

Creating safe places to live through design

Six recently built housing schemes were examined as part of a Cabe crime and urban design research project that was funded by the Home Office and undertaken in 2009-2010.

Themed briefing papers that explore the wider learning from the research are published alongside our case studies by researchers at the Applied Criminology Centre at the University of Huddersfield, who completed the original research for Cabe.

Why was this work undertaken?

Cabe and the Home Office were keen to investigate the crime experience of contemporary housing schemes, particularly those that would be considered by Cabe and the design community to represent good design. Feedback from design, planning and crime prevention professionals pointed to a lack of evidence and learning available on how such schemes were performing and confusion in current design guidance. Evidence was weakest particularly on higher density schemes, built to reflect current urban design principles and which would be considered by Cabe and the design community to represent "good design". At times, this lack of evidence has led to a polarisation of views and confusion as to what might be the best approach to achieve safer neighbourhoods from the outset, particularly when designers and planners are also seeking to meet other design objectives as part of a place making agenda.

The Cabe team at the Design Council is pleased to be presenting this new evidence to help designers and other stakeholders create safe, attractive neighbourhoods. We are clearly aware that crime and fear of crime is a critical issue in how residents view their neighbourhood and their resultant quality of life.

Who is it for?

We would encourage all who are involved in the design of new developments to read and use these case studies and the briefing papers. With the changes underway in the planning system under the Localism bill, there are likely to be wider range of possible stakeholders involved in developing new neighbourhoods. Community groups developing neighbourhood plans and community right to build proposals will wish to learn more alongside planning and design professionals and police crime prevention design advisors.

How did we undertake the research?

The case studies were selected to take two schemes from each of three police force areas (Greater Manchester, Kent and West Midlands) that had achieved a Building for Lifestandard (14 or more points) or were rated "good" or better in the CABA Housing Audit. The schemes were a range of types from city centre and suburban schemes to larger scale regeneration or urban expansion schemes. All but one of the schemes were built predominately for private sale.

The researchers conducted site visits to analyse and map the specific design features and layout of the scheme down to the level of an individual dwelling and then examined the recorded crime in the scheme. This analysis used recorded crime data, qualitative interviews with key stakeholders including neighbourhood policing teams and local crime prevention design advisors, facilitated walkabouts and data on the connectivity of street layouts.

What types of crime did we look at?

- Burglary dwelling
- Theft of and from vehicles
- Robbery
- Theft from the person
- Assault
- Criminal damage

Although we did not set out to include anti-social behaviour or neighbour disputes in the research brief much of the feedback from local police and planners, particularly in on site walkabouts, showed that such incidents were more common than actual recorded crime events and had resulted in police or local authority resources being used to attend and resolve matters.

We felt it was important to include this feedback so stakeholders can understand how design can lessen the opportunity for the whole continuum of activities occurring as it appeared that some crime events escalated from initial non-criminal disputes between neighbours and some crime events caused related anti-social behaviour incidents.



Castle Vale

A design-led regeneration project in an area blighted by crime has focused on a very simple, legible structure with a clear definition of public and private space.

BIRMINGHAM

URBAN RESIDENTIAL REGENERATION



A corner building with contemporary, distinctive architecture aids legibility and character.

The scheme is integrated with the surrounding area by pedestrian paths and pavements along the roads which all run to the front of dwellings.



Semi-detached units with on-plot parking. Parking is always overlooked.



Overlooked footpaths have purpose and direction, connecting to surrounding neighbourhoods and facilities.

Background

The Castle Vale Estate was Birmingham's biggest post-war, predominantly high rise housing estate. It housed 20,000 people in 5,000 dwellings with commercial and other social and community services and facilities alongside. From the 1970s, social and economic decline set in, and crime levels, vandalism and anti social behaviour grew, aggravated by physical design and maintenance problems with the housing stock.

During the 1990s there was extensive regeneration in the area, led by Castle Vale Housing Action Trust (CVHAT), delivering new housing accompanied by economic and social regeneration initiatives.

The case study site is the Farnborough Road scheme which is one of three major redevelopment areas within Castle Vale. It contains 237 dwellings, a range of flats, houses and bungalows and an average density of 34 dwellings per hectare.

Location

The scheme is located on the south side of Farnborough Road, the main distributor road within Castle Vale, and is within a 10-minute walk of local schools and a new local centre. There is a frequent bus service to the centre of Birmingham. Access is gained through four access roads off Farnborough Road, and the site is well connected to local play, sports and other neighbourhood facilities through a series of footpaths.

Urban Design Story

The scheme has been designed and structured around a network of public streets, faced by perimeter blocks with entirely private space to the rear. Street enclosure is generally good with the exception of roads with smaller-scale bungalows, where road width tends to be excessive. The majority of the flats are accommodated along Farnborough Road, creating a strong street frontage and edge that relates well to the scale of the distributor road and provides a sense of arrival to the estate. The rear of both the houses and the flats is private either as private gardens to houses or shared private spaces for flats. These spaces are fenced with a mixture of metal railings and top trellising used to prevent unlawful entry into the garden areas.

The dwelling types, architecture and materials used are all contemporary with the strong render colours provide an identity and legibility to the scheme. Parking is well integrated into the streets and overlooked from surrounding housing, most of which is on-plot or in small courts at the front of the dwellings or in street lay-bys.

The scheme is integrated with the surrounding area by pedestrian paths and pavements along the roads which all run to the front of dwellings, connected to open space, play and sports facilities, and other community facilities. Combining these routes with the grid layout, the development is highly permeable, especially on foot, yet retains a clear distinction between the public "front" and private "rear" of the dwellings.



Landscaping and built form work together to define public and private boundaries.



Exposure to rear and side of properties is minimised and access points are well over-looked.

There was only one incident of burglary in the study period (2007-09) and this occurred in the back garden of a property.

The maintenance of the housing and environment is the responsibility of the Castle Vale Community Housing Association (CVCHA), although the quality of materials used in landscaping and the public realm is not very high, it appears to be weathering well. There is more evidence of deterioration in the dwellings themselves.

Crime Story

The main crime type is criminal damage to buildings e.g. where someone has thrown a stone against a window. There was only one incident of burglary in the study period (2007-09) and this occurred in the back garden of a property.

Key Lessons Learnt

In an area that was blighted with physical, social and economic decline, one of the main issues facing designers of this scheme was how it was going to tackle the issue of crime and antisocial behaviour. The developer's ambitions and commitment to the importance of good design produced a design-led and participative approach from the offset. As a result, the development has benefited by gaining a robust residential layout with distinct character and a sense of place. Residents believe that crime and vandalism has reduced as a result of the new development. Some of the key lessons learnt here are:

Defining Public and Private Space

The unbroken perimeter block layout sets very clear definition of public fronts of buildings and private amenity space behind, with no rear access, improves the security of dwellings and back gardens.

Movement

Permeability can be achieved in a scheme without creating separate movement routes. Here paths and pavements run as part of the street to the front of dwellings. This reinforces movement in the right places to keep streets animated and does not open up rear access to properties.

Movement and Access



The perimeter blocks provide clearly defined vehicular and pedestrian movement patterns.

Ownership



Boundaries between public and private spaces are defined and effectively managed through the layout, landscaping and built form.v

Fronts and Backs



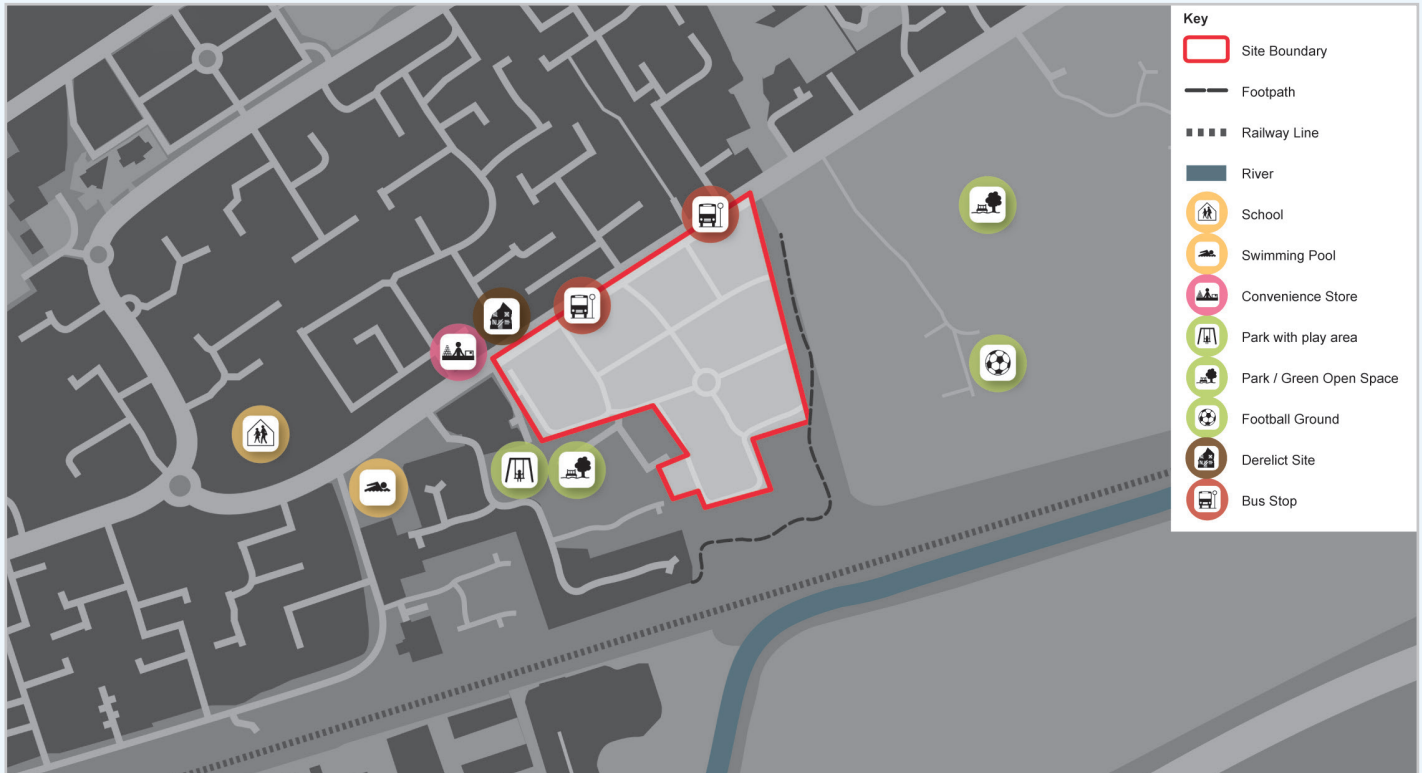
A regular pattern of fronts and backs, streets and footpaths are overlooked and exposure to rear access and backs of properties is minimised.

Parking



All parking is designed to be at the front of properties, the principal forms are on-plot and on-street lay-bys.

Locator Map



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Castle Vale Crime Statistics – Type and Number



Clarence Gardens

A scheme with inconsistent design quality creates places for crime and anti-social behaviour.

BIRMINGHAM

SUBURBAN INFILL



Three storey town houses create an urban feel.

The site's connectivity is limited despite being surrounded mainly by neighbourhoods of connected streets.



A street that doesn't accommodate occasional street parking easily.



A low quality parking court with limited overlooking.

Background

The scheme is developed on a brownfield site that was previously the major part of the grounds of the former Highcroft Hospital. It contains 444 dwellings in the form of town houses and apartments. The scheme was designed to quite a high density of 73 dwellings per hectare. The residential part of the scheme has been developed in two parts: the retention and conversion of two Grade II listed former hospital buildings on Highcroft Road and a separate new build development behind on the hospital grounds. The new build element here is the focus of this study.

Location

The site is located within a predominantly suburban district of Birmingham. It is within a 10-minute walk of Gravelly Hill railway station with frequent trains into the centre of Birmingham. There are regular bus services around the site the area is also well served with schools, shops and community buildings within a 10-minute walk.

Urban Design Story

The development of this site shows the perils of large redevelopment sites being parcelled up and developed in isolation. Effectively this site is in three parts – the main hospital buildings which were refurbished into apartments, the new build residential scheme behind and the retained and new build health service buildings around the south, west and north of the site. Each of these elements has been designed, developed and managed

separately with boundary fences separating each part. This misses much of the potential of the site, particularly the landscape value of many mature trees and open spaces arising from the original hospital grounds. A design framework at the very outset could have established a more logical layout, enabling better connections, higher quality public spaces to be used by all, potentially supported shared facilities such as local shops and delivered a more obvious sense of place.

