



Top Quality Housing – The Cherwell Approach

Sam Thomas – Sustainability Project Officer



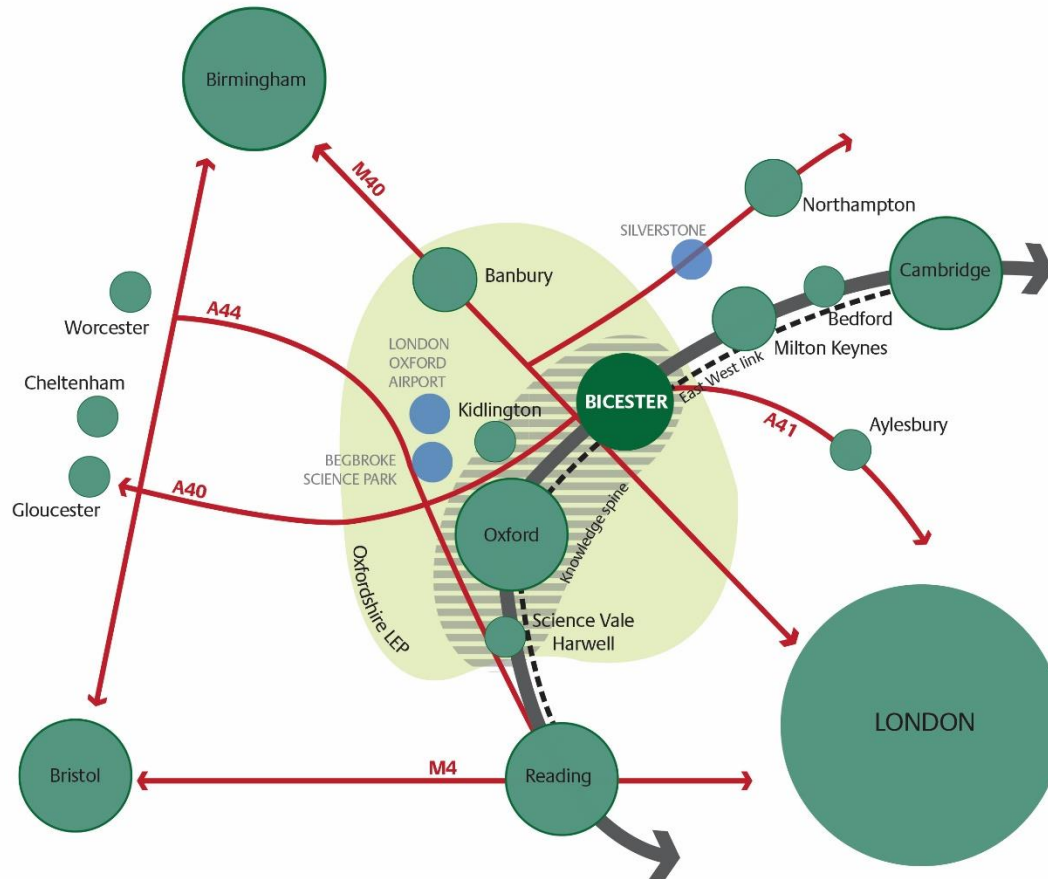
Big Energy Summit 2020 – *Leadership in a Climate Emergency* – 11th March

- Background to Cherwell
- Planning Law
- NW Bicester Eco Town
- ECO-Business Centre
- Build!
- Graven Hill self-build

