Sheffield Home Zone Guidelines



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1 <u>Sheffield Home Zone Guidelines – Introduction.</u>

1.01 Definition

A 'Home Zone' is the UK term for a street where people and vehicles share the whole of the road space safely, and on equal terms; and where quality of life for residents takes precedence over ease of traffic movement. Home Zones are based on a change in the way that people perceive and use the street.

1.02 Purpose of the Guidelines

These Guidelines include highway design advice and the principles of place particularly pertinent to the design of acceptable Home Zones in Sheffield. They cover the function, design objectives and features, and the procedure for consultation and designation of Home Zones.

The Guidelines set out key principles and design parameters for Home Zone schemes in Sheffield, which developers and designers who wish to progress Home Zones should follow. The City Council encourages developers to consider Home Zones in residential areas and will support their development through offering advice and formal highway adoption of acceptable schemes. A set of Appendices accompanies the Guidelines that elaborate on Home Zone-specific design features and management requirements.

Developers should read this guidance in conjunction with the 'Manual for Streets' and the City Council's guidance 'Better Places to Live in South Yorkshire'. The City Council also has a 'Housing Market Renewal Developer Manual' that explains a wide range of design quality issues pertinent to residential areas.

1.03 The role of Home Zones in creating better places to live

Home Zones can: -

- Restore the balance between traffic and communities.
- Allow the street and public realm to be used more for social activities.
- Make it safer for residents to walk and cycle through their local streets.
- Allow children the opportunity to play safely next to their homes.
- Discourage through traffic or 'rat-runners'.
- Encourage community interaction and neighbourliness.
- Reduce the likelihood of crime and anti-social behaviour.
- Increase house prices over comparable properties elsewhere.

1.04 Home Zones in the wider context of high quality residential development

Home Zones are potentially an effective way of improving residential living standards and regenerating poorly performing housing markets. Home Zones are, however, only one of a number of measures to improve quality and sustainability in residential areas. The Sheffield Developer Manual sets out design requirements and links to good practice guidance to enable the design and implementation of high quality residential developments, which is especially relevant to Housing Market Renewal Areas. Where Home Zones are not incorporated in residential streets, a 20 Mph Zone will usually be required.

1.05 <u>Issues relating to Home Zones that require special consideration</u>

Whilst the inclusion of Home Zones in housing areas can bring about the positive change outlined in Para 1.03, particular care is required in the planning of some specific elements of Home Zone schemes. These include: -

- **10-mph design speeds:** Should not inhibit emergency vehicle access or frustrate legitimate drivers by excessive stretches of 10-mph street.
- **Car parking:** Car parking should be designed and managed to ensure adequate provision for residents and visitors, to minimise the likelihood of conflicts and to prevent parked vehicles from blocking emergency access.
- **Shared Surfaces:** Blind and partially sighted people should be accommodated by providing way-finding features or safe pedestrian areas.
- **Maintenance:** The maintenance regime for all elements of a Home Zone should be agreed early on in the design to avoid overgrowth of grassed or planted areas or disrepair of non-adopted hard-surface highway areas. The highway materials used, which may be more expensive to maintain than range normally adopted by the City Council, require early discussion.
- Local distinctiveness: A positive relationship between the scheme's context and its layout is fundamental to any successful Home Zone design. It is also important to consider local connections to ensure that the Home Zone is successfully integrated with the surrounding area.

1.06 Legislation and Government Guidance on Home Zones

Section 268 of the Transport Act 2000 allows local authorities to designate roads as a Home Zone. In pursuance of this, The Quiet Lanes and Home Zones Regulations 2006 comprise the regulations on Home Zone designation and the procedure for making a 'Use Order', which permits specified uses of roads (other than movement) within a Home Zone. The Government's Manual for Streets (2007) promotes the use of Home Zones in residential streets. Home Zones are also supported in a number of key policy documents, including PPG13 *Transport* and PPS3 *Housing*.



2 Key Principles and Benefits of Home Zones.

2.01 Summary of the Features & Aims

The designation of a street or group of streets as a Home Zone brings with it a change of responsibilities. All users, whether in vehicles, on bike or on foot, have equal status. All legitimate community uses are allowed within the whole street, together with traffic movement in delineated areas.

The features of Home Zones should create self-enforcing low vehicle speeds with a reduced impression of



long straight roads, improved landscaping and lighting, and the creation of social spaces and the provision of a shared surface. The overall aims are to encourage social interaction, physical activity and a reduction in the likelihood of crime and road accidents, as well as an attractive living environment. Drivers should feel that the car is a "guest" in the street. Particular attention should be given to the needs of children and disabled people.

2.02 KEY PRINCIPLES for Home Zones in Sheffield

- 1. Design for 10mph driver speeds.
- 2. Minimise the physical and visual impact of cars on people and environment and design for equal priority amongst street users.
- 3. Design streets and spaces as lively community places that are fully inclusive of all and safe to play, socialise and travel in.
- 4. Create an attractive streetscape that contributes to the local sense of place, community safety and security.

2.03 The Benefits of Home Zones

The benefits of Home Zones in residential areas are multiple. Home Zones help to restore the balance between traffic and communities, in favour of a community-orientated environment, and help to build and strengthen the communities they serve. A well-thought out scheme will open the way for the street and public realm to be used more for social activities and play, which is attractive to existing and perspective residents alike. This aim is achieved by designing for low vehicle speeds using physical and environmental features –and by designing streets and spaces to accommodate social and play activities.

