Urban types
Summary of urban types

- Urban type 1 - compact grid
- Urban type 2 - loose grid
- Urban type 3 - slabs and towers
- Urban type 4 - courts and cul-de-sacs
- Urban type 5 - urban renaissance
- Urban type 6 - big box
- Urban type 7 - urban centre
- Atypical (not representative of any above type)
The Urban Context and Character Study has identified seven broad urban types which are common to and may be found across the entire borough. Each is described in detail and analysed on the basis of its strengths, weaknesses, opportunities and threats (SWOT). This will ultimately provide a basis on which to prepare general design recommendations based on the qualities of each type along with more specific recommendations for each study area and its character areas.

It should be noted that there is often overlap between the urban types identified. For example, the compact grids of type 1 evolved smoothly into the looser grids of type 2, and the slabs and towers that characterise type 3 may contain elements of the low-rise courts and cul-de-sacs layouts of type 4. Furthermore not all examples of each type exhibit all of the characteristics in the summary of the types.
brief summary

- Compact grid layout ranges from strict orthogonal grids to more relaxed grids
- Streets connect together - there are very few dead end streets
- Street lengths and blocks size and shape vary resulting in a variety of grid layouts
- Predominantly terraces and pairs - overall medium to high density (60 - 100dph)
- Low rise - predominantly 2-3 storeys
- Small scale mixed use - often found on corner plots or on the main street
- Minimal setbacks with well-defined front boundaries - often low brick walls
- Chiefly brick construction with party walls and chimneys
- Most commonly found in the eastern part of the borough: Chiswick, Brentford, Isleworth
- Examples in the borough include: the Glebe Estate in Chiswick, Brook Road and surrounds in Brentford, the Inwood Road area in Hounslow, Byford Road and Linkfield Road both in Isleworth
- Lacking in civic and amenity spaces
- Non-residential comer uses

historic development

- Rise of the industrial city - mass migration to the city from the countryside and the need for cheap housing en masse to house the growing population.
- The grid layout came later to this borough than inner London, because LBH remained generally agricultural for much longer, but most was in place by the end of the C19th and nearly all by WWI.
- Victorian railways (from mid C19th) opened up parts of the borough to Victorian commuters. New development layouts were based on lanes between market garden plots or, following Enclosure and sale of common or heath land, purposely laid-out. Grid networks led from and often between through-roads.
- Speculatively built by private individuals/builders often to a pattern book.
- Terraces often built in small piecemeal lengths eventually forming long terraces with subtle variations in size, style and detailing.
- Different sizes and types built to different standards dependent on affluence and class status of occupiers.
- Built in brick as most the cheapest and widely available building material.
- Plots and dwellings generally become larger towards the end of the C19th.

variations

- There are two main varieties of the compact grid evident in the borough: orthogonal grid and relaxed grid.
- Orthogonal grid - regular streets lined with terraces or short perimeter lengths of brick buildings. They were speculatively built in small piecemeal lengths, resulting in subtle variation in size (width and spacing of streets and plots, forecourts), style (gabled or classical, arched forms, porches, bay windows), and applied decoration (colonnettes, brick or terracotta banding) (Examples: Glebe Estate and Inwood Road).
- Relaxed grid - slightly looser, more sweeping grid layout than orthogonal with larger plots for villa style properties in set piece gardens catering for more affluent clientele. Residences usually in pairs or short terraces if narrow fronted, presenting themselves as larger villas with landmark features or individual wider houses at prominent locations (Examples: Grove Park and Bedford Park).
**Type 1 | Compact grid**

### Dominant period
- Predominantly from the late 19th century and pre-World War One periods with some examples from recent times (post 1990s - see urban renaissance type)
- Spatial and aesthetic differences evident depending on the affluence of the target market with higher quality, larger (often semi-detached), more ornate properties for wealthier clientele, e.g. Dukes Avenue
- Edwardian housing tended to be more elaborately detailed than earlier periods
- Many examples and variations of compact grid found in Chiswick

### Land use
- Predominantly residential with some mixed use on corner plots and/or main streets
- Pubs and corner shops often included as part of development - sometimes also small business and light industrial premises and community uses
- Often contains quite prominent churches that act as a local landmark, e.g. St Stephens Church
- A great number and variety of public houses are found in this type but many have unfortunately been converted to other uses in recent years
- Sufficient dwelling density to allow for a mix of uses to be sustained and profitable

### Layout and structure
- Perimeter block structure with streets lined by buildings
- Blocks can vary from the regular and orthogonal to a looser, deformed pattern responding more to landscape and topography
- Blocks sizes vary between 50m to 150m on a side
- Street based layout creating a fine grain network of routes where vehicles and pedestrians are integrated
- Layout is very walkable offering a good choice of routes for the pedestrian with very few dead-end streets
- Pattern of small plots results in a fine urban grain and a rich, varied townscape

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**Photomontage of a typical Victorian terraced street highlighting key characteristics**

- Clear boundary wall distinguishing private and public space.
- Strong and continuous building line with buildings set back 2-3m from boundary line.
- Skylights added over the years as lofts have been converted to habitable space.
- Repeating elements provide rhythm along the street, e.g. chimney stacks, projecting bays, party walls etc.
- Replacement windows do not match original design.
- Satellite dishes detracting from chimney stacks.
- Wooden front doors painted to households taste and style.
- Rubber and recycling put out on street on collection days.
- Pavements with flagstone paving - mixed state of repair.
- Tarmac road with resident only parking restrictions.
- Sash windows with shutters.
- Modern railings unsympathetic to original design.
- Street trees planted since area built - placed to align with party walls. Not consistent along entire length of street.
Type 1 | Compact grid

Streetscape
- Narrow(ish) street widths (10-12m) with low-rise buildings
- Pedestrians, cyclists and vehicles integrated into street design
- Minimal building setbacks (1-3m) with front low boundary walls or fencing - front gardens are too shallow to accommodate car parking
- Car parking is almost exclusively on-street - usually on both sides - sometimes one side
- Mews set behind the principal terraces that front onto the street have a smaller, more compact, domestic scale
- Pavement widths are narrow at 2m to 2.5m.
- Shallow front gardens can soften the streetscape when planted generously and consistently
- Street trees feature in some streets aligned to party walls, but are not always consistent
- No grass verges

Building type and form
- Urban yet domestic scale with strong vertical emphasis
- Small, compact scale with a close and clear relationship between street and building
- Predominantly terraced houses and semi-detached (from Edwardian period)
- Larger, imposing, detached ‘villas’ also evident (e.g. Woodlands Grove) these are often now divided into flats
- L-shaped building plan is the most common for the terraced property
- Heights chiefly 2 to 3 storeys - sometimes 4 storeys with half-basements
- Average dwelling density between 60-100dph sometimes slightly higher
- Garden sizes - front gardens are shallow (1m to 2.5m) back garden lengths range from patio size 5m to an extensive 25m

Materials and detailing
- Level of detailing, craftsmanship and ornateness varied greatly depending on the clientele and affluence of target market when built, e.g. Bedford Park was very different from Windmill Road
- Period features commonplace and a variety of historic styles were used - Italianate, Gothic, Arts and Crafts
- Detached or semi-detached villas tended to be far more ornate and lavishly detailed than terraced properties
- Party wall parapets and chimneys give a distinctive rhythm to the skyline
- Mostly constructed of yellow stock/red/brown brick or local stone
- Decorative patterned brickwork - Flemish bond is a common pattern.
- Slate roofs with lead lining and ridge lines
- Steeply pitched roofs or butterfly roofs concealed by parapets
- Bay windows in a variety of shapes - square bays common in Edwardian properties
- Coloured glass in front door part of original design
- Sash windows with glass panes - window heads, sills and columns feature
- Decorative ceramic tiles laid onto path to front door, porches and halls

Images:
- Compact grid with sweeping streets and mature trees
- Larger villa style properties with good size front gardens
- Typical L-shape building form with small back garden
- Non-residential uses on and near to the corner plot
- Narrow fronted ‘cottage style’ terraced houses with various facade treatments
- Tight arrangement of semi-detached houses with strong vertical proportions and ornate applied detailing
- Distinctive features: slate roof, lead edging, chimney stacks, party walls, window heads and painted brickwork
The Glebe Estate lies just south of Chiswick High Road and is a very compact and reduced scale example of a compact grid. It is comprised of narrow, long rectangular blocks, between 70m wide and 200m in length on a simple, orthogonal grid layout, with compact two storey terraced houses. The streets are narrow (10m to 15m wide) with a high frequency of front doors in a variety of shades and colours lining the street. The area has a domestic and human scale and feel.

