Swale Borough Council

Choices for housing growth

Project ref 41410

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Contents

Executive summary

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About this report

This report is the starting point for developing a longer-term vision for how Swale might deal with choices about the type and location of housing growth.

None of this work represents an agreed political position or policy. The views presented here are those of the consultant team only.

This study is needed, firstly because the planning inspector for the current adopted plan had concerns that current plan adopted might not be able to support sufficient homes over the plan period. An early plan review was therefore required. Secondly, the Government is consulting on a new method of calculating housing targets. Emerging numbers suggest that Swale needs to provide more housing permissions – equivalent to around 35% more every year, on top of the number already in the local plan. This is equivalent to 7,500 additional homes by 2037/38.

There is a growing interest in using new settlements as a way of solving the housing crisis. Government is promoting garden villages and towns. Swale wanted to explore the possibilities of developing these types of plans.

How do we get Swale fit for the future?

We began by understanding the likely context of development in future. The nature of change is uncertain, but it appears clear that disruptive social and economic change is likely to hit Swale over the coming decades. Plans must help Swale cope with those changes, to remain resilient over the long term. Analysis suggests that it will be important to

- Attract and retain a highly skilled population – potentially using housing and superb environments to do that;
- Link to large labour markets – and so work with increasingly specialised labour markets; and
- Create a nimble, flexible policy environment - creating room for excellent investment propositions that can cope with the unexpected.

What could the Swale settlements of the future look like?

The concept of 'good growth' is likely to be critical to the success of proposals for a major new settlement. There is no reason why Swale should tolerate poor design quality. The aim should be to create a national exemplar. Swale could investigate using Garden City or Garden Village principles for development.

If Swale wanted to build a new settlement, how many homes might it have? How much land and infrastructure might it need?

We have assumed that a new settlement could come in units of around 5,000 additional dwellings – although we considered some smaller and larger scenarios. A settlement of 5,000 dwellings can be relatively self-contained, and is large enough to create its own 'value contour'. This study looks for locations for around two or three of these settlements, total around 15,000 additional homes. A combination of different settlement development options could be necessary to hit this target.

Around 230 ha of land would be needed for a settlement of 5,000 units. This would have a relatively modest impact, taking about half of one percent of the total Swale land area. A new settlement would generate social infrastructure, transport infrastructure and utilities costs. Very roughly, social infrastructure costs could add up to around £14,000 per home. Transport infrastructure and utilities costs depend on locations of development chosen, so are difficult to estimate – but could be of the order of another £13,000 per home. Utilities infrastructure costs would be additional.

Executive summary (2)

Finding suitable locations for a new settlement

We looked for suitable locations by 'sieving' Swale in three ways: development constraints show where we are *able* to grow, market constraints shows where the market is *willing* to grow, and infrastructure constraints which show where it is *efficient* to grow. We found the following.

- Development is likely to be most environmentally permissible in the band of unconstrained land which runs from east to west through the centre of Swale.
- Development is most market viable in the area to south and south east of Sittingbourne and Faversham. Sheppey is unlikely to be popular with the market, and subsidy is unlikely to be available in the long term to make it so.
- Infrastructure change could have fundamental effects on a spatial approach to housing. In particular, the A2/M2 link could unlock a large amount of development land to the south and east of Sittingbourne, as well has help solve congestion and air quality problems on the A2. Locations around rail links and with good links to strong labour markets may be increasingly sought after by the skilled workers of the future.

We constructed and tested development scenarios

Having 'sieved' Swale, we built Swale-relevant growth scenarios to marshal the detail, and looked at the performance on different criterion. We found the following.

- S1 *Business as Usual* fails to reposition Swale for the future, and creates few major advantages.
- S2 *Sittingbourne* is expensive and could affect an Area of High Landscape Value. But this option is most likely to help deliver an A2/M2 link if this was sought, and so address AQ and congestion.
- S3 *Faversham* performs well, with fewer major obstacles than some options. Market enthusiasm is likely.
- S4 *Western Swale* may struggle to address the fundamental problems with air quality and congestion without a bypass – in addition to A2/M2 link. This could make the option expensive for the relatively limited number of homes it generates.

Hybrid scenarios are likely to be necessary if we are to get to 15,000 homes, and take the best elements from the different scenarios. Higher delivery could be possible if more sites were chosen.

We shared findings with councillors, and got their input. This was a valuable step to take: there are likely to be many more discussions necessary before plans are finalised.

We made a very early start on visualising some outcomes

To stimulate early discussion, URBED provided some sketch impressions of what new settlements around Sittingbourne could look like. **These are not proposals and must not be taken as such,** but show conceptually how we might fit two settlements of around 5,000 homes each onto land to the south and east of Sittingbourne.

The Swale planning team had a large number of comments on the sketch – showing that there is a long way to go on these complex issues.

If Swale wanted to build a new settlement, when could it start and how quickly could it deliver homes?

The evidence suggests that we may need more than one new large site to deliver homes at the pace we need. The analysis suggests that the Government's targets can be met - but achieving them is likely to need the delivery of the current plan, plus a new allocation (which could add up to around 2,000 homes by 2037/38 and 4,000 by 2056), and then three new 'Garden' allocations. Irrespective of the long term, the key thing is to achieve the Government's *per annum* housing target.

Executive summary (3)

Recommendations and next steps

We looked at why does the current planning and development system produce sub-optimal results, and made a number of recommendations about how Swale can get the design quality and infrastructure it needs. We suggested that Swale needs to adopt a new approach if it is to capitalise on this opportunity.

Next steps could be as follows.

1. Swale needs to develop the **vision**, undertake early **work on the delivery model and planning strategy** and a **create a design brief** for the new settlement. This needs programming in a **step by step Gantt chart**. This is about members owning and directing a positive, long-term social and economic future– with a potentially radically different, entrepreneurial role for the council.

2. Swale could use the design brief to drive an informal consultation to test whether landowners or promoters have innovative ideas, allowing them to be active participants in the strategy. A version of this document could also inform the consultation. Great care is needed to avoid creating runaway hope values at this stage – by constantly stressing the need to pay for infrastructure costs.

3. Sites judged as meeting the design brief criteria could then form part of the Plan Issues and Options. Detailed work on delivery plausibility, delivery model and land assembly would be necessary. The preferred option could be identified and adopted in the Local Plan.

Important note for developers and landowners
We can expect that each home built in Swale on strategic sites will be likely to need between £30,000-£50,000-worth of supporting infrastructure spend. Without this infrastructure spend, then no planning permissions can be granted, meaning that there is no development opportunity. Infrastructure costs are likely to be collected by either CIL or S106. It is important to bear in mind that CIL and S106 are ultimately paid out of land values. This means that land with residential planning permission may be worth much less than landowners currently anticipate. It is critically important that this point is well understood by landowners, so that they do not have unrealistic expectations about the value of their land. Equally, developers should be careful to ensure that these costs are factored into their bids for land. The Council will be unsympathetic to claims that development on green field sites is unviable.

Introduction

The objectives of this report – and some very important caveats

This report is the starting point for developing a longer term vision for how Swale might deal with choices about the type and location of housing growth. It poses the question about Swale's future growth strategy: should Swale continue to pursue the long established policy of incremental growth around established larger towns or villages, or should Swale consider choices about the type and location of housing growth based on a long term view?

Our objective is to provide preliminary work to understand the implications of different approaches, what is realistic, and what benefits might flow from different scenarios.

None of this work represents an agreed political position or policy. The views presented here are those of the consultant team only. The report does not reflect the position of the Council. This work is intended to spark a debate, and so help to get to better decisions for Swale's future.

This study is needed because the inspector had concerns that current plan adopted might not be able to support sufficient homes over the plan period. In addition, the Government is consulting on a new method of calculating housing targets. Emerging numbers suggest that Swale needs to provide more housing permissions – equivalent to around 35% more every year, on top of the number already in the local plan. This is equivalent to 7,500 additional homes by 2037/38

The plan inspector for the current adopted plan required Swale to undertake a plan review. This was required because the inspector had concerns that infrastructure was possibly insufficient to support sufficient homes. There were also concerns about environmental capacity and air quality on the A2.

Another factor has recently been added to this requirement for early review. Changes to the way that central Government calculates housing targets are undergoing consultation, and **it is highly likely that Swale is likely to need to build more new homes every year than it has done in the past.** The exact implementation is currently still to be determined by Government, but the new method could increase Swale's target housing number from 776 per year, to over 1,050 per year, once the new plan is in place.

Per annum, this is a rise in housing production of 35%, with an additional 7,500 homes being allocated within the new plan period 2022 to 2037/38. The process (and the resulting housing number) is not yet finalised and remains dependent on highly volatile household projections which vary over time, but the final number decided upon is highly unlikely to fall below 1,000 per year. The household projections for Swale, the Governments 'starting point' for housing targets, are now higher than when the last plan was submitted for examination. There are other pressures – most noticeably from councils unable to accommodate their own growth. This may include London and other highly constrained Councils in the South East.

In our view, a prudent approach would see Swale preparing to plan for around another 7,500 homes over the new plan period to 2037/38, in addition to the number already identified through the existing plan. It would also be helpful to think in terms of the longer term, outside the plan period, so as to avoid having a similar housing shortage at each successive round of plan making. A long term view may also allow the Council to promote larger, more sustainable, housing options which have long lead in times and span several plan rounds. So it may be sensible to start thinking now about sustainable growth post 2037/38.

Year	Notional plan period	Total by 2037/38	Post Plan period
Government housing target to be delivered against Swale current local plan			
Govt emerging minimum target	Assumes a 1,054 dpa target (23,188 for the period) for new plan period. Existing plan targets prior to that point. *Backlog prior to 16/17: completions for 14/15 and 15/16 were 618 and 592 respectively, which against 776X2 leaves a backlog of 337, added to the 16/17 number.	21,578	
BAU (adopted Local Plan)	Adopted Local Plan (estimated actual likely delivery not trajectory delivery)	14,165	
Gap between Govt target and Swale Plan		- 7,413	
How Swale can reach the Government housing target by 2037/38:			
BAU (adopted Local Plan)	Delivering adopted Local Plan (estimated actual likely delivery not trajectory delivery)	14,165	
BAU (LP) new allocation	Business as Usual + assumes an allocation with lead in time of 6 years from from 2017/18. Will extend beyond plan period. Assume 4K in total	1,755	4,000 by 2056
Settlement 1 (assumed 10,000 dwellings by 2054)	New settlement 1 assumed to be 10K with lead in time of 10 years from 2017/18, assumed higher delivery with more outlets	2,475	10,000 total. Finishes 2070
Settlement 2 (assumed 5,000 dwellings by 2067/68)	New Settlement 2 assumed at 5K with lead in time of 10 years from 2017/18, but with assumed lower delivery rate than 10K. Will extend beyond plan period.	1,575	5,000 total. Finishes 2060
Settlement 3 (assumed 2,500 dwellings by 2042)	New settlement 3 with 9 year lead in from from 2017/18	1,725	2,500 total. Finishes 2044
How close does Swale get to reaching the target?			
TOTAL DELIVERY	total delivery	21,695	
Delivery gap (new delivery plans against target)		117	

The main reason why these additional homes are needed is that people are living longer, in smaller households

The housing number is not yet settled. However, whatever the outcome of the consultation, the need for housing in Swale is very likely to rise over time.

Technically this is because:

- Household sizes continue to fall, with more people living alone
- People live longer, so absorbing more housing
- Domestic migration from London is highly likely to continue, as individuals leave London looking for more space and a stronger environment.

Politically all main political parties agree we have under-supplied housing over the last 30 or so years. So there is also a national housing *backlog* to fill.

Whilst we cannot put a precise number on the housing target, it is highly likely that:

- As a minimum Swale will be asked to meet the household projections
- There is likely to be uplift for market signals and other political reasons

Regardless of what Swale is required to provide you may choose to grow further. For example to expand the Boroughs labour supply (and thus grow its economy in an context which will see its workforce age), or to plan positively to take London growth. The arguments for this active planning is that London out-migration is highly likely to happen anyway, and a decision to actively plan for this would allow Swale to use and direct this growth in positive ways.

A more passive approach might see circumstances in which the opportunity to create a positive shift in the Swale economy is managed less successfully, with a lost opportunity to get the right quality of new development and a less co-ordinated and more incremental approach to planning for infrastructure.

It is worth noting that Swale is not very sensitive to international incoming migration rates: almost of all the household growth in Swale derives from 'domestic' migration and natural change.

In this context, it is sensible to examine a new approach, and look at whether a different long-term approach could help deliver the future that Swale wants for itself

If major housing expansion is needed, the question is how best to approach the situation.

- **At the national scale, the focus through the nineties was on PPG3's 'brownfield first, greenfield last'** approach. This held back greenfield land in the hope that development might be forced into brownfield site (PPG3, 2000). This principle remains today but brownfield land is finite and many areas are now running out of supply.
- **In the first decade of this century, focus also moved to providing urban extensions to existing settlements**. However, there were genuine concerns about the ability of existing settlements to cope with edge developments, and political difficulties in expansion given that green spaces around existing settlements are prized for their informal leisure uses and amenity.
- **Increasing focus is now falling on the ability of new settlements to deliver the housing that the UK needs – as shown in the Housing White Paper *Fixing our broken housing market* (2017).**

Over the long term, more housing supply can be expected to moderate the price rises of market housing, and be used to provide affordable housing too.

"The truth is that the current planning and development model, which meets housing needs…by pressing sequential development into and up against existing communities, drives high densities and low quality, and so ramps up local people's opposition to development. Such development, building on the next field, endlessly adding to existing communities, directs development to the very bits of environment most precious to people – at the end of their garden, the gateways to the town, the fields they most treasure precisely because they are on their doorstep. It makes new housing development politically toxic for local politicians.

As a consequence, limited land releases result in high density, poor quality estates, often without services or jobs, without so much as a café or shop. Each proposal is fought at the planning stage as if it were the last word (stop it and protect the town), yet in reality each is just a small step on a never ending conveyer belt – gradually encircling the community with ever more dormitory housing estates"

Policy Exchange (2015) *Garden Villages*

There is a growing interest in using new settlements as a way of solving the housing crisis. Government is promoting garden villages and towns

1. Town and Country Planning Association (TCPA) remains a proponent of the original vision set out by Ebenezer Howard's original 1898 vision set out in *Garden Cities of To-morrow*.

2. Post-war, Government' develops 'new towns' frequently employing Garden City thinking. In total 32 new towns were designated in the UK between 1946 and 1970, during three phases:

- Mark One (eg Hemel Hempsted and Stevenage): designated between 1946 and 1950;
- Mark Two: designated between 1961 and 1964; and
- Mark Three (Milton Keynes): designated between 1967 and 1970.

In 1992, the Government ceased to classify New Towns as a specific public policy area.

3. The idea of new garden settlements is picked up by Government
"The supply of new homes can sometimes be best achieved through planning for larger scale development, such as new settlements or extensions to existing villages and towns that follow the principles of Garden Cities. Working with the support of their communities, local planning authorities should consider whether such opportunities provide the best way of achieving sustainable development. In doing so, they should consider whether it is appropriate to establish Green Belt around or adjoining any such new development."
National Planning Policy Framework para 52

4**. The 2014 Wolfson Economics Prize seeks answers to the question.** 'How would you deliver a new garden city which is visionary, economically viable, and popular'? URBED 's submission wins the £250,000 prize.

5. Proposals are given encouragement by think tanks and industry discussion. Policy Exchange and the TCPA recommends updates to the New Towns Act to allow to give local authorities (rather than Central Government) the power to create new garden villages of 1,500 – 5,000 homes, with the thinking that developments of this scale could be successfully dealt with locally, and could thus be brought forward more quickly, but could sustain everyday services.

6. As part of Budget 2016, the Government published a prospectus to invite expressions of interest from local authorities who want to create new communities based on garden city principles. No definition is provided.
The prospectus states that *"We do not consider that there is a single template for a garden village, town or city. It will be important for the new community to establish a clear and distinct sense of identity. We want to see local areas adopt innovative approaches and solutions to creating great places, rather than following a set of rules."*
The benefits to a LA of designating a site as a garden settlement are relatively limited. A "limited amount" of funding is promised to LAs who successfully designate Garden Villages, with "brokerage", access to government housing funding streams, unspecified financial flexibilities, unspecified planning freedoms, and support in considering different delivery bodies.

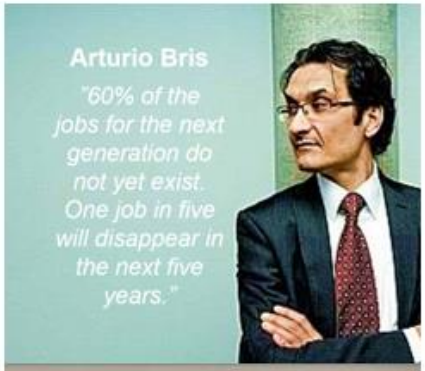
7. The Housing White Paper *Fixing our Broken Housing Market* (February 2017) follows up the push for new settlements: "Well-planned, well-designed, new communities have an important part to play in meeting our long-term housing needs. Provided they are supported by the necessary infrastructure, they are often more popular with local communities than piecemeal expansion of existing settlements."

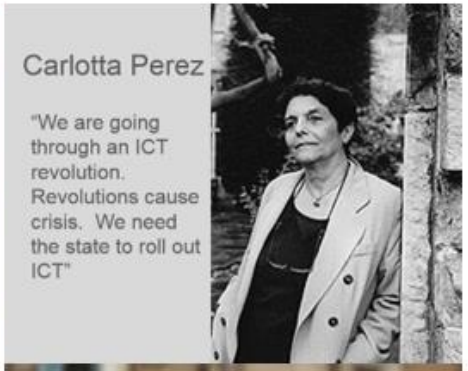
How do we get Swale fit for the future?

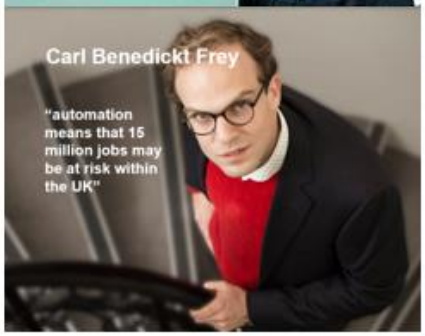
The truth is that no-one can be sure of the long term future. It is driven by product and technological change, making future sources of success very hard to predict. Ideas of the future vary widely – but most agree that coming changes are likely to be highly disruptive

Whilst their precise analyses vary, economists agree that we are likely to be entering a period of highly disruptive change. There are suggestions, variously, that labour markets will be upended by IT, causing major social dislocation; that there will be a shift away from acquisition of material goods towards spending on experiences; that growth will be low in future; and that a second great depression is in the offing. There is not a great deal of agreement from economists about what might happen, and a resulting lack of confidence in our ability to successfully predict change.

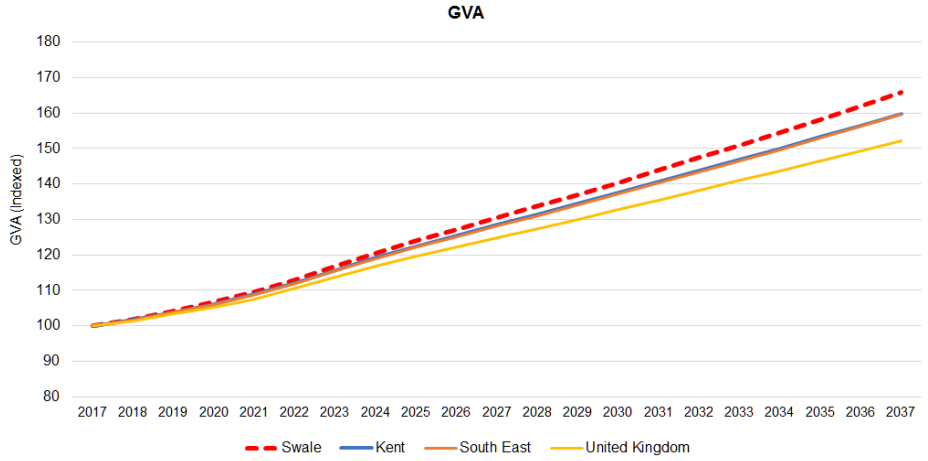
This uncertainty feeds through into the planning and economic development sector, because many of the forecasting methods available – particularly those traditionally employed by planning evidence bases - are quite ill-fitted to anticipating the types of off-trend, non-linear shifts that we may see.



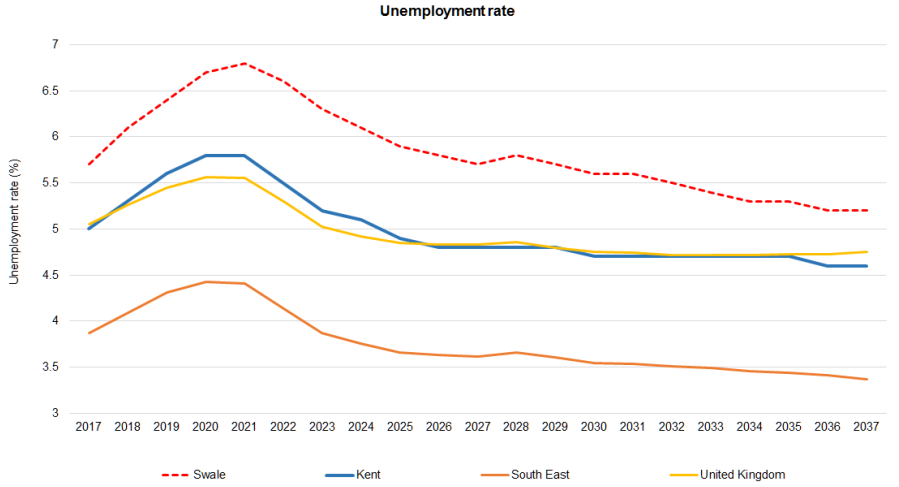




Best estimates by economic models suggest that Swale will be wealthier by 2037/8. Swale marginally outperforms the South East and UK: over time, Swale is likely to look and feel more prosperous compared to other parts of the UK. However, none of this success is predestined



Source: Experian August 2017



Source: Experian August 2017

Economic models take historic performance of economic sectors nationally, make some adjustments for other factors such as oil price projections, and then apply national sector growth to the local economy.

Because the broader Swale area has growing sectors, the forecasts are relatively positive. But these forecasts rely on Swale being able to find site capacity at roughly the same rate has it has done in past: these forecasts are therefore not in any way predestined.

Some of this growth is likely to be due to other nearby areas also performing well: previous evidence such as the SHMA has suggested that incoming economically active people are likely to commute to neighbouring areas (including Medway Towns, Canterbury and London).

"Economic modelling tends to project the present into the future with essentially linear trends…In the face of such radical uncertainty, the sensible course is to focus on known facts and give yourself as many options as possible, not to guess at numbers to fill the cells on your spreadsheet."

John Kay, ex Director of IFS, Financial Times, November 2015

The economic geography of the UK is changing, with uncertain implications for Swale

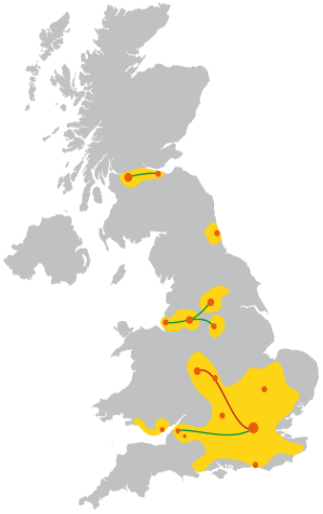
The UK is at a moment of change. New infrastructure will create new, more integrated economic patterns. The first phase of HS2 (expected in 2026), will create new configurations of labour and product markets, as well as creating agglomeration benefits (Gibbons 2010). Such new connections have been shown to have a real effect on growth patterns, and can be expected to do so again (Chen & Hall 2011).

Swale's connections onto the high speed network at St Pancras will help, but implications might create added competition for Swale: for example, Birmingham's HS2 stations will provide quicker links into central London than many stations in London Zone 5 and 6, and will in some instances be quicker than connections from Faversham (1h10 to London) and Sittingbourne (58 mins to London).

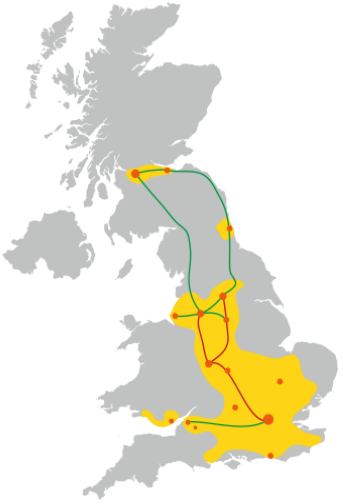
The Lower Thames Crossing will be built. There are currently no dates for when work will begin, although the initial consultation gave a date of 2025 completion date.

Current economic configurations (UK): growth predominantly centred around local cities

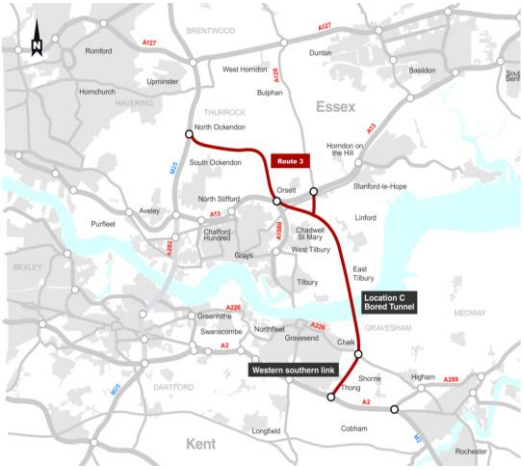
The emerging new geographies (2030): West Midlands and South-east regions merge



The completion of the HS2 "Y" and beyond 2040: the West Midlands with fast links to the northern and southern economies and the creation of a 'mega-region'



The Lower Thames Crossing will be operating



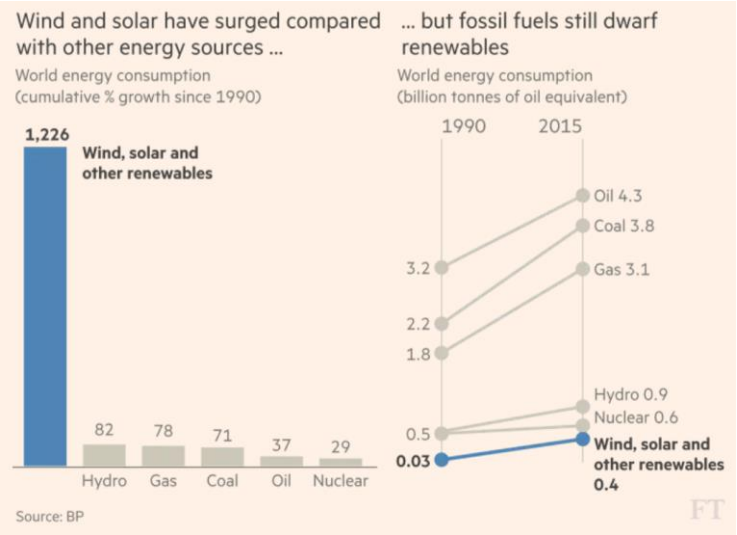
Source: Alan Baxter Associates in Independent Transport Commission (2015) *Connectivity and Cities*

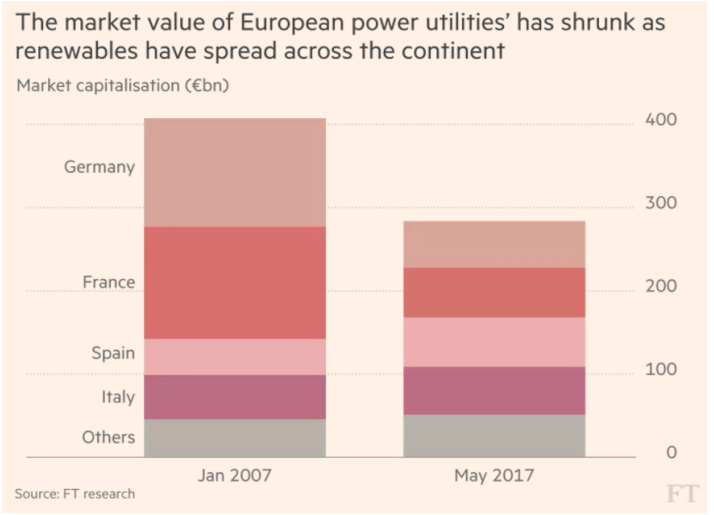
We cannot be sure what changes will take place, but continuing social and attitudinal change appears likely. We are building for “Generation Z”

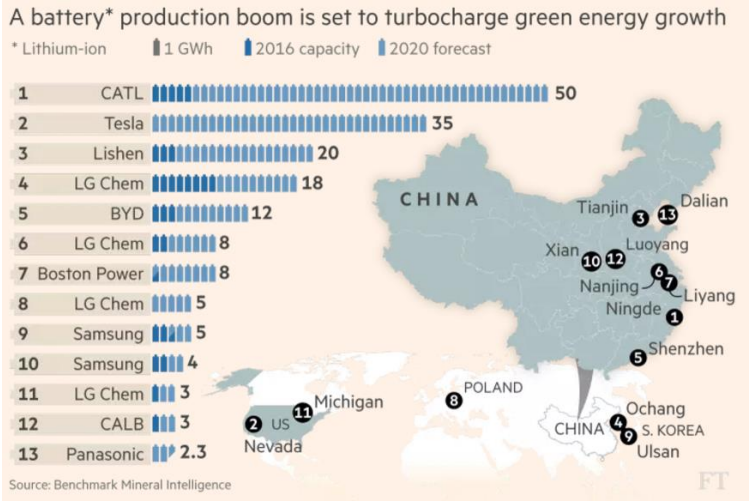
Build out on new settlements on new sites would be unlikely to *start* for many years, and perhaps take many years to complete. Even urban extensions to *existing* planned sites might not appear for around 15 years (say, 2032). Those timeframes mean that this study, which looks at the longer term, will be building for a very different group of customers, who might want very different things.

