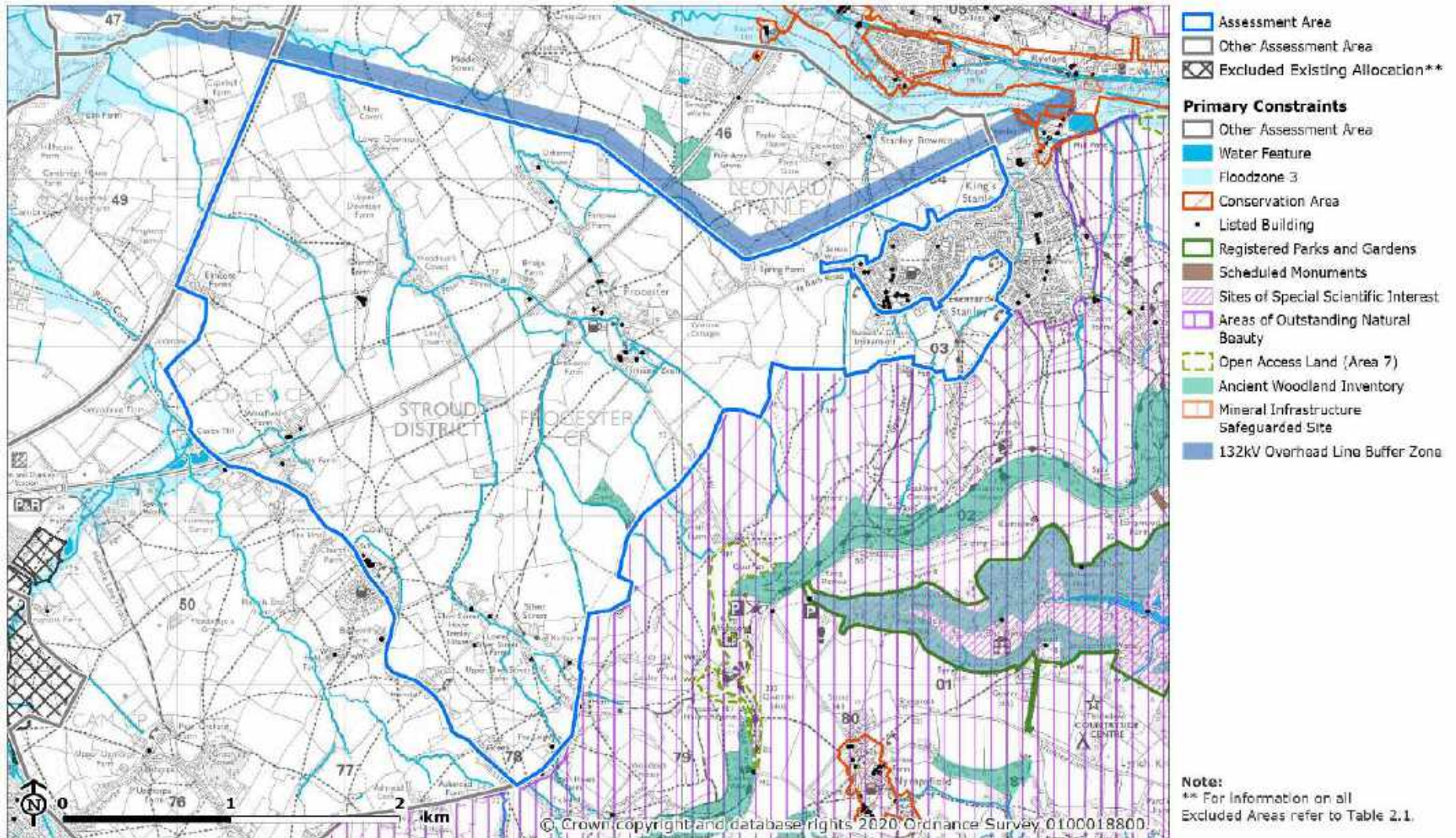
Authority Area: Stroud District

Development Typology: New Settlement

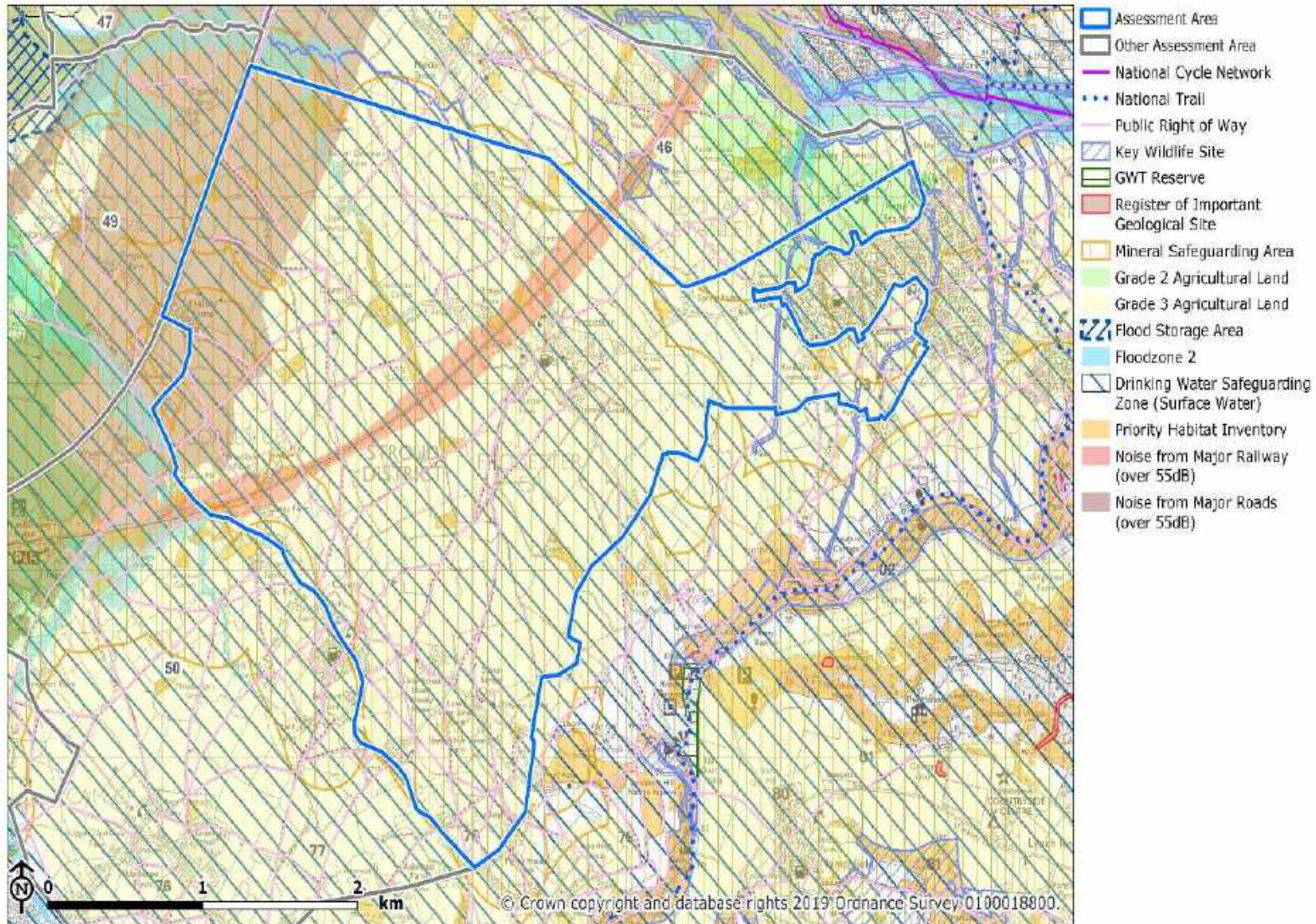
Area: ~998ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designate5</i></p> <ul style="list-style-type: none"> There are 51 listed buildings in the assessment area. These include a grade I listed tithe barn in Frocester and four grade II* listed buildings including two former farmhouses – Priory House and The Leigh -, a former monastic court house and a former Saxon church. The grade II listed buildings include churches, farmhouses, agricultural buildings, cottages, houses, burial monuments, a railway bridge, an inn and vicarage. The grade II* listed Priory House and former Saxon church forms part of a larger group of designated assets relating to Leonard Stanley Priory. Within the assessment area these include a grade II tithe barn and privy and the scheduled remains of the priory. <p><i>Non-designated</i></p>	<p>The listed buildings are a key sensitivity of the assessment area. These are generally clustered towards the settlement at Silver Street, Coaley, Frocester and Leonard Stanley. There are some outlying farmhouses north of Coaley and Frocester, while the remains of the former Church of St Peter stand between the two settlements. Many of these listed buildings would be susceptible to setting change and the historic rural character and identity of these settlements could also be at risk, were they to be coalesced into a new development.</p> <p>The area around Leonard Stanley Priory is particularly sensitive as - in addition to several listed buildings that would be susceptible to setting change – there are the scheduled remains of the priory. All of these are susceptible to both physical and setting change. The scheduled site is not well understood and not all the precinct is covered by the scheduling meaning that there may be highly important remains beyond the scheduled boundary that are non-designated.</p> <p>Frocester is also sensitive due to the density and continuity of non-designated assets. Some of these assets may be of more medium or high significance, meaning that development could give rise to significant negative effects. Such assets include the prehistoric flint working site and Roman Villa's. The early medieval phase of the Frocester Villa is also</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> • The HER lists many non-designated assets within the assessment area. These include: <ul style="list-style-type: none"> - Mesolithic or Neolithic flint working site, southeast of Frocester Court; - Neolithic trackway, Frocester Court; - Possible Neolithic and Bronze Age settlement near Ash Copse; - Possible barrows west of Church Farm and - Iron Age farmstead and Roman villa and features in Frocester; - Possible Roman villa west of Frocester and another building southeast of Frocester; - Roman settlement north of Silver Street; - Course of Roman road; - Saxon cemetery associated with the grade II listed St Peter's Church; - Early medieval settlement Frocester; - Possible medieval occupation sites at Leonard 	<p>rare, and the Saxon cemetery at the grade II listed former Church of St Peter contributes to its significance, as well as being significant in evidential terms. The DMV's should also be treated with caution as these can often be of more than local importance.</p> <p>To avoid/ minimise harm development would be best placed in the northwest of the assessment area, away from the historic settlements and the listed buildings therein. In this area the main sensitivities are the outlying listed buildings along Bath Road and the Church of St Peter and its cemetery, which includes Saxon burials. There are also the earthwork remains of a DMV at Elmcote, the significance of which is uncertain. Beyond these assets it may be possible to develop a small village with minor negative effects. Any larger sized settlement would be likely to cause significant negative effects.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>Stanley Priory, Frocester and Coaley;</p> <ul style="list-style-type: none"> - Deserted Medieval Village's (DMV) east of Elmcote Farm, east of Long Covert and west of Frocester; - Earthwork features south of Frocester; - Ancient ponds and dams, Frocester; - Enclosure or possible moated site, Frocester; - Undated stone structure, Frocester; - Ridge and furrow earthworks across the assessment area; - Site of multiple post-medieval buildings and a pottery kiln in and around Frocester; - Medieval or later road to Frocester; - Undated features at Leonard Stanley Priory; - Undated cropmarks north of Frocester and earthworks north of Silver Street; - Extant 16th century cottage and farmhouse, Frocester; - Route of turnpike roads; 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Disused mineral railways north of Frocester; - Extant railway; - Two German prisoner of war graves at the former Church of St Peter; and - Home Guard headquarters in the stable of Frocester Manor. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • Other than the historic settlements at Silver Street, Coaley, and Leonard Stanley the HLC indicates that an agricultural landscape comprised of a mix of irregular, less irregular and less regular enclosures. These enclosures have time depth and could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. • THE HLC also records a former post-medieval ornamental landscape at 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>Frocester. No features appear to remain.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are further designated assets relating to Leonard Stanley Priory immediate to the assessment area. These include the grade I Church of St Swithin. • Other assets particularly susceptible to setting change include the grade II listed Betworthy Farmhouse, Pigeon Farmhouse, and Ham Farmhouse. • There are several scheduled monuments on the high ground to the south and east of the assessment area for which prominence and visibility are important. For these assets meaningful setting change appears unlikely. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • No non-designated assets within the HER have been identified as being particularly susceptible to setting change. 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> • Key Wildlife Site (River Frome Mainstream & Tributaries) overlaps with the north-eastern corner of the assessment area around Leonard Stanley. • Key Wildlife Site (Wickster’s Brook and Ditch) overlaps with the northern boundary of the assessment area. • Ancient Woodland adjacent to the eastern boundary of the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> • Multiple sections of the River Frome Mainstream & Tributaries Key Wildlife Site adjacent to the north-eastern boundary. • Wickster’s Brook and Ditch Key Wildlife Site adjacent to the northern boundary. <p>Assets within 2km:</p> <ul style="list-style-type: none"> • SSSI (Coaley Wood Quarries) 900m south. • SSSI (Woodchester Park) 1.1km east. • SSSI (Selsley Common) 1.4km north-east. <p>IRZs:</p>	<p>There is significant potential for all new settlement size options to avoid intersection with the local designations in the assessment area, as they are restricted to the eastern boundary.</p> <p>Sensitive design principles for any development may enforce simple buffers to built development and to recreational access, in the vicinity of the watercourse network both that is designated and tributaries upstream.</p> <p>Principles should also avoid isolation of wooded habitats and seek to optimise connectivity.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> The assessment area falls within multiple IRZs associated with SSSIs in the surrounding area, which list all residential applications as land uses of risk. <p>Negligible effects may occur for all development sizes as there is potential for these scales of development to be accommodated over 250m from local designations and over 2km from national designations.</p>				
Soil Quality	<p>The vast majority of the assessment area is comprised of grade 3 agricultural land. However, there is a small area of grade 2 agricultural land in the north-easternmost corner of the assessment area, equating to approximately 20ha.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality under all development size options. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	<p>There is significant potential for all development size options to avoid the loss of grade 2 agricultural land as it is restricted to a comparatively small area in the north-east of the assessment area. However, the remaining land within the assessment area is still grade 3 and therefore development at any location has the potential to result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or grade 3b.</p>	?	?	?
Water Quality		N/A			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>The entirety of the assessment area is located within a drinking water safeguarding zone.</p> <p>As such, significant negative effects may occur in relation to water quality under all development size options.</p>				
Flood Risk	<p>The majority of the assessment area is greenfield. However, the settlement of Frocester is located in the north east and Silver Street is located in the south. There are also a number of smaller areas of residential/agricultural development throughout the area as well as local roads. In addition, a railway line bisects the assessment area from south-west to north-west.</p> <p>In the northern half of the assessment area, land directly adjacent to Wicksters Brook is located within Flood Zone 2. However, the vast majority of the assessment area is not located in Flood Zone 2.</p> <p>There is potential for all development size options to be accommodated within the assessment area outside of Flood Zone 2 and therefore negligible effects are considered likely in relation to flood risk.</p>	<p>There is potential for all development size options to avoid the area of Flood Zone 2 in the north by being located to the south or west of Frocester.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Mineral Resources	<p>The majority of the assessment area is located within Mineral Safeguarding Areas (MSAs).</p> <p>There is potential for development to result in the sterilisation mineral resources. There is insufficient space outside of MSAs to accommodate a new settlement. As such, significant negative effects may occur in relation to mineral resources for all development sizes.</p>	<p>There are pockets of land in the west and east of the assessment area that are not located within MSAs. However, none of them are sufficient to accommodate a new settlement.</p> <p>It may be possible to accommodate development in the assessment area without the sterilisation of mineral resources by extracting minerals prior to development.</p>	*	*	*
Noise	<p>There is approximately 125ha of land adjacent to the western boundary that is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the M5. In addition, the assessment area is bisected by approximately 53ha of land within a noisy area due to the presence of a railway line.</p> <p>Significant negative effects may occur under the largest development size option this scale of development could not be accommodated without intersecting with noisy areas. Negligible effects may occur under the small and medium development size options as there is potentially sufficient space to accommodate these scales of development outside of noisy areas.</p>	<p>There is potentially sufficient space to accommodate the small and medium development size options to the north of the south of the railway noisy area that intersects the site.</p> <p>Although it may not be possible to accommodate the largest size option as a continuous development, it may be possible to accommodate this scale of development outside of noisy areas by locating it north and south of the railway.</p> <p>Suitable mitigation may also be possible to overcome any noise related issues.</p>	*		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Odour	No odour-related spatial policies apply to the assessment area.	N/A			
	As such, negligible effects are considered likely in relation to odour for all development sizes.				

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> A well-wooded agricultural character with Elm hedgerows, mature oak trees and blocks of mixed woodlands. A well developed and interconnected network of public rights of way. Some areas in the east possess a continuation of the special qualities of the Cotswolds AONB such as high levels of tranquillity and accessibility. <p>As such, landscape sensitivity is high under the medium and largest development size options as the key characteristics and qualities of the landscape may be highly sensitive to development of these scales. Landscape sensitivity is reduced to moderate-high for a small village as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	H	H	M-H

Summary of Constraints and Landscape Sensitivity

The distribution of settlements within the assessment area is such that development at any location in the south would result in significant negative effects on the setting of historic assets contained within these settlements. These impacts may be reduced at the small village scale due to there being less coalescence between settlements, but it is likely there would still be significant impacts on setting due to the rural setting that this space between settlements provides.

Therefore, in terms of the historic environment, it may be most appropriate to locate development in the northern half of the assessment area to the north-west of Frocester. Although there is potentially sufficient space to locate a large village in this location, development at the small village scale may be most appropriate due to the potential for negative impacts on the setting of Frocester. Additionally, landscape sensitivity is also reduced at the small village scale compared to the larger scales of development. However, even at the smallest scale, landscape sensitivity is still considered to be moderate-high. This area is occupied by land within a Mineral Safeguarding Area, grade 3 agricultural land and an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours in the north-eastern most corner. There may be potential to extract mineral resources prior to any development and it may be possible to deliver suitable mitigation to overcome any noise related issues. In addition, it is not clear whether the grade 3 land is grade 3a or the lower quality grade 3b.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The area is connected to the highway network via Bath Road, which runs through the centre of the assessment area and provides a link to the A38 and M5 Junction 13. The A419 is to the north of the assessment area linking to Stroud and Stonehouse.</p> <p>Minimal traffic congestion issues are currently experienced within the immediate vicinity of the assessment area.</p> <p>M5 Junction 13 is located to the north of the assessment area and is considered a 'critical junction' in the JCS/SADC Transport Evidence Base. The JCS/SADC modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate just within its design capacity in 2031 (at 88% Ratio to Flow Capacity during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 18,271</p> <p>A relatively low number of workplaces (jobs) can currently be accessed by public transport from the assessment area.</p>	

Criterion	Rationale	Score
	Number of workplaces (jobs) accessible within 30 minutes = 260,548 Access from the assessment area to employment by Car scores relatively high , with good connections to local urban centres / employment sites.	
Access to other key services and facilities by public transport	TRACC Accessibility Modelling outputs show that the assessment area is within 20 to 40 mins travel time of Frocester by public transport. Education facilities are accessible within 20 mins in the area surrounding Frocester to the north and Coaley to the south of the assessment area.	
Private car use by commuters	% Driving a Car or Van = 72% Car based commuter trips currently account for an average of 72% of commuter journeys in LSOAs covered by the assessment area, reflecting its relatively rural location and limited public transport connections.	
Proximity to sustainable transport networks	The assessment area is within the 5km catchment of both Stonehouse Rail Station and Cam & Dursley Rail Stations and is served by low-frequency bus services. The assessment area is currently divorced from the National Cycle Network; however, some existing local walking and cycle routes are in proximity to the assessment area.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-			

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
		25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	At lower levels of growth, load is acceptable. At highest levels, reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer.			
	Rail transport	Within 5km of Cam & Dursley mainline station and Stonehouse branch line station. Higher scale of growth may be sufficient to support expansion of mainline rail capacity.			
	Bus transport	Within 500m of existing low frequency bus route and close enough to Stroud to mean that improvements in frequency could result in reasonably high levels of bus patronage. Higher scale of growth increases prospect of securing investment needed to deliver bus infrastructure improvements.			
	Cycle transport	Close to existing cycle network and whilst outside of reasonable distance to enable significant increase in cycle trips to Stroud or Gloucester, improvements would enable increased cycling to the stations. Higher scale of growth increases prospect of securing investment needed to deliver cycle infrastructure improvements.			

