

4. EASE OF MOVEMENT Development Design Guide



Brighton Goods Yard redevelopment. Linkages strengthened between many destinations either side of the site. Pedestrians have priority on the majority of links across the site. Impact of the new highways scheme is kept to a minimum.

### 4.0 EASE OF MOVEMENT

# 4.1 Street layout

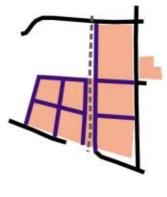
### Objective

To provide a network of route choices that are safe, integrated and easy to use for all types of movement but particularly for public transport, walking and cycling.

## 4.1.1 The grid system

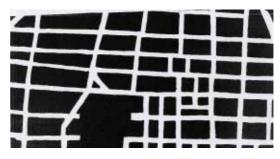
The Local Plan requirements for sustainable transport SDP 2, 3, 4,7v, 10iii and 11 are reflected in the objective above. Only the largest developments will involve the design of a new street layout. In these cases the grid, whether rigid or deformed, is the easiest way to provide an accessible and clear layout. Whilst it can be modified to create interest and accommodate local conditions the grid should be used as the basis for all new layouts (except where historic routes cannot be easily integrated into a grid). In areas vulnerable to extraneous traffic, calming measures should be an integral part of the design (see 5.3.5 and 5.3.6).

Design Principle 4.i : The connected pattern should be used as the basis for new street layouts.



Chapel development, Southampton, showing the proposed new grid layout of streets.





Paris



Berlin



Barcelona

As long as the connections are in place the grid can be modified to an irregular form as shown below.



Toulouse



Southampton (at larger scale than above plans)

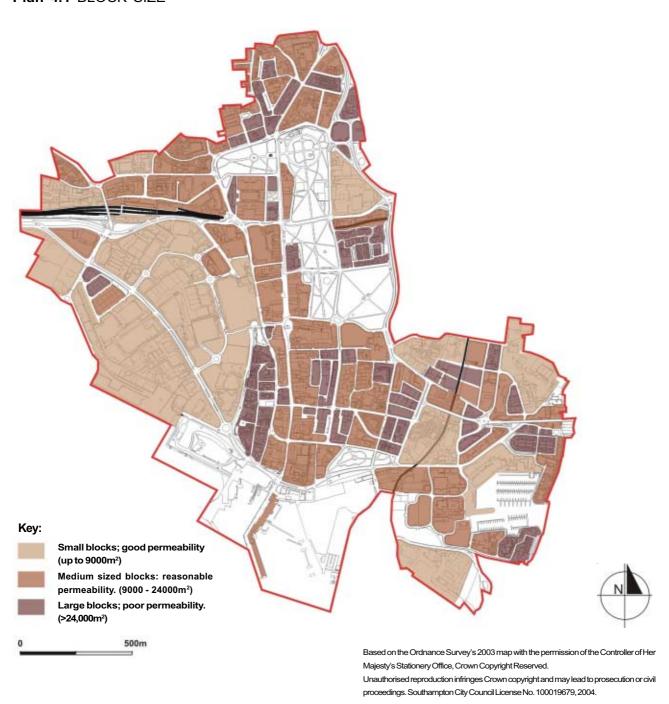
Plan 4.1 is an analysis of the existing block structure of the City Centre and its effect on permeability. Plan 4.2 provides an illustration of how the poor block structure of the Western Character Area may be improved in the long term.

Designing the grid to maximise the benefits of passive solar gain warrants an orientation north-south/east-west. The east-west axis should prefer-

ably be within  $30^{\circ}$  of due east/west. The south facing buildings can then be positioned to benefit from passive solar design.

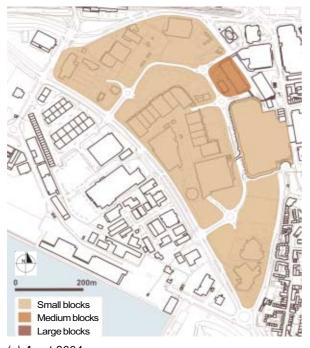
Design Principle 4.ii: New routes should link up with existing movement patterns and be structured to provide easy extension of the public transport network.

Plan 4.1 BLOCK SIZE

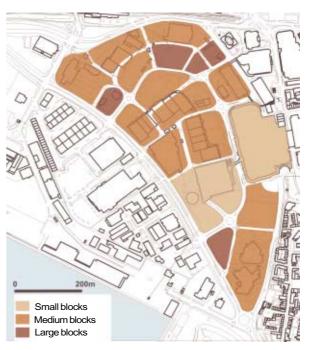


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(b) How the block structure might be improved by 2050. Some of these links might be formed with pedestrian/cycle routes rather than vehicular routes.

