

## USING THE THREE DRAGONS TOOLKIT TO DEMONSTRATE THE VIABILITY OF INDIVIDUAL SCHEMES

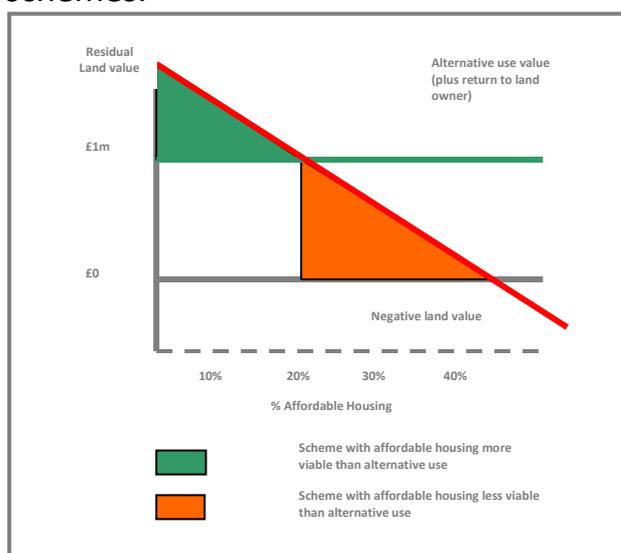
The practicality of delivering new housing schemes is something that local authorities and planning inspectors need to take into account when considering allocating sites or dealing with a planning application. Increasingly, this means assessing whether a site is 'viable' and can deliver the affordable housing and other planning contributions being asked for by the local authority.

Three Dragons works regularly with individual developers, architects and masterplanners to explore the viability of individual schemes. We make use of an Excel based model we originally developed for the GLA – the Three Dragons Toolkit – which enables us to test the impact on residual land value of

- Varying affordable housing targets (with and without grant)
- The new Affordable Rent tenure being introduced
- Code for Sustainable Homes,
- S106 and any potential Community Infrastructure Levy.

The Toolkit can also demonstrate where site-specific costs (eg for decontamination) makes a scheme unviable unless planning contributions (including affordable housing) are reduced.

We have worked with developers of schemes from 5 to 5,000 units. The Toolkit is very flexible and is capable of handling small scale developments with unique property types through to large complex schemes.



Often, particularly at the early stages of masterplanning, there is no firm information on house prices, build costs or housing mix. One of the main strengths of the Three Dragons Toolkit is that it comes with a file of default house prices and build costs and other essential information (e.g. affordable housing costs), based on

published sources such as Land Registry and the Building Cost Information Service.

However the user is also able to over-ride the defaults and insert scheme specific information where this is available.

The following four case studies illustrate how the Three Dragons Toolkit can be used to inform dialogue between local authorities, developers and landowners.

### **Case Study A: Tapton Estates Swadlincote**

Tapton Estates is a landowner seeking to bring forward Phase 4 of a major residential scheme on the edge of Swadlincote. The site is former industrial land and heavily contaminated. The local authority was seeking 40% affordable housing on the site.

The Three Dragons Toolkit was used to carry out a viability appraisal based on housing mix and site decontamination costs supplied by the masterplanner and using published data on house prices and build costs in the area. Use of the Toolkit demonstrated that it would be difficult to achieve more than 10% affordable housing. The scheme has now been agreed with a much reduced overall S106 contribution.

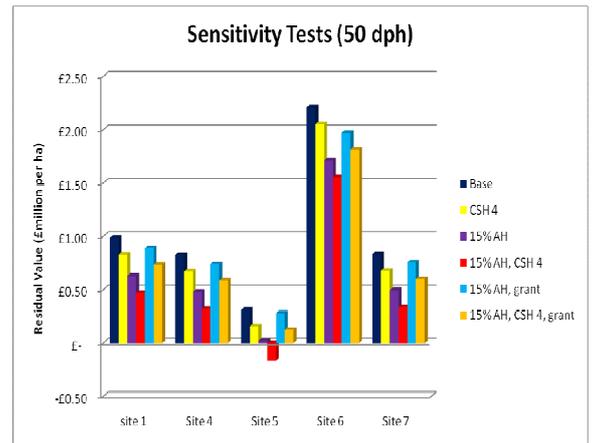
### **Case Study B: Radstone Fields South Northamptonshire**

The Three Dragons Toolkit was used in discussions between the local authority, the landowner and the developers of this major (1,000 unit) scheme. The Toolkit was used to demonstrate:

- The potential impact on financial viability of the proposed design code.
- The potential effect of different levels of development cost, profit margin and overheads
- The likely level of affordable housing which the site would be able to sustain and the impact of different mixes of affordable housing on scheme viability.
- The impact of change in house prices or build costs over time in order to derive an agreed formula for an overage agreement.

## Case Study C: Bridging Newcastle Gateshead

As part of a team led by Glen Bramley of Heriot Watt University Three Dragons modelled the viability of 5 sites in urban and suburban Newcastle and Gateshead at varying densities. The toolkit was used to test the impact of the introduction of 15% affordable housing (with and without grant) and to assess the impact on residual land values of moving from Level 3 of the Code for Sustainable Homes to Levels 4 or 6.



## Case Study D Retirement Housing in Braintree

Three Dragons was jointly commissioned by Braintree District Council and Hallmark Developments to carry out an appraisal of a proposed Retirement development of 68 retirement houses and flats in Halstead. Planning consent had been granted in 2008 for a scheme of 85 units of which 20 would be affordable. The Three Dragons toolkit was used to assess viability in the current market and a revised S106 contribution was agreed for officer recommendation to members reflecting an overall reduction in the number of units and the payment of a commuted sum of £150,000 towards affordable housing with provision for uplift should market conditions improve or build costs fall.