EPOA
Essex Planning
Officers Association

Case Studies from
The Essex Design Guide (2005 Edition)

Case Studies

It is the purpose of the following case studies to show how the principles of this Guide can be put into practice in the design of the layout of a number of sites with differing requirements and characteristics. These should not be regarded as stereotype solutions to be copied, but as demonstrations of the application of the approach advocated by this Guide.

A number of small areas of development are demonstrated showing different approaches:

- An informal urban street
- A variable-width street with the variety of frontage associated with the traditional village
- A formal street of 2-3 storey houses and on-street parking
- A set-piece of buildings at a major entrance to the site
- A piece of urban layout with variable-width roads and a 'market square' focus
- A large, landscaped square
- A layout using Boulevard Planning principles
- A formal square
- An informal village green
- A village-type, tree-lined street with housing of mixed densities.
- A pedestrian street
- A small mews cul-de-sac
- A layout using Arcadia principles
- A 'brownfield' site development incorporating mixed uses.

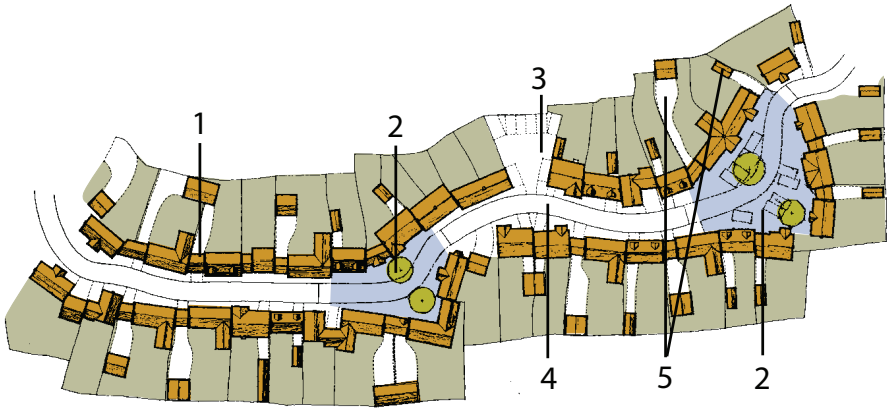
These case studies may be viewed in isolation as potential small infill developments, or they may be viewed as the jigsaw pieces of a much larger development. Since one of the aims of this Guide is to demonstrate principles for the structuring of large developments the individual cases studies are also combined here into a large layout not untypical in extent of the substantial peripheral or freestanding developments that have been started in recent years.

Informal urban street

Case study 1

Variety of houses mainly wide frontage shallow plan, mainly joined together, some without on-plot parking. Most houses front back edge of footway without front gardens. This is a practical and flexible format for the typical residential layout at urban densities (8 dwellings per acre, 20 dwellings per hectare and above).

1. Carriage arches to maintain continuity of street frontage
2. Parking square as speed restraint
3. Parking court
4. Road type D, 4.8m wide with 1.5m min. footways
5. Garages and parking space to rear



Informal Urban Street. Case study 1

Ground-floor plan

First-floor plan

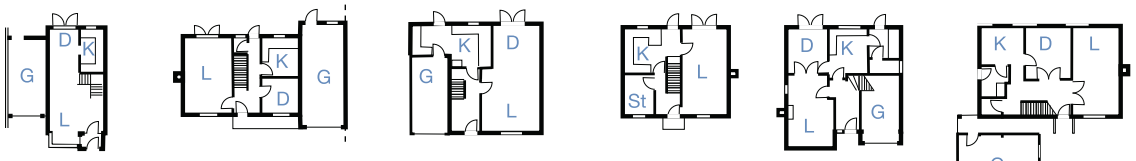
Second-floor plan

Informal Urban Street. Case study 1

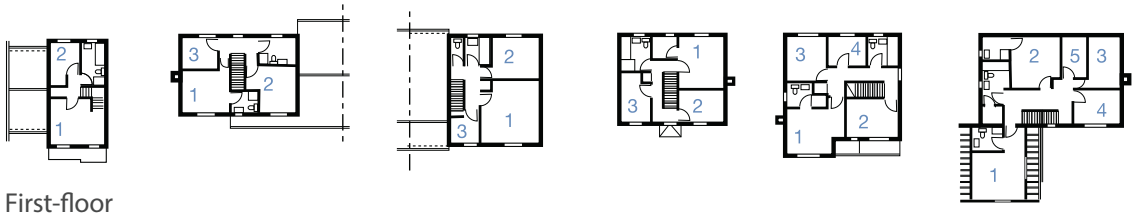
Typical unsatisfactory layout using standard detached house types

Conventional developer's solution for the same site as comparison using same size houses. Frontage dominated by parked cars. Fragmented street scene due to useless narrow gaps between detached houses. Smaller private gardens due to houses being set back. No enclosure of spaces or unfolding visual sequence for the pedestrian. No traffic speed restraint. Three fewer houses on the site.

