What is Urban Design?

Urban Design is defined as the relationship between different buildings: the relationship between buildings and the streets, squares, parks, waterways and other spaces which make up the public domain; the nature and quality of the public domain itself; the relationship of one part of a village, town or city with other parts; and the patterns of movement and activity which are thereby established; in short, the complex relationships between all the elements of built and unbuilt space.

All new development, not only regeneration, requires a thoughtful design approach and an appreciation of existing built form.

URBAN DESIGN ALLIANCE
The urban realm is the setting for civic life. It comprises our streets, parks monuments and buildings as well as the events which happen in them. Civic life is enriched by developments which welcome a broad range of people and is impoverished by those which exclude or discourage all but a narrow range of users. The diversity of socio-economic needs and multi-use activities required to sustain society gives a rich vitality to the urban environment yet this balance of needs is a fragile achievement.

Everybody supports the idea of having a high-quality environment but usually feels someone else is responsible for creating or maintaining it. The purpose of this Urban Design Guide is to inform and encourage all those who collectively shape the appearance of Dundee, to share a vision for future developments which will explore and enrich the ‘grain of the city’ and progress its unique character.

This guide will provide a common point of reference for those involved with land use planning and development, with traffic management strategies and with the design and maintenance of public places.

This guide comprises two parts:

Part 1 looks at the history and evolution of Dundee, more recent development trends and also describes current thinking on how to achieve better land use patterns for the future.

Part 2 explains the purpose of the Urban Design Guide and sets out the principal objectives to be pursued. This part also states the Design Principles for developers and their agents to help in addressing the objectives of the Guide. The Guidelines are illustrated by reference to actual developments in Dundee which can offer practical solutions for wider application.
Historically, towns were shaped by their location, their principal economic purpose and their natural topography. Their hinterlands were small and different towns took on different identities quite naturally. In the case of Dundee the pattern of growth from medieval burgh to major whaling port and then to industrial city with associated docks and railyards remained spatially coherent until well into this century. Public buildings were obvious as such due to their prominence of site and architectural style. Open spaces were edged or sheltered by buildings and had much lower volumes of traffic than today, being also used for markets or conducting business outdoors.

Dundee’s transformation over the last century has been phenomenal. A variety of factors were at play, such as the drive to clear the Victorian slums, the need to quickly build new housing and the desire to accommodate much higher volumes of traffic on new and improved roads. After World War II, the ethos of the free standing building surrounded by parkland allowing unimpeded traffic flows was promoted as the ideal. In city centres the old tenements and workshops were systematically demolished. The comprehensive redevelopments of the 1960s liberated many people from crowded and unhealthy living conditions, destroyed much of the pre-Victorian Dundee and in doing so left many awkward sites, particularly in the city centre where earlier development and ownership patterns were more complicated.
Until recently many roads were designed primarily to accommodate ever increasing car numbers, with pedestrians given a lower status. On the busiest roads this has led to a complete segregation of pedestrians and vehicles. Modern roads have become much more divisive than the streets of the past, with wide roads creating difficulties for pedestrians and vehicles to safely coexist.

The 20th Century has brought great changes to the appearance of our city and to the lifestyle of city dwellers, but the wisdom of land use patterns which generate more and more traffic is now being questioned. Since the 1960s the practice of zoning or segregating different uses of land from each other and the rates of personal car ownership have both greatly increased and are interdependent to a large extent.

While the initial spur to distance the tenements from the mills for public health reasons gave us industrial and housing estates we now have other such single-use areas as the shopping centre, the retail park, the leisure park, even the business park.

A development pattern of zones or estates may be acceptable to those with cars but it is acknowledged as being difficult to service with public transport and it leads to the isolation of large sections of the community such as the very young and the very old, the disabled and the underprivileged.

The attractions and health of historic urban quarters are being looked at afresh with informed clarity and vision.
In architectural terms, a monotony and sameness in buildings across the whole country has become the accepted practice. It is possible to find sizeable housing estates where all the homes are alike creating a “placelessness” which offers little in the way of distinctive character, long term sustainability and valued amenity. The result is a series of discrete estates for separate uses that often become impenetrable, no-go areas for anyone not living or working in the area and quality of the urban environment is diminished.