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Plan 4.2 NOTIONAL IMPROVED BLOCK STRUCTURE FOR PART OF THE WESTERN CHARACTER AREA

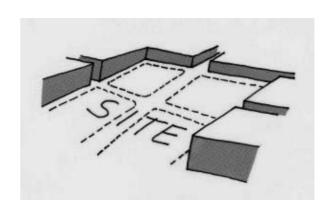
All major buildings should be within 400m walking distance of a bus stop and account should be taken of the effects on the perception of distance, of barriers to pedestrians such as main roads, subways and bridges.

People prefer to walk on streets where they can be seen by drivers, residents and other pedestrians.

Pedestrians and cyclists feel more comfortable on low-speed streets (20 mph)(see 5.3 Street design details). Above these speeds clear and coherent cycle lanes should be provided. In some circumstances on wide pavements cyclists and pedestrians may be able to share a clearly marked surface.

Plans 4.3 and 4.4 provide an assessment of route hierarchy within the City Centre. This will assist developers new to Southampton with locational decisions. It will also provide a basis for prioritising

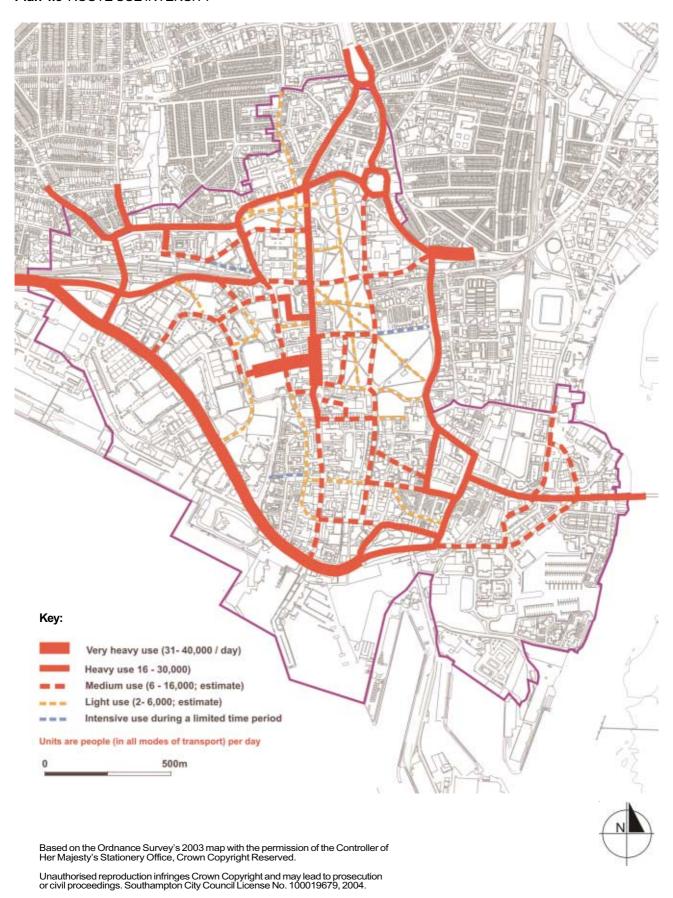
private and public investment. Whilst there will never be an excuse for poor quality design, a difference in priority may be given to the degree of detail and quality of materials for buildings on prime sites as compared to a seldom-used back street.



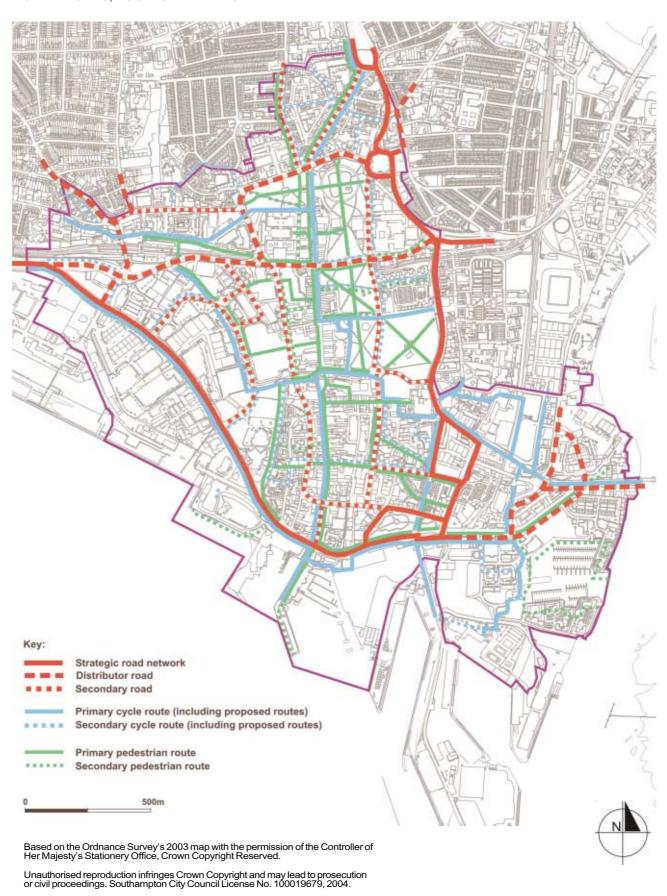
The dotted lines indicate new streets connected to existing ones.

