



Ministry of Housing,  
Communities &  
Local Government

## INNOVATION IN HOUSING DELIVERY

Better Design For Better Places Conference

14<sup>th</sup> February 2018

Mark Farmer



# innovation

/ɪnəˈveɪʃ(ə)n/ 

*noun*

the action or p

"innovation is c

*synonyms:* cha

restruc

More

Creative  
Process

g success of any organization"

olution, upheaval, transformation, metamorphosis, reorganization,

rearrangement, remodeling, renovation, restyling, variation;

End  
Outcome  
& Value

- a new method, idea, product.

plural noun: innovations

"technological innovation designed

Making  
Process



# Innovation in Creativity & Design Needs To Move Central To Value Creation In Homebuilding

## Design Thinking as a Strategy for Innovation



Innovative Design Quality & Value Creation Have Decoupled In Homebuilding – Land  
Has Been The Dominant Route To Value Creation



# Homebuilding Innovation Is Also Too Currently Focused On The Making Not Creating Phase



This diagram illustrates the design thinking framework created by The Design Council<sup>3</sup> (UK), which maps the design process into four distinct phases: Discover, Define, Develop, and Deliver. This illustrates the divergent and convergent stages of the design process.





# And Innovation in Making & Production Is A Fast Changing, Technology Led World

**Figure 13:** Characteristics of the hyperefficient and flexible factory of the future



Source: A.T. Kearney



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# Innovation In Design & Making Should Be Able To Replicate Both Uniformity & Mass Customisation







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## Creating Great Spaces & Places







home  
group

# Gateshead Innovation Village































































home  
group

























home  
group





home  
group





















home  
group























































# The Birmingham Modular House Type

Steve Dallaway, Housing Development Manager,



# One Size Fits All?

**What works for us....**

**won't necessarily be right for you....**





insider  
**RESIDENTIAL  
PROPERTY  
AWARDS 2016**

MIDLANDS

**Social Housing Provider of the Year**

**WINNER**  
Birmingham City Council







# Birmingham Rationale

Main drivers,

- Increase supply of AFFORDABLE housing and
- Develop sites deemed unsuitable for traditional methods