In the last ten years, following the completion of the Inner Ring Road, it has been possible to replace scenes of traffic congestion in the city centre with pedestrianised streets of high amenity value paved in natural materials of quality and of an attractive detailed design which accommodates street furniture and sculpture unique in design to Dundee.

One measure of the success of the recent improvements is that it is now possible to enjoy a meal or a drink outdoors as more and more caterers are utilising this option for their customers and providing a lively and transient streetscape within many parts of the city. The recent redevelopment of the Overgate Centre also adds a highly successful and popular retail centre to the city drawing shoppers from afar.

The number of people choosing to live in the city centre is increasing which suggests a good balance is growing between the convenience and privacy standards for residents and the continuing promotion of commercial enterprise with the provision of a wide range of leisure activities.
Suburbs evolved to accommodate the nuclear family, but families are changing and households are becoming smaller. The trend nowadays is for many people to marry late after living alone or in short-term partnerships. Families tend to have fewer children than before and a large proportion of marriages end in divorce, leaving the partners single again or as lone parents. People live long after their children have left home, as couples or alone.

A truly sustainable development is one that can accommodate the changing circumstances of people throughout their lives whether they are breaking up or settling down, growing up or growing old. But most contemporary housing estates offer little choice of house type and may be quite unsuited to the householders of the future.

For environmental and social reasons as well as concerns about poor standards of urban design, there is now a greater resistance to the tendency for cities, towns, villages and the countryside to become shapelessly suburban. It is now policy at all levels of government to encourage environmentally sustainable and socially inclusive patterns of development and the recommendations of the Urban Task Force have recently given impetus and direction to these objectives.

To promote the principles of sustainability and social inclusion, it is important that we ensure that all developments make the best possible use of the natural resources of the site and that, where appropriate, a mix of uses and tenures is incorporated into the package.
We also need to integrate transportation and land use planning to ensure new developments are located so as to reinforce the viability of existing centres and public transport services. Adherence to these principles can reduce the need for people to travel and reduce the environmental impact of traffic by encouraging walking and cycling instead of the use of cars. Ultimately the creation of attractive and successful places and the promotion of sustainable patterns of living, working and travelling are wholly compatible objectives.

The traditional pattern of urban growth generated relatively dense neighbourhoods by today’s standards but where they survive, such areas remain very popular. Many areas like the West End or central Broughty Ferry have a very distinct character by virtue of their mixed use nature, and possess a real “sense of place”.

Analysis of such areas reveal common qualities such as:

- a well balanced mix of uses
- catering for the private car without encouraging its use and being safe for walking and cycling
- having a strong identity usually by having well-known landmark buildings, busy outdoor focal points or interesting views out to the wider area.

Although planning practice since the 1960s has mitigated against mixed-use development patterns, there is evidence that things are beginning to come full circle with the benefits...
of mixed-use, mixed-tenure communities being increasingly recognised.

Proponents of mixed-use development argue that since we all need to work, shop, be educated, and enjoy some recreation, the closer and more integrated these functions are, the more contented we are likely to be. The case is also well supported by environmental considerations.

A better environment for pedestrians and cyclists and the reduced use of the private car can help make places both safer and healthier.

The term “urban village” is now commonly understood as a concept which aims to bring together the vibrancy, culture and variety of the city, yet retaining the intimacy, ease of access and human scale which create strong and lasting communities. It is a place where the elements of design which often characterise successful historic neighbourhoods are rediscovered and where home and work, leisure and retail opportunities are well integrated.

This type of development can bring social and economic benefits to our area and may be well suited to accommodating a wide range of household types in the future.
The Urban Design Principles have a dual purpose -

Firstly, by setting the criteria for developers and designers about to embark on new projects, the principles are intended to set the framework for urban design in Dundee.

By reference to developments in Dundee, they aim to raise design expectations generally and demonstrate that achieving good development is a thoughtful rather than an onerous or expensive task.