Viability

	Development Type					
	Small Village			Large Village	Town/City	
Dwellings	2,500	3,500	4,500	7,500	10,000 (70% net)	10,000 (60% net)
Indicative developer contributions and affordable housing pool/per unit (£)	40,000	40,000	40,000	40,000	25,000	15,000
Viability	High	High	High	High	High	Medium

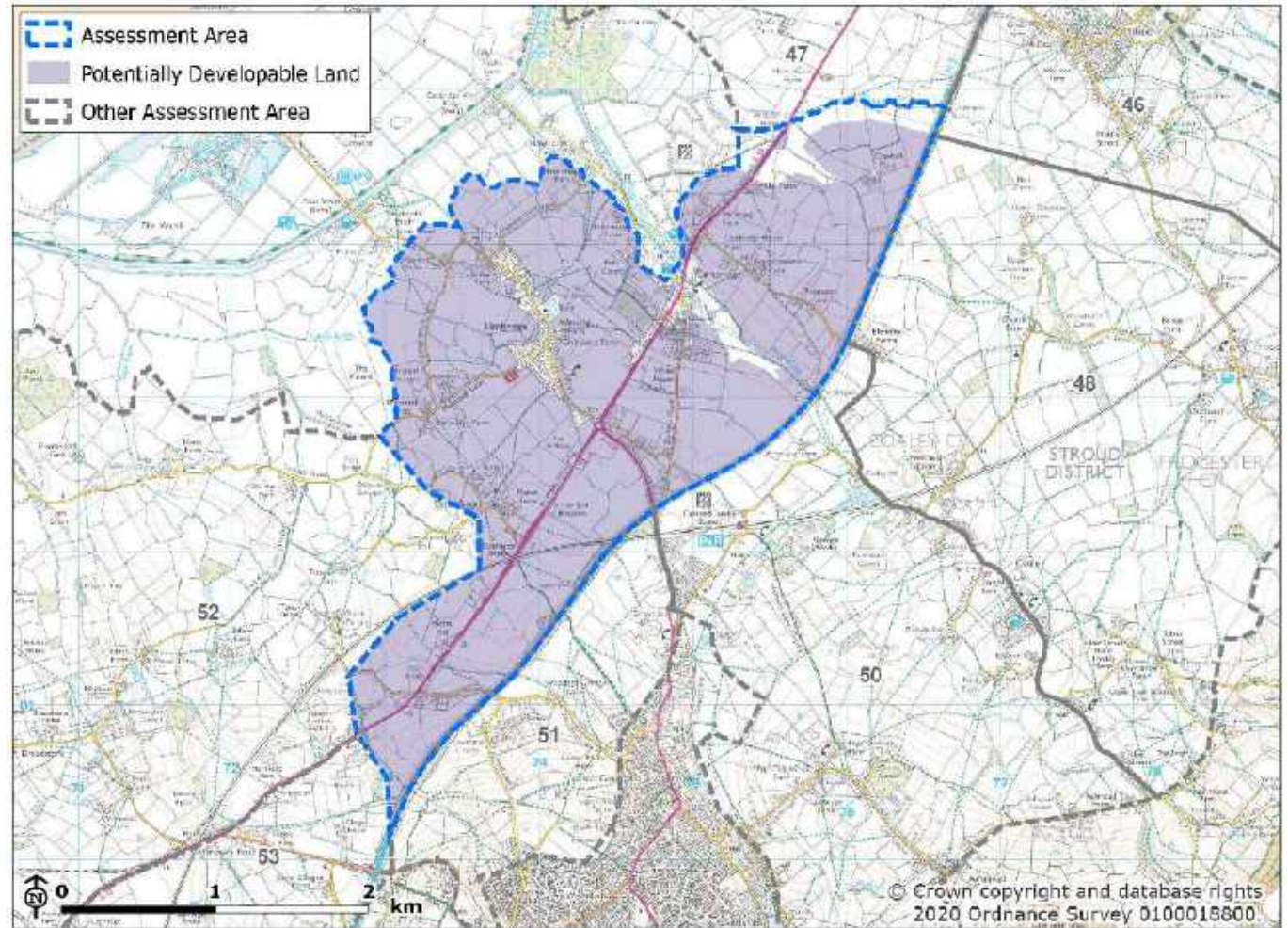
Assessment Area 49 – New Settlement: Land at Slimbridge and Cambridge (West of M5)

Assessment Area Ref: 49

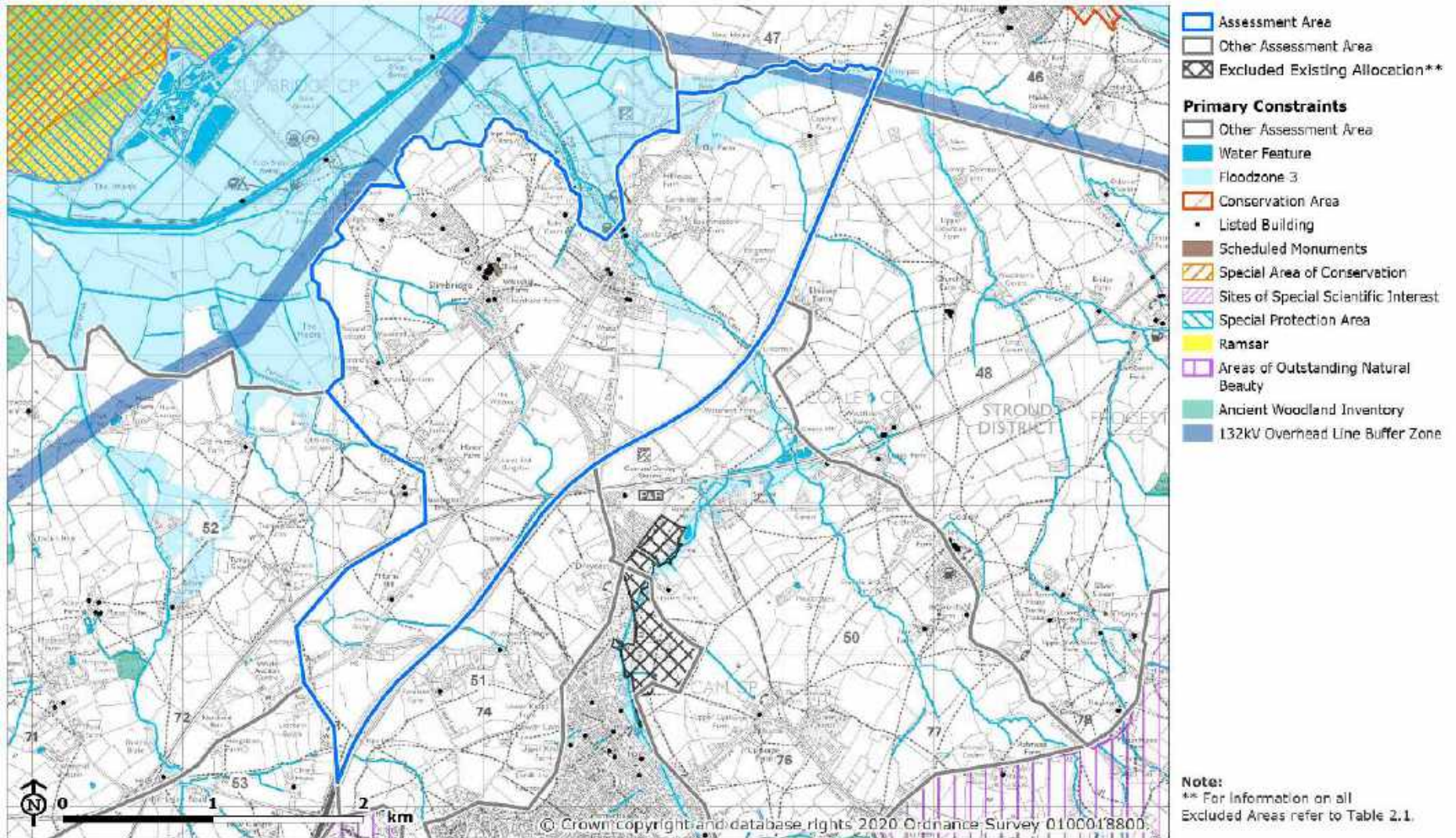
Authority Area: Stroud District

Development Typology: New Settlement

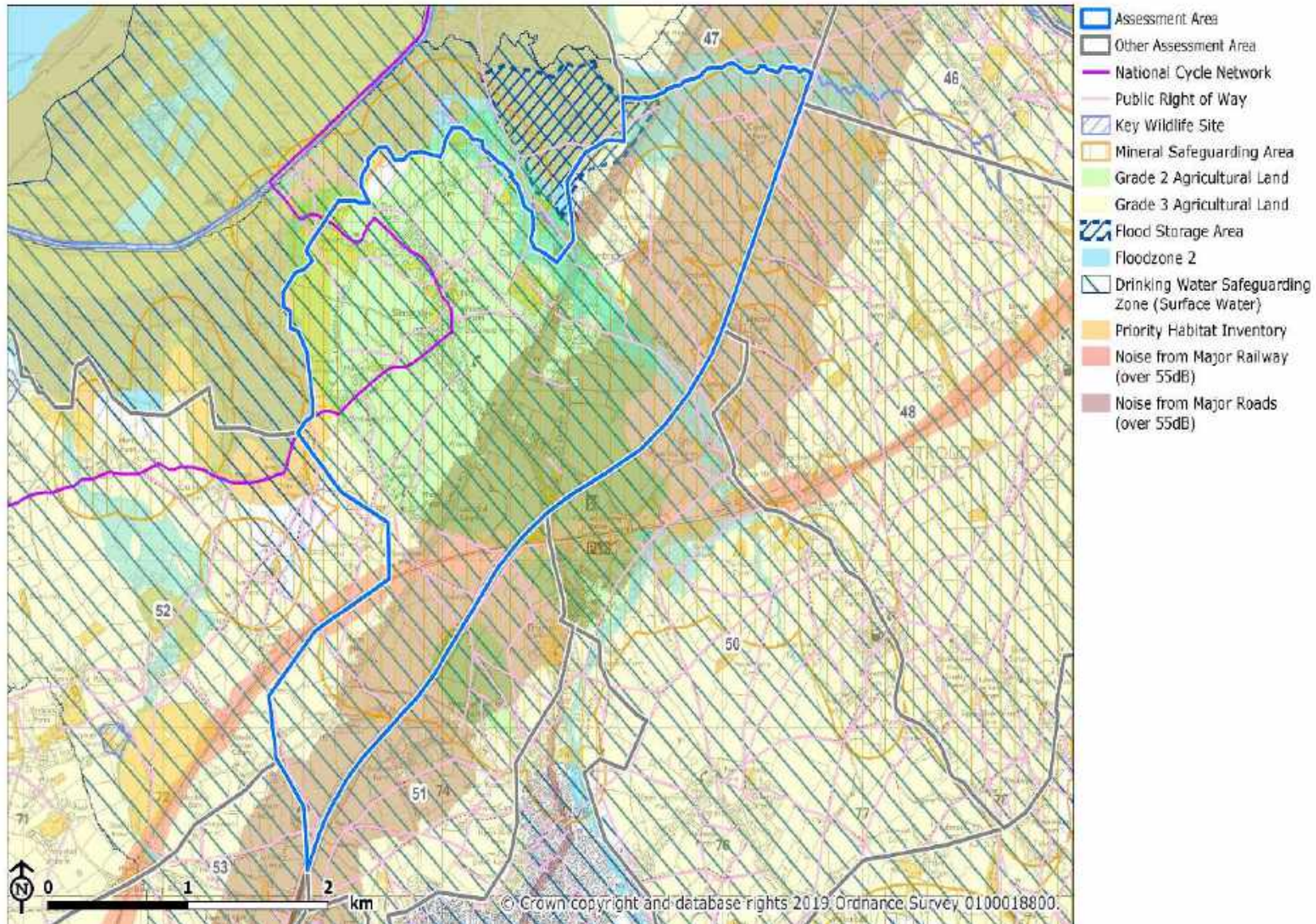
Area: ~781ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 37 listed buildings in the assessment area. These include the grade I listed Church of St John, Slimbridge and two grade II* memorials in its cemetery. The remaining listed buildings are all grade II and include several farmhouses, cottages, agricultural buildings, memorials associated with the Church of St John. There is a scheduled moated site adjacent to the Church of St John, Slimbridge. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER lists a reasonable number of non-designated assets within the assessment area. These include: <ul style="list-style-type: none"> Mound and prehistoric flint flakes; Cropmarks of a possible Roman Camp east of Manor Farm, Gossington; 	<p>The listed buildings are a key sensitivity of the assessment area, with many likely being sensitive to setting change. Most are in Slimbridge or Cambridge; historic settlements with modern infill. There are also some dispersed outlying listed farms.</p> <p>In Slimbridge the grade I Church of St John is highly sensitive, and so too is the adjacent scheduled moat. The nearby possible Saxon settlement adds to the sensitivity of this area.</p> <p>Other non-designated assets that could be of more than local significance include the possible Roman Camp near Gossington and the possible DMV's at Gossington and Slimbridge. Given the sensitivities of the area it is unlikely that a new settlement of any size could be developed without giving rising to significant negative effects. However, there is an area to the north of the M5 and Elmcote Farms that could be developed as an extension to that in Assessment Area 48. There is also a small area south of the railway along the A38 that may be suitable for a small village with a low number of dwellings. However, this would be dependent on in field verification of the sensitivity of the grade II listed Hornshill Cottage, a former inn, as low.</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Roman features, Slimbridge; - Roman and possibly 5th century Saxon settlement north of the Church of St John, Slimbridge; - Roman Gloucester to Sea Mills Road (now the A38) - Deserted Medieval Settlements (DMV) at Gossington and possibly at Newhouse Farm, Slimbridge; - Medieval features, Slimbridge; - Possible moated site east of Wickster's Bridge and another south of it associated with cropmarks; - Earthwork flood defences by Wickster's Bridge; - Post-medieval enclosure and possible settlement east of Slimbridge; - Mill(s) site Cambridge; - Various cropmarks near The Willows; south of White House Farm; south of Kingston Farm; north of Moorend Cottages; and at Stock Bridge; 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Canal at Cambridge; - Extant railway; - Turnpike Roads. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The assessment area includes the historic settlements of Gossington, Slimbridge and Cambridge. It is otherwise primarily an agricultural landscape comprised of a mix of irregular, less irregular and regular enclosures. The irregular enclosures have time depth and could include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • None of the listed buildings in the wider vicinity appear to be 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>particularly susceptible to meaningful setting change.</p> <p><i>Non-designated</i></p> <p>No non-designated assets within the HER have been identified as being particularly susceptible to setting change.</p>				
<p>Ecological and Geological Environment</p>	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> Key Wildlife Site (Cambridge Old Canal) to the north of Cambridge, adjacent to the northern boundary. <p>Assets within 250m:</p> <ul style="list-style-type: none"> Key Wildlife Site (Wickster's Brook and Ditch) adjacent to the north-eastern boundary. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI/SAC/SPA/Ramsar (Upper Severn Estuary) 1.5km to the north. SSSI (Stinchcombe Hill) 1.6km to the south-east. RSPB (Slimbridge) reserve is located within 400m to the north-west, on the opposite side of the Gloucester and Sharpness Canal Key Wildlife Site, although it should be noted that it is not designated. 	<p>There is potential to locate all development scales on the eastern boundary of the assessment area, toward the M5 corridor, where they would be over 250m from local designations and over 2km from national designations.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>IRZs:</p> <ul style="list-style-type: none"> The assessment area falls within IRZs, principally associated with the Severn, which list all residential applications as land uses of risk. Coastal and floodplain grazing marsh associated with the Severn (indicating potential impact pathways) extend into the Assessment Area. <p>Negligible effects may occur for all development size options as there is potentially sufficient space to accommodate all scales of development over 250m from local designations and over 2km from national designations. Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>				
Soil Quality	<p>There is over 400ha of grade 2 agricultural land in the central region of the assessment area around settlements of Slimbridge and Cambridge. The majority of the remaining land in the assessment area is grade 3 in the south and north. In addition there are two small (<10ha) pockets of grade 4 agricultural land adjacent to the northern boundary.</p>	<p>There is potential for development under the smallest size option to avoid the loss of grade agricultural land by being located in the north or south of the assessment area. However, these areas are still comprised of grade 3 agricultural land and therefore development may still have adverse impacts on higher quality soil in these locations, dependent upon whether it is grade 3a or the lower quality grade 3b.</p>			?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality under all applicable development sizes. The effects are uncertain under the smallest size option as this scale of development could potentially be accommodated on grade 3 agricultural land, but it is not clear if it is grade 3a or the lower quality grade 3b. There is no uncertainty identified for the medium and large size options as these scales of development could not be accommodated without intersecting with grade 2 agricultural land.</p>	<p>Note: a recent study associated with a planning application in the central area (Wisloe Road, Dursley Road) identified land as Grade 3b in this location; however this has not been verified by the Council at this time).</p>			
Water Quality	<p>The entirety of the assessment area is located within a drinking water safeguarding zone.</p> <p>As such, significant negative effects may occur in relation to water quality under all development size options.</p>	N/A			
Flood Risk	<p>The majority of the assessment area is greenfield. The settlements of Slimbridge and Cambridge occupy the central region of the assessment area and the A38 bisects the area from north to south.</p> <p>There is approximately 18ha of developable land to the north and south-east of Cambridge that is located within Flood Zone 2. In addition, there are</p>	<p>There is potential for development at the small and medium size to be located to the south of Slimbridge, avoiding the areas of Flood Zone 2 in the north. There may also be potential for the town scale to avoid Flood Zone 2, but this may result in broken up development due to the presence of existing development.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>smaller areas (<10ha) of development land in the northern most part of the assessment area that are also located in Flood Zone 2. The assessment boundary to the north of Cambridge overlaps with a flood storage area.</p> <p>Negligible effects may occur for all development scales as they could potentially be accommodated outside of Flood Zone 2.</p>				
Mineral Resources	<p>The majority of the assessment area is located within a Mineral Safeguarding Area (MSA).</p> <p>There is potential for development to result in the sterilisation of mineral resources. As such, significant negative effects may occur in relation to mineral resources under all development size options.</p>	<p>There are pockets of land in the north and south of the assessment area that are not located within a MSA. However, they are insufficient to accommodate a new settlement.</p> <p>It may be possible to accommodate development within the assessment area without the sterilisation of mineral resources by extracting minerals prior to development.</p>	*	*	*
Noise	<p>The majority of the eastern half of the assessment area is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the M5.</p> <p>Significant negative effects may occur in relation to noise at the largest scale as it is unlikely that this scale of development could be accommodated without intersecting with the M5 noisy area. Negligible effects may occur under the</p>	<p>There is potential for a small village to be accommodated to the west of Slimbridge, avoiding the M5 noisy area. Additionally, a large village could also be accommodated outside of noisy areas by surrounding and incorporating Slimbridge.</p> <p>Suitable mitigation may also be possible to overcome any noise related issues.</p>	*		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	smallest and medium development size option as these scales of development could potentially be accommodated without intersecting with the noisy area				
Odour	No odour-related spatial policies apply to the assessment area.	N/A			
	As such, negligible effects are considered likely in relation to odour for all development sizes.				

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> A well-wooded agricultural character with Elm hedgerows, mature oak trees and blocks of mixed woodlands. Rural setting provided to the existing settlement and features of historic interest including Scheduled Monuments, Registered Buildings and Registered Parks and Gardens. Rural and removed agricultural character. <p>As such, landscape sensitivity is high for the largest development size option as the key characteristics and qualities of the landscape may be highly sensitive to development of this scale. Landscape sensitivity is</p>	H	M-H	M

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
reduced to moderate-high for a large village and moderate for a small village as the key characteristics and qualities of the landscape are potentially less sensitive to development at these scales.			

Summary of Constraints and Landscape Sensitivity

Overall, the western half of the assessment area is likely to be more sensitive to development than the eastern half due to the presence of Slimbridge and Cambridge, which both contain multiple historic assets. The western half of the assessment area is also more sensitive in terms of the natural environment due to it falling within 2km of the internationally designated Severn Estuary (SPA/SAC/Ramsar/SSSI).

As such, the delivery of a new settlement may be more appropriate in the eastern half of the assessment area. Although there is potentially sufficient space in the eastern half of the assessment area to accommodate a large village, there is a large area in the central region of the eastern half that is comprised of grade 2 agricultural land, which development would result in the loss of. As such, land to the north or south of this area of grade 2 soil may be less sensitive to development. The delivery of a small village is also likely to cause less disruption to landscape character. Landscape sensitivity is moderate under the small village scenario compared to moderate-high and high under the medium and large scales of development respectively.

A small village could potentially be accommodated in the north of the eastern half of the assessment area, or in the south of the area, south of the railway line. These locations are occupied by land within a Mineral Safeguarding Area (MSA), a drinking water safeguarding zone (as is the whole of the assessment area), an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours and grade 3 agricultural land. It may be possible to extract mineral resources prior to development and suitable mitigation may also be possible to overcome any noise related issues. In addition, it is not clear if the grade 3 land is grade 3a or the lower quality grade 3b. Although these areas may be less sensitive compared to the west in terms of the historic environment, there is still potential for development in the north to impact on the setting of Cambridge, and locating development further north to potentially reduce this impact may encroach into an area of Flood Zone 2.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The area is connected to the highway network via the A38 which runs centrally through the assessment area and the A4135, providing links to Cam, Dursley and Stonehouse, whilst M5 Junction 13 is in close proximity to the north of the assessment area.</p> <p>Few traffic congestion issues are currently experienced within the immediate vicinity of the assessment area.</p> <p>M5 Junction 13 is located to the north of the assessment area and is considered a 'critical junction' by the JCS/SADC Transport Evidence Base. The JCS/SADC modelling work's Do Nothing and Do Minimum model tests forecast that this junction will operate just within its design capacity in 2031 (at 88% Ratio to Flow Capacity during the AM and PM peak periods).</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 22,088</p> <p>A relatively low number of workplaces (jobs) can currently be accessed by public transport from the assessment area.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 255,179</p> <p>Access from the assessment area to employment by Car scores relatively high, due to the well-connected local road network to key urban / employment centres.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that the assessment area is between 20 and 40 mins travel time by public transport services of urban centres and healthcare facilities. Education facilities are accessible within 20 mins by public transport.</p>	
Private car use by commuters	<p>% Driving a Car or Van = 71%</p> <p>Car based trips currently account for an average of 71% of all commuter journeys in LSOAs covered by the assessment area.</p>	

Criterion	Rationale	Score
Proximity to sustainable transport networks	The assessment area is within the 2.5km catchment of Cam & Dursley Station, providing good connectivity via mainline services, whilst also served by reasonably frequent bus services along the A38. A National Cycle Network route and several walking routes are also in close proximity to the assessment area.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Load is acceptable, although easement would require high pressure pipeline diversion which would incur a cost to developer.			
	Rail transport	Within 2.5km of Cam & Dursley mainline station and with a low frequency bus route serving it. Higher scale of growth may be sufficient to support expansion of mainline rail capacity.			