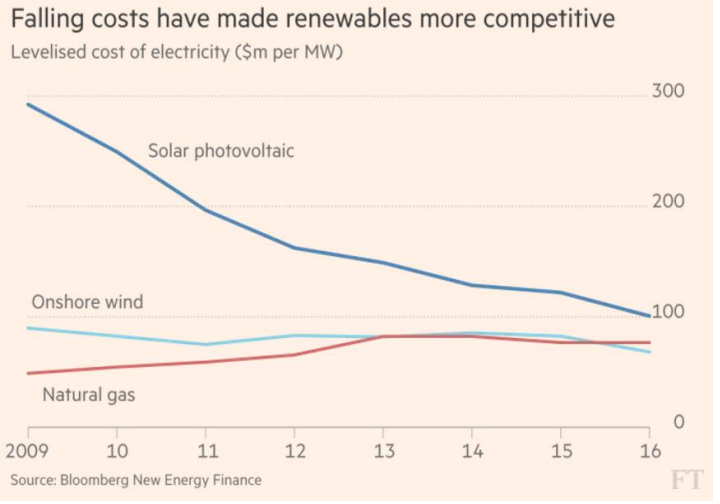
Baby boomers	**Generation X**	**Millennials**	**Generation Z**
			
b: 1946 - 1964	b: 1964 - 1980	B: 1980-2000	b:2000+
Age in 2038: 74 – 92	Age in 2038: 58 - 74	Age in 2038: 38 - 58	Age in 2038: 21 - 38

A Green ‘Big Bang’ is getting nearer. Swale’s future utilities and transport systems could be profoundly affected









Source: Financial times May 18 2017

Trends suggest that to be prosperous in future, Swale will need to embed good quality companies and highly skilled labour in the local economy. Skilled workforces attract investment, and good environments attract skilled workforces

Long term prosperity requires that Swale is able embed high quality economic activity and skilled workers as deeply as possible in the local economy.

If this effort is to be successful, Swale needs to help to upgrade its image as a place to live and work. The objective will be to get the local economy more fit to face the rigours of future competition. Prosperity is more 'sticky' to a place when a place can create a supporting 'ecosystem' of high quality labour market access, face-to-face communication, and a network of competing and collaborating firms. (Amin & Thrift 1992)

Housing is a critical part of this picture. An excellent quality housing offer will be essential if a skilled population is going to be retained and attracted to Swale.

Skills are also an important determinant (some studies place it as *the* most important determinant) of employers' willingness to invest in a location (DfT, undated). In turn, skilled labour is attracted by

- A high quality housing offer
- High quality labour market connections.
- The ability to provide locations and context for face-to-face contact – such as a strong retail offer
- Opportunities for social and cultural interaction – such as cafes and restaurants
- Environmental factors**.** As Richard Florida (2000) states, "Quality of place – particularly natural, recreational, and lifestyle amenities – is absolutely vital in attracting knowledge workers and in supporting leading-edge high technology firms and industries. Knowledge workers balance economic opportunity and lifestyle in selecting a place to live and work. Given that they have a wealth of job opportunities, knowledge workers have the ability to choose cities and regions that are attractive places to live as well as work".

For Swale, this means that

- Swale must provide the right housing and local environments for prosperity to flourish
- Swale must provide a superb place to live and socialise for local workers in Swale and Canterbury, and central London workers
- That package will need to include strong town centres, leisure opportunities, high levels of social cohesion and trust, excellent education, childcare, great transport links into town
- Create the housing and commercial capacity to facilitate adaption, change, and growth.

If Swale gets these elements right, the rest is likely to follow – including inward investment.

We undertook a SWOT analysis to understand how Swale performs now

STRENGTHS: describes what a place excels at and separates it from the competition

- Connection to London and Europe (via road & HS1)
- Kent Science Park
- Large distribution centers such as Aldi and Morrisons
- Horticultural fruit production
- Kent AONB, heritage assets and coastline

OPPORTUNITIES: refer to favourable external factors that a place can use to give it a competitive advantage

- Increase accessibility to HS1
- Low-carbon power sources (solar, wind)
- Increasing evidence of ability to capture footloose investment
- Outstanding built environment in Faversham
- Outstanding built environment in rural areas
- Network Rail 'Access for all' at Canterbury West station
- Lower Thames Crossing
- Opportunities presented by new housing

WEAKNESS: what stops a place from performing at its optimum level

- No particular strategy to spread development benefits from HS1
- Lower skill levels and educational attainment
- Few exemplars of outstanding new development
- Lower wage levels
- Lower levels of life expectancy on Isle of Sheppey
- Pockets of deprivation
- Poor health outcomes in some areas
- Possible lack of Unique Selling Point for Swale

THREATS: refers to factors that have the potential to harm a place

- Possible migration of London population into Swale
- Potential for developers to control development of land in key new locations that could work against the maximisation of land values and, thereby, community benefits
- Viability problems in some areas, and a risk of continuing a cycle of deprivation in some areas as developers look to more viable locations

The big picture

1. Disruptive social and economic change is likely to hit Swale over the coming decades

2. We cannot be sure what changes will take place – but longer term there is need to attract and retain a highly skilled population with great housing, superb environments and links to large labour markets

3. Places need to build ability to flex and change if they are to prosper over time

What could the Swale settlements of the future look like?

The concept of ‘good growth’ is likely to be critical to the success of proposals for a major new settlement. There is no reason why Swale should tolerate poor design quality. The aim should be to create a national exemplar

The Wintles, Bishops Castle, Shropshire – Living Village Trust

Living Village Trust development

“People look at the new housing estates that have been bolted on to their towns and villages in recent decades and observe that few of them are beautiful. Indeed, not to put too fine a point on it, many of them are pig-ugly…because we don’t build beautifully, people don’t let us build much. And because we don’t build much, we can’t afford to build beautifully”

Nick Boles, Housing Minister 2012

Swale could investigate the institution of Garden City or Garden Village principles for development

North Cambridge Masterplan

Haverleij

The "garden" status of the development does not reside in the appearance or density of development at the site. Whilst these will be centrally important, the critical differentiator between "garden" status and other well-planned developments relates to the way that land value increase created as development progresses are used to the benefit of both landowners and community, and that an income stream is captured that allows for infrastructure investment and the long-term stewardship of shared assets.

The Town and Country Planning Association states that garden communities have

- Land value capture for the benefit of the community.
- Strong vision, leadership and community engagement.
- Community ownership of land and long-term stewardship of assets.
- Mixed-tenure homes and housing types that are genuinely affordable.
- A wide range of local jobs in the Garden City within easy commuting distance of homes.
- Beautifully and imaginatively designed homes with gardens, combining the best of town and country to create healthy communities, and including opportunities to grow food.
- Development that enhances the natural environment, providing a comprehensive green infrastructure network and net biodiversity gains, and that uses zero-carbon and energy-positive technology to ensure climate resilience.
- Strong cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods.
- Integrated and accessible transport systems, with walking, cycling and public transport designed to be the most attractive forms of local transport.

This report is a long way from setting out individual architectural styles or treatments. As the opportunity becomes better understood, progressively greater levels of detail could be added. A design code would be needed. This could be either be Supplementary Planning Document or integrated into the statutory Development Plan Document.

New housing products could be needed to appeal to a new generation: Building for “Generation Z” born year 2000 onwards. Age in 2038: 21-38

Self build in Holland to a set of broad design guidelines

Woodland housing

Co-housing community

Freiburg urban agriculture

Building for younger baby boomers (born 1946-64, age in 2038: 74+) and “Generation X” born 1964 – 1980. Age in 2038: 58 – 74.
Objective: freeing up family housing; high density; better social capital formation?

Strong rise in one person households and the over 80s is projected. Authorities around the country are in denial, and hope that someone else will pick up the problem. Instead – a new approach - should we accept this, and plan for it?

There are a series of advantages to older peoples’ provision. With McCarthy and Stone (and other) type provision

-Densities delivered can be high

-Each dwelling flat counts as a home produced and releases family provision down the chain

-Little trip generation arises, and no schools impacts are created

-But, most importantly given the looming social care crisis: retirement provision can reduce social care costs (reducing home visit travelling costs)

-A highly efficient way forward?

Older people can be affluent, socially engaged, and contribute to town centre regeneration.

Defined islands of development can be created to create strong communities and create an excellent environment for both newcomers and existing residents

At Keele University Science Park, URBED and PBA's masterplan integrated the 'Innovation District' concept with defined islands of development. The objective was to strengthen social capital between residents, and create a superb living and working environment for the sub-region (3,000 homes and an additional 2,800 workers).

The approach was partnered with costed transport, utilities and social infrastructure. The site was shown to be viable, even after these costs had been paid.

A new two-form entry primary school is planned for the site, likely to be delivered in conjunction with the University.

CASE STUDY: Graven Hill, Oxfordshire – a self-build community

In 2014, Cherwell District Council purchased the 462 acres (187 hectares) Graven Hill site from the MoD with the objective of allowing people to build their own homes.

Up to 1,900 self-build properties are to be built on the site. The scheme will include kit homes, group-build schemes and properties designed by the owners but built by contractors. A resolution to grant planning permission has already been agreed for the homes as well as a primary school, pub and shops. The development will also include a million sq ft of commercial space and create up to 2,000 jobs and apprenticeships. More than half the site will be set aside as community woodland and open space.

A Local Development Order (LDO) has been created to allow homes constructed to pre-approved guidelines to be built without additional permissions. The order would set the maximum height, depth and building materials but would give self-builders the freedom to interpret those specifications to their own style.

Self-builders who want a property built to their own specifications will still be able to apply through the normal planning process. Delivery will be separated into phases with a different LDO for each phase, beginning with a smaller area for between 100 and 200 homes.

Graven Hill, Oxfordshire

If Swale wanted to build a new settlement, how many homes could it have? How much land and infrastructure might it need?

We have assumed that a new settlement could come in units of around 5,000 additional dwellings. A settlement of 5,000 dwellings can be relatively self contained, and is large enough to create its own 'value contour'. This study looks for locations for around two or three of these settlements, total around 15,000 additional homes. A combination of different settlement development options could be necessary to hit this target

This study investigates the possibility of a locally led vision of new garden villages. **We look at various sizes of settlement –but the most common is around 5,000 dwellings (not unlike the size originally envisaged as 'garden cities' by Ebenezer Howard). This is better understood today as a large village community than a town.** Around 5,000 homes allows a secondary school as well as two primary schools and a small but vibrant village centre, but including an employment area, recreational space and landscaped areas. There would be likely to be enough demand for a pub; a six GP surgery; and community provision. Such a settlement probably would not attract a full range of national retailers, but could, if desired, operate more as a self-sustaining community than settlements of a smaller size.

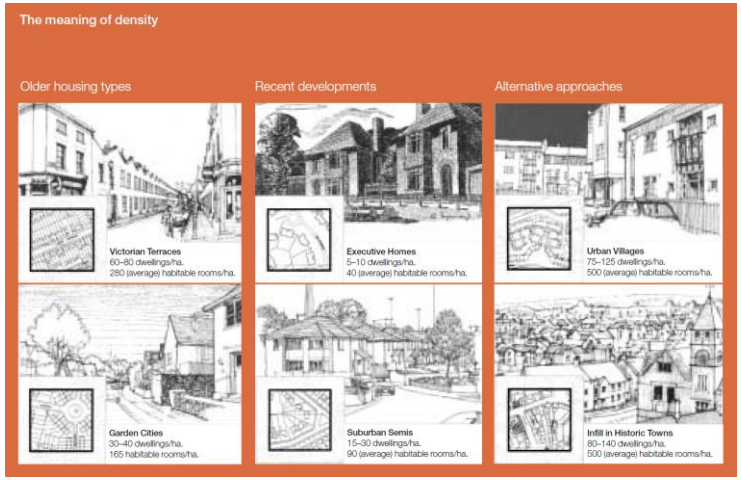
Larger settlements are also possible. Some scenarios explored in this report deal with this scale of development.

These settlements may in time grow further. However, at around 5,000 homes, their scale would not overwhelm the area. We have no preconceptions around design, and it is unlikely that a new village would be delivered by a single developer.

Around 230 ha of land would be needed for a settlement of 5,000 units. We have set out a land budget, although no real precision is possible at this stage

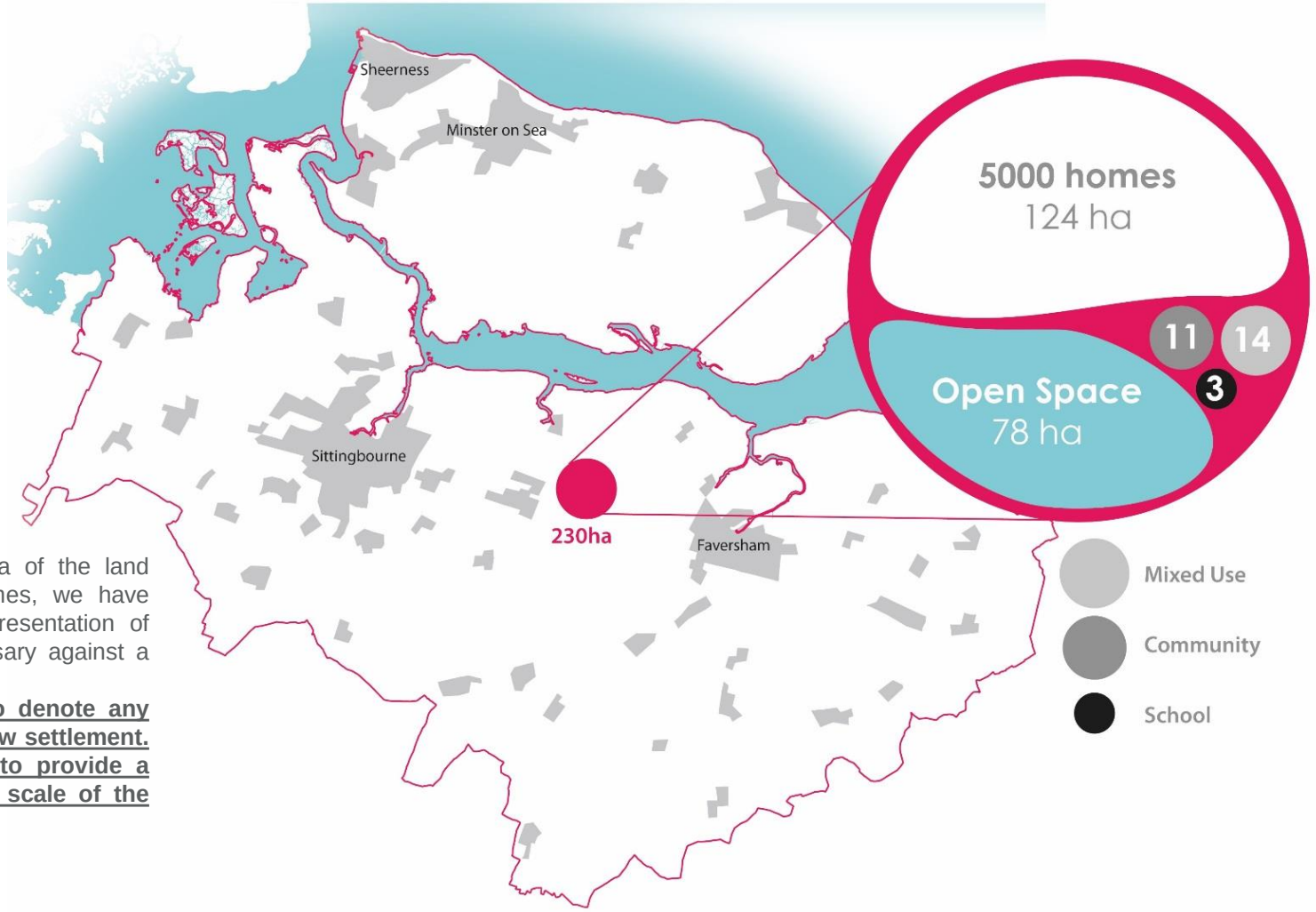
The land budget set out here is intended to give a very rough idea about the amount of land that would be required for a settlement of 5,000 homes at about 45 dwellings per ha. This puts the new settlement at the top end of traditional garden city density.

A great deal depends on factors assumed around circulation space (such as for roads and verges) and elements such as Sustainable Urban Drainage Schemes (SUDS). A 10,000 home settlement would be roughly scalable, pro-rata.



1	**Land area**	230.0	hectares			
2	**Gross to net ratio?**	0.6				
3	**Developable area**	138.0	hectares			
	Other space	92.0				
3	**Mix of uses**	%	area ha	Plot ratio	floor area	
	Housing	0.9	124.2	See below		
	Retailing		0.0	0.4	0.0	
	Mixed use	0.1	13.8	0.8	110400.0	
	Office		0.0	1.5	0.0	
	Industry	0.0	0.0	0.4	0.0	
		1.0	**138.0**		110400.0	
4	**Housing**	percentage	area ha	density u/ha	total	
	High density	0.0	0.0	60.0	0.0	
	Medium Density	0.6	68.3	40.0	2732.4	
	Low density	0.5	55.9	25.0	1397.3	
	Over other uses		13.8	60.0	828.0	
		1.0	138.0		**4957.7**	
5	**People**	household size	Children/unit	People	Children	
	High density	1.2	0.1	0.0	0.0	
	Medium Density	2.0	0.6	5464.8	1639.4	
	Low density	3.0	1.3	4191.8	1816.4	
	Over other uses	1.5	0.0	1242.0	0.0	
				10898.6	**3455.9**	
6	**Open space**	FIT ha/1000 people	Total ha			
	Outdoor sport	1.6	17.4			
	Play	0.6	6.0			
	Natural Green space		55.1			
		2.2	**78.5**			
7	**Community**			Area/ facility	number of facilities	Total ha
	Primary Schools	1000-2500 homes/primary school		2.6	1.0	2.6
	Secondary Schools	5,000-10000 homes/secondary school		5.0	0.0	0.0
	Community uses	1 ha/1000 people				10.9
						13.5

Swale Borough covers 373 sq km, or 37,300 ha. A 230ha, 5,000 home development would have a relatively modest impact, taking about half of one percent of the total Swale land area



To provide a very rough idea of the land needed to deliver 5,000 homes, we have provided an approximate representation of the scale of land take necessary against a map of Swale.

The map is not intended to denote any choice of location for any new settlement. The map is only intended to provide a general idea of the relative scale of the land take involved.

A new settlement would generate social infrastructure, transport infrastructure and utilities costs. Very roughly, social infrastructure costs could add up to around £14,000 per home

Social infrastructure is needed to support places. 4,000-5,000 homes supports provision of key services such a six GP surgery; community provision; around two primary schools and a secondary school (subject to already existing neighbouring provision). We have not looked at retail and other provision here, but it is sensible to expect everyday services, including modest food/ convenience retail provision, and possibly a pub. A 10,000 home settlement would be roughly scalable, pro-rata.

Social infrastructure provision for a typical 5,000 home settlement

	Unit measure	Ideal catchment population	Suggested dwellings/ pop per unit	Approx needs for a settlement of 5000 units	Approximate cost per unit	Approx cost for settlement of 5000 dwellings (£)	Approx cost for settlement of 10,000 dwellings (£)
Early years /Primary school	2.3ha	Two form entry - 420 pupils	1750 dwellings[2] (based on yield of 24 pupils for 100 dwellings)	Two / Three primary schools	£6,700,000	£16,750,000	£33,500,000
Secondary school	10 ha	1200 pupil	6000 dwellings	0.8 or one new school	£28,600,000	£23,833,333	£47,666,667
Community/Youth Centre	>400 m2	1000>[4]	500 >	1900 m2 Centre	£1,440,000	£5,760,000	£11,520,000
Health Centre With 5 GPs	840m2	1,800 per GP	3500 - 4,500 dwellings	1 health centre and possible expansion of existing.	£4,000,000	£5,000,000	£10,000,000
Leisure centre	Multi purpose sports	24,000 >	11,000 dwellings or more	Cluster of SUE's/ Expansion of existing	£33,000,000	£15,000,000	£30,000,000
LEAP (Local Equipped Areas for Play)	0.16ha	various	0.29 ha per 1000 housing units	8 LEAPs	£200,000	£1,600,000	£3,200,000
NEAP (Neighbourhood Equipped Area for Play)	0.31ha	various	0.29 ha per 1000 housing units	4 NEAPs	£450,000	£1,800,000	£3,600,000
Total						£69,743,333	£139,486,667
Approx cost per unit						£13,949	£13,949

Transport infrastructure and utilities costs would also be incurred by new development. Costs would very much depend on locations of development chosen, so are difficult to estimate

The **transport infrastructure costs** generated by new settlements will vary by location. If proposals need a new motorway junction, for example, it is clear that costs would be relatively high per home, unless very large amounts of new development were approved in order to cover the costs per home.

Elements of transport costs could be paid for through central funding, including Highways England Road Investment Strategy (RIS) or even Local Enterprise Partnership Regional Growth Fund. For funding bids to be successful, a clear strategic benefit would need to be demonstrated that would accrue to the network overall.

Other funding (such as Housing Investment Fund) can also pay for infrastructure, but this would be more targeted at unlocking specific housing sites.

Utilities infrastructure costs will typically be the responsibility of developers, and should be found out of land value. They should therefore create no public sector liabilities. However, particularly onerous costs may reduce development viability, and so reduce developers' ability to create affordable housing provision, or pay for other infrastructure.

In some instances, and with sufficient forward planning, developers may be able to ensure that new utilities infrastructure forms part of utilities companies' Asset Management Programmes which are typically agreed with industry regulators. This would allow the utilities companies themselves to pay for investment.

Some elements of infrastructure – such has high speed broadband – should be paid for in their entirety by the private sector. Telecoms companies' business plans rest in part on the connection of new customers to networks, and so there should be no public sector liabilities relating to the connection of a new settlement to fibre optic networks.

Some sources have suggested that generic utilities and transport costs for new settlements can be high. Policy Exchange (2015, *Garden Villages)* make a rough estimate that utilities and transport connections can typically amount of £30,000 per home. These costs are therefore quite substantial – and are themselves unlikely to take full account of the potentially very substantial costs associated with some developments in Swale which could require substantial new road infrastructure.

Taking a Swale example, various cost estimates of road infrastructure exist – with A2/M2 link road at say £33m, Sittingbourne Northern Relief Road at £25m, and new J5A at say £135m, then we get to total costs (on roads alone) of around £200m. If we build 15,000 additional new homes, that equates to £13k per home on road infrastructure alone. Utilities infrastructure costs would be additional.

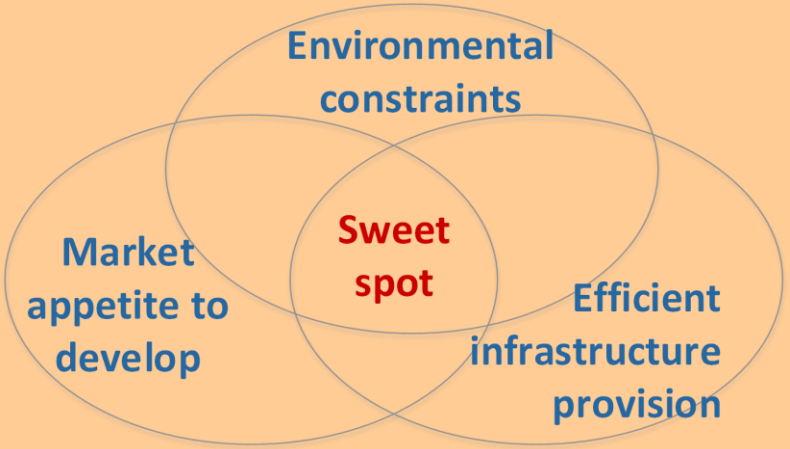
Finding suitable locations for a new settlement

We have set up a process that allows us to identify suitable locations for development

We 'sieve' Swale in three ways: development constraints which show where we are *able* to grow, market constraints which shows where the market is *willing* to grow, and infrastructure constraints which show where it is *efficient* to grow.

- Environmental constraints
- Market willingness
- Infrastructure efficiency

In a perfect world, the sieving processes would provide us with the ideal locations for our growth scenarios: the areas would be unconstrained, be popular in the marketplace and have ready access to pre-existing infrastructure. Unfortunately, the real world is far messier, but conceptually, the process would result in a series of "sweet spot" sites with the perfect characteristics for growth.



Sieve 1:

Development constraints

Swale is affected by a series of development constraints, and we assume that these will be similar in 2038. These policy constraints affect development in different ways, so it is important to understand the effects of each on our ability to plan for change

There are no blanket injunctions against development in certain locations in the English planning system. Instead, the planning system demands that the benefits of development are large enough as to outweigh the harm created.

In some instances, that can be a very high hurdle: it is hard to imagine a Site of Special Scientific Interest being granted permission for a housing estate. There will be situations where the statutory position enjoyed by these and their settings will be a development showstopper.

In other instances, there are barriers to development, but development is judged to be a net positive (it is very unusual to find development that does not have some negative impact on some environmental consideration).

In the end, then, a planning judgement about whether development can be permitted is made by looking at the relative costs and benefits of development, and whether, in the end, the proposal constitutes sustainable development.

A Local Plan will need to take these considerations into account in order to ensure that development is as sustainable as possible. Effectively, the Local Plan system sets up a sliding scale of developable locations, with the most sustainable locations at the top of the list, and the least sustainable at the bottom. Much of the discussion in the plan making process essentially is around where the plan thinks the break point between locations that the plan considers sustainable and unsustainable locations comes. Inevitably, this is a grey area.

We will provide a three- categorisation of constraints which can indicate the likely level of constraint on the accommodation of new development in an area. The categories are set out in the following table, with an indication of the indicators we will use for each. At some point, development within the boundary of a local authority becomes unsustainable when compared with other locations in nearby authorities. If that is the case, then growth should be redirected to other locations through the Duty to Co-operate.

Constraint category	Datasets
Very highly constrained. Designations identified in this category cover designations where the NPPF indicates that development should ordinarily be restricted, and where an impact is unlikely to be possible to mitigate. They represent the highest potential constraints to the establishment of a new settlement	Area of Outstanding Natural Beauty Special Areas of Conservation Special Protection Areas Sites of Special Scientific Interest Scheduled Ancient Monuments Registered Historic Parks Flood Zone 2/3 Local Green Space Ancient Woodland **Unmapped: Green Belt – not present; safety Safeguarding Zones – not available without charge*
Highly constrained: constraints are those considered to represent a significant barrier to the delivery of development. It may be possible to mitigate impacts in these areas, or build around them, but good practice would to seek to avoid these areas.	Local Nature Reserve Local Wildlife Sites Landscape Character area with "conserve" status shown in Swale Landscape Character and Biodiversity Appraisal 2012 (NOTE: see Appendix 1 for further explanation here) **Unmapped: Sites of Importance for Nature Conservation – not available without additional charge; Waste Disposal Sites – not available without additional charge; Ground Instability – not available without additional charge*
Less constrained: these areas have less significant barriers which can generally be addressed if dealt with carefully.	Agricultural Land Quality/Grade Land in grades 1, 2 and 3a of the Agricultural Land Classification Conservation Areas Listed Buildings Power Lines Settlement Gaps Landscape character areas without 'conserve' status shown in Swale Landscape Character and Biodiversity Appraisal 2012 High Landscape Value local landscape designation (Kent and Swale) **Unmapped: Local Air Quality – no layer available; Archaeology Zones – not available without additional charge; Contaminated Land – not available without additional charge; Mineral Resources/ Safeguarding – not available without additional charge; Pipelines– not available without additional charge*
Unconstrained: these areas have no policy constraints (	n/a - but in common with all other areas, will be subject to the usual planning tests of sustainability set out in NPPF

Understanding some of the key conservation areas and heritage considerations

Conservation Areas, Heritage Assets and AONB

The NPPF states that, when considering the impact of a proposed development on the significance of a designated heritage asset (such as listed building and conservation area), great weight should be given to the asset's conservation.