The Glebe Estate was built between 1871 to 1891 on church-owned land. Based on a simple orthogonal street plan with cottages fronting onto the street, the estate was divided into plots and built speculatively over this period. The estate provided worker cottages for skilled/semi-skilled households divided often into two or three tenements. Some were owner-occupied, but most were bought by landlords to let out. Freeholds were bought in the 1970s and a new, wealthier class of people started to renovate these cottages with a new-found appreciation for Victorian townscape, architecture and conservation.

The inhabitants have changed over the years but the built fabric has remained fairly intact albeit some alterations, additions and minor changes. The area is a very popular and affluent part of Chiswick, with houses now largely occupied and owned by one household.

See Character Area L in the Chiswick Study Area for more information on this area and its surrounding context.
Type 1 | Compact grid

**strengths**

- Sufficient density allows for a healthy and sustainable mix of uses to provide for local conveniences within a 5-10 minute walk
- Close to public transport - partly because of when and where they were built these areas are within walking distance to train, underground and bus services
- Walkable - the layout is very walkable with street intersections often no more than 100m apart and very few dead end streets
- Navigable and legible - logical street pattern with corner landmark buildings/features makes navigating easy with clear views to the end of the street, lengths, angles are consistent, regular and reliable
- Well-defined public and private space with secure private back gardens and public-facing small front gardens adjacent to the fully public street
- Enclosure - buildings clearly define the street without overshadowing or dominating it, giving a domestic and human scale to the street
- Uniformity – the consistent style and layout repeated in an area gives it a particular character and sense of place
- Rhythm and variety in the elevation as bay windows and other features are repeated down the street
- Rhythm in the roof line with chimneys and original dormers repeating down the street
- Front gardens - the shallow planted front gardens can soften the streetscape and do not allow for conversion to car parking
- Feels safe and secure - front doors and windows front onto and overlook the street which due its intimate scale does not feel too big
- Economical - uses space efficiently, provides adequate density without needing high-rise buildings
- Adaptable - the fine grain plot structure allows for constant and gradual internal adaption and rear extensions
- Period features and high quality craftsmanship evidenced in external detailing gives a visual richness and personality to the facades
- On-street parking helps provide constant activity and natural surveillance on the street
- Robust building types can be used as houses or flats
- Dual aspect dwellings provide good access to daylight and through-ventilation
- Traditional look and feel is currently fashionable

**weaknesses**

- Uniformity and consistency can be boring and dull if the buildings and spaces do not give activity and life
- Often fails to respond to the underlying landscape, of contours, natural features such as rivers etc.
- Due to many that exist in the borough being created before the advent of the motor car - lack of car parking is an issue as there is little to no off-street parking
- Cars can easily dominate and overtake the streetscape making the public space one-dimensional and making social interaction and children's play impossible
- Incorporates little green civic space or amenity space
- Pavements can be too narrow to allow social interaction/meeting especially when occasionally cluttered by rubbish and recycling
- Limited street greenery - street trees are often small or inconsistently planted
- Small front gardens offer inadequate space for storage of refuse and recycling bins and/or cycle parking

**opportunities**

- Infill development should be of the highest architectural standard and respond to context and character
- Sensitive backland development is appropriate where there is suitable space within the backs of blocks
- Creation of home zones along many of the quieter streets to find a better balance between cars and pedestrians and social activity
- Introduction of cycle parking within small front spaces
- Designation of some areas as Conservation Areas for their special architectural and historic interest
- Local listing or listing as an asset of community value of some of the unique buildings that feature in this type and are at risk of being lost, for example, local pubs and corner shops
- Visual animation and differentiation through sensitive treatment of building facades, sensitive front space planting and boundary treatment, street planting and/or improved landmarking where necessary, especially at corners
- Introduction of communal refuse and recycling systems to take pressure off front gardens and pavements
threats

- Unsympathetic and poor quality subdivision of houses into HMOs
- Conversion of non-residential uses (e.g. local pub or corner shop) into residential thereby losing important local employment and amenity.
- Unsympathetic infill or backland development that fails to adhere to layout and streetscape of building line, setback, heights, scale and massing
- The addition of poorly designed extensions or porches that disrupt the rhythm and consistency of the street elevation
- The loss of external detailing through the replacement of sash windows, original doors and tiles
- The loss or concealment of brickwork through rendering, cladding, pebble dashing or unsympathetic sandblasting and repointing
- The addition of poorly designed dormer windows, roof lights and poorly arranged photo-voltaic panels, which disrupt the rhythm in the roofline
- The loss of original chimney stacks or their covering by satellite dishes
- The loss of front gardens and garden walls to hard standing
- Becoming increasingly expensive and no longer affordable to the young families they once provided a first step on the property ladder for – knock-on effects for housing market.

Individualistic yet sensitive infill, Chiswick

The type is being revived in regeneration schemes such as this one in Neasden, London Borough of Brent
**Type 2 | Loose grid**

**brief summary**

- A very common type in the borough, due to the significant growth experienced during the interwar and early postwar period.
- Large areas of the borough contain variations of this type resulting in it being ubiquitous.
- Mostly comprises large, irregular blocks on a network of wide, curving streets with a mixture of closes and cul-de-sacs.
- Some blocks are more regular and straight, others are more curving and gestural.
- Characterised by their low density, consisting of large plots with large front and back gardens.
- Consists of largely detached, semi-detached or short terraces and predominantly 2 storeys.
- Epitomise current suburban character - a generosity of space, large back gardens, deep front gardens, space for your car, space to extend your house, uniform and conservative in style, detailing.

**historic development**

- Housing Act 1919 offered council Housing for the working masses, ‘Homes for Heroes’ as it was termed.
- Suburban housing boom after the late 1920s depression - massive population growth met with huge house building program - ribbon development covered swathes of previous countryside/market gardens.
- The underground railway was extended and offered quick access into the West End and City.
- Offering light, space and good air to city dwellers in a time of TB and bacterial infections.
- Demand to escape the cramped, dark terraces of the Victorian estates.
- Marketing by estate agents of this new lifestyle for the aspiring, affluent household was very successful.
- Growth and accommodation of the private motor car heavily influenced the layout and design of these houses.
- Advances in technology - electrification of the home, plumbing and sewage.
- Decline in domestic servants and help.
- More small speculative builders at the beginning of the period gave way to larger building firms able to develop large estates - the volume house building firms of today originated in this period.
- More leisure time and the demand for gardening led to the creation of large gardens where fruit and vegetables could be cultivated.

**variations**

- There are three main variations of the loose grid evident in the borough: garden suburb, ribbon development and curves and closes, often described as ‘loops and lollipops’.
- Garden suburb - shorts terraces (4 or 6 dwellings), wider and shallower plots, influenced by Arts and Crafts movement with a more direct relationship to the private garden. Many built by trusts or local authority on garden suburb ideals (Example: Worple Avenue, Isleworth). Later postwar variant has a more new town style - less applied detailing, simpler, economical forms (Example: Morris Road, Isleworth) and rectangular greens with parking bays (Example: Sparrow Farm Estate, Feltham).
- Ribbon development - Interwar development lining major streets, characterised by a more regular, orthogonal grid (Example: Boston Manor).
- Curves and closes - large, irregular shaped blocks forming a loose and coarse grid structure of straight, gently curving and sweeping streets. Closes often feature with houses grouped around the close in a semi-circular arrangement (Example: Central Way, Hounslow).
Type 2 | Loose grid

**dominant period**
- Predominantly from the interwar and early postwar period - late 1910s to late 1940s and early 1950s
- Includes mixture of speculative development by small house builders or local authority planned estates
- The 1920s and 1930s saw a significant council house building programme which had a dramatic effect on the landscape and created a number of garden suburb-style estates
- This growth came about and was heavily influenced by the increasing popularity of the new underground lines, the motor car and road building, opening up new areas that were not previously accessible
- This period witnessed a loosening and opening up of the more compact urban grain of Victorian and Edwardian housing layouts. Blocks became bigger, streets widened, plots deepened and houses gained more space with bigger front and back gardens
- This type has been somewhat undervalued and criticised for its low densities, suburban and sprawling nature
- Architectural recognition is beginning to occur, but often little is known about the architects and building firms who created many of these estates

**land use**
- Predominantly residential (low density)
- Can contain a small parade of retail units and pub, though these are not always within a 5-10 minute walk
- Usually in close proximity to a primary school which were sometimes provided as part of a planned estate
- Access to open space and green amenity space feature strongly