Developers house types (higher proportion of narrow frontage deep plan types)



Ground-floor



First-floor

Village street

Case study 2

Variety of houses mainly joined together, some without on-plot parking. This is acceptable as street is widened at certain points to accommodate street parking. All houses front back edge of footway without front gardens.

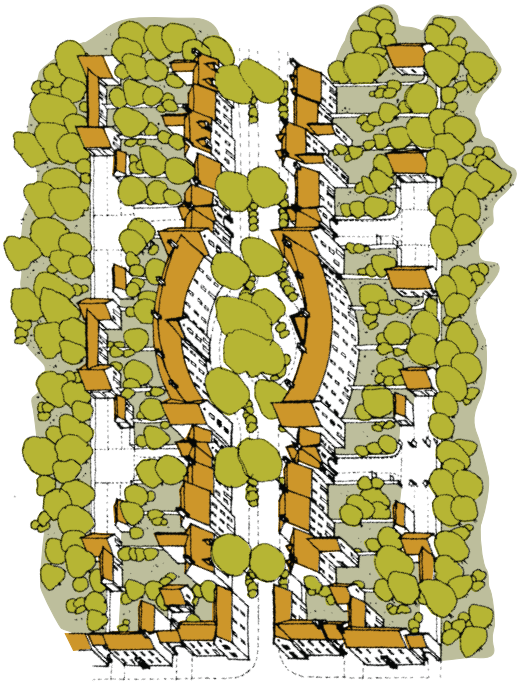
1. Island
2. Road type D, 4.8m wide with 1.5m and 2m footways
2. Carriageway widened by 2m each side where on-street parking required. Speed restraint every 60m
3. Ramped narrows
4. Garage court
5. Road type E leads to Arcadian low-density housing
6. Table junction
7. Parking court
8. Chicane

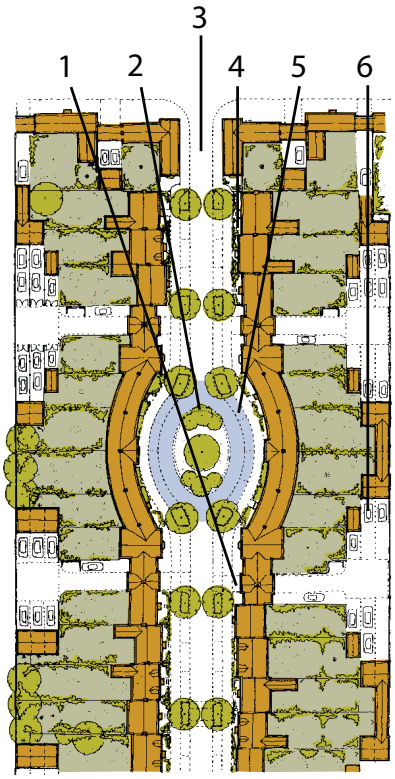
Urban 2- and 3-storey housing

Case study 3

All houses joined together in terraces. Two crescents of 3-storey town houses as focus. Street widened to accommodate on-street parking.

1. Carriage arch to maintain continuity of street frontage
2. Island and change of surface act as speed restraint
3. Road type D, 4.8m wide with 1.5m and 2m footways. Carriageway widened by 2m each side for car parking divided by tree planting at intervals
4. Small front gardens possible
5. Vehicular area paved in setts