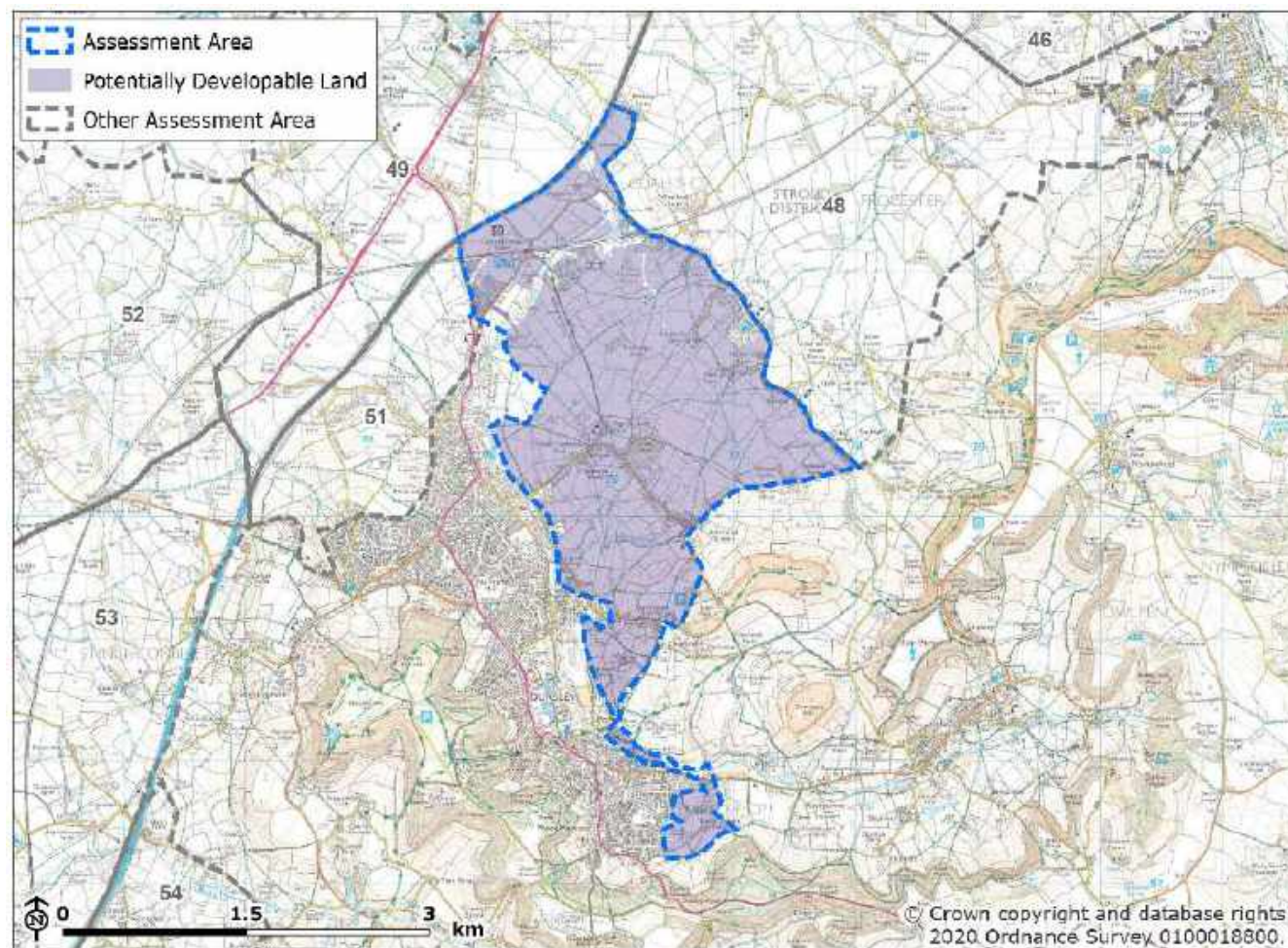
Assessment Area 50 – Urban Extension: Land North East of Cam and Dursley

Assessment Area Ref: 50

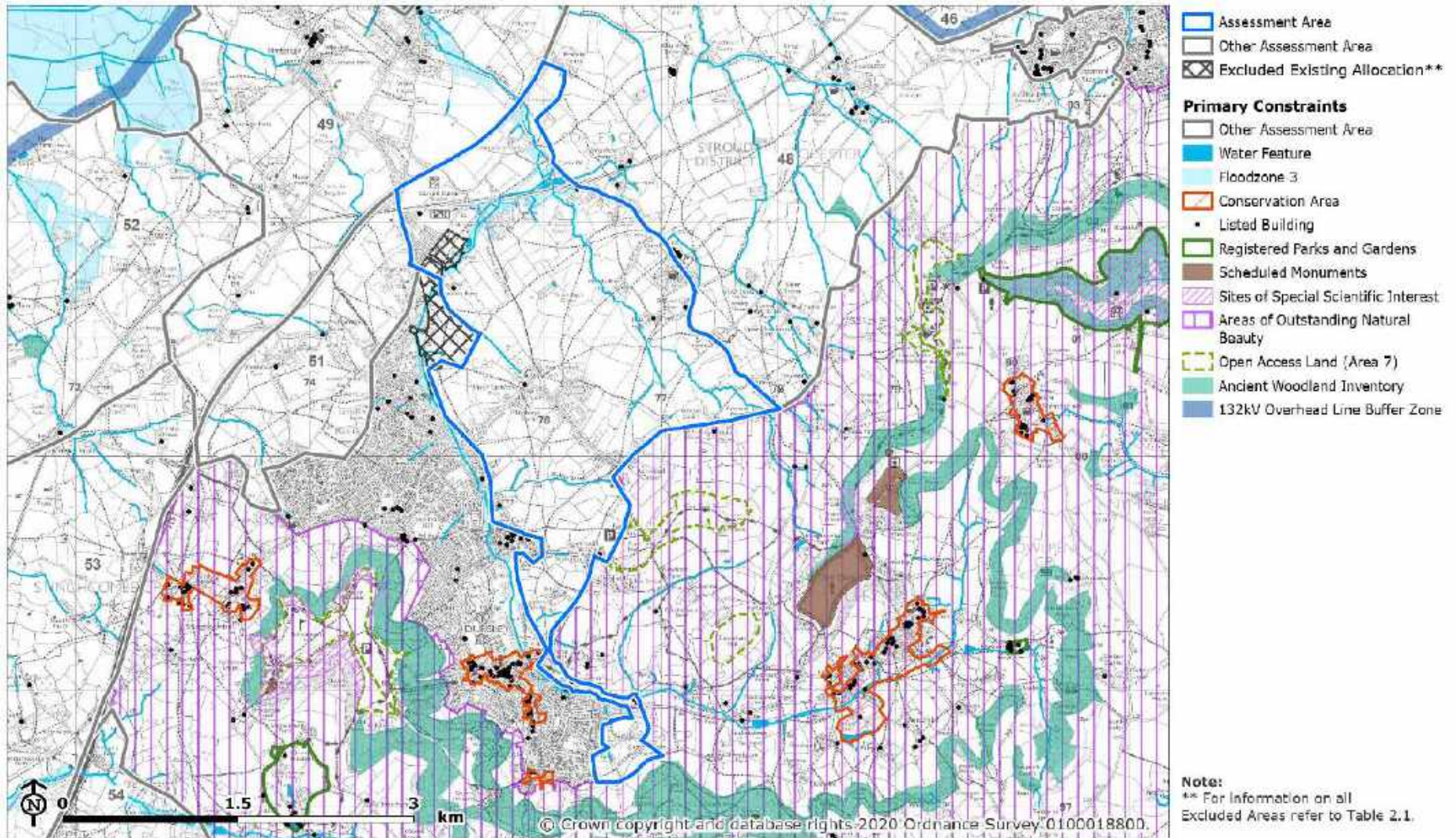
Authority Area: Stroud District

Development Typology: Urban Extension

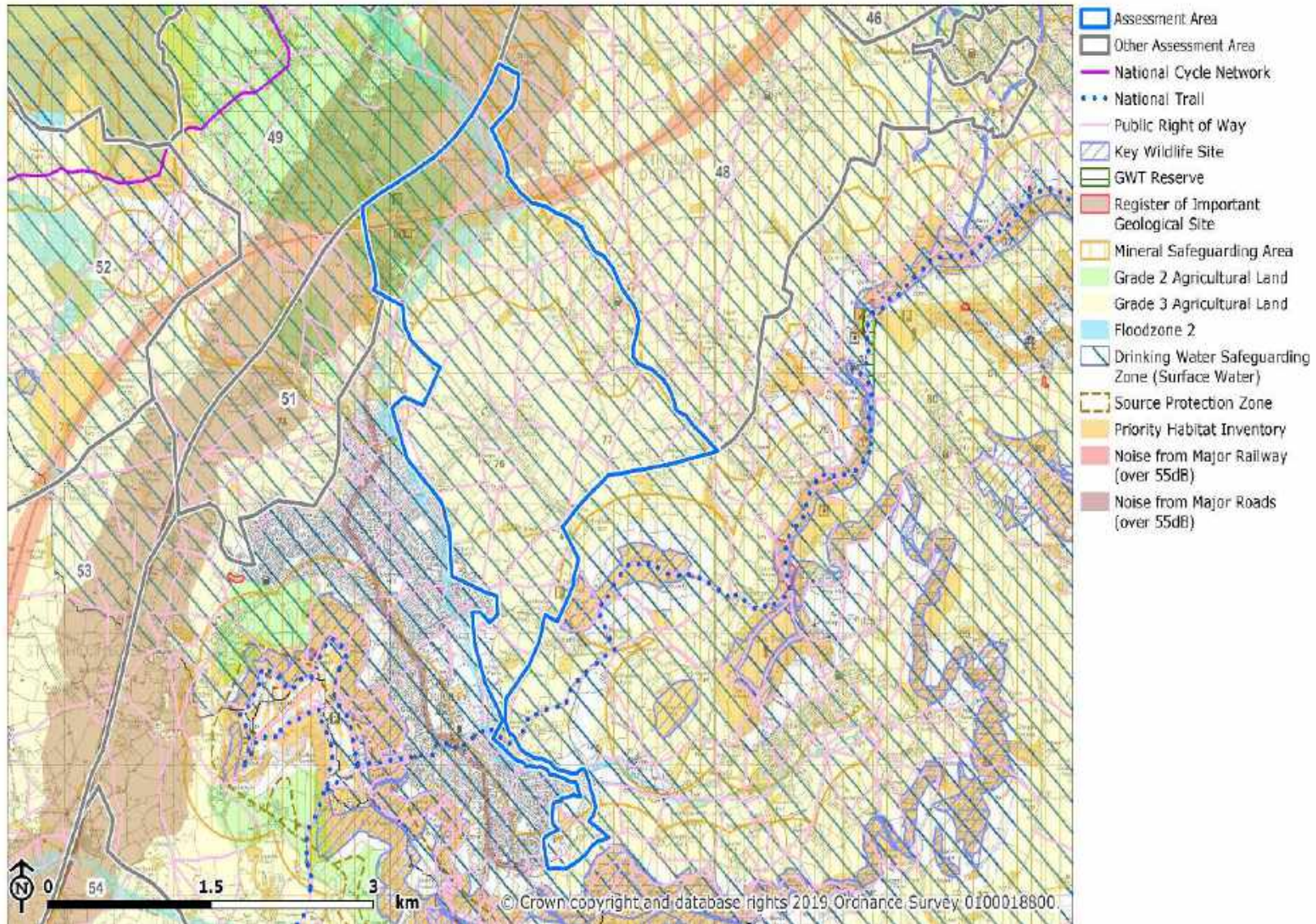
Area: ~696ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are 13 grade II listed buildings in the assessment area. These include a former country house and stables, farmhouses, cottages, a former school, and a goods shed. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • The HER records only a limited number of non-designated assets within the assessment area. These include: <ul style="list-style-type: none"> - Late Iron Age to Roman settlement at Draycott; - Medieval features at Waterend Farm; - Mill sites at Townsend and Draycott; - An old iron works at Coaley; - Ridge and furrow earthworks across the assessment area; 	<p>The southern part of the assessment area is highly sensitive to change as a result of Dursley Conservation Area and the listed buildings in the wider vicinity e.g. Chestal House and Lodge. Its non-designated former parkland, which may be of more than local importance given its association with a nationally important asset, would also be at risk of harm. The area also contains listed buildings that would be sensitive to setting change e.g. Ferney Hill and its stables and Mill Farmhouse, Dursley Mill and Mill Cottage. However, much of the very southern tip of the assessment area, beyond these assets and the B4066, appears less sensitive.</p> <p>The area around Upper Cam is also sensitive as there are two grade II listed farmhouses – Church Farm and Downhouse Farm - within the assessment area that would be highly susceptible to change. In the wider area the grade I Church of St George may be susceptible to setting change, and in more general terms the historic character and identity of Upper Cam would also be at risk.</p> <p>The non-designated potential hillfort – which may be of more than local importance – also makes Cam and the rest of the southern boundary sensitive. So too does the grade II Myles House, which stands immediately adjacent to the assessment area.</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> - Extant medieval house in Coaley; - Crop marks north of the Cam and Dursley train station; - Site of a WWII Royal Observation Corps post, Dursley; - Extant railways; - Pumping stations, one still extant; and, - Turnpike roads. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • Other than the existing settlements the HLC data indicates a primarily agricultural landscape comprised of irregular and less irregular, with some riverine pasture. The enclosures have some time depth and may include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. 	<p>Along the western edge of the assessment area the key sensitivities are the grade II listed Draycott Farm and Upper Upthorpe Farm. Their historic outbuildings and/ or agricultural hinterland will contribute to the legibility of their significance.</p> <p>Coaley, which is on the eastern edge of the assessment area, is the other key area of sensitivity. There are three grade II listed farmhouses here and the historic character of the settlement itself – along with the grade II listed parish church of St Bartholomew – are all constraints.</p> <p>The grade II listed Oatridge House (a former farmyard) and Hazelden Cottage also stand on the eastern edge of the assessment area, adjacent to the railway. These too may be susceptible to setting change.</p> <p>There are no non-designated assets within the assessment area that appear to be of more than local significance.</p> <p>The sensitivities of the assessment area are located in such a way as to make any single large-scale extension likely to result in significant negative effects. However, there are three areas – the first to the northeast of Lower Cam; the second to the northeast of Draycott Farm around the railway; and the third to the southeast of Dursley - where development may give rise to minor negative effects, provided that development to the</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • Dursley Conservation Area adjoins the southernmost part of the assessment area. • In the wider vicinity listed buildings that may be susceptible to setting change include the grade I Church of St George, the grade II Church of St Bartholomew, the grade II Myles House and the grade II Chestal House, which survives along with its similarly listed lodge (and its non-designated parkland). <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • There is a possible Hill Fort on Cam Long Down, to the south of the assessment area, which may be susceptible to setting change. 	<p>southeast of Dursley was set back from the B4066 to avoid harm to the listed Dursley Mill, Mill Farmhouse and Mill Cottage. In total these three areas should facilitate a large extension.</p>			
<p>Ecological and Geological Environment</p>	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> • No assets within the assessment area. <p>Assets within 250m:</p>	<p>Development, particularly in the south of the assessment area must avoid isolating deciduous woodland and grassland priority habitat of conservation value from other habitats in the local landscape.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> • Key Wildlife Site (Cam Peak and Long Down) adjacent to the south-eastern boundary. • Key Wildlife Site (Dursley Woods), which is also Ancient Woodland (Whitley Wood), adjacent to the southernmost boundary. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> • SSSI (Stinchcombe Wood) 1.1km south-west. • SSSI (Stinchcombe Hill) 1.6km south-west. <p>IRZs:</p> <ul style="list-style-type: none"> • The assessment area falls within multiple IRZs associated with SSSIs in the surrounding area (Upper Severn Estuary, Stinchcombe Hill and Woodchester Park), which identify all planning applications as a potential risk. <p>Negligible effects may occur for all development size options as there is potential for all scales of development to be accommodated over 250m from local designations and over 2km from national designations. Detailed development design and other mitigation measures</p>	<p>To avoid potential indirect impacts associated with recreational activity on habitats outside the assessment area, a comprehensive green infrastructure strategy may be required.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	may reduce the potential for adverse effects.				
Soil Quality	<p>The majority of the assessment area is comprised of grade 3 agricultural land. However, there is approximately 56ha of grade 2 agricultural land adjacent to the north-eastern boundary. In addition, land adjacent to the Cam on the south-western boundary and adjacent to Dursley in the southernmost part of the assessment area is classified as urban. There is also approximately 5ha of grade 4 agricultural land adjacent to the B4066 in the southernmost part of the assessment area.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality at all development size options. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	<p>There is significant potential for all development size options to avoid the loss of grade 2 agricultural land as this area is restricted to a comparatively small region in the north-west of the assessment area. However, the majority of the remaining land in the assessment area is still grade 3 and therefore development at any location has the potential to result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or grade 3b.</p>	?	?	?
Water Quality		N/A			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>The whole of the assessment area is located within a drinking water safeguarding zone.</p> <p>As such, significant negative effects may occur for all development size options in relation to water quality.</p>				
Flood Risk	<p>The assessment area is predominantly greenfield. The settlement of Upthorpe is located in the central region and a railway line passes through the northern part of the assessment area.</p> <p>There is approximately 16ha of developable land to the north and south of the railway line in the north of the assessment area that is located in Flood Zone 2. In addition there are smaller regions of developable land within Flood Zone 2 directly adjacent watercourses in the north-east and in the southernmost part of the assessment area.</p> <p>There is sufficient space within the assessment area to accommodate all development size options outside of Flood Zone 2. As, negligible effects may occur in relation to flood risk.</p>	<p>There is significant potential for all development size options to avoid Flood Zone 2 in the south of the assessment area.</p>			
Mineral Resources	<p>There is over 200ha of developable land in the northern half of the assessment area that is located within a Mineral</p>	<p>There is significant potential for all development size options to avoid the sterilisation of mineral resources by being</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>Safeguarding Area (MSA). Additionally, there is a smaller amount (15ha) of land located within a MSA in the southernmost part of the assessment area.</p> <p>There is potential for development to result in the sterilisation of mineral resources. However, the majority of the assessment area is not located within MSAs and therefore there is sufficient space to accommodate all scales of development without the sterilisation of mineral resources. As such, negligible effects may occur in relation to mineral resources.</p>	<p>located in the southern half of the assessment area.</p> <p>In addition, it may also be possible to extract mineral resources prior to development.</p>			
Noise	<p>Land in the northernmost part of the assessment area is located within the M5 noisy area and a railway line noisy area.</p> <p>However, there is sufficient space within the assessment area to accommodate all development size options outside of noisy areas. As such, negligible effects may occur in relation to noise.</p>	<p>There is significant potential for all development size options to avoid noisy areas by being located in the southern half of the assessment area.</p> <p>Suitable mitigation may also be possible to overcome any noise related issues.</p>			
Odour	<p>No odour-related spatial policies apply to the assessment area.</p> <p>As such, negligible effects are considered likely in relation to odour for all development sizes.</p>	N/A			

Landscape Sensitivity

<p style="text-align: center;">Overview of Sensitivity and Spatial Variation</p>	<p style="text-align: center;">Sensitivity Rating: Large extension (3,500+ dwellings)</p>	<p style="text-align: center;">Sensitivity Rating: Medium extension (1,500-3,500 dwellings)</p>	<p style="text-align: center;">Sensitivity Rating: Small extension (500-1500 dwellings)</p>
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • Open and expansive with panoramic views from elevated areas including views to the Cotswolds AONB. • Sloping landform of the Escarpment Foothills – transitional landscape from the Cotswolds AONB. • Rural setting provided to the existing settlement including Cam and Dursley. • Some areas in the east possess a continuation of the special qualities of the Cotswolds AONB such as high levels of tranquillity and accessibility. <p>As such, landscape sensitivity is high under the medium and largest development size options as the key characteristics and qualities of the landscape may be highly sensitive to development of these scales. Landscape sensitivity is reduced to moderate-high for small urban extensions as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	<p>H</p>	<p>H</p>	<p>M-H</p>

Summary of Constraints and Landscape Sensitivity

Land adjacent to the south-western boundary of the assessment area is particularly sensitive to development due to multiple listed buildings within Upper Cam and Dursley Conservation Area adjacent to the southernmost boundary, which also contains multiple listed buildings. Therefore, to preserve the setting of these heritage assets, an urban extension may be best placed to the north of Upthorpe, adjacent to Lower Cam. A small or medium extension type could potentially be accommodated in this location. This area is occupied by a drinking water safeguarding zone (as is the whole of the assessment area) and grade 3 agricultural land, but it is not clear if it is grade 3a or the lower quality grade 3b.

There may be potential to accommodate a larger extension type if land further north around Draycott farm is also used. However, this area is also occupied by land within a Mineral Safeguarding Area (MSA) and some land in Flood Zone 2 associated with a watercourse. There may be potential to extract mineral resources prior to development. The area has high landscape sensitivity for the large and medium scale extension scenarios. Landscape sensitivity is reduced under the small extension scenario, but is still moderate-high.

Land to the east is also sensitive in terms of the historic environment due to a number of listed buildings within the settlement of Coaley. Furthermore, development in this half of the assessment area may not be considered an urban extension due to the degree of separation from Cam and Dursley in the west.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via the A4135, which runs along the western boundary of the assessment area through Cam and Dursley town centres, linking to the A38 to the north.</p> <p>Minimal congestion is currently experienced on major roads within the vicinity of the assessment area and no 'critical junctions' are located within the vicinity, as defined by the JCS/SADC Transport Evidence Base.</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 5,636</p> <p>A low number of workplaces (jobs) can currently be accessed by public transport from the assessment area.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 235,458</p> <p>Access from the assessment area to employment by Car scores relatively low, compared with other assessment areas.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that the assessment area has poor accessibility apart from the area surrounding Cam and Dursley Rail Station, which is within 20-40 mins of urban centres and healthcare facilities by public transport. Education facilities are accessible within 20 mins by public transport from most of the assessment area.</p>	
Private car use by commuters	<p>% Driving a Car or Van = 75%</p> <p>Car based trips currently account for an average of 75% of all commuter journeys in LSOAs covered by the assessment area, reflecting its current rural nature.</p>	
Proximity to sustainable transport networks	<p>The majority of the assessment area is within 2.5km catchment of Cam & Dursley Rail Station, providing good rail links via the mainline, whilst the assessment area is currently served by low frequency bus services. The assessment area benefits from some existing walking and cycling routes, but is currently divorced from the National Cycle Network.</p>	

Deliverability/Infrastructure

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer.			
	Rail transport	Within 2.5km of Cam & Dursley mainline station and with a low frequency bus route serving it.			
	Bus transport	Within 500m of existing low frequency bus route but distant from key destinations so difficult to effectively improve quality of bus provision other than to station. It is unlikely that improvements in access to the station alone will provide a package of sustainable transport measures.			
	Cycle transport	Distant from existing cycle network and outside of reasonable distance to enable significant increase in cycle trips (other than to station). However, the current Local Plan includes proposals for a walking and cycling route from Dursley to Cam and on to Cam & Dursley station which is currently			

Criterion	Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	being developed. There are opportunities for development in this location to link up to this which would enhance accessibility cycle.			