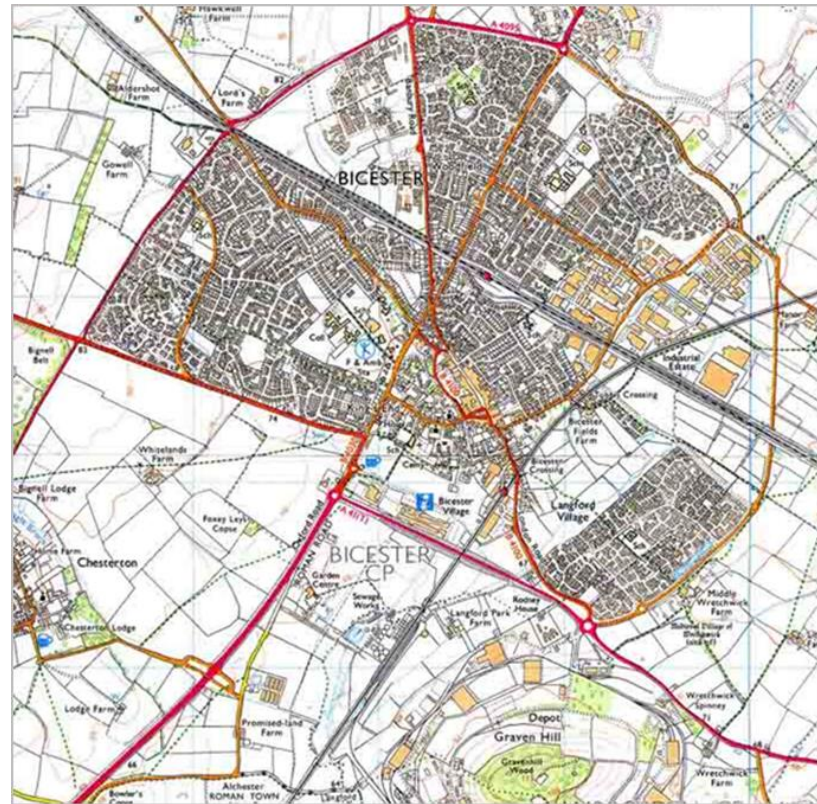
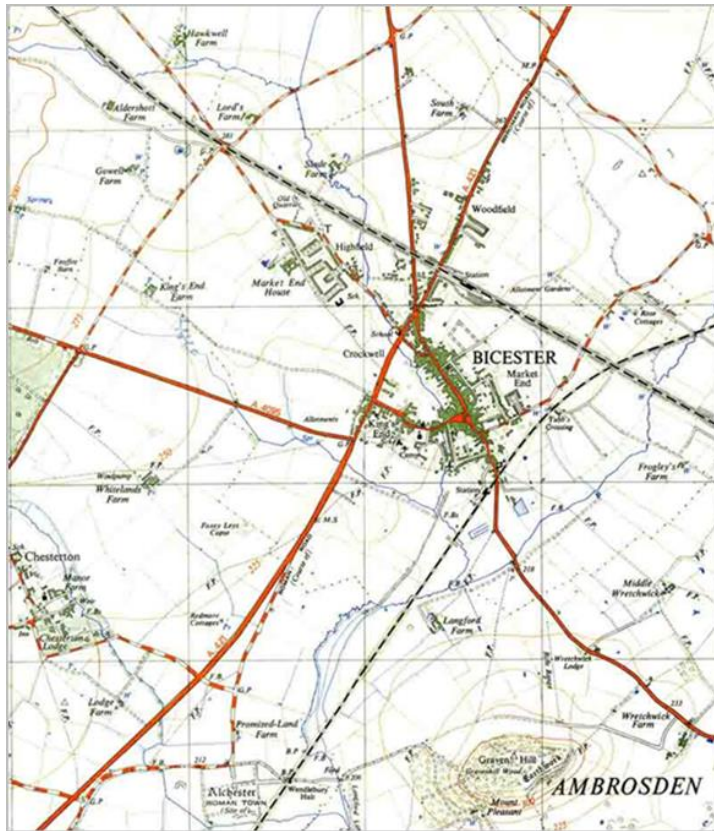