As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification. The NPPF goes on to say that substantial harm to or loss of a grade II listed building, park or garden should be exceptional – although the NPPF does not define when harm should be considered 'substantial'. Even so, substantial harm is considered possible if substantial public benefits that outweigh that harm.

A similar logic applies to non-designated heritage assets: in weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset.

The NPPF points out that "not all elements of a Conservation Area will necessarily contribute to its significance". It states that "Local Planning Authorities should look for opportunities for new development within conservation areas and within the setting of heritage assets to enhance or better reveal their significance."

The NPPF states that "great weight" should be given to the preservation of Areas of Outstanding Natural Beauty (para 115).

Registered Parks and Gardens

Many types of designed landscape regarded as of special interest are included on the Register of Historic Parks and Gardens of Special Historic Interest. Established in 1983 under the National Heritage Act the Register, administered by Historic England, includes almost 1,650 sites. The National Planning Policy Framework (March 2012) sets out that registered parks and gardens are designated heritage assets of the highest significance.

There are a number of areas in Swale on the register. Historic England would object to development which affected the designated sites.

Registered Historic Parks and Gardens designation can be reviewed and possibly redrawn. Heritage England advise that this process is undertaken at Local Plan allocation stage, not reserved until application stage. Some listings date from the 80s and do not provide as much information as modern listings in terms of the reasons for listing and the relative importance of different areas within the designation. It is possible that a detailed analysis of the designation can be undertaken, and a case made for any areas to be removed, with sufficient detail provided to allow any harm to be analysed.

Local Green Space

The NPPF states that Local Green Space should be treated in a way similar to Green Belt (para 78).

Sites of Special Scientific Interest (SSSI)

The NPPF (para 118) states that proposed development on land within or outside a Site of Special Scientific Interest likely to have an adverse effect on a Site of Special Scientific Interest (either individually or in combination with other developments) should not normally be permitted.

Where an adverse effect on the site's notified special interest features is likely, an exception should only be made where the benefits of the development, at this site, clearly outweigh the impacts that it is likely to have.

Impact Risk Zones (IRZ) for SSSIs cover areas near to SSSIs. They are as defined by Natural England and downloaded from the MAGIC website. SSSI IRZs identify locations where Natural England should be consulted by the LPA in relation to the risk of impacts to statutory designated sites that might arise from a planning application.

Understanding some of the key conservation areas and heritage considerations

Special areas of conservation, Special Protection Areas and RAMSAR sites

The NPPF states that local planning authorities should aim to conserve and enhance biodiversity. If significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.

This logic applies to

- Special Areas of Conservation are areas given special protection under the European Union's Habitats Directive, which is transposed into UK law by the Habitats and Conservation of Species Regulations 2010.
- Special Protection Areas are which have been identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds found within European Union countries. They are European designated sites, classified under the Birds Directive.
- Listed or proposed Ramsar sites. Wetlands of international importance, designated under the 1971 Ramsar Convention.

Flood risk

The NPPF states that "Local Plans should take account of climate change over the longer term, including factors such as flood risk".

Flood zone distinctions are important in terms of national planning policy. Within flood zone 3 (high risk) and flood zone 2 (medium risk) there are planning constraints as regards appropriate land uses. Appropriate development within the different flood zones is set out in the National Planning Policy Framework.

For development within higher probability flood zones (2, 3 or 3b) it is necessary to demonstrate that the sequential test is passed, i.e. that there are no sites at lower probability of flooding available.

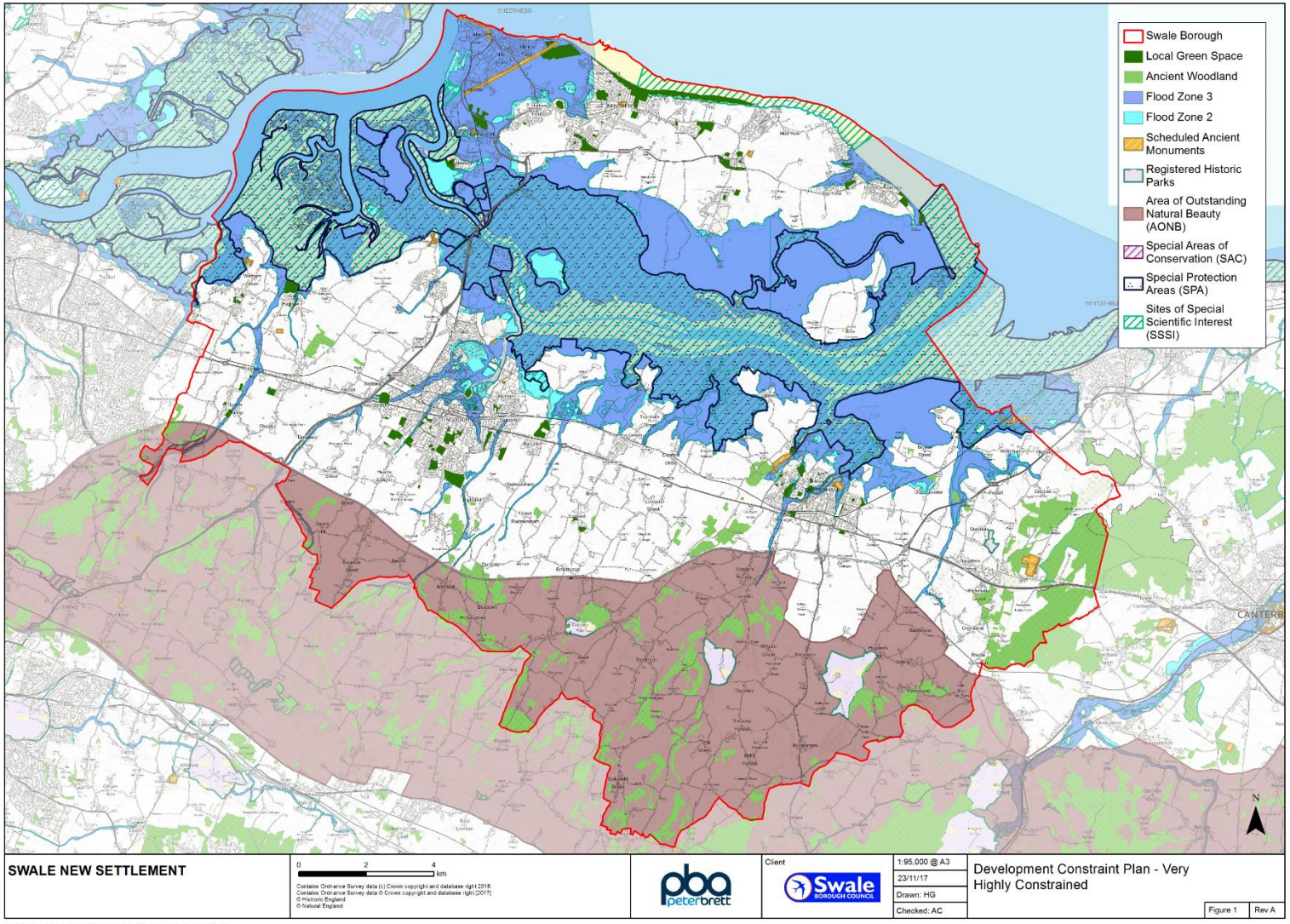
In some cases – such as essential infrastructure in flood zone 3b, the functional floodplain or residential development within flood zone 3 – it is necessary to demonstrate that the exception test is passed. This exception test has two parts.

- That the development in question has wider sustainability benefits that outweigh flood risk; and
- That the development is safe in terms of flood risk, both to the development and third parties.

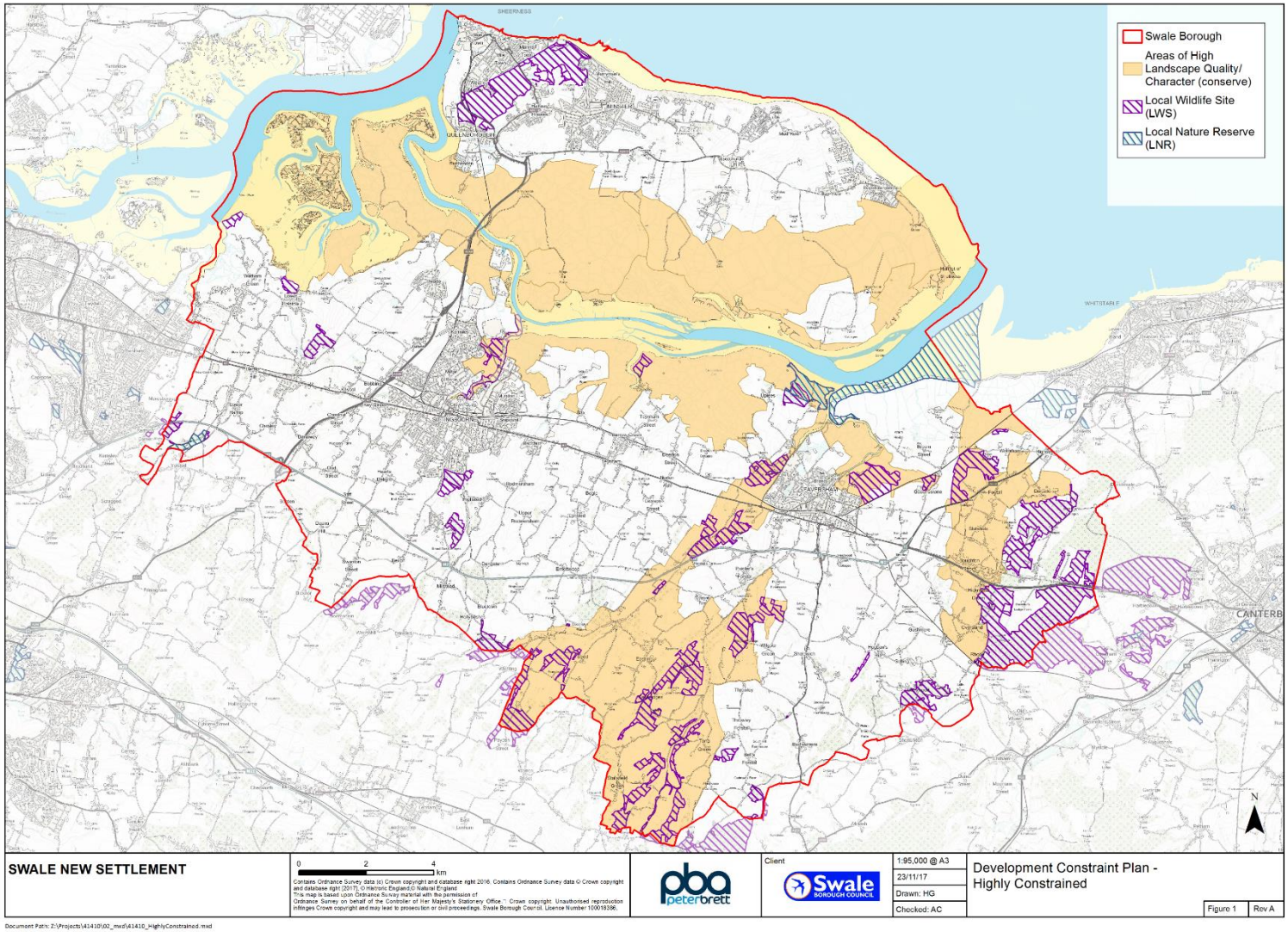
Local designations

Local policies carry varying weight in the planning process. Some local policies (such as settlement gaps) are linked to other planning decisions. So, for example, a settlement gap policy drawn up for an earlier plan may be justified on the grounds of the number of homes previously designated to an area. If the housing number changes, then the settlement gap policy can be expected to change too. Local designations do not have the weight of national designations, but if local landscape designations or local wildlife sites have been justified through the plan process, they will carry weight.

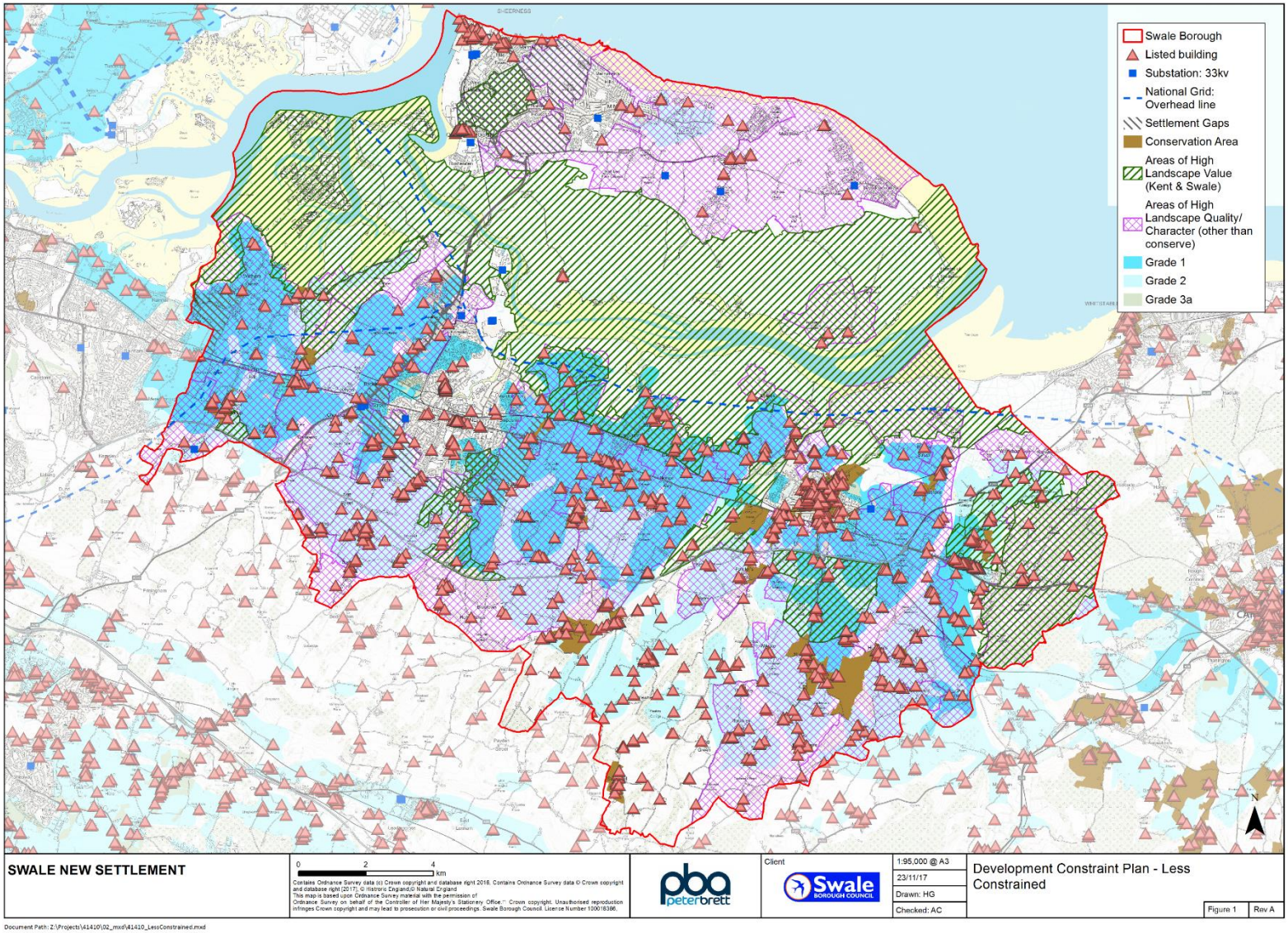
The **very highly constrained** land is affected by a number of different issues – including flood, ancient woodland, special conservation areas and areas of scientific interest



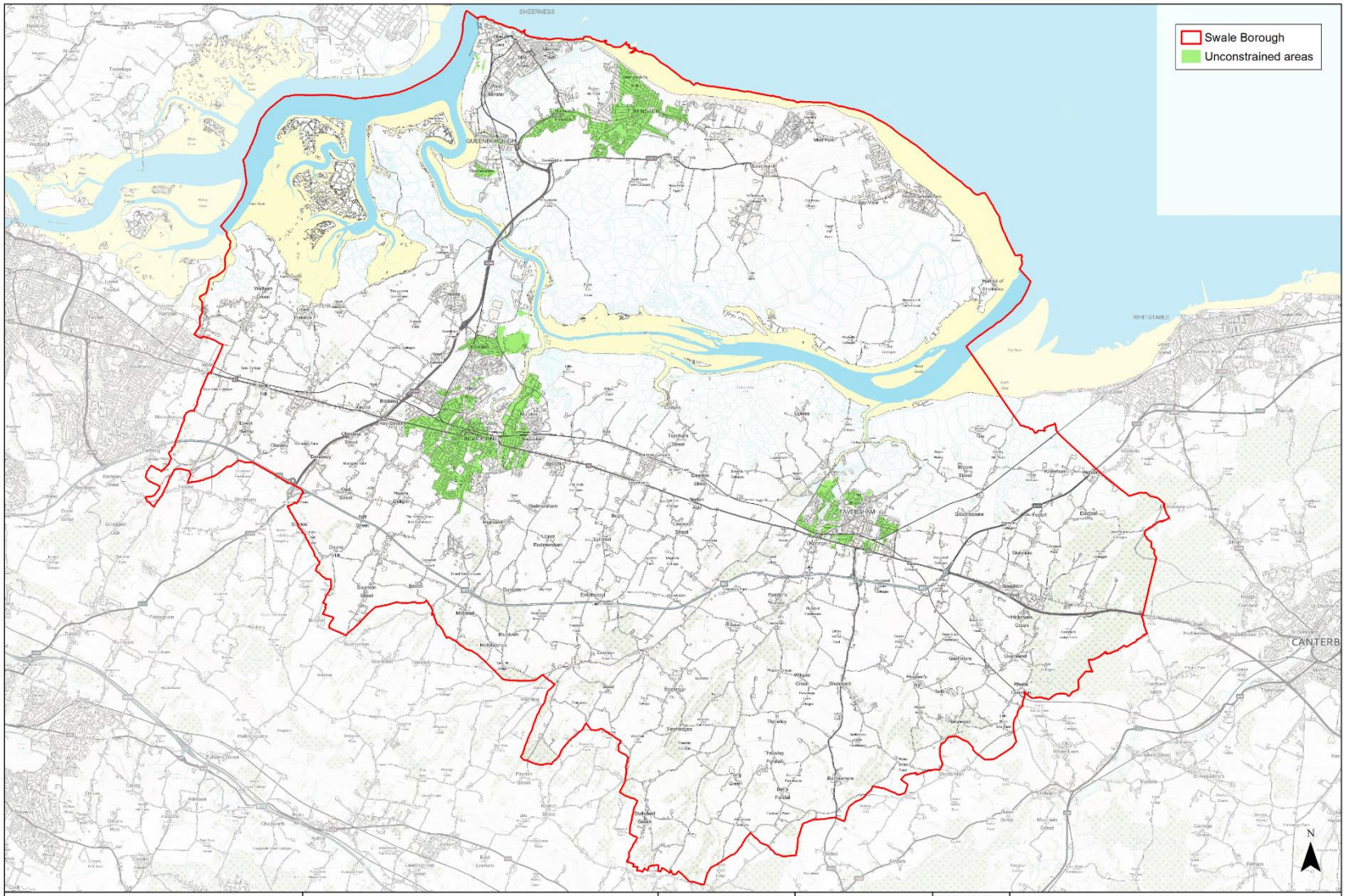
The **highly constrained** areas are affected by areas of high landscape quality, local wildlife sites, and local nature reserves



The **less constrained** areas are affected by factors including different grades of agricultural land, settlement gaps, and conservation areas

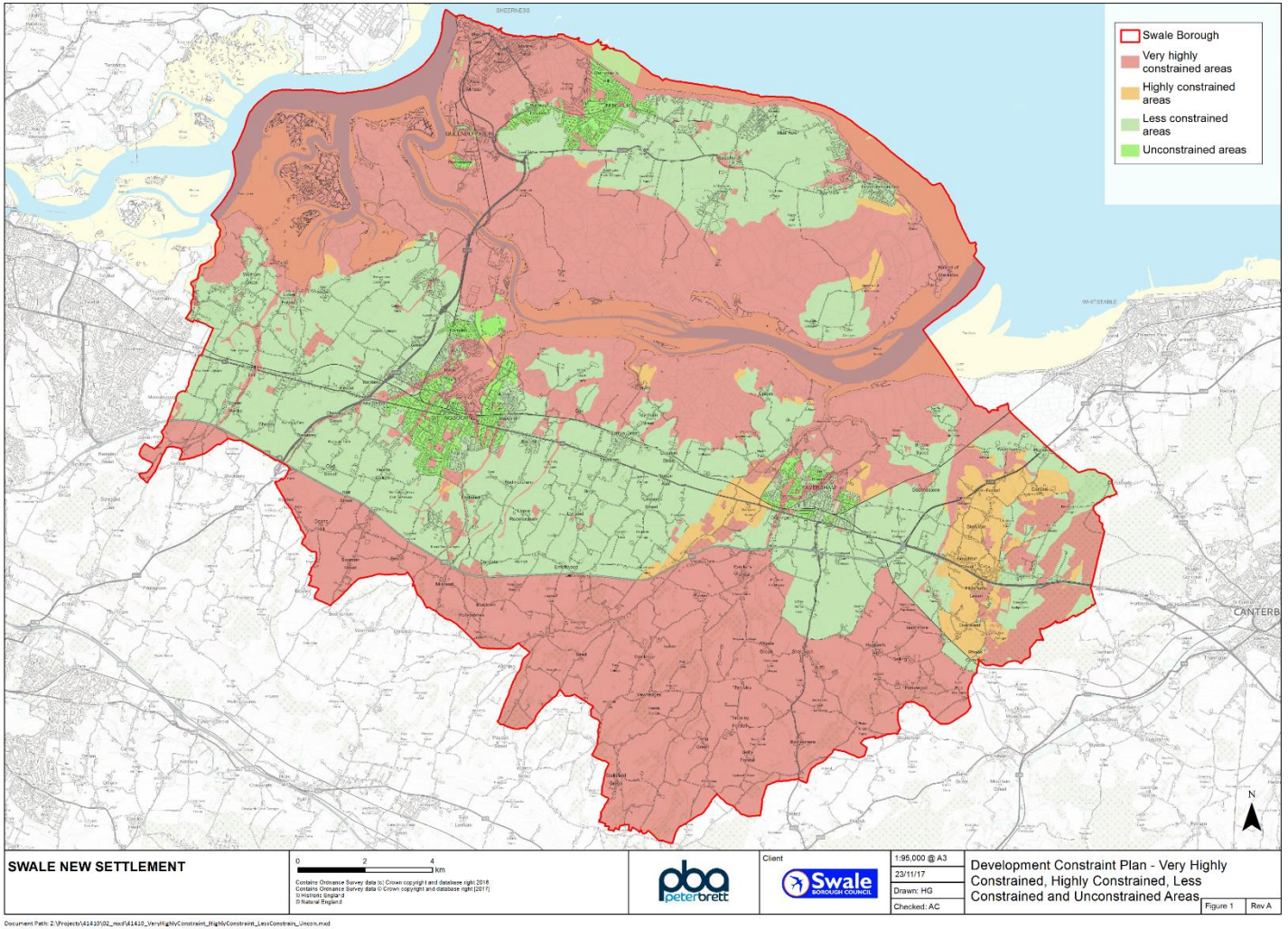


A small area of Swale is **unconstrained**



We brought the factors together onto one map to show the different levels of environmental constraint, to indicate where development might encounter different types of barriers

We are proceeding on the basis that development could take place in the green areas on the map. These are the areas which would tend to have environmental constraints which could be mitigated. Clearly, developments in these area will still require careful mitigation if they are to be successful.



Sieve 2:

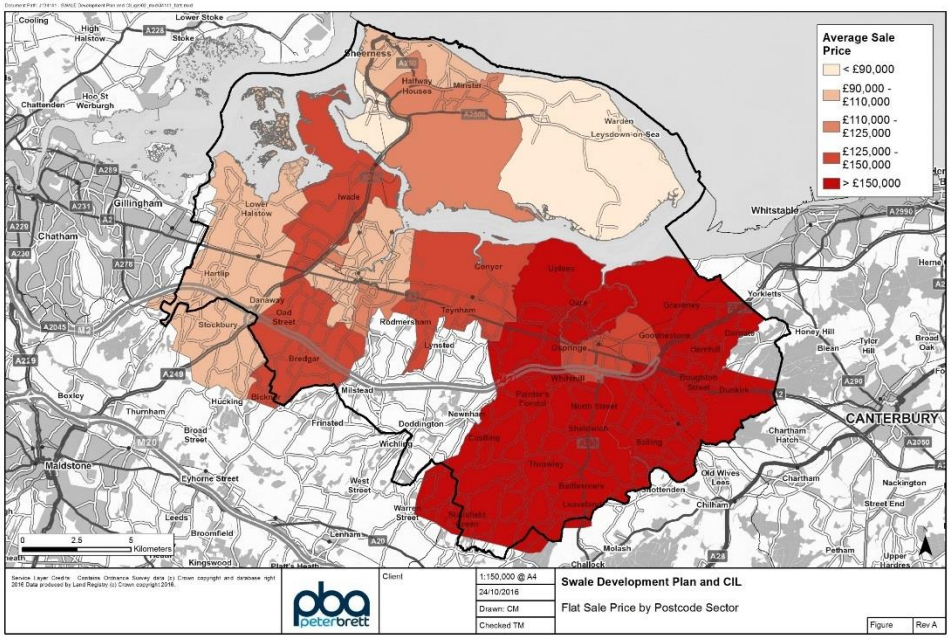
Market appetite for development

Fundamentally, the planning system can only permit the development that the market wants to deliver. Sites must be market viable if they are to proceed. Analysis suggests that viable housing opportunities are more likely to be found to the south of Sittingbourne, and in the more southerly and eastern areas of Swale – and we suggest that similar variation will persist in future

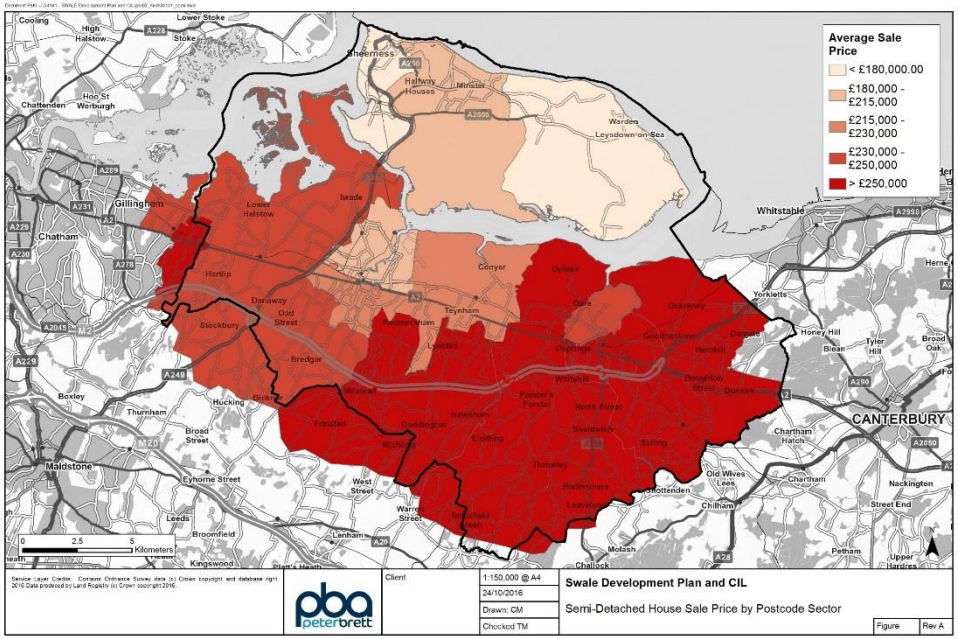
Sales values are a good proxy of housing viability. Market developers would generally prefer to develop in an area where the sales price of housing is high. This is because many build costs are relatively fixed: the costs of getting planning, or building material costs, do not change significantly by location, but sales prices do – opening up the opportunity for higher profit levels in higher priced markets. The graphics below show sales values for various types of homes across Swale. Higher value areas are shown in darker reds. Different housing types are shown, but it is likely that the semi-detached map gives the best view of relative property values because of the relatively consistent size and form of this type of housing.

We expect that these value contours are likely to persist over time, and are likely to be present in similar form in 2037/38: the differentials between areas are likely to be the same, even though the absolute values will have shifted. This is because relative housing prices are a function of fundamental economic geography, such as proximity to labour markets and infrastructure, and these factors tend not to alter greatly.