Viability

	Development Type				
	Small Extension		Medium Extension		Large Extension
Dwellings	500	1,000	2,500	3,500	4,500
Indicative developer contributions and affordable housing pool/per unit (£)	40,000	40,000	40,000	40,000	40,000
Viability	High	High	High	High	High

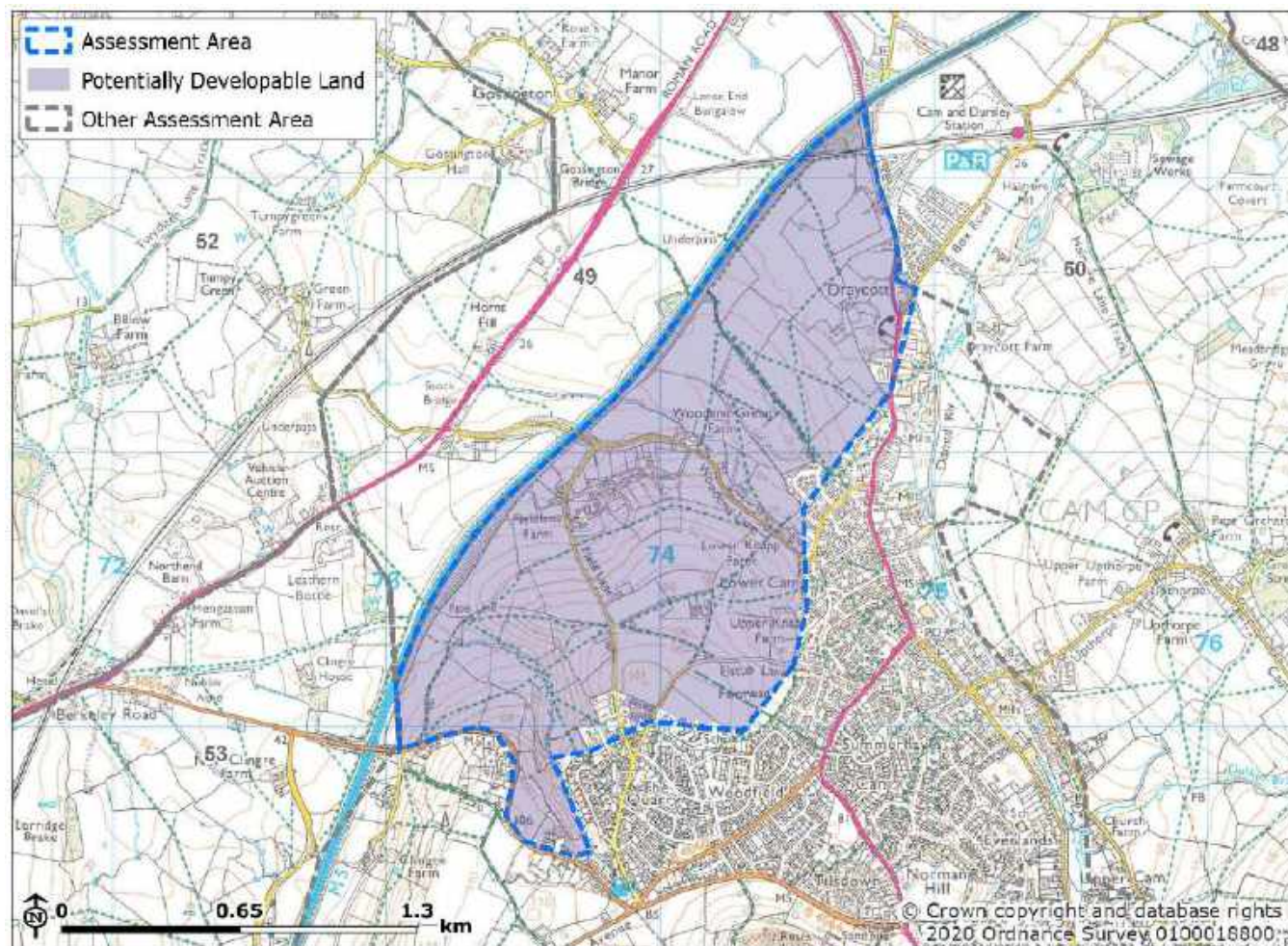
Assessment Area 51 – Urban Extension: Land North West of Cam

Assessment Area Ref: 51

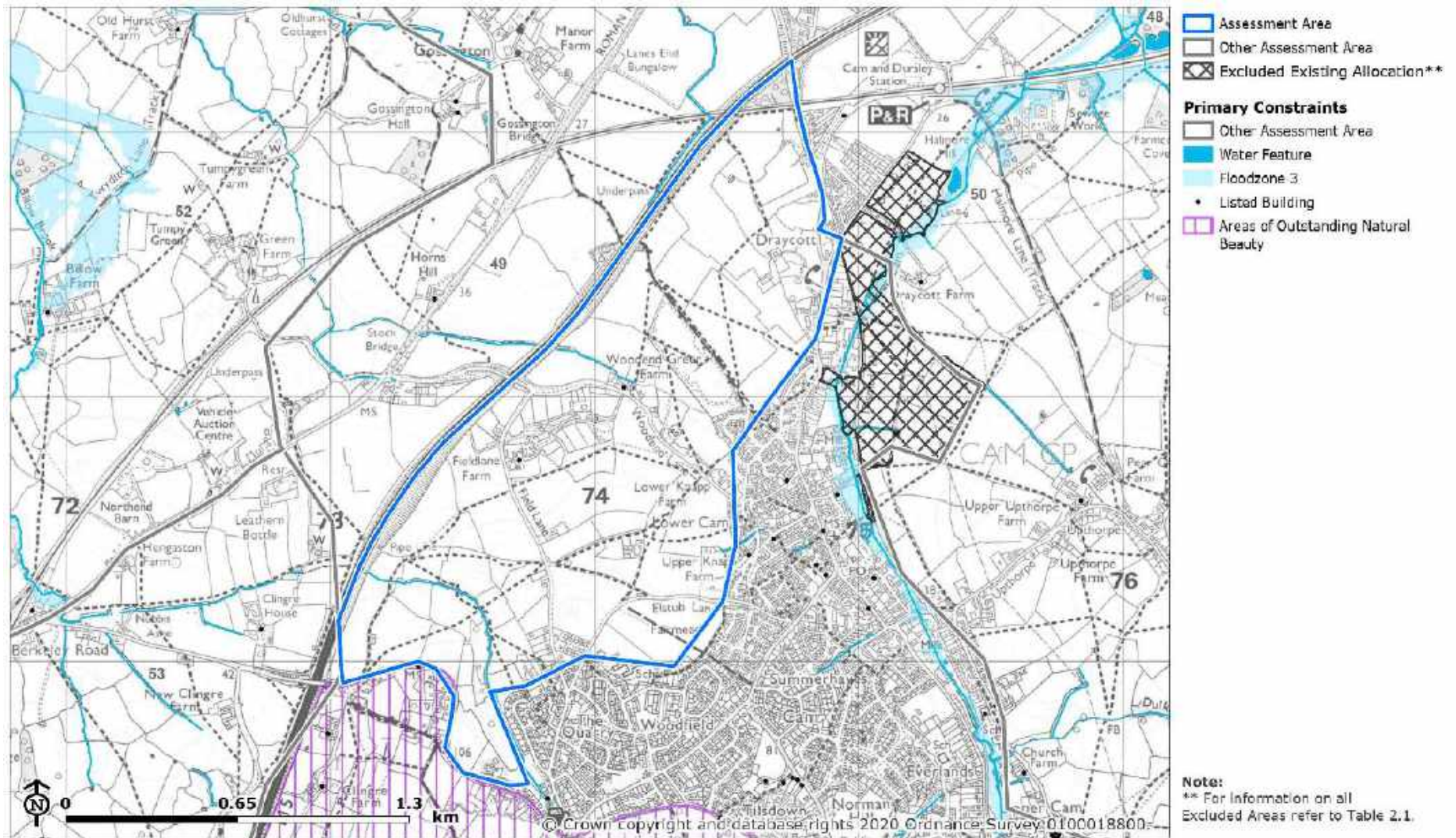
Authority Area: Stroud District

Development Typology: Urban Extension

Area: ~223ha



Primary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
<p>Historic Environment</p>	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are two grade II listed buildings in the assessment area; both are farmhouses. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • The HER records only a limited number of non-designated assets within the assessment area. These include: <ul style="list-style-type: none"> - Possible Neolithic settlement at Lower Knapp Farm; - Ring ditch cropmark west of Upper Knap Farm; - Possible prehistoric mound and flints (truncated by M5); - Medieval settlement earthworks at Cam; - Some limited ridge and furrow earthworks and medieval strip lynchets; - Possible Holloway south of Field Lane Farm; 	<p>The key sensitivities of the assessment area are the two listed buildings Field Lane Farm and Woodend Green Farm. These are located relatively centrally within the assessment area.</p> <p>None of the known non-designated assets appear to be of more than local importance, although the irregular enclosures are coherent over a particularly large area.</p> <p>It may be possible to accommodate a large urban extension extending along the whole of the southern and eastern edges of the assessment area without changing the setting of the two listed buildings.</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> - Cropmarks west of Woodend Green Farm; - Linear earthworks south of Woodend Farm; - Multiple stone stiles; - Post-medieval quarry north of Woodend Green Farm; - Disused and extant railways and former turnpike roads. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • Other than the existing settlement at Cam the HLC data shows that the assessment area is entirely agricultural and comprised of irregular enclosures. These have some time depth reflecting former unenclosed cultivation patterns and may include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> None of the designated assets in the wider area have been identified as being susceptible to meaningful setting change. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> No non-designated assets within the HER have been identified as being particularly susceptible to setting change. 				
<p>Ecological and Geological Environment</p>	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> No assets within the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> Register of Important Geological Site (The Quarry Dursley) 150m south. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI (Stinchcombe Hill) 800m south. <p>IRZs:</p>	<p>The topography in the south of the assessment area becomes steep and increasingly wooded. Sensitive development design, and any associated green infrastructure strategy, may strengthen and extend this habitat mosaic, to buffer habitats of conservation value farther south and benefit biodiversity on site, making most effective use of the steep topography.</p> <p>A large extension type may fall within 2km of the SSSI to the south and result in greater recreational pressure on this designation.</p>	<p>*</p>		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<ul style="list-style-type: none"> The assessment area falls within multiple IRZs associated with SSSIs in the surrounding area, which identify all planning applications as a potential risk. <p>Minor negative effects may occur under the largest development size option as it is likely that this scale of development would fall within 2km of the national designation to the south. Negligible effects may occur under the small and medium development size option as there is potential for these scales of development to be accommodated over 250m from local designations and over 2km from national designations. Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>				
Soil Quality	<p>The majority of the assessment area is comprised of grade 3 agricultural land. However, there approximately 26ha of grade 2 agricultural land in the northern half of the assessment area. In addition, there are two small areas (<5ha) of urban classified land adjacent to the southern boundary.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to</p>	<p>There is potential for all development size options to avoid the loss of grade 2 agricultural land by being located in the south and north of the assessment area. However, the majority of remaining land is still grade 3 and therefore development at any location has the potential to result in the loss of high quality agricultural land, dependent upon whether it is grade 3a or grade 3b.</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	soil quality for all development size options. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.				
Water Quality	<p>The whole of the assessment area is located within a drinking water safeguarding zone.</p> <p>As such, significant negative effects may occur in relation to soil quality under all development size options.</p>	N/A			
Flood Risk	<p>The majority of the assessment area is greenfield. Part of the B4135 passes through the north-east of the assessment area and there are two local roads in the south with areas of residential/ agricultural development.</p> <p>The assessment area does not contain any land that is located within Flood Zone 2.</p> <p>As such, negligible effects may be considered likely in relation to flood risk for all development size options.</p>	N/A			
Mineral Resources		There is potential for development under the small and medium size options to be located in	*		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	<p>The northern half of the assessment area is located within Mineral Safeguarding Area (MSA).</p> <p>There is potential for development to result in the sterilisation of mineral resources. As such, significant negative effects may occur under the largest development size option as it is likely that this scale of development could not be accommodated without intersecting with the MSA. Negligible effects may occur in relation to mineral resources under the small and medium development size options as there is potentially sufficient space outside of MSAs to accommodate these scales of development.</p>	<p>the southern half of the assessment area, avoiding the sterilisation of mineral resources.</p> <p>It may also be possible to accommodate development without the sterilisation of mineral resources by extracting minerals prior to development.</p>			
Noise	<p>Over half of the assessment area is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the M5 on the western boundary.</p> <p>Significant negative effects may occur under the largest development size option as this scale of development could not be accommodated without intersecting with the noisy area. Negligible effects may occur under the small and medium development size</p>	<p>There is potential for development under the small and medium size options to be accommodated at the urban fringe of Cam, avoiding the M5 noisy area to the west.</p> <p>Suitable mitigation may also be possible to overcome any noise related issues.</p>	*		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
	options as these scales of development could potentially be accommodated outside of the noisy area.				
Odour	No odour-related spatial policies apply to the assessment area.	N/A			
	As such, negligible effects are considered likely in relation to odour for all development sizes.				

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> Open and expansive with panoramic views from elevated areas including views to the Cotswolds AONB and the River Severn. Sloping landform of the Escarpment Footslopes – transitional landscape from the Cotswolds AONB. Rural setting provided to the existing settlement including lower Cam and Dursley. Some areas in the east possess a continuation of the special qualities of the Cotswolds AONB such as high levels of tranquillity and accessibility. <p>As such, landscape sensitivity is high under the medium and largest development size options as the key characteristics and qualities of the landscape may be highly sensitive to development of these scales.</p>	H	H	M-H

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Large extension (3,500+ dwellings)	Sensitivity Rating: Medium extension (1,500-3,500 dwellings)	Sensitivity Rating: Small extension (500-1500 dwellings)
Landscape sensitivity is reduced to moderate-high for small urban extensions as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.			

Summary of Constraints and Landscape Sensitivity

Overall, the least constrained land in the assessment area is located in the south adjacent to the fringe of Cam where it may be possible to accommodate a medium extension type. This area is occupied by a drinking water safeguarding zone (as is the whole of the assessment area) and grade 3 agricultural land, but it is not clear if it is grade 3a or the lower quality grade 3b. It is also in relatively close proximity to Stinchcombe Hill SSSI, which may be vulnerable to recreational pressures.

Accommodating a larger extension type would require extending development either to the north west, or along the eastern boundary of the assessment area. The former would result in encroaching into land that is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours as well as impacts upon the rural setting of two grade II listed buildings in the central region of the assessment area. The latter would result in development encroaching into land that is within a Mineral Safeguarding Area (MSA) and also potentially into an area of grade 2 agricultural land. There may be potential to extract any mineral resources prior to development. Additionally, the area has high landscape sensitivity to the medium and large scale extension options. Landscape sensitivity is reduced under the small scale extension scenario, but is still considered to be moderate-high.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via the A38, which runs through the centre of the assessment area, the A4135 (eastern boundary) and the B4066 (to the south west), providing good links to Cam and Dursley town centres and further afield.</p> <p>Minimal traffic congestion is currently experienced on major roads within the vicinity of the assessment area and would likely support additional capacity from development growth. No 'critical junctions' are located within the vicinity as defined by the JCS/SADC Transport Evidence Base.</p>	

Criterion	Rationale	Score
Access to employment	Number of workplaces (jobs) accessible within 45 minutes = 10,400 A relatively low number of workplaces (jobs) can currently be accessed by public transport from the assessment area.	
	Number of workplaces (jobs) accessible within 30 minutes = 236,202 Access from the assessment area to employment by Car scores relatively low , reflecting higher travel times / distances from key employment areas.	
Access to other key services and facilities by public transport	TRACC Accessibility Modelling outputs show the assessment area's eastern edge (closest to the existing settlement of Cam) is within a 20-40 minute public transport journey of a number of urban centres and healthcare facilities. Education facilities are accessible within 20 mins by public transport.	
Private car use by commuters	% Driving a Car or Van = 73% Car based trips currently account for an average of 73% of all commuter journeys in LSOAs covered by the assessment area.	
Proximity to sustainable transport networks	The majority of the assessment area is within 2.5km catchment of Cam & Dursley Rail Station, providing good rail services via the mainline between Bristol and Birmingham. The assessment area is currently served by low frequency bus routes, but benefits from some existing walking and cycling routes despite being divorced from the National Cycle Network.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Large Extension (3,500+ dwellings)	Score: Medium Extension (1,500-3,500 dwellings)	Score: Small Extension (500-1,500 dwellings)
Strategic Infrastructure	Waste water	Whilst new investment would be required, there are no significant issues with provision of additional infrastructure.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Load is acceptable.			
	Rail transport	Within 2.5km of Cam & Dursley mainline station and with a low frequency bus route serving it.			
	Bus transport	Within 500m of existing low frequency bus route but distant from key destinations so difficult to effectively improve quality of bus provision other than to station. It is unlikely that improvements in access to the station alone will provide a package of sustainable transport measures.			
	Cycle transport	Distant from existing cycle network and outside of reasonable distance to enable significant increase in cycle trips (other than to station). However, the current Local Plan includes proposals for a walking and cycling route from Dursley to Cam and on to Cam & Dursley station which is currently			

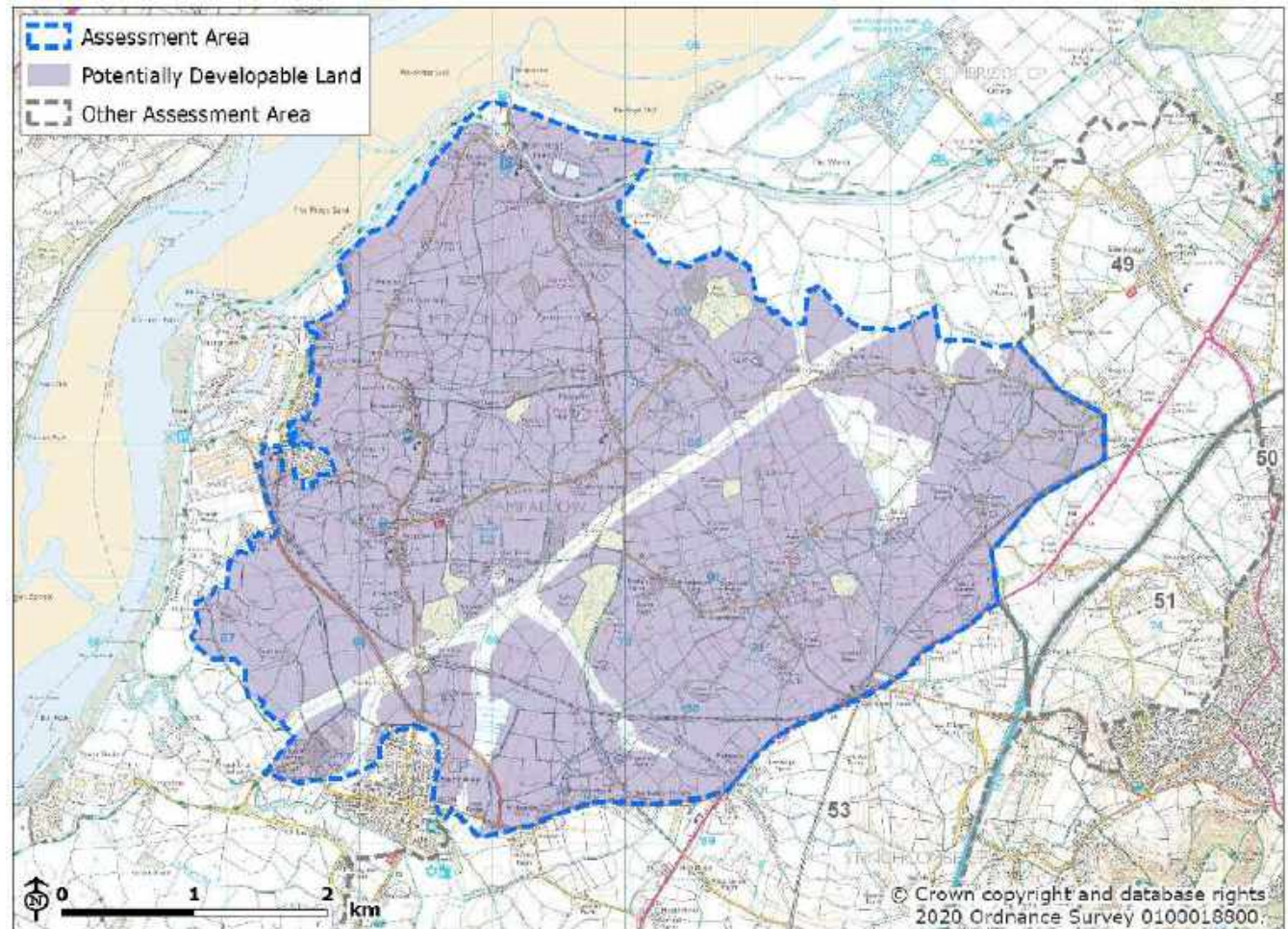
Assessment Area 52– New Settlement: Land North of Berkeley