BACKGROUND TO CHERWELL

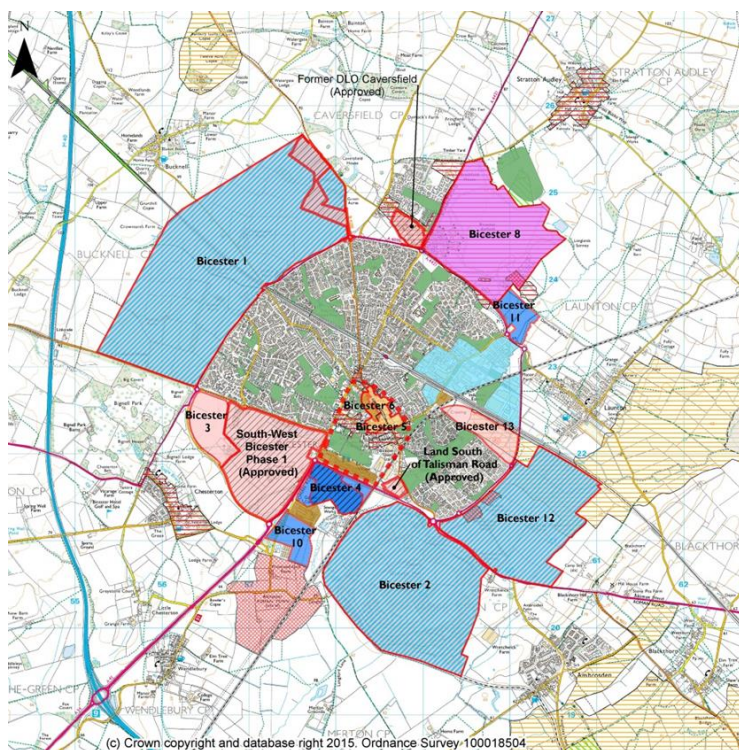
Cherwell District - Location



Background: Bicester 1950 - 1999



Background: Planned Growth for Bicester



Housing

Bicester 1	NW Bicester	3293
Bicester 2	Graven Hill	2100
Bicester 3 ⁺	Kingsmere	2468
Bicester 12	SE Bicester	1500
Bicester 13	Gavray Drive	300
Others		468
Total		10,129