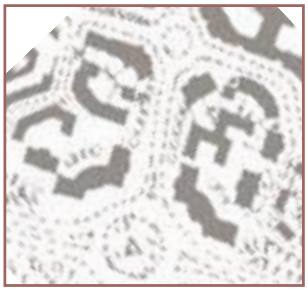




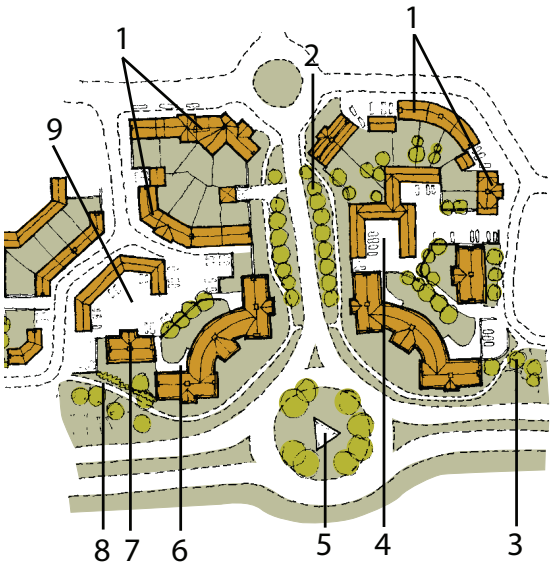
Major entry point

Case study 4

3-storey flats arranged as a composition centred on traffic roundabout giving access to residential area from local distributor or county road.



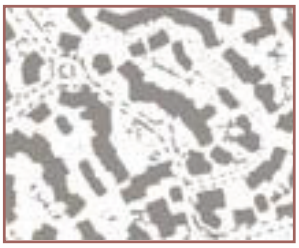
1. 2-storey housing
2. Tree planted verges
3. Anti-noise bund if heavily trafficked
4. Garaging and parking to flats
5. Focal feature on roundabout
6. Entrance on side away from main road to prevent on-street parking
7. 3-storey flats
8. Communal walled garden
9. Garaging and parking to flats

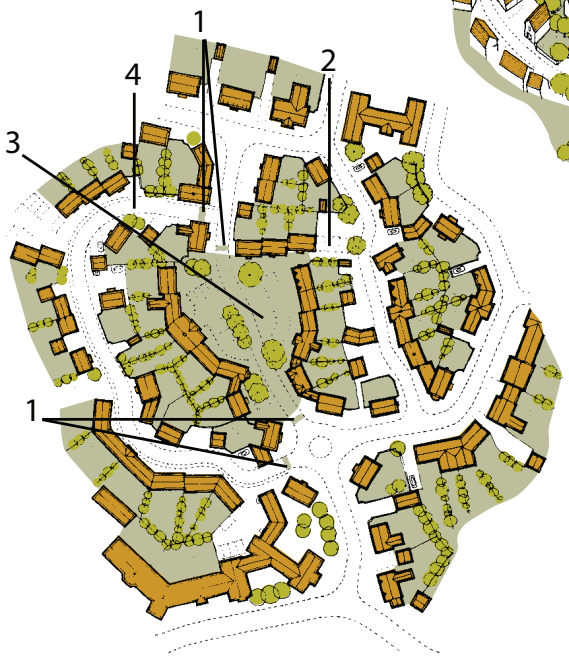


Urban layout

Case study 5

Focuses on informal 'market square' paved between fronts of buildings. 'Back lanes' give access to rear of some plots and provide extra parking and garaging as well as serving their own frontage development.





1. Ramps
2. Garaging and parking belonging to 'market square' houses
3. 'market square' parking square adopted up to face of buildings, no front gardens. Square paved in setts and vehicle way marked by channels
4. 'Back Lane' road type G shared surface mews 5.8m