The retained hospital buildings give the primary sense of place to the whole scheme. The enclosure of this part by a boundary fence, containing its own private landscaped grounds, however limits its potential to act as a unifying element, especially to establish high standards of design and landscape quality for the rest of the development. There is very little design influence on the new build element – the housing has a single uniform architectural style theme of red brick, large panels of white render, juliet balconies and projecting bay windows. There is evidence that design detail and quality is significantly lower in later sections of the new build scheme and particularly to the rear of dwellings and in car parking courts.

The site's connectivity is limited despite being surrounded mainly by neighbourhoods of connected streets. The only connections from the site are both from the eastern boundary onto Highcroft Road. The internal network of streets therefore is of limited benefit without the external connections. So many potential routes finish in dead end cul-de sacs and boundary fences – particularly where they abut the health service buildings and



A large under used open space at the heart of the scheme

The large green open space at the centre of the scheme is a huge missed opportunity to create functional and attractive public space.

associated car parking, missing opportunities at an early stage to create logical street connections through here – there is one footpath left in place exiting the scheme to the northwest but this looks like an afterthought – it is not well defined or overlooked.

The built form of the new scheme is a mixture of 2,3 and 4 storey terraced houses and larger housing blocks configured into perimeter blocks with a heavy reliance on rear parking courts. The scale and density of the development gives an urban feel with small private gardens and significant space given over to parking.

Car parking has been arranged in the form of on plot spaces and a number of large rear parking courts. The parking courtyards are accessed through open archways. High brick walls, some very high due to the change in level across the site, reduce natural surveillance of such spaces from adjacent properties. The parking courts also displayed other problems; the presence of large unsightly large refuse bins, weak and poorly maintained landscaping, evidence of vandalism and odd dead end alleyways to the rear of some properties. It was evident that the parking courts are not universally well used – many residents and visitors were parking unofficially on kerbs and pavements rather than in the rear courts.

The landscape strategy appears to be very limited with evidence of poor design and construction. The large green open space at the centre of the scheme is a huge missed opportunity to create functional and attractive public space. It is grassed with a weak boundary treatment around the edge with some very spindly new trees placed randomly. It fails to respond to the positive character of the restored hospital building

or deal adequately with the sloping site. It appears to provide no obvious opportunity for people of all ages to use it – in particular within the main space there is no play area for young children or any seating that could be used by teenagers or adults to meet or enjoy recreation.

The maintenance approach to the scheme is patchy and there was evidence of a lack of maintenance in various locations. The communal areas within the curtilage of flats blocks was the only area of the scheme under a maintenance contract paid for by the residents therein. The other areas of public space and the roads within the scheme were not being maintained and there was a widespread litter problem. It is understood the local authority is still at the time of the site visit to adopt the roads and the public spaces.

Crime Story

Within the study period (2007-09) there was a relatively high amount of crime in this development. By far the biggest problem was criminal damage, followed by vehicle crime. The data shows that many of these incidents were clustered around the parking courts, short cul-de sacs within the blocks and in areas where there are an abundance of footpaths; many of the offences were recorded as damage or vandalism to properties and vehicles using stones (Interestingly, these small stones were originally used as a design feature around the boundaries of properties to deter intruders from encroaching on people's property) and parking disputes between neighbours, including assaults and damage to vehicles.

Despite relatively low numbers of burglaries, they were located near to footpaths and alley ways leading to parking courts, other footpaths, open space areas and other through roads.

Key Lessons Learnt

Clarence Gardens shows the difficulties that can arise in high density schemes when there is an absence of skilful design carried through consistently across all the parts of the development and an over reliance on particular design options such as rear courtyard parking.

Overall Design

For a large development site such as this an overall design framework would have helped define the connections with the surrounding area, integrate the different development sites and set consistent design principles to ensure public spaces, routes and facilities are in the right place, are designed to a consistent quality and are well overlooked. This would have then reduced and eliminated the number of residual or awkward spaces and isolated footpaths that have led to crime events in this particular scheme.

Parking Types

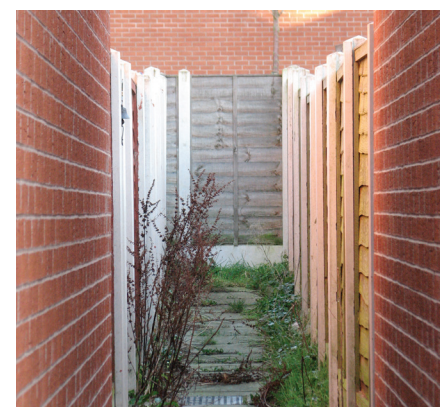
Parking needs to be designed carefully to compliment and relate to each housing type. Default use of large rear parking courts as seen here with multiple access routes should be avoided – these performed very poorly for crime in this scheme and should be challenged in other schemes.

Parking Courts

If rear or side parking courts are used, they require careful design at a detailed level to ensure they are small, close to owner's dwellings, overlooked by occupied rooms and without opening significant rear access to many dwellings. They should not connect to footpaths and should have landscaping and design detail that matches the design quality of the "front" of schemes.

Management and Maintenance

Management and maintenance needs to be part of the design and delivery process across a large scheme. A partially complete maintenance approach has led here to problems even after a few years, with signs of damage and neglect and landscaping in a poor state of repair and upkeep.



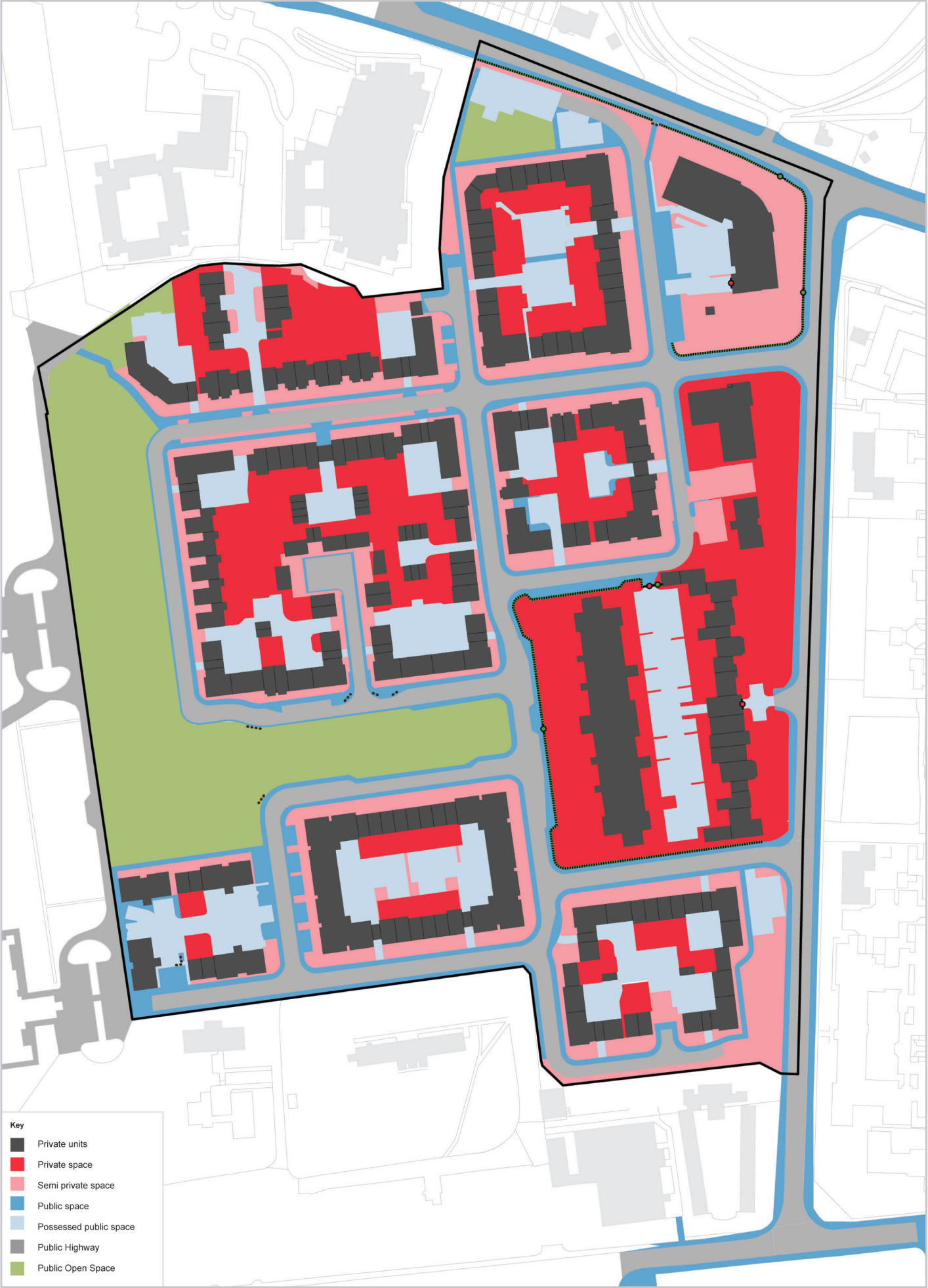
Alleyways that are not maintained and lack use and purpose are common within this scheme.

Movement and Access



Movement and access to the surrounding area is limited, and the scheme therefore feels detached as a neighbourhood.

Ownership



Public and private spaces are clearly defined.

Fronts and Backs



The variants of the perimeter blocks in this scheme do not provide adequate levels of surveillance in all areas, as a result the large parking courts in particular are less secure.

Parking



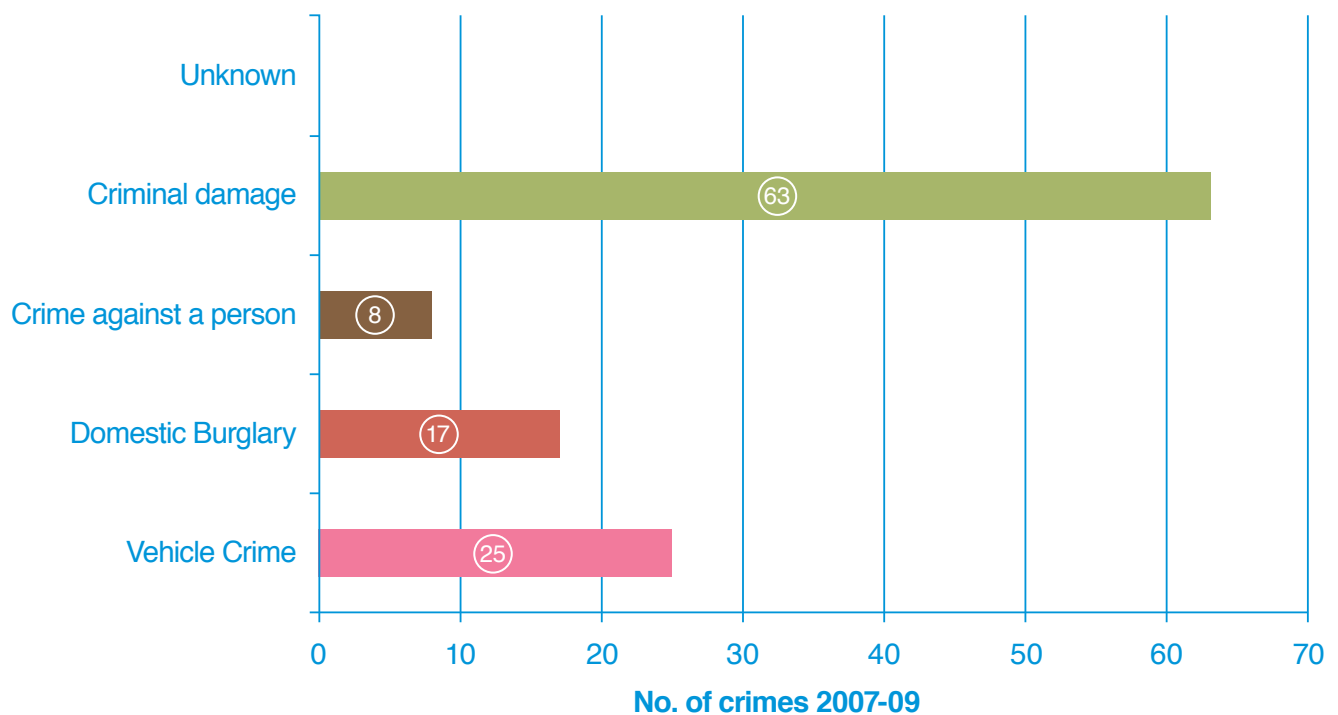
Rear parking courts and on-plot parking are the predominant parking types, however many people choose to park on street.