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# Plan 4.3 ROUTE USE INTENSITY

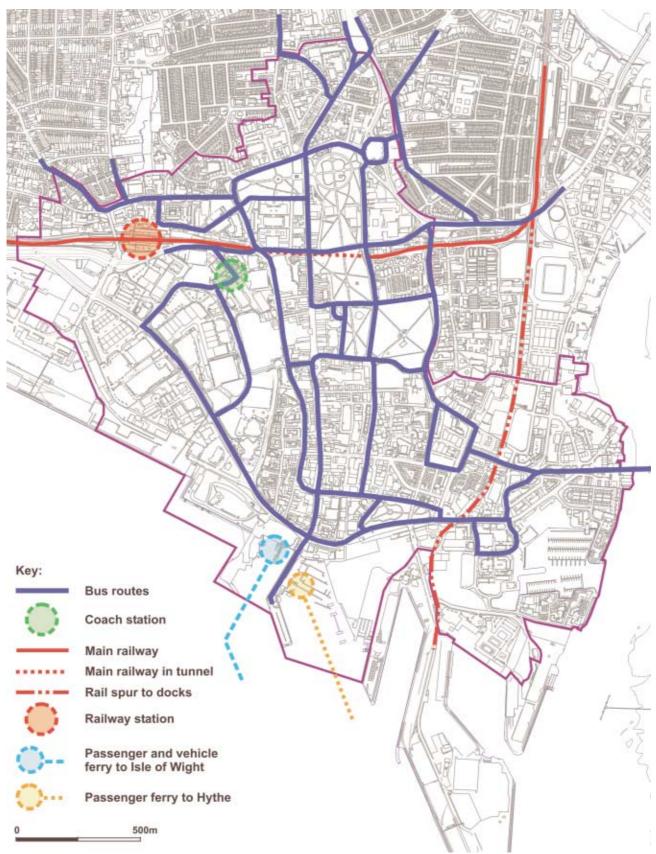


Plan 4.4 ROADS, ROUTES AND PATHS.



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# Plan 4.5 PUBLIC TRANSPORT ROUTES



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# 4.2 Parking and servicing

### Objective

To ensure that safe and secure parking and servicing requirements are integrated into new development in a way which minimises their negative impact on townscape quality and supports the creation of lively public spaces.

The Local Plan prescribes the maximum quantity of parking allocation allowable for different locations and uses (SDP 5). It establishes the general principle that the needs of cyclists, pedestrians and disabled people should be prioritised over those of able-bodied car drivers (SDP 4). It also seeks to reduce dependency on the private car (SDP 2) and guard against the negative impact of additional travel (SDP 3). This section deals with how these principles can best be incorporated into development.

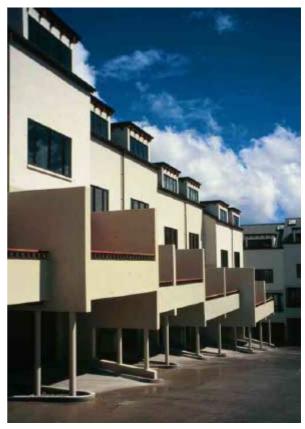
### 4.2.1 Cycle parking

Readily accessible communal indoor cycle storage may be the best solution for high density residential developments. Normally such storage should be at ground level.

Design Principle 4.iii: Safe, secure, easily accessible and attractive to use cycle parking shall be provided for all developments in line with Appendix 2 of the Local Plan.

# 4.2.2 Car and motorcycle parking - general principles

The way in which the parking is arranged can dramatically affect the appearance of a development. In mixed-use developments it may be possible to reduce the allocation of parking by doubling up the allocations for complementary uses such as offices and leisure. The use of smart cards to limit daytime access to parking to office workers may help facilitate this. Parking places should be looked over and well lit. In multi-storey car parks, and otherwise where this isn't possible, CCTV should be installed. Secure motorcycle parking facilities should be provided. BS8300:2001 gives guidance on the access requirements of disabled people.



Terraced townhouses with undercroft parking at rear - Auckland.