**layout and structure**
- Large, irregular blocks with closes and cul-de-sacs forming a loose grid structure. Block lengths range from 70m to over 300m
- Streets form a network that is fairly permeable to pedestrians but catering principally for the car as street intersections can be as far apart as 300m
- Sometimes a network of separated footpaths are evident which interweave through the middle and side of blocks
- Medium to wide streets of between 12-20m (the more recent the street the wider it tends to be)
- Main streets often have larger, grander houses on bigger plots
- Large internal space of blocks given over to deep back gardens - 50m to 100m
- Generous pavement widths sometimes with grass verges and street trees
- Buildings are set back from boundary line between 4-9m
- Boundaries are mostly low brick walls but in many instances have been removed to allow for car crossovers
- Parking is often on paved over front garden and also on-street (one sided and sometimes two-sided)

**Photomontage of a typical interwar street with semi-detached houses highlighting key characteristics**
Type 2 | Loose grids

**streetscape**
- Use of short and long sweeping curves in street design - a departure from the more orthogonal grids described in urban type 1
- Uniformity of street layout and dimensions - plus the use of closes and cul-de-sacs for the first time
- Wider streets allowed for more light to penetrate houses and to begin to accommodate the motor car
- Desire to bring greenery and a touch of the countryside to these estates with street trees, grass verges and small green spaces
- Lower building heights and wider streets lessen the sense of enclosure and feeling of being somewhere urban
- Building setback far from boundary line - usually 4m to 8m
- Bay windows with gable ends add a vertical rhythm to the street
- Importance of front boundary walls to streetscape enclosure

**building type and form**
- Beginnings of standardisation and mass production building methods - a few standard house types with some variations, though some of the larger, grander houses were customised for affluent clients
- Suburban in character - buildings set on large plots with space (usually 2m-4m) between each set of buildings to access rear
- Semi-detached houses, short terrace runs (in postwar period) and occasional detached house (often on the prominent corner plots)
- Houses were wider and shorter with an emphasis on the horizontal
- House internal layout usually consisted of sitting room at front, dining room behind, kitchen at rear and 3/4 bedrooms on first floor with indoor bathroom
- Some apparently semi-detached houses in fact contain ground and first floor flats accessed via front and side doors
- Includes both detached and semi-detached single storey bungalows
- Low densities - usually between 25-50 dph
- Garages becoming common - often set back to the side of the house

**materials and detailing**
- Simpler in style and detail than Edwardian/Victorian houses, using less expensive materials and building methods
- Earlier interwar houses had more ornate detailing craftsmanship than later examples (particularly postwar) which were much simpler and less detailed due to economic and aesthetic reasons.
- Often traditional 'country style' influences including mock beams, lattice windows, weather boarding, pebble dash - Tudorbethan and Jacobethan were popular
- Houses have been personalised through painting of facade, render and front doors
- Curved and square bay windows feature heavily with gable ends or catslides
- Terracotta detailing on bay surrounds and porches a common feature
- Combination of brick and render, pebble dash in later examples, often render on ground floor with brick work above
- Hipped roof, dormers and gable ends predominate with slate and tiled roofs
- Metal and wooden windows, later examples using uPVC with top and side swing openings

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Houses arranged around large green spaces with mature trees - careful appreciation of landscape

Typical streetscape where front boundaries have been removed to accommodate on-plot car parking

Semi-detached single storey bungalows

Garden suburb style of book ended short terraces

Tudor style with mock beams and angled bay windows

Elegant interwar semi-detached pair with strong vertical proportions and curved bay windows

Early postwar gambrel-fronted 4-unit terrace, a sub-type most common in the west of the borough
This late interwar development is situated in the centre of the borough between Hounslow and Isleworth. It consists almost entirely of semi-detached houses with a handful of short terraces of four units set around large sweeping crescents and gardens of which Central Avenue forms the spatial spine to the area. Plots are wide and long, occupying large blocks which reduce pedestrian permeability. They have large front and back gardens giving a generous, suburban but not particularly leafy character to the area. Most houses have hipped roofs with large projecting bays and large chimney stacks. Streets are long and fairly wide, but mostly not tree-lined.

See Character Area O in the Hounslow Study Area for more information on this area and its surrounding context.
Type 2 | Loose grid

strengths

- Spaciousness make it popular with families - especially young families
- Generous front gardens contribute to the leafy character when they are well planted and not paved over for car parking
- Their ability to be personalised and adapted/improved over time with extensions, alterations and improvements
- Large blocks giving each house a large back garden which can be a haven for wildlife
- Street layout and widths allow for grass verges, street trees and small green spaces
- Interesting architectural elements such as square or curved bay windows, gable ends and porches
- High quality craftsmanship can sometimes be evidenced in the external detailing
- Uniformity – the consistent style and layout repeated in an area gives it a particular character
- Rhythm in the elevation as dormers, bays and set backs are repeated down the street
- Rhythm in the roof line with chimneys and original dormers repeating down the street

weaknesses

- Low density, resulting in inefficient use of land and not enough people within a given area to sustain a mix of uses and/or public transport
- Design and dependence on the private motor vehicle
- Some streets, particularly the wider ones offer poor sense of enclosure
- Front gardens are large enough to be used for car parking
- Front boundary walls are often removed to make way for car parking leading to a loss of definition and enclosure
- Sheer uniformity and endless repetition of some estates can seem quite monotonous and can make way-finding difficult

opportunities

- Intensification and an increase in overall density in certain areas where PTAL is good
- Introduction of a greater mix of uses and improvements to community infrastructure
- Possible provision of innovative, sensitively designed infill housing within the centre of some larger blocks
- Reinstatement where lost and improvement where existing of grass verges and street trees which add so much to the quality of the streetscape
- Reinstatement where lost and improvement where existing of front boundary walls to ensure a clear demarcation between public and private space
- Improvement of pedestrian permeability by improving and linking up footpaths, though care should be taken to ensure they do not become hostile and unsafe spaces
- Encouragement of dense planting of front and back gardens to encourage flora and fauna
Type 2 | Loose grid

threats

- Removal of front gardens and use as car parking
- Inappropriate roof extensions that are out of proportion and scale, use incorrect materials and fail to blend in to the existing building form
- The loss of and general poor maintenance of grass verges
- Problem of large sheds being built in the back gardens that are being used as illegal residential accommodation
- Cross overs eroding the kerb line, pavement quality and grass verges
- The loss of external detailing through the replacement of original windows and doors
- The loss or concealment of brickwork through cladding, rendering or pebble dashing
- The loss of original chimney stacks
- The addition of poorly designed dormer windows and roof lights which disrupt the rhythm in the roofline
- The addition of poorly designed extensions or porches that disrupt the rhythm and consistency of the street elevation
- The loss of front gardens to hard standings and car parking
- The differing elevational treatment of pairs of attached houses
- The loss of a gap between two semi-detached pairs creating a terraced effect
- The addition of poorly designed dormer windows, roof lights and poorly arranged photo-voltaic panels, which disrupt the rhythm in the roofline

Infill makes some attempt at respecting local character though surface treatment could be better, Hounslow

Recent development at higher density though on loose, looping street layout, Stanmore, London Borough of Harrow
Type 3 | Slabs and towers

brief summary

- There are few examples of this type across the borough but these few have significant impact due to their structure, scale and height
- Freestanding buildings set within open space which consists of grassed areas, mature trees and shrub planting
- Structure and layout makes this type stand out from its surroundings which are usually street based layouts
- Mixture of high-rise towers (point blocks) and lower-rise, linear slab blocks
- Usually medium to high density
- Highly visible and prominent on the skyline due to the towers
- Segregated movement of internal access roads and pedestrian footpaths
- A mix of housing types, commonly flats, maisonettes and terraced houses
- Large car parking courts and hard-standing dominate the public space
- Green Dragon Lanes (Brentford Towers) and Iivybridge Estate in Isleworth are the most typical examples of this type in the borough

historic development

- Modern architecture arose in the 1920s and 1930s but was not popularised and commonplace until the building of postwar housing estates.
- Part of slum clearance legislation - compulsory purchasing of ‘slums’ and demolition alongside the rebuilding of areas bomb damaged or destroyed during WWII.
- The 1956 Housing Subsidy Act led to the building of ‘tower blocks’ as the subsidy increased the taller the building - around 4,500 tower blocks built up until 1979 - only 6 built (35m and higher) between then and 1998.
- Streets in the sky part of the modernist vision, first popularised by CIAM and Le Corbusier.
- Proliferated following successful development of Park Hill in Sheffield in the 1950s.
- Access to daylight, nature and open space as a reaction to the compact and tight urban grain of previous Victorian terraced housing.
- With the collapse of Ronan Point in East London in 1968 the building of tower blocks dramatically reduced.
- Popularised as dystopian future in the film A Clockwork Orange (1971).
- Type gradually waned in popularity amongst designers, local authorities and developers in favour of Type 4.