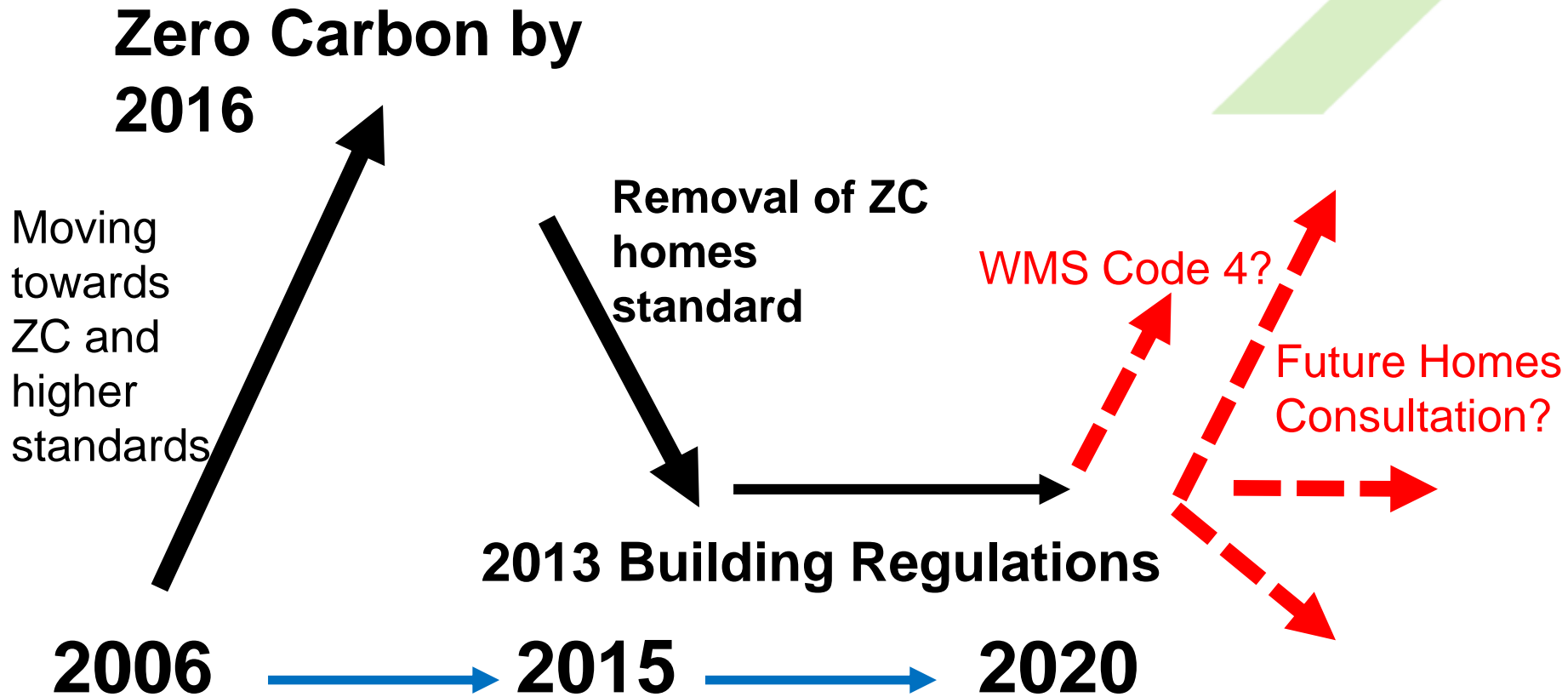
Employment Land

Bicester 1	NW Bicester	10 ha
Bicester 2	Graven Hill	26 ha
Bicester 4	Bicester Business Park	29.5 ha
Bicester 10	Bicester Gateway	18 ha
Bicester 11	NE Bicester	15 ha
Bicester 12	SE Bicester	40 ha
Total		138.5



PLANNING LAW

Planning Law (Energy Efficiency)





NW BICESTER ECO TOWN

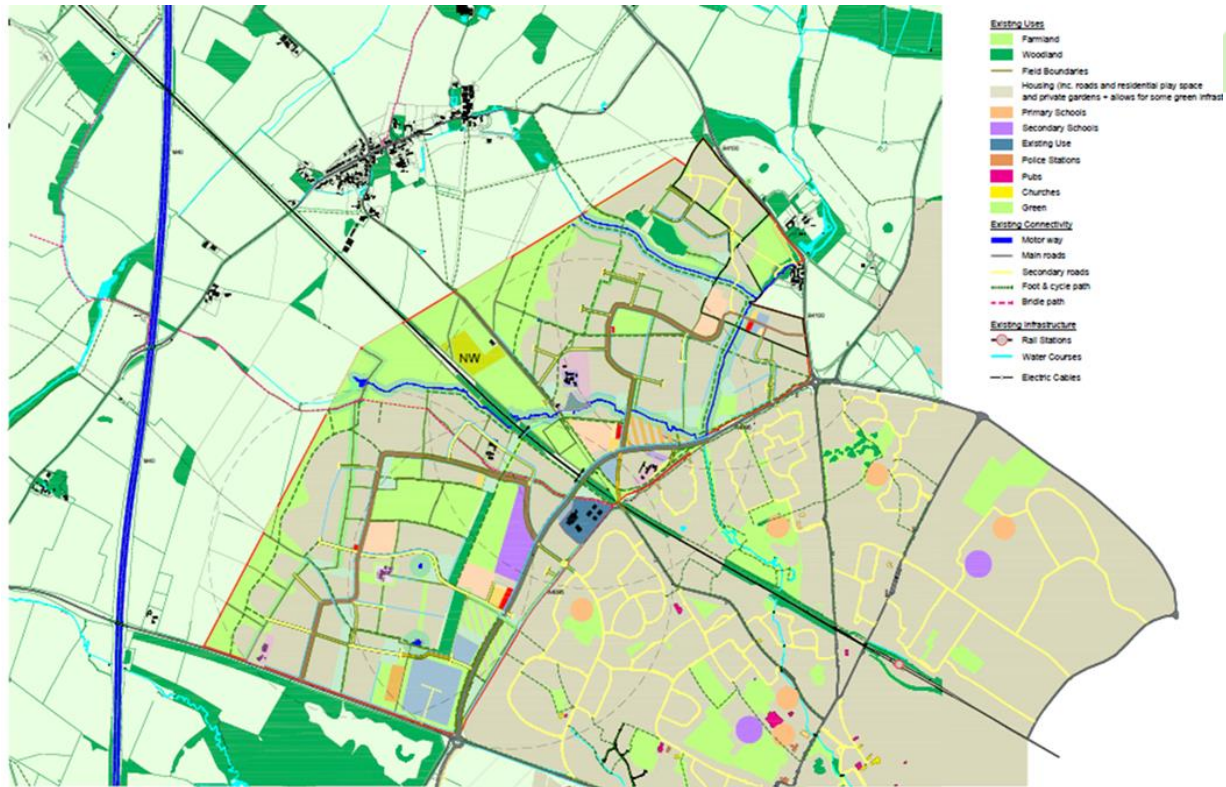
NW Bicester

- July 2008 NW Bicester proposed as a location for the Eco Town initiative
- July 2009 Planning Policy statement issued naming NW Bicester as one of 4 locations
- Outline planning permission for 6,000 homes for the site
- Detailed PP granted for Elmsbrook exemplar development