Assessment Area Ref: 52

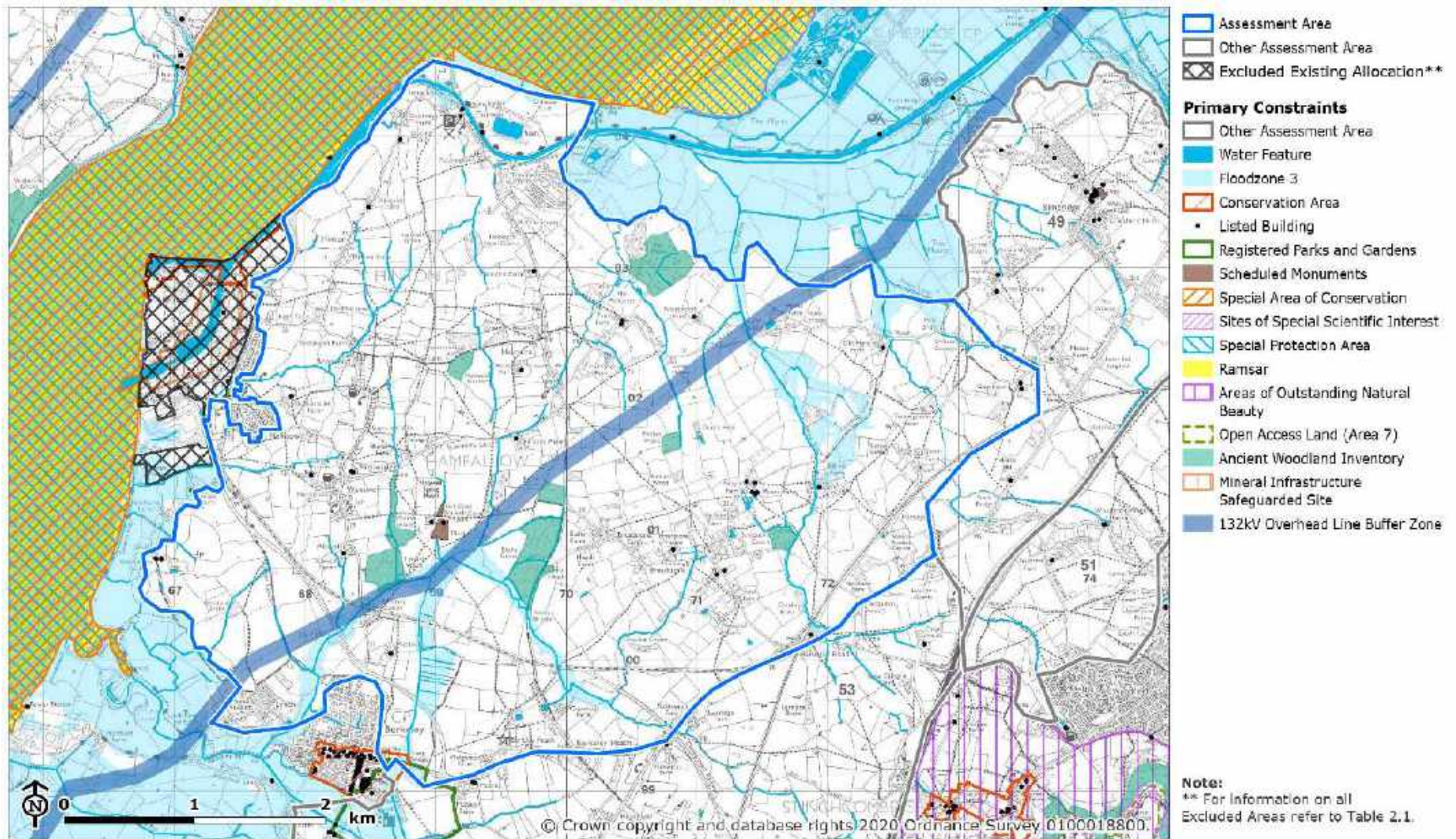
Authority Area: Stroud District

Development Typology: New Settlement

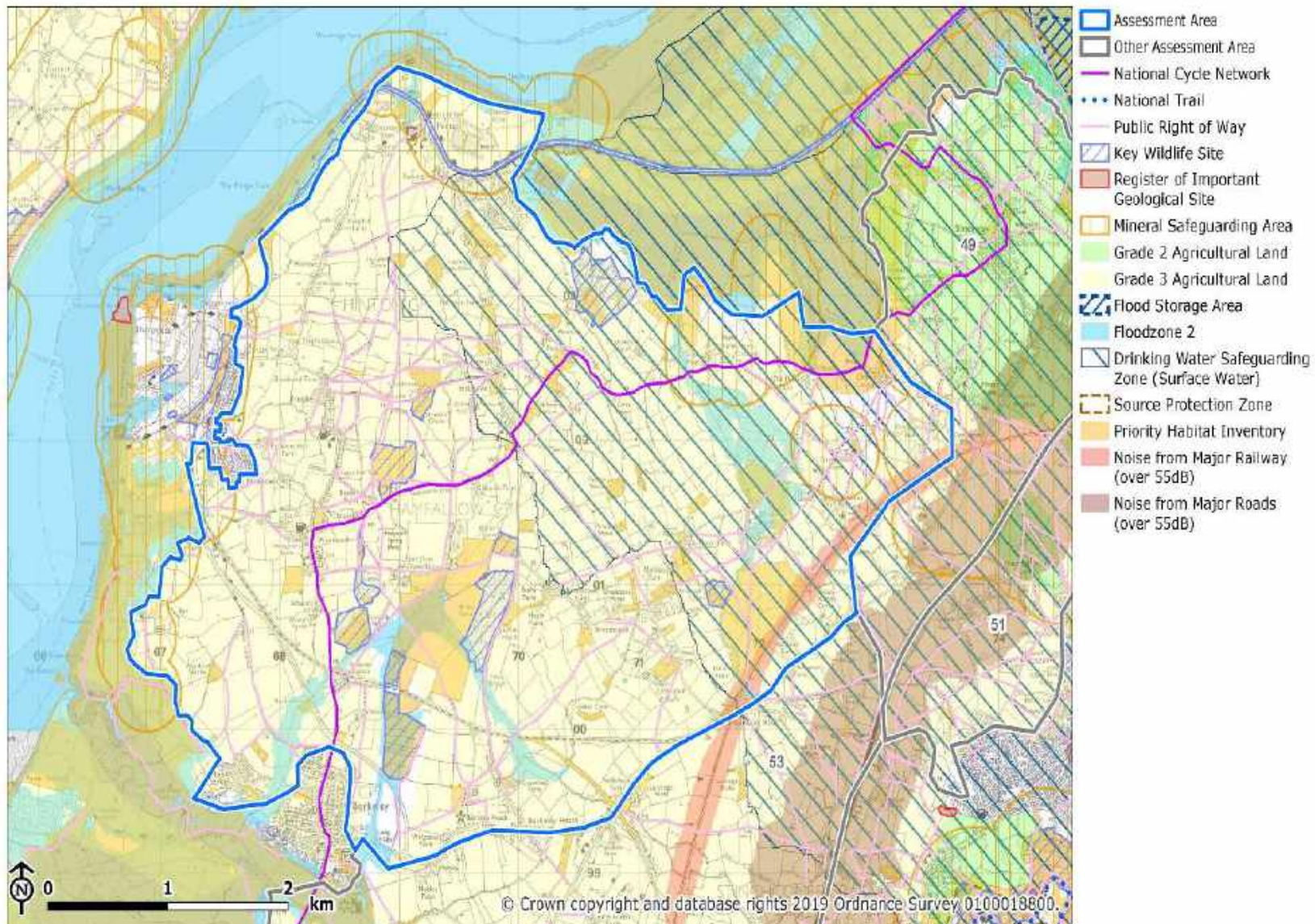
Area: ~2,228



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
<p>Historic Environment</p>	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 36 listed buildings in the assessment area. These include the grade I Wanswell Court Farmhouse and the grade II* Manor House Farm and gate piers. The remaining grade II listed buildings include country houses, houses, farmhouses and agricultural buildings. There is a scheduled moat and fishpond at Wanswell Court. The grade II* Berkley Castle registered park and garden (RPG) is overlapped by the southern boundary. The southern boundary also overlaps Berkley Conservation Area. The western boundary overlaps a very small part of the Sharpness Old Dock Conservation Area. <p><i>Non-designated</i></p>	<p>To the south of the assessment area Berkley is highly sensitive due to the presence of Berkley Conservation Area and Berkley Castle RPG, and some of the listed buildings within them.</p> <p>The western edge is also sensitive due to the presence of the Sharpness Old Dock Conservation Area. However, the landscape setting of this asset is likely to make less of a contribution to the significance/ legibility of the asset, making change to its character/ special interest the key risk.</p> <p>The listed buildings within the assessment area are another key sensitivity. Many are isolated rural buildings that derive significance/ legibility from their agricultural/ rural setting making them susceptible to setting change.</p> <p>The scheduled moat at Wanswell Court Farm is another key sensitivity both in terms of physical change and setting change, with the irregular enclosures surrounding it aiding its historic legibility.</p> <p>There are some non-designated heritage assets that may also be of more than local importance. These include the probable Saxon Monastery, the moated site that may be associated with the grade II* listed Manor Farm House, and the possible DMV's at Gossington and Brookend. Effects to these assets could result in significant negative effects.</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> • The HER records many non-designated assets within the assessment area. These include: <ul style="list-style-type: none"> - Prehistoric feature, Berkley; - Bronze Age features south of Newtown; - Roman metal working site, Berkley; - Probable Saxon monastery near Newtown; - Possible Danish battle site at Wanswell; - Moated site (possibly associated with the listed Manor Farm) Breadstone; - Probable deserted medieval village (DMV) at Gossington and another near Brookend; - Possible medieval settlement south of Saniger Farm; - Multiple hollow ways by Daucey's Farm and a another near Luggs Farm; - Medieval hollow way and site of building/ building platform in Berkley; - Dispersed ridge and furrow earthworks; 	<p>Despite the dispersed distribution of the key sensitivities within and beyond the assessment area there are two areas that may accommodate small villages without giving rise to significant negative effects.</p> <p>The first area is centred around Brookend and the area east to the ancient woodland at Howe's Grove, and north to Hinton Farm. Development could probably be sited here avoiding the DMV and the agricultural/ rural setting of the nearby listed buildings.</p> <p>The second potential area for development is just north of Breadstone and south of Halmore. Again, this area could likely be developed without harming the setting of the encircling listed buildings or causing physical change to any assets of more than local importance. However, there is less space to accommodate a new settlement in this area.</p> <p>The effects of either of these small village developments would probably be minor negative.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Medieval to post-medieval bank or lynchet at Gauncey's Farm; - Site of a holy well in Wanswell; - The Gloucester and Sharpness Canal; - Cropmarks north of Kingshill Farm; - Barge and boat remains near the canal; - Site of mills near Crawless Farm and Abwell; - Undated features Cromwell Farm, Newtown and 17-19 Hillcrest Berkley; - Extant non-designated buildings including Chapel's in Berkley and Halmore, a church in Newtown, farm's in Slimbridge, Hinton and Breadstone, as well as the Sharpness New Docks and Birmingham Company Village; - Extant railways and former turnpike roads; - Multiple military sites relating mainly to WWII and WWI. <p><i>Historic Landscape</i></p>				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> Other than the existing settlement the HLC data shows that the assessment area is primarily an agricultural landscape comprised of irregular, less irregular, regular and less regular enclosures. Some of these have some time depth reflecting former unenclosed cultivation patterns and may include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. The HLC data also records several areas of surviving early woodland; most of which appear to be officially designated as Ancient Woodland. A surviving post-medieval ornamental landscape - part of the Berkley registered park 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>and garden - is recorded to the south.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • Berkley Conservation Area and RPG contain many listed buildings. Those most susceptible to meaningful setting change include the grade I Berkley Castle and its gatehouse. • To the west of the assessment area is the grade II Saniger Farm. <p><i>Non-designated</i></p> <p>No non-designated assets within the HER have been identified as being particularly susceptible to setting change.</p>				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> • Key Wildlife Site (Wanswell Hay Meadows) located to the north-east of Wanswell in the central region of the assessment area. • Key Wildlife Site (Tintock Wood) to the south-east of Wanswell, which is also Ancient Woodland. 	<p>Any future development should respect the interconnecting wetland habitats in and around this assessment area. Buffers to development may be appropriate in this regard.</p> <p>The woodland and grassland habitats account for a reasonable proportion of the assessment area. Opportunity to optimise connectivity</p>	*		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> • Key Wildlife Site (Berkeley Heath Water Meadows) to the north of the B4066 in the south of the assessment area. • Key Wildlife Site (Bushy Grove) lies 500m to the east, which is also Ancient Woodland and contains a Register of Important Geological Site. • Key Wildlife Site (Bengough's Covert) in the south-east of the assessment area, which is also Ancient Woodland. • Key Wildlife Site (Red Wood) adjacent to the northern boundary, which is also Ancient Woodland. • Key Wildlife Site (Sharpness Docks) overlaps with the western boundary to the north of Newton. • Key Wildlife Site (Gloucester and Sharpness Canal) in the northernmost part of the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> • SSSI/SAC/SPA/Ramsar (Severn Estuary) adjacent to the northern boundary. Associated flood plain and grazing marsh habitats extend to within the west and north of the Assessment Area. 	<p>between these should be encouraged at all development scales.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> None within 2km of the assessment area. <p>IRZs:</p> <ul style="list-style-type: none"> The assessment area falls within IRZs associated with SSSIs in the surrounding area, which identify residential planning applications as a potential risk. <p>Significant negative effects may occur under the largest development size option as there is insufficient space to accommodate this scale of development without intersecting with a local designation within the assessment area. Negligible effects may occur under the small and medium development size options as these scales of development could potentially be accommodated in the south of the assessment area, over 250m from local designations and over 2km from national designations. Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>				
Soil Quality	The vast majority of the assessment area is comprised of grade 3 agricultural land. There is some developable land	The pockets of grade 4 agricultural land within the assessment area are insufficient to accommodate a new settlement.	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>(<50ha) that is grade 4 agricultural land in the southern half of the assessment area and further patches of grade 4 agricultural land adjacent to the northern boundary.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur for all development size options in relation to soil quality. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	<p>The remaining areas are grade 3 agricultural land which could be Grade 3a.</p>			
Water Quality	<p>There is over 800ha in the eastern half of the assessment area that is located within a drinking water safeguarding zone.</p> <p>Negligible effects may occur in relation to water quality for all development size options as there is potentially sufficient space to accommodate these scales of development outside of the safeguarded zone.</p>	<p>There is potential for development under the small and medium size options to be located in the western half of the assessment area, avoiding the drinking water safeguarding zone. There may also be potential to accommodate development at the largest scale by accommodating development on both sides of the power lines.</p>			
Flood Risk	<p>The majority of the assessment area is greenfield. However, there are a number of small settlements and local roads distributed throughout the area. In addition, the B4066 passes through the south-west of the assessment area.</p>	<p>There is potentially sufficient space in the north-west of the assessment area to accommodate all development size options outside of flood zone 2.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>There are small areas (<10ha) of developable land in the south and in the north-east of the assessment area that are located within Flood Zone 2.</p> <p>However, there is sufficient space within the assessment area to accommodate all development size options outside of Flood Zone 2.</p>				
Mineral Resources	<p>There are pockets of land adjacent to the western (~63ha), northern (~65ha) and eastern (~100ha) boundaries that are located within Mineral Safeguarding Areas (MSAs).</p> <p>There is potential for development to result in the sterilisation of mineral resources. However, there is sufficient space outside of MSAs to accommodate all potential development scales. As such, negligible effects may occur in relation to mineral resources.</p>	<p>There is significant potential for development to avoid the sterilisation of mineral resources by being located set back from the western northern and eastern boundaries.</p> <p>It may also be possible to accommodate development without the loss of mineral resources by extracting minerals prior to development.</p>			
Noise	<p>There is some land (~50ha) in the south-east of the assessment area that is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to a railway line passing through the area.</p> <p>However, there is sufficient space within the assessment area to accommodate all scales of development outside of noisy</p>	<p>There is sufficient space within the assessment area to accommodate all scales of development outside of noisy areas.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	areas. As such, negligible effects may occur in relation to noise.				
Odour	No odour-related spatial policies apply to the assessment area.	N/A			
	As such, negligible effects are considered likely in relation to odour for all development sizes.				

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key sensitivities include:</p> <ul style="list-style-type: none"> The elevated ridge of Whitcliff Deer park which forms a prominent feature on skylines in the east of the area. Intact rural character, particularly away from modern intrusions including major roads and electricity infrastructure. The strong wooded character, with areas of mixed woodland (including some ancient woodland, orchards and frequent hedgerow trees. Some are locally designated at Key Wildlife Sites. Sense of time-depth, particularly associated with the Berkley Castle Grade II* Registered Park and Garden. 	H	M-H	M

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<ul style="list-style-type: none"> Sparsely settled character, with small dispersed and often linear villages and the small historic town of Berkeley. Areas adjacent to the River Severn, particularly if characterised by a steeper landform. <p>As such, landscape sensitivity is high under the largest development size option as the key characteristics and qualities of the landscape may be highly sensitive to development of this scale. Landscape sensitivity is reduced to moderate-high and moderate for the large and small village scenarios respectively as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>			

Summary of Constraints and Landscape Sensitivity

The assessment area contains several evenly spaced settlements containing listed buildings, the setting and character of which could be disturbed by the delivery of a new settlement of any scale.

All the land with the area is recorded as Grade 3 agricultural land and there several pockets of Ancient Woodland many of which are also local wildlife sites connected by BAP Priority Habitat and small brooks and streams, many of which have flood plains designated as Zone 2. It is not clear if the grade 3 land is grade 3a or the lower quality grade 3b. Furthermore, this area falls within 2km of the internationally designated Severn Estuary (SAC/SPA/Ramsar/SSSI) to the west.

Mineral Safeguarding Areas (MSAs) and a large Drinking Water Safeguarding Zone cover the north eastern third of the area.

Notable landscape sensitivities include the elevated ridge of Whitcliff Deer park which forms a prominent feature on skylines in the east of the area, the area's strong wooded character, with areas of mixed woodland (including some ancient woodland, orchards and frequent hedgerow trees and the general sense of time-depth associated with the historic villages and Berkley Castle Grade II* Registered Park and Garden to the south. Consequently, landscape sensitivity is high for all but small of villages.

All things considered, there is potential for such small villages to be located in the centre of the area in between the small settlements of Brookend, Halmore and Wanswell. Alternatively, setback to the north or south of the village of Breadstone in the eastern half of the area.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via the A38 and B4066, which provide links to local urban centres.</p> <p>Minimal congestion is experienced on major roads in the vicinity of the assessment area, which would likely support increased capacity / enhanced public transport routes to support future development growth. No 'critical junctions' are located within the vicinity as defined by the JCS/SADC Evidence Base.</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 10,195</p> <p>A relatively low number of workplaces (jobs) can currently be accessed by public transport from the assessment area.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 150,264</p> <p>Access from the assessment area to employment by car scores relatively low compared with other assessment areas.</p>	
Access to other key services and facilities by public transport	<p>TRACC Accessibility Modelling outputs show that small areas of the assessment area (adjacent to Sharpness, Berkeley and the A38 near Breadstone) are within 20-40 mins public transport travel time of some key services, where access to education facilities was slightly better. However, the majority of the assessment area has poor public transport accessibility to these key services.</p>	
Private car use by commuters	<p>% Driving a Car or Van = 76%</p> <p>Car based trips currently account for an average of 76% of all commuter journeys in LSOAs covered by the assessment area, reflecting its proximity to the strategic road network.</p>	
Proximity to sustainable transport networks	<p>The assessment area is partially within the 5km catchment of Cam & Dursley Rail Station and is served by low-frequency bus services. A National Cycle Network route runs through the centre of the site, whilst the Gloucester – Sharpness Canal towpath runs along the western boundary of the site, providing good walking and cycle links to key trip attractors.</p>	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	Development likely to require a new STW unless a connection can be made to the existing Sharpness STW via a long-distance sewer. Cost of providing new treatment assets will be borne by the water company and would need to secure funding. This would not happen before 2026 to 2030.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	At lowest levels of growth, load is acceptable. At all other levels of growth, reinforcement of pipeline network would be required, with the cost of downstream reinforcement to be borne by developer.			
	Rail transport	Eastern half of area within 5km of Cam & Dursley mainline station.			
	Bus transport	Within 500m of existing low frequency bus route but distant from key destinations so difficult to effectively improve quality of bus provision other than to station. It is unlikely that improvements in access to the station alone will provide a package of sustainable transport measures.			

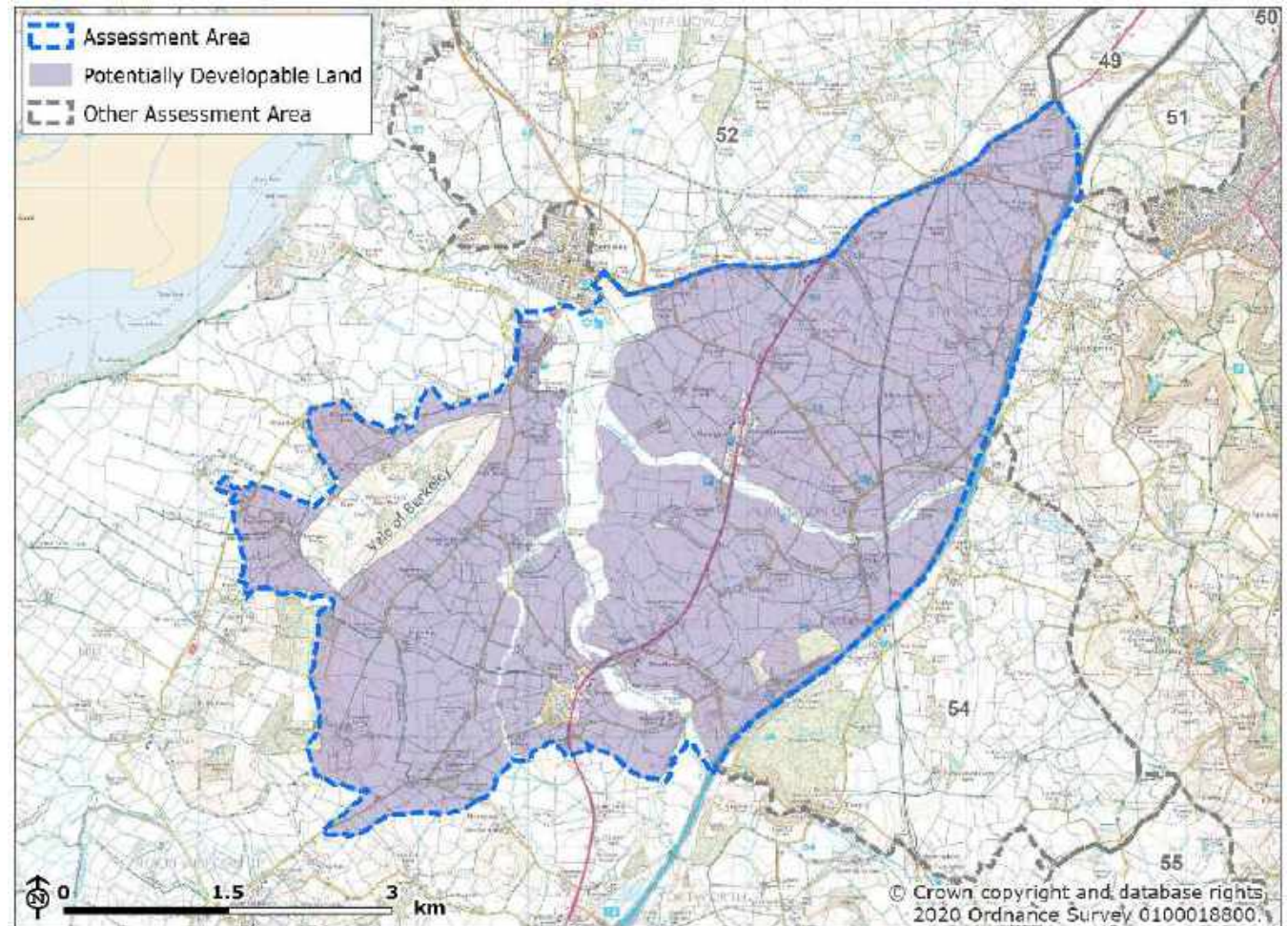
Assessment Area 53 – New Settlement: Land South of Berkeley