variations

- Examples to be found in the borough: Iivybridge Estate in Isleworth, Brentford Towers in Brentford, Heston Farm and Convent Way, both in Cranford and Heston.
- Few major variations in the borough. Some later examples are exclusively lower-rise as the popularity of tower blocks waned in mid-late 1960s. These still characterised by freestanding residential blocks set within open space.
Type 3  |  Slabs and towers

**dominant period**
- Exclusively postwar period (1950s, 1960s and 1970s)
- Local authority-designed and constructed with in-house architect teams, often as replacement of earlier housing that was bomb damaged from WWII or deemed unfit for habitation
- Local authority building programmes dependent upon central government long-term loans and grants made development financing heavily reliant on central government agenda
- Heavily influenced by International and modernist principles of urban planning and architecture - Le Corbusier and CIAM movement
- Radical in their departure from traditional housing layouts (in which houses face onto a street) and the materials and technology used (e.g. reinforced concrete panels)

**land use**
- Predominantly residential - with a mix of flats, maisonettes and terraced houses
- Quite often contain a parade of shops (laundrette, take away, public house etc.) located within the estate to serve estate residents
- Sometimes contain dedicated civic and educational facilities such as a school, church and community centre
- Exclusively postwar period (1950s, 1960s and 1970s)
- Local authority-designed and constructed with in-house architect teams, often as replacement of earlier housing that was bomb damaged from WWII or deemed unfit for habitation
- Local authority building programmes dependent upon central government long-term loans and grants made development financing heavily reliant on central government agenda
- Heavily influenced by International and modernist principles of urban planning and architecture - Le Corbusier and CIAM movement
- Radical in their departure from traditional housing layouts (in which houses face onto a street) and the materials and technology used (e.g. reinforced concrete panels)

**layout and structure**
- Buildings sit within open space - absence of a perimeter block and street pattern
- Designed as self-sufficient estates with own services and shops
- Routes do not align with surrounding street network giving them their own movement structure
- Buildings set back from roads and paths - accessed from open space or courtyards in contrast to street access seen in previous types
- Large amounts of open space either grass patches, car parks or sometimes landscaped

Photomontage of a typical slabs and towers type highlighting key characteristics
Type 3 | Slabs and towers

streetscap
- Landscape is seen as an important element with buildings set within it
- Landscape is semi-public, for residents to use as amenity space but is accessible to anyone
- Landscape consists of access roads, pedestrian footpaths, car parking courts and green space
- Streets in the sky were devised with linked deck access to offer dedicated pedestrian routes across the estate
- Pedestrians and vehicles often segregated, pedestrians use footpaths and cars use access roads
- Dwellings often accessed from decks and service cores - sometimes exposed, sometimes internal
- Entrances and doorways are few, serve many dwellings and often difficult to identify

building type and form
- Medium and large floor plan apartment blocks, including a mix of high rise towers (often known as point blocks) and lower-rise, linear slabs
- Complex building layout patterns arose with later examples only comprised of lower-rise slabs rising to no more than 6 stories
- A mix of dwelling types and sizes - studio, 1, 2 and 3 bed flats and maisonettes. Stacked maisonettes are a common dwelling type
- Contrast in building heights is a strong feature e.g. 2 storeys next to 20 storeys
- Density range varies by estate - between 70-180 dph
- Private outside space is minimal - few have private gardens, some have balconies or deck access space
- Provision of amenity space is through the large, communal landscape that surrounds the buildings
- Buildings have deck access and were sometimes raised on pillars to allow landscape to flow underneath uninterrupted

materials and detailing
- Modern building materials and finishes being used for first time on a mass scale
- Pre-cast reinforced concrete (PRC) was a common building material used in a ‘natural way’ - a departure from brick which had been the dominant building material up to now
- Prefabricated and standardised construction systems used to keep costs down and build efficiently en masse
- Many new materials were not robust or suitable for wet, cold climate, suffering structural and aesthetic problems
- Large sheets of plate glass used to allow light and air into dwellings
- Minimal to no detailing - a free facade or ‘brutalist’ aesthetic - free from embellishment and ornament to reflect new tastes and a rejection of previous values
- Flat roofs were common though some have been pitched since as problems arose with leaking
- Most have new uPVC windows, put in as part of the estate renewal programme
Ivybridge Estate in Isleworth is an example of this urban type. Located in the south of Isleworth close to the borough boundary with the London Borough of Richmond.

The estate, built in 1970, consists of four 18-20 storey tower blocks and long, L shaped slab blocks arranged and set within open space and car parking. The traditional street pattern has been replaced with a footpath network and internal vehicular access roads.

See Character Area V in the Isleworth Study Area for more information on this area and its surrounding context.
Type 3 | Slabs and towers

**strengths**

- Internal dwelling sizes and spaces are generous and well laid out
- Plenty of natural daylight and air circulation were considerations in the design
- Offers high-rise living with great views
- Large areas of open space – when it is well maintained and of good quality
- A variety of building types within an estate meets a diverse set of housing needs
- Benefited from dedicated community spaces and areas to play for children
- Landscape benefits from mature trees and shrubs giving a leafy, parkland feel to many estates
- Some early examples featured public art, often in the form of sculpture and mosaic

**weaknesses**

- Internal shopping parades are often difficult to access from outside the estate by non-residents which diminishes passing trade/footfall and makes it difficult for traders to survive and prosper
- Suffer from poor ventilation, mould, damp and leaking roofs as a result of new and generally untested building construction systems and materials
- Require high levels of maintenance compared with other housing types due to the large amount of open space and layout arrangements
- The uniform and consistent style and layout can make such an estate seem bland and oppressive
- The open layout and removal of a traditional street system makes them difficult to navigate for those who do not live there
- Though often highly permeable they are often poorly legible, requiring layout signs at entry points
- Multiple properties (often more than 15) accessed from one service core often leads to security and surveillance issues
- The network of footpaths are often too quiet and poorly lit which makes them feel unsafe particularly after dark - especially for vulnerable users such as the elderly
- Due to the high rise nature of many of the properties families find them difficult to live in - particularly if lift maintenance is poor

**opportunities**

- Improvement of the layout in conjunction with building new homes by better enclosing space and framing key movement routes to improve legibility
- Improvement of wayfinding to and through the estates for visitors and passers-by
- Reduction of the impact of cars and the amount of public space they occupy
- Sensitively draw upon the original architectural aesthetic, pattern and visual language when considering upgrading works and investment
- Communities to plan, manage and maintain the large areas of open space which have potential to be community gardens or allotments
- Redevelopment of unused and redundant areas occupied by, for example, garages
- Incorporation of public art
Type 3 | Slabs and towers

threats

- Ad-hoc piecemeal changes which do not address underlying layout and structures issues
- Insensitive repairs and alterations lead to a weakening of the architectural integrity of the estate
- Poorly designed new infill development
- Poor, inadequate maintenance and lack of investment - particularly on the large amounts of open space which is maintenance-heavy
- An increase of open space given over to car parking and hard-standing rather than landscaped gardens.