Flats – average sale price gradient

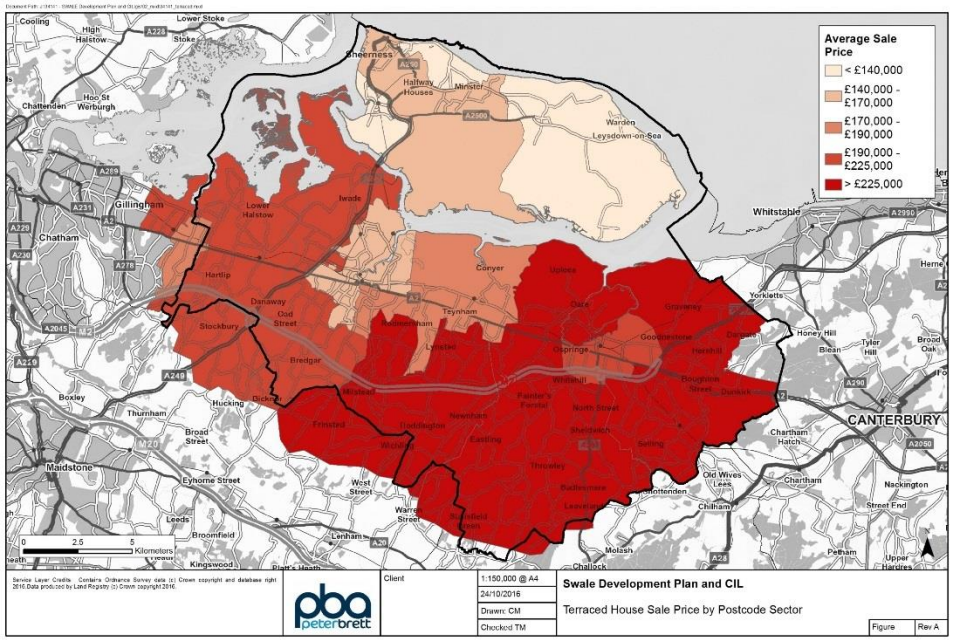


Semi-detached houses – average sale price gradient

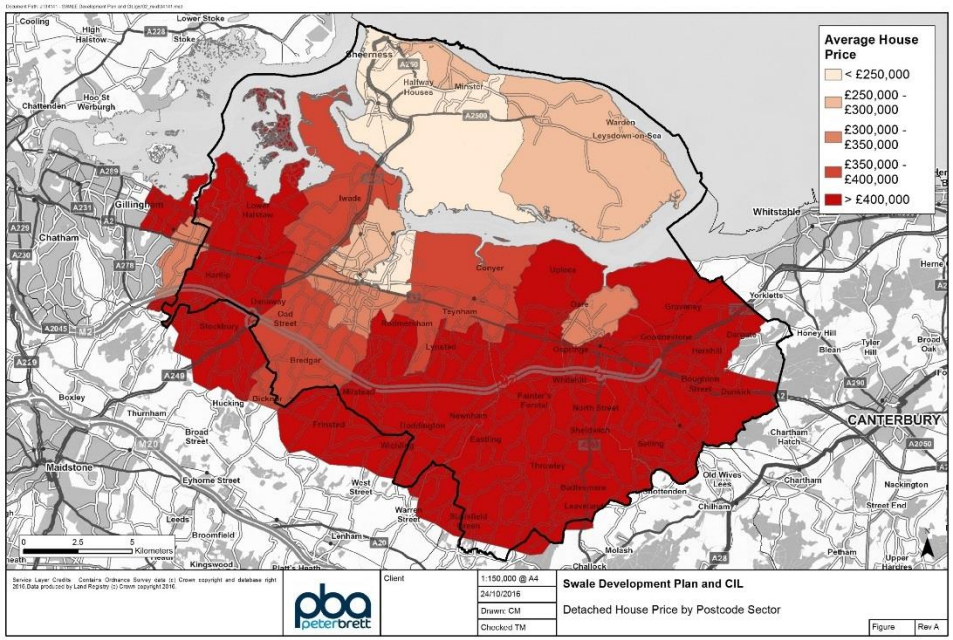


Terrace and detached house values tell a similar story: viability is likely to strengthen towards the south and east of Swale

Terraced houses – average sale price gradient



Detached houses – average sale price gradient

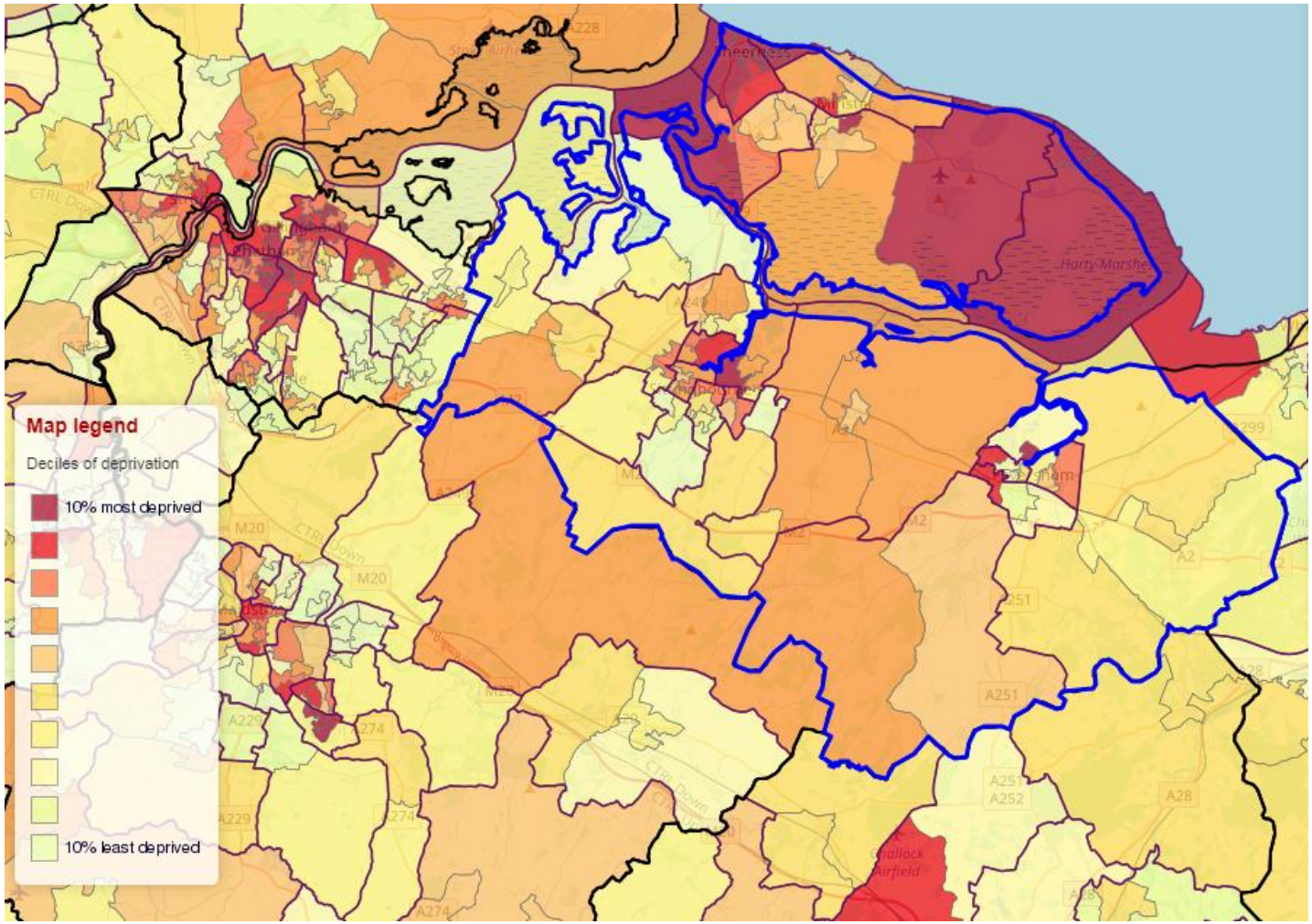


The most deprived areas of the borough also have amongst the lowest house prices – meaning that the market will tend to have a lower appetite for development in Swale's less well off areas

One of the Swale Local Plan's objectives is to see development directed to the less well off areas of the boroughs.

Unfortunately, this objective will tend to cut against the NPPF's requirements to provide the development industry with market viable sites. There is a potential mismatch between housing need and the locations where housing need is likely to be met.

Index of multiple deprivation (IMD) 2015



Sieve 3:

Supporting infrastructure

Infrastructure is needed to support growth. Infrastructure is frequently costly to put in place, but good infrastructure can generate higher sales values that can see development accelerate

We undertook a brief literature review to investigate the relationship between transport infrastructure, property prices, and land development. We did not look at other transport impacts, agglomeration or efficiency. The review would tend to suggest that transport provision can have a role in creating new site opportunities, particularly when existing sites are constrained by a lack of transport provision. We have summarised findings below – with the proviso that Bridget Rosewell (2013) points out that identifying the payback to any kind of infrastructure is surprisingly difficult. Infrastructure projects are general purpose technologies - and separating their impact out from everything else is analytically very awkward.

The literature review shows that we cannot reliably quantify an effect of transport investment on sales values of development (or consequent land values), but that benefits would be broadly positive in a growing economy such as Swale's.

Rail projects tend to have a positive effect on residential property prices, but given that the existing rail network is already in place, these effects will already be 'in the price' of existing housing at most locations in Swale.

Road projects tend to have a positive effect on property prices, although the effect in prices may depend on distance to the project (and the effects can vary over time). The London School of Economics (2015) found that road projects also have a positive effect on productivity. House prices immediately adjacent to roads may fall. Prices near new roads, but not immediately adjacent, tend to rise. There are no findings on the effects of roads on commercial values, but productivity rises in industries which use roads intensively.

Regarding tram and bus schemes, the LSE found no high quality evaluations that provide evidence on the impacts of trams and buses schemes (although that does not mean that such schemes produce no impacts). We included tram and bus projects in our review in principle, given that, on the balance of probability, some effects were likely. They may, however, be relatively dilute.

The LSE found no high quality evaluations providing evidence on the impacts of cycling and walking schemes. Although that does not mean that such schemes produce no impacts, we decided that, on the balance of probability, that such schemes were likely to have only a tangential effect on site deliverability. They may, however, have a valuable impact on the ability of the area to attract and retain skilled labour, when seen as part of an overall package of measures.

The literature review also showed that the benefits from earlier transport projects were lost because a complementary policy package did not accompany investment. The review suggests that there would be considerable value in ensuring that sites were available in order capture the growth arising from investment. This is because economic growth is only generated by transport investment if the other ingredients for growth are in place. One of these ingredients includes the availability of suitable site locations.

Transport and utilities infrastructure will change over time. Our spatial choices around new settlements could be very affected by the possible A2/M2 link road in particular

As we have set out above, technological change might have major implications for future transport and utilities networks. For example, it is the case that change might release new capacity on roads (for example through the effects of driverless cars on the road network).

What we are exploring here, though, is the effects of these changes on market willingness and ability to develop in future, and whether those changes should fundamentally alter our approach to our spatial strategy.

Road and junction upgrades will no doubt take place incrementally over time, but many are likely to cater for trend growth and housing change, rather than opening up major new development areas. Even major interventions such as the Lower Thames Crossing could have relatively dilute effects on Swale: western border of Swale is around 10 miles from the southern end of the LTC, and whilst this might make commercial development along the M2 more attractive its effects on housing sites are likely to be low.

However, there are a number of pieces of infrastructure which have the ability to change our spatial strategy with regard to new settlements.

- **The most influential proposed pieces of infrastructure are the proposed A2/M2 link (also known as the Sittingbourne Southern Relief Road - SSRR) and Sittingbourne Northern Relief Road (SNRR**). A council resolution to pursue these schemes has been made, and this road could unlock development sites to the south and eastern side of Sittingbourne. In particular, the A2/M2 link, with associated new Junction 5A, could unlock possible development sites to the south and east of Sittingbourne. The link would also help to deal with the infrastructure constraints which caused concern during the inspection process for the adopted Plan, and so relieve congestion and air quality problems on the A2.
- **It is possible that various bypass schemes could unlock land** (for example, to the south of Teynham, or around Bapchild).
- **In this study, we also assume that railway networks will remain broadly similar, and that train frequencies are similarly broadly unaffected – although that assumption could be challenged, and new stations opened up.** We understand that there are longer term Network Rail proposals for an Ashford to Faversham link via Canterbury, where the link between the Canterbury East and West lines would be re-established, but we have not investigated this opportunity further; there are also very high level work on the possibilities of a new station south of Faversham on the line to Canterbury. More frequent stopping services could be considered at Teynham and Newington, or even a new station at Graveney Bridge. Each of these concepts would need more detailed work carrying out with the franchisee and Network Rail, but we have not pursued this further here.

It is likely that the A2/M2 link and Junction 5a would create a step change in our ability to unlock land for a new settlement, and so we have concentrated on this proposal here.

The problem is that funding for these improvements is uncertain and costs are very high. There are estimates of around £200m on strategic roads alone (A2/M2 link road say £33m, Sittingbourne Northern Relief Road say £25m, new J5A say £135m) with a new junction. **It is likely that these highway and rail improvements would only prove affordable if housing development was used to help pay for them in addition to major public subsidy.**

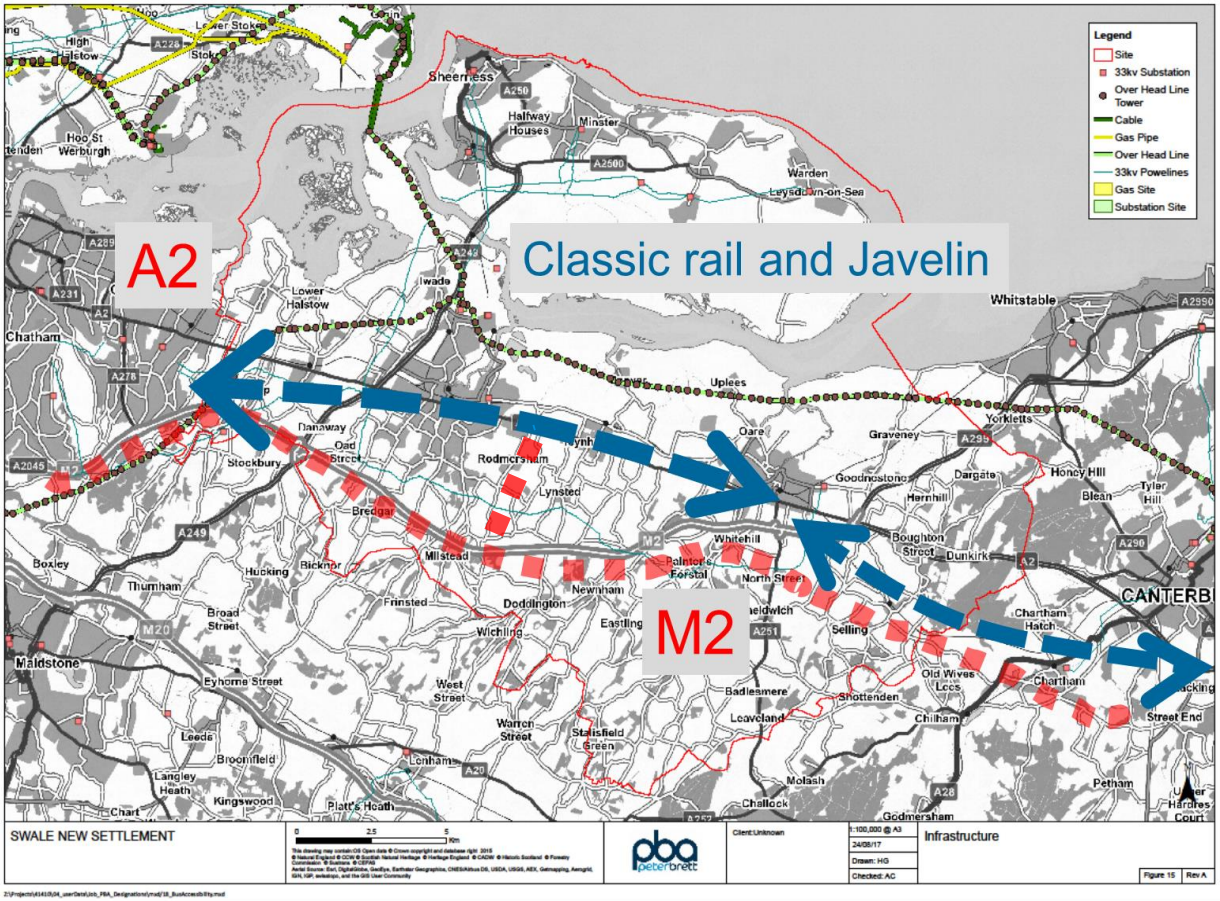
Fast public transport link to large labour markets may become more important over time. This study has assumed that rail networks stay broadly the same as they are today – but this assumption could be usefully examined further, because new housing development options might get opened up if new stations or higher frequency services could be created

People in skilled, dual income partnerships want to operate in large labour markets – giving both partners the ability to pursue career objectives. Research has found that the 'feminization of the formal labour market is a long term trend in all regions. More women are working than in earlier decades and fewer men, relatively speaking. This influences migration at the upper end of the labour market when both partners in a marriage or consensual union have professional or managerial jobs. The aspirations of both partners are best satisfied in large metropolitan labour markets.'

As a result, public transport back to large, liquid labour markets may grow in importance over time. The key links are likely to be rail links into Medway Towns, London and Canterbury.

If rail frequencies could be increased (for example at Selling) or opening new stations (for example, at Graveney) then new development options could be opened up. There may also be opportunities if the Ashford-Faversham via Canterbury link is opened up by Network Rail.

It may be worthwhile for the council to discuss these possibilities with Network Rail and/or the franchisee.



Good quality social infrastructure can also increase sales values. Good schools have a quantifiable effect on sales values – which could be around £30,000 on a typical house south of Sittingbourne. Impacts of this scale are likely to have appreciable effects on developers' willingness to deliver homes

Work at the LSE has shown that "a primary school one standard deviation above the average in terms of the performance of its pupils in key stage 2 tests (at age 11) attracts a house price premium of around 3%." This means that a school right at the top of the league tables attracts a premium of around 12% relative to one at the bottom. Applying this to the average semi-detached house price in south of Sittingbourne (banded between £230,000-£250,000) suggests that the effect could amount to a house price premium of £30,000.

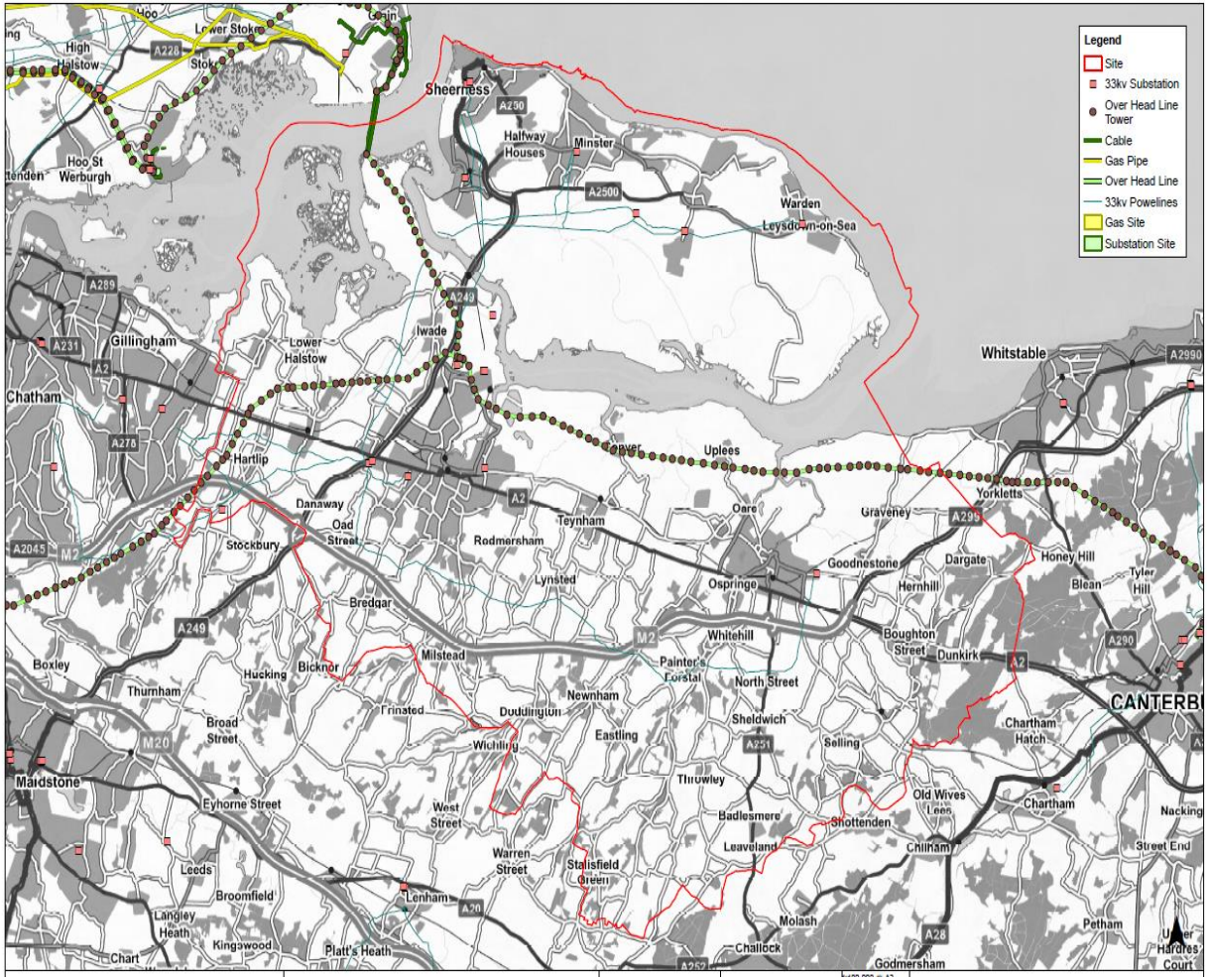
A similar picture emerges for Paris, where in 2004, the best schools attracted a premium of up to €17,500. And this is not just a European story: studies from the United States and elsewhere produce comparable results. LSE work finds that "a link between better schools and higher house prices has emerged as one of the most stable empirical regularities, with studies worldwide reporting effects of a similar order of magnitude. These numbers make a great deal of sense in terms of investment in children's future labour market skills. The potential earnings benefits in later life from a good state primary education outstrip the costs of buying a house near a good school."

Quite apart from education being a good thing in itself, good social infrastructure can affect the housing location choices that people make – which can have appreciable effects on development viability. If Swale wants to see the less viable areas become more able to attract housing development, it could consider how it might drive school performance in those areas.

Utilities infrastructure could be a determinant of the spatial strategy. Utilities requirements by 2038 might be very different, with a smart grids, grid decarbonisation (no gas) and local generation of electricity. Low carbon energy supplies will be increasingly important, and Swale could take advantage of significant advantages here

We have not undertaken a formal review of utilities capacity as part of this study. More work would need to be undertaken at later stages – but at this early stage, we are unaware of particular utilities infrastructure shortages which could affect the spatial strategy chosen. As we explain on the next page, though, utilities provision can have important implications for locational choices, given the implications for development viability.

It is also the case that major inward investors are increasingly looking at the importance of securing low carbon energy supplies in order to comply with their own sustainability policies, as well as creating resilience for their businesses. We understand that Swale has the potential ability to provide for low carbon energy sources which could provide a significant strategic advantage for the area in future, as well as providing a sustainable revenue source for the Local Authority. **LEPs around the country are investigating these issues further, and the issue will grow in priority given the recent Industrial Strategy priorities.**



CASE STUDY: utilities infrastructure shortages at Whitfield, Dover District Council

Just under a decade ago, Dover District Council was searching for a response to the local demand for housing. In response, Dover planned a major strategic of around 5,500 homes, wrapped around the existing village of Whitfield. This was the biggest single allocation in the Dover plan: there were strong environmental and landscape arguments for putting housing development in this location. But as planning processes went forward, it became apparent that Whitfield was short of electricity, potable water and foul drainage capacity to cope with growth. Further, Whitfield found itself at the end of each of these networks, meaning that utility capacity growth at this location was very expensive, with costs falling on developer. This created significant problems with development viability.

PBA was asked to investigate further, and met with the Department for Energy and Climate Change (DECC) to discuss proposals to address electricity shortages with three Combined Heat and Power (CHP) plants. These CHP plans would provide Whitfield with the necessary energy supply, and save the cost of grid connection.

However, DECC stated that this solution would be unlawful: the UK's deregulated utilities markets meant that householders must be able to buy electricity from another supplier, meaning that the CHP solution would break existing competition rules.

The combination of awkward spatial planning choices and the UK's inflexibility on utilities markets created a major hurdle to delivery. It is clear that further work will be required at any of the strategic development sites in question here to investigate the detail of proposed solutions.

Planned development at Whitfield

Swale could use this opportunity to embrace the “Smart” agenda, and get all new settlements connected to ultra-high speed internet, with embedded ‘Smart’ technologies

Masterplans could give specific attention to issues of smart city infrastructure. Swale needs to be clear that it is forward thinking - smart streets can create amazing spaces and places to be, with convenience, excitement, efficiency and the ability to deal with anti-social behaviour, rubbish and unforeseen incidents. As well as allowing for new technologies - vehicle charging, linked communication and real time advice on things to do and places to, these initiatives can also help with the healthy towns agenda, and contribute to better quality of life for residents and businesses. PBA recently arranged for the Ebbsfleet Development Corporation to visit the BT / Openreach research facility in Suffolk—a fact finding trip, intended to generate ideas and stimulate debate. We saw a wide range of new technologies – all of which were exciting, but only some of which were likely to be genuinely game-changing for city streets.

We know that the Smart agenda is very broad—and so early work could involve an “Objectives Review” from the particular perspective of Swale. This will allow prioritisation of the myriad possible technologies into an evaluated list of measures that have demonstrable benefits in achieving specified Smart outcomes that are important to Swale.

- One area which will certainly be key to Swale will be **information technology for movement and accessibility**. Hence the use of smart technology to manage the transport network holistically, and across all modes, is an obvious objective.
- **Health and well-being** are another critical opportunity for the Smart City agenda. Home based health monitoring is likely to be a necessary technology in an aging population—and the infrastructure for this could be a key objective.
- **Parking spaces** are delivered inefficiently in most places, often tied to particular land uses, with public and community buildings also often used inefficiently. Smart technologies can be used to re-allocate this space in time, as well as space.
- **Waste management and energy resource management** would be a fourth area that could be a key objective.

Whilst these concepts are potentially exciting, it is important to bear in mind how much will get done at new settlements through existing processes – at little or no cost to developers or public sector. It is the case that any significant development is likely to be connected to high speed data connections as a matter of course. Telecoms providers will normally require developers to excavate and lay the necessary ducts and joint boxes, which would be provided through normal costs assumptions on the part of developers. In the current market structure – which is currently being liberalised – Openreach will provide them connections free of charge, and construct the necessary chambers as part of the general highway construction works. All other works are typically undertaken by Openreach at their expense, provided each individual connection does not exceed £3,400. In urban areas, this connection cost is highly unlikely to be exceeded. Indeed, for larger residential developments, it is sometimes possible to negotiate for the telecoms provider to pay the developer per dwelling connected and this should be reviewed further by developers.

The big picture

1. Development is likely to be most environmentally permissible in the band of unconstrained land which runs from east to west through the centre of Swale

2. Development is most market viable in the area to south and south east of Sittingbourne and Faversham. Sheppey is unlikely to be popular with the market, and subsidy is unlikely to be available in the long term to make it so

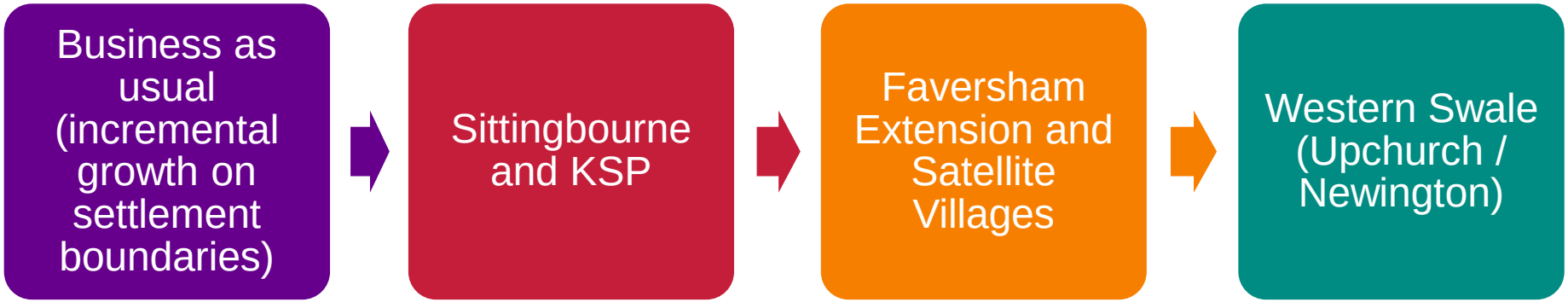
3. Infrastructure change could have fundamental effects on a spatial approach to housing. In particular, the A2/M2 link could unlock a large amount of development land to the south and east of Sittingbourne, as well has help solve congestion and air quality problems on the A2. Locations around rail links and with good links to strong labour markets may be increasingly sought after by the skilled workers of the future

Constructing and testing development scenarios

Having ‘sieved’ Swale, we built Swale-relevant growth scenarios to marshal the detail

A successful strategy needs to bring order to this real-world complexity. We have therefore arranged the choices generated by the sieving process by creating a series of scenarios. As we discuss later, it is possible to combine the most attractive elements of different scenarios.