Assessment Area Ref: 53

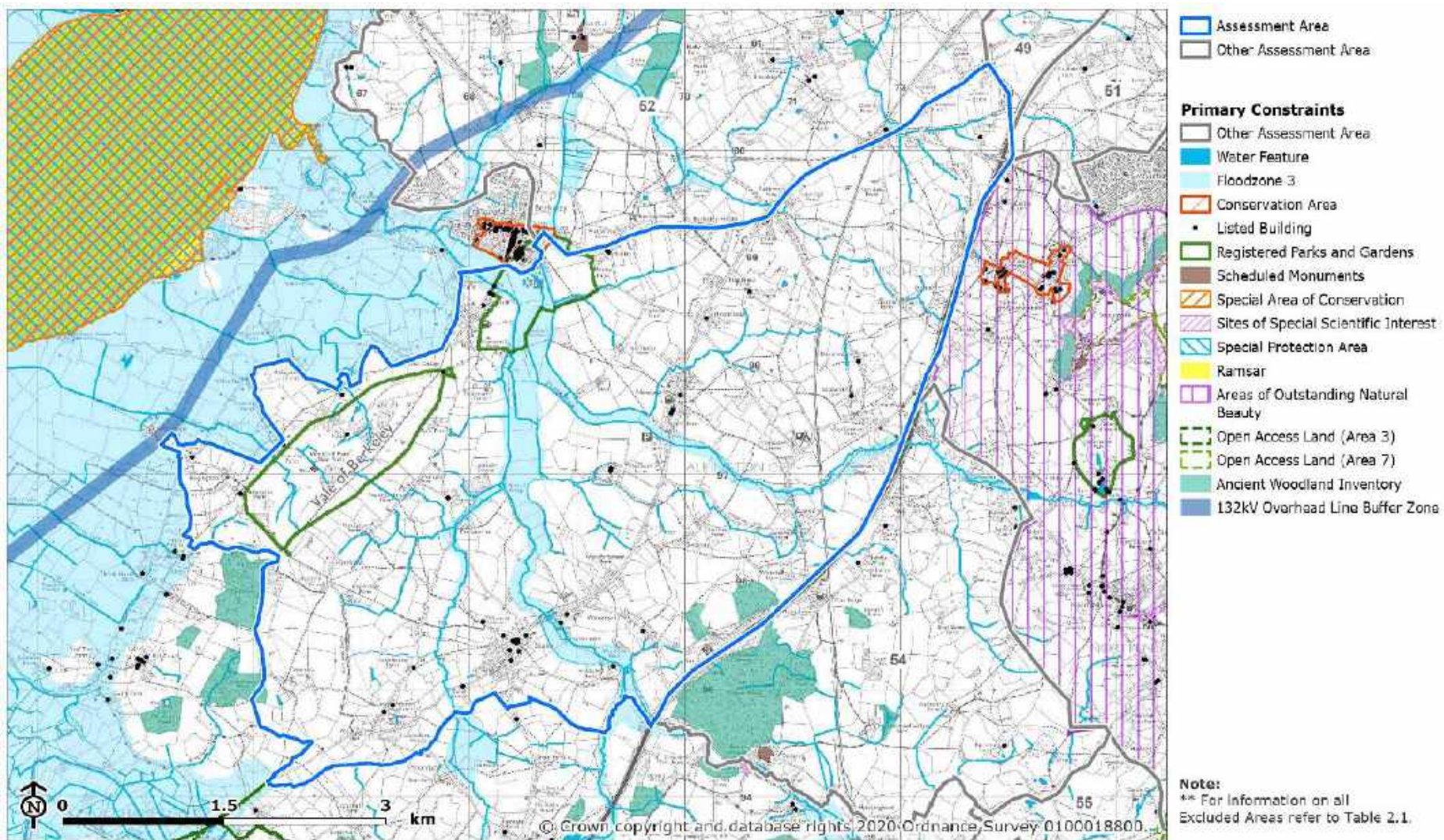
Authority Area: Stroud District

Development Typology: New Settlement

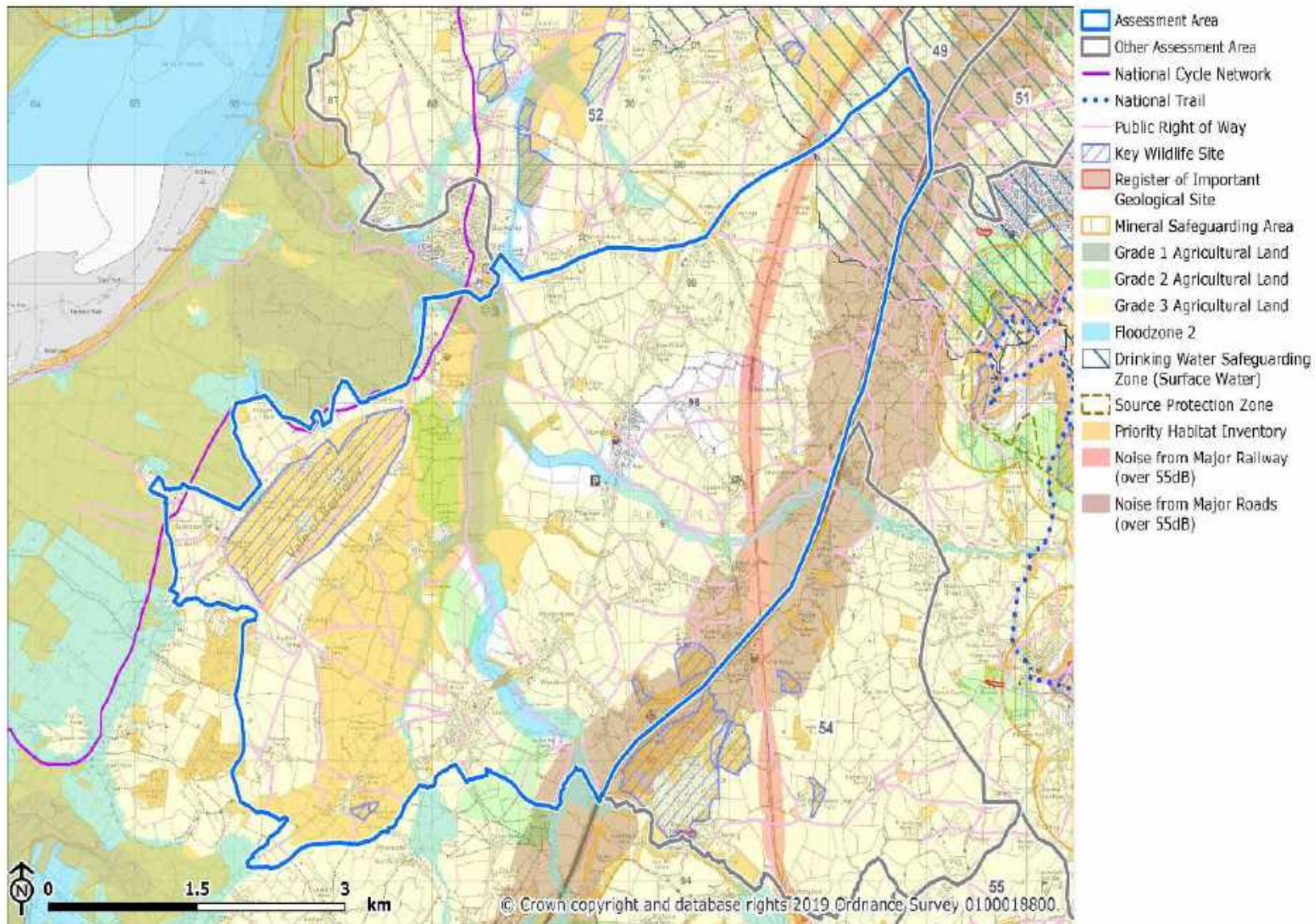
Area: ~2,500ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> The northern edge of the assessment area overlaps the Berkley Conservation Area. The assessment area contains the grade II* Berkley Castle registered park and garden (RPG), comprised of two separate areas the grounds immediate to the grade I listed Berkley Castle and Whitcliff deer park to the southwest. There is a scheduled moated site in Whitcliff RPG. There are 56 listed buildings in the assessment area. Except for the grade II* Church of All Saints, Stone, they are all grade II listed. Most of the grade II listed buildings are farmhouses, but there are also some houses, cottages and agricultural buildings, as well as multiple burial monuments associated with the church. <p><i>Non-designated</i></p>	<p>The north-western part of the assessment area is highly sensitive due to the presence of Berkley Conservation Area and Berkley Castle RPG, along with the listed buildings and scheduled monument therein. There is also an area of Ancient Woodland along the western boundary.</p> <p>The same area also includes non-designated heritage assets that may be of more than local importance and add to the area's sensitivity. For example, there is the Iron Age Hill Fort located just west of Whitcliff RPG, and the DMV and moated sited are both near Alkington Farm to the southeast of the other part of the RPG at Berkley.</p> <p>The listed buildings represent further key sensitivities. Many are clustered towards the existing settlements of Ham, Newport and Stone, with the latter being surrounded by several outlying listed farmhouses. There are further dispersed and isolated designated farmhouses across the assessment area. These typically have important historical and functional relationships with their historic outbuildings and agricultural hinterland that are sensitive to change.</p> <p>To avoid/ minimise harm any new development would probably be best placed to the east of the A38 and north of Stone and the Ancient Woodland near Woodford. Located appropriately between Newport and the M5 a</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> • The HER records many non-designated assets within the assessment area. These include: <ul style="list-style-type: none"> - Possible Iron Age Hill Fort Bevington; - Roman cemetery, Alkington; - Two Roman roads (Gloucester – Sea Mills and Berkley – Bitton); - Deserted medieval village (DMV) at Alkington and another possible one (truncated by the M5) at Upper Wick; - Medieval moated site at Court Moat (built over) and another south of Alkington Farm; - Possible site of a former medieval deer park at New Park Farm the area also contains an earthwork bank and ditch as well as a quarry; - Site of medieval hospital southeast of Pickwick Farm and a bridge near Stone; - Medieval – post-medieval Holloway, Berkeley; - Medieval water meadow, Berkley; 	<p>small village (or possibly even a large one, built at the lower end of the development quantum) would potentially give rise to minor negative effects. Further north, a small village sited appropriately between the dismantled railway, Berkley Road and Standle Farm might also give rise to minor negative effects.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Medieval site at Manor Farm, Lower Stone; - Medieval or post-medieval features west of Oakleaze Farm, Alkington; - Ridge and furrow earthworks across the assessment area with cultivation terraces near Willis Elm Farm; - Cobbled surface, Upper Wick; - Sites of undated farms and a post-medieval Almshouse, Ham and Stone; - Two mill sites, Ham and Stone; - Cropmarks and earthworks in Whitcliff Deer Park; - Earthwork/ banks relating to the former route of the Little Avon; - Post-medieval sea defences, Ham; - Fishpond, Middle Mill Farm; - Pits and ditches, Berkley Vale Wind Farm; - Post-medieval features, Stone; - Earthworks west of Baynhamcourt Farm; 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Extant and disused railways; - Former turnpike roads; - Extant buildings including Mobley Farm, Middle Farm, Congregational Chapel, Swanley Farm Cottage, Stone Court, Home Farm, Lower Wick Mill House, Wick House, and a former Toll House at Stone; <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • Other than the existing settlement the HLC data shows that the assessment area is primarily an agricultural landscape comprised of irregular, less irregular, regular and less regular enclosures, with some riverine pasture. Many of the enclosures appear to have some time depth and may include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> Along the eastern and western edges there are two areas of surviving early woodland (classified as Ancient Woodland). <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are numerous designated assets in the wider vicinity, especially to the east along the escarpment. None appear to have a particularly meaningful relationship with the assessment area, other than perhaps Stinchcombe Conservation Area. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> No non-designated assets within the HER have been identified as being particularly susceptible to setting change. 				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> Large Key Wildlife Site (Whitcliff Park) occupying the north-west corner of the assessment area. 	The north and east of the assessment area is generally less constrained with regard to ecology, and lies closest to the existing M5, A38 and rail corridors. Development here would nevertheless need to give consideration			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> • Key Wildlife Site (Michael Wood) adjacent to southern boundary, which is also Ancient Woodland. • Coastal and floodplain habitats associated with the Severn extend through the south western third of the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> • Two areas of Ancient Woodland (Cat Grove and Round House Wood) adjacent to western boundary. • Remaining area of Michael Wood Key Wildlife Site 100m from southern boundary on the opposite side of the M5. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> • SSSI (Damery Road Section) 900m south. • SSSI (Stinchcombe Hill) 1.2km east. • SSSI/SPA/SAC/Ramsar (1.2km north-west. <p>IRZs:</p> <ul style="list-style-type: none"> • The assessment area falls with IRZs for the Severn, which lists all residential applications as land uses of risk. 	to the network of tributaries to the Severn, and field boundaries of ecological value.			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	Negligible effects may occur for all development size options as there is potential for these scales of development to be accommodated over 250m from local designations and over 2km from national designations.				
Soil Quality	<p>The majority of the assessment area is comprised of grade 3 agricultural land. However, there are two pockets of grade 2 agricultural land in the western half of the assessment area adjacent to Little Avon River, which equate to approximately 70ha. There is approximately a further 16ha of grade 2 agricultural land adjacent to the southern boundary of the assessment area. In addition, there is pocket of grade 4 agricultural land in the eastern half of the assessment area to the east and around Newport.</p> <p>There is potential for development to result in the loss of high quality agricultural land. Significant negative effects may occur in relation to soil quality under all development size options. The effects are uncertain as there is no data distinguishing whether the grade 3 land is grade 3a or the lower quality grade 3b.</p>	There is potential for all development size options to avoid the loss of grade 2 agricultural land by avoiding development on the western bank of Little River Avon. However, the majority of remaining land in the assessment area is grade 3 and therefore development at any location has the potential to result in the loss of high quality agricultural land.	?	?	?
Water Quality	There is approximately 134ha in the north-easternmost corner of the	The drinking water safeguarding zone occupies a comparatively small area of the overall assessment area and therefore there is			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>assessment area that is located within a drinking water safeguarding zone.</p> <p>However, there is sufficient space within the assessment area to accommodate all scales of development outside of drinking water safeguarding zones.</p>	<p>potential for all development scales to be located outside of this area further to the south-west.</p>			
Flood Risk	<p>The majority of the assessment area is greenfield. There are several small settlements throughout the assessment area and the A38 bisects the area from north to south.</p> <p>There are small areas (<10ha) of developable land adjacent to the Little River Avon and its tributaries that bisects the area that are located within Flood Zone 2.</p> <p>However, there is potentially sufficient space outside of Flood Zone 2 to accommodate all scales of development. As such, negligible effects may occur in relation to flood risk.</p>	<p>There is potentially sufficient space in the south-west and the north-east of the assessment area to accommodate all scales of development outside of Flood Zone 2. In addition, the central region of the assessment area may also be able to accommodate development under the small and medium development scales outside of Flood Zone 2.</p>			
Mineral Resources	<p>The assessment area is not located within any Mineral Safeguarding (MSAs).</p> <p>As such, negligible effects are considered likely in relation to mineral resources for all potential development scales.</p>	N/A			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Noise	<p>Land adjacent to the full length of the eastern boundary is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours due to the presence of the M5. In addition, there is further land in a noisy area adjacent to the railway that bisects the eastern half of the site from north to south.</p> <p>However, there is potentially sufficient space within the assessment area outside of noisy areas to accommodate all development scales. As such, negligible effects may occur in relation to noise.</p>	<p>There is potentially sufficient space in the south-west of the assessment area to accommodate all scales of development outside noisy areas.</p> <p>Suitable mitigation may also be possible to overcome any noise related issues.</p>			
Odour	<p>No odour-related spatial policies apply to the assessment area.</p> <p>As such, negligible effects are considered likely in relation to odour for all development sizes.</p>	N/A			

Landscape Sensitivity

<p style="text-align: center;">Overview of Sensitivity and Spatial Variation</p>	<p style="text-align: center;">Sensitivity Rating: Town/city (10,000+ dwellings)</p>	<p style="text-align: center;">Sensitivity Rating: Large village (5,000-10,000 dwellings)</p>	<p style="text-align: center;">Sensitivity Rating: Small village (1,500-5,000 dwellings)</p>
<p>Key sensitivities include:</p> <ul style="list-style-type: none"> • The elevated ridge of Whitcliff Deer park which forms a prominent feature on skylines in the east of the area. • Intact rural character, particularly away from modern intrusions including major roads and electricity infrastructure. • The strong wooded character, with areas of mixed woodland (including some ancient woodland, orchards and frequent hedgerow trees. Some are locally designated at Key Wildlife Sites. • Sense of time-depth, particularly associated with the Berkley Castle Grade II* Registered Park and Garden. • Sparsely settled character, with small dispersed and often linear villages and the small historic town of Berkeley. • Areas adjacent to the River Severn, particularly if characterised by a steeper landform. <p>As such, landscape sensitivity is high under the largest development size option as the key characteristics and qualities of the landscape may be highly sensitive to development of this scale. Landscape sensitivity is reduced to moderate-high and moderate for the large and small village scenarios respectively as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	<p>H</p>	<p>M-H</p>	<p>M</p>

Summary of Constraints and Landscape Sensitivity

The historic environment assessment has identified this location as less sensitive to development compared to the opposite side of the A38 where the settlements are Woodford and Newport are located (which contain listed buildings). In terms of landscape, the delivery of a small village may be more suitable due to a moderate sensitivity rating. Landscape sensitivity is increased to moderate-high and high under the medium and large scale scenarios of development respectively.

Land in the west and north-west of the assessment area is likely to be less suitable for the delivery of a new settlement due to the presence of Berkeley Castle Registered Park and Garden and large areas of floodplain designated as grazing marsh priority habitat adjacent to the Little Avon, which contribute to habitat connectivity of the internationally designated Severn Estuary (SAC/SPA/Ramsar/SSSI) further to the north of the assessment area.

The least constrained land within the assessment area lies to the east of the A38, to the south of Newport and Doverte Brook which bisects the assessment area. A small village could potentially be located in this location on grade 3 agricultural land and over 250m from the Ancient Woodland to the south. It is not clear whether the grade 3 land is grade 3a or the lower quality grade 3b. There may be potential to accommodate a large village in this location, but this would encroach into land within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during the period 07:00-23:00 hours on the eastern boundary as well as potentially resulting in adverse impacts upon the area of Ancient Woodland to the south.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The area is connected to the highway network via the A38 which runs through the centre of the assessment area, providing direct links to key urban centres, whilst the M5 runs along the western boundary and M5 Junction 14 is 1.5 miles to the south.</p> <p>No 'critical junctions' are located within the vicinity as defined by the JCS/SADC Transport Evidence Base, but this may simply reflect the extent of this prior analysis rather than the absence of specific forecast future capacity constraints on the highway network.</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 7,306</p> <p>A low number of workplaces (jobs) can currently be accessed by public transport from the assessment area.</p>	
	<p>Number of workplaces (jobs) accessible within 30 minutes = 176,342</p> <p>Access from the assessment area to employment by Car also scores relatively low.</p>	

Criterion	Rationale	Score
Access to other key services and facilities by public transport	TRACC Accessibility Modelling outputs show that small parts of the assessment area (adjacent to Berkeley and the A38 near Breadstone) are within a 20-40 minute public transport journey of local urban centres and healthcare facilities. Although public transport access to education facilities was slightly better in these locations, the majority of the assessment area has poor levels of public transport accessibility.	
Private car use by commuters	% Driving a Car or Van = 72% Car based trips currently account for an average of 72% of commuter journeys in LSOAs covered by the assessment area.	
Proximity to sustainable transport networks	The majority of the assessment area is outside of the 5km catchment of Cam & Dursley Rail Station and is served by low-frequency bus services along the main arterial routes within the assessment area. A National Cycle Network route runs along the western boundary providing active travel links to nearby urban centres.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Strategic Infrastructure	Waste water	Development likely to require a new STW unless a connection can be made to the existing Michaelwood STW via a long-distance sewer. Cost of providing new treatment assets will be borne by the water company and would need to secure funding. This would not happen before 2026 to 2030.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Load is acceptable, although easement would require high pressure pipeline diversion which would incur a cost to developer.			
	Rail transport	Only a small part of the assessment area is within 5km of Cam & Dursley mainline station. Area is on mainline rail route but lack of supporting bus and cycle infrastructure networks and proximity to Cam & Dursley station means it is unlikely to justify provision of a new station.			
	Bus transport	Within 500m of existing low frequency bus route but distant from key destinations and station, so difficult to effectively improve quality of bus provision.			

	Cycle transport	Close to existing cycle network although outside of reasonable distance to enable significant increase in cycle trips.			
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Viability

	Development Type					
	Small Village			Large Village	Town/City	
Dwellings	2,500	3,500	4,500	7,500	10,000 (70% net)	10,000 (60% net)
Indicative developer contributions and affordable housing pool/per unit (£)	40,000	40,000	40,000	40,000	25,000	15,000
Viability	High	High	High	High	High	Medium

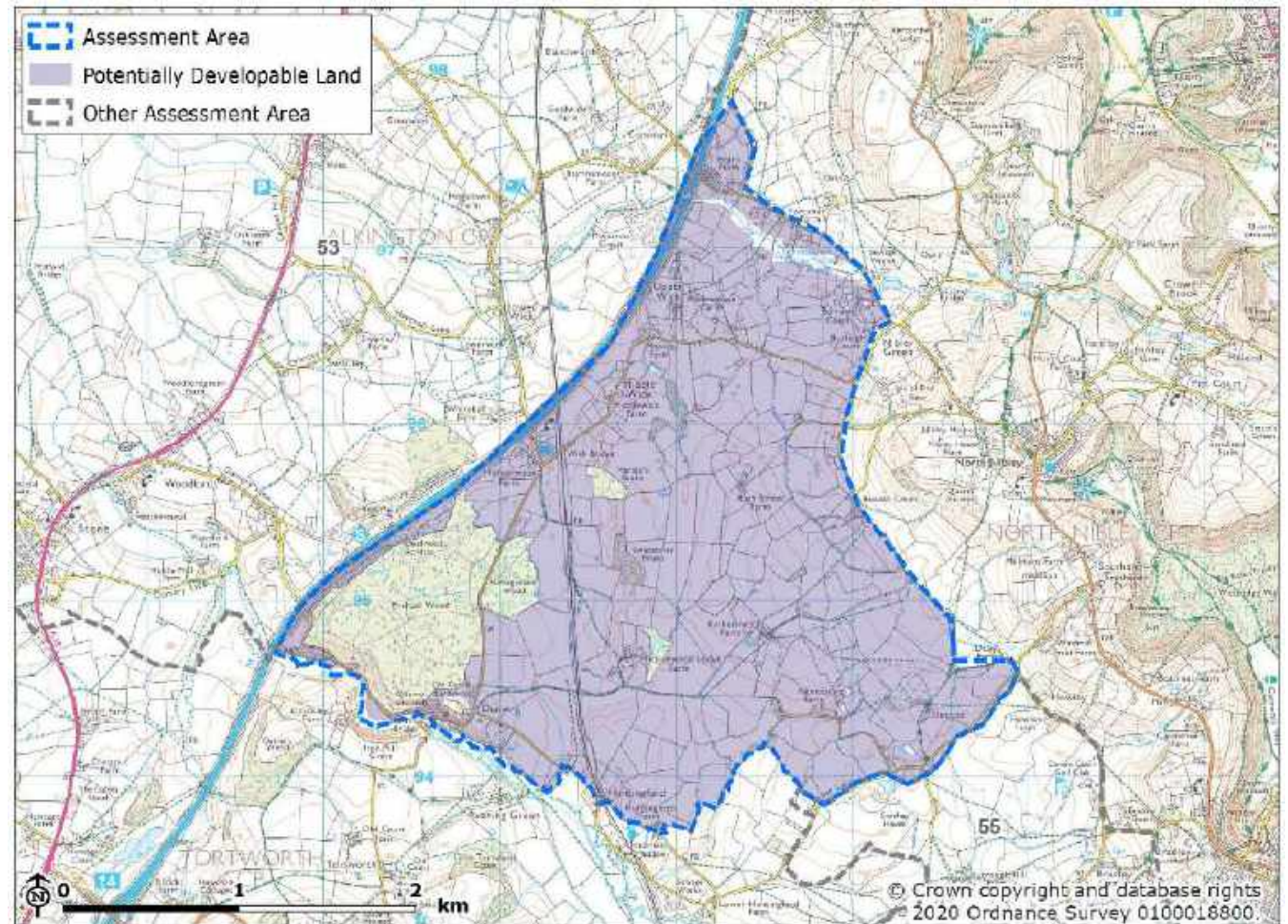
Assessment Area 54 – New Settlement: Land between M5 and North Nibley