Large landscaped square

Case study 6

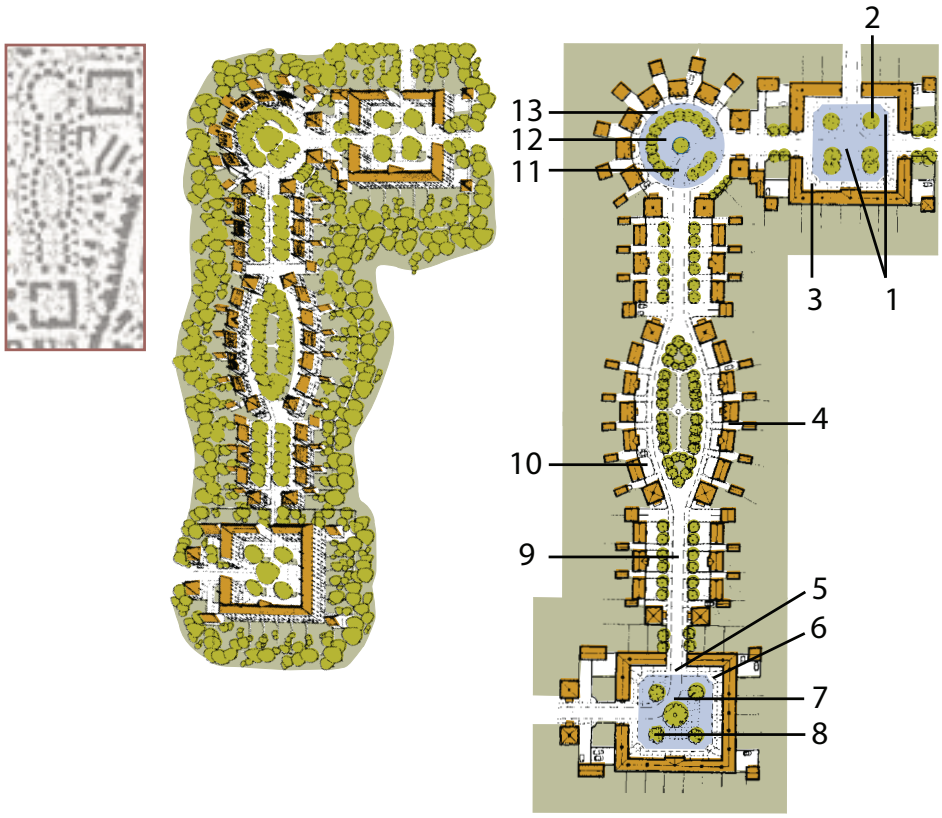
3-storey town houses in terraces required in order to enclose large landscaped space. Parking and garaging on-plot and provided through carriage arches to prevent car-dominated frontage.

1. Adjoining arcadian layout
2. Road type F, minor access way
3. Generous tree planting
4. Table junction
5. No footway required around open space
6. Road type D, 4.8m wide wide with 2m footway
7. Other landscaped areas link to provide wildlife corridor
8. Front gardens possible
9. Gardens and parking spaces to rear
10. Carriage arches
11. Private garden areas may reduce due to facing public open space

Boulevard planning

Case study 7

Detached houses designed to a single architectural theme set in a formal plan. Structural tree and hedge planting reinforces the concept. Urban design sequence starts and finishes with strong urban forms (Formal squares).

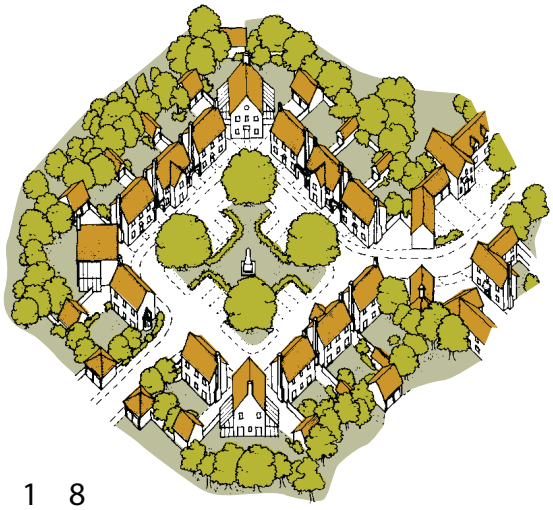


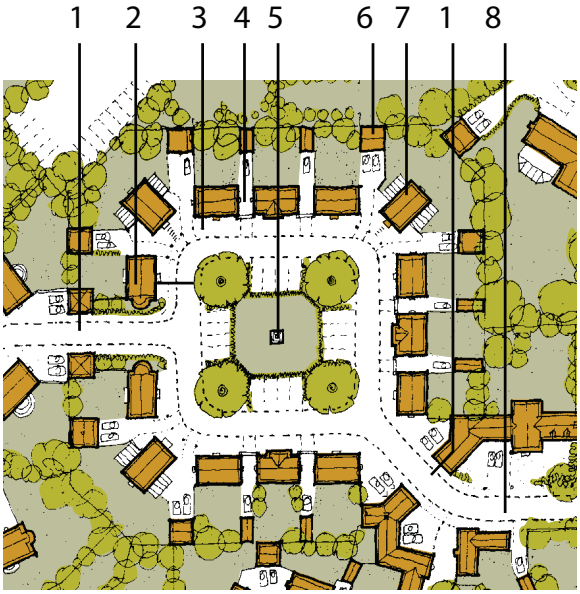
1. Private parking areas
2. Vehicular area paved in setts
3. Independent adopted perimeter footpaths
4. Houses linked by gateways
5. Track of road marked in channels of granite sets
6. 50mm upstand to pavement at perimeter of private parking area
7. Right-angle bend and change of surface act as speed restraint
8. Vehicular area of square paved in setts
9. Road type D, 4.8m wide carriageway with 2m wide footpaths
10. All garaging between and to rear of houses
11. Speed restraint bend
12. Vehicular area of circus paves in setts
13. Private drives serve detached houses in circus