A low speed highway layout makes it safe for the whole highway space to be used for purposes other than just movement and also ensures that residents feel more comfortable to walk and cycle in their local streets, thereby encouraging local journeys by these modes and making the development more sustainable and pleasant. A further benefit is the deterrent to through traffic or 'rat-runners'. Rat-running has been reduced by up to 100% in some retrofit Home Zones in the UK following their implementation.



More people out in the street for longer periods

of time is likely to encourage greater community cohesion with neighbours looking out for one another. The presence of people in the street socialising or walking also deters causal crime and anti-social behaviour. Community surveillance of the street, through a well thought-out building and street layout, dissuades criminal activity, such as car crime and burglary.

A further prominent advantage of a well-designed Home Zone for developers of new-build schemes, and from a regeneration perspective in both new-build and retro-fit schemes, is the increase in house prices over comparable properties elsewhere. There is actual and anecdotal evidence from many successful Home Zones that house prices have risen $\pounds 10-15,000$ above the background increase for the area over a monitored period (usually 4–5 years). Research by one consultancy suggests that high quality street design and environment is the key factor behind such increases. The CABE document 'Paved with Gold' provides further insight into the value of good street design.

2.04 Community Consultation, Home Zone Designation & Use Orders

The success of a Home Zone, whether new build or retrofit, will depend on whether people enjoy using the spaces provided and are aware of the objectives of the design. Schemes progressed in partnership with local communities and residents will respond better to community needs and aspirations. For retrofit Home Zone projects, it is especially important to involve the existing community in the design process so that their specific aspirations are accommodated (see Page15). Consultation with residents is also necessary to enable streets to be legally designated as a Home Zone and for the appropriate signage to be installed. With new build schemes, consultation with new residents funded by the developer, via an information pack or notice of intention, is required to satisfy the Home Zone designation procedure. In these cases, consultation of residents in a first phase may be sufficient for designation of subsequent phases. For both types of scheme, the Council will usually expect a consultation strategy to be submitted.

A Use Order gives legal status to uses of the highway other than movement, which may include, for example, social events and informal games. A Use Order may only be drafted once Home Zone designation has been agreed. Residents must be consulted on the types of street uses that they are comfortable with, either by notice as they move into the development or after a set period of occupation. The City Council should be contacted at an early stage about the types of uses that may be acceptable in a Home Zone scheme, as these will vary depending on the proposed design. See the 'Quiet Lane and Home Zone Regulations 2006'.

2.05 <u>Where is the Council Seeking to Develop Home Zones?</u>

Home Zones can be introduced in all types of residential developments, as well as certain other types of mixed-use development, where traffic flows are expected to be no more than 100 vehicles per hour in the afternoon peak.

> In new housing developments: - 'New Build'

Where new residential development is being proposed, developers are encouraged to consider the provision of Home Zones within their developments. Home Zones have particular relevance for the 'sustainable communities' agenda within Housing Market Renewal areas. Home Zones are more cost effective when built into new streets from the outset. Providing these Guidelines are followed, the highway in a Home Zone will be adoptable by the City Council (with the likely exception of art features & play equipment). Early consultation with SCC's Highways Development Control is required. Certain Home Zone features, such as raised plateaux and planting areas, may also be introduced in local collector roads in residential areas.

> Within appropriate existing residential streets: - 'Retrofit'

Home Zones can also be applied as retrofit schemes in existing residential streets. Funding through the Local Transport Plan will not generally be available for the introduction of retrofit schemes. However, funds may be available for a small number of retrofit schemes, through a registered social landlord or regeneration agency, for example. Neighbourhoods that suffer from social, traffic/environmental or road safety problems should be identified as priorities for retrofit Home Zones, as the benefit–cost ratio will be most significant, although local funding opportunities will also influence priorities. Where retrofit schemes are introduced, they will be monitored to see how Home Zones contribute towards LTP objectives – including accessibility, tackling congestion and road safety – as there will be measurable before and after conditions.

2.06 Size of Home Zones and Bus Routes

Home Zones should substantially reduce through traffic and speeds in residential roads. However, if drivers have to travel too far along Home Zone streets, they may become frustrated and attempt to drive faster than the 10-mph design speed. This will undermine the aim of the low speed, mixed priority street environment. Home Zone streets are not generally suitable for bus routes, due to the tight vehicle tracking through frequent horizontal deflections, so residents will have to walk to the nearest bus route on a conventional street. For these reasons, all points in a Home Zone should be within reasonable walking distance by road from a conventional street that is suitable for a bus route. This requirement limits the size of one continuous Home Zone, but does not prevent two or more Home Zones from lying on opposite sides of a 20 or 30mph-restricted street.

2.07 Design Guidelines Introduction

Design guidelines for Home Zones under the four Key Principles on Page 4 are set out on Pages 7–14 of this document. These Guidelines apply directly to New Build Home Zones, recognising that the greater opportunities for Home Zone schemes in Sheffield are within new housing developments. Many of the design features of New Build Home Zones apply equally to Retrofit Home Zones and the design guidelines should be consulted in the design of these schemes. However, a slightly different approach is required for some elements of Retrofit schemes and a summary of the special issues and design considerations relating to Retrofit Home Zones appears on Page 15.