Assessment Area Ref: 54

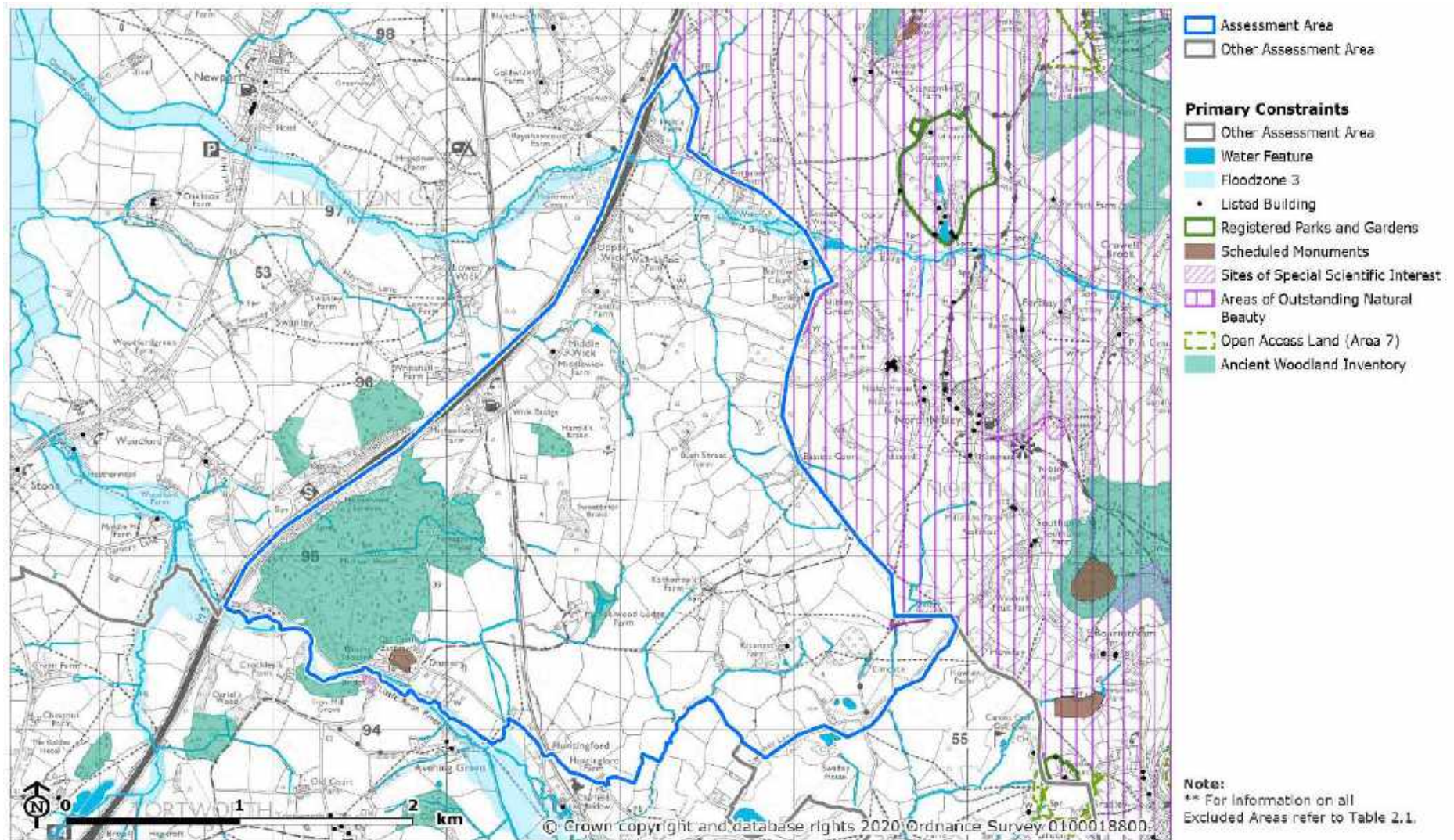
Authority Area: Stroud District

Development Typology: New Settlement

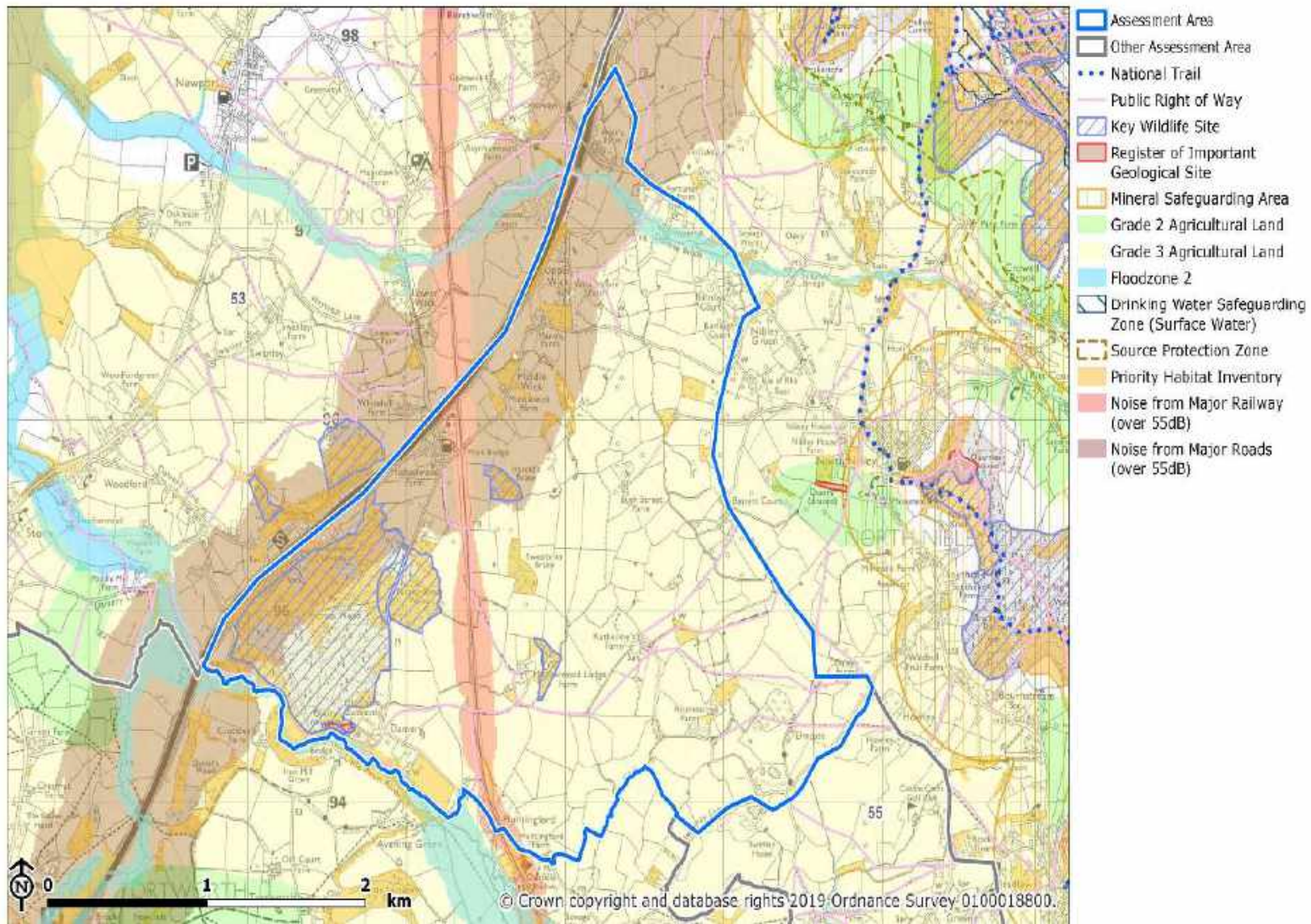
Area: ~792ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
Historic Environment	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are five grade II listed buildings within the assessment area. These are all farmhouses save for Burrows Court, which is a house with mill attached. • There is a scheduled medieval enclosure – possibly a ringwork or animal pound – at Damery. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • The HER records a limited number of non-designated assets within the assessment area. These include: <ul style="list-style-type: none"> - Route of the Roman Road between Berkley and Bitton; - A possible deserted medieval village (truncated by the M5) at Upper Wick; - A medieval moated site east of Michael Wood; - Post-medieval and later trackways near Bush Street Farm; 	<p>Due to the presence of listed buildings, the northern and south-eastern parts of the assessment area are sensitive to development.</p> <p>The scheduled monument and ancient woodland similarly make the south-western part of the assessment area sensitive to development, both in physical terms and probably in terms of the scheduled monuments setting – although this is difficult to estimate given the monument’s differing interpretations.</p> <p>In the wider area the scheduled monuments along the eastern escarpment would be sensitive to setting change. Development up the ridge should be avoided.</p> <p>In terms of non-designated assets, most are likely to be of local significance. Potential exceptions include the battle site, to the north near Nibley, and the Roman road, which runs north to south across the assessment area and may be associated with further unrecorded Roman activity. All the non-designated assets would be highly susceptible to physical and/ or setting change.</p> <p>To avoid/ minimise harm development would be best placed towards the centre of the assessment area, probably between Huntingford and Harold’s Brake. It may be possible to appropriately site a small village in this area with minor negative effects,</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Site of a stone cottage along the M5; - Extant post-medieval mill south of Fortune Farm and the site of another to the southeast; - Limited ridge and furrow earthworks, mainly to the north and south; - Site of the medieval Battle of Nibley Green; - Cobbled surface at Upper Wick; - Possible medieval to post-medieval field boundaries, Huntingford; - Extant railway. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC data shows that the assessment area is primarily an agricultural landscape comprised of irregular and less irregular enclosures. These have some time depth and may include hedgerows that qualify as important under the archaeology and history criteria of The Hedgerow Regulations 1997. 	<p>depending on the significance of the Roman Road, which runs through this area.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> The HLC shows that Michael Wood, Furzeground Wood, Sweetbriar Brake and Harold's Brake are all areas of surviving early woodland (classified as Ancient Woodland). The official Ancient Woodland dataset also maps the woodland around Michaelwood Lodge Farm as Ancient Woodland. <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are three scheduled monuments to the east of the assessment area along the escarpment that may be susceptible to setting change, There is a very large number of designated assets in the wider area including listed buildings, registered parks and gardens and conservation areas. At this stage none have been identified as being particularly susceptible to 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>setting change as a result of development in the assessment area.</p> <p><i>Non-designated</i></p> <ul style="list-style-type: none"> No non-designated assets within the HER have been identified as being particularly susceptible to setting change. 				
Ecological and Geological Environment	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> Large Key Wildlife Site (Michael Wood and Furzeground Wood) occupies the south-west of the assessment area and is also an area of Ancient Woodland. This area is not included as developable land within the assessment area. Key Wildlife Site (Alder Wood) 300m east of Michaelwood Farm in the central region of the assessment area, which is also an area of Ancient Woodland. Key Wildlife Site/Ancient Woodland (Michaelwood Lodge Wood) in the southern half of the assessment area. Key Wildlife Site (Damery Quarry) adjacent to the southern boundary. 	<p>The local landscape is particularly rich in woodland habitats – both within and surrounding the assessment area. Any development, and associated infrastructure, should avoid fragmentation or isolation of wooded habitats. Strengthening the connectivity and diversifying the intervening habitat mosaic may be appropriate for any future mitigation strategy. This is particularly true for the south and west of the assessment area.</p>	*	*	*

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> Register of Important Geological Site (Damery Quarry) adjacent to the southern boundary. <p>Assets within 250m:</p> <ul style="list-style-type: none"> SSSI (Damery Road Section) 80m from the southern boundary. <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> SSSI (Nibley Knoll) 1.2km to the east. SSSI (Wotton Hill) 1km to the east. SSSI (Stinchcombe Hill) 1.2km to the north-east. SSSI (Cullmore's Quarry) 1km to the south. SSSI (Coombe Hill) 1.9km to the east. <p>IRZs:</p> <ul style="list-style-type: none"> The assessment area falls within IRZs associated with SSSIs in the surrounding area, which identify residential planning applications as a potential risk. <p>Minor negative effects may occur for all development size options as they could not be accommodated within the assessment area without falling within 2km of national designations. Detailed development design and other mitigation</p>				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	measures may reduce the potential for adverse effects.				
Soil Quality	<p>The whole of the assessment area is comprised of grade 3 agricultural land.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality for all potential development sizes. The effects are uncertain as there is no data distinguishing whether the land is grade 3a or grade 3b.</p>	Grade 3 agricultural land covers the assessment area. There is a possibility that any of this land could be Grade 3a.	?	?	?
Water Quality	<p>The assessment area is not located within any drinking water safeguarding zones or source protection zones.</p> <p>As such, negligible effects may occur in relation to water quality for all development size options.</p>	N/A			
Flood Risk	<p>The assessment area is greenfield apart from the small settlements of Damery in the south-west and Middle Wick/Upper Wick in the north. In addition, there are several local roads within the assessment area and areas of agricultural development.</p> <p>There are small (<5ha) areas of developable land that are located in Flood Zone 2 in the south-west and</p>	There is potential for all development scales to be set back from the south-western and northern boundaries of the assessment area, avoiding land in Flood Zone 2.			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>northernmost part of the assessment area due to the presence of the Little Avon and Doverte Brook respectively.</p> <p>There is sufficient space within the assessment area to accommodate all potential scales of development outside of Flood Zone 2. As such, significant negligible effects may occur in relation to flood risk.</p>				
Mineral Resources	<p>The assessment area is not located within any Mineral Safeguarding Areas (MSAs).</p> <p>As such, negligible effects may occur in relation to mineral resources for all development size options.</p>	N/A			
Noise	<p>Land adjacent to the northern and western boundary of the assessment area is located within the M5 area of high noise Noisy area. In addition, a smaller area of land adjacent to the railway that passes through the south-west of the area is also located within a noisy area.</p> <p>However, there is potentially sufficient space within the assessment area to accommodate all development scales outside of noisy areas. As such, negligible effects may occur in relation to noise.</p>	<p>There is potential for all development scales to avoid noisy areas by being located in the eastern half of the assessment area.</p> <p>Suitable mitigation may also be possible to overcome any noise related issues.</p>			
Odour	<p>No odour-related spatial policies apply to the assessment area.</p>	N/A			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	As such, negligible effects are considered likely in relation to odour for all development sizes.				

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key sensitivities include:</p> <ul style="list-style-type: none"> • Undulating topography including some prominent slopes and small hills. • Areas of ancient woodland and BAP priority habitats, including some which are locally designated as Key Wildlife Sites. • The rural setting the landscape provides to existing settlement. • Strongly rural perceptual qualities, particularly in the south away from the M5 motorway. • Open and expansive landscape character on elevated ground, with long distance views. • Frequent intervisibility with the adjacent Cotswolds AONB, including the William Tyndale Monument, which creates a strong sense of place. <p>As such, landscape sensitivity is high under the medium and largest development size options as the key characteristics and qualities of the landscape may be highly sensitive to development of these scales. Landscape sensitivity is reduced to moderate-high for the small village scenario as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>	H	H	M-H

Summary of Constraints and Landscape Sensitivity

The south-west contains a large area of Ancient Woodland/Key Wildlife Site, a Scheduled Monument and a SSSI just outside the assessment area boundaries. Delivery of a settlement in this area would result in significant negative effects on these assets. Furthermore, delivery of a new settlement in the western half would also result in significant negative effects on the setting of listed buildings within Middle Wick/Upper Wick adjacent to the western boundary. The eastern boundary also displays higher levels of sensitivity due to the presence of further listed buildings in the north-east and south-east as well as Scheduled Monuments on an escarpment further to the east and a SSSI.

Overall, the central region of the assessment area may be the least sensitive to development. There is potential to accommodate a small village in this location that would avoid the majority of constraints in the assessment area. There is Key Wildlife Site/Ancient Woodland adjacent to Michaelwood Lodge Farm, but it may be possible to include a suitable buffering zone around this asset should a new settlement be delivered in this area. The area is comprised of grade 3 agricultural land, but it is not clear if it is grade 3a or the lower quality grade 3b. A large village could potentially be accommodated in this area, but this has the potential to result in greater adverse impacts upon historic and natural environment assets to the west and east. Additionally, the area has high landscape sensitivity to the large village scale of development. Landscape sensitivity is reduced under the small village scenario, but it is still considered to be moderate-high.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	<p>The assessment area is connected to the highway network via the B4060 to the east and a number of local access roads, which provide links into local urban centres, whilst the M5 runs along the western boundary of the assessment area and M5 Junction 14 is 1.5 miles to the south.</p> <p>No 'critical junctions' are located within the vicinity of the assessment area, as defined by the JCS/SADC Transport Evidence Base.</p>	
Access to employment	<p>Number of workplaces (jobs) accessible within 45 minutes = 19</p> <p>A very low number of workplaces (jobs) can currently be accessed by public transport from the assessment area.</p>	

Criterion	Rationale	Score
	<p>Number of workplaces (jobs) accessible within 30 minutes = 83,572</p> <p>Access from the assessment area to employment by Car scores relatively low.</p>	
<p>Access to other key services and facilities by public transport</p>	<p>TRACC Accessibility Modelling outputs show that the assessment area currently has poor accessibility by public transport to key services, within the threshold journey times defined for this metric.</p>	
<p>Private car use by commuters</p>	<p>% Driving a Car or Van = 72%</p> <p>Car based trips currently account for an average of 72% of commuter journeys in LSOAs covered by the assessment area.</p>	
<p>Proximity to sustainable transport networks</p>	<p>The assessment area is outside of the 5km catchment of a Rail Station, although is close to a low-frequency bus route. The assessment area is currently divorced from existing strategic walking and cycling routes.</p>	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000- 10,000 dwellings)	Score: Small village (1,500- 5,000 dwellings)
Strategic Infrastructure	Waste water	Development likely to require a new STW. Limited mains sewerage in this area. Cost of providing new treatment assets will be borne by the water company and would need to secure funding. This would not happen before 2026 to 2030.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	At lowest levels of growth, load is acceptable. At all other levels of growth, reinforcement of pipeline network would be required, with the cost of downstream reinforcement to be borne by developer.			
	Rail transport	Area is on mainline rail route but not proximate to any rail stations. Area is on mainline rail route but lack of supporting bus and cycle infrastructure networks means it is unlikely to justify provision of a new station.			
	Bus transport	More than 500m from any bus route.			

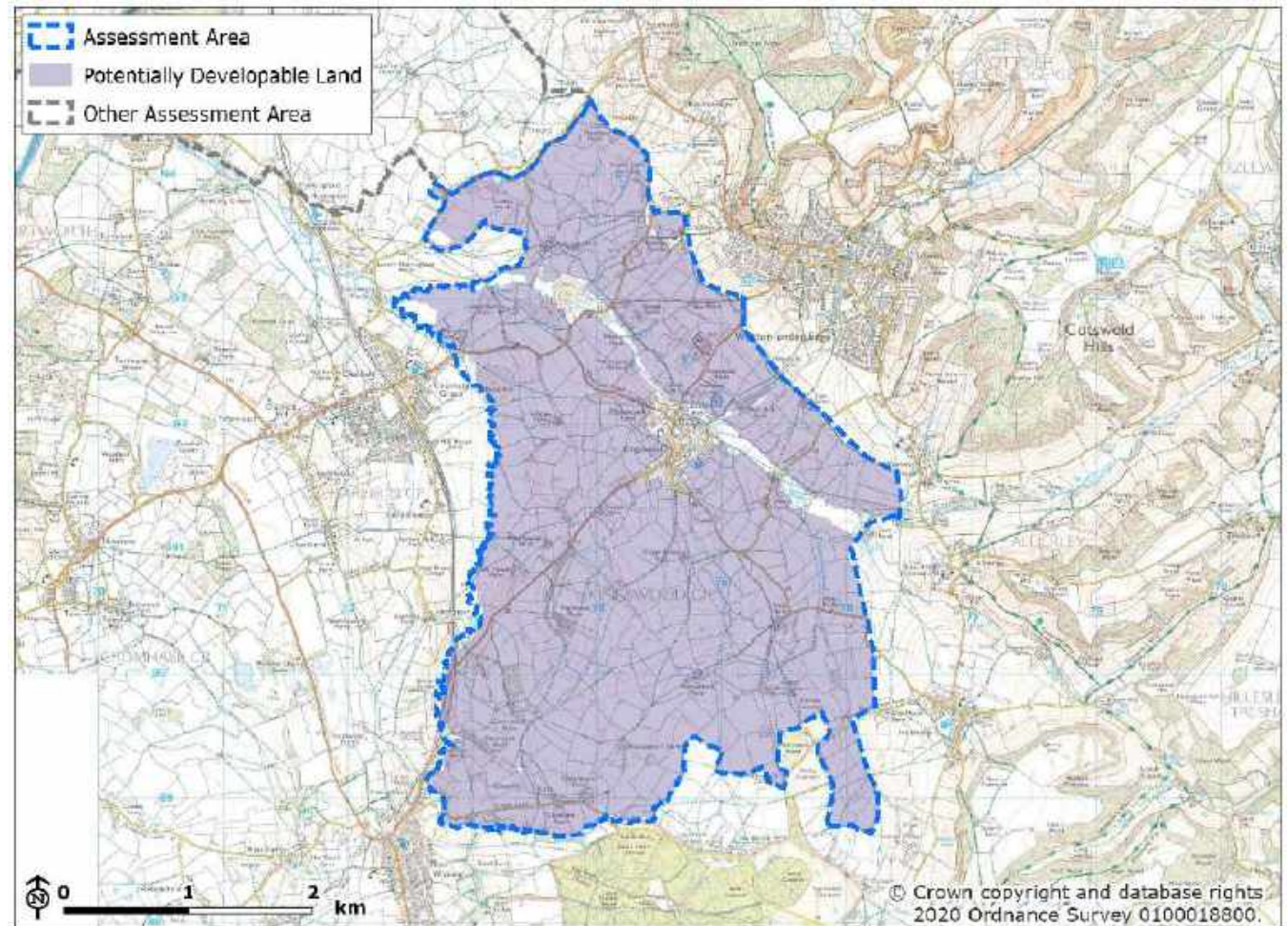
Assessment Area 55 – New Settlement: Land at Kingswood