Locator Map



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Clarence Gardens Crime Statistics – Type and Number



Lacuna

A high density, highly managed housing scheme which has experienced very little crime.

WEST MALLING

NEW COMMUNITY GREENFIELD



The evidently high level of management and maintenance creates a sense of ownership and identity.

The scheme was designed to incorporate the local Kent vernacular, aspiring to give residents the feeling of living in a traditional village.



Streets are designed using high quality materials and with an intimate scale.



Cul-de-sacs have been designed to appear and feel like a private street.

Background

Lacuna is at the centre of new small town of Kings Hill on the site of a former Battle of Britain airbase. The master plan for Kings Hill proposed 1,850 dwellings, commercial development, a school, community hall, doctor's surgery, nursery, golf course, and a hotel. Lacuna contains 260 dwellings, and was planned and designed to imitate a village environment. The area assessed for this study included 88 dwellings and is socio-demographically classified as an area of "Prosperous Suburbs: Prospering Younger Families" (Office for National Statistics, 2010).

Location

The area assessed for this study is located next to a primary school, a local centre with a large supermarket, a variety of small shops and eating places, a public house and other community facilities. There is a bus service to West Malling and the railway station, where there is a regular service to London Victoria. A high quality business park is located at the entrance to Kings Hill development.

Urban Design Story

The scheme was designed to incorporate the local Kent vernacular, aspiring to give residents the feeling of living in a traditional village. As such, each plot in the masterplan has been carefully designed and stitched together to achieve a compact urban form.

Considering the high mix of detached and semi-detached housing, density is high at 58.5 dwellings per hectare.

The street layout has been structured to ensure that vehicle movement is maintained through key distributor roads and access to housing achieved through a combination of linked cul-de-sacs and small loops that connect to the main roads. Winding through the scheme is a separate footpath and cycleway- which connects to the local centre. This has led to a development that is tightly knit and intimate, where many streets, particularly the cul-de-sacs, look and feel more like a private space than public. This may help deter unwanted pedestrians, vehicles or intruders from entering or using these areas. Despite the irregular layout the network of roads, paths and spaces is permeable, connected and well overlooked by the fronts and sides of dwellings, with windows and front doors carefully positioned to improve passive surveillance.

Another strong feature is a street design approach to keep vehicular speeds low and to restrict and manage on-street parking. This has been achieved by varying the width of the road, the use of shared spaces for vehicles and pedestrians, speed tables and changes in surface materials. Parking is integrated into the housing layout, allowing residents to park close to their properties, in the form of garages, carports and underground gated car parks. However parking is not wholly resolved – unofficial parking on pavements was evident.



The main footpath running through the scheme is potentially an area for crime, but is countered with good natural surveillance, maintenance and lighting.



Parking has been highly integrated with the housing, cars can be parked close to their respective properties or secured in garages/basement. However, despite this arrangement there is an issue with cars being parked on pavements.

To a greater extent, the character and sense of place in Lacuna comes from the consistent landscaping design and management.

To a greater extent, the character and sense of place in Lacuna comes from the consistent landscaping design and management – its high quality, attention to detail and evident high level of management and maintenance is distinctive in a UK context at this scale. Private and public spaces are clearly defined and the design and placement of trees, box hedging, topiary and climbing plants in public spaces is appropriate to the scale of the streets and housing.

Crime Story

In the study period (2007-09) there were very low levels of crime in the Lacuna development. Just two instances of criminal damage were reported at corner properties adjacent to footpaths. The comparator site (an area adjacent to Lacuna with similar socio-economic profile and locational features) demonstrated a more incidents; including burglary and vehicular crime.

Key Lessons Learnt

The Lacuna development would appear to have a layout that some commentators would consider to be to be susceptible to crime as it is highly permeable and there is some accessibility to rear gardens from public spaces. yet the crime story appears to show a much better outcome. Looking at the scheme there are some design approaches that may be beneficial:

Surveillance

The streets, paths and public spaces are well overlooked and yet deliver privacy to individual dwellings. The compact nature of many of the spaces and specific placement of front doors, bay windows and balconies from main living rooms, means almost every single part of the scheme, including parking areas feels to be under good passive surveillance.

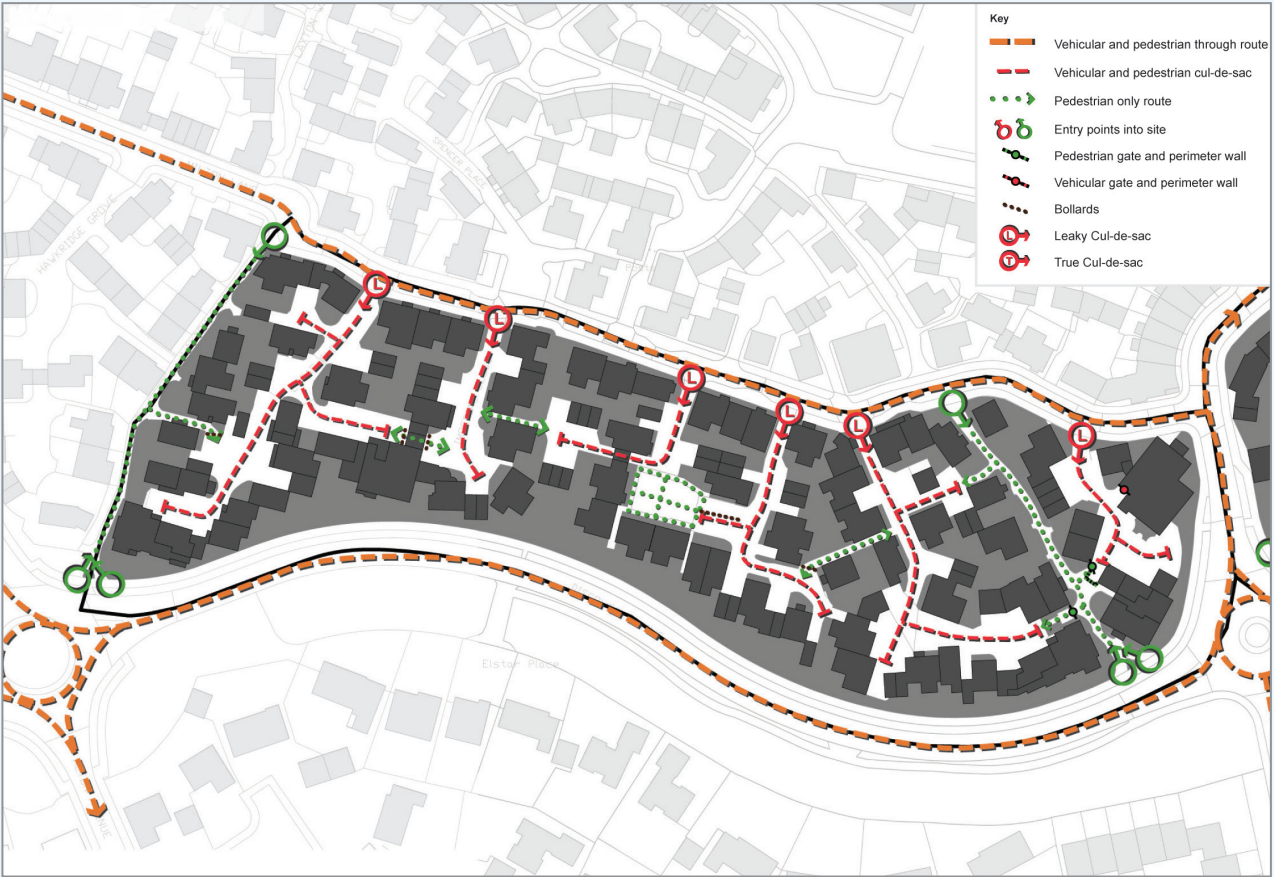
High Quality Management and Maintenance

Good quality design and construction of the public realm, high level of investment in landscaping and evidently efficient management and maintenance creates a strong sense of identity, ownership and attractiveness to the whole scheme. This sends out a clear message that this is a consistently well cared for and respected "place" to residents and to visitors. The level of investment in the public spaces and the quality of its management is unusual in a UK context and obviously does rely on there being sufficient resources from residents and a competent organisation overseeing the scheme to maintain this quality approach.

Parking

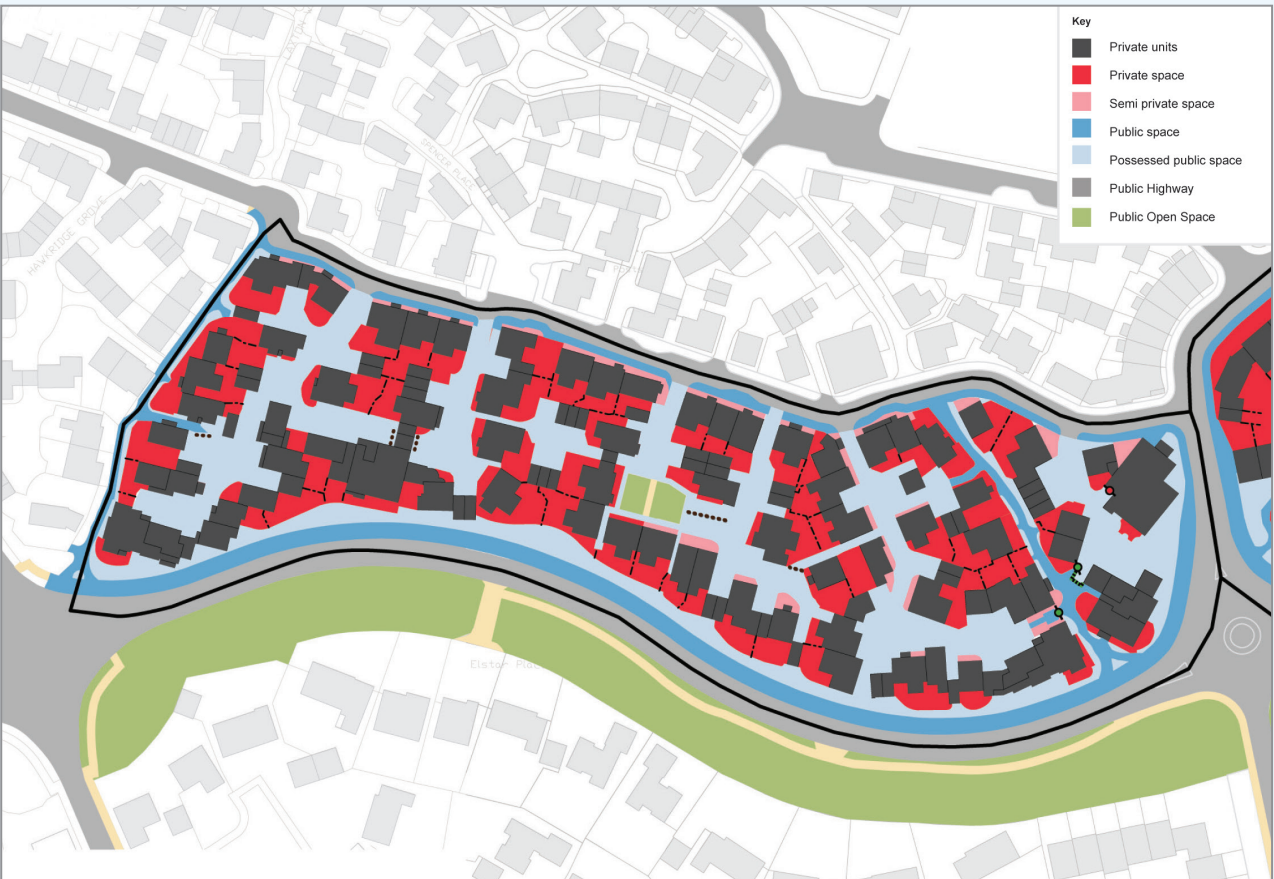
This scheme shows how careful design of car parking can be achieved even with a dense scheme by integrating it well into streets and spaces and ensuring parking is close to and overlooked by the owner's property.