3 Design Guidelines for Home Zones in Sheffield.

Four Key Principles for Home Zones in Sheffield are set out in the introduction to these Guidelines. Various measures that help to achieve these principles are set out under each one in turn below. Some of these measures are crosscutting and contribute to more than one principle, but have been listed under the most important. Designing to be inclusive of all users is an over-arching principle. Where developers are considering Home Zone designs, they should contact the City Council's Highways Development Control Team to discuss the initial concept design. Providing the Key Principles are met, the highway elements of a Home Zone will be adoptable by the City Council.

3.01 KP 1: Design for 10mph driver speeds.

10-mph is the top speed at which all road users can safely co-exist in the same space and 'negotiate' right of way with each other. There are two broad methods of reducing driver speeds: 1) Physical features that make it difficult or uncomfortable to drive at more than the target speed; & 2) Environmental 'signals' (or psychological features) that influence driver behaviour so that their applied speed is adapted to their environment. Ideally designers should aim to create streets that control speeds naturally, through urban design and the layout of the street, rather than with abrupt traffic calming features. A combination of features in the following list will be necessary to achieve a 10-mph design. Physical speed reducing features should ideally lay around 25 metres apart.

- Zig-zagged or winding streets and/or carriageway alignment shifts to create horizontal deflections for vehicles. Views are naturally closed on a curved street, adding variety, and ensuring shorter forward visibility. Jagged and disjointed alignments are more difficult to navigate and tend to keep speeds low. The street must still enable access for refuse collection and delivery vehicles and fire appliances. A 3-axled refuse collection wagon, which is slightly larger than a fire engine, is the largest vehicle that can be expected to negotiate a Home Zone. (Length– 10.70m, Width– 2.49m).
- Single-track streets reduce driver speeds by narrowing the effective vehicle pathway, which has been shown to have a direct relationship to speed, and through driver anticipation of on-coming vehicles. Narrow vehicle tracks also allow street space to be allocated to uses other than vehicle passage. Single-track streets (not One-way) should have a vehicle pathway of around 3.2 meters wide, which accommodates larger vehicles without allowing two smaller vehicles to pass each other. (NB: narrow vehicle tracks may require larger radii at junctions to cater for the turning tracks of larger vehicles). However, a narrow vehicle track should widen to 4.5 metres for 7m approximately every 40m to provide passing places for opposing vehicles, depending on the detailed layout.

Passing places should be intervisible.

- Frequent T-junctions to ensure speeds between junctions are low.
- **Traffic calming**. Chicanes are preferred in the form of features that are in keeping



with the overall design, such as planted areas, trees or kerb buildouts. Pinch points may also be used. These features should be conspicuous, robust and carefully positioned to prevent potential collisions. Reflective strips or road markings are not required on/around slowing features. Overrun sections may be used alongside certain features to provide speed reduction whilst allowing clearance for larger vehicles (eg. fire engines). Vertical deflections should only be used where alternatives are constrained by the street layout, although large raised street squares (plateaux) may be appropriate.

- Use of innovative on-street parking arrangements to lower traffic speeds, such as alternate-side echelon bays or blocks of end-on bays. Parking bays should be protected at either end by physical features to prevent overrun when not parked in and should be limited to blocks of six spaces. The bays should be laid out to encourage drivers to reverse IN rather than OUT. Measures are required to ensure access to the rear of vehicles. The street width will be influenced by the on-street parking arrangement. See Appendix 2 for detail on car parking.
- Features to reduce forward visibility to a level appropriate to the design speed. The amount of forward visibility, like road width, has been found to have a direct influence on driver speeds, in that longer sightlines encourage greater speeds. In a Home Zone with 10-mph design speeds, forward visibility for drivers should be less than 40 metres with a minimum limit in exceptional circumstances of 12 metres. Measures to limit forward visibility can include trees, planters, buildings and/or bends in the vehicle pathway, but see further comments about intervisibility between drivers and children.
- Containment of the sides of a route. The nature of the containing forms at the sides of a street are important in determining its character and the subsequent speed of drivers. Long horizontal or parallel lines tend to encourage speed. Vertical and diagonal lines, projections, and the variety created by set backs and street trees, increase the sense of change and can therefore encourage drivers to slow. Patterns that set up small-scale rhythms encourage slow speed, whereas large-scale rhythms –higher speeds.
- Shared Surface. It has been found that speeds are lower on shared surfaces than the general average for Home Zones (TRL Report 654). This is due to the influence on driver behaviour when a distinct vehicle carriageway is removed and mixed priority introduced. Shared surfaces are covered in more detail under Key Principle 2.
- Intermediate 20-mph section between 30-mph highway and the Home Zone entries to create a stepped speed reduction (i.e. 30-20-10). This could be achieved by incorporating the Home Zone into a wider 20 Mph Zone. However, the start of the Home Zone must not immediately follow the 20-mph signs as drivers may believe that this speed limit applies to Home Zone.
 NB: An intermediate 20-mph section is only a requirement where the Home Zone entries themselves do not stimulate a sharp reduction in driver speeds and change in driver expectations.

• **Gateway features** should be used on the entries to the Home Zone to create an indication of entering a street environment designed primarily for local community use rather than vehicle movement. Gateway features can include pillars or archways, together with Home Zone signs and a slowing or 'throttle' feature across the vehicle pathway.

Vertical gateway features (such as pillars) may be situated within or outside of the adopted highway. Early discussions with the City Council can determine whether Gateway features might be adoptable as part of the 'public highway'. The Gateway should include a tactile feature across the vehicle track to ensure that visually impaired pedestrians are alerted to the transition between a conventional road layout and a shared surface and viceversa. (See Appendix 1).