NW Bicester - PPS

- Zero Carbon (regulated and unregulated)
- Climate Change Adaptation
- Homes
- Employment
- Transport
- Healthy lifestyles
- Local services
- Green infrastructure
- Landscape and Historic Environment
- Biodiversity
- Water
- Flood risk management
- Waste
- Masterplanning
- Transition
- Community and Government

NW Bicester



NW Bicester

‘over a year the net carbon dioxide emissions from all energy use within the buildings on the eco town development as a whole are zero or below’

– PPS definition of zero carbon

NW Bicester - Elmsbrook

- 393 dwellings, local centre, community hall, eco business centre, primary school and 40% green space
- CSH level 5, PV, gas CHP heat network

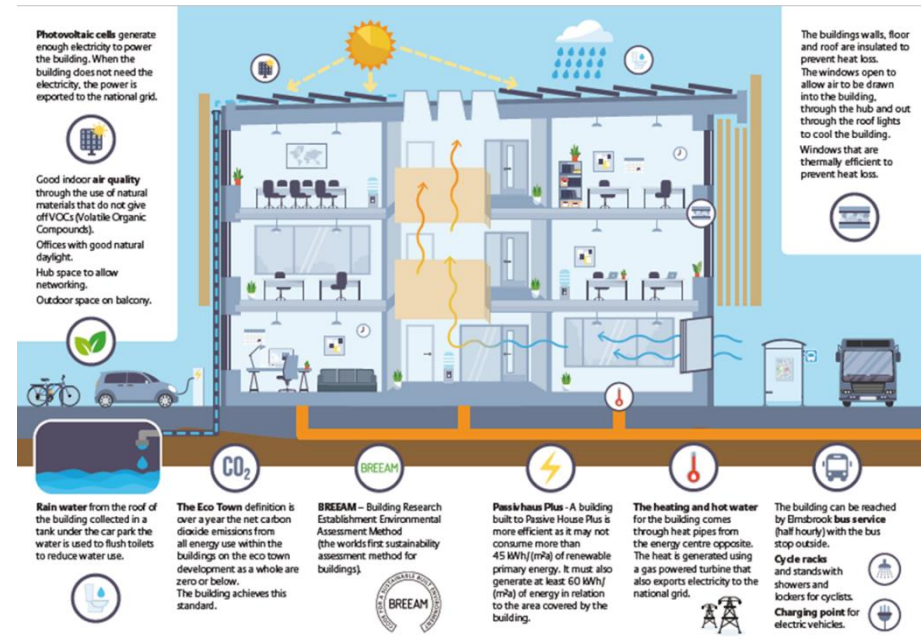




ECO BUSINESS CENTRE

ECO Business Centre

- Located in Elmsbrook local centre
- 1,400m², 125 workplaces for local and start up businesses
- Host Oxfordshire Greentech
- Opened 2019



ECO Business Centre


- Zero Carbon, Passivhaus Plus and BREEAM excellent
- Fabric first/ Brise Soliel
- District heating
- Solar PV/ Offsite PV
- Healthy working environment
 - MVHR/ natural ventilation
 - Non-toxic materials
 - Natural light





