

Infrastructure Capacity & Availability Vs Increased Housing Provision

HBF National Technical Conference – Birmingham 21st
September 2017

Steve Wielebski – Senior Consultant to HBF

Infrastructure availability/provision – a changing world



Reflections

- Importance of infrastructure as the foundation for growth
- Forget Brexit – Look at Government Policy & Objectives for housing
- Infrastructure and utility life 12-years ago
- What has changed since 2005/6?
- House building industry needs and expectations.
- Tensions and conflict affecting infrastructure investment and availability
- Future challenges and opportunities
- Water & Sewerage Sector market reform – an update on the New Charging Arrangements
- Questions.

The importance of 'infrastructure' at a national level

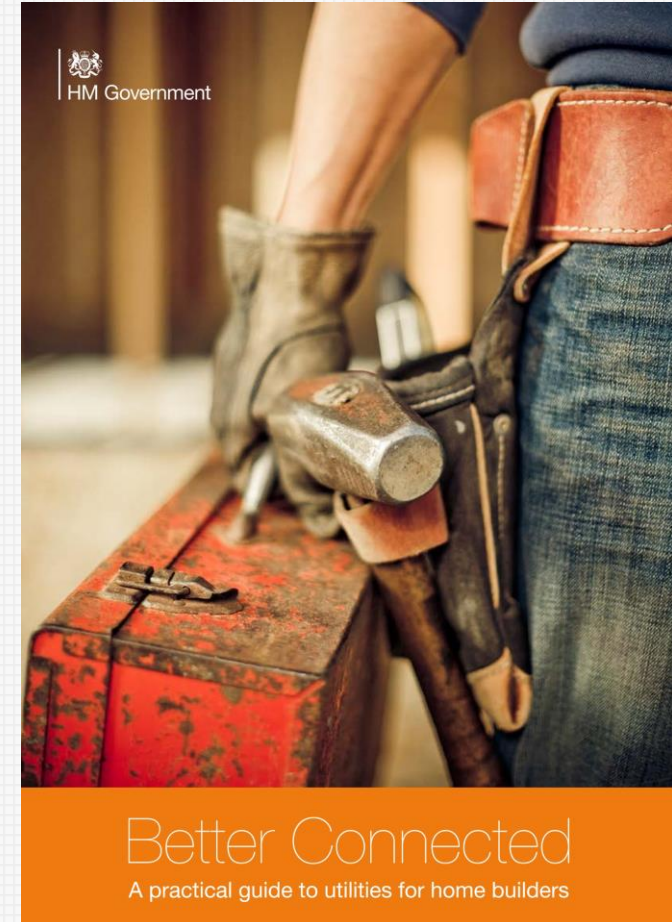
“Poor infrastructure impedes a nation’s economic growth and its international competitiveness”.
(The World Bank – 2006)

“Efficient infrastructure is critical for ensuring the effective functioning of an economy it constitutes one of the main mechanisms to increase income, employment, productivity and competitiveness”.
(World Economic Forum – Geneva 2010)

- These principles apply at the regional/local level – but HBF members are telling us they are encountering a growing number of problems when it comes to infrastructure availability & capacity – this is becoming a real concern.

Government policy & objectives

- Housing – high priority for all political parties
- Planning in principle for certain brownfield land to be confirmed by Dec. 2017 – sites may not be identified in local plans – potential issues when considering infrastructure availability?
- Committed to increasing off-site/modular construction for housing – potentially huge implications for all utility service providers in terms of the timely investment in infrastructure capacity and delivery performance
- A commitment to further planning reform and/or possible legislation to encourage house builders to build more homes and faster.
- Sufficient infrastructure capacity availability seen as a key factor for increased housing delivery – see CLG guidance “*Better Connected*” – December 2014
- Accelerated provision of super-fast broadband



Utility service infrastructure & its provision – the position in 2006

2005/6 - HBF undertook an in depth analysis of the utility service sector due to the poor performance of almost all utility providers seriously affecting house builders and their customers – key findings:

- House building industry not recognised as an important major customer – has this changed?
- The length of time from utility service application to the handover of a new home was around 46 weeks – in some cases longer if an electricity sub-station was to be provided
- Main source(s) of delay – Water and Electricity companies
- Reluctance on the part of several utility companies (DNOs) to accept and work with external multi-utility providers and SLPs
- The application of restrictive practices delaying connections/metering and ultimately, handovers
- Not all house builders were providing the required minimum levels of information
- Poor communication – both ways
- Average construction period for a 1000 sq. ft. house – around 18 weeks
- Highways – no issues of major concern