## 4.2.3 Parking within blocks

Hiding parking within the centre of a perimeter block removes it from the general public realm. This approach could work for office or hotel developments. In residential developments it should be backed up with additional security measures to ensure that the rear access isn't exploited by criminals. Large areas of parking should be designed in conjunction with the overall planting plan. Planting design objectives should complement security objectives.

Where the ground floor of a building is used to accommodate parking the impact on the road frontage of the building must be dealt with sensitively. The building should still achieve the required level of active uses on the road frontages. Building regulations may require mechanical extract ventilation if natural ventilation is not provided.

Design Principle 4.iv: Where appropriate the majority of parking spaces should be located within the centre of a perimeter block or in a basement. Active use units must wrap parking in the ground floor of a building.

(d) (b) (a) (e) (e)

Parking Opportunities:

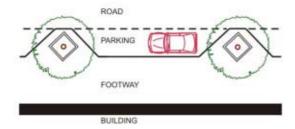
- (a) Centre of block
- (b) Road side parking
- (c) Distinct parking block
- (d) Roof level or decked
- (e) Basement

This diagram illustrates where vehicle parking could and should not be located. Refer also to diagrams illustrating variations on the permiter block on page 34.

### 4.2.4 Roadside parking

Used creatively and subject to sight line requirements and adequate provision of crossing places, on-street parking can have important beneficial effects:

- calms passing traffic
- increases the number of people using streets
- allows tree planting to be incorporated into the street without cluttering the pedestrian route. (As shown on the diagram; below).



This diagram illustrates a recommended detail for the accomodation of parallel roadside parking interspersed with street trees.

Roadside parking cannot be allocated to (for example) householders as part of the official parking allocation for a residential development. However it could be used to provide visitor parking, with pay and display charging.

### 4.2.5 Parking in a separate block

Large areas of new, unrelieved, surface level parking are unlikely to be approved in the City Centre. In exceptional circumstances where these are allowed they are best provided in distinct blocks. Parking blocks should be linked to surrounding buildings by carefully detailed pedestrian routes. Ample tree and shrub planting within the block should be included together with a peripheral ring of trees (see 5.4.6).



Residential infill above a car park in Auckland.

### 4.2.6 Multi-storey or roof level parking

Where possible new multi-storey car parks should be wrapped by single aspect building for other uses able to provide an active front such as housing or offices, perhaps with a ground floor retail use.

Vehicle access to the parking should be from the side or rear of the building.

#### 4.2.7 Basement parking

In common with 'wrapped' multi-storey car parks, basement parking allows the street frontage of buildings to remain relatively free of cars. It facilitates a closer relationship between the building and the pavement by avoiding rows of parking surrounding the building. Basement access also provides the potential to service businesses from underground. Basement car parks may require mechanical extract ventilation in accordance with building regulations.

### 4.2.8 Bus parking

Large developments involving public transport provision should avoid creating large lay-up areas for buses except where expressly permitted by the City Council.

Design Principle 4.v: Designers should consider the needs of different types of users in the following order: pedestrians and disabled people, cyclists, public transport, motorcyclists, taxis and private hire vehicles, freight and the private car.

Design Principle 4.vi: Car, motorcycle and bus parking should be integrated carefully into developments with consideration given to its effect on visual amenity, security and street vitality.

### 4.2.9 Servicing of commercial property

Servicing of shops and businesses from the street frontage should be limited where possible to off-peak hours. Storage and delivery yards should be obscured within perimeter blocks. This will support the Local Plan policies aimed at preserving and enhancing the amenity of the townscape (SDP 1, 7 and 9ii). They should also link with the service access route inside the city centre ring road. Aleaflet explaining the service route signage system is available from the City Council.

Where rear access is not possible or where the site dictates a pavilion building, loading docks and waste disposal containers shall be contained within the perimeter of the building and behind doors which shall be closed at all times except to allow ingress and egress.

Design Principle 4.vii: Servicing and refuse collection arrangements for commercial property should be carried out from the inside of perimeter blocks, or be incorporated within the building.

## 4.2.10 Servicing of residential development

Communal bins should be screened within bin stores (which themselves should usually be screened by planting) and located within 10m of a point accessible to refuse vehicles. Wheelie-bin stores for single residential units should be within 25m of a point accessible to refuse vehicles.

In some circumstances, including conversion schemes, refuse stores will need to be accommodated inside the building. It will not be acceptable for the design to rely on bins being left on the road frontage of the site.

Refuse vehicles should not be required to reverse more than 25m. Turning heads need to take into account the overhanging equipment at the rear of the refuse lorry for lifting the wheelie-bins.

Design Principle 4viii: In residential areas communal bins and 'wheelie-bins' should be accommodated in suitable screened and ventilated enclosures.