Formal square (detached houses)

Case study 8

Detached houses designed to a single architectural theme set in a formal plan.





1. Pinch point of buildings at entrance to square
2. Formal tree planting in square
3. Front gardens possible
4. Houses linked by gateways
5. Central feature
6. All garaging between and to rear of houses
7. Corner-filling houses
8. Road type D, 4.8m wide carriageway with footways, right angle bends act as speed restraint in square

Village green

Case study 9

Variety of houses, mainly joined together, with parking provided on-plot or communally at rear, arranged to provide continuity of frontage. Some houses front back edge of footway, some have front gardens. Garden areas may reduce due to fronting on to large public open space.

Network of road type D, 4.8m. Footways only on housing frontages at perimeter of green

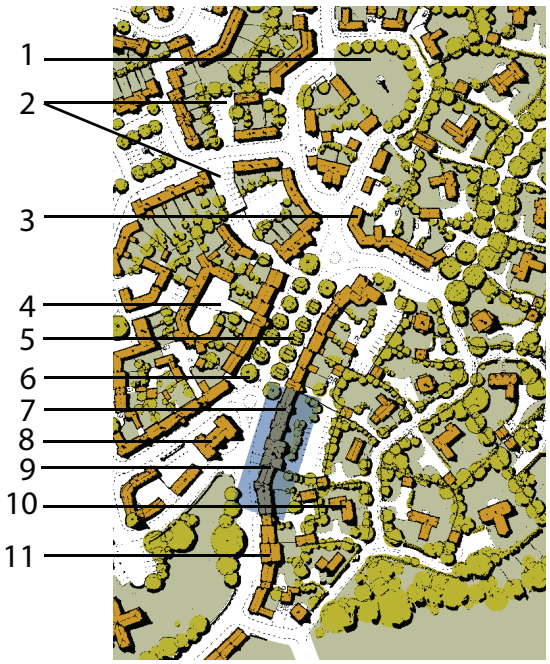
1. Houses supervising parking court
2. Small visitor parking area on green
3. 3-storey elements to give variety to perimeter of green
4. Parking court
5. 3-storey formal building dominating green ('country house')
6. Carriage arches for some accesses to maintain continuity of frontage
7. Cart lodge parking on axis of 'country house'

Urban village

Case study 10

Variety of houses, mainly joined together with parking provided on-plot or communally at rear, arranged to provide maximum continuity of frontage to urban spaces. Except around small green, all houses front back edge of footway without front gardens

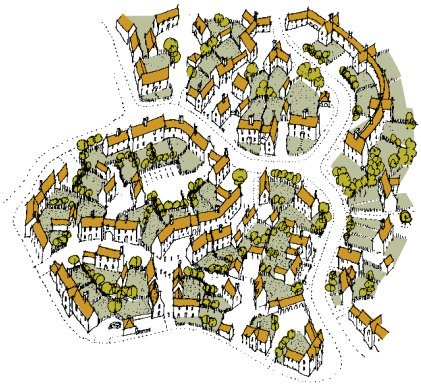
1. Small green fragmented building frontage but strong enclosure by trees 2. Parking courts 3. Houses form end stop to street 4. Garage court with studio flats over garages 5. Visitor parking at right angles to carriageway under trees 6. Avenue tree planting 7. Flats with communal garden and parking 8. 3-storey flats dominate street and green 9. Carriage arches to maintain continuity of frontage 10. Adjacent arcadian housing 11. 3-storey town houses at intervals