The principles have been developed as a direct response to encourage and foster the good design ethos of NPPG 1 and 3 and are in accordance with the Scottish Executive’s aspirations of “A Policy on Architecture for Scotland”, and “Designing Places”. The principles also augment the standards laid down in Policy H10 of the Local Plan which set a minimum safeguard of satisfactory standards of privacy, garden ground, parking spaces etc. in new developments.

The Urban Design principles create a framework against which a qualitative assessment of development proposals can be made. Good design control requires such an approach.

The Urban Design Principles outline the City Council’s design expectations at a city-wide level. Inevitably, the principles, from time to time, will need to be augmented by Development Briefs for specific sites. Past experience suggests that Development Briefs can have a significant influence on the quality of proposals submitted for approval and henceforth Briefs will be a means to further promote and illustrate the objectives of the Urban Design Guide.

The principles are arranged into six topic areas

1. **Context and Local Distinctiveness**
2. **Sustainability**
3. **New Buildings**
4. **Safe and Attractive Residential Streets**
5. **Public Art**
6. **Design statements.**

Each of these topics is dealt with individually on the accompanying pages. In time these six principles may be supplemented by the inclusion of others.
The Georgian elegance of form and material implementation sets the grandeur and formality of South Tay Street.

The Hillcrest Housing Association building in Dock Street responds to the local context in the use of materials, detail and height to result in a new building which sits happily in and contributes to the 19th century terrace.

The character of Craigiebank is determined by the flowing lines of the original masterplan and landscape design resulting in an almost Arcadian neighbourhood.

The retention, restoration and reuse of the existing building in its landscape setting allows the design agenda of new buildings to be of a practical form dominated by the landscape plan.

Dundee High School of formal urban classicism forming the visual termination to Reform Street and commanding and defining Euclid Crescent.

The Hillcrest Housing Association building in Dock Street responds to the local context in the use of materials, detail and height to result in a new building which sits happily in and contributes to the 19th century terrace.

The Georgian elegance of form and material implementation sets the grandeur and formality of South Tay Street.
Context is crucial. It is formed by the character and location within which a project is to be developed, drawing on the existing built form, open space, infrastructure and existing community. If the aim of high quality places is to be achieved the design must be informed from the context in a cohesive and inclusive approach to reinforce and develop the character of its locality and to ensure that the unique identity of a place is not harmed.

Popular places are often familiar and distinctive in type and detail, it is this distinctiveness that gives an area its character and helps people to find their way about the city, to read the urban environment as a series of distinct, not separate, community areas.

Design Principle Elements:

Character the aim is to build on local character, not necessarily copy it.

Identity a development should respect the constraints of a site and the detailing should draw strength from local identity to avoid the “placelessness” formed when standardised design solutions are used.

Landscape an attractive and well detailed landscape plan should be developed in conjunction with the built form design, not secondary to it.

Infrastructure the existing site and surrounding infrastructures must be enhanced to provide a valid network of permeable streets and attractive open amenity spaces to strengthen the local community facilities.
Replacement Scottish oak windows at Powrie Place, Dundee, using oak grown near Inverness, converted to lumber at Newtonmore and manufactured into windows at Kirkmichael. The windows were then installed in Dundee benefiting the economy and promoting social inclusion by supporting employment and contributing to the reduction of global warming.

The re-use of an existing listed mill to create city centre accessible homes whilst retaining the historic built form and street pattern, transport infrastructures and aiming to build upon the community of the Lochee area.

The 1980s car-orientated proposals for the North East Arterial. This has been replaced by traffic management and realignment proposals promoting sustainable transportation policies that will conserve the Albert Street area, save substantial acquisition and construction costs and avoid creating physical barriers between residents and their amenity.
The objective of good urban design is to develop environmental and social sustainability whilst achieving economic viability.

At each key stage of the design process decisions are made regarding the constraints of cost, materials, construction techniques and the overall design. Each of these decisions must be tempered by selecting the sustainable option offering the most benefit in order that the vision of a healthy, robust and stimulating society constantly aspiring for improvement can be attained.

Design Principle Elements:

Environment

Infrastructure: consideration of new constraints placed upon the existing networks.