Movement and Access



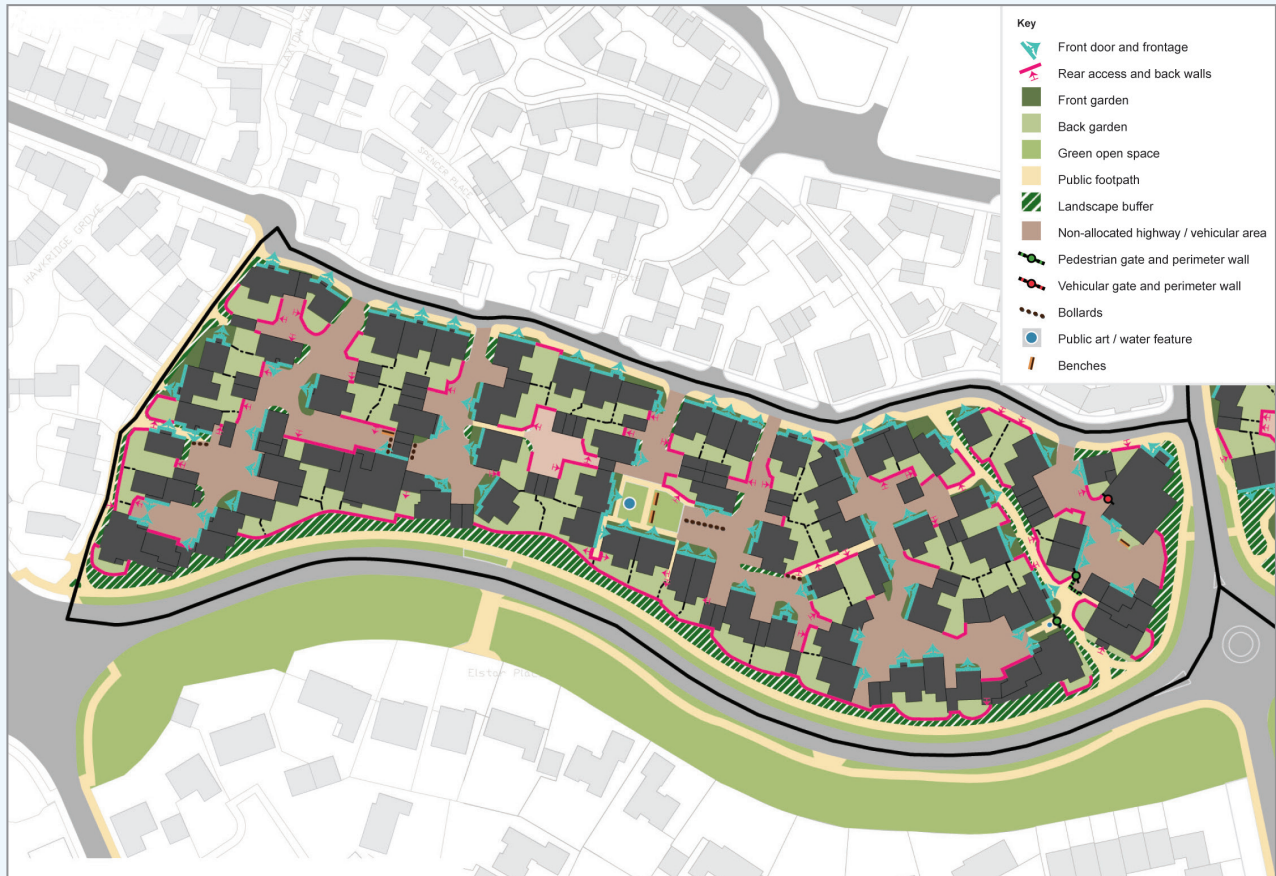
Cul-de-sacs with connecting pedestrian routes form the main street layout in the scheme.

Ownership



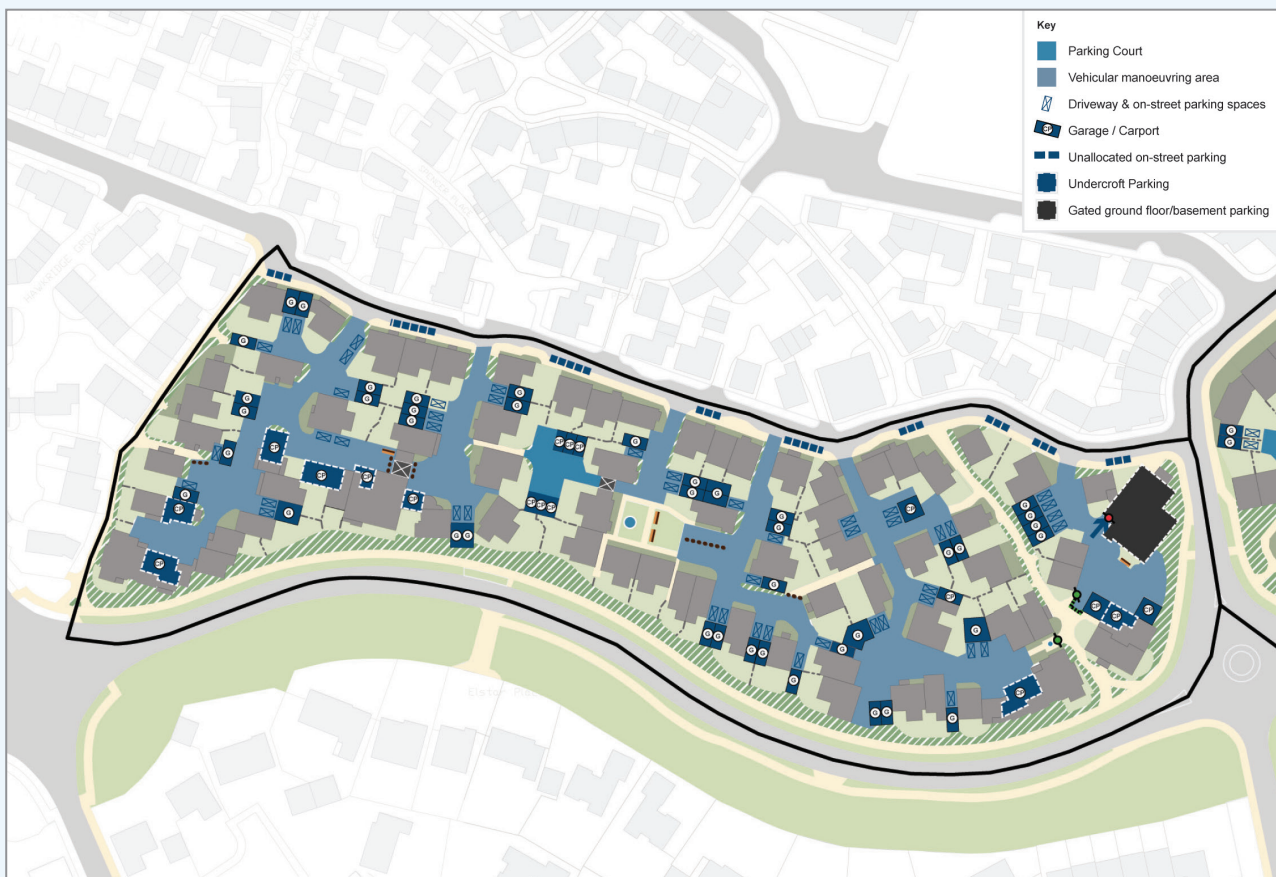
The public and private realm is clearly defined by the design and treatment of the landscape and use of surface materials.

Fronts and Backs



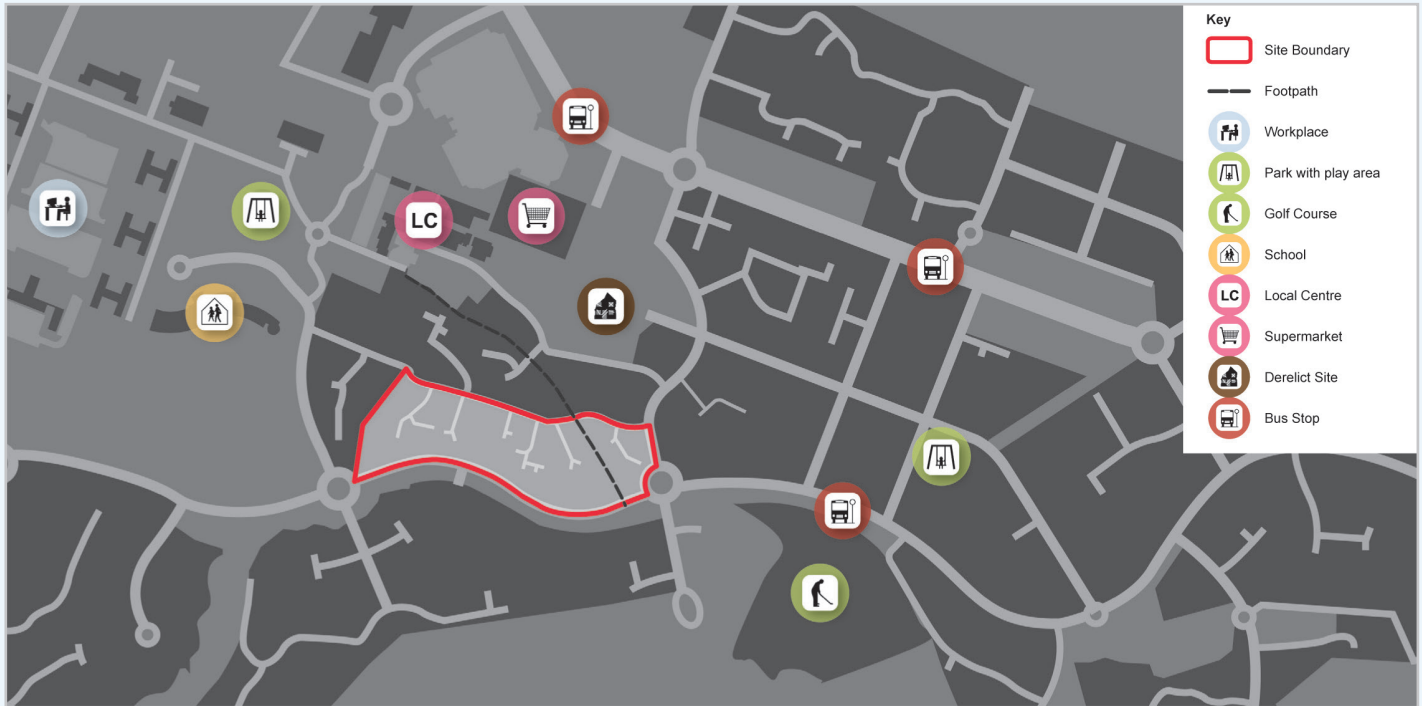
Spaces are generally well overlooked with an irregular pattern of fronts and backs; front doors can open out onto back walls and gardens and vice versa.

Parking



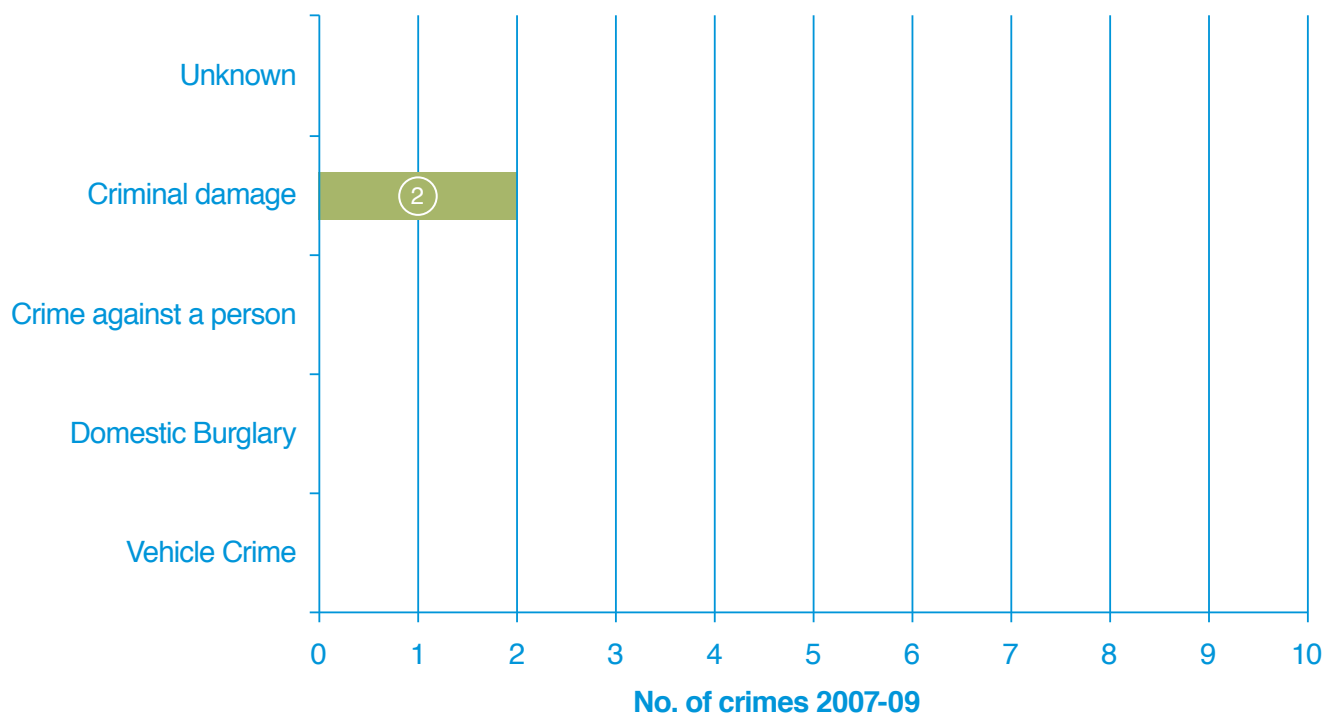
A variety of parking types have been used across the scheme, they are overlooked and/or have secured access.