Scenarios discussed are of varying sizes, and so combinations of scenarios would be needed in order to reach a figure of 15,000 additional homes, if that were to be adopted as an objective.



We have not looked in detail at development on the Isle of Sheppey. This is because the analysis above suggests that the geography of Sheppey, and its constrained access to labour and product markets, will create long term development viability difficulties. Whilst additional sites could be allocated on Sheppey, we expect that they would be very slow in coming to market, and therefore make a limited impact on housing and economic growth prospects for the borough.

The planning environment in Sheppey could remain permissive, and very welcoming to growth, but we do not think that the area can be relied on as a location for a new settlement of the scale that we are looking for.

We assessed the four scenarios put forward using economic, social and environmental factors

Each of these scenarios will have pros and cons. We wanted to make an early assessment of the scenarios. This exercise is a pre-cursor to an assessment of submitted sites, to determine whether any should be considered for the Local Plan.

We have used the economic, social and environmental categories chosen have been derived from (although is not intended to directly replicate) the topics covered in an Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA). We have not fully replicated these assessment processes and we have not undertaken any independent primary research because it would be too detailed an exercise at this stage. We have also added a criteria which looks at the ability to address transport & air quality constraints, given that these were such fundamental issues in the examination of the current Local Plan.

Each of the above scenarios is tested against a notional base case, which is the situation in place today.

The base case test year has not been set. We are testing the end state in each scenario, so any test year would be essentially notional and create no implications for the analysis undertaken.

We have performed a high level RAG (Red/Amber/Green) analysis under the categories shown (right). A scoring scale has been used to assess each spatial option against each criterion in the sustainability assessment framework.

This scoring has used professional judgement rather than hard quantification at this stage, and more work will need to be done in future. There will also be further political considerations which we are unable to include here.

Assessment criteria

Economic: strategic delivery of objectives for the future	a. Attracting and retaining a highly skilled population b. Facilitating strong labour market links to growth nodes outside c. Facilitating strong labour market links to jobs inside Swale
Economic: Deliverability	a. Likely infrastructure cost efficiency per home
	b. Market appetite for development
	c. Ability to address transport and air quality constraints
Social: building equity and social capital	a. Regenerating less well-off areas of Swale
Environmental: environmental conservation	a. Preserving and enhancing environmental and ecological systems

Red-Amber-Green (RAG) ratings

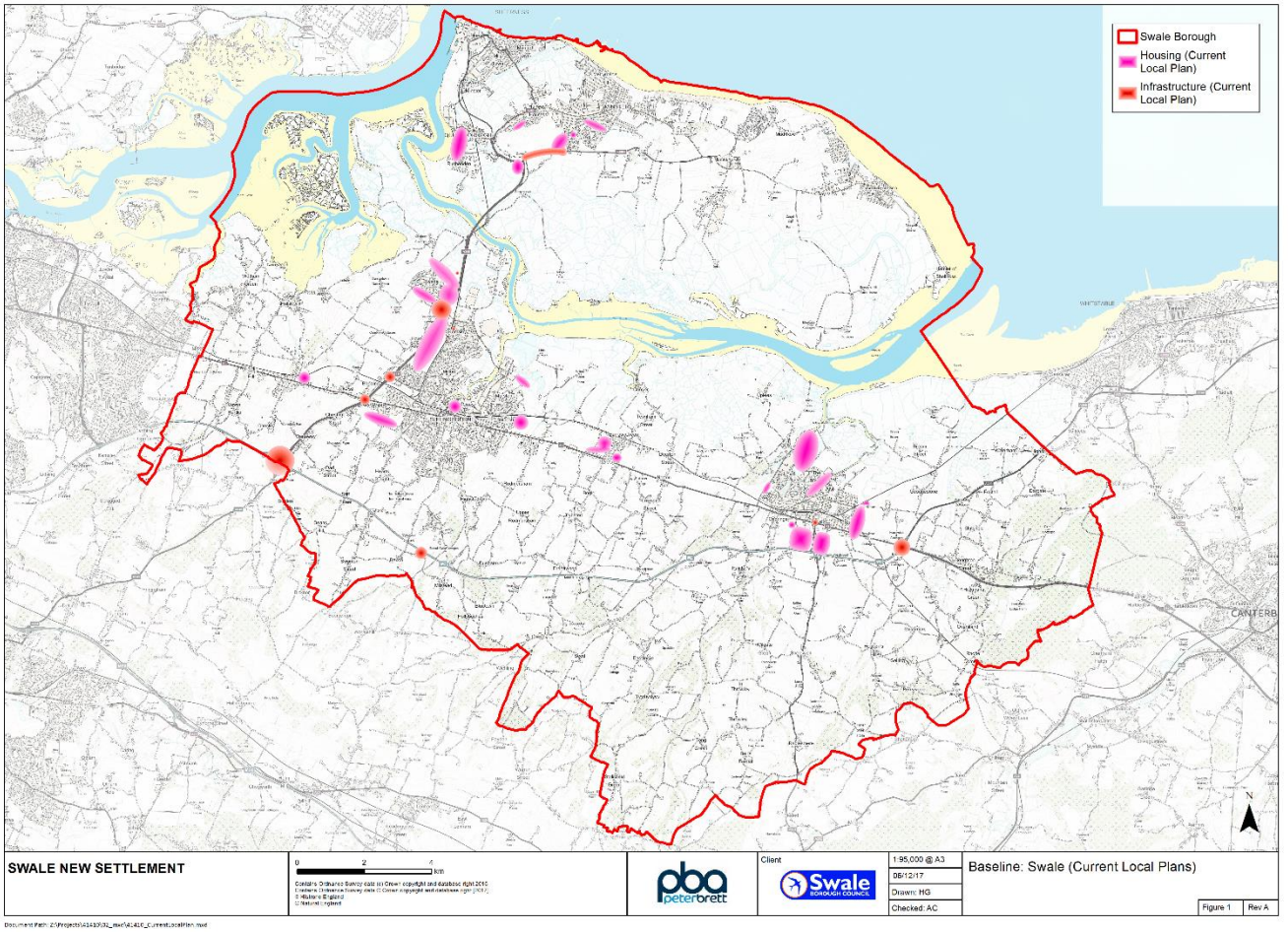
++	Compared to the base case, this option is likely to have a significant positive impact, or perform much better
+	Compared to the base case, this option is likely to have a minor positive impact, or perform a little better
0	Compared to the base case, this option is likely to have negligible or no impact
-	Compared to the base case, this option is likely to have a minor negative impact, or perform a little worse
--	Compared to the base case, this option is likely to have a significant negative impact, or perform much worse

Combining the results of the sieving process with the growth scenarios

Our starting point for analysis: Swale has an adopted Local Plan that runs to 2031. This study looks at the additional growth which is likely to be required *on top of these plans* – which means that it remains essential that the growth already planned is delivered

We have provided a rough view of our assumptions about future growth with regard to housing and infrastructure which is already built into existing plans.

- Housing: we have mapped the major sites that we expect will be in place by that point, with some indicative housing growth numbers.
- Infrastructure: we have mapped the key pieces of infrastructure which we assume will be in place. It is important to note that, at the moment, this infrastructure may not have committed funding or permission.
- Obviously, we cannot anticipate change perfectly – but this exercise provides a starting point for our analysis.



Scenario 1
Business as usual

Scenario 1: Business as usual (max) sees Swale broadly maintain its settlement pattern, adding growth to existing urban areas

Explanation of scenario

This scenario maintains the existing spatial strategy as set out in the existing Local Plan but extends it further. This sees growth in Sittingbourne; further growth in Sheerness and Queenborough on the Isle of Sheppey, and 'organic' growth in Faversham. In essence, the scenario we explore here sees further growth at the fringes of existing settlements – although the scale of growth explored in this scenario in Faversham may be too large to conform to the description of 'organic' which is included in the current iteration of the Local Plan.

To develop this scenario, we have taken the existing settlement housing distribution from Policy ST2 Local Plan Housing Targets 2014-2031 (17 years). We have then applied a pro-rata increase so that these relative shares between the areas are maintained, but sufficient land is taken at each of the locations to provide an additional 15,000 homes. For our purposes, we have assumed that 15,000 homes takes around 690ha in total, in line with the assumption made earlier. **These numbers are simply a scenario for exploration, and do not imply that this would be the basis for any allocation made.**

Policy ST3 has focused development growth using the following general prioritised approach:

1. The primary and greatest scales of development are at Sittingbourne, in line with its position as the main Borough urban centre;

2. A secondary focus at the urban centres on western Sheppey closest to the Island's main facilities and transport choices and at Faversham, where growth is accommodated without significant harm to its smaller scale character and its built and natural assets; and

3. A tertiary focus and scale at the Rural Local Service Centres, notably and variably in recognition of constraints, at Iwade, Teynham and Newington, to support their roles as the primary focus for the rural area, without harm to their character and separation with other settlements. Other such centres have a lesser focus as suggested by their remoter location and/or availability of sites with lesser environmental harm.

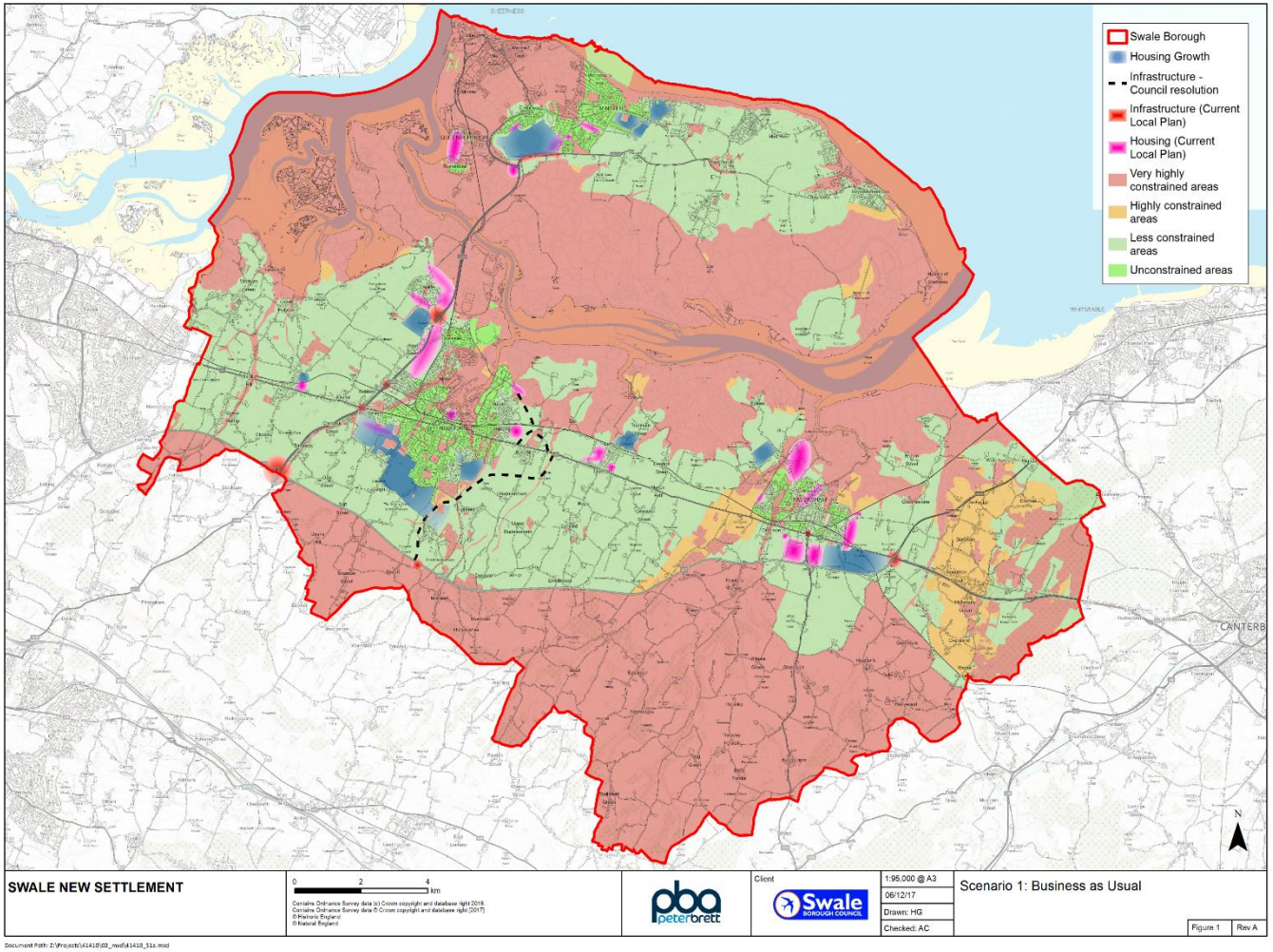
Infrastructure needed

Formal infrastructure modelling has not been undertaken, but it is likely that the following infrastructure would be needed if this scenario was to be realised:

1. The A249 corridor could need further upgrade to service growth on Sheppey;
2. The A2/M2 link road, or other similar solution, could be required to release growth in an arc to the south of Sittingbourne;
3. The 'missing link' to the Sittingbourne northern relief road, possibly with separate linking 'arms' to the A2 London Road.
4. A2 / A299 Junction upgrade needed
5. A local bypass could be required around Teynham, taking traffic off the A2 London Road and releasing development land to the south of Teynham village.

Scenario 1: Business as usual

The business as usual option would see incremental growth on the periphery of existing settlements. Because the current distribution of homes focuses on Sittingbourne, this would continue: we have assumed a swath of contiguous development to the south. Significant new allocations would be attached to Sheppey, although they would be associated difficulties with viability, and possible questions about capacity on the A249. Upgrades to the A2 and A2/M2 link would be required to solve the congestion and air quality problems identified by the inspector during the last Local Plan process, and this growth would not be able to be delivered without these solutions being in place. However, there is currently no identified way of paying for this infrastructure. Section 106 might not be able to pay for strategic infrastructure of this sort because current regulations make it impossible to pool five or more contributions (which would be necessary) and state that there must be a direct relationship between new growth and the infrastructure concerned. CIL could be used, but it is hard to imagine a sum of the necessary size being assembled.



Scenario 1 (BAU): our high level assessment of this scenario

		Scenario 1 BAU	Notes
Economic: strategic delivery of objectives for the future	Attracting and retaining a highly skilled population	**0**	Situation similar to present day base case
	Facilitating strong labour market links to growth nodes outside Swale	**0**	Situation similar to present day base case
	Facilitating strong labour market links to jobs inside Swale	**0**	Situation similar to present day base case
Economic: Deliverability	Likely infrastructure cost efficiency per home (positive=efficient)	--	Likely to need new link road at the minimum, and possibly a new M2 junction, but difficult at the moment to see how this might be paid for, given distribution of growth
	Market appetite for development	--	Viability on Sheppey likley to be problematical, leading to difficulties in plan delivery. This situation is currently existing, but growing allocations pro-rata likely to exacerbate the situation
	Ability to address transport & air quality constraints to delivery	--	The BAU scenario rolls forward the existing strategy, with housing growth proportionately increased. The delivery of the scenario requires the solution to the transport infrastructure shortages identified in the current plan's examination. BAU offers no immediate solution to this difficulty, although the situation will be incrementally worsened.
Social: building equity and social capital	Regenerating less well-off areas of Swale	**0**	Situation similar to present day base case
Environmental: conservation	Preserving and enhancing environmental and ecological systems (positive=conservation)	-	Incremental growth on urban fringe avoids rural encroachment, but will create environmental access disbenefits for existing residents

++	The spatial option is likely to have a significant positive impact
+	The spatial option is likely to have a minor positive impact
0	The spatial option is likely to have negligible or no impact
-	The spatial option is likely to have a minor negative impact
--	The spatial option is likely to have a significant negative impact.

Scenario 2
Sittingbourne and Kent Science Park

Scenario 2: Sittingbourne and Kent Science Park

Explanation of scenario

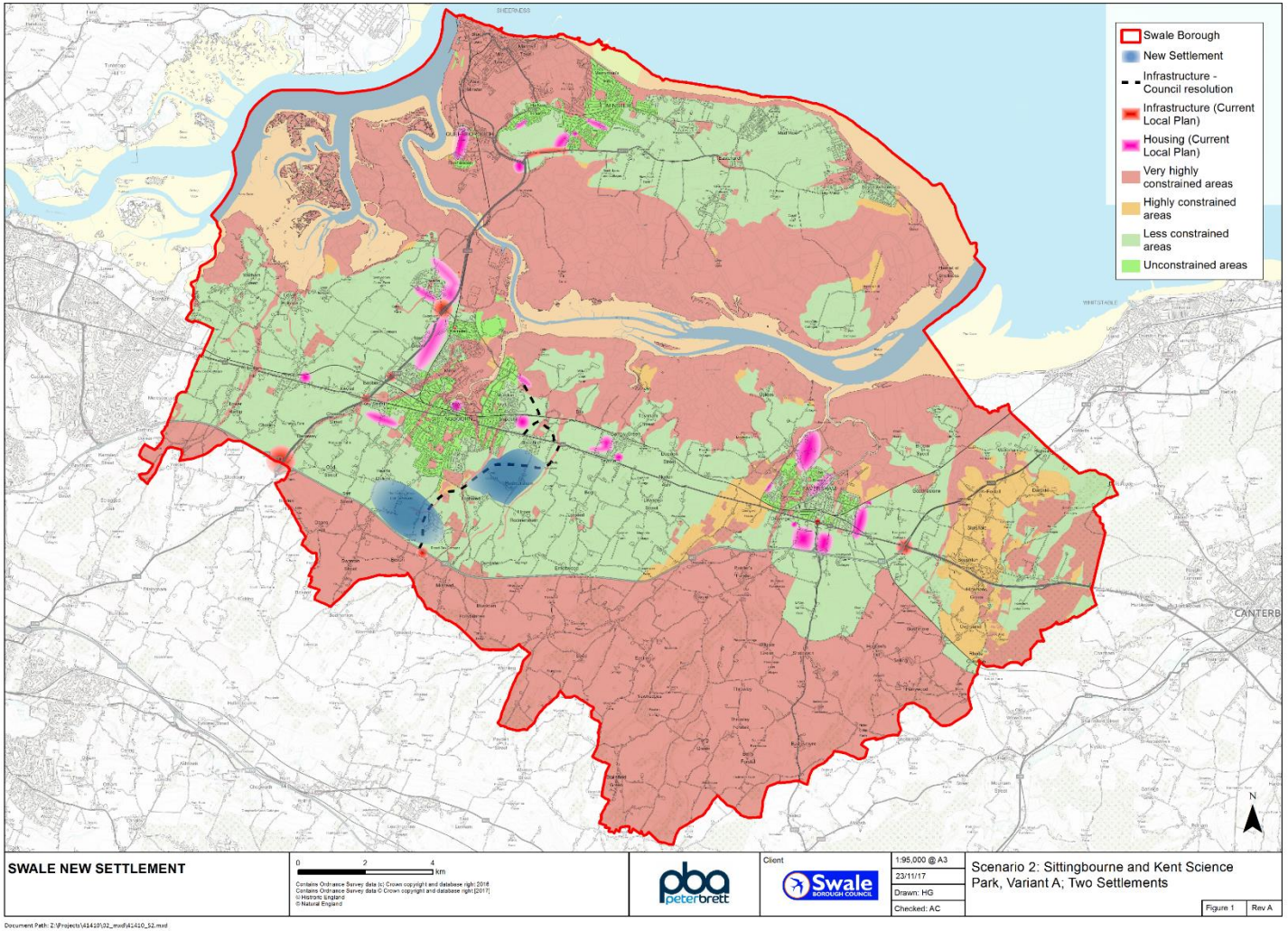
This scenario explores the implications of growth to the south of Sittingbourne. This covers the area around Kent Science Park, but goes further to look across the crescent of land north of the M2 and east of the A249 Maidstone Road. The scenario assumes that the site would be accessed via a new motorway junction on the M2 (J5a) and a new relieve road to link from this junction to the A2. This would improve the access arrangements to Kent Science Park (currently accessed in places via a single track road). This could offer an opportunity for traffic to avoid the already congested A249 and Junction 5, an offer an alternative route to the current A2 corridor.

We have not tested different road alignments options here, or separately considered road impacts in our appraisal. Detailed studies may show that there are different options possible, and clearly any A2/M2 link road will have impacts of its own.

We have not pursued the concept of putting substantial development to the south west of Sittingbourne – for the reason that this corridor is already congested, and even with upgrades is likely to remain a key route for commercial and residential users accessing the Isle of Sheppey. (The A249 is key commuting route for commercial access to Sheppey / Port of Sheerness; as well as Sheppey and Sittingbourne commuters to M2 and Maidstone).

Quinn Estates have made a submission, and we are aware of other landowners in the area coming forward with their own proposals. Other configurations are possible, and it is possible that these could more closely conform to Garden City principles set out elsewhere in this report. We are not evaluating specific proposals here.

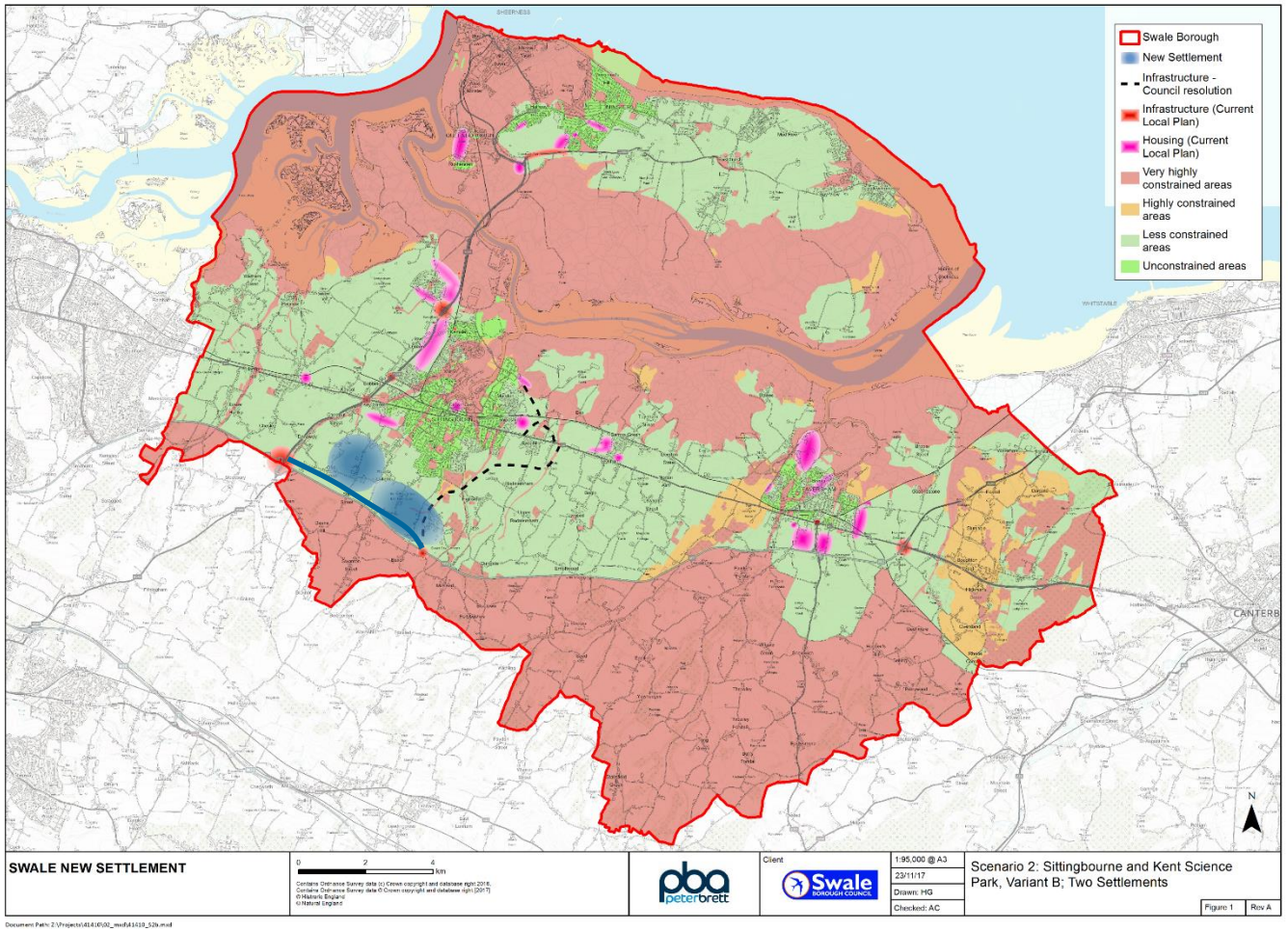
Scenario 2a: Sittingbourne and Kent Science Park. This sees development at two new villages, each with around 5,000 homes. One is to the south of the town, and surrounds the Science Park, whilst the other is to the south east. Both are on or near the route of the proposed link road



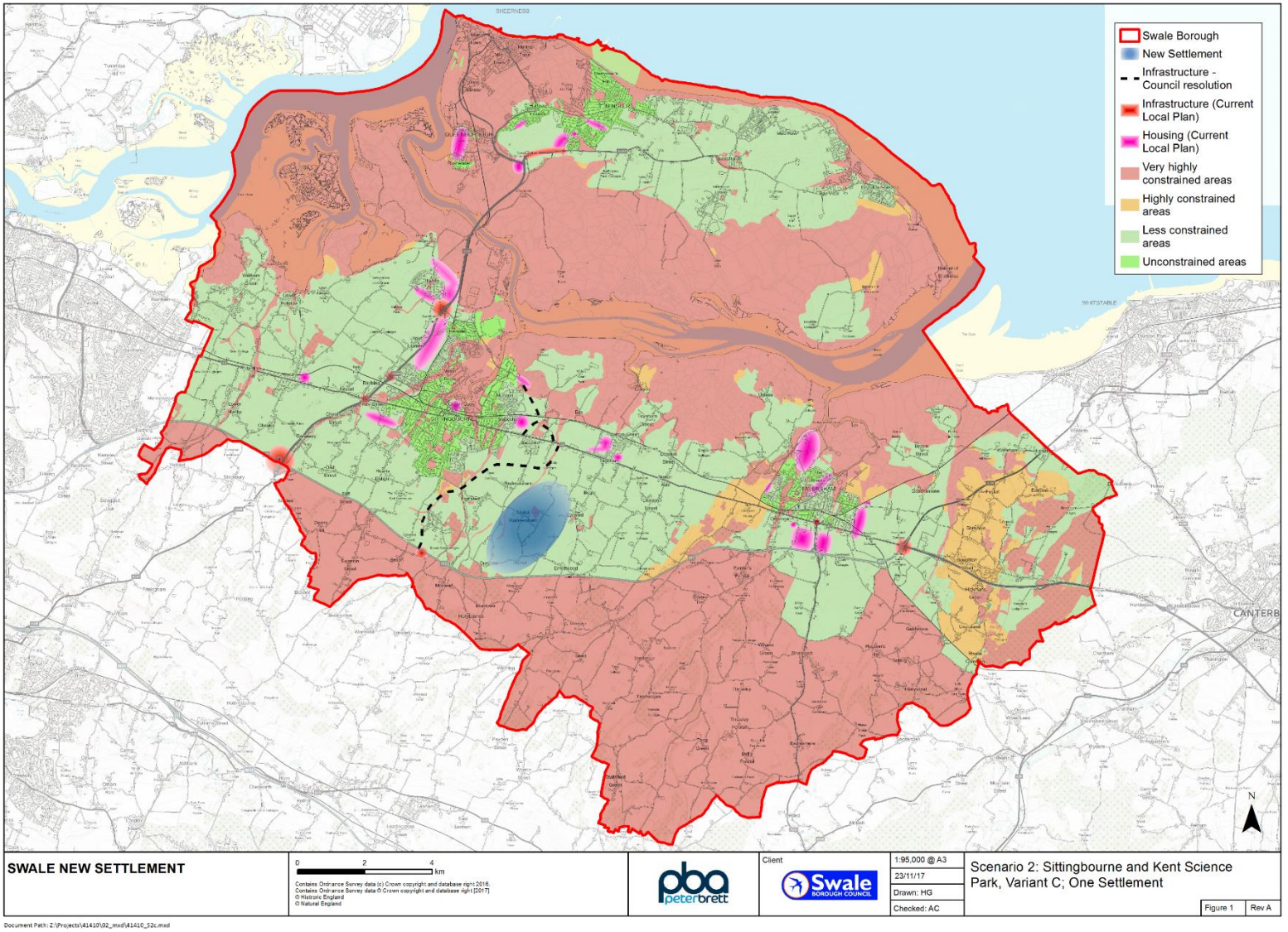
Scenario 2b: Sittingbourne and Kent Science Park. Again, this variant sees development at two new villages, each with around 5,000 homes, with one surrounding the science park. This variant concentrates development to the south and south west of Sittingbourne by creating a new access route between J5 and the proposed J5A, leaving land to the south east of Sittingbourne untouched

This variant looks at the possibility of running an access road alongside the M2, between the existing Junction 5 and the proposed Junction 5a. It would allow access to two new villages to the south/south west of Swale, each of around 5,000 homes.