Housing built on under-used open space, regenerated estate, Feltham
Regenerated estate, Brixton, London Borough of Lambeth
Type 4 | Courts and cul-de-sacs

brief summary

- A significant number of developments of this type exists across the borough, though they are more prevalent in the west.
- This type can cover small areas such as Brookwood Road in Hounslow, to large estates such as Haverfield Estate in Brentford.
- Examples are predominantly from the 1970s, 1980s and 1990s.
- Characterised by a main distributor or loop road with a series of access roads forming semi-enclosed courts or cul-de-sacs, creating a ‘superblock’ structure.
- Traffic separation principles ensure vehicles and pedestrians are often segregated especially in the more Radburn-esque examples.
- Lower-rise buildings are arranged in groups around a semi-enclosed court or cul-de-sac, sometimes inward facing, sometimes outward facing.
- Predominantly medium density but can vary greatly depending on the dominant building type - 1980s examples can be very low density (range 30-50dph).
- Building types can be very mixed with apartment blocks, short terraces and semi-detached.
- Car access and parking is an integral element of the design, with ease and proximity a key design feature.
- Characterised by an insular, self-contained feel, resulting from its lack of through-movement and wider connectivity.

historic development

- Inspired by the garden city principles of Ebenezer Howard, residential vehicle-pedestrian segregation was first applied in the town of Radburn, New Jersey, USA in 1929 as a response to mitigate the effects of the motor car.
- Though it never caught on in the USA, the town gave its name to the design principle.
- The basic Radburn principle: vehicle access is to the back of the home while pedestrian access is to the front.
- Addresses road safety issues arising from increasing car ownership (Buchanan Report 1963). This acceptance of the car led to ways of designing housing areas to accommodate this long-term trend.
- New standards and professional practice guides like DB10 and DB32 both heavily influenced housing design and layout during the 1960s and 1970s.
- The principle has been altered and applied (some say eroded and corrupted - hence the terms quasi- and pseudo-Radburn) in various forms across the world including the UK.
- The type evolved during the 1980s into the so-called ‘Noddy Box’ estate of small, sometimes poorly-built units on small plots with an emphasis on privacy and insularity.

variations

- A great many variations of this type exist with some considerable changes made over time to address problems and changes in lifestyles, but two principal variations are:
- Public court based housing estates. These tend to strictly segregate users: cars onto roads, pedestrians onto footpaths and the two rarely mix. Houses are grouped around a court or cul-de-sac, where cars would be able to park either outside or within garages. Heavily influenced by Radburn principles and subsequent DB10 and DB32. The Beavers Estate in Hounslow West is a good example of this variant.
- Private cul-de-sacs estates - built by large private house builders in the 1980s and 1990s. The large housing estate along Westmacott Drive in Feltham is a good example of this variant.
Type 4 | Courts and cul-de-sacs

dominant period

- The Radburn examples were built in the 1960s to 1970s usually by the local authority or the newly emerging housing associations.
- The later examples are mostly from the 1980s to mid 1990s built largely by private house builders (referred to as the Barrattification of Britain), which followed a similar layout pattern of cul-de-sacs accessed from a main distributor road but did not separate pedestrians from vehicles to the same extent.
- From the late 1970s and through the 1980s public sector build housing virtually disappeared and private house builders dominated house production through ever increasing large, suburban, edge-of-settlement estates.
- Housing was mass produced either by a local authority, housing association or private house builder.
- Standard house types formed a pattern book which were applied across an estate.
- The increasing popularity and ownership of cars influenced the design of estates during this period and housing layouts were reconfigured to try to accommodate cars but to not let them dominate.

land use

- Almost exclusively residential.
- Very limited or non-existent provision of any other uses such as local shops and cafes.
- Usually contains a mix of dwelling types from flats to terraced houses.
- Some contain a provision for local amenities such as shopping precinct, community uses, schools.
- Green space often forms an integral feature in the layout.

layout and structure

- Main access road provides vehicular access into and out of estate and servicing.
- Designed like a pocket or pod, with one way in and one way out, through movement is discouraged and designed out.
- Access roads to each cluster of buildings and usually car parking court - these access roads form dead-ends.
- Pedestrians use the street network or sometimes a network of segregated footpaths that meander through the landscape.
- Pedestrian underpasses sometimes evident which ensure pedestrians and vehicles do not mix.
- Many cul-de-sacs have narrow pavements which follow road layout and sometimes include separate footpaths that follow to the side of houses or back gardens.

Photomontage of a typical cul-de-sac type development highlighting key characteristics.
Type 4 | Courts and cul-de-sacs

**streetscape**
- Streets no longer hold a general use and are predominantly for the car, pedestrians and cyclists being separated from the street with provision of dedicated footpaths
- A large central open space which wraps around groups of housing is an integral feature
- This open space is dissected by footpaths for pedestrians but is a car free zone
- Buildings are set back from street - sometimes at offset angles, arranged in a group or in a more ad-hoc way
- Boundary lines are often delineated by change in material or other subtle way
- Buildings enclose courtyards and open space not the road

**building type and form**
- Medium to small scale buildings from linear blocks of maisonettes and flats to groups of terraced housing
- Mix of dwelling types evident in one estate - terraced housing, flats and maisonettes
- Buildings arranged for easy access to and from the car
- In some examples buildings front onto the park and footpath and back onto the court
- Density range - low to medium. Earlier Radburn examples were medium density and the later cul-de-sacs much lower density
- Dwellings arranged to give sunlight, air and best outlook onto landscaped grounds
- Small private gardens and balconies provide private outside space

**materials and detailing**
- Timber frame construction is typical
- A variety of facade materials, e.g. brick, wood panelling, render
- Horizontal emphasis on windows
- Flat roofs are common - though pitched roofs have since been introduced to tackle leaking issues
- Later 1980s examples have a ‘traditional’ look with pitched roofs, porches and brickwork
- Very sparsely detailed - detail is sometimes applied through manipulation of primary material, e.g. shaped concrete
- Some have since been re-faced or re-pointed to improve robustness and durability

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Oriel Estate in Bedfont - housing is arranged around courts
Maisonette blocks arranged around a parking court
Simply detailed terraced house

A mix of house types and sizes with on-plot parking and garages
Distributor road loops around estate providing access to individual cul-de-sacs
Two storey houses arranged around and accessed from a cul-de-sac
Beavers Estate is a good example of the quasi-Radburn type and is located in Hounslow West, south of Henlys roundabout. This area consists of irregularly laid-out concrete housing blocks built in the late 1960s. The layout ensures vehicles and pedestrians are segregated, with roads for cars and footpaths for pedestrians making moving around quite confusing unless you know the estate well. Buildings are constructed with fair-faced concrete blocks detailed with white rendered indentations and window frames. Buildings are clustered in blocks of between four and six and heights range from two to four storeys with hipped roofs.

See Character Area H in the Hounslow West Study Area for more information on this area and its surrounding context.
Type 4  |  Courts and cul-de-sacs

strengths
- Landscape - green space and mature trees - though strength depends on quality
- Quiet residential ambience within the centre of the estate
- Mixed housing types provide diversity of households
- Safety - as pedestrians and children are separated from vehicles
- Small groupings of houses give a sense of neighbourliness - depending upon how many houses shared a court or cul-de-sac

weaknesses
- Fails to integrate into the surrounding urban structure
- Though often highly permeable they are often poorly legible, requiring layout signs at entry points
- Confused and poorly defined public and private space
- Segregation of pedestrians, cars and cyclists can lead to dead and inactive routes
- Poor levels of natural surveillance of public space - especially where houses back onto courtyards and key routes can make routes and spaces feel unsafe especially at night
- Difficult and expensive to maintain due to high levels of public space and poor layout
- Profusion of unadopted streets which do not benefit from mainstream street maintenance and cleansing
- Not easily adaptable - very few examples of side or rear extensions to dwellings
- Confusion over which is the front or back of the house and resulting impacts on privacy, tidiness and general upkeep
- Shopping areas find it difficult to thrive and survive as density of people is low and there is little to no through movement of passers-by

opportunities
- Significant restructuring of the layout to improve legibility and quality of permeability, for example, by connecting culs-de-sacs together to form streets
- Improvements to the quality of public open spaces
- Reintegration of vehicles, pedestrians and cyclists on certain key routes, possibly through the creation of home zones
- Introduction of small scale infill development to provide active frontages and resolve exposed backs
- Incorporation of public art
Type 4 | Courts and cul-de-sacs

threats

- Poor quality treatment and maintenance of the landscape and pedestrian footpaths will heavily impact on overall livability of the area
- Ad-hoc, piecemeal and poorly laid out new development which fails to address the weaknesses inherent in this type
- Poor, ad-hoc customisation of the backs of housing
- Poor boundary treatments or over-dominance of car parking on front boundaries

Improvements to public space by addition/refurbishment of children’s play area, re-surfacing of footways and better-tended grassed areas, Hounslow West