Locator Map



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Lacuna Crime Statistics – Type and Number



Ingress Park

A high density and varied housing scheme demonstrates the benefit of a strong place-making design philosophy and attention to detail.

KENT

URBAN EXTENSION



The housing layout relates well to retained trees and open spaces.

The quality of the public realm has been designed and maintained to a very high standard.



Different architectural styles stemming from the Kent vernacular bring interest and variety to the streets.



Streets have been designed to reduce unofficial street parking.

Background

Ingress Park is a major housing development within the Thames Gateway growth area. It is planned to eventually have 950 new dwellings, live-work units, shops and a new school. It is set within the grounds of the Grade II listed Ingress Abbey. A key place making principle of the site is the landscape design, which integrates the existing landscape features and the gradient of the site, a 24m fall from the top of the site down to the riverside and provides extensive views of the river.

Location

The site is well situated for local facilities. There are local shops, including a superstore near Greenhithe railway station, a 10-minute walk away. There is a frequent train service to London Victoria. There is currently no bus provision, but by the time the development is completed a service is planned to run through the whole development.

The site can only be accessed by vehicles from one access point off London Road. A second access point further along London Road is expected to be opened when the whole development is complete. There are additional pedestrian access points via combined walk/cycleways to the High Street and the east.

Urban Design Story

This scheme offers a mixture of housing types, ranging from cul-de-sacs with town houses to detached homes to riverside apartments. As such, dwelling type and density vary in size, ranging from 40-150 dwellings per hectare with the highest density achieved at the river front. This range is noticeable as you move down from the access road to the riverside with each collection of houses having their own individual design and materials, which gives some character to each area. There is a strong design influence to the whole scheme stemming from the existing abbey and the Kent vernacular.

Place making is central to the planning and design philosophy of this development. The layout takes advantage of the natural features to create well defined urban spaces and open space. The architecture, streets and spaces work together to make distinctive places that help way finding; gateways, focal points, landmarks and small open spaces.

The quality of the public realm has been designed and maintained to a very high standard. The streets take shape from the layout of the houses and are clearly not designed just to be areas for vehicular access. Soft landscaping has been integrated into the highways, and changing surface materials add quality to the streetscape.



Parking courts are designed to the same standards as the housing and other public spaces.

Parking is well integrated in a variety of forms, including on-plot, integral garages, and small groups of spaces within view of the housing they serve.

Parking is well integrated in a variety of forms, including on-plot, integral garages, and small groups of spaces within view of the housing they serve. Underground parking is located beneath apartment blocks. Where there are parking courts, the developer has built small amounts of housing within them to ensure good natural surveillance. Parking enforcement is a top priority, and a management company has been employed to ensure that residents and visitors adhere to the parking regulations, keeping cars in designated areas only.

The careful planning and implementation of the landscape strategy has successfully countered some of the effects of high density. A comprehensive landscaping strategy was put in place from the outset, which included advanced planting of open spaces to create an early mature green environment. Individual and small groups of trees were preserved and now form focal points within open spaces for housing clusters to form around. These spaces are well overlooked, front doors,

balconies and windows face out onto these focal areas. Private gardens are well screened with walls and fencing integrated into the overall design of the environment but tend to be small and tight.

The appearance of the scheme is lifted by the hard landscaping which has been built with robust and attractive materials, ensuring long life with minimum maintenance. There is a maintenance company in place for all open spaces and hard landscaping.

Crime Story

Over the three year study period (2007-09) the number of crimes committed is low. There did appear to be a pattern to these crimes, those that were recorded were primarily criminal damage to vehicles, on the roadside or in parking bays and courts. Several accounts of burglary occurred in properties adjacent to footpaths or walkways and also those dwellings which bounded the entrance to rear communal parking areas. The statistics also show that a number of the burglary offences were from garages (integral or detached at the end of gardens).

Key Lessons Learnt

Ingress Park is a large permeable development with many footpaths and walkways connecting properties to other parts of the development and other residential areas. Previous crime prevention research would suggest that these features would encourage crime particularly around footpaths and walkways, where they provide access to the rear or side of the dwelling. Other vulnerable locations would be properties located next to open space, those on corner plots and those with communal parking. To some extent, crimes in Ingress Park followed this pattern, but unlike other developments that have similar design approaches, overall crime levels here are low. Looking at this scheme specifically it seems to benefit from measures to address known vulnerabilities:

Parking Types and Management

Parking is dispersed through the scheme in a variety of types and is highly managed reducing the potential for inappropriate parking and inter-neighbour disputes.

Parking courts

Parking courts are modest sized, designed to a high quality and are well landscaped. The developer has placed some dwellings within the parking court to improve overlooking and activity in the space.

Management and Maintenance

The high quality design of and use of hard and soft landscaping and a long term comprehensive management and maintenance programme has contributed to a sense of ownership, respect and territorial responsibility.



Robust and long lasting materials used in the public realm.

Movement and Access



There is one main loop that serves the development. The detail and design techniques implemented into the buildings and landscape help wayfinding in what could be seen as a complex street/movement network.



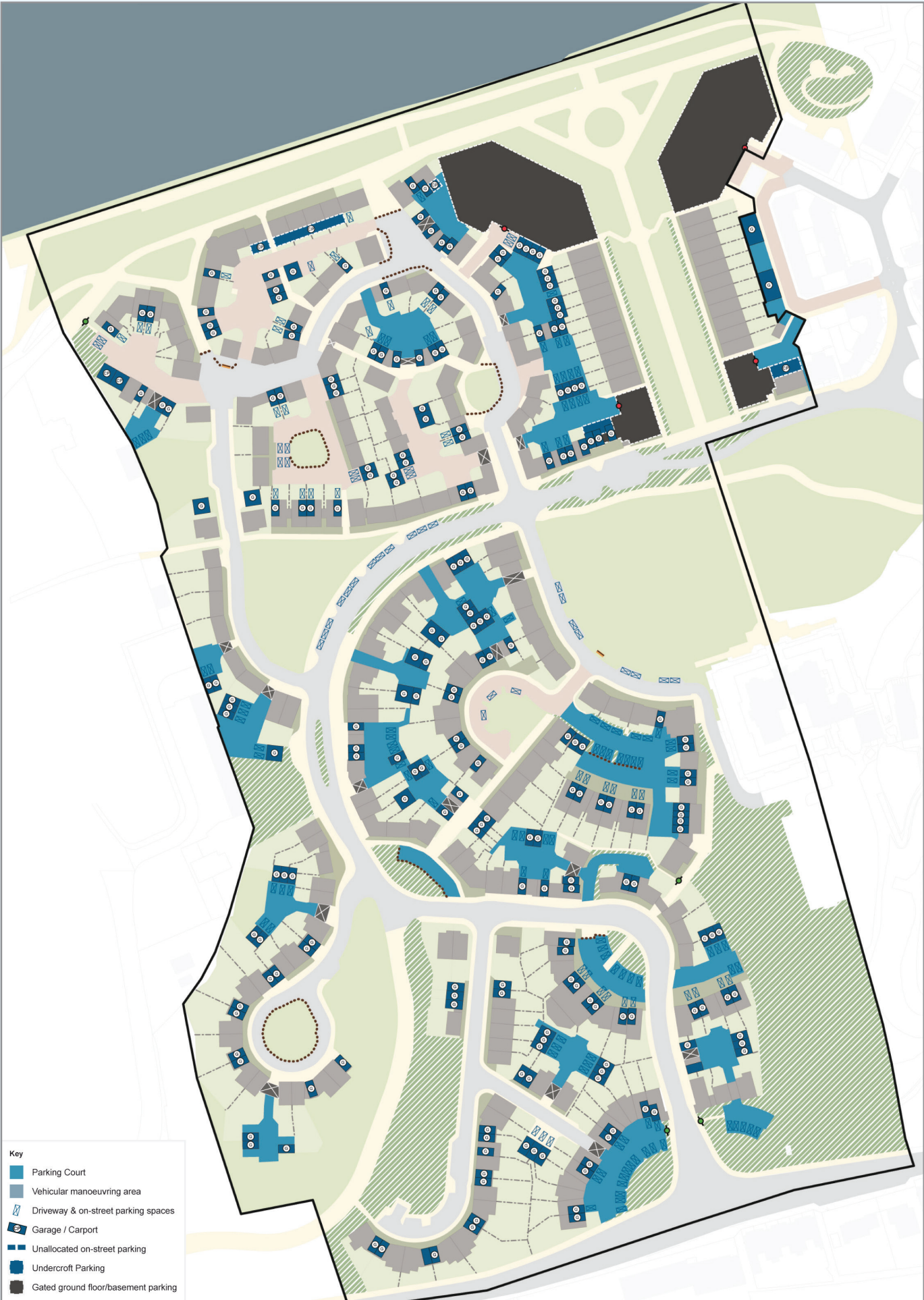
Private and public spaces are clearly defined by plot boundaries, walls and fences.

Fronts and Backs



Spaces are generally well overlooked. Some of the smaller rear parking courts do not have as good surveillance as the larger ones.

Parking



On street parking has been banned from most streets, and replaced with garages and parking courts.



Unknown



Timber Wharf

A high density single block benefits from a coherent design approach.

MANCHESTER

URBAN HIGH DENSITY INFILL



The building frontage facing onto Worsley Road.

The choice and quality of materials and landscaping is in keeping with the urban contemporary look.



Offices and shops on the ground floor add activity and interaction at street level.



The rear boundary of the development is defined by a green wall.

Background

Completed in 2002, Timber Wharf is one of a group of four schemes where the developer transformed an industrial brownfield site into a neighbourhood for young professionals. The mixed use scheme comprises a modern eight-storey development overlooking the Bridgewater Canal.

A density of 367 dwellings per hectare has been achieved through a mixture of one and two-bedroom apartments. On the ground floor and mezzanine level there are live/work units, offices and shops with doors onto the street.

Location

The scheme is located in the south-west corner of Manchester city centre, with nearby facilities to suit city living. This includes cafes, restaurants, supermarkets and smaller shops. Cornbrook station on the Manchester Metrolink tram is a short walk away and Deansgate railway station is also within a 10-minute walk. There are also good connections with footpaths and towpaths along the canals to the city centre.

Urban Design Story

The development is aimed at young professionals, attracted to the proximity to the city centre, the modern architecture and the contemporary finish of the apartments. The block sits at the end of the private road of Worsley Street and backs onto a canal;

sitting next to the three other schemes and collectively they create a distinct high quality urban inner city environment. The frontage at ground level is complimented by a raised timber side walk and leads to a viewing platform overlooking Britannia Wharf and the canals.

The choice and quality of materials and landscaping is in keeping with the urban contemporary look to the whole scheme. Access for vehicles is limited by lockable bollards, restricting it to service and delivery vehicles during the day. Unfortunately, unlike neighbouring blocks, Burton Place and Box Works, less planting has been used which would have helped soften the hard urban appearance of the streets. The road and landscape is maintained privately by a management company.

Access to the residential component of the building is through one main central lobby, a tall nine-story atrium in the middle of the building. There are additional entrances to the sides of the building and one to the rear but these are gated for private access to private patios and gardens.

Car parking is provided at a ratio of one space per dwelling in a secure underground area with access off Worsley Street. Some of the apartments have been let out without their parking space and the parking has continued to be used by the property owner. As a result, many cars, including visitors, are parked on nearby streets, mainly on Ellsmere Street, some of which is metered.