3.02 KP 2: <u>Minimise the physical & visual impact of cars on people</u> <u>& environment and design for equal priority amongst users.</u>

Home Zones aim to design streets and spaces for their immediate communities, placing priority on the living environment and readdressing the balance between designing for people and motor vehicles. A Home Zone is not anti-car, although the design seeks to limit the impact that cars have on the 'liveablility' and vitality of the street space for socialising, enjoyment and moving around by non-motorised means. It is the buildings, trees, planting and surface treatments that should define the Home Zone's spaces, rather than conventional kerbs and carriageway widths. A combination of measures from the following list should be used to achieve this principle, which should include a Shared Surface.

Shared Surface - a design speed of around 10mph must be achieved. A Shared Surface is highway where distinction between pedestrian and vehicle areas has been removed or reduced and sends a strong signal that the whole of the highway space is open equally to all users. Pedestrians, motorists, cyclists, children playing and people socialising have equal priority to use the entire space, although right of access to premises must be respected. A Shared Surface sends a distinct message to drivers that they should expect other users to be present in the space and should proceed with great care at very low speed. Where there is car parking on a Shared Surface, a minimum 1.2 metre wide strip for pedestrian access between parked cars and property boundaries needs to be incorporated, with measures to prevent vehicle encroachment. Elsewhere, a hard-paved margin 700mm wide should encompass the Shared Surface to allow clearance for lighting columns.

Consideration of blind and partially sighted people is critical as there may be no kerb, which these people usually follow as a wayfinding aid. In cases where a Shared Surface (without a detectable feature between a conventional footway and carriageway) is incorporated, an alternative means of demarcating a safe pedestrian area or a tactile wayfinding aid to guide users with visual impairments must be provided. The Guide Dogs Trust is currently researching



possible features and the Guidelines may be updated in light of this in due course. In the meantime, possible features should be discussed with officers and Sheffield's Access Liaison Group. The transition from Shared Surface to conventional road layout should be marked out with a tactile warning design so that visually impaired people do not walk out into an open carriageway.

- Coloured and textural surface contrasts to break up impression of a highway for motoring. Colour contrasts between surface materials can also be used to differentiate between pedestrian-only, vehicle and parking areas. However, the implications for wheelchair users and the noise implications of vehicles running over a textured surface need to be considered.
- Trees on opposing sides of the street. Trees are recognised as an important feature of any street scene. Trees can break up the visual impression of a long, straight highway and create a sense of street enclosure that helps to reduce driver speeds (especially if they are taller than the distance between bases). Trees can also be used to protect parking areas or non-vehicle areas. Specific locations for trees, adoption by the City Council and commuted sums for 30-year maintenance will be agreed on a site-by-site basis. Early consultation with Highways Development Control is strongly recommended. Officers can advise on suitable tree species for the highway.
- Lower parking density allowing for greater provision of public amenity space, including within the street itself, and encouraging uptake of more sustainable transport modes. A total parking provision (on&off-street space) of 1.25–1.33 spaces per household, inclusive of visitor parking, should normally be achieved. Sites close to or within the City Centre will require lower levels of parking, whereas suburban sites with poor public transport connections may warrant slightly greater parking provision. (See Appendix 2 for more detail). A lower general provision of parking should not impact on the number of disabled parking bays that are provided, including wider on-street bays that can be marked in the future as disabled parking bays.
- Enforcement of parking designations/restrictions -whether parking is adopted or private. Prevention of parking in non-parking space should be self-enforced by design using physical obstructions, such as bollards, trees and planters, to ensure indiscriminate parking does not devalue amenity space or block access for larger vehicles. Physical measures will usually need to be supplemented by a Controlled Parking Zone (Restricted Parking Zone), which sets out the acceptable parking areas. Where parking demand is high, the zone may have to extend beyond the proposed site boundary. (See Appendix 4 for further detail).
- Potential future car club provision should be catered for with designated car club bays. Car clubs are well-suited to Home Zones as there will typically be a greater number of residents who use a car for essential journeys only and may use car club vehicles as an alternative to owning a car. Car clubs contribute to high standards of sustainable design that are being promoted in housing regeneration sites. Developers should refer to Car Club advice within the City Council's Sustainability Toolkit. Car club bays should be

designated as part of the development, or at suitable alternative locations within the vicinity of potential users. Until required for car club vehicles, bays provided as part of a development may be used, in the interim, as decided by the operator or owner.

- Avoidance of rear parking courts wherever possible. Rear parking courts should only be used if it is impossible to meet the parking provision with other types of parking, for example, on-street arrangements or front forecourts. Rear parking courts are space inefficient and often encourage vehicle crime and anti-social activities.
- Sheltered and secure cycle parking space should be provided in each dwelling or outhouse where appropriate, sufficient to house a minimum of two bicycles, although this should be increased for larger dwellings. In flats, sheltered and secure communal cycle parking facilities should be provided to accommodate an average of 1.5 cycles per dwelling. Consideration must be also given for visitor cycle parking in Home Zones, which should be provided within the public realm as short-stay 'Sheffield' stands.
- Use of Smarter Choices. Smarter Choices are techniques for influencing peoples' travel behaviour towards more sustainable options such as school, workplace and individualised travel planning. They also seek to improve public transport awareness and marketing services, such as travel awareness campaigns, websites for car share schemes, supporting car clubs and encouraging teleworking, through the provision of targeted campaigns that include providing facilities, information, incentives and rewards. Measures such as individualised marketing for residents have been shown to be more effective in some circumstances than physical measures at reducing dependence on the private car. Further benefits can be achieved by using a combination of both physical and Smarter Choices measures.