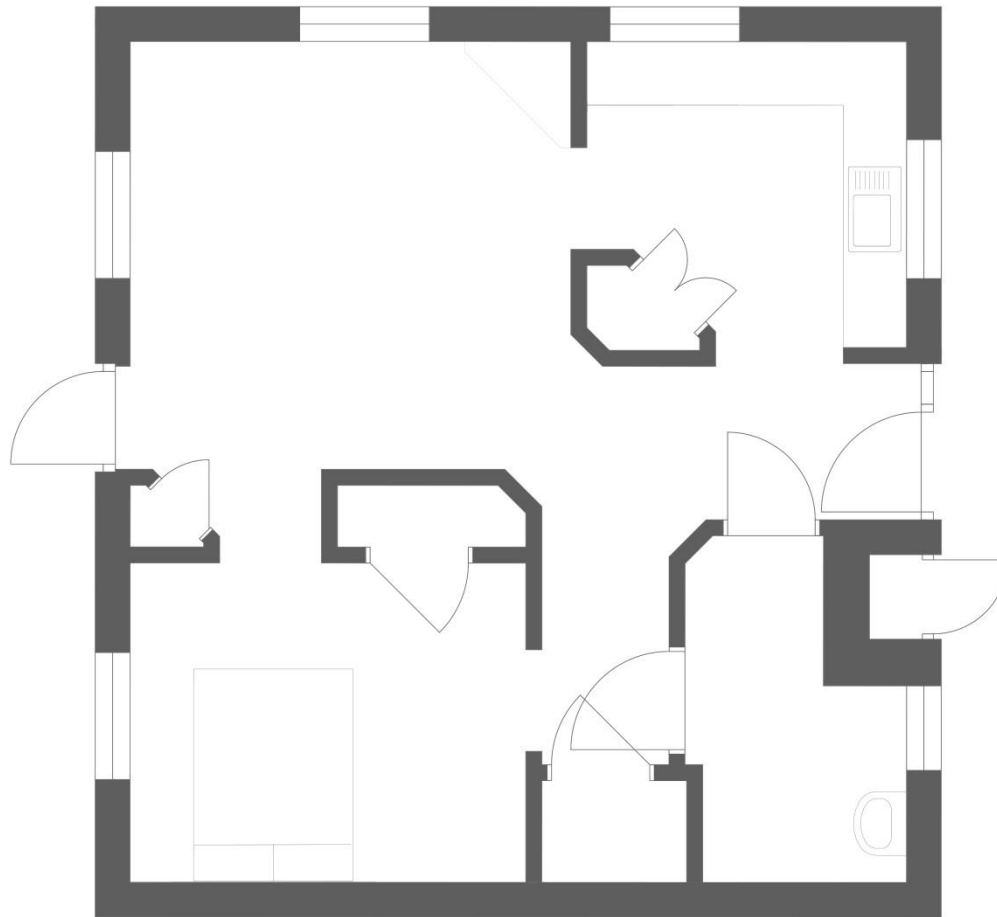
Build![®]

A Cherwell
District Council
Initiative

- 
- Set up 2010 to deliver **affordable** housing across the district
 - Motivated by a strong belief that **everyone** deserves a decent place to live
 - Respond to a **growing housing need** at a time of less public resources







Hope Close Banbury

11 shared ownership units





GRAVEN HILL

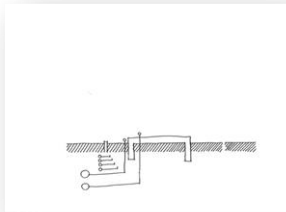
Graven Hill



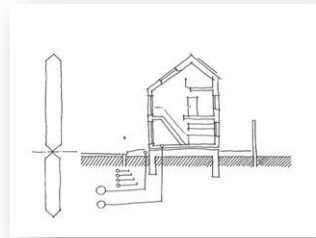
UK's largest self
build
development on
186 hectares,
1,900 homes,
over 15 years

Graven Hill – Self Build Type

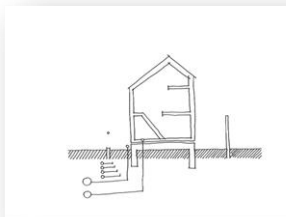
□ Plot Sale



□ Tailored Turnkey



□ Shell



□ Apartments



Beattie Passive
constructing the
apartments – 300
properties built to a
passivhaus
standard

Graven Hill – Design Code

- Thermal U Values
 - Walls, Floors, Roofs
0.12W/m²K or less
- Thermal Bridges
 - Y value of 0.8W/m²K or less
- Window U and G Values
 - 1.4W/m²K and 0.5-0.7 or less
- Air Leakage Rate
 - 3m³/hr/m² @50Pa or less
- MVHR efficiency
- Overheating Risk
- Electrical lighting
- Solar PV



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Cherwell
DISTRICT COUNCIL
NORTH OXFORDSHIRE