Entrance on Worsley Street to the underground car park.



Lobby entrance to the apartments from Worsley Road.

The total number of offences recorded in the study period was relatively low.

The principal open space is well defined within the scheme as a triangular shaped communal garden fronting the canal and this is used exclusively by residents of Timber Wharf and the Box Works. The space is formally laid out with planted areas and grass banks. To the rear, a boundary wall faces the canal; a combination of concrete walls and metal mesh fencing covered with dense ivy to soften visual impact.

Crime Story

The total number of offences recorded in the study period was relatively low. The area where the most offences have taken place is the underground car park, primarily theft from motor vehicles or theft of pedal cycles. There are also a number of burglaries that have taken place within the apartments, where entry was gained either by the front doors or via the patio. A caveat to this data is that because this is a large single block just over half of the incidents recorded did not have a specific address, so the exact location for these offences is unknown.

Key Lessons Learnt

There is a comparatively low level of crime within this high density apartment development but the places where further design input to similar schemes could be beneficial are:

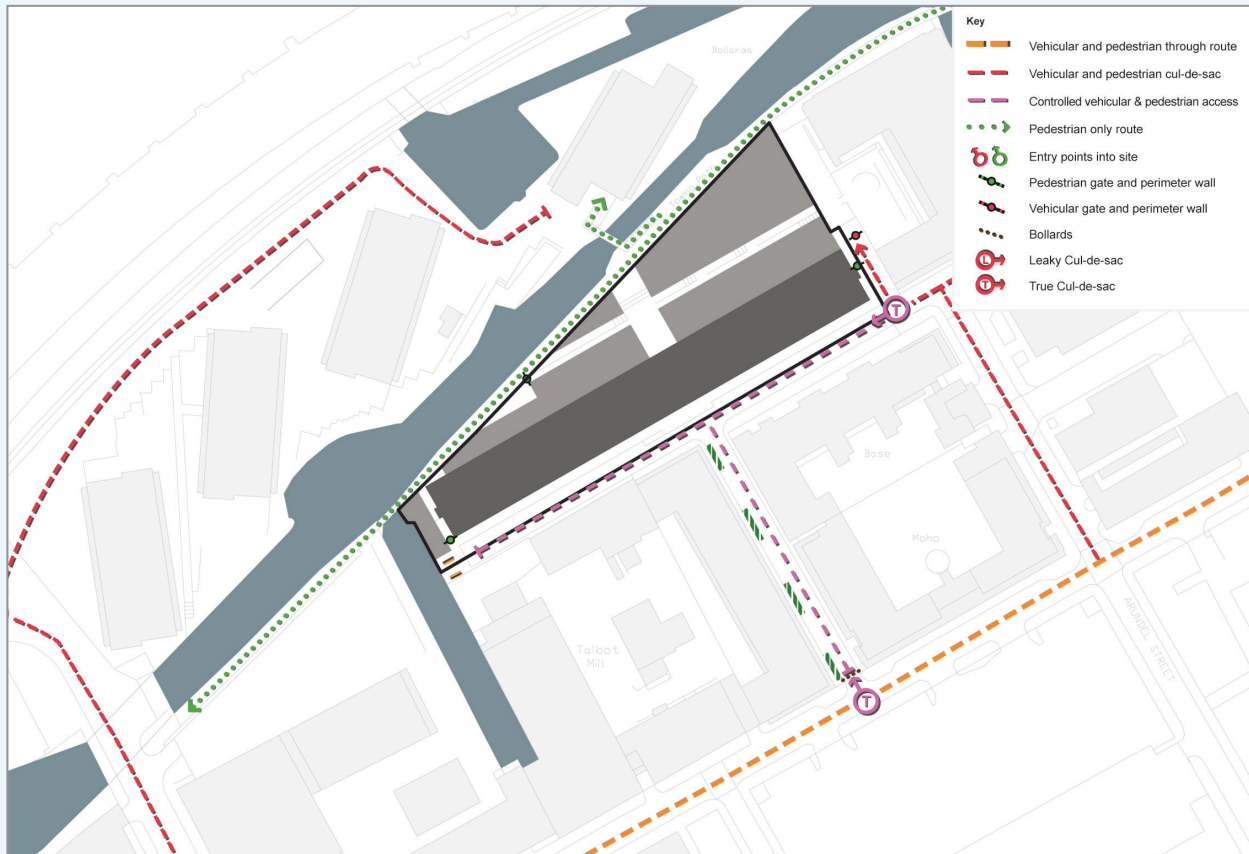
Boundary Treatment

For schemes that back onto publically accessible routes it is important to ensure that the boundary treatment is designed in detail to deliver a consistent level of security for ground level units, particularly those close to corners and external features such as walls or fences that may aid entry to private areas.

Security Inside

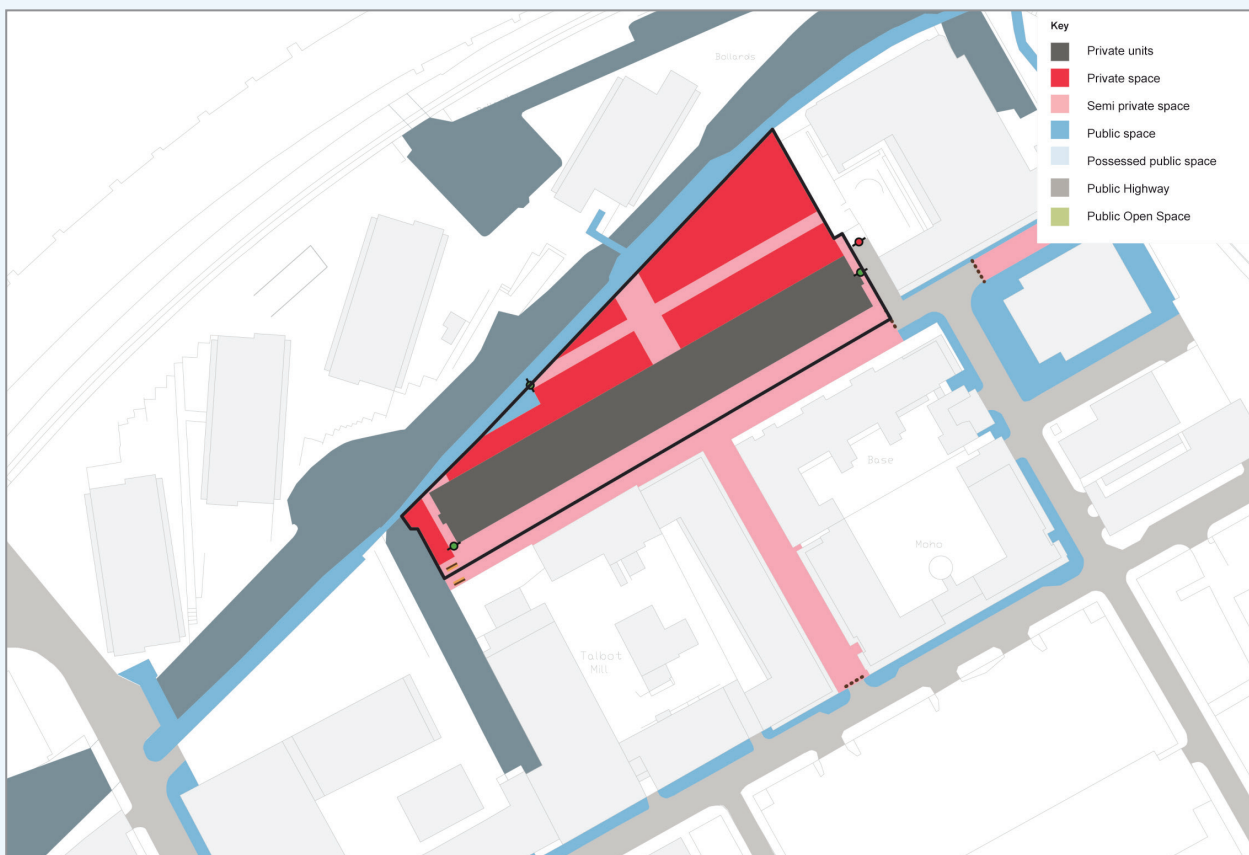
Security within a scheme as well as outside is important – to reduce the ability to move about inside without restriction – specifically cycle storage areas should have separate security within underground car parks.

Movement and Access



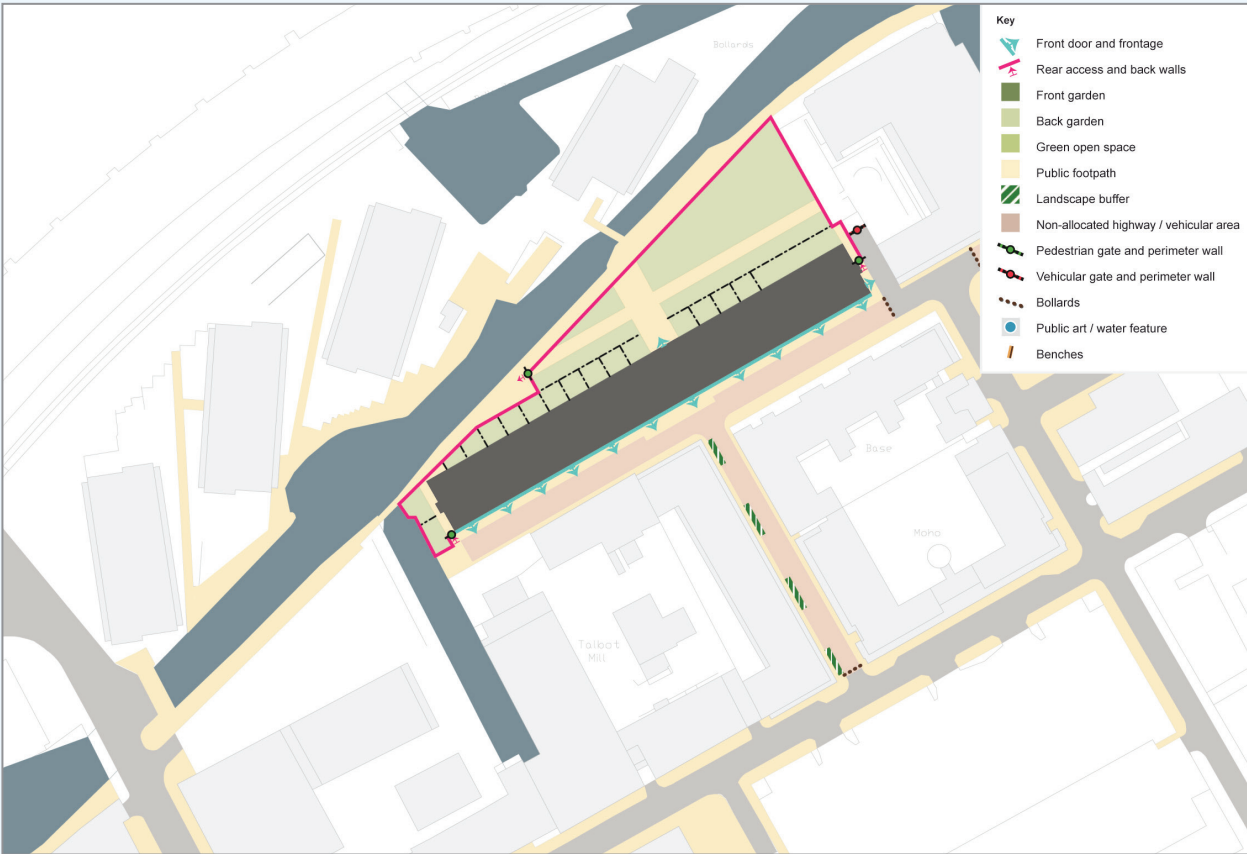
Situated at the end of a cul-de-sac, access to Timber Wharf is carefully controlled by the private road. Vehicular movement is limited to the front of the building, but pedestrians actively use the footpaths to the rear which lead to the city centre.