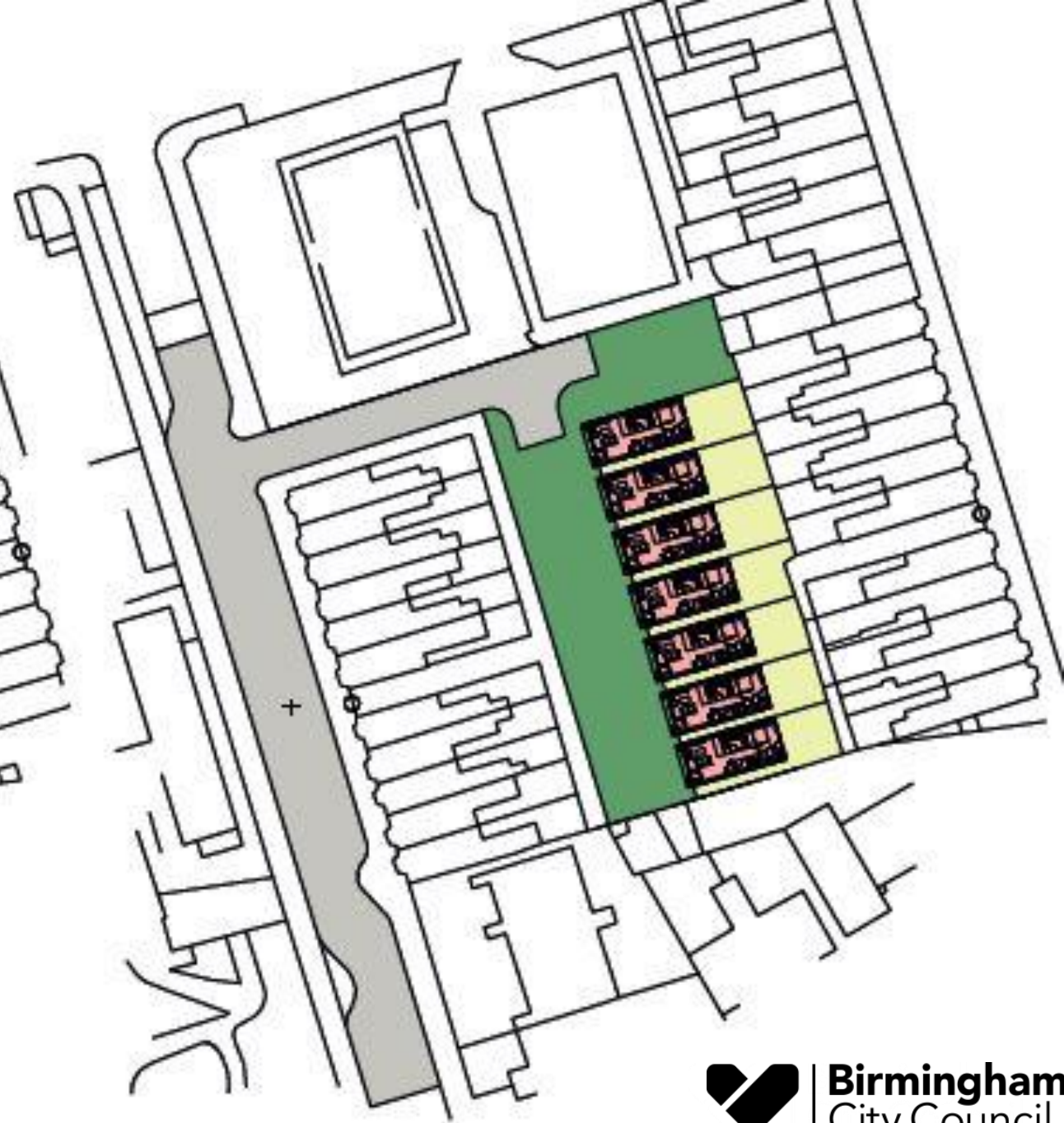
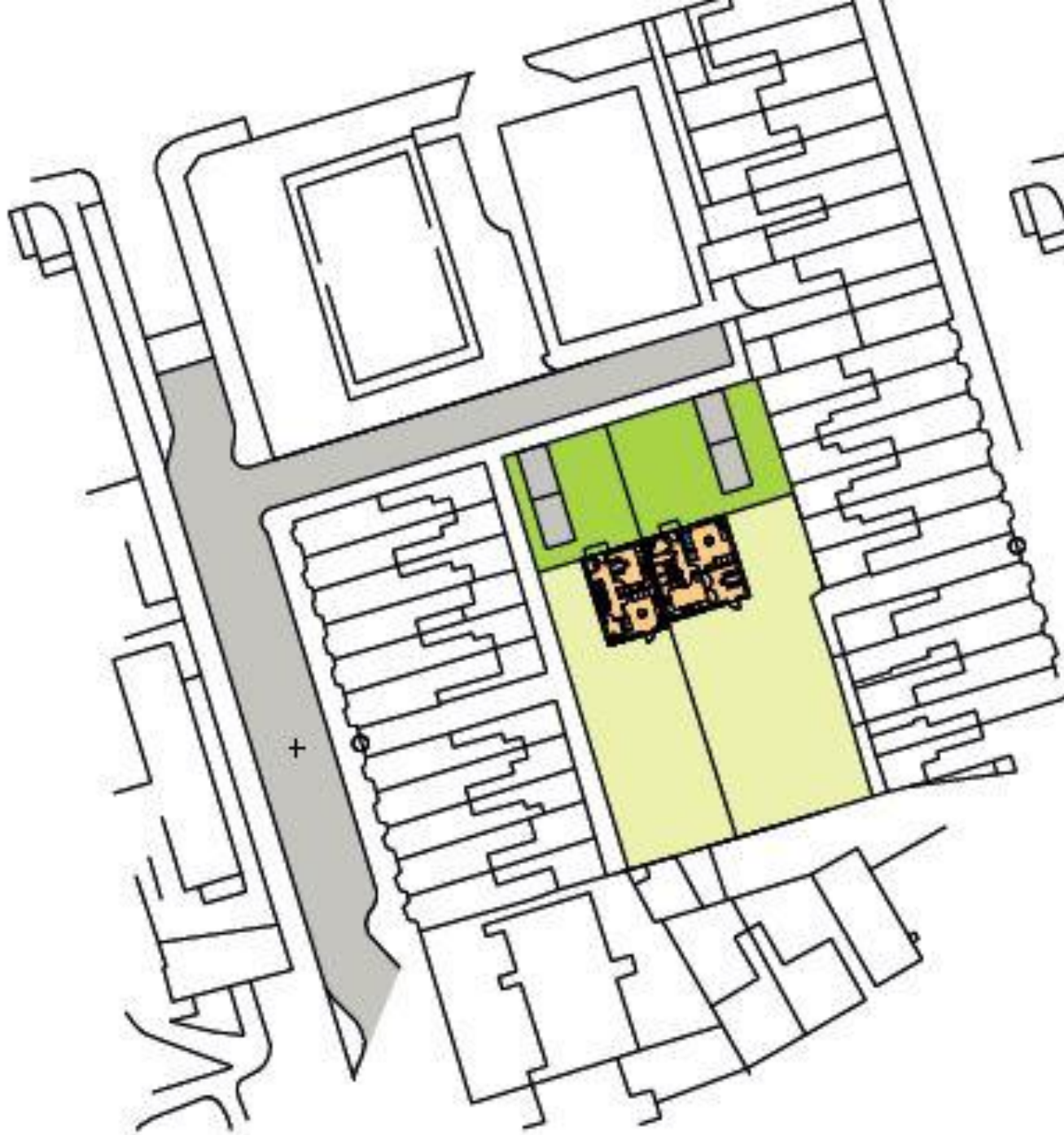