3.03 KP 3: <u>Design streets & spaces as lively community places that</u> <u>are fully inclusive of all & safe to play, socialise & travel in.</u>

The public realm should be designed to encourage the activities intended to take place within it. Streets should be designed to accommodate a range of users, create visual interest and amenity and to encourage social interaction. Home Zones must provide children with a safe and attractive area outside their homes, which will provide a place to meet and play with their friends. The interrelationship between buildings and the street is also important in fostering a vital and active community. The measures set out below should ideally be incorporated into the design of a Home Zone in order to achieve this principle.

The particular requirements of disabled people must be considered throughout.

 Inclusion of social areas and child play areas within and/or next to the street, -protected from vehicle intrusion, or within 'green fingers' between dwellings. Most interaction will be informal, with people meeting



and chatting outside their homes. However, the environment should include features that are designed to provide for and encourage people to spend time in the street, including areas for games. Seating should be included in or adjacent to the street, particularly in areas suitable for community interaction.

- On-street parking should normally be provided in Home Zone streets. The everyday act of residents walking to and from their cars will create some street activity and provide regular chances for people to meet. On-street parking caters for visitors and thus provides some flexibility, as well as reducing traffic speeds by creating obstacles in the vehicle track (as in KP1). On-street parking should be arranged so that it does not dominate views of the street or impinge upon other activities that will take place in Home Zones.
- Active property frontages add interest, life and vitality to the street, as well as creating natural surveillance. A number of features might be included to create more active frontages:
 - Frequent doors and windows (onto habitable rooms) with few blank walls;
 - A variety of building forms, including more narrow frontage buildings, giving patterns to street elevations;
 - Positive presentation of facades (building fronts), with projections such as bays and porches incorporated, providing a welcoming feeling;
 - On occasion, but respecting residents' privacy, lively internal uses visible from the outside or integrating with street activities.

Formal front gardens in Home Zones could be absent or minimal, as the quality of the street will reduce the need for a "buffer zone" from passing traffic. The benefits of the Home Zone will be less significant with long front gardens, as the street will be more remote from dwellings.

- **Space making.** A series of different types of community spaces –connected by convenient and attractive routes should be created. Designing an interesting and pleasant experience is related to legibility, permeability and the concept of activities or movement in various types of spaces. A space, by its form, can convey a sense of rest and completeness, or imply movement. In Home Zones, as the emphasis is on places for people rather than movement, the aim is to create most spaces for the enjoyment, activities and rest of residents. Such spaces also help to reduce driver speeds, providing the width of the vehicle track itself is limited.
- Play equipment and areas can be provided in the public realm both in green spaces or adjacent to the street. This may include items such as swings, slides, sand pits and marked-out games for children. In addition, games or exercise equipment for older people may also be provided. However, play equipment will not usually be adopted and areas with equipment (rather than marked-out games) should not form part of the 'public highway'.
- Maintenance proposals for all areas that will have public access, but not be part of the adopted highway, need to be clearly stated. The maintenance regime for these areas should be agreed with the City Council at the earliest possible stage. This may include a Highways Act Sc142 License for the maintenance of areas of landscaping within adopted public highway.

3.04 KP 4: <u>Create an attractive streetscape that contributes to the</u> local sense of place, community safety & security.

Various features, such as those set out under Key Principle 3, will help to encourage social interaction and foster a strong community spirit. But it is also important to create an attractive environment that identifies the place and encourages the community to take ownership in their street. Residents and their visitors should be able to relax when spending time or travelling in the area. It is important that anti-social behaviour and crime is limited through design, especially during hours of darkness when street activity will have receded. The measures set out below should ideally be incorporated into the Home Zone to achieve this principle.

• Use of quality surface materials including block paving, cobbles/ setts, bonded stone chippings and natural or concrete paving -thereby departing from a continuous black asphalt surface. However, where large areas of cobbles are used, a smooth route must be provided for wheelchair users at regular intervals. Detail on acceptable materials is set out in Appendix 3.

• Soft landscaping and trees for

aesthetic/ environmental benefits. Trees are particularly important in that they provide variation and interest throughout the seasons. Tree canopies and vegetation, however, should not obscure street lighting or criminal activity and therefore aid street robbery, car crime or drug dealing. Tree canopies should therefore be at least two metres above the street surface. Bushes/shrubs must not obscure visibility to children at the side of the vehicle track. Shrubs that grow to over 600mm should be avoided within 1.5m of the vehicle track for this



reason. There must be good visibility between properties, footways and car parking areas to engender good community surveillance.

- Installation of quality streetlighting, possibly using wall mounting on buildings to reduce street furniture. A higher specification of lighting to ensure safer streets and public spaces is encouraged. The use of variable lighting levels may also be appropriate in some circumstances. Where wallmounted lighting is proposed, easement agreements with residents will need to be formed for maintenance and repair. Early discussion with the City Council is required to qualify such arrangements.
- Where on-plot parking is necessary, the opportunity should be taken to design these spaces so that they complement the street layout. Where parking is provided within individual dwellings, with integral garages at street level, there should be at least one habitable room at ground floor with surveillance of the public realm.