Infill of quasi-single aspect semi-detached houses on ‘spare’ land at edge of estate, Muswell Hill, London Borough of Haringey
Type 5 | Urban renaissance

brief summary

- Even distribution across the borough with the greatest concentration in Brentford
- Many examples to be found along and just off the main roads, e.g. London Road
- Typifies the new type of planning and urban design arisen out of the Urban Task Force Report: Towards an Urban Renaissance which encouraged reuse of brownfield land, higher densities and mixed use-type development
- Mostly comprises a return to the perimeter block with buildings fronting onto and enclosing streets and public space with strong axes
- Blocks tend to be smaller, more square in shape and respond to the underlying landscape in comparison to the compact grid type which tended to have longer rectangular blocks
- Higher densities achieved (up to 250 dph) through compact design principles
- Provision of a mix of housing types including flats, maisonettes, townhouses, mews and terraces, reflecting the diversity of housing need
- Predominantly mixed in tenure with private and affordable units integrated into one scheme
- Built almost exclusively by private developers or housing associations
- Examples include: Brentford Lock, Great West Quarter, Feltham town centre

historic development

- Reaction to the poor design of large cul-de-sac estates.
- Groundswell of the need for urban design in planning and architecture.
- By design - first government policy (DEFRA) on urban design values/quality.
- Creation of CABE and a strong push from central government to raise design standards.
- A return to the compact grid style layout with connected streets becoming important again.
- PTAL agenda - optimising sites.
- Part of the regeneration agenda after years of inner city urban decay - using brownfield sites, intensification of transport nodes, investment in infrastructure, place-shaping agenda.
- Lifting of strict planning standards such as the 21m overlooking rule and a push for focusing on performance criteria and outcomes such as privacy.
- Given a boost by the new London Mayor, Ken Livingstone and creation of the London Plan.
- London Plan and push for intensification, densification and tall buildings and responding to huge population growth.
- Re-discovery and emphasis on cities as hubs and economic drivers and places to live and thrive.
- A contextual rather than type based approach is applied with an emphasis that every place is different and needs a suitable response.
- c2010, Rory Olcayto of The Architects’ Journal coins the term CABE-ism to describe the type.

variations

- Many respond to context - so form, heights and types vary considerably.
- Even higher density developments witnessed in recent years with a push for intensification - particularly in areas with good PTAL.
- ‘Iconic’ tall buildings sometimes placed in the urban fabric.
Type 5 | Urban renaissance

**dominant period**
- Almost exclusively 1990s/21st century
- Most built by private developers and/or housing associations guided by the layers of national, regional and local planning policy
- Built on mainly brownfield sites, in old and under-used industrial areas (e.g. Brentford Lock), railway yards and land adjacent to canals
- Some has been public sector-led as part of housing estate renewal programs - can include infill or more comprehensive redevelopment and restructuring
- Historic buildings often reused and incorporated into new development designs - seen as a value uplift as provides a sense of history to a new development
- Considerable difference between those developments of the 1990s and those being built now (mid-2010s)
- New London vernacular emerging in recent years influenced by the Mayors Housing Design Guide, which is seeing a return to brickwork facades, recessed balconies, ground floor maisonette-type terraces and parapet roofs

**land use**
- Predominantly residential but a significant increase in mixed-use development
- Often with the ground floor given over to commercial, retail or community uses to help animate public space and provide local convenience
- Sometimes these ground floor units have remained vacant for long periods due to poor demand or pressure to turn into residential.
- Some developments (high-end) contain in-house gym, leisure facilities, concierge

**layout and structure**
- A return (partial) to the perimeter block layout - an unambiguous street-based form is evident
- Blocks are usually smaller and squarer than those from type 1
- Emphasis on through-movement and permeability for the pedestrian
- Clearer definition of public-private space and fronts and backs
- Can include internal access routes - pedestrian only sometimes
- Open courtyard layouts popular with one edge not built
- Private internal courtyards shared by residents - delineated by a gate or wall
Type 5 | Urban renaissance

streetscape
- Often high quality streetscapes with a return to importance of the street with doors directly fronting onto street to create activity and an ‘urban buzz’
- Internal pedestrian prioritised streets or home-zones (e.g. Union Lane, Isleworth)
- Parking a big design issue - mixed response - sometimes provided on street but usually provided within the block at the rear or underground to reduce pressure on on-street parking
- Landscaping often provides piazzas, courtyards, squares as part of public realm (not always publicly accessible however)
- Public art often featured in these new public spaces
- Boundary treatments are usually clear and intact - delineated by low boundary edge or change in material

building type and form
- Very mixed building types - townhouses, houses, mews houses, flats and maisonettes
- Smaller, domestic scale house types which share common characteristics to the Victorian terraced house (4-5m wide, L or T shaped plan)
- Medium to large scale apartment blocks usually provided at the corner of blocks
- Densities are medium to high (80-250dph) to optimise land and increase values
- General building heights vary from 2 storeys to 7 storeys with the occasional taller element
- Substantially taller buildings mark key locations/nodes (e.g. GWQ tower - 75m), the first since the 1960s office and residential towers
- Apartment buildings feature heavily as a way to increase density and offer urban living
- Landscaped grounds with dense, mature planting soften the dense, urban landscape
- Small dwellings sizes due to the push for maximising units on sites - being addressed by the London Housing Design Guide (LHDG)
- Low ceiling heights (2.5-2.6m) and little to no differentiation between floors

materials and detailing
- Concrete and timber framed construction systems
- Return to an emphasis on materials with a mixed palette used with consistency across a scheme
- Use of external cladding systems (e.g. coloured panels, faux-terracotta)
- Articulation of form through careful use of contrasting materials or patternwork
- Increasing use of sustainability measures in architecture - mechanical ventilation, louvres, triple glazing, passivhaus principles
- Stripped back facade treatment and building specification to minimum but a push for architectural elements to add visual richness
- Roofs in a variety of forms, pitched and flat, arising out of local context
- Windows in a variety of shapes and sizes but increasing use of full panel glazing
- Horizontal emphasis and squat feel to many elevations as a result of low ceiling heights
- Beginning to see a return to craft and careful choice of materials
- Common use of recessed and projecting balconies, external bays, articulation of the service core which add some visual interest but are not consistent to achieve rhythm along an elevation

Shared surface streetscapes overlooked by balconies
Thoughtfully landscaped street with on-street parking
Double height ‘penthouse’ apartments on top floor
Type ideally features public transport and a mix of uses
Brightly coloured facades with projecting balconies

Subtle boundary treatment and on-plot parking
Brentford Lock is located in Brentford, just north of the High Street by the River Brent, canal and lock. Built in 2000s this residential development has some small retail units, hard landscaped areas of public open space and narrow-boat moorings, all focused on the canal at Brentford Lock. The scale of the buildings at 3-6 storeys is significantly greater than surrounding areas. The Island site has more variety of form to link with its river fronts and the tallest buildings relate to the High Street with an 8th storey feature and public square. However, the Lock and the vista along the canal to GSK provide the only connections to the wider Brentford townscape.

See Character Area O in the Brentford Study Area for more information on this area and its surrounding context.

**Street and block structure**

- Large apartment buildings forming an open courtyard adjacent to river
- Small parking courts forms part of streetscape
- Terraced houses fronting onto public space with private rear gardens backing onto river
- Underground car parking
- Semi-private courtyards
- Apartment building
- Shared surface street providing access to dwellings
- Town houses with back gardens

**Section a-a’**

- Small parking courts arranged to be overlooked by apartments
- 3 storey town houses with on plot parking and trees
Type 5 | Urban renaissance

**strengths**
- Often located in areas with good services and public transport
- Higher densities make better use of land and intensify urban areas
- Return to the importance of a connected street pattern
- Attempts are made to understand and respond to the local character
- Mixes housing types and tenures (tenure-blind) into a development ensuring a mixed population
- Often feature public art in the form of sculpture

**weaknesses**
- Do not always fit into their surroundings
- Cores serving multiple flats suffer from management problems
- Single aspect flats give little adaptability and long-term livability
- Some developments are poorly located with regard to services and public transport, going against one of the main principles of the type
- Some developments do not fully integrate tenures
- Repeated use of similar, often cheap, materials and finishes can give developments an anonymous, ‘cloned’ feel

**opportunities**
- Use as a catalyst for wider improvements to the public realm
- Use as a catalyst for improvements to local public transport accessibility
- Reuse of older buildings for new uses
- Innovative and imaginative solutions to development on restricted and unusual sites
- Removal of the perceived need for gated developments through use of perimeter blocks which provide security through their intrinsic design
- Realistic inclusion of non-residential uses, including ground floor retail, in terms of viability and impact on residents
- Introduction of imaginative frontage treatments such as artwork from local schools and local historic information, where non-residential ground floor units remain unlet for extensive periods
- Incorporation of public art
Type 5 | Urban renaissance

threats

- Excessively tall and insensitively designed buildings in inappropriate locations
- Poor maintenance of the public spaces (which are sometimes in private ownership) or restricted access to non-residents

Early 18th century building restored for office use within early 21st century mixed use development, Brentford