Ownership



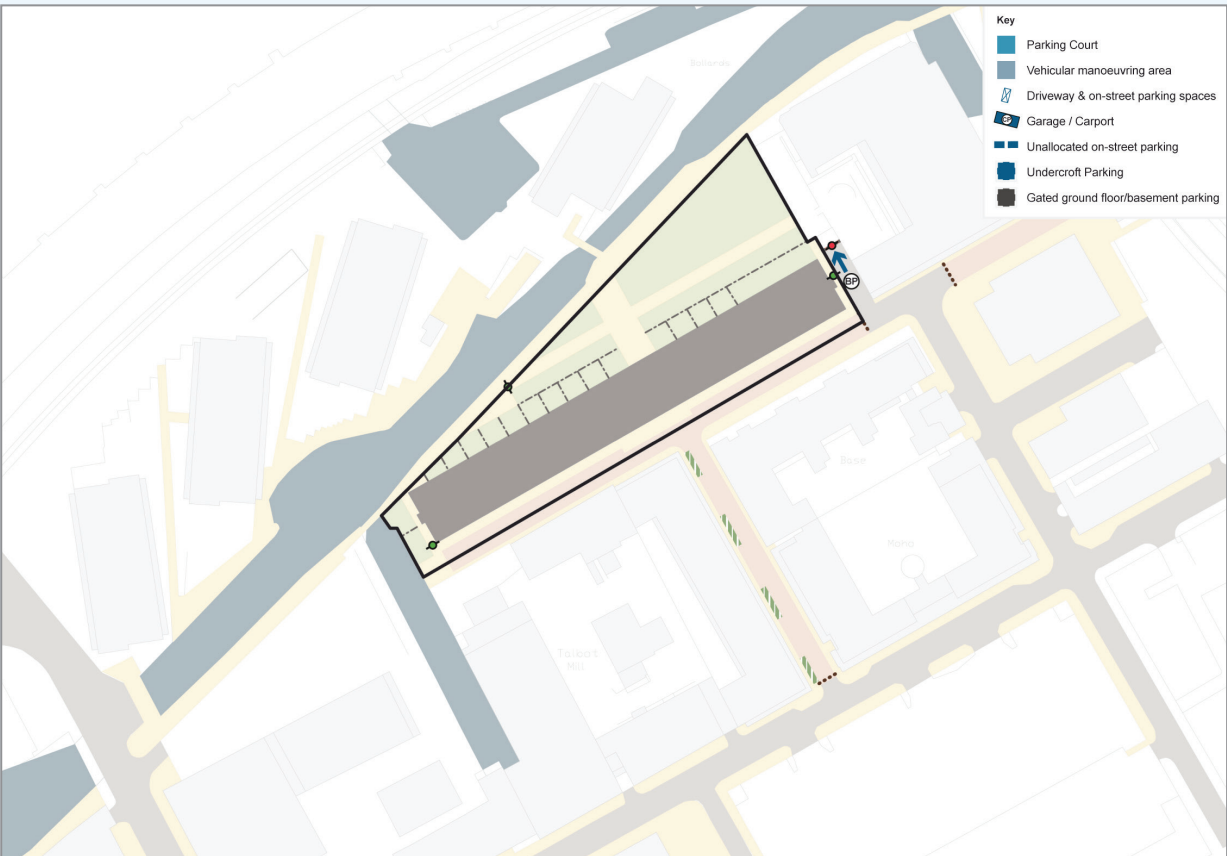
The private and public boundaries are defined through a mix of use of surface materials, signs and walls and gates.

Fronts and Backs



All spaces are overlooked.

Parking



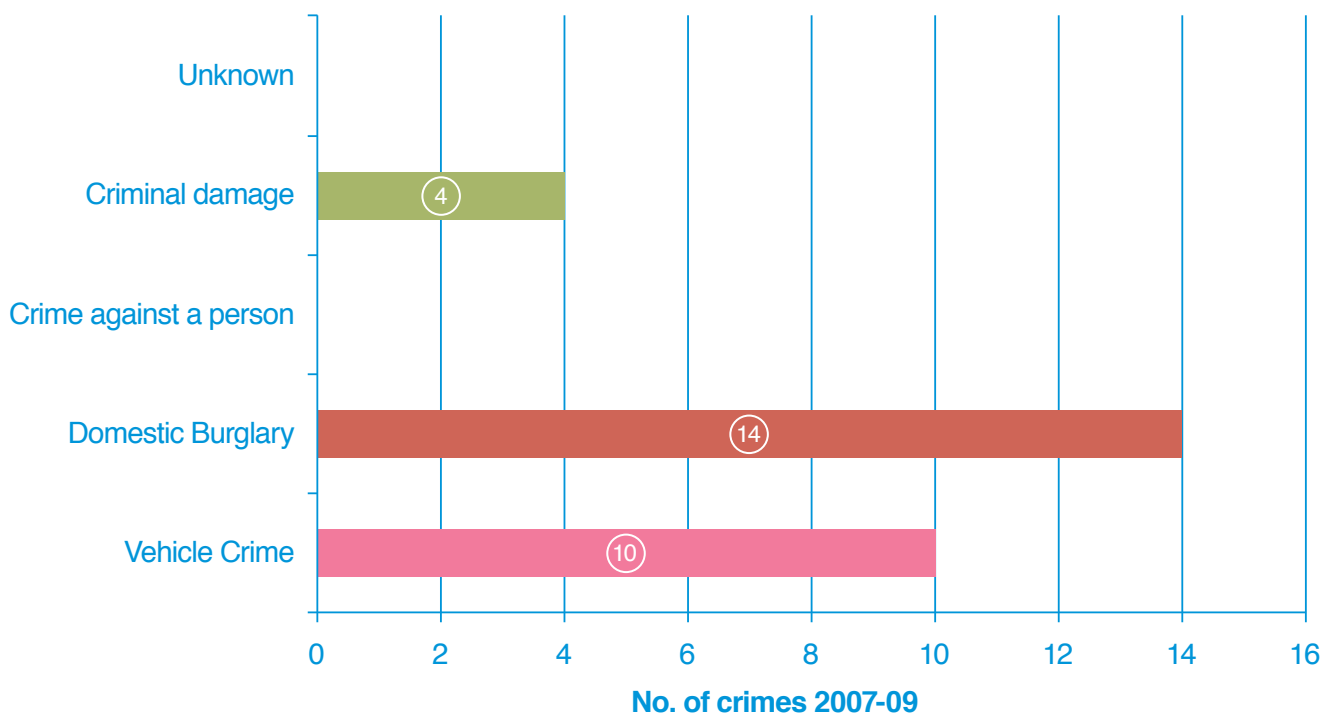
Parking is provided in a secure underground car park, although there is on-street parking on Ellesmere Street.

Locator Map



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Timber Wharf Crime Statistics – Type and Number



South at Didsbury Point

A relatively isolated gated scheme shows that relying heavily on physical perimeter security measures is not a panacea.

MANCHESTER

INNER SUBURBAN INFILL



Terraced housing frontage to the only street within the scheme.

The gates reduce the potential of the scheme to contribute activity to the surrounding streets.



A view of the gated access road from inside the development.

Background

This scheme is the first phase of a large development comprising of 414 dwellings. Phase 1 comprised 91 dwellings and is the area chosen for this case study.

The vision was for neighbourhoods of terraced housing with a variety of designs in each street. The development was to relate to the Victorian elements of the existing West Didsbury Village with a modern design to attract young professionals.

Location

The site was previously the grounds of the Withington Hospital. It is well situated for local facilities, with schools, local high street shops in West Didsbury Village and a park with a children's play area at the edge of the development, all within a 10 minute walk. Frequent bus services also serve the development connecting it to central Manchester, 4 miles away.

Urban Design Story

The ambition of the developer was to create a scheme with the qualities of an urban village but with a contemporary inner city look. However, the decision to gate the development extensively to use large rear parking courts, and to provide no real shared facilities has hindered any real resemblance to a village in the conventional sense.

The layout of the scheme is a series of terraces and apartment blocks arranged around two large parking courts with a single gated street providing access to the outside. Two further large blocks of apartments on the eastern side of the site (not included in this study), share their access with the case study area, significantly increasing the number of cars that pass through the main gate and the numbers of cars in the parking courts. As the majority of parking is therefore located to the rear of properties, architects have attempted to increase surveillance over parking courts by positioning windows and apartment balconies to overlook them.

The sole pedestrian and vehicular street has been well designed with a mixture of planting and surface materials that compliments the architectural detail of the homes. The quality of the public realm and soft landscaping that is accessible to residents is generally high; however it is noticeably lacking in accessible open space, perhaps as a result of the amount of space given over to parking in the rear courts at the centre of the scheme. A pocket park is found further south, along The Boulevard, but access is restricted by gating and it does not appear to be well used.

The scheme is missing qualities and facilities that would help contribute to 'village' community; instead measures introduced for physical perimeter protection have created a private housing estate environment. The gates and strong sense of disconnection reduce the potential of the scheme to contribute activity to the surrounding streets or provide the right qualities of surveillance and connection with the surrounding streets and neighbourhoods.



The scheme relies on large rear parking courts, overlooked by some of the properties.



The use of alleyways and standardised fencing has created opportunities for rear access.

The benefits of such extensive perimeter fencing for crime prevention are reliant on careful design to avoid weak points.

Notwithstanding the effects on the look and functionality of the site, the benefits of such extensive perimeter fencing for crime prevention are reliant on careful design to avoid weak points. The site visit showed a number of flaws in detailed design, implementation and on-going maintenance. Specifically alleyways to parking areas are not well overlooked or lit and the gates put in place to restrict access to these spaces were too low and easily scalable. There was evidence that shrubbery and hedges have become overgrown, reducing the opportunities for surveillance through railings out to the street beyond.

Crime Story

There were high levels of vehicle crime both outside and inside the perimeter fence in this case study. It is impossible to tell from police data where exactly all of these took place, but there appeared to be incidences outside on the road that the development faces and also in the large rear parking courts.

There are also repeat cases of domestic burglary from rear of homes backing onto the parking areas, despite the development being gated.

Key Lessons Learnt

This development shows how getting the fundamental design and layout right is more important than relying on security gates.

Design Principles

A scheme which was intended to have an 'urban village feel' appears to have been partially comprised by the measures used to ensure protection of parking courts and access to rear of properties. The sense of exclusion could have been avoided, if from the outset, the scheme had been designed in a way that did not require security measures i.e. fewer and smaller parking courts and a more conventional network of streets.

Parking

Parking needs to be designed to be close to and with genuine surveillance from each owner's dwellings. The two very large courts in this development do not deliver this outcome and the use of multiple alleyways for access is not helpful in creating a secure environment.

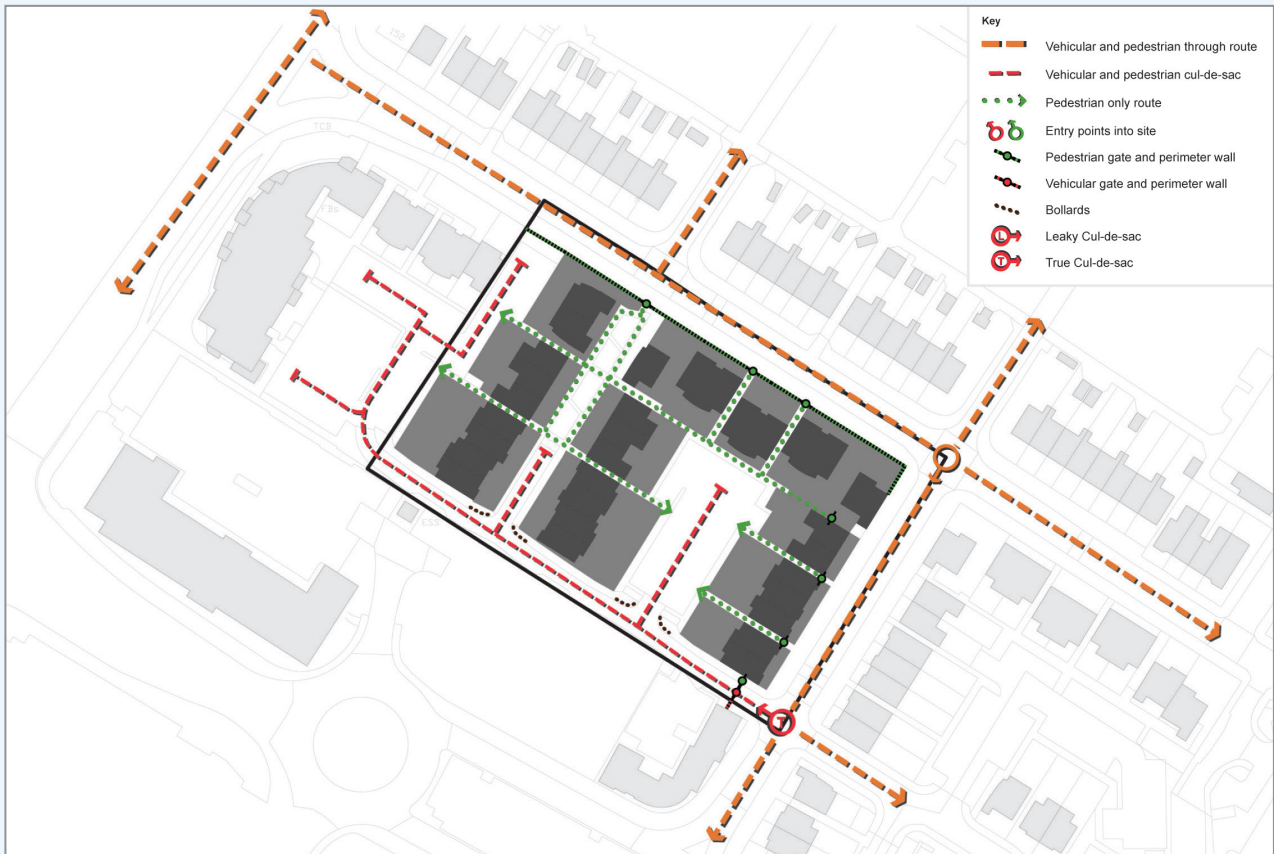
Gating

Extensive security along the front of dwellings severs the connection between the development and the surrounding streets, thereby reducing the level of activity on the street and the benefit of surveillance.