Major changes between 2006 and 2017 – Utility Sector

- From 2006 to 2010 - through collaborative working, (HBF/Utility Sector/Regulator) areas of major conflict and delay were addressed, but not entirely.
- Positive outcome - improved working practices with a reduced delivery period (32 to 35 weeks) from service application to the handover of a new home - Water & Sewerage Sector still taking the longest to deliver.
- Energy Sector - improved working practices and increased completion with statutory performance requirements now in place backed by financial penalties for non-performance. Major reforms by OFGEM have also led to reduced house builder contributions for off-site infrastructure.
- Water & Sewerage Sector – Ongoing market reform in England and Wales but the jury is still out as to whether this will address the issues flagged up by the HBF. (New Charging Arrangements are due to come into force in April 2018 in addition to increased ‘sector’ competition – series of 19 individual WaSC/WoC consultations expected any time).
- Telecommunications – major issues with Openreach slowly being resolved but the fall-out due to a lack of timely investment in primary infrastructure is clear for all to see. Diversions remain an issue.

Major changes between 2006 and 2017 – Highways

Over the last 5 years – from a relatively benign position a growing number of issues have emerged:

- Increased demands from Highway Authorities for commuted sum payments for future maintenance
- Growing reliance on S37 for highway adoption – not really appropriate
- Unnecessary or inappropriate use of S278 for simple highway improvements, e.g. vehicle crossings
- Adoption delays and delays in bond releases – the latter has the potential to seriously restrict increased investment in new housing provision, especially that provided by SMEs
- DfT Guidance dealing with highway adoptions and issued in early 2017 largely ineffectual
- Increasing calls for a revision of the Highways Act 1980 – an identifiable need for simple, separate legislation for estate road construction and adoption, i.e. simpler, smarter regulation
- Contrary to our customer expectations, HAs' unwilling to meet earlier commitments to adopt

What do we need from the utility sector?

Before Considering house builder needs a few key facts:

Each year the cumulative cost of all utility service connections (excluding diversions, off-site network reinforcement and ICs) is around £0.5 billion.

Off-site network improvements to provide water and sewerage infrastructure capacity add around £100m - £150m to these costs - ICs add a further £130m.

Construction periods for masonry construction are largely unchanged but MMC and modular construction, (increasing in volume) can reduce the construction period for a new home by nearly 70% to around 4 to 6 weeks once road and sewerage infrastructure is in place.

Our Simple Needs:

- Continued recognition that house builders are key customers
- Open, transparent, fair and equitable charging but far more important will be ready access to existing utility networks accompanied by much improved infrastructure delivery timescales. This raises a major question if not a challenge for the utility sector

Can those responsible for infrastructure delivery do so in sufficient time and at an affordable cost that does not compromise project viability??

Tensions and conflict affecting infrastructure availability

- Statutory Local Plans/Planning Policy Statements - definitive source of reference that can be relied upon to inform key investment decisions by house builders and infrastructure providers - i.e. an effective response to the accepted principle of predict, plan and provide.
- Last 4 years - certain utility providers have moved away from meeting the infrastructure needs arising from local plan land-use allocations to a more risk-based approach in an attempt to match infrastructure investment with actual need – a risky strategy when considering the need to increase housing delivery.
- For some utility providers ‘actual need’ is often defined as the submission of a planning application – this is neither appropriate nor helpful when considering the Sector’s statutory obligations.
- Some WaSCs are translating ‘actual need’ into a pre-cursor requirement for house builder funded network modelling before determining network capacity and/or points of connection. The resultant and inappropriate imposition of house builder funded network reinforcement also carries significant risk, namely, delay and the prospect of compromised project viability.
- Certain WaSCs imposing/using S98 off-site requisitions inappropriately – increased cost and delay for house builders

Further tensions & conflicts

- Highway capacity – significant increase in S278 works and S106 planning obligations
- All investment decisions carry a degree of risk – risk must be shared – with infrastructure and utility providers being encouraged to invest ahead of new development rather than delay to suit their own commercial interests
- A failure to invest (in sufficient time) to match the requirements of a local plan results in delay and inequitable demands being imposed upon house builders leading to compromised project viability
- In the case of the Water & Sewerage Sector, whilst the sector is a statutory consultee to the local plan process, subsequent demands for the imposition of Grampian-style planning conditions that either delay development or which seek house building funding for off-site network reinforcement works against the delivery of new homes - it is not an appropriate way forward.
- Question – S37 and S94 WIA 1991 are statutory obligations placed upon all WaSCs – therefore they can be considered contingent liabilities. What stops WaSCs making financial provisions in their accounts to fund infrastructure provision rather than wait for the next 5 year AMP assessment?