Space Use: site layout to maximise solar gain by orientation and the relationship to the existing built fabric.

Materials: retention and reuse of already built structures where practical with the knowledgeable implementation of new construction materials.

Utilities: the thoughtful accommodation of car parking with good landscaping, the provision of the waste recycling centres onsite or on adjacent sites and innovative approaches to waste and water recycling within each building.

Social

Design: formation of an attractive development for the greater enhancement of the city as a primary catalyst of the Local Agenda 21, and as a future legacy for the city.

Space Use: creation of practical public and private realms within a site.

Space Standards: provide minimum room size/minimum number of rooms/minimum external space.


Economic

Materials: Evaluate the long term implications of a ‘quick - fix’ solution.

Energy: the use of technical advances of active and passive strategies to alleviate the strain.

Quality: ‘good design is not necessarily expensive design’
Dundee Contemporary Arts - a sophisticated modern building enclosing a series of arts spaces that has instantly become a popular city centre venue.

The glass facade of the University of Abertay Library uses the solar gain of a southerly aspect to induce air circulation by natural convection throughout the building. The library continues the set piece design ethos of the Victorian buildings in the area.

Innovative architectural form, materials and detail expressed in harmony.

Dundee Contemporary Arts - a sophisticated modern building enclosing a series of arts spaces that has instantly become a popular city centre venue.

The bold and contemporary modern design of the facade and the reuse of the existing structure greatly enliven this forgotten corner of Union Street and add to the vital night-time scene.
New buildings, extensions and infill developments should be well designed, flexible and outwardly expressive as to their purpose. An agenda of imaginative and innovative contemporary architecture is sought to discourage ‘off-the-peg’ design and debased versions of historical styles.

**Design Principle Elements:**

**Design**

New buildings and developments must present a design solution appropriate to the site and context and be constructed in materials consistent with the design approach adopted.

**Regeneration**

Existing buildings should always be considered for regeneration rather than demolition and replacement to sustain a built form representing embodied energy, an existing infrastructure and on occasion an urban microclimate.

**Detail**

The design elements of elevations, roof lines, doors, windows, materials and floorscape should draw from the site context to retain and create valued places.

**Facade**

The ability of a design to ‘turn a corner’ to a development, and not present a blank gable, has an important contribution to make in planning the urban form.

**Innovation**

New building solutions are to be encouraged, especially with residential proposals, to accommodate a modern lifestyle and be flexible enough to accommodate future lifestyle changes and needs.

**Inclusive Approach**

The key to producing good buildings is simply thoughtful design and detailing, the use of good construction materials with a particular attention being paid to the interface relationship between the building and the street.
The regeneration plans for Ardler have clear urban design objectives and begin an ambitious programme to provide over 1,300 new homes. The proposals are the fruit of a Partnership/Masterplanning exercise by the City Council and the developers rather than the outcome of successive estate developments by individual housebuilders. The City Council has worked with Sanctuary Scotland Housing Association, Wimpey Homes and the local residents to consider the problems and potentials of the entire area and through a combination of refurbishment and new-build aims to create a new “Urban Village”.

The street pattern follows a simple and elegant hierarchy. A concentric tree-lined avenue passes through the entire development while linking streets give direct access inwards to the village centre and outwards to the surrounding areas. Lower in the hierarchy are Local Streets, Lanes and Courts. Each type of road has specific characteristics and dimensions and taken together, they bring a clear identity to the new Ardler. The development also implements the principles of sustainable urban drainage systems.
To establish a safe and attractive street a traffic management hierarchy is sought. An efficient and attractive hierarchy of boulevards, avenues, streets and lanes can feed local traffic onto main roads and yet actively discourage the presence of non-local traffic and restrict vehicle speeds in residential areas.

Streets must do more than just accommodate traffic.

**Design Principle Elements**:

- **Definition** the built form of new developments should reinforce and define streets and spaces and follow a clear building line, usually set from the context.

- **Streetscape** the built form must be as ‘active’ as possible, especially at ground level, in layout and specification to provide attractive and well designed facades contributing to form a valid streetscape.