Home zone development of neo-terraces, Plymouth
Type 6 | Big box

brief summary

- Located across the borough but more common in the west and along the Golden Mile section of the Great West Road
- Located close to major A roads (A4, A315, A312, A30, A244), the M4 and Heathrow
- Self-contained pods with one or two access roads (little to no through movement)
- Large footprint, rectangular, freestanding buildings, also known as super sheds and LSSBs (large single-storey buildings)
- Buildings surrounded by car parking and/or hard and soft landscaping
- 4-10m building heights - often double height ceilings
- Mono-use - either industrial, office or retail uses
- Examples in the borough include; North Feltham Trading Estate (Feltham), Chiswick Business Park (Chiswick), Brentford Campus Paragon Site (Brentford), Halford and Lidl off Hospital Road (Hounslow), Heathrow International Trading Estate (Hounslow West), Tesco supermarket off Rugby Road (Isleworth), Airlinks Business Park (Cranford and Heston)

historic development

- Large footprint commercial/industrial buildings in the UK have their roots in the factories and warehouses of the late C18th and early C19th, but the type can be dated to the vast portside warehouses of the Romans.
- Developments in road transport in the first half of the C20th (e.g. the Great West Road) gave rise to the suburban and exurban siting of large factories and warehouses in trading estates, some fronted by Art Deco office buildings.
- From c1970 continuing developments in logistics (containerisation and larger road haulage vehicles) and communications (the advent of the motorways), the shift from manufacturing to service industries and changes in consumer behaviour and expectations led to the establishment of very large storage and distribution centres in strategic locations.
- Through the 1980s retailers began to favour big box-style stores (hypermarkets/superstores) in out-of-town centre retail parks and shopping malls.
- Leisure uses such as multiplex cinemas and bowling alleys followed.
- In the mid 1990s planning policy guidance discouraged out-of-town centre retail, noting its detrimental effects on the life of urban centres.
- Through the 1990s higher quality business parks began to appear, featuring architect-designed low to mid-rise large footprint office buildings with integral landscaping.
- Most recent use of the big box is the heavily secured data centre and self-storage, the latter effectively displacing space from recent small residential units to large commercial units.

variations

- Industrial and trading estates - these make up the majority of the big box type and range in age, quality and size. More recent examples tend to be much larger in every sense and much coarser in grain than older 1950s/60s examples.
- Retail parks - sometimes located within town centres, e.g. Asda in Hounslow, cater for car-based shopping trips. Consist of large retail shop floors of usually one storey but sometimes two, surrounded by car parking with loading bays to side or rear. Many retail parks contain 4-6 retail stores clustered together sometimes with a filling station.
- New high quality business parks are notably different with a strong emphasis on quality of public realm, landscaping and employee/client experience, e.g. Chiswick Park with its high quality public realm with buildings framing footpaths, lakes and densely landscaped gardens.
Type 6  |  Big box

**dominant period**
- Predominantly 1980s to present
- Some older and smaller estates from interwar and postwar period feature smaller scale office and industrial buildings mostly constructed from brick, with windows
- Generally estates, plots and buildings have got larger over the years as a result of economic and operational advantages which has an impact on the grain and scale of areas

**land use**
- A range of land uses depending on type of estate: industrial, office, commercial or retail often with leisure
- Specific uses include distribution centres, small-to-medium enterprises (SMEs), film and television studios, car dealerships, swimming pools, multiplex cinemas, wholesale builders’ merchants, DIY and garden centres, superstores and light engineering and manufacturing
- Can include small food and drink premises to cater for workers or visitors
- Low value areas which are affordable places from which to trade
- Retail and leisure uses in particular require large areas for car parking and circulation

**layout and structure**
- The detached urban structure offers limited through movement or connections which marks these areas out from their immediate surroundings
- Large scale, coarse urban grain with large plots, buildings and few routes
- Internal pod-like layout - one access road in and out - sometimes restricted access
- Often cover a large area and have little relationship to the natural landscape
- Buildings arranged next to or around an access road or large cul-de-sac
- Clusters of buildings sometimes form a loose, open courtyard layout
- Car-based layout with limited provision for pedestrian/cyclists
Type 6 | Big box

streetscape

- Streets are wide with large turning circles/junctions to cater for heavy goods vehicles
- Buildings set back from street behind a sea of car parking, sometimes with soft landscaping
- Generally, buildings do not front onto the street - entrances face inwards away from the street towards the car park from where majority of visitors arrive
- Boundary lines demarcated by low and high fences and/or planting
- Soft landscaping is usually low maintenance shrubbery with the occasional tree
- Pavements on main access road but less so on plot access roads
- Tarmac roads and mixed quality materials on pavement
- Scattered arrangement of street furniture - low bollards, street lights etc.

building type and form

- Very large plots with a large proportion given to car parking/hard-standing (30% to 60%)
- Medium to large footprint buildings/sheds - 20m to over 150m in length
- Simple rectangular building forms - highly regular and standardised forms
- Building heights typically 5m to 10m forming one double-height single storey building or two storey buildings
- Buildings have blank edges with exception of entrance and exits. Retail stores have semi-glazed edges
- Multiple businesses can be located in one large building with shared entrance
- Buildings arranged and constructed to suit commercial and operational requirements
- Large floorplate buildings which cater for expansive shop floors with loading bays at rear, e.g. large supermarket or electrical wholesaler
- No vertical stacking of uses, e.g. residential or office over ground floor retail store

materials and detailing

- Mixed materials - brick, metal sheets, glass (clear and coloured), pre-fabricated panels
- Very little detailing - functional and commercial aesthetic
- Signs/brands feature heavily on building facade advertising name and operations of business
- Few windows or if building is heavily glazed this is often reflective or opaque glass
- Flat roofs with the occasional, more distinctive saw-tooth roofs
- One main entrance with side and rear entrances for loading/staff access
- Air conditioning units and fume vents common place on external facade
Type 6 | Big box

Feltham trading estate

The map above shows the distribution of this urban type across the borough. This example, located in Feltham is typical of a big box type trading estate. This type of estate can be found across the western half of the borough, taking advantage of good accessibility to the road network and Heathrow Airport. Set back behind a row of early postwar semi-detached houses this estate is accessed by a distributor road (Central Way). Small access roads provide a means of entry to the low-rise sheds and office units. Car parking is extensive and is sometimes controlled access with a manned barrier point.

See Character Area A in the Feltham Study Area for more information on this area and its surrounding context.
## Type 6 | Big box

### strengths
- Offers dedicated space for businesses suited to their requirements
- Economic drivers for local area and often wider sub-region
- Support the operations and economic activity of Heathrow Airport
- Provide a place for the dirtier, noisier industries to be located away from sensitive residential areas
- A safe, controlled, campus-style place for business to locate and be close to other businesses, e.g. Chiswick Business Park

### weaknesses
- Not permeable, usually only functioning as a place to drive into and out of
- Car-based model relies on and encourages use of the private motor vehicle and not walking or cycling. Subsequent impacts on sustainability and health
- Do not contribute to walkable neighbourhoods
- Impacts on town centres - drawing potential trade and business exchange away from established centres which benefit from public transport access
- Sprawling nature, inefficient use of land and isolation, large areas devoted to car parking and circulation
- Little to no connection to underlying natural landscape - often limits accessibility to such natural assets, e.g. River Crane in Hounslow West
- Can affect retailers in established town centres

### opportunities
- Improvements to the walkability and legibility of these areas
- Improvement to public transport provision to these large employment locations
- Introduction (or improvement where existing) of a communal focus, for example, a cafe
- Reconnection to the natural landscape which often surrounds some of the estates
- Wrapping of other uses around the big box buildings to soften and animate edges
- Introduction of residential uses into some of the more pleasant estates
- Introduction of vertical stacking of uses, for example, residential or office over ground floor retail
- Incorporation of public art
Type 6 | Big box

threats

- Usually dependent on one main economic driver, e.g. Heathrow Airport - if this driver changes location then the knock-on effects would be substantial
- Big box developments, particularly retail, locating in town centres reduce variety and activity
Type 7 | Urban centre

brief summary

- Mixed use areas with high levels of local accessibility - intensity and proportion of mix varies from centre to centre
- Centres spatially arranged along high streets, historic cores and at key road junctions
- Streets and spaces lined by buildings with ground floor non-residential uses
- Residential or commercial uses often stacked above ground floor retail
- Usually a diverse mix of building types and ages reflecting their historic origin
- Many examples in the borough lie along or just off the London Road - Hounslow High Street, Chiswick High Road, Brentford High Street, Feltham town centre (remnants)
- Other examples include Hounslow West along Bath Road (Hounslow West), South Street (Isleworth), Heston Road village centre (Cranford and Heston)

