Density and Urban Design

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The following study was carried out as a piece of urban design research, and is available in a presentation format only.
How to Plan?

• Understand the Context and Constraints - to identify potential developable areas
• Calculate a land use budget – including other needs with housing: schools, healthcare, retail, sports and play spaces, parks, etc
• Identify suitable local densities for housing
• Determine housing numbers and supporting infrastructure
• Context, Character and Density together
Density is a measure

Housing density:
• Dwellings per hectare: dw/ha
• 1 hectare = 2.47 acres, or 1 international rugby pitch
• Density is a measure, but no specific design qualities or characteristics are implied

All three examples are the same density 75 dw/ha, but have different characteristics in the form they take.
Density, Walkability & Compactness

Urban Task Force (1999)
What’s included?

- **Gross density** – housing plots plus all roads, pavements, open spaces, landscaped areas – neighbourhood scale of area
- **Net density** – housing plots plus site specific roads, pavements and incidental spaces in the layout – block scale of area
- **Open space and landscaped areas** – calculated per head of population
Local Density Study

• MBC draft Local Plan policy for housing in rural service centres is for 30 dw/ha (minimum)

Local examples range from:
• Low: Swadelands Close with 27 dw/ha
• High: The Millers with 37 dw/ha
• More recent examples - smaller back gardens and own parking at front: 35 dw/ha typical
Examples 1 & 2: Westwood Court & Cherry Close

- Westwood Court:
  - 40 dw/ ha care home, mixed flats and houses

- Cherry Close:
  - 29 dw/ ha mostly row housing and lots of amenity space
Examples 3 & 4: Ham Lane & Swadelands Close

28 dw/ha mixed housing, and large back gardens

28 dw/ha mixed housing with amenity space
Examples 5 & 6: Old School Close & The Millers

34 dw/ ha, mixed housing

37 dw/ ha, mostly row housing
Examples 7, 8 & 9: Wealden Square, Groom Way & Glebe Gardens

33 dw/ ha row housing

25 dw/ ha mixed housing

26 dw/ ha mostly semi detached housing
Example 10: Douglas/ Foord Road

34 dw/ ha mixed housing
Example 11: High Street

31 dw/ha mixed housing
Princess Mary Gate, Wendover - Density: 36 dw/ha

Higher density due to garden lengths and housing types

Characteristics:
2-4 storey row and detached houses, and flats
Short front and rear gardens
Minimal on-street landscaping

Images from Google Street View
Upper Waterways, Oxford -
Density: 40 dw/ ha
*Higher density due to garden and housing types*

**Characteristics:**
- 2-3 storey row and detached houses, and flats
- Short front and rear gardens
- Generous on-street landscaping
- Walkable to local shops
Lower Waterways, Oxford - Density: 50 dw/ ha

Higher density due to garden lengths and housing types

Characteristics:
- 2-4 storey row and detached houses, and flats
- Short front and rear gardens
- Generous on-street landscaping
- Walkable to city centre
Variations & Character

Balancing Context + Character + Density
= Good Quality development

Varying characteristics:
• How much landscape is visible from public realm
• Front gardens - sizes and role
• Streets and public spaces – parking arrangements
• Rear gardens and private space – getting smaller
• Storey heights – variety and uniformity
• Housing types – all forms of houses and some flats
How to secure good design quality

• Via Local Plan policies
• Via Neighbourhood Plan policies
• Development briefs (SPDs)
• Area-based Design Guides
• Site specific Design Codes

• Design Review Panels – MBC or LPNP led
• Resources to address in advance or once applications submitted...
What aiming to control?

• Relevance to location
• Logic in structure
• Variety and uniformity
• Links between places
• Front gardens
• Parking arrangements
• Building forms
• Materials