Designing for Context

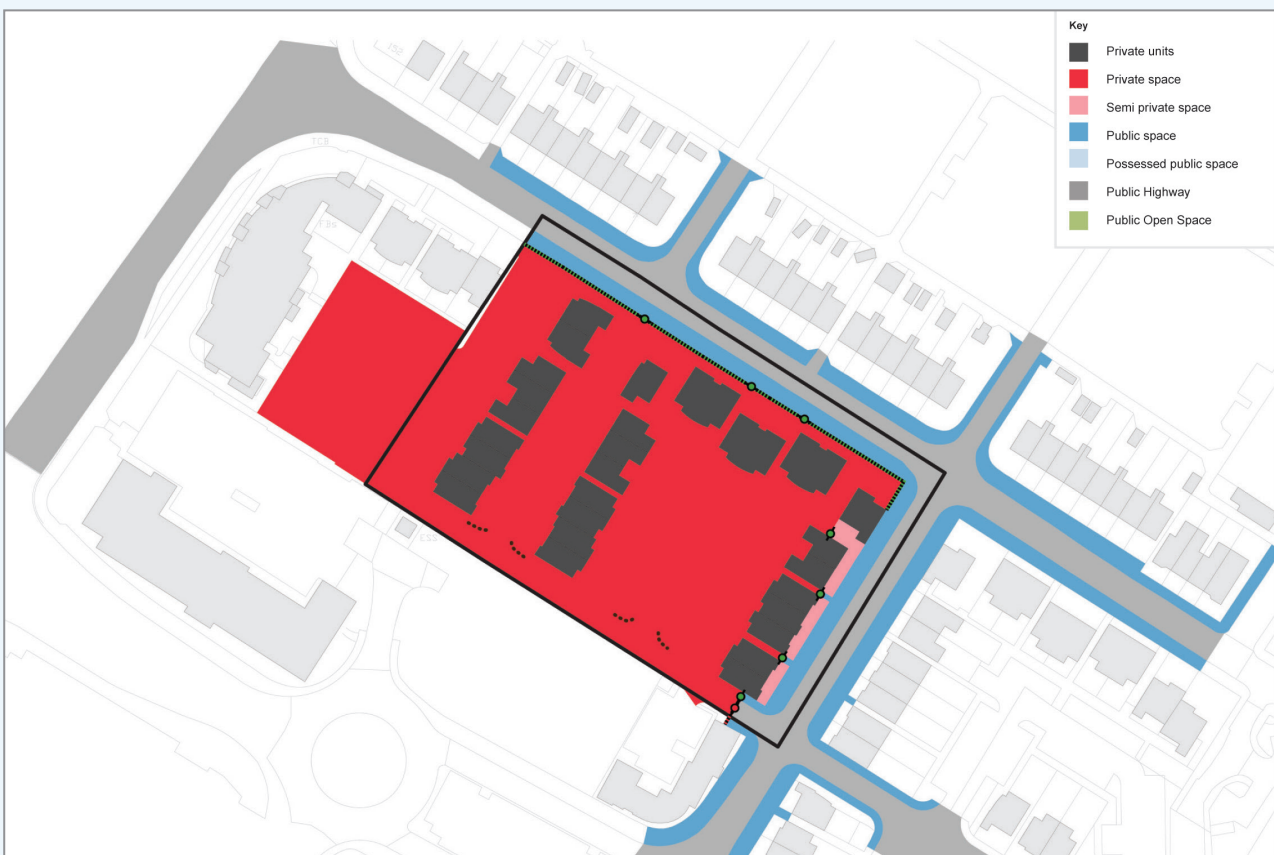
If schemes are designed to include perimeter security then such gates and railings need to be appropriately designed, installed and maintained to be effective.

Movement and Access



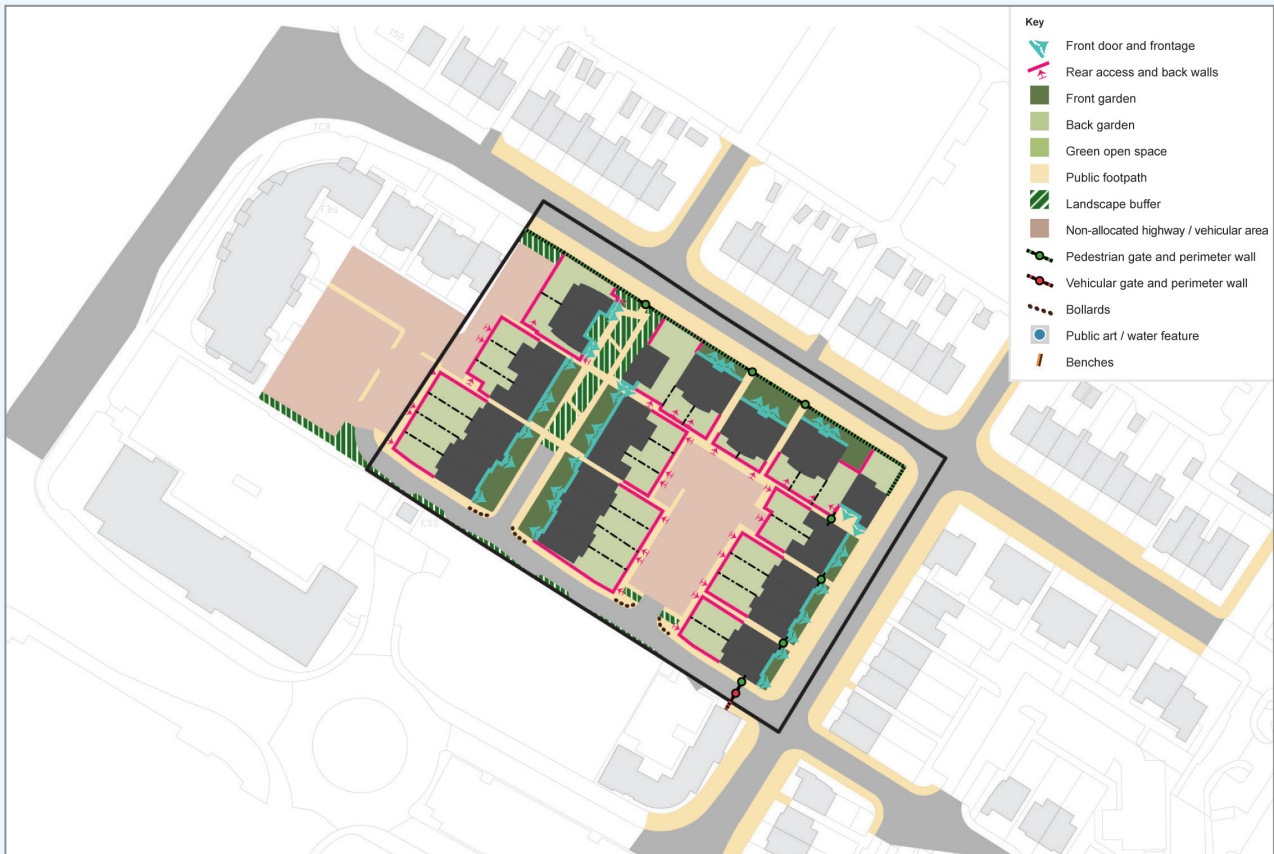
The scheme is impermeable due to the gated access points, with one vehicular access road and multiple pedestrian gated entry points into the scheme.

Ownership



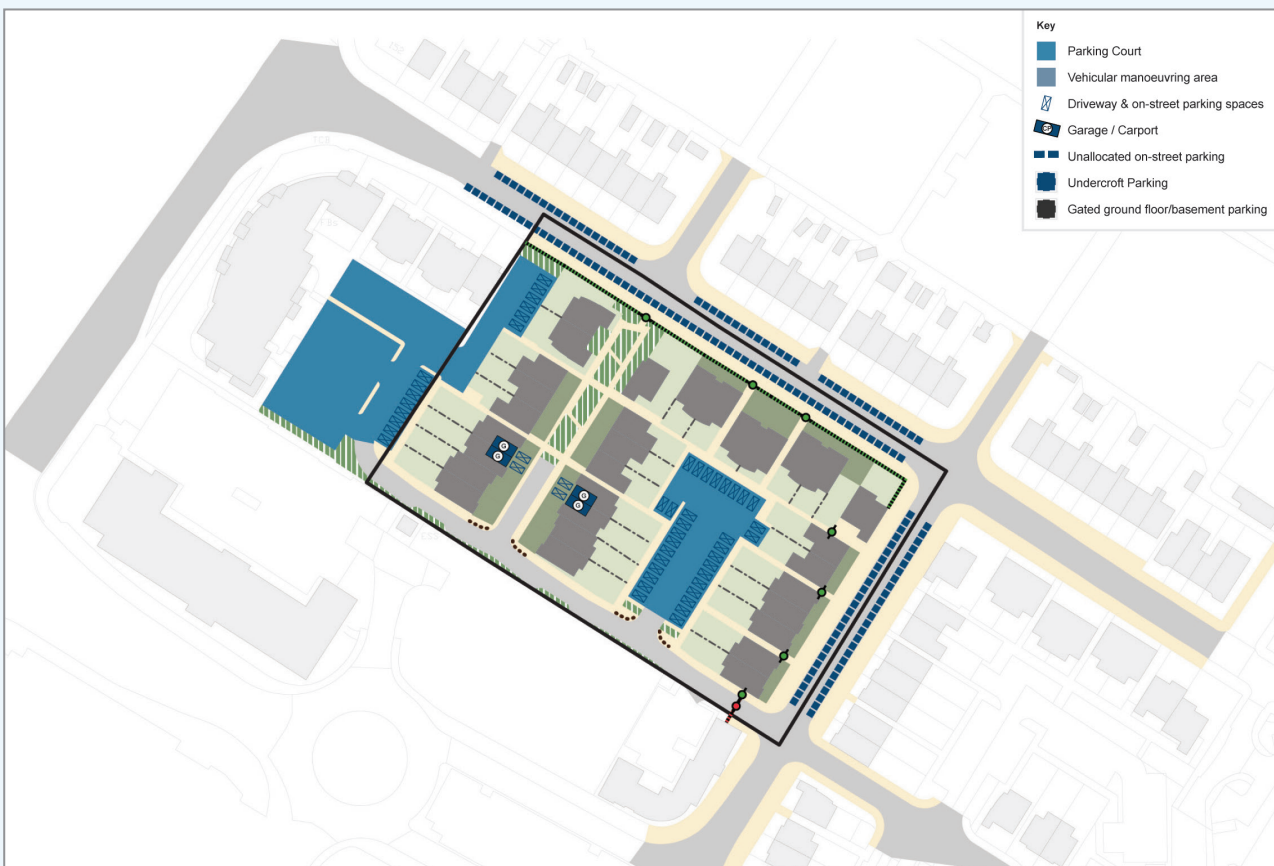
The secured gated access means almost the entirety of the site is private space, highlighting the defensive intention and nature of the scheme.

Fronts and Backs



Properties front onto the main roads and backs face parking courts.

Parking



Most of the resident parking is arranged within two main parking courts.

Locator Map



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South at Didsbury Point Crime Statistics – Type and Number