Assessment Area Ref: 55

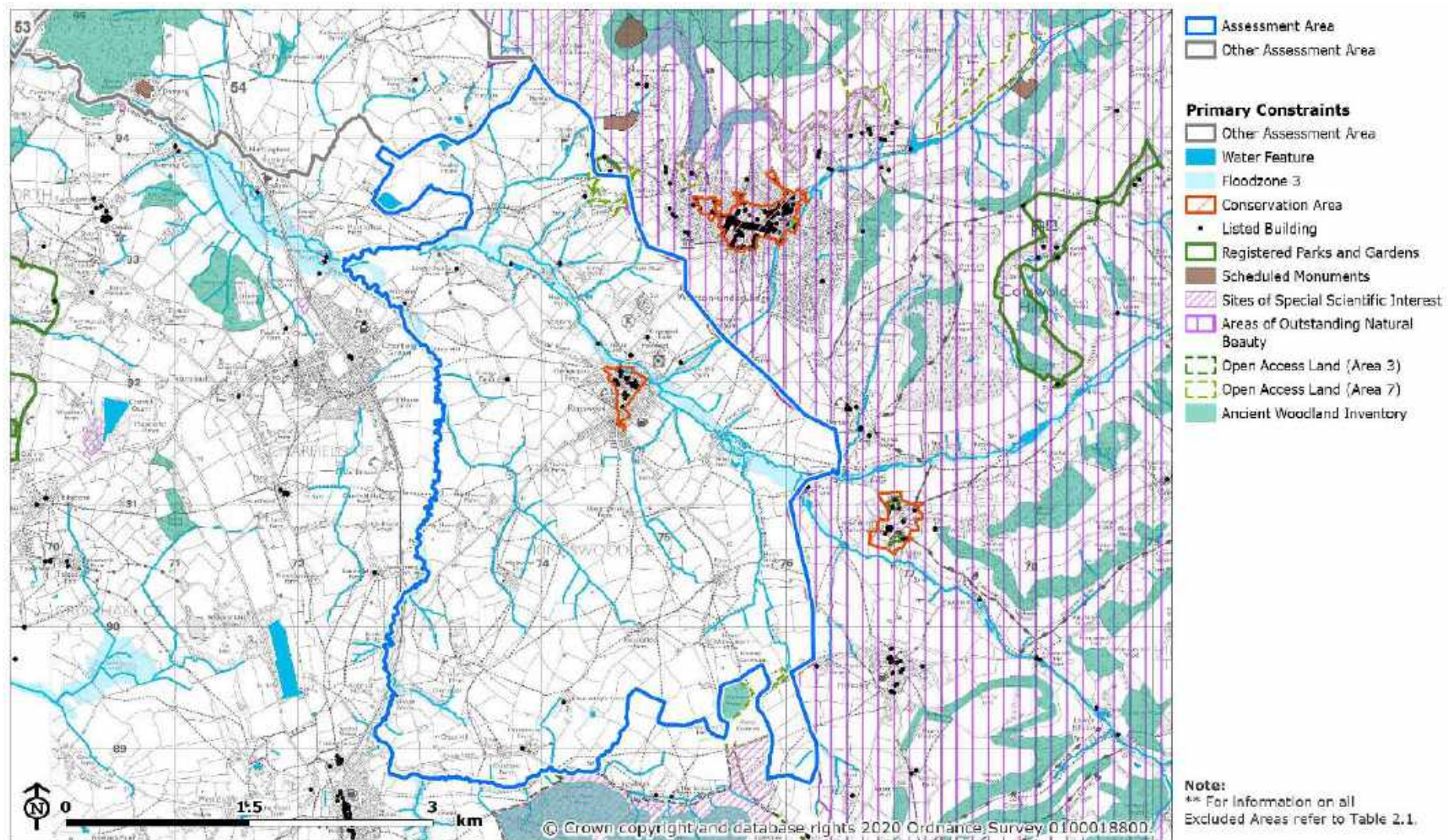
Authority Area: Stroud District

Development Typology: New Settlement

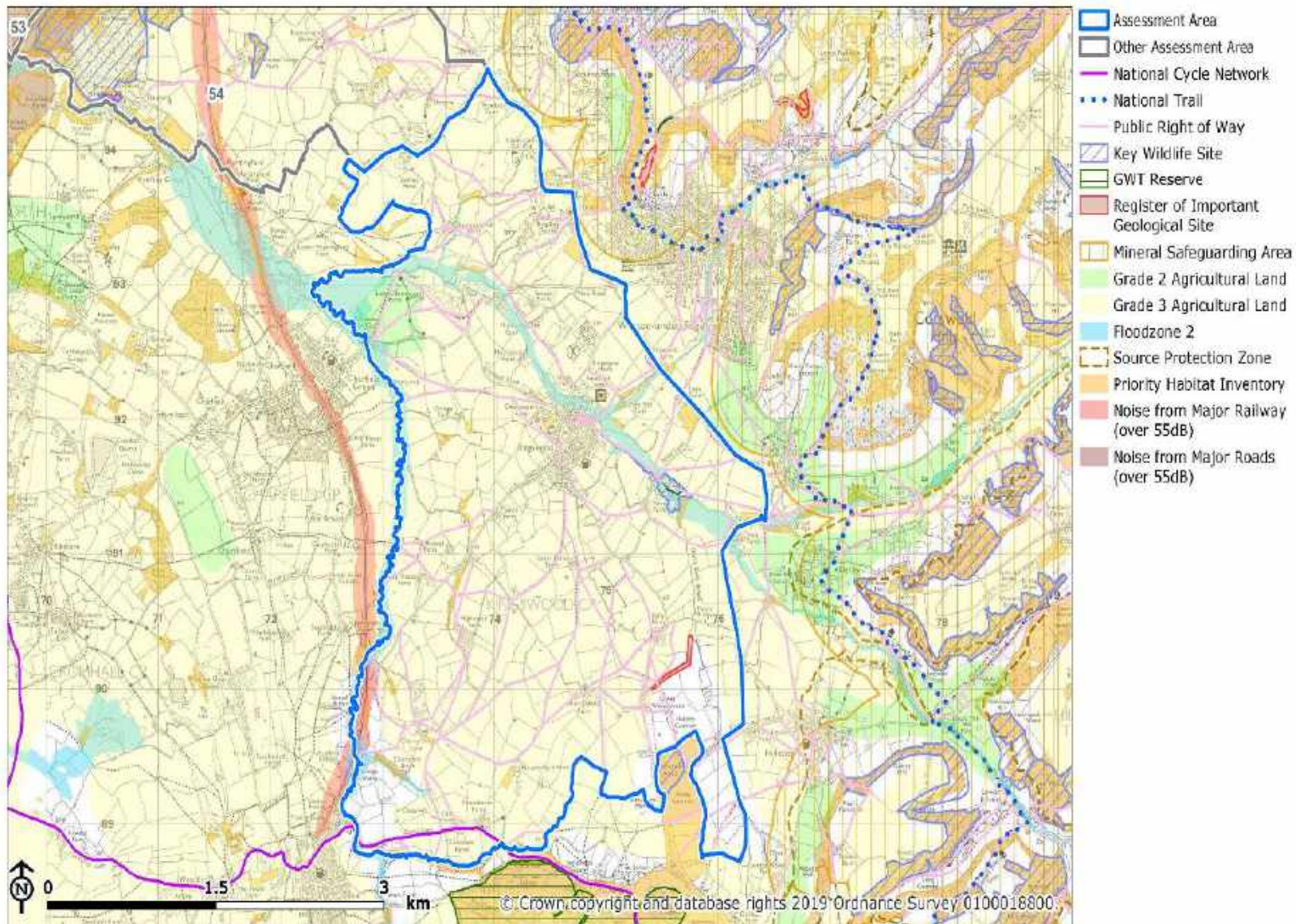
Area: ~1,422ha



Primary Constraints



Secondary Constraints



Environmental Constraints

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
<p>Historic Environment</p>	<p>Assets within the assessment area that could be susceptible to physical and/or setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> There are 44 listed buildings in the assessment area. Most are in the Kingswood Conservation Area. Those that are outlying are typically farmhouses or country houses; there is also a former mill house. The scheduled remains of the Kingswood Abbey Gate lie within the conservation area. There is also a scheduled bridge along Chase Lane. Part of Bradbury Court registered park and garden (RPG) is overlapped by the assessment area. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> The HER records a limited number of non-designated assets within the assessment area. These include: 	<p>Kingswood Conservation Area and the listed buildings and scheduled monument within it, as well as the listed buildings to the north and east of it make most of the northern half of the assessment area sensitive to development.</p> <p>The sensitivity of this half of the assessment area is increased by the presence of Bradley Court RPG, and the risk to setting change to assets along the eastern edge of the assessment area. These assets include the scheduled monuments, Wotton-under-Edge Conservation Area and the grade II listed gazebo in Bradley Court RPG. This sensitivity is increased by the scheduled monuments and Wotton-under-Edge Conservation Area to the east of the assessment area.</p> <p>The eastern edge of the assessment area remains sensitive to the south due to the potential for setting change to the grade II listed Park Farmhouse and Day House Lane Farmhouse and the Alderley Conservation Area. The non-designated moat at Lovett’s Wood Farm, may also be susceptible to setting change as a result of development in the south-eastern part of the assessment area.</p> <p>Within the southern part of the assessment area the key sensitivities are the two grade listed farmhouses: Mounteney’s Farm and</p>	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Possible round barrow, south of Kingswood; - Roman, post-medieval and undated features at Middleyard Farm; - Roman features at Swinhay Farm; - Roman and post-medieval features near Chestnutpark Farm; - Medieval features at Threeways, Kingswood; - Ridge and furrow earthworks, mainly around Kingswood and to the north. Some are associated with boundary ditches and banks; - Site of a possible Manor and burials between Highwood Farm and Upper Barnes Farm; - Disused cemetery Kingswood; - Mill sites at Lower Barnes Farm, Kingswood and north of Kingswood; - Post-medieval pillow mound south of Mounteney's Farm and a field boundary to the north; - Post-medieval field boundaries near Kingswood; 	<p>Chasehouse Farm and the scheduled bridge near Wickwar.</p> <p>The settlement of Wickwar lies to the southwest of the assessment area. Coalescence with a new settlement would affect its historic character and should be avoided.</p> <p>In terms of known non-designated assets, the barrow, if proven to be such and to have above ground remains, may be of more than local importance. However, most non-designated assets appear to be of local importance, and focused in around Kingswood. They would be highly susceptible to physical and/or setting change.</p> <p>There is a small area in the northern half of the assessment area around Swinhay House where development might avoid significant negative effects. However, this area would probably not accommodate any more than the lowest number of dwellings envisaged for a small village.</p> <p>The southern half of the assessment area might more feasibly accommodate development without significant negative effects provided it is appropriately located to avoid harming the key sensitivities in this area. For example, the area from the western boundary along the railway to Dayhouse Farm, Upper Barnes Farm, Folly Farm and the down to Haroldsfield Farm, Cherryrock Farm and back to the railway. This area might</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> - Hollow way near Lower Barnes Farm; - Post-medieval turnpike road routes; - Extant non-designated buildings including the Congregational School, Kingswood and Grindstone Mill; - Possible beacon hill with enclosure and sub-rectangular feature, Elbury Hill; - Undated enclosure and cropmarks near Lower Barnes Farm. <p><i>Historic Landscape</i></p> <ul style="list-style-type: none"> • The HLC data shows that the assessment area is primarily an agricultural landscape comprised of irregular, less irregular and less regular enclosures, alongside some riverine pasture. Some of the enclosures have time depth and may include hedgerows that qualify as important under the archaeology 	accommodate a small village with minor negative effects.			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>and history criteria of The Hedgerow Regulations 1997.</p> <p>Assets beyond the assessment area that may be susceptible to setting change:</p> <p><i>Designated</i></p> <ul style="list-style-type: none"> • There are two scheduled monuments to the north-east of the assessment area, along the escarpment. • Wootton-under-Edge Conservation Area is also located along the escarpment to the east, and to the south is Alderley Conservation Area. • There are several listed buildings in the wider area. For most any setting change is not likely to be meaningful, however, those identified as particularly susceptible include: the grade II Park Farm, Day House Farm, Charfield House and the gazebo at Bradley Court RPG. <p><i>Non-designated</i></p> <ul style="list-style-type: none"> • There is a moat recorded at the grade II Lovetts Wood Farm. 				

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>Topography and landscape may be important to its interpretation. Grindstone Mill also stands on the edge of the assessment area and development could affect its relationship with its pond mill.</p>				
<p>Ecological and Geological Environment</p>	<p>Assets within the assessment area:</p> <ul style="list-style-type: none"> • Key Wildlife Site in the eastern half of the assessment area to the south-east of Kingswood (not on developable land). • Register of Important Geological Site (Hams Gulley Brook) in the south-east of the assessment area. <p>Assets within 250m:</p> <ul style="list-style-type: none"> • Two SSSIs (Lower Woods and Yarley Meadows) adjacent to the southern boundary of the assessment area. Lower Woods is also a GWT reserve and an area of Ancient Woodland (Shortwood Brake). <p>International and National Assets within 2km:</p> <ul style="list-style-type: none"> • SSSI (Cullmore’s Quarry) 400m to the north-west. • SSSI (Wooton Hill) 500m to the north-east, which contains a Register of Important Geological Site. 	<p>The watercourses and wooded linear features of this assessment area should be respected by any future development proposal. Opportunity for extension, strengthening and diversification of the habitat mosaic may be particularly beneficial where separation between settlements is desired.</p>	<p>*</p>		

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<ul style="list-style-type: none"> SSSI (Coombe Hill) 1.3km to the north-east. SSSI (Hawkesbury Meadow) 1.8km to the south. SSSI (Bishop’s Hill Wood) 1km to the south, which is also Ancient Woodland. SSSI (Nibley Knoll) 1.1km to the north. <p>IRZs:</p> <ul style="list-style-type: none"> The assessment area falls within multiple IRZs associated with SSSIs in the surrounding area, which identify all planning applications as a potential risk. <p>Minor negative effects may occur under the largest development size option as this scale of development is likely to fall within 2km of national designations. Negligible effects may occur under the smallest and medium development size options as there is potential for these scales of development to be accommodated over 2km from national designations. Detailed development design and other mitigation measures may reduce the potential for adverse effects.</p>				
Soil Quality	The majority of the assessment area is comprised of grade 3 agricultural land. However, there is approximately 28ha of	There is significant potential for all scales of development to avoid the loss of grade 2 land in the north-west as it is restricted to a	?	?	?

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>developable land in the north-western corner of the assessment area that is grade 2. In addition, there is approximately 47ha of developable land in the south-western corner of the assessment area that is grade 4 and a further 70ha of developable land in the south-eastern corner that is grade 4.</p> <p>There is potential for development to result in the loss of high quality agricultural land. As such, significant negative effects may occur in relation to soil quality under all development size options. The effects are uncertain as there is no data distinguishing whether the land is grade 3a or the lower quality grade 3b.</p>	<p>comparatively small part of the overall assessment area. However, the majority of remaining land within the assessment area is grade 3 and therefore development at any location has the potential to result in the loss of high quality agricultural land.</p> <p>Although there is potentially sufficient grade 4 land in the south-east to accommodate a small village, this would result in an irregular development layout.</p>			
Water Quality	<p>The assessment area is not located within any drinking water safeguarding zones or source protection zones.</p> <p>As such, negligible effects may occur at all development scales in relation to water quality.</p>	N/A			
Flood Risk	<p>The majority of the assessment area is greenfield. The settlement of Kingswood is located in the central region of the assessment area and the B4060, B4062 and B4058 pass through the area to the south-west and north of Kingswood respectively. There are also a number of local roads and areas of agricultural</p>	<p>There is sufficient space in the southern half of the assessment area to accommodate all scales of development outside of Flood Zone 2.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>development throughout the assessment area.</p> <p>There is land directly adjacent to the full length of the western boundary of the assessment area that is located within Flood Zone 2 due to the presence of the Little Avon. In addition, there are further small areas of developable land (<10ha) within Flood Zone 2 to the north and south-east of Kingswood due to Ozleworth Brook passing through the assessment area.</p> <p>There is potentially sufficient space within the assessment area to accommodate all scales of development outside of Flood Zone 2. As such, negligible effects may occur in relation to flood risk for all development scales.</p>				
Mineral Resources	<p>The assessment area is not located within any Mineral Safeguarding Areas (MSAs).</p> <p>As such, negligible effects are considered likely in relation to mineral resources for all potential development scales.</p>	N/A			
Noise	<p>There is a small area (<10ha) adjacent to the south-western boundary that is located within an area recognised as having noise levels in exceedance of 55dB at night or 60dB on average during</p>	<p>There is significant potential for all development scales to be set back from the noisy area on the south-western boundary.</p> <p>Suitable mitigation may also be possible to overcome any noise related issues.</p>			

Topic	Assets/constraints overview	Spatial variation within assessment area, development capacity/location implications, potential mitigation	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000-10,000 dwellings)	Score: Small village (1,500-5,000 dwellings)
	<p>the period 07:00-23:00 hours due to the presence of the B4060.</p> <p>There is sufficient space within the assessment area to accommodate all development scales outside of noisy areas. As such, negligible effects may occur in relation to noise.</p>				
Odour	<p>No odour-related spatial policies apply to the assessment area.</p> <p>As such, negligible effects are considered likely in relation to odour for all development sizes.</p>	N/A			

Landscape Sensitivity

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<p>Key landscape sensitivities:</p> <ul style="list-style-type: none"> • Undulating topography including some prominent slopes and small hills. • Areas of ancient woodland and BAP priority habitats, including some which are locally designated as Key Wildlife Sites. • The rural setting the landscape provides to existing settlement. • Strongly rural perceptual qualities, particularly in the south away from the M5 motorway. • Open and expansive landscape character on elevated ground, with long distance views. 	H	H	M-H

Overview of Sensitivity and Spatial Variation	Sensitivity Rating: Town/city (10,000+ dwellings)	Sensitivity Rating: Large village (5,000-10,000 dwellings)	Sensitivity Rating: Small village (1,500-5,000 dwellings)
<ul style="list-style-type: none"> Frequent intervisibility with the adjacent Cotswolds AONB, including the William Tyndale Monument, which creates a strong sense of place. <p>As such, landscape sensitivity is high under the medium and largest development size options as the key characteristics and qualities of the landscape may be highly sensitive to development of these scales. Landscape sensitivity is reduced to moderate-high for the small village scenario as the key characteristics and qualities of the landscape are potentially less sensitive to development at this scale.</p>			

Summary of Constraints and Landscape Sensitivity

Overall, the southern half of the assessment area may be less sensitive to development due to the settlement of Kingswood being located in the northern half, which contains a Conservation Area and multiple listed buildings. Although there are areas of grade 4 agricultural land on the south-western and south-eastern boundaries that could offer potential for development to avoid the loss of high-quality soil, these areas are potentially more sensitive due to a number of historic assets around the south-western boundary and natural environment assets around the south-eastern boundary.

Therefore, the delivery of a new settlement may be best placed set back from these areas in the southern half, potentially in the space between Upper Dayhouse Farm and Folly Farm. This area could potentially accommodate a small village whilst avoiding the majority of constraints in the assessment area. This area is comprised of grade 3 agricultural land, but it is not clear if it is grade 3a or the lower quality grade 3b. There is potentially sufficient space in this area to accommodate a large village, but this would result in greater adverse impacts on the setting Kingswood Conservation Area. Landscape sensitivity is reduced at the small village scale compared to the larger scales of development, but is still considered to be moderate to high.

Accessibility

Criterion	Rationale	Score
Capacity of the road network	The area is connected to the highway network via the B4058, which runs through the centre of the assessment area, and the B4060, providing good links to Wotton-under-Edge, Charfield, Wickwar and Chipping Sodbury.	

Criterion	Rationale	Score
	Some traffic congestion issues are experienced on major roads in the vicinity of the assessment area during the AM / PM peak, although no 'critical junctions' are within the vicinity of the area - as defined by the JCS/SADC Transport Evidence Base.	
Access to employment	Number of workplaces (jobs) accessible within 45 minutes = 5,465 A low number of workplaces (jobs) can currently be accessed by public transport from the assessment area.	
	Number of workplaces (jobs) accessible within 30 minutes = 144,767 Access from the assessment area to employment by Car scores relatively low .	
Access to other key services and facilities by public transport	TRACC Accessibility Modelling outputs shows that the assessment area currently has poor accessibility to key services by public transport within 60mins travel time. Only education facilities can be found within a 20-minute public transport journey of the area.	
Private car use by commuters	% Driving a Car or Van = 73% Car based trips currently account for an average of 73% of commuter journeys in LSOAs covered by the assessment area.	
Proximity to sustainable transport networks	The assessment area is outside of the 5km catchment of a Rail Station, although is in proximity to a bus route with lower frequency services to a limited range of destinations. The area is currently divorced existing strategic walking / cycling routes.	

Deliverability/Infrastructure

Criterion		Rationale	Score: Town/city (10,000+ dwellings)	Score: Large village (5,000- 10,000 dwellings)	Score: Small village (1,500- 5,000 dwellings)
Strategic Infrastructure	Waste water	Development likely to require a new STW unless a connection can be made to the existing Charfield STW via a long-distance sewer. Cost of providing new treatment assets will be borne by the water company and would need to secure funding. This would not happen before 2026 to 2030.			
	Drinking water	Additional work and funding would be required to increase supply in the area. For development of up to 10,000 dwellings, it is likely there would be headroom in the system to supply this additional capacity in AMP7 (2020-25). If over 10,000 dwellings then this would need to be delivered no earlier than in AMP8 (2025-30).			
	Electricity	No current capacity issues with electricity supply. Growth may require further expansion of bulk (132kv) or primary (66/33kv) substation capacity in the future.			
	Gas	Reinforcement of pipeline network required, with the cost of downstream reinforcement to be borne by developer.			
	Rail transport	The assessment area is on a mainline rail route but not proximate to any rail stations. Lack of supporting bus and cycle infrastructure networks means it is unlikely to justify provision of a new station.			
	Bus transport	Within 500m of existing low frequency bus route but distant from key destinations and station, so difficult to effectively improve quality of bus provision.			
	Cycle transport	Distant from existing cycle network and key destinations, so cycle improvements unlikely to significantly increase cycle trips.			

Viability

	Development Type					
	Small Village			Large Village	Town/City	
Dwellings	2,500	3,500	4,500	7,500	10,000 (70% net)	10,000 (60% net)
Indicative developer contributions and affordable housing pool/per unit (£)	40,000	40,000	40,000	40,000	25,000	15,000
Viability	High	High	High	High	High	Medium