Pedestrian spine street

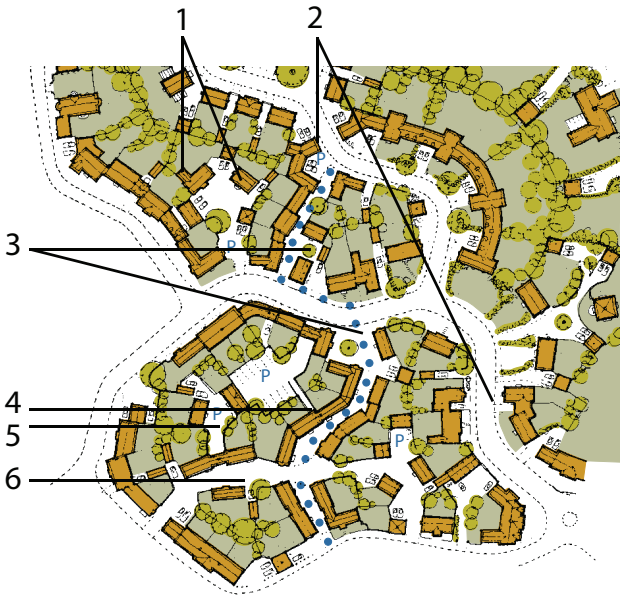
Case study 11

Attractive pedestrian scale street continuously enclosed and fronted by houses. Parking and garaging to rear. Not having to accommodate vehicles means the street space can narrow to give a height of buildings to street width ratio characteristic of narrow streets in historic towns and villages. All houses within Fire and Rescue hosereel distance of road.



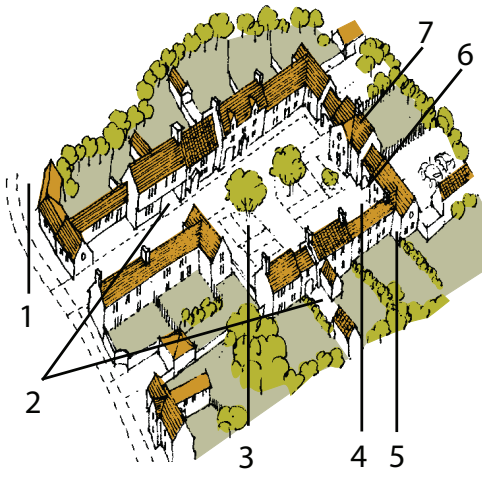
1. Houses supervise parking court
2. Pinch point with built form
3. Small squares
4. Arch leading to parking court
5. Houses supervise parking court
6. Road type H, Mews Court crosses spine street

P: Parking for houses in pedestrian spine street

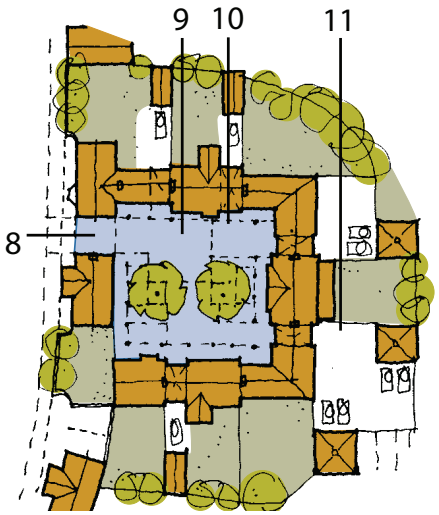


Mews Court

Case study 12

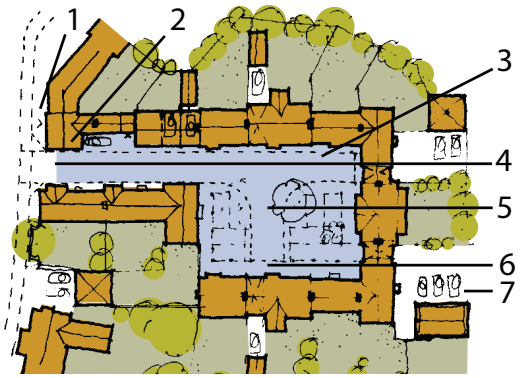


1. Maintain frontage continuity of through road 2. Residents parking beneath or behind buildings 3. Visitors parking square 4. No sightsplays required at vehicle accesses within mews court 5. Enclosed corners to square 6. Carriage arches maintain continuity of frontage 7. Taller building emphasises central axis



Mews court less than 20m long

8. Road type H, mews court, 4.8m wide 9. Size 5 turning head 10. Overall paving in turning area, gaps for trees 11. Parking court