# Birmingham Rationale

But also,

- Innovate rather than stagnate
- Promote good design in MMC
- Birmingham is big enough to trial it







# Planning Context

- Internal agreement of approach
- Within NDSS standards
- Car-free (not a panacea)
- Communal amenity space
- Modal Shift



# Design objectives

- No bigger than 14.0m long or 4.8m wide.
- Transported without damage to materials.
- The two floors will be joined together on site and services connected.



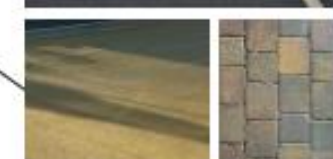


# Holbeche Road Landscape Concept

The concept for the space at Holbeche Road is to create a private courtyard with scattered trees and stone seating. Evergreen hedging will define the frontages this will be re-enforced by shrub planting. The Tarmac in the courtyard will be broken up with a tegula block in the form of a double soldier course. This block will then continue though to the private pathways within the frontages.

## LEGEND

- Tarmac Access Road
- Tarmac with Chippings
- Tegula Block Soldier Course Through Tarmac
- Tegula Block Pathway
- PCC Riven Faced Slab to Private Pathways
- Hedge 600mm Ht Lonicera
- Evergreen Shrubs
- Low Groundcover planting
- Close Boarded Fence 1800mm Ht with concrete posts and gravel boards
- Close Boarded Fence 1200mm Ht with concrete posts and gravel boards
- Concrete / Recon Stone Seat informally placed around tree
- Existing Boarded Fence to be removed





# Setting out your stall

- Standard set of simple archetypes
- Landscape Principles
- Agree procurement strategy
- Political buy-in essential
- Local residents support





It seems pods could be crucial in meeting the second City's housing targets but the design failed to impress some councillors

# 'Horrendous battleship' home pods head for city

Prefab units that take two weeks to build could be future

Carl Jackson  
Local Democracy Reporter

**H**OME pods that take just two weeks to build have been likened to 'battleships' as they head to Birmingham.

Swedish-style homes are built in a factory and then transported to their permanent location by a lorry before being hoisted into place by a crane.

The pods can be delivered to sites where it is difficult and expensive to construct traditional homes.

The council's housing programme Birmingham Municipal Housing Trust (BMHT) is now considering a 'huge number' of sites across the city, said Steve Dallas, housing development manager.

Council leader Ian Ward has

declared modular homes would be 'essential' in meeting a target to develop 33,000 more homes in Birmingham by 2031.

BMHT has done modelling work using existing sites and is hoping to create a prototype house by early next year.

The city's planning committee was shown how a pod could fit into certain locations including a narrow plot in Heaton Street, Hockley.

Different materials can be used to create the pods such as brick, zinc and timber to make sure they fit in with different types of surroundings.

However, the mock-ups did not impress some councillors.

Cllr Gareth Moore (Cons, Edingdon) said: "The principle of modular builds I don't have a problem with,

"But strikes design. I don't like it."

He is right to

up a lot

"Last massive lot of p

"We don't

Cllr BMHT

descri

sum

14  
NEWS

## Factory-built house that looks 'like shipping container' gets go-ahead

Carl Jackson  
Local Democracy Reporter

**BIRMINGHAM'S** first factory-built council home has been given the green light, despite it being branded "a shipping container".

A crane will drop the two-storey, two-bedroom unit into a vacant plot of land on Heaton Street, Hockley, after Birmingham City Council's planning committee approved it.

But some have called for the appearance to be changed first.

"There is no way on earth I would inflict that sort of property on an area within the city I live," said councillor Bob Beauchamp.

"It's absolutely not the best that can be done with modular building. I have never seen anything so ugly and primitive in all my life."

The concerns were echoed by Cllr Adam Higgs, who described it



» The design for the home in Hockley has not gone down well with some











# Issues

- Fear of the known-unknown
- Fear of modern materials
- Small 'c' conservatism
- Who jumps in first?
- What if it all goes wrong?
- Its not cheaper



## Next Steps

- Deliver prototype - Spring 2019
- 7 pilot sites to Planning Committee
- Buy-in
- Application and scale
- Modular does not need to replace traditional