This option would allow the south east of Sittingbourne to remain untouched, although would entail the construction of 5-6km of roads, in addition to the A2/M2 link previously assumed.



Scenario 2c: Sittingbourne and Kent Science Park. This further variant puts 10,000 new homes in one place, and would establish a new town on land to the south east of Sittingbourne

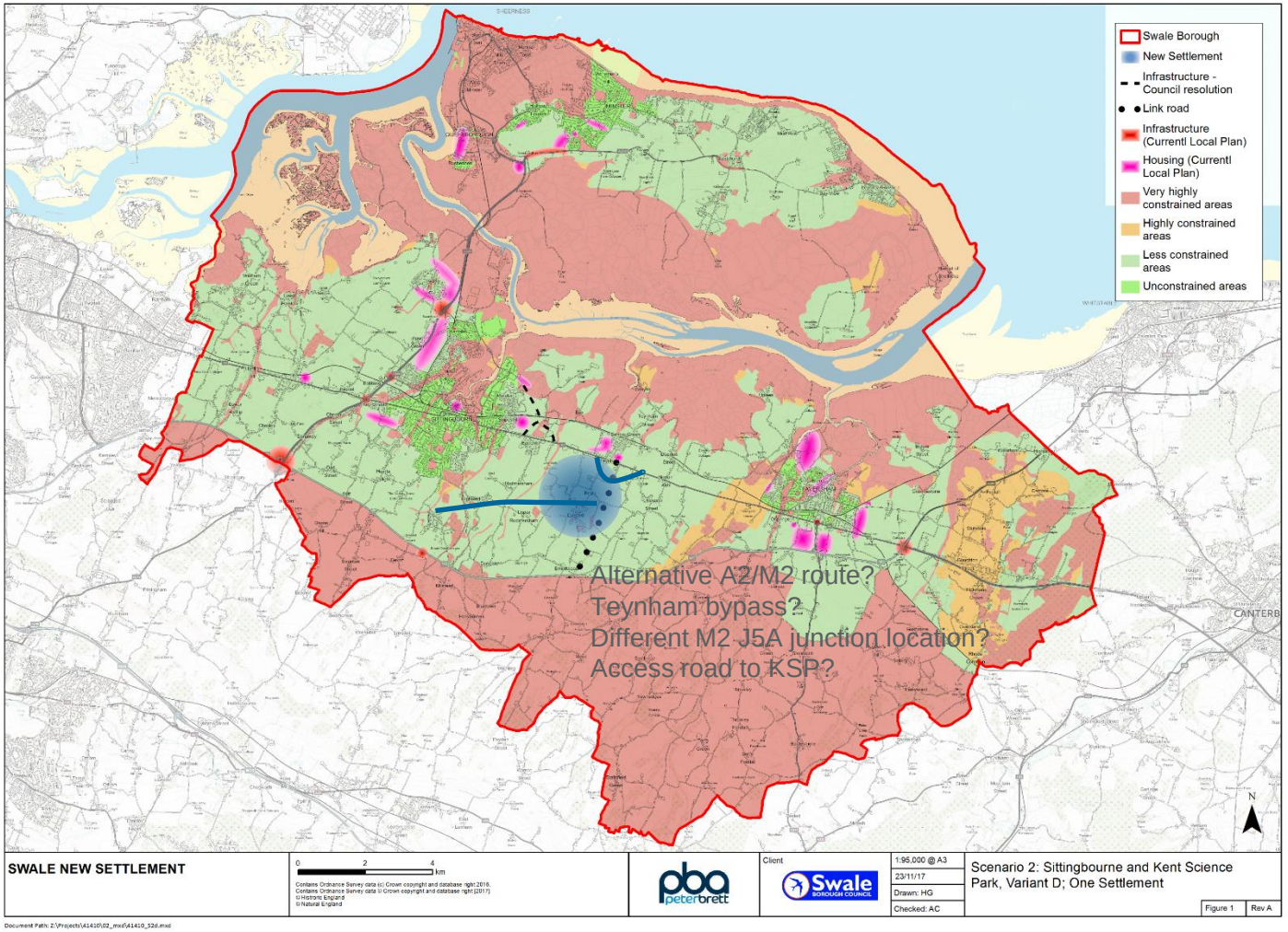


Scenario 2d: Sittingbourne and Kent Science Park. This variant is focused on Teynham. It moves the location of the A2/M2 link road further east, helping form a Teynham bypass, and further relieving the A2; provides an access road to KSP, and puts around 10,000 homes in one place

This scenario sees the development of Teynham, and also helps create a Teynham bypass. Instead of having a J5A to the south of Sittingbourne, J5A would be moved further east to the south of Teynham. The A2/M2 access road would then run from a new Teynham bypass, south to the M2. 10,000 homes could be created in the area, and the proposal could abstract traffic from the A2 further east, helping with A2 congestion and air quality issues.

Here, we assume that the development would be located to the south of Teynham, in order to avoid the need for an additional crossing of the railway. Such a crossing would be needed if land to the north of the railway line was to be developed.

Additional expense would be incurred given that this option could (arguably) require an additional access road to KSP. There is also risk of a disconnect with the proposed Sittingbourne Northern Relief Road, so the impact on A2 and rural road rat running would need to be tested.



Scenario 2 (Sittingbourne and KSP): our high level assessment of this scenario

		Scenario 2: Sittingbourne and KSP				Notes
		Variant A	Variant B	Variant C	Variant D	
Economic: strategic delivery of objectives for the future	Attracting and retaining a highly skilled population	++	++	++	**	Creates opportunity to create very strong new environment adjacent to KSP
	Facilitating strong labour market links to growth nodes outside Swale	+	+	+	++	Links to rail station in Sittingbourne not especially strong, even with major PT interventions. Access to Teynham station is strong under variant D.
	Facilitating strong labour market links to jobs inside Swale	++	++	++	+	Proximity of KSP could be significant benefit, with the potential for creation of an 'innovation district' with colocated jobs and housing. Considerable distance to KSP or urban areas under variant D, but more easterly junction location may be advantageous, abstracting traffic from A2 further east.
Economic: Deliverability	Likely infrastructure cost efficiency per home (positive=efficient)	--	--	--	--	Likely to need new link road at the minimum, and possibly a new M2 junction, but compared to base case this is scenario likely to be more expensive
	Market appetite for development	+	+	+	*	Values suggest that market appetite to south of Sittingbourne is present, but infrastructure costs will impact viability.
	Ability to address transport & air quality constraints to delivery	++	++	++	++	Scenario 2's co-location of housing growth with the site of the potential A2/M2 link means that this scenario makes the delivery of this road most likely. S106 and /or Grampians could see this link delivered, to the wider benefit of Swale re: congestion and air quality.
Social: building equity and social capital	Regenerating less well-off areas of Swale	+	+	+	*	Proximity to Sittingbourne will grow local retail catchment, if well managed, but will do little for Sheppey
Environmental: conservation	Preserving and enhancing environmental and ecological systems (positive=conservation)	-	-	-	-	Will build on rural land, but avoids main areas of constraint and protects access to rural open space for residents on town fringe. Red status conferred because there are important issues to take into account regarding the extent of Areas of High Landscape Value, with a categorisation other than "conserve". These must be dealt with at any design stage, along with issues around road alignments, which might also run through affected areas.

++	The spatial option is likely to have a significant positive impact
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Scenario 3
Faversham extension and new villages

Scenario 3: Faversham extension and new villages

This scenario explores extension to the south of Faversham in various combinations

This scenario explores the possibility of growth to the south of Faversham. We separately consider concepts for new villages alongside the development at the Faversham Strategic Development area, which is a boot-shaped piece of land around the south-east of Faversham. This site includes land which is currently in the ownership of the Duchy of Cornwall. This land is being actively promoted already through the 2017 Call for Sites, alongside other land to the north of the A2, north west of M2 Junction 7.

All together, growth of 10,000 units could be possible, comprised of around 5,000 homes on the Faversham Strategic Development Area together with two smaller garden villages to the south of the M2.

We have put forward three scenario variants, with varying combinations of location. The concept is that these scenarios around J6 could share infrastructure already in place in Faversham. A further alternative is offered, centred around J7.

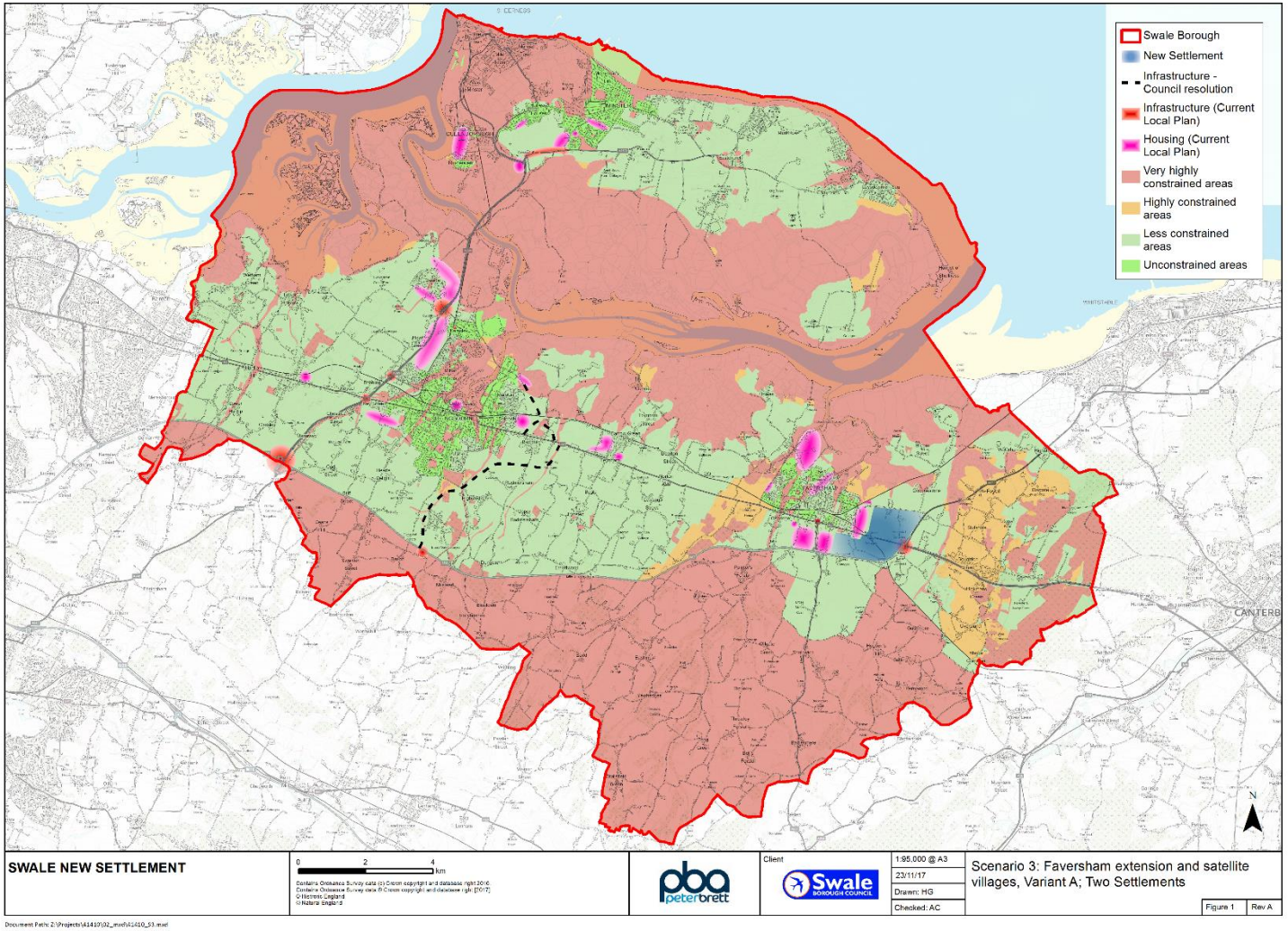
Land around Selling (station) is also a possibility for development, although we have not pursued it at this stage. The site is an attractive one, given that its likely viability is high, and that a railway station is already in place. Development would be constrained by the presence of the Area of Outstanding Natural Beauty (AONB) which is located to the south west of the railway line, and any development that did take place to the north east of the rail line would be constrained by an area of High Landscape Quality/ Character. Highways capacity is also likely to be an important constraint: there are two narrow lanes under the railway, and to avoid this connections up towards J7 would be on rural lanes. The Duchy has owns a corridor of land south of the railway back toward Faversham, but this is in the AONB. However, this would potentially make a strong green link, if this route could be secured.

We have therefore not pursued his concept further at this stage, although further detailed study could be undertaken in future.

Scenario 3a: Faversham Strategic Development Area (5,000 units) could share infrastructure with Faversham

Faversham Strategic Development Area (5,000 units) could either be seen as a traditional “Sustainable Urban Extension” to Faversham, and so seek integration into the existing urban area, or be positioned as a separate development, with a green break between the existing area and the new development.

This option only creates 5,000 homes, so would need to be combined with others to reach the target.



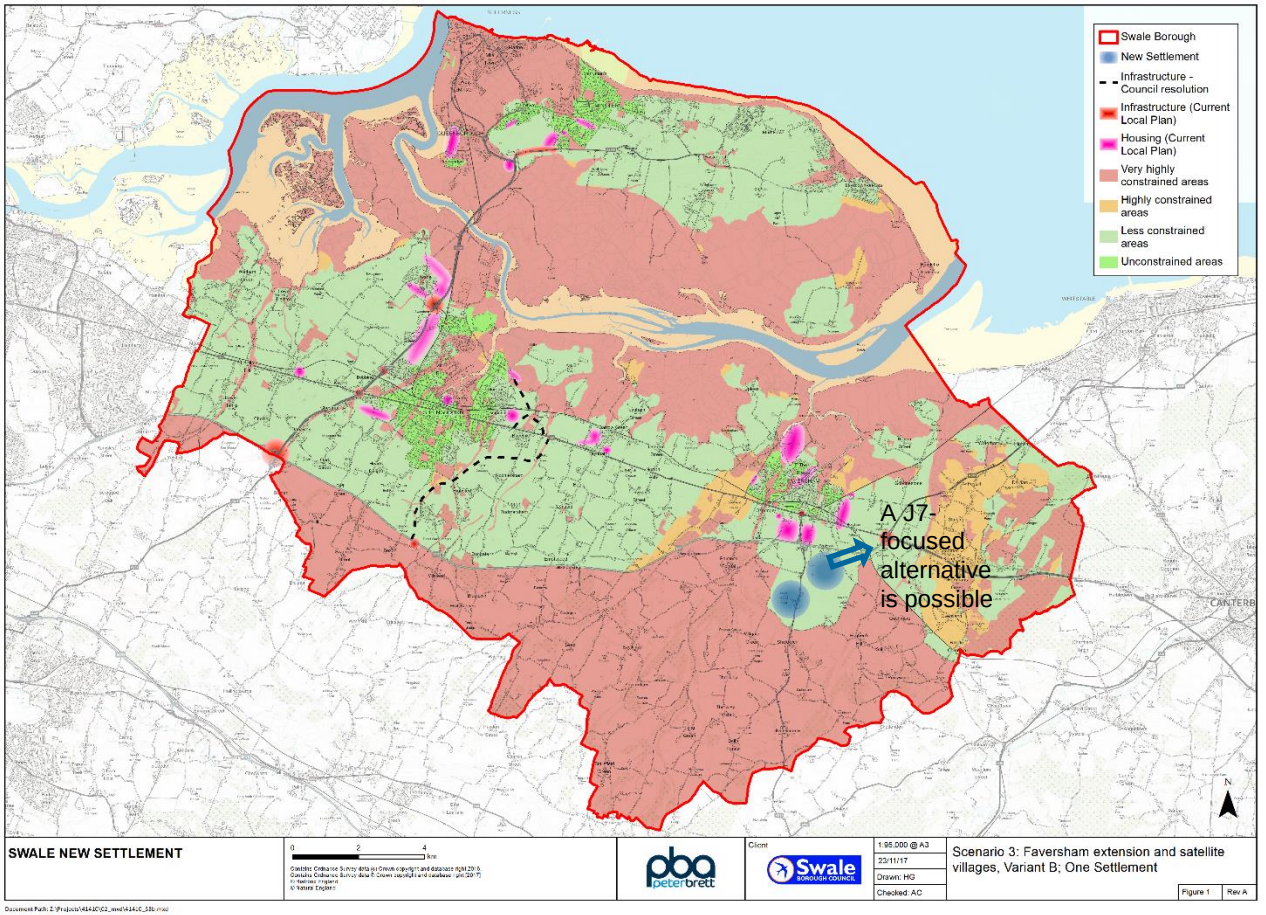
Scenario 3b: This sees two new settlements of 2,500 units each. These could possibly share infrastructure with new housing on Strategic Development Area land to the south of Faversham

Village 1 could lie to the south of both the M2 and the strategic development area, which could accommodate 2,500 units. Village 2 could lie to south of Faversham on the A251 Ashford Road, at or around North Street, and could accommodate 2,500 units. The Ashford Road is currently congested and would be likely to need upgrading – but separate modelling work would be needed to understand impacts and confirm this view.

It would be possible to combine these villages with development at the Faversham Strategic Development Area. If the new settlements were to share infrastructure with the Strategic Development Area, proposed, then we would need to find ways of overcoming the severance issues created by the M2. A good quality crossing is in place, but further study would be required regarding the adequacy of those connections.

Because this area is on the periphery of the AONB, there could be obstacles to planning if this site was seen to affect the setting of the AONB. Case law gives significant weight to AONB settings.

A further alternative is offered, centred around J7. Land at J7 is more distant from Faversham, so would share infrastructure with Faversham less easily. It is also possible that land around J7 could be a preferred location for employment, and environmental constraints mean that there would likely to be room for only 2,500 dwellings.

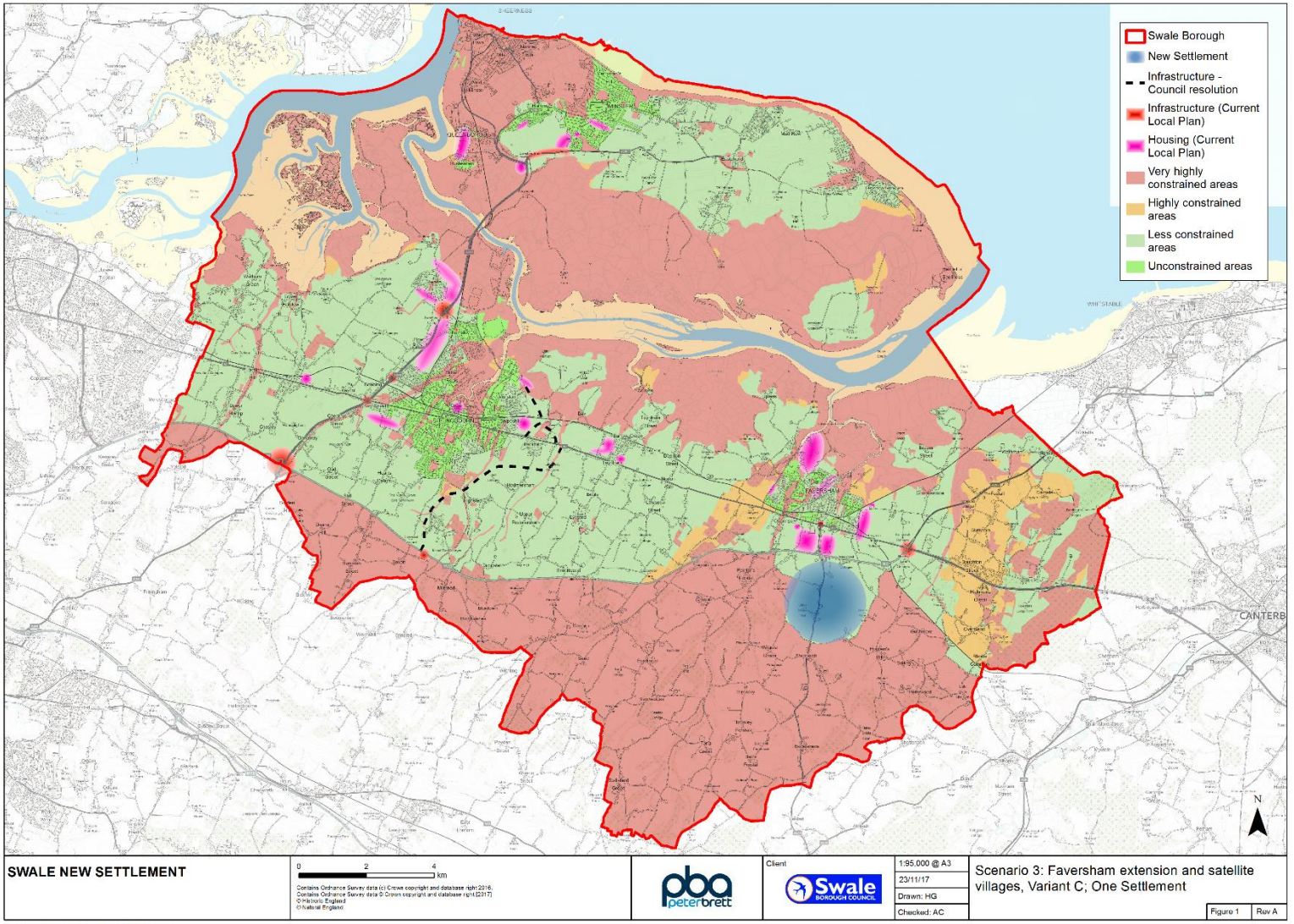


Scenario 3c: Faversham extension and satellite villages. This variant sees the creation of a single settlement of around 10,000 homes on the Ashford Road running south out of Faversham

This variant suggests that there would be physical space for a new town to the south of Faversham, on the Ashford Road.

Development would be likely to run up to the very boundary of the AONB. Again, because this area is on the periphery of the AONB, there could be obstacles to planning if this site was seen to affect the setting of the AONB. Case law gives significant weight to AONB settings.

Again, the Ashford Road is currently congested and would be highly likely to need upgrading – but separate modelling work would be needed to understand impacts and confirm this view.



Scenario 3 (Faversham extension and satellite villages): our high level assessment of this scenario

Scenario 3b has a Junction 6 and Junction 7 sub-variants. Each would perform similarly on these measures – although it could be argued that Variant C performs worse on Environmental grounds, given that it affects the setting of the AONB.

		Scenario 3: Faversham SUE & villages			Notes
		Variant A	Variant B	Variant C	
Economic: strategic delivery of objectives for the future	Attracting and retaining a highly skilled population	++	++	++	Creates opportunity to create very strong new environment
	Facilitating strong labour market links to growth nodes outside Swale	+	+	+	Links to rail station in Faversham not especially strong, even with major PT interventions. New station options could assist
	Facilitating strong labour market links to jobs inside Swale	+	+	+	Location well located for strategic road network
Economic: Deliverability	Likely infrastructure cost efficiency per home (positive=efficient)	-	-	-	Sharing infrastructure with likely expansion on Duchy sites should moderate cost per home, but compared to base case this is scenario likely to be more expensive. This scenario assumes that A2/M2 road still required.
	Market appetite for development	++	++	++	Strong values mean that markets likely to pick up proposals with enthusiasm
	Ability to address transport & air quality constraints to delivery	-	-	-	Location of growth away from main A2 corridor may allow this option to sidestep the immediate congestion and air quality issues which affect some scenarios. However, distance to the A2/M2 link location means that it will be more difficult to use the value released by this growth to pay for this link (although CIL's ability to pay for strategic issues may make this possible, if a CIL was to be set).
Social: building equity and social capital	Regenerating less well-off areas of Swale	0	0	0	Faversham is one of the better off areas of Swale. Proximity to Faversham will grow local retail catchment, if well managed, but will do little for Sheppey.
Environmental: conservation	Preserving and enhancing environmental and ecological systems (positive=conservation)	-	-	-	Will build on rural land, and may damage the setting of the AONB. There are strategic decisions to be made in the case of scenario A regarding whether or not a green break between the existing urban area and the new development is desirable. However, these scenarios are built outside main areas of constraint and protects access to rural open space for residents on town fringe. It could be argued that Variant C performs worse on Environmental grounds, given that it affects the setting of the AONB - arguably, this could be classed as a "red".

++	The spatial option is likely to have a significant positive impact
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Scenario 4
Western Swale (Upchurch and/or Newington)

Scenario 4: Western Swale (Upchurch and/or Newington)

Explanation of scenario

This scenario looks at the possibility of growing, possibly in combination, sites at Upchurch and/or Newington.

This option could provide opportunities to work with Medway, given that this growth would help serve Medway housing markets.

Newington benefits from a railway station, which would help with the integration of new housing into sub-regional and London jobs markets.

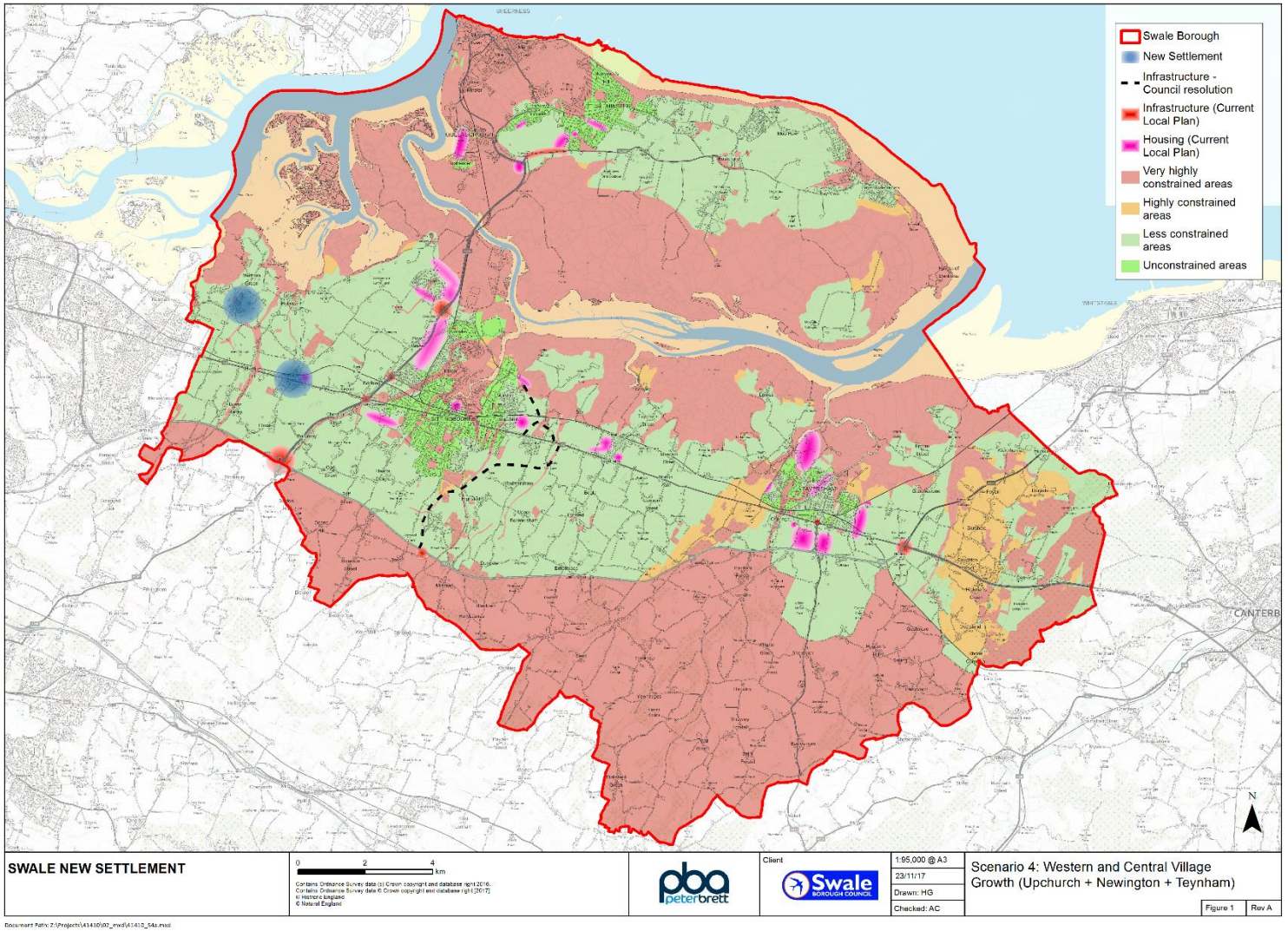
Newington may need a bypass under these scenarios but we have not made any particular assumptions here.