- Signature street art to identify the area. Art should be distinctive to the development or neighbourhood and complement the Gateway features. In retrofit schemes, community participation in the design is essential. Art works will not normally be adopted and should ideally be located outside of adopted highway areas.
- Innovative accommodation of utility services, eg. a utilities strip with easily replaced surface materials. This strip should be either within pedestrian-only areas, the verge or to the edge of the shared surface (if there are no pedestrian-only areas). Drainage pipes and utilities should be located under areas which will be least disruptive to access for servicing. Home Zone developments may also present the opportunity to use Sustainable Urban Drainage Systems (SUDS). This will however be dependent on the specific ground conditions of the site, and the feasibility and maintenance implications of SUDS. Special consideration needs to be given to the location of trees and street furniture in relation to sewers and water mains, due to the possibility of damage. The City Council and utility providers need to be consulted at an early stage.

3.05 Special Considerations for 'Retrofit' Home Zones.

The Key Principles for Retrofit Home Zones are identical to New Build. However, retrofit Home Zone schemes often have slightly differing constraints on the layout relating to existing highway boundaries and the layout of buildings. These constraints may dictate which measures can be used to achieve the key principles and where they can be positioned. Scheme budget is usually a more pertinent consideration in retrofit schemes due to the potential cost implications of reshaping existing highway, rather than building in a Home Zone layout into new highways from the outset.

Possibly the greatest consideration in designing a retrofit Home Zone is in getting the existing community involved. Home Zones in existing streets must have the support of the community from the outset, when the aims and objectives of the Home Zone are agreed. The process requires more than simply consulting residents on a design proposal: Residents should actually participate in designing the Home Zone and be able to put forward their views on what they expect the scheme to achieve and, equally, to raise concerns over any features they consider to be inappropriate. Community 'buy-in' to the scheme is therefore critical. Consultation with Access Groups, who may not be represented in the immediate community, is also important to ensure that the scheme is inclusive of people with particular needs.

A Home Zone 'Champion' will be needed to promote and co-ordinate consultation and design of the Home Zone. The Champion may be a Council officer, community group or independent consultancy, and should ensure full community involvement and cross-discipline liaison is achieved.

Parking provision may be reduced slightly in the new Home Zone scheme to enable more highway space to be used for other purposes, such as public amenity, and to encourage lower car use. However, this issue may be contentious and residents should therefore be involved at an early stage when considering revised parking solutions.

The alignment of existing utility equipment under the highway must be considered when revisions of the highway layout are proposed, especially where there are changes to the vehicle route and/or location of parking areas and where street trees are proposed. The utilities should either run under pedestrian-only areas or under a utilities strip around the edge of a shared surface. To achieve this aim the new layout should be designed to fit around the existing utility equipment or, where this is not possible, the equipment may be relocated following consultation with the relevant statutory undertaker.

3.06 Other Opportunities.

Home Zones are an important part in the creation of better places to live. The Sheffield Developer Manual sets out other requirements for the design of residential developments and the built environment.

Other opportunities exist to make a local contribution to wider issues of global warming, climate change – and to enhance Sheffield's existing "Green City" reputation. Proposals will therefore be welcome that incorporate, for example, recycling, waste management and energy efficiency.

3.07 <u>References</u>

- Institute of Highway Incorporated Engineers Home Zone Design Guidelines (2002). See in particular <u>Appendix D</u> (Summary of Key Guidance) on Page 90. Go to <u>www.theihe.org</u>;
- 'Inclusive Mobility' The Department for Transport. Go to <u>www.dft.gov.uk/transportforyou/access/tipws/inclusivemobility</u>;
- 3. South Yorkshire 'Better Places to Live' and Technical Appendices. Go to www.sheffield.gov.uk/highwaydesignguide ;
- Manual for Streets (2007) Department for Transport. Go to <u>www.dft.gov.uk/pgr/sustainable/manforstreets</u>;
- 5. The Quiet Lane and Home Zone Regulations 2006. Go to <u>www.dft.gov.uk/pgr/sustainable/homezones/circular22006thequietlanesan5740</u>
- 6. Car Parking, What Works Where (2006) English Partnerships. Go to www.englishpartnerships.co.uk;
- DfT Homes Zones (2005) Challenging the Future of Our Streets. Go to <u>www.dft.gov.uk/pgr/sustainable/homezones/cfos</u>;
- Pilot Home Zone Schemes: Summary of the Schemes, TRL Report 654 (2006) – Transport Research Laboratories on behalf of DfT;
- CABE Paved with Gold: The Real Value of Good Street Design. Go to www.cabe.org.uk/publications;
- 10. Living Streets Walkable Neighbourhoods. Go to www.livingstreets.org.uk
- 11. Sheffield City Council Sustainability Toolkit guidance Car Clubs etc. Go to www.sheffield.gov.uk/sustainability, then Movement and inclusion section;
- 12. Sheffield Materials Brochure. Go to www.sheffield.gov.uk/highwaydesignguide ;
- 13. Home Zone Design Guide for Gateshead (2005) Gateshead Council. Go to www.gateshead.gov.uk;

For a web download of this document go to:

www.sheffield.gov.uk/homezone

3.08 Photo Examples.

Use of planters to improve the streetscene and 'tame' driver speeds.





Tree planting and street furniture to create horizontal deflections of the vehicle pathway.

Plateau and narrowing at Gateway or junction.



APPENDIX 1 – Gateway Features (Sheffield Home Zone Guidelines)..