Note: The urban centre type boundaries relate to spatial layout and urban character and therefore do not necessarily accord with the town centre designations outlined in planning policy.

historic development

- Historic street pattern normally evident - settlement origins lie in the centre, e.g. Hounslow town centre lies along the old Roman Road (now London Road) which subsequently became home to coaching inns and associated trade.
- Modern urban centres originate from settlement cores - have grown and expanded as the settlement grew but still have strong physical connection to early form and landscape.
- Rise of the modern department store and larger footprint retail units lead to a loosening of the urban grain and in some cases elimination of the historic urban core character.
- Changes in commercial and retail technology and patterns have heavily influenced form and layout of urban centres.
- New shift for urban centres with the rise of internet shopping and the bigger leisure and social interaction role that centres play in the C21st.

variations

- Many variations of the urban centre in the borough resulting from size, scale, form and history.
- High streets, i.e. Hounslow, Brentford and Chiswick, are strong, linear centres with buildings lining either side of a busy thoroughfare (the Roman Road).
- Modern C20th regenerated centres, i.e. Feltham, have historic cores but have undergone significant restructuring and development in recent times.
- Historic village centres, i.e. Heston, cluster around a strong civic building such as a church and remain the civic and economic heart of a settlement.
- Smaller centres clustered around public transport, i.e. Hounslow West, Isleworth station these originated and grew as a result of the footfall arising from the public transport provision.
- Local shopping parades/clusters, i.e. St Johns Road in Isleworth.
Type 7 | Urban centre

dominant period
- All periods - though many centres have historic routes as trading points/centres
- The form and pattern of many centres can be traced back to medieval times from where settlements originated and grew
- Often contain some of the oldest buildings in the borough, e.g. St Leonard’s Church in Heston
- Huge importance of the London Road as principal trading route still evident today in the location and form of the borough’s urban centres
- Many of the high streets buildings date from Victorian/Edwardian period when significant growth, enterprise and civic building took place

land use
- Easily distinguishable from surroundings by the change in land use mix, intensity and distribution but also levels of activity and footfall
- This change can often be quite distinct and sharp - turn a corner from a quiet residential street onto a busy high street, e.g. Montague Road turning onto Hounslow High Street
- Very mixed use of land - retail uses dominate but commercial, leisure, office, food and drink, civic and residential uses also feature to greater and lesser degrees
- Due to their good accessibility and high levels of footfall many land uses which require constant passing trade, e.g. shops, restaurants locate here
- Importance of critical mass and diversity of land uses to support one another and attract a mix of potential customers
- Traditionally shop owners lived above their shop, though nowadays flats and/or offices often built over shops

layout and structure
- Urban centres characterised by both strong global connectivity and strong local connectivity
- Arranged along and around the principal street in the area - scale and size of the centre corresponds to the hierarchy of the street
- Smaller network of local streets connect into the principal street offering important local accessibility
- Characterised by a fine urban grain of narrow, deep plots reflecting the high competition for street frontage
- A few arranged around historic cores/nodes where two important and busy routes intersect, e.g. the village centre of Heston
- Some centres pedestrianised in recent years to reduce the impact of heavy vehicular traffic and provide a more pleasant experience
- Smaller centres often laid out along or at junction of the busier residential street(s) in the area, pavements often a bit wider with seating to encourage meeting and interaction

- Buildings are predominantly three storeys high with ground floor retail, first and second floor offices/residential
- Sensitive placement and design of fascia - framed by building columns and cornicing
- Fully glazed shopfronts displaying store goods to passers by
- Projecting signs help shop visibility and attract shoppers in the distance
- Frequent placing of bins and lighting
- A mixture of narrow to medium wide shop fronts creating variety and activity along the street
- Pedestrianised part of high street offers a comfortable, safe space for pedestrians but after dark when majority of shops close it can feel too quiet and empty.
- The high street comes under heavy footfall
- Street tree with seating around base offers a comfortable place to rest
- Loss of street tree - hole has been filled in with tarmac
Type 7 | Urban centre

streetscape
• Buildings face the street with little to no setback from boundary line in order to maximise exposure to passing trade
• Mixed shop front widths though chiefly narrow to medium shop fronts (5m-10m) - have become larger in recent years (10m plus)
• Street trees can be an important townscape feature - Chiswick High Road with its mature plane trees offer a dense canopy and leafiness to the high road
• Linear streetscapes can be broken up with small set backs, offsets or squares which offer important openings and spaces to rest and relax, e.g. the gradual widening of Chiswick High Road and the small public space in front of Holy Trinity Church in Hounslow
• The frequency and quality of side alleys/streets can heavily influence quality of overall urban centre streetscape
• Heavy use of street furniture of lighting, benches, trees, bins, commercial refuse bins
• Market stalls placed on the pavement or side street add animation to the streetscape, e.g. the greengrocers along Chiswick High Road

building type and form
• Typical building heights range 3-4 storeys with some taller buildings/elements to mark important junctions
• Run of individual buildings along a stretch or one long building with the ground floor broken down into multiple units
• Many of the smaller individual buildings have rear ground floor extensions
• Some large footprint buildings exist such as shopping malls, supermarkets etc.
• High intensity of land uses is reflected in the varied and diverse types of buildings and their adaption over the years
• Vertical stacking of uses with ground floor retail and floors above a mix of retail, office, residential - some buildings feature basements
• Servicing access usually at the rear

materials and detailing
• Very mixed building ages displaying a variety of architectural styles, detailing and materials
• Significant Victorian townscape with ornate applied detailing
• More recent buildings tend to have large expanses of glass sheets - sometimes obscured by frosting or display panels
• Signage and advertising a strong feature in urban centres
• Canopies and outdoor seating sometimes extend onto public space

Smaller local centre clustered around Isleworth station offers local convenience and enterprise opportunities
Wide pavements with room for seating, cycle parking and street trees
Three storey high street building with ground floor restaurants and cafes - Chiswick
Recent town centre development - large retail stores with residential above - Hounslow
Wide variety of local stores with flats above - along Bath Road
High density town centre regeneration in Feltham
Small, narrow fronted traditional shop fronts in Chiswick

Hounslow | Context & Character
Hounslow High Street is a large and extensive example of the urban centre type. Retail and commercial uses line either side of the high street for approximately 350m, with combined plot depths of up to 70m. The area is chiefly characterised by its mix of uses, predominantly retail units on ground floor and offices above. A diverse mix of building sizes, types and ages line the high street, with a traditional plot pattern of narrow, deep plots. Building heights are fairly consistent, ranging from three to four stories offering a pleasant sense of enclosure to the public space, punctuated by narrow alleyways running north-south. There are terraced streets that sit behind and off the High Street and Kingsley Road lined with late Victorian/Edwardian terraced housing. More recent, larger footprint buildings are evident, such as Trinity Centre, Asda and office buildings in the west. These give a much coarser grain to the townscape, with less visual variety and street level activity.

See Character Area E in the Hounslow Study Area for more information on this area and its surrounding context.
Type 7 | Urban centre

strengths

- Provide a focal point and identity to an area
- They are drivers of economic growth and facilitators of wider regeneration
- Location of civic and community uses, providing a place to bring diverse communities together
- Offer a strong connection to the history and early settlement pattern of an area and subsequent heritage still visible in many places
- Rich architectural offering with buildings covering many different periods, styles and types - often display some of the more accomplished buildings in the borough

weaknesses

- Due to their accessibility and land use intensity they can become congested and uncomfortable places to spend time
- Some suffer from poor public transport accessibility or the public transport is difficult to find
- Some are disconnected from their immediate residential surroundings by heavily trafficked roads

opportunities

- Reappraisal of the role of town centres in the 21st century, offering greater opportunities for leisure, civic and non-shopping type activities
- Dramatic improvements to the public realm in order to attract people to and encourage them to remain in an urban centre
- Introduction of food markets which are very popular and can help provide access to fresh food for local people and support local farmers and artisan food makers
- Bring to light the rich heritage of our centres through physical measures and wider education work. Archaeology is very important in these areas
- Service delivery and public sector investment into centres
- Incorporation of public art
Type 7 | Urban centre

threats

- Large out-of-town retail parks which draw potential spend away from town centres
- Parking issues either a lack of parking which discourages people from using a centre or too much parking poorly integrated so it dominates the streetscape
- Internet shopping age - reducing the need to visit shops in a centre
- Insensitive redevelopment that destroys the fine urban grain, variety and diversity that characterises urban centres

Well-used market place in need of improvement not least through complete reorientation of stalls to create single central street, Chiswick

New town centre square enlivens and provides focus for high street, Brentford