Future challenges & opportunities

- Market reform must continue – need for even greater competition in the Utility Sector – this is crucial if we are to increase housing delivery
- Improved utility service delivery performance is essential
- Using MMC and/or modular construction a new home can be available for occupation within a few weeks of starting on site. Question - **are all utility infrastructure providers awake to this fact - are they able to respond to the challenge?**
- There is an underlying need to know what house builders (as major customers) need and in what timescale – collaborative engagement therefore essential
- More investment in infrastructure is required – this has been recognised by the OECD who have been critical of the UK's poor performance. (*OECD Report: Improving Infrastructure in the UK – 2015*)

Future challenges & opportunities (continued)

- The need to recognise the importance of local plan land allocations, together with increased housing provision – utility service providers are part of this important process
- WaSC 5-year AMP funding must begin to define where, when and how infrastructure investment is to be made, i.e. site specific
- How are new technologies to be embraced and integrated into the construction cycle? E.g. PV DC generation to AC, battery technology
- How do we get more out of existing infrastructure assets?
- Can utility service companies, NAVs, SLOs, MU providers actually deliver?
- What impact will the change to electric cars have in terms of grid capacity?
- These challenges and opportunities apply equally to the supporting supply chain – there are no ‘get out’ clauses with housing numbers increasing rapidly.

Water & Sewerage Sector Charging Rules – our major concerns

- No confirmation of the statutory obligations placed on all WaSCs & WoCs under S37 et al, S94 and S185 of the Water Industry Act 1991. Similarly, the right to connect to the public sewerage system under S106 of the same 'Act'.
- Certain WaSCs continue to demand developer funding for network capacity assessments, in particular for foul sewers – we now have several examples of delays in housing provision whilst 'modelling' is undertaken (6 month delays are not uncommon).
- The input parameters that are being used for foul sewer modelling but more importantly, how the results are being used to justify demands for developer funding for off-site foul sewer network reinforcement are not specific to new development.
- Current Ofwat consultation PR19/D-Mex – will this result in improved performance backed by financial penalties?

Water & Sewerage Sector Charging Rules – our major concerns (continued)

- 5 out of 10 WaSCs (mostly southern-based) are relying on an inappropriate use of the planning system to secure developer funding for off-site foul sewer network reinforcement:
 - E.g. the imposition of S106 planning obligations and planning conditions, including Grampian conditions with clear evidence of compromised project viability and development being seriously delayed. (In one case £1.20m demanded from a house builder to fund improvements at the WwTW – contrary to Ofwat direction)
- Ofwat's current proposals have the propensity to undermine project viability and lead to delays in the provision of new housing. Essential that HBF members respond to the forthcoming round of respective WaSC/WoC consultations.

From April 2018 will the New Charging Rules/Cost Arrangements meet expectations?

Key challenges for the Utility Service Sector

- Effectively responding to significantly reduced construction periods.
- Recognise the dynamics driving the increase in housing numbers and the demand that will be placed on existing infrastructure
- Having in place sufficient capacity, assets, resources and skills to meet demand.
- Has the sector maximised efficiency from existing infrastructure assets?
- Recognition that the 'Smart Home' is already with us accompanied by an exponential growth in associated technologies, e.g. ultra-fast broadband.
- The need for a quantum increase in 'smart metering' – Water Sector in particular.
- Keeping costs down.
- **Ultimate question: Can infrastructure providers up their game and deliver to meet the needs of the house building industry? The Minister would like to know!**

What has HBF been doing?

- Engaging with the National Infrastructure Commission (NIC).
- Regular discussions with Ofwat.
- Possible engagement with CMA over competition issues?
- Engagement with DfT.
- Engagement with the EA – flood risk mitigation
- Looking at creating a dedicated HBF Highways and Sewerage Infrastructure sub-group to bring the major issues into focus with Government
- Preparing its response to the latest DCLG consultation “*Planning for the right homes in the right places – 14th Sept ‘17*”. Infrastructure availability a key consideration in this consultation which will remain open until 9th Nov.

Thank you for listening – any questions



*The voice of the
home building
industry*