This is the first Home Zone Guidelines Appendix that provides guidance on a particular Home Zone issue in more detail.

The gateway or entrance to a Home Zone is an important feature that should indicate to all road users the change in nature of the street space from conventional to low speed, mixed priority highway. Home Zone Gateways are ideally positioned at a road junction (but set back slightly).

A Home Zone Gateway should achieve the following:

- Send a strong message to drivers that the Home Zone is unsuitable for through traffic and the streets within are designed for very low speeds;
- Signal to all road users that there is a change in highway status away from conventional priority for the car, towards equal priority for all users of the space;
- Provide an alert to visually impaired pedestrians that they are entering or leaving a shared street space. This is particularly important where a full shared surface highway is used within the Home Zone;
- Identify the community through signature art or features.

The features of a Home Zone Gateway should therefore include the following:

- Entry and end signs for Home Zones designated under the Transport Act 2000, designed to the Traffic Signs Regulations and General Directions (Diagrams 881 and 882). These signs may potentially be mounted on the face of gateway features, rather than separate posts;
- A pinch point or 'throttle' of the vehicle pathway, usually at 3m width;
- The Gateway to be set back slightly (up to 10m) from any road junction to allow two light vehicles to pass within the conventional carriageway;
- Vertical gateway features enclosing the vehicle pathway, which typically involve pillars or an archway;
- A change in surface materials at the Gateway, indicating the different type of highway within the Home Zone;
- A tactile surface feature to alert visually impaired pedestrians that they are entering a shared surface (where this is without physically demarcated footways) and, on leaving, to guide them onto the conventional footways;
- The vehicle pathway should be raised, either for a short section at the Gateway or to continue as a level shared surface throughout the Zone.

The Home Zone Gateway illustration opposite shows;

- i) set back of Gateway from road junction,
- ii) positioning of vertical gateway features (in this case pillars),
- iii) relationship between conventional highway and shared surface.



APPENDIX 2 – Car Parking (Sheffield Home Zone Guidelines)..

Principles

Car parking is a critical factor in the design of a successful Home Zone. The position and type of parking has a key influence on road safety, street activity, crime reduction and the efficient use of space, thereby contributing to Key Principles 1, 2, 3 & 4 in these Home Zone Guidelines.

Ideally, the majority of car parking in a Home Zone should be provided on the street in communal bays, which can be shared by residents and visitors. This provision allows various levels of household car ownership to be catered for efficiently and reduces the overall space needed for parking. The efficient use of land is a key objective of Government Planning Policy Statement (PPS 3) on Housing. On-street parking arrangements can assist in shaping a low speed street layout –an important feature of Home Zones– by 'deflecting' the vehicle path around them when they are married with other street features so that low speeds are achieved even when the parking bays are empty. Parking on the street maximises street activity at the street/home interface, which leads to safer, friendlier streets with a lower chance of crime.

Parking Provision

The availability of car parking is a major determinant of travel mode (PPG13). Maximum parking standards manage the demand for car ownership and use, encouraging use of lower impact alternatives. In Home Zones, the provision of parking can be reduced below normal car parking standards. This difference anticipates the slightly lower car ownership levels in a Home Zone, the increased efficiency of on-street parking and the greater viability of walking and cycling for utility journeys. Car clubs can also strongly supplement reduced car ownership in Home Zones.

Research has shown that, where at least half the parking is provided on-street in a communal manner, only 80% or less of the typical provision is required. However, car parking provision should not be below a level that would lead to indiscriminate parking in the Zone or displacement of parking into surrounding streets. To this end, a provision of 1.25-1.33 spaces per dwelling, inclusive of visitor space, is usually appropriate. In the City Centre, City Centre fringes and District Centres, a substantial lower provision will be required in accordance with Sheffield's Car Parking Standards for these areas. In suburban areas, a slightly higher provision than 1.33 spaces per dwelling may be permitted. Where parking spaces for disabled residents and visitors are located on-street, 5% of spaces should be wide enough (3.3 metres) to allow designation as disabled bays when a future need arises. This proportion should be based on the maximum parking standard for the area. The aim should be to provide at least one disabled space within 50m of each dwelling.

Existing car ownership should be taken into account in retrofit Home Zones.

Layout & Design

Parking in a Home Zone should be simple, aesthetically in-keeping, well overlooked and clearly defined. Blocks of on-street parking bays should be defined by materials/colour-contrasts and protected by buildouts, street furniture and/or planting so they remain as vehicle path deflectors when unoccupied. Various parking arrangements can be used in Home Zones, and the most appropriate type will depend on street width, building layout and the relationship with public and pedestrian spaces. The following arrangements should be considered: -

- *Alternate-side echelon parking* –most typical layout in a Home Zone with blocks of 4-6 bays and deflection of vehicle path between. The parking bays are angled at 45 or 60 degrees to ease access;
- *End-on parking* –appropriate for wider streets and squares, can be alternateside bays to create deflections of the vehicle path;
- Alternate-side parallel parking –used where street width is constrained or where spaces for longer vehicles are required. Parallel parking on both sides should be avoided as it depicts a linear street layout.
- *Parking around a square* –squares can identify a street and comprise valuable public space. Parking can be arranged around the edge of a square but should not dominate the space;
- Single, pairs or small clusters of bays within buildouts -parking bays can be positioned in small pockets fitting in with the street layout and helping to shape the vehicle pathway.