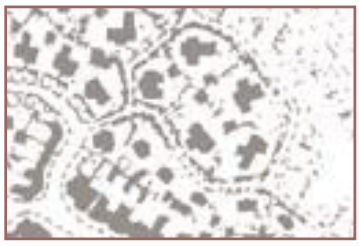
Mews court more than 20m long

1. 1.5m x 1.5m sightsplays 2. Enclosure by buildings of 1.8m walls up to 8m back from footway 3. Road type H, mews court, 4.8m wide 4. Ramp 6m back from footway 5. Size 3 turning head 6. Overall paving inturning area, gaps for trees 7. Parking court

Arcadia

Case study 13

Layout at density not exceeding 8 houses per hectare (3 houses per acre). Houses sufficiently widely spaced to allow existing and new landscape to dominate. Meandering road alignment. Hedge and hedge-bank boundaries, including front boundaries to roads.

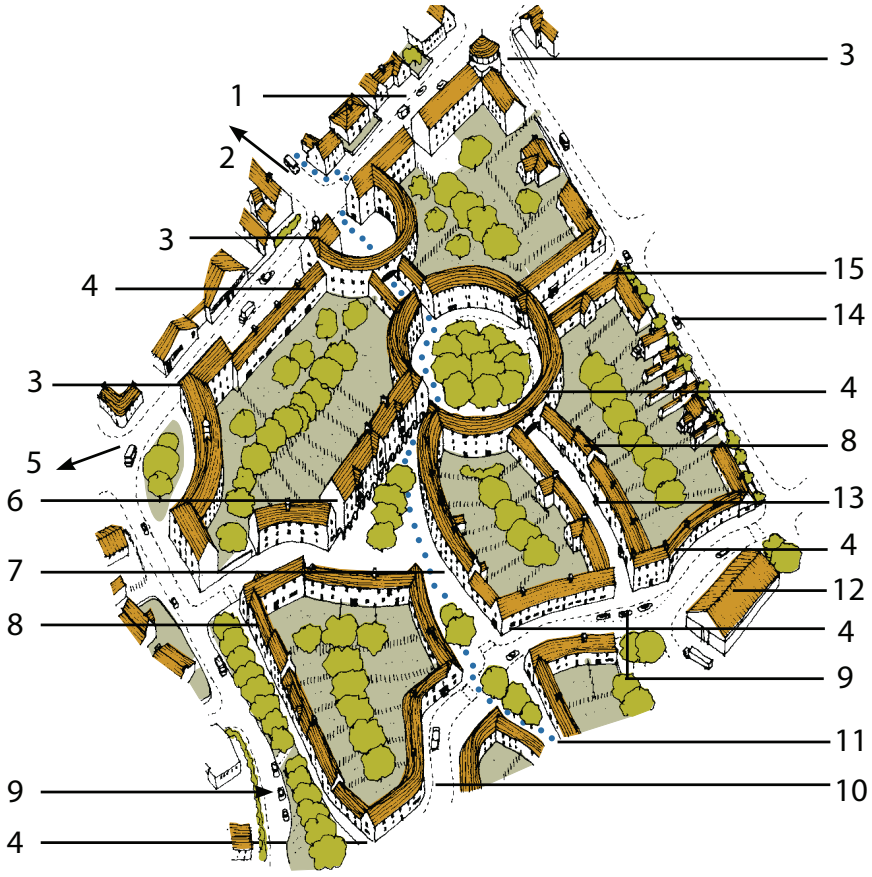


1. Varied alignment of houses
2. Road type E, minor access way
3. Cars turn within plots and egress in forward gear
4. Tree and hedge rear boundaries give high standard of privacy
5. Space for trees between houses
6. Trees and hedges on front boundaries with houses set back behind
7. Parking and garaging inconspicuously sited within plots

Mixed use area

Case study 14

Higher density area, in or near the centre of a large town. Wide range of existing facilities, employment and access to public transport within walking distance. Car-free zone covering most of the area.



1. Bus route
2. To town centre
3. Commercial
4. Flats
5. To railway station 200m
6. Shops and pub
7. Pedestrian zone with access for deliveries only
8. Houses with small gardens
9. Layby for deliveries
10. Road type B traffic calmed street giving access to industrial area and carrying bus route
11. Adoptable main pedestrian/cycle spine route with priority where it crosses vehicular street
12. Industry
13. Unadoptable pedestrian street
14. Parking restrictions on all perimeter streets
15. Vehicular access for deliveries only

Countryside Properties-Abode, Harlow.