Scenario 4a: Western Swale (Upchurch and/or Newington). Here, we present the results of building 2,500 units at one or either of the village locations

Work by officers shows that the area to the north west of Newington village is on visually prominent hill, so development could be concentrated at the south west and north east.

Growth at Newington could therefore be broken into smaller parts, with some growth to the north east of the village, and some to the south west, but this could run the risk of fracturing growth and losing our ability to create coherent settlements.

A finer-grained analysis of precise growth numbers could come at a later stage of work, because at this stage we are exploring broad concepts.



Scenario 4 (Western and Central Village Growth): our high level assessment of this scenario

		Scenario 4: Western Swale	
		Variant A	
Economic: strategic delivery of objectives for the future	Attracting and retaining a highly skilled population	+	More modest expansions may not create critical mass
	Facilitating strong labour market links to growth nodes outside Swale	++	Proximity to rail stations in Newington will assist commuter links to London, Medway and Canterbury. This is likely to be an important attribute in future labour markets. At Upchurch these
	Facilitating strong labour market links to jobs inside Swale	+	Locations well located for strategic road network
Economic: Deliverability	Likely infrastructure cost efficiency per home (positive=efficient)	-	Sharing infrastructure with likely expansion on Duchy sites should moderate cost per home, but compared to base case this is scenario likely to be more expensive
	Market appetite for development	+	At Newington, site proximity to station is likely to assist in market uptake. At Upchurch these benefits not in place.
	Ability to address transport & air quality constraints to delivery	--	Classed as red because AQMA at Newington High Street presents serious obstacle to further growth in the area. This could be alleviated if Newington got a bypass as part of proposals - but more information needed regarding whether 2,500 homes would be enough to make a sufficient contribution to paying for costs (this problem overcome if seen as part of other proposals elsewhere). A2/M2 link likely to be required alongside these bypass proposals, further raising costs. More work needed to clarify costs and funding as a result of these proposals. Rated red for now but this could be reviewed.
Social: building equity and social capital	Regenerating less well-off areas of Swale	0	The villages are amongst the better off areas of Swale
Environmental: conservation	Preserving and enhancing environmental and ecological systems (positive=conservation)	-	Will build on rural land, but avoids main areas of constraint and protects access to rural open space for residents on town fringe

++	The spatial option is likely to have a significant positive impact
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0	The spatial option is likely to have negligible or no impact
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Assessing the scenarios against each other

We compared the assessments of each development scenario, side-by-side. New settlements around Sittingbourne and Faversham perform best in our ranking – but we are aware that other views are possible

- S1 Business as Usual fails to reposition Swale for the future, and creates few major advantages.
- S2 Sittingbourne is expensive and could affect an Area of High Landscape Value. But this option is most likely to help deliver an A2/M2 link if this was sought, and so address AQ and congestion.
- S3 Faversham performs well, with fewer major obstacles than some options. Market enthusiasm is likely.
- S4 Western Swale may struggle to address the fundamental problems with air quality and congestion without a bypass – in addition to A2/M2 link. This could make the option expensive for the relatively limited number of homes it generates.

		Scenario 1	Notes	Scenario 2: Sittingbourne and KSP				Notes	Scenario 3: Faversham SUE & villages			Notes	Scenario 4: Western Swale	
		BAU		Variant A	Variant B	Variant C	Variant D		Variant A	Variant B	Variant C		Variant A	
Economic: strategic delivery of objectives for the future	Attracting and retaining a highly skilled population	0	Situation similar to present day base case	++	++	++	**	Creates opportunity to create very strong new environment adjacent to KSP	++	++	++	Creates opportunity to create very strong new environment	+	More modest expansions may not create critical mass
	Facilitating strong labour market links to growth nodes outside Swale	0	Situation similar to present day base case	+	+	+	++	Links to rail station in Sittingbourne not especially strong, even with major PT interventions. Access to Teynham station is strong under variant D.	+	+	+	Links to rail station in Faversham not especially strong, even with major PT interventions. New station options could assist	++	Proximity to rail stations in Newington will assist commuter links to London, Medway and Canterbury. This is likely to be an important attribute in future labour markets. At Upchurch these
	Facilitating strong labour market links to jobs inside Swale	0	Situation similar to present day base case	++	++	++	+	Proximity of KSP could be significant benefit, with the potential for creation of an 'innovation district' with colocated jobs and housing. Considerable distance to KSP or urban areas under variant D, but more easterly junction location may be advantageous, abstracting traffic from A2 further east.	+	+	+	Location well located for strategic road network	+	Locations well located for strategic road network
Economic: Deliverability	Likely infrastructure cost efficiency per home (positive=efficient)	--	Likely to need new link road at the minimum, and possibly a new M2 junction, but difficult at the moment to see how this might be paid for, given distribution of growth	--	--	--	--	Likely to need new link road at the minimum, and possibly a new M2 junction, but compared to base case this is scenario likely to be more expensive	-	-	-	Sharing infrastructure with likely expansion on Duchy sites should moderate cost per home, but compared to base case this is scenario likely to be more expensive. This scenario assumes that A2/M2 road still required.	-	Sharing infrastructure with likely expansion on Duchy sites should moderate cost per home, but compared to base case this is scenario likely to be more expensive
	Market appetite for development	--	Viability on Sheppey likley to be problematical, leading to difficulties in plan delivery. This situation is currently existing, but growing allocations pro-rata likely to exacerbate the situation	+	+	+	*	Values suggest that market appetite to south of Sittingbourne is present, but infrastructure costs will impact viability.	++	++	++	Strong values mean that markets likely to pick up proposals with enthusiasm	++	At Newington, site proximity to station is likely to assist in market uptake. At Upchurch these benefits not in place.
	Ability to address transport & air quality constraints to delivery	--	The BAU scenario rolls forward the existing strategy, with housing growth proportionately increased. The delivery of the scenario requires the solution to the transport infrastructure shortages identified in the current plan's examination. The BAU scenario explored here assumes that A2/M2 link road is in place, which might deal with these problems, but there difficulities in seeing how this might be paid for, given the distribution of growth around Swale.	++	++	++	++	Scenario 2's co-location of housing growth with the site of the potential A2/M2 link means that this scenario makes the delivery of this road most likely. S106 and /or Grampians could see this link delivered, to the wider benefit of Swale re: congestion and air quality.	-	-	-	Location of growth away from main A2 corridor may allow this option to sidestep the immediate congestion and air quality issues which affect some scenarios. However, distance to the A2/M2 link location means that it will be more difficult to use the value released by this growth to pay for this link (although CIL's ability to pay for strategic issues may make this possible, if a CIL was to be set).	--	Classed as red because AQMA at Newington High Street presents serious obstacle to further growth in the area. This could be alleviated if Newington got a bypass as part of proposals - but more information needed regarding whether 2,500 homes would be enough to make a sufficient contribution to paying for costs. A2/M2 link likely to be required alongside these bypass proposals, further raising costs. More work needed to clarify costs and funding as a result of these proposals. Rated red for now but this could be reviewed.
Social: building equity and social capital	Regenerating less well-off areas of Swale	0	Situation similar to present day base case	+	+	+	*	Proximity to Sittingbourne will grow local retail catchment, if well managed, but will do little for Sheppey	0	0	0	Faversham is one of the better off areas of Swale. Proximity to Faversham will grow local retail catchment, if well managed, but will do little for Sheppey.	0	The villages are amongst the better off areas of Swale
Environmental: conservation	Preserving and enhancing environmental and ecological systems (positive=conservation)	-	Incremental growth on urban fringe avoids rural encroachment, but will create environmental access disbenefits for existing residents	-	-	-	-	Will build on rural land, but avoids main areas of constraint and protects access to rural open space for residents on town fringe. Red status conferred because there are important issues to take into account regarding the extent of Areas of High Landscape Value, with a categorisation other than "conserve". These must be dealt with at any design stage, along with issues around road alignments, which might also run through affected areas.	-	-	-	Will build on rural land, and may damage the setting of the AONB. There are strategic decisions to be made in the case of scenario A regarding whether or not a green break between the existing urban area and the new development is desirable. However, these scenarios are built outside main areas of constraint and protects access to rural open space for residents on town fringe. It could be argued that Variant C performs worse on Environmental grounds, given that it affects the setting of the AONB - arguably, this could be classed as a "red".	-	Will build on rural land, but avoids main areas of constraint and protects access to rural open space for residents on town fringe

We discussed scenarios with Councillors. This provided a valuable insight into local development pressures, concerns, and opportunities

The scenario comparisons provided above were the work of PBA.

However, we are well aware that these scenario comparisons are far from being the final word on the subject. It is critically important that the Council collectively 'owns' any future land use strategy. Without political support, no progress can be made. This must be the Councillors' plan, and not the work of the development industry, landowners or outside consultants.

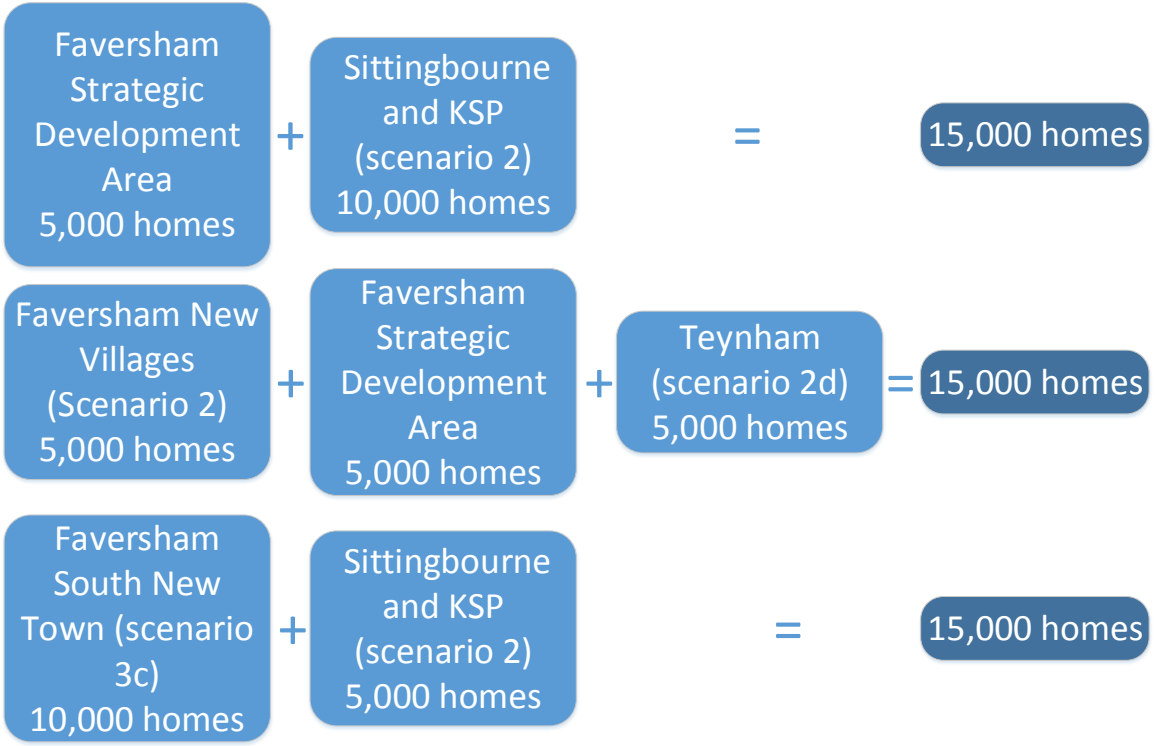
We introduced the scenarios to Councillors in a workshop session. This was a very valuable process. Councillors' views have been taken away by officers, and will be used to improve and modify plans over time.

Hybrid scenarios are likely to be necessary if we are to get to 15,000 homes, and take the best elements from the different scenarios. Higher delivery could be possible if more sites were chosen

Explanation of scenario

It is of course possible to take the element deemed most attractive from each of these scenarios, and use these elements as a basis for a future spatial strategy. We have not explored this scenario formally, because the possible combinations of different elements are too numerous to analyse successfully. In any event, the choice of elements would need to follow detailed discussion within the council.

As an example, though, we could get to 15,000 homes in the following ways:



A very early start on visualising some outcomes

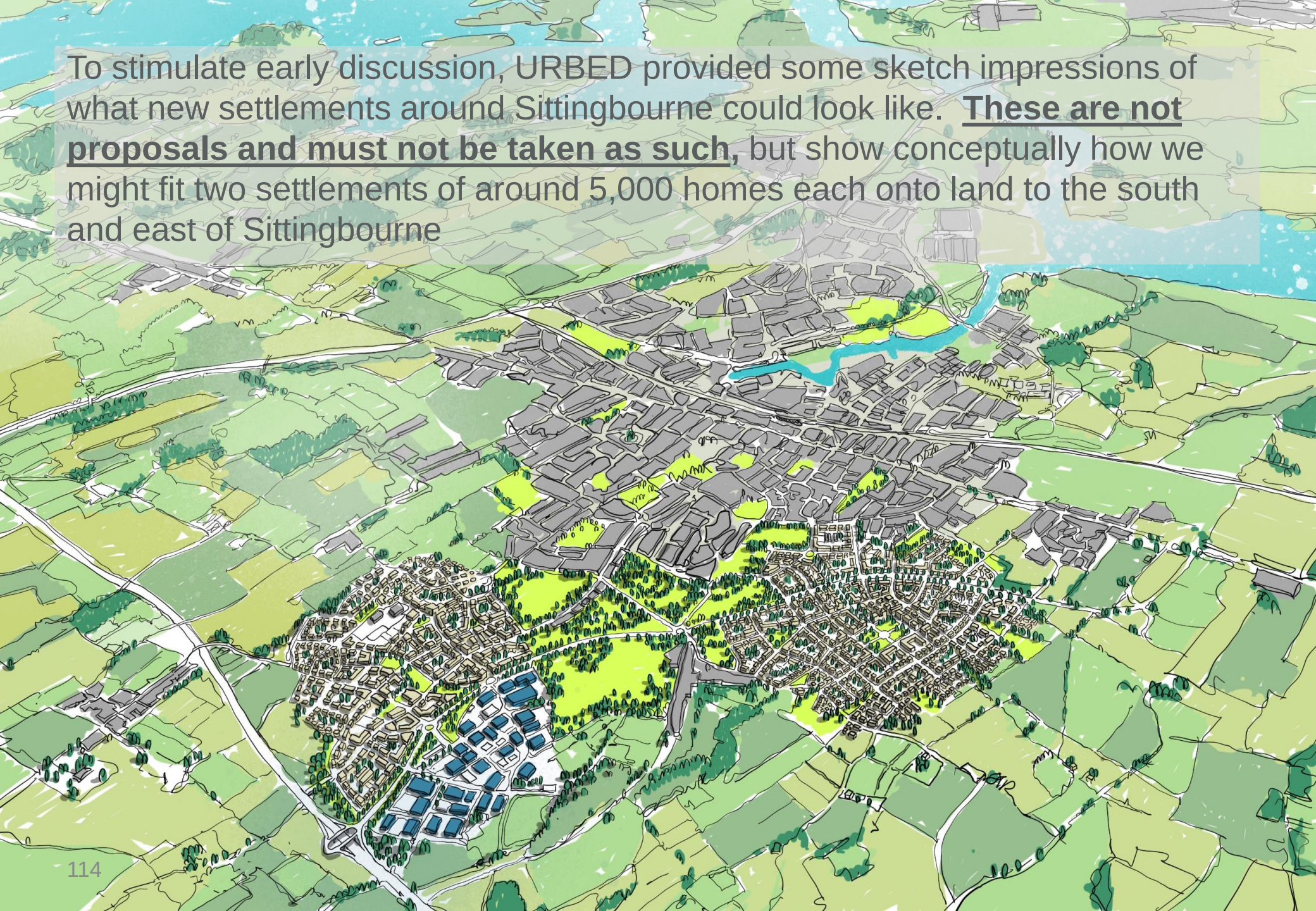
The development proposed could create a step change in Swale's prosperity and quality of life. It is **not** just another set of housing estates. Examples from elsewhere show how we might define Swale's new 'villages'

Best practice elsewhere suggests that we need to be creating developments with a superb sense of place. This about far more than simply delivering housing 'units', or even just homes – we need to generate development which can help generate a sense of individuality and pride in their inhabitants.

The design of proposals is critical in how this works: there needs to be a focus for the settlement. Swale needs sustainable villages which weave the human environment into the natural world and create architecture at its proper scale.

Swale needs villages that create rooted communities, offer choices both to our ageing populations and talented workers in housing, transportation and amenities: a lively community where both residents and workers feel invested.

URBED sketch example, showing settlement coherence



To stimulate early discussion, URBED provided some sketch impressions of what new settlements around Sittingbourne could look like. **These are not proposals and must not be taken as such,** but show conceptually how we might fit two settlements of around 5,000 homes each onto land to the south and east of Sittingbourne

The Swale planning team had a large number of comments on the sketch – showing that there is a long way to go on these complex issues. **None of these issues are tied down, and there is a great deal of work to be done before we get to the right location and configuration of growth**

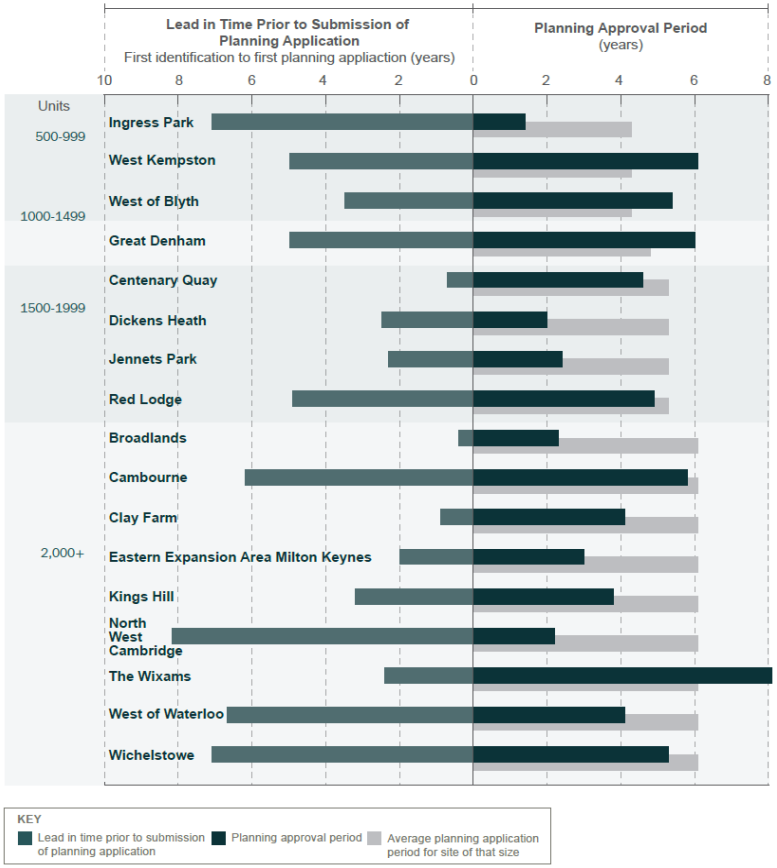
If Swale wanted to build a new settlement, when could it start and how quickly could it deliver homes?

How long do major settlements take to get through the planning system?

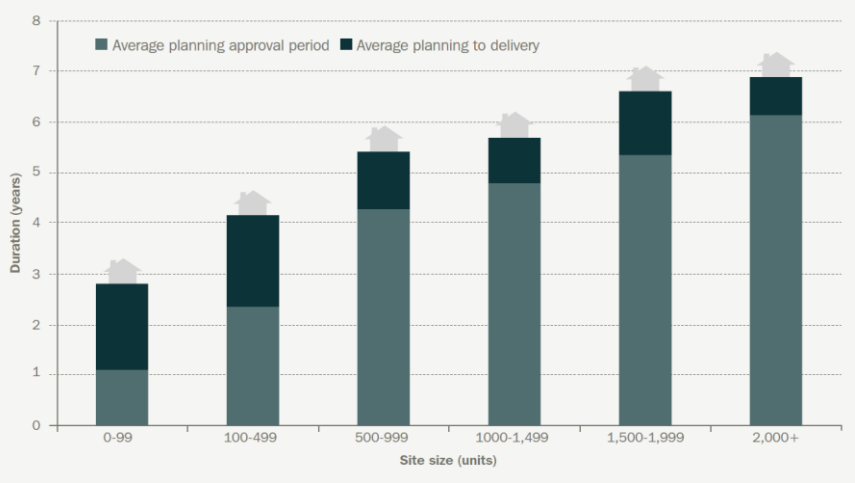
Analysis has been undertaken on the average 'planning approval period' and the subsequent period from receiving a detailed planning approval to delivery of the first house on site. The research found that getting accurate data for this on some of the historic sites is difficult, so the analysis focused on 18 of the sample sites where information was available.

Larger sites take longer to approve on average. The greater the number of homes on a site, the longer the planning approval period becomes. Research showed that there is a big step-up in time for sites of in-excess of 500 units.

Average lead-in time of sites prior to submission of the first planning application



Average planning approval period and delivery of first dwelling analysis by site size



Source: NLPNLP November 2016 Start to Finish How Quickly do Large-Scale Housing Sites Deliver?

How quickly do houses get built when sites are under way?

There are no hard and fast rules as how to predict how many houses can be delivered from a single development area. Below, we explain the range of factors which influence the delivery rate. In the end, this is a process of triangulating the different sources of evidence and using judgement to arrive at an estimate.

Market strength: Research shows that, unsurprisingly, the state of the housing market is a major influence on build rates. Of course, we can expect to see a number of cycles of the property market throughout the period of a major settlement. A major unknown, though, is the trend rate of growth that sits behind those cyclical movements.

Market absorption rates: Estimates of likely delivery rates may be informed looking at the past ability of the local housing market to absorb new housing.

Proportions of new build sales: research by NLP found that housing sites with a larger proportion of affordable homes deliver more quickly, where viable. This is because there is no difficulty in finding buyers.

The number of available outlets: this is potentially important because where a single development area is able to be split up and developed by different developers, housing output from the development area overall tends to be higher. The development areas discussed in this document are very large, frequently with good highway access and a large number of outlets possible. There is likely to be little physical obstruction to creating large numbers of development outlets, but in practice, the number of likely outlets at each development area is not likely to be limited by factors such as highway access, but will instead be limited by developers' judgements about the number of housing sites which could be built out simultaneously.

Build rates: estimates of delivery rates may be informed by looking at delivery rates elsewhere. Prior to the 2007 downturn, the rule of thumb was that a typical housebuilder producing estate-type housing under a 'normal' mix of houses and flats could produce and sell one house a week (about 50 per year). Experience from the market found that it was very difficult to increase this sales rate from a single development area. However, multiple outlets competing with each other on adjacent development areas could each sell near to 50 units per year. This was part of the reason that some national developers trade under multiple brands. For example Barratt Development PLC trade as Barratt Homes, David Wilson Homes, Ward Homes and Wilson Bowden Homes.

At Bradley Stoke (to the North East of Bristol), the average annual output was 7.5 units per week (although it is worth noting that the "record" annual output in the best year was 22 per week, when 15 housebuilders were competing on site). However, we do not believe housebuilders would want to produce housing at anything like this rate for long, as it may erode values.

Scheme	Peak Annual Build-Out Rate	Annual Average Build-Out Rate
Cambourne	620	239
Hamptons	548	224
Eastern Expansion Area	473	268
Cranbrook	419	321
Broughton	409	171

Source: NLP analysis and various AMRs

Swale has developed a delivery trajectory. This works with the Government's likely new housing delivery target of 1,054 dwellings per year. It shows that the target could be met, if the Adopted Local Plan sites were delivered plus a number of new strategic site options

The evidence suggests that we may need more than one new large site to deliver homes at the pace we need.

The analysis shown below suggests that the Government's targets can be met- but achieving them is likely to need the delivery of the current plan, plus a new allocation (which could add up to around 2,000 homes by 2037/38 and 4,000 by 2056), and then three new 'Garden' allocations.

In total, over the long term – by say 2070 - these 'Garden' developments would be for around 10,000 homes, the second at around 5,000 homes, and the third at around 2,500 homes. Those numbers, though, are the possible long term build out, and it might be that this volume would not be required. If so, it would be relatively straightforward to take account of this in the plan process.

Irrespective of the long term, the key thing is to achieve the Government's *per annum* housing target. Current analysis suggests that this is likely to be around 1050 every year. As discussed above, there are a great number of influences on whether this can be achieved – many of which are not under the control of the Council.

Year	Notional plan period	16/17 plus bklog*	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	Total by 2037/38
Government housing target to be delivered against Swale current local plan																								
Govt emerging minimum target	Assumes a 1,054 dpa target (23,188 for the period) for new plan period. Existing plan targets prior to that point. *Backlog prior to 16/17: completions for 14/15 and 15/16 were 618 and 592 respectively, which against 776X2 leaves a backlog of 337, added to the 16/17 number.	1112	776	776	776	776	776	776	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054	21,578
BAU (adopted Local Plan)	Adopted Local Plan (estimated actual likely delivery not trajectory delivery)	615	650	650	650	700	700	700	700	700	700	700	700	700	700	700	650	650	650	650	650	650		14,165
Gap between Govt target and Swale Plan		-497	-126	-126	-126	-76	-76	-76	-354	-354	-354	-354	-354	-354	-354	-354	-404	-404	-404	-404	-404	-404	-1054	- 7,413
How Swale can reach the Government housing target by 2037/38:																								
BAU (adopted Local Plan)	Delivering adopted Local Plan (estimated actual likely delivery not trajectory delivery)	615	650	650	650	700	700	700	700	700	700	700	700	700	700	700	650	650	650	650	650	650		14,165
BAU (LP) new allocation	Business as Usual + assumes an allocation with lead in time of 6 years from from 2017/18. Will extend beyond plan period. Assume 4K in total	Planning lead-in period & site prep						75	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	1,875
Settlement 1 (assumed 10,000 dwellings by 2054)	New settlement 1 assumed to be 10K with lead in time of 10 years from 2017/18, assumed higher delivery with more outlets	Planning lead-in period & site prep										75	150	250	250	250	250	250	250	250	250	250	250	2,725
Settlement 2 (assumed 5,000 dwellings by 2067/68)	New Settlement 2 assumed at 5K with lead in time of 10 years from 2017/18, but with assumed lower delivery rate than 10K. Will extend beyond plan period.	Planning lead-in period & site prep										75	150	150	150	150	150	150	150	150	150	150	150	1,725
Settlement 3 (assumed 2,500 dwellings by 2042)	New settlement 3 with 9 year lead in from from 2017/18	Planning lead-in period & site prep									75	150	150	150	150	150	150	150	150	150	150	150	150	1,875
How close does Swale get to reaching the target?																								
TOTAL DELIVERY	total delivery	615	650	650	650	700	700	775	820	820	895	1120	1270	1370	1370	1370	1320	1320	1320	1320	1320	1320	670	22,365
Delivery gap (new delivery plans against target)		-497	-126	-126	-126	-76	-76	-1	-234	-234	-159	66	216	316	316	316	266	266	266	266	266	266	-384	787

Recommendations and next steps

Swale needs to adopt a new approach if it is to capitalise on this opportunity

History suggests that the UK has difficulties in developing new settlements and paying for associated infrastructure. The result is that many new developments are disappointing in their design and infrastructure and impact on the built and natural heritage. Many people have lost confidence in the UK's ability to deliver high quality settlements, and are therefore sceptical of such proposals.

It is clear that the UK needs a new approach – or at least, resuscitate the best of past approaches taken in earlier periods. The good news is that the issues are relatively well understood, and many of the necessary legislative and legal frameworks are in place. Across the country, different models are being tested and developed.

Why does the current planning and development system produce sub-optimal results? (1)

Team members URBED have looked closely at new approaches to delivery of garden settlements, and have looked at why the current system produces disappointing results. There is a short answer, and a more detailed answer. Below, we present both.

The short answer to this question is that the UK system – which sees permission predominantly granted to major housebuilders - is not effective at holding on to the huge uplift in land values created when planning permission is granted. If the desired future is to be delivered, then the Council will need to think carefully about how to set up the development so that the dramatic, unearned increase in land value created by designating land for housing (rather than agriculture) is obtained for the benefit of all – rather than simply accruing to private interests. This is morally defensible – given that the value is created by democratically-led policy decisions – and commercially sensible, because development can proceed more rapidly if it is backed up by timely infrastructure provision. This point is accepted across the political spectrum.

URBED have provided more detailed answer to the question above. It requires us to sketch out the development process, and understand where the money goes at each stage.

Under the current system what tends to happen is that private land that is a prospective housing allocation or 'optioned' – meaning that landowners are approached by a development company which promises to get planning permission for land. Developers might compete with each other to offer the landowner the most attractive future price for the land, but little money changes hands at this stage. This is an agreement: if planning permission is granted, then the landowner agrees to sell land to the developer or land trader at an agreed price. Options can either be agreed directly with one of the house-builders, or via an intermediary such as a land agent. These options generally last for a set period of time and can lead to a process of speculation as land and options are traded. Through this process land prices are bid up and over inflated land values can become crystallised.