The parking sections of Manual for Streets and the IHIE Home Zone Guidelines have further information on parking layouts and street widths (See References). Bays within shared surfaces should be clearly defined by markings, materials contrast and/or colour contrasts.

Echelon/angled and end-on bays should be at least 4.8m long by 2.4m wide, but 3.3m wide for disabled bays. Parallel bays need to be at least 6m long and 2m wide. It is beneficial to include parking bays of various sizes to accommodate different sized vehicles, which also increases space efficiency. Parking bays should be arranged to encourage drivers to reverse in (rather than reverse out) in shared surfaces to minimise the chance of accidents.

Off-street parking should be at the front of the curtiledge where it is well overlooked and complements the street scene. Sightlines between off-street parking and the street (especially pedestrian areas) should be kept clear.

Other references for parking standards and layout design

- PPG13: Transport; & PPS3: Housing; -car parking sections.
- South Yorkshire 'Better Places to Live' and Technical Appendix 1.
- English Partnerships: Car Parking –What Works Where (2006).
- Sheffield Development Framework policy on car parking (PT7).
- Institute of Highway Incorporated Engineers Home Zone Guidelines (2002).
- Manual for Streets (2007).





Alternate-side echelon parking.

Colour contrast to depict parking areas.

APPENDIX 3 – Materials (Sheffield Home Zone Guidelines)

Materials are an important consideration in Home Zone design. The variation of surface materials used in the street and public realm can give a residential area a quality feel and help to signify local streets. Furthermore, the application of different types of surface materials in the street can help to denote which activities are suitable in various spaces and send positive signals to drivers about the nature and intended use of the street, helping to reduce speeds and encourage thoughtful driving.

Selected surface materials in a Home Zone should: -

- be safe, with appropriate skid resistance properties,
- be durable and easy to maintain,
- display local distinctiveness and creative design,
- present a colour contrast between vehicle pathways, pedestrian only spaces/routes and parking areas,
- include textural features across the vehicle track to slow drivers,
- break-up the impression of continuous, linear streets,
- be in-keeping with house materials and appropriate to local character,
- take account of the safety and comfort of people with impaired mobility.

Use of a variety of highway materials is encouraged including block paving, cobbles/setts, and natural or concrete paving. Where areas of cobbles or setts are used, a smooth route must be provided for wheelchair users.

Materials for use in residential streets that are to be adopted are specified in Part 2 of the Technical Appendix to 'Better Places to Live in South Yorkshire'. These materials are chosen on a number of factors including, suitability for purpose, safety, long-term availability and cost & ease of future maintenance.

On receipt of written application, the City Council will consider the use of materials outside this range. This application must include evidence that the materials meet the specification in the Technical Appendix for their intended use. The adoption of areas using such materials will only be agreed subject to payment of a commuted sum, for future maintenance of these areas and supply of the material. Commuted sums will also be required prior to the adoption of areas where the cost of the range of materials used is deemed to be in excess of that which would normally be provided.



Textural and colour contrasts through the use of a variety of surface materials.

APPENDIX 4 – Management & Maintenance (Sheffield HZ Guidelines)

In Home Zones, solutions will need to be established to manage car parking and to maintain non-adopted public realm and highway features.

Management of car parking in Home Zones and surrounding streets.

As in many residential streets, the impacts of indiscriminate car parking need to be considered. In a Home Zone, inappropriately parked vehicles can block access – which is often tight to reduce speeds– and devalue key elements of a scheme, such as an enhanced street scene and amenity space. The following two design aspects should be employed to help to discourage or prevent indiscriminate parking: -

- Car parking spaces should be clearly defined and visible;
- The design and location of street furniture and traffic management features, including planting, high verges/kerbs, buildouts and fencing, should be deployed to deter car parking in inappropriate areas.

There will often be cases when car parking demand in and/or around a Home Zone is predicted to exceed availability, and therefore one of the following management tools should be utilised, either from the outset or retrospectively: -

- Restricted parking zone/ residents permit scheme to enable active enforcement of indiscriminate parking. A Traffic Regulations Order can make it illegal to park outside of marked-out spaces. Yellow lines should generally be avoided. A parking scheme may sometimes be necessary in surrounding streets to prevent parking displacement. Enforcement would be undertaken by the City Council, and a financial agreement with the developer or management company will be required to cover the costs of implementing and enforcing the Zone. This solution is more likely to be effective than the following option;
- Management agreement with residents that states where car parking is allowed and precluding parking in other areas. Enforcement would therefore be the responsibility of the 'management company'.

Maintenance of non-adopted public realm and highway features.

The City Council, in unusual circumstances, may adopt elements of soft landscaping and street furniture. The default position is that the scheme developer is responsible for the maintenance of non-adopted highway features and public spaces. It is usually preferred by a developer, however, for a private management agency to be appointed to carry out maintenance of these features/areas. Typically, this may involve a local organisation that is currently active in the local community, such as a local Trust. A management agency can also act as the first calling point for residents who wish to express any issues with the Home Zone design or suggestions for improvements.

Alternatively, it is possible to set up an agreement with residents for the maintenance and care of communal areas and non-adopted highway features. This system ensures that residents take responsibility and pride in the upkeep of their streets and are out in the street more often, contributing to activity levels. However, it is important that residents are comfortable with this type of arrangement and that it respects the needs of residents who are unable to contribute (physically or financially, for example).

The maintenance regime for all areas that will have public access should be agreed with the City Council at an early stage in the scheme design process.