The company holding the option will then seek to promote the site through the planning system, often by challenging the local plan process and seeking to undermine the case being made on sites being considered as an allocation. It does this because when the land goes in the plan, it becomes much more valuable – because there is less risk that it will stay as agricultural land. The value of the allocation is very high – so developers are willing to pay for very expensive consultants and lawyers to ensure that their site gets into the plan.

Once a planning allocation has been made the option is locked-in and the land value crystallised – and gets entered onto company books as an asset. If it is not already controlled by a house builder it will be sold to one or more of the volume house-builders. In some cases, they will add the site to their land bank (their business model requires them to maintain at least three years supply, so it is possible that nothing happens for a while).

Although the site might now be in the plan, the process is not finished. Developers must now secure an outline planning consent. This involves a significant financial commitment and it is often the case that only the largest house-builders are able to fund the fees involved. It is at this point that discussions take place about the quality of the scheme, the infrastructure requirements and the planning obligations. By this point the land value has often already been fixed earlier – based on assumptions about what obligations will be entered into made at a time when potential buyers are bidding

(2 - cont)

against each other. Developers are trying to retain their profit margin against a fixed land value – and the only way to do that is to try to reduce costs.

Because an inflated land value is fixed too soon the planning process becomes adversarial. Developers are unable to agree to demands that will increase costs and therefore fight the planning system on issues of design quality and Section 106 Contributions. Meanwhile the planning authority loses faith that it will be a quality scheme and seeks to add more controls through design guidance, planning conditions and S106 contributions. The developer counters by seeming to agree to the design guidance but asking that it be 'illustrative' in order to maintain flexibility. The result is schemes that are often disappointing, and where the size of the scheme seems to bear an inverse relationship to the quality achieved.

Because of this it is possible that a scheme in a very high value area is rendered unviable by planning requirements, not because the planners are being unreasonable but because developers have paid so much for the land. This undermines the traditional process of development in which the land value should be a residual – by which we mean the land value should be what is left once all other costs have been determined.

This process can even happen on publicly owned land. Here the usual development route is for the land owner to seek a private sector partner. A beauty contest is undertaken through a tendering process to appoint a development partner who again tends to be one of the volume house-builders. The public sector land owner will load their tender specification with quality requirements and performance indicators but they are also under an obligation to get best value for the land. The bidders will promise the earth as part of the bidding process including words like 'we will seek to…' to build in some wriggle room. Once the preferred bidder has been identified the real negotiations will begin and many of the promises will be scaled back once more detailed viability work has been undertaken.

Then, once a developer is in place with planning permission implementation will start at the developers pace. As a rule of thumb a house builder will expect to sell one to two homes a week from each sales 'outlet'. A large site may support a number of sales points if they can be differentiated but that still means a few hundred homes a year. This means that an urban extension 5,000 homes will take 20 years to complete and somewhere like Ebbsfleet up to 60 years. This bears no relationship to local plan timetables.

The problems will be compounded in a region where there a number of large schemes competing in the same housebuilding market. The volume house builders only appeal to a segment of the existing market (typically only a third of house buyers would consider a new build). The sites will therefore be competing for a limited pool of buyers leading to problems with market absorption rates.

There is an opportunity to rethink the process with the aim of increasing delivery rates, capturing land value to invest in infrastructure and achieving quality development.

A more active, Dutch-style development role could be taken by the Local Authority, buying land at or near agricultural values, and capturing land value uplifts to pay for infrastructure

How can Swale get the design quality and infrastructure it needs?
1: The Master Developer Model and the “plot passport”

There is an increasing acceptance that the process by which quality development is achieved involves a master developer. This is the process by which many traditional urban areas in the UK were developed from Edinburgh New Town to Bath and indeed the garden cities and the new towns. It is also the process by which most large scale developments take place in other parts of Europe and elsewhere in the world.

A master developer is responsible for developing a masterplan for the settlement and for putting in place the infrastructure. This would need the master developer to undertake design and layout masterplanning to facilitate this stage. However, the master developer is not responsible for building any of the homes or other buildings. Instead what the developer does is package-up land for sale to small scale developers. This is done through a process of plots. The master developer puts in the roads and divides the land into plots.

The masterplan is then translated into a set of rules for each plot which in the Netherlands become what is called a plot passport. These rules are then made a condition of the sale or lease of the land and so are enforced through land ownership rather than planning powers. Ideally the rules would be a light touch as possible. Typically, a plot passport can be included on a single side of A4 paper. The rules relate to the height of the building and the position of its street-facing wall. It specifies whether the building should join to those on either side and can include details of boundary treatment and where parking is allowed. However, it often says nothing about use, or indeed about architectural design, allowing the plot to be used for housing, retail or offices. The rules that are included in the plot passport are rigid and non-negotiable meaning that plot owners are left in no doubt about what they are allowed to do. It also means that consents can be handled through an administrative process that checks the proposals against the rules without the need for discretion, debate or further consultation.

It may seem counter intuitive that a process such as this with limited aesthetic controls will create good quality places. However, the experience is that it does and does so much more effectively than prescriptive design codes. There is scope to include some design guidance in the plot passport, including materials that can be used, proportion off wall to window etc. This will help areas develop different characters but are still based on the principle of as few rules as possible that are specific and non-negotiable.

Using the passport as part of the contract, the master developer sells plots to individual developers. This can range from the sale of individual plots for self-build or custom-build up to the sale of a few hundred plots to larger house builders. In between this there will be an opportunity to sell smaller numbers of plots to local developers or housing associations to increase the diversity of product. A proportion of the plots would be reserved for social and affordable housing and these would not have a value. So, depending on the density of the housing proposed, the cost of each plot (less the social housing) would generate a land value that would return to the master developer. This land value would be the same as the current market value for serviced housing land. The land receipt would be used by the master developer to fund the provision of roads and infrastructure with the residual amount going back to the land owner.

1: The Master Developer Model and the “plot passport” (cont)

This is a very well established process that used to be common in the UK and still is elsewhere in the world. The master developer could be a council, or alternatively might be a development corporation or a new town corporation. Recent changes to the law have made setting up such bodies much easier. These corporations could either be specific to a particular scheme, or might cover a number of schemes.

There are other models for master developer which are private sector based and there are a handful of companies seeking to develop this as a business model including Urban and Civic, U+I and of course Grosvenor, who date back to the development of Mayfair three hundred years ago, using a very similar model. It is even possible that some of the volume house-builders may adopt a similar model.

However, the general view is that where there is a private sector lead, there will be a need for the public sector to be a partner in the master developer.

If such a model is adopted, complex and time consuming Section 106 deals are not required, because the master developer (and through the master developer, the local authority) has directly captured the land value uplift. Land value uplift could be used to help pay for wider infrastructure, such as contributing to major road infrastructure improvements as necessary.

Other possible models exist. These might involve the public sector creating developable plots, setting the land price, and then judging competing developer bids for land on the basis of quality.

Much of this feels very different to the way that we have been developing in recent years but it is not particularly radical. What is difficult is the process of getting from where we are now to having a master developer in place. This is covered on the following page.

How can Swale get the design quality and infrastructure it needs? 2: Implementing a new model

In order to achieve Swale's objectives, we need to establish a new mechanism for delivering large scale housing development. This will incentivise the creation of long term value and give the public sector a stake in the development growing forward.

However, getting to this point is the difficult bit. Where land is in public ownership, progress is more straightforward. We understand that public sector land holdings in Swale are relatively limited.

Where a public sector land ownership was already existing (either currently, or after a land purchase) the council could decide to control the master developer directly, or via an arms-length development corporation or some form of public private partnership. In each case the organisation would need to have its own staff and to have planning and compulsory purchase powers.

However, the most common situation with regard to the suggested allocations relates to sites in private ownership. At the time of the new towns these were dealt with through Compulsory Purchase and there is still a view that this is the cleanest way to capture value and to ensure quality development for large strategic sites. However, most councils no longer have the expertise or capacity to undertake a CPO on this scale so that there would probably be a need for an agency to make this a reality (HCA could perform this role after changes in Budget 2017). It is important that there is a CPO mechanism in place to do this as a 'stick' to bring owners to the table.

However, this should not be about CPO. There should also be 'carrots' to encourage owners to participate in the process. This should include a willingness to establish a private sector master developer with the local authority as a partner. As with other public sector land owners there should also be a mechanism to pool land ownership and to take out value only once plots have been sold. In this way development can be coordinated allowing investment in infrastructure and creating an incentive to create long term value from a quality development rather than short term gains.

A series of different development models including Joint Ventures, Local Development Agreements, Urban Development Companies and even Development Corporations are possible. Detailed work will be needed to pick the right approach.

The role described for the Local Authority could work to de-risk investment. That lower risk profile would mean that private developers would be happy to take a lower profit margin – again assisting with the viability and deliverability of development. There could be a role for Prudential Borrowing, repaid by future receipts through Council Tax or Business Rates.

This could also be a significant improvement to Local Authority finances. The context of major cuts to Local Authority grant funding, new sources of funding should be sought, and ground rents, Council Tax receipts and retained business rates could all be used to create an income stream for the local authority (or community trust, if the Letchworth model was pursued).

How can Swale get the design quality and infrastructure it needs?
3: The role for CIL and S106

Above, we have suggested that a master developer approach be adopted. It could be possible that this would could allow Swale to sidestep the requirement to agree s106 deals or run a separate CIL.

However, not all sites will be covered by the master developer model, and even where sites are working under this model, different structures could be imagined. To cover those instances, it is worth examining the role for Community Infrastructure Levy (CIL) and Section 106.

Infrastructure delivery is of critical importance to Swale. This point was proven in the last plan enquiry. Housing development in Swale cannot proceed until road infrastructure and air quality issues are addressed (probably including an A2/M2 link, A2 corridor upgrades, and/or some package of bypasses including Bapchild/ Teynham/ Newington).

There is a very good argument for a big role for central Govt/agency funding being used here. These are strategic infrastructure items and so serve very much wider markets than Swale residents and businesses; they are expensive; and they will need a cocktail of funding sources assembled.

There is also a good argument that development should make a contribution. There is still a lack of clarity about how strategic infrastructure can be paid for. The intention is that CIL and S106 should be improved. The 2017 Budget announced

a) **A consultation on changes to s106 pooling in some circumstances.** This is likely to be helpful to Swale. Even large single sites like KSP would come forward in separate permissions, each with its own s106 agreement. The current pooling rules mean that we would be unable to create a strategic funding 'pot' to pay for strategic infrastructure from the individual s106 agreements. It appears that this problem will be solved in future.

b) A consultation on changes specifically targeting land use change (eg agricultural values to housing values). This is also very helpful to Swale. There will be very significant value created by planning permission when we moving from agricultural values to housing values.

However, the budget did *not* announce anything about relaxing the S106 tests (which state that, amongst other things, the s106 charge must proportional, and related directly to the ameliorating the impacts of development). This is bad for Swale, because it means that S106 is likely to be unable to be used to pay for A2/M2 from other developments which do not immediately benefit from the A2/M2 link. It appears that CIL will be the only way of funding strategic cross-site infrastructure.

A possible way forward might be as follows, assuming for sake of argument that Swale decided to progress with an east Sittingbourne site and with a south Faversham site:

- Layer 1: "new" CIL targeted on greenfield to residential change of use – spread right across Swale if necessary, including KSP area and Faversham – would raise money for strategic infrastructure and could be spent anywhere on anything relating to the delivery of growth (although we can expect it to be spent on A2/M2 links and A2 improvements). **The Council should consider getting CIL on greenfield land in place as soon as possible, in order to hold down hope value.**
- Layer 2: Poolable S106 on S106 that would be more closely targeted on mitigating specific development impacts other than strategic transport.

The two layers should be clearly directed to different infrastructure items, to avoid accusations of "double dipping" to pay for infrastructure. This two-layered approach has the effect of reducing the dependence of Swale on individual proposals – because Swale will find it easier to get the money to pay for A2/M2 link without relying on adjacent development.

An important reminder for developers and landowners

We can expect that each home built in Swale on strategic sites will be likely to need between £30,000-£50,000-worth of supporting infrastructure spend. In the absence of a master developer or similar structure, this is likely to be collected by either CIL or S106.

Without this infrastructure spend, then no planning permissions can be granted, meaning that there is no development opportunity.

It is important to bear in mind that CIL and S106 are ultimately paid out of land values.

This means that land with residential planning permission may be worth much less than landowners currently anticipate.

It is critically important that this point is well understood by landowners, so that they do not have unrealistic expectations about the value of their land.

Equally, developers should be careful to ensure that these costs are factored into their bids for land.

The Council will be unsympathetic to claims that development on green field sites is unviable.

If we wished to get these settlements into the current process, a new plan will be needed

For now, though, it is important to get the underlying basic concepts agreed: the Council must agree that this is something that they would like to pursue.

The next steps could be as follows, and are based on the TCPA report *Creating Garden Cities and Suburbs Today*.

The first step could be creation of a vision and then an accompanying design brief. There is no need to belabour this step, but it would be important to see this in the context of what Swale wanted to be in future, in the context of a rapidly changing world. *Reading 2050 Vision* is a good example. Armed with the vision, a design brief for the new settlement could be quite quickly created. We suggest that the design brief could include the necessary sequential test and site selection criteria, and include models of land value capture. Full weight must be given to the deliverability of sites.

The second step could involve investigative work on setting up the master developer model described above (or other delivery model). This would need to be seen as a major corporate initiative by the Council and represents a significant strategic decision which must be made in full understanding of the ramifications, costs and benefits.

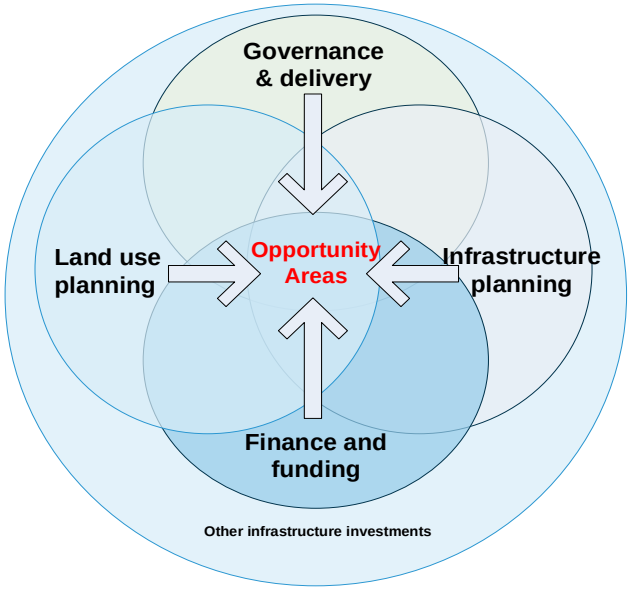
The third step could be to undertake an informal consultation could be undertaken, perhaps using a version of this document alongside the design brief, asking third parties to submit proposal for new communities which fulfil the design brief's aspirations. **The benefit of this approach is that it would allow all proposals to be put forward in a transparent way**. This would be a transparent way of proceeding, and ensure that the process was not open to challenge from landowners who could argue that they never realised the possibility of putting forward their sites for consideration under a relatively radical new plan.

The fourth step would be to insert proposals into the plan process, using the sites identified by the local authority and submitted by third parties and meeting the criteria of the brief could then be used in the identification, testing and consultation on options for growth, until the preferred option is identified and adopted in the Local Plan.

Clearly, this approach would break the current Local Plan settlement strategy. Local Plan Review processes (such as the one currently under way) should not undermine some of these fundamental principles of the Plan: if they do, they no longer are seen as reviews, and instead are viewed as entirely new Plans. But Swale may already be into some of this territory when we take account of some of the proposals being made around both Sittingbourne and Faversham.

Exactly how this process is best negotiated will require further thought.

Development on the scale proposed needs a major role for the Swale Planning team in focusing governance, infrastructure, finance and land use around the site. Sub-regional arrangements could be made. Strong political leadership is required



Swale could use best practice from London. London marshals the complexity of the London Plan by designating 'Opportunity Areas' which see focused public investment and private developer interest. Each Opportunity Area is masterplanned (with the creation of an Opportunity Area Planning Framework) which is then delivery tested with a Development Infrastructure Funding Study (DIFS) which looks at infrastructure requirements, costs and funding, and sets these against development viability and build-out trajectory. This de-risks development, both for public and private sector investors.

At some point, a similar approach could be taken in Swale. Having arrived at an agreed set of sites, Swale will need to build up a package of governance, land use and infrastructure planning, and funding and financing support. The objective must be to create development momentum at the sites. This may require land assembly, land remediation, new policy, and/or assistance with the relocation of some of the existing uses.

Across the UK, expertise in these areas is emerging but still quite limited, so it could be useful for Swale to share resources with other neighbouring authorities who could be doing similar things.

The changing political and economic context for local authorities is tending to force the public sector to adopt a more entrepreneurial development role, using and adding to its own assets. Continued public sector funding austerity compels local authorities to be increasingly ambitious in the way that they raise revenue. A number of solutions arise from possible development in Swale, and arise from the possibilities generated through increased Council Tax receipts (driven by underlying household growth) and Business Rates in order to continue to serve the area and its residents. Authorities could commission a review of public sector property to develop an understanding of the scale and potential of the public sector property portfolio in the area, with particular focus on the potential to a more entrepreneurial approach to the development of land around future infrastructure assets. We anticipate that such an exercise could show how better use of assets would deliver more housing in total, more affordable housing, new public sector services and a financial return to the local authority.

New delivery structures might be needed to take full advantage of delivery – perhaps including a Locally Accountable New Town Development Corporation (LANTDC). Proposals could be designated as “official” Garden Villages

This work suggests that Swale will need a new approach to development, potentially involving new delivery structures, to take full advantage of the opportunities before it.

We do not make any firm suggestions here about what these delivery organisations might be. Separate study would be required. However, these could include a Locally Accountable New Town Development Corporation (LANTDC). ‘Local accountability’ would involve councillors’ nomination rights to the Board of the Corporation. Councillors role would not be just that of a representative of their local authority: their first duty would be to the Corporation.

Legislation enabling new locally-accountable versions of these previously centrally-controlled vehicles was included in the 2017 Neighbourhood Planning Act. Draft regulations published in December 2017 set out how these locally accountable New Town Development Corporations (NTDCs) will work, while also providing for a more comprehensive review of NTDC powers. The draft regulations require councils to plan "for the long-term stewardship of the assets of the new town for the benefit of the community.

The LANTDC could take the role of the master developer, although this might not always be the case. Money for LANTDC interventions could come from a number of sources. Money for roads and schools et might come from departmental programmes; local authorities themselves could invest in the Development Corporation to secure future income, using ‘prudential borrowing’; and most would probably come from the ‘patient funds’ – the institutions with large sums to invest for long periods to pay future pensions and insurances. The Homes and Communities Agency has also been provided with extra funding and a reinstated planning and land-buying remit in the Budget 2017. The HCA is ready to support garden towns with what its chair Sir Ed Lister calls a "more aggressive" land-buying stance. However, the strategy and detail of the future HCA approach to garden towns is still under discussion.

Such an organisation is unlikely to be affordable from within the boundaries of a relatively small area like Swale. Swale may need to combine with neighbours to set up such a corporation. If neighbours felt unwilling to join, then other models would be available.

A central Government prospectus sets out how Government can support local areas who want to create new garden villages, towns and cities. It offers tailored government support to local areas with ambitious and innovative proposals to deliver 1,500 homes and above. A rolling process of designation for new town or village status is under way. No special funding is available for designated sites, but it would be valuable to get Swale sites designated, given that this would increase visibility of the programme and position the sites for funding over the longer term.

Swale may need to give itself sufficient time to set up the delivery structures that could be necessary to drive growth and capture land value rises

It might be too much to expect that a LANTDC, or equivalent, would be operational by the time of the adoption of the new plan in 2022/3. It is therefore perhaps unrealistic to imagine that such an organisation could be buying land in advance of the plan allocation to capture land value (although it is possible to imagine that the Council could act unilaterally).

However, as we have pointed out above, there is a critical need to ensure that land value is captured, in order to pay for the infrastructure needed.

This is a problem. We need to ensure that we are able to hold down land values, or else land will be traded at values which are too high, so rendering the right level of infrastructure spending effectively impossible to provide. Above, we have suggested that a CIL could be put in place soon to hold these values down, and have tried to ensure that we use this document to send a clear message to the market about the costs of future infrastructure and the effect on land values.

We may also be able to use the NPPF to our advantage here. The objective would be to avoid putting individual landowners in a position of monopoly land supply: this will create a very valuable dynamic which ensures that only the sites which provide satisfactory infrastructure packages will be allowed permission. If the council was able to keep a form of tactical ambiguity about its intentions for the longer term (years 11-15) then this would help significantly.

Paragraph 47 states that years 0-5 of the plan needs to provide "specific deliverable sites sufficient to provide five years worth of housing"; for later periods, LAs must to "identify a supply of specific, developable sites or broad locations for growth, for years 6-10 and, where possible, for years 11-15."

In effect, then, the NPPF is not required to formally allocated the land for years 11-15, and these may remain as areas of search. Areas of search should be oversized, and be able to supply more homes than are required.

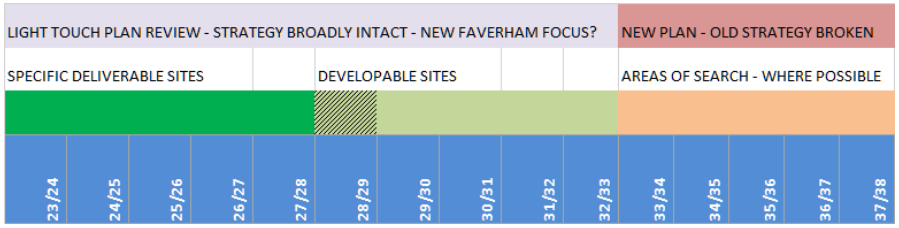
With five year plan reviews becoming a requirement, Local Authorities will be required to review the plan before its land supply runs out in any event, and so frequent review is built into the process.

The next plan review could proceed in the following way. Shorter term supply could be provided from the established plan sites. The additional uplift number resulting from the Government's new housing calculation methodology could be provided from the more settled and less controversial choices to the south of Faversham. Oversized areas of search could provide for the longer term.

There are two implications here. Firstly, we acknowledge that some discussion with CLG would be needed – we understand that an 'area of search' in one plan does not need to automatically be translated into a formal allocation at a future date, but this might be usefully confirmed.

Secondly, this approach would suggest that Swale needs to be actively pushing the Faversham allocation through the system.

This approach may also allow the delivery mechanisms (LANTDC or other) time to get set up and become operational.



Innovative housing delivery methods may improve the build out rate and viability of development. A number of initiatives could be investigated further, including self build communities

Using Private Rented Sector (PRS) investment to broaden the tenure available to new occupiers could increase delivery rates. Around the country, the emerging model is one of developers finding the opportunities and working in partnership with the public sector to secure land at low value and/or agree nominal affordable housing contributions – and agree other elements including access to funding and reductions in planning risk. Some of the cost assumptions (e.g. ongoing management costs) are untested and therefore part of the role of Councils (and HCA) could be to bring forward these sites for development as 'proof of concept' to establish new benchmark costs and values as a basis for future developments.

Using custom and self-build could broaden the appeal of the site to groups which might not find a volume housing product attractive. The argument is that custom and self-build provision would broaden the effective market for new homes, in a context where 75% of the population will not buy a new home from any volume housebuilder resulting in a small number of prospective purchasers for any particular speculative volume housebuilder standard house type range. Igloo (a developer) submitted written evidence to Parliament (Housing and Planning Bill 2015). It suggested that the three principle forms currently operating in the UK are:

- Individual Custom Build - where a small builder delivers a single home to an individual's design either on a site owned by the customer or the builder (the "Grand Design" approach)
- Custom Build Development where a Custom Build Developer secures the site and planning and offers a basic house type with scope for customisation (eg Inhabit, Fairgrove, Modcell, Urban Splash, HAB) and
- Custom Build Enabling where an enabler secures the site, planning permission, mortgages and a panel of Home Manufacturers and then delivers and markets the serviced plots (eg igloo, Cherwell).

Igloo's evidence states that

- 53% of the UK population would like to build their own home at some time in their lives (12%/7 million people in the next 12 months) but only around 10,000 succeed (IPSOS Mori).
- The available evidence suggests that Custom Build is around 3-5 times faster than market sale (Holland).
- In the UK self-build amounts to around 10% of new home production and there is virtually no Custom Build. Igloo finds that in other developed countries, on average, around half of homes are Custom Build or self-build and they build on average about double the number of homes per head of population.

However, Igloo state that *"to be viable Custom Build requires sites in excess of 100 plots. Home Manufacturers require on average a minimum of around ten to fifteen homes per site in order to recover the individual site set up costs and make a reasonable profit (they typically require a profit margin slightly above a builder (say 5%) but substantially below a developer (say 20%) because they do not have sales risk or a significant requirement for capital (as they are paid in stage payments before they have paid their suppliers)."*

There is no question that this is a currently unproven marketplace. Careful policy scoping work would need to be undertaken.

The big picture: next steps

1. Next steps are to develop the **vision for Swale**, undertake early **work on the delivery model and planning strategy** and a **create a design brief** for the new settlement. This needs programming in a **step by step Gantt chart**. This is about members owning and directing a positive, long-term social and economic future– with a potentially radically different, entrepreneurial role for the council

2. **Swale could use the design brief to drive an informal consultation** to test whether landowners or promoters have innovative ideas, allowing them to be active participants in the strategy. A version of this document could also inform the consultation. Great care is needed to avoid creating runaway hope values at this stage – by constantly stressing the need to pay for infrastructure costs

3. **Sites judged as meeting the design brief criteria could then form part of the Plan Issues and Options**. Detailed work on delivery plausibility, delivery model and land assembly would be necessary. The preferred option could be identified and adopted in the Local Plan

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Appendices

Appendix 1 – Local landscape character designations

The Swale Landscape Character and Biodiversity Appraisal 2012 reviewed Swale's landscapes. The primary aim of the document is to guide the process of accommodating change throughout Swale Borough, whilst maintaining the character and local distinctiveness of the landscape.

Landscapes were categorised into the categories shown on the following table. The conclusions reached regarding each of the character areas are expressed using a matrix that encompasses

Condition and Sensitivity. This analysis gives a broad indication of each area's ability to accommodate a change in management or use without loss of overall integrity. The matrix helps to assist in the direction of any policy that might be applied to the land in question.

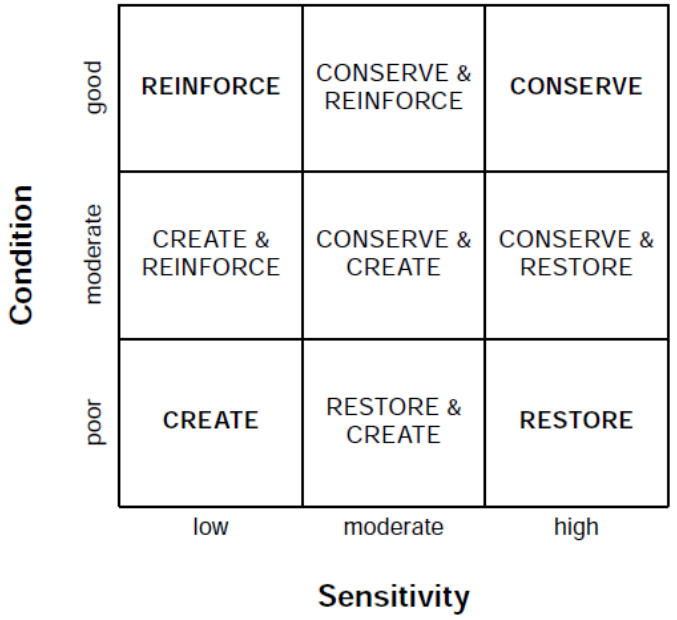
Our approach has been to use this study as follows:

- "Conserve" status Areas of High Landscape Value have been categorised as "Very highly constrained".
- Areas of High Landscape Value with other status have been categorised as "highly constrained" in this study. In NPPF terms, though, this designation could be seen as similar to the Local Wildlife Sites in terms of the hierarchy of international, national and local, which might suggest a higher level of constraint.

The area to the south and south east of Sittingbourne is the main areas affected by the precise extent of the Areas of High Landscape Value with status other than 'conserve'. These are issues that Sittingbourne growth options will need to work through. There may be design solutions which work around the designation, although the proposed A2/M2 link road may run through some of the designated area. It is conceivable that the Local Plan review may also need to look at the extent of the designation.

Our approach as been to recognise the impact on the Area of High Landscape Value by flagging the Sittingbourne options as red under 'red' score under 'environmental conservation', with the commentary referring to AHLV.

Condition and sensitivity matrix Swale Landscape Character and Biodiversity Appraisal 2012



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