- **Boundaries** boundaries of walls, hedges and railings, and level changes, define what is perceived as the public realm of the street and the private realm of the garden to generate feelings of belonging and personal space, yet can provide privacy without being perceived as a defensive barrier.

- **Permeability** new roads and streets should link up with the surrounding roads and services infrastructure to provide a high degree of permeability for pedestrians, cyclists, cars and public transport.

- **Surveillance** the design of new streets must incorporate a high degree of appropriate landscaping and accommodate parked vehicles in a way that does not break up the street frontages and restricts general security surveillance.

- **Management** a management and maintenance agreement will be sought for shared areas not adopted by the City Council as long term success is only achieved by good management.
The bronze sculptures around the exterior of the Overgate Centre were part of the overall building project.

‘On the Wing’ on Riverside Drive makes reference to both the Tay Estuary Nature Reserve and Dundee Airport.

Traditional drystone dyking used in a lively and contemporary manner to give emphasis to ‘just’ a stone wall.

The dragon refers to the local legend of the Nine Maidens. It is an important landmark for pedestrians in the City Centre.

The Compass Mosaic brings a richness of detail to Discovery Point.

DC Thomson’s Desperate Dan and Minnie the Minx are a new addition to the High Street.

The intricate gates to Doigs Court contribute to the charm and variety of Castle Street.

Tony Morrow and Alistair Smart
Maggie Howarth

Phil Johnston & Co

Diane Maclean

David Wilson

Tony Morrow

David Wilson
Public Art is a means by which artists and their patrons can enrich the environment of built forms, open space and contribute to the cultural heritage of the city. Artworks can take the form of “stand alone” pieces or be functioning elements on buildings or in public spaces. Buildings are enriched by the inclusion of individually designed and crafted metalwork, stonework, stained glass etc. In the streets, the design of bollards, seats, banner columns and boundaries can all benefit by artists involvement in manufacture and construction. New developments offer excellent opportunities for the inclusion of contemporary arts and crafts.

To set an agenda of nurturing and sustaining a high quality cultural base in Dundee the City council has continually commissioned unique artworks at many locations which are functional on a daily basis yet have enormous value in the formation of streetscape, landscape, monuments and landmarks.

New major buildings in prominent locations and large housing projects will be subject to a future “Percent for Art” policy, whereby a percentage of the project costs will be used to employ artists to enhance the project.

Where new developments are to incorporate artworks:

Architects, designers and developers must involve artists and craftsmen from the outset of the design process to give validity and direction to the commission

In the case of free standing artworks they must act as local landmarks and bring a sense of identity to their location through the beauty of proportion and quality of finish.
In response to the Dundee City Council Development Design Briefs for the Railyards Site, the Design Statement for redevelopment makes a long term vision for the future of the property all the more essential.

In this situation a Design Statement can explain the fundamental approach of the developer, clarify what is and what is not open to negotiation and identify the impacts in the wider area. A good Design Statement can help a consensus to be reached about the broad principles of the development, take the contention out of subsequent discussions on matters of detail and may allow a variety of equally acceptable development options to be identified.

The Design Statement submitted by the owner of the Seabraes Mill arrives at the framework for development based on an objective analysis of the surrounding area. The framework is loose enough to allow a high degree of flexibility for the future but strong enough to ensure a pattern of ad-hoc developments is avoided.

In this situation a Design Statement can explain the fundamental approach of the developer, clarify what is and what is not open to negotiation and identify the impacts in the wider area. A good Design Statement can help a consensus to be reached about the broad principles of the development, take the contention out of subsequent discussions on matters of detail and may allow a variety of equally acceptable development options to be identified.
Design statements are needed to demonstrate that the local context has been appreciated and fully appraised and that the development proposals are based on consistent design principles.

Planning Applications or Listed Building Applications for new buildings or extensions to existing buildings on significant sites must be accompanied by a Design Statement. Significant sites will be identified in the Local Plan allocations for Development Sites and in these cases Design Statements should explore and illustrate:

- The environmental impact on the site and the surrounding area a new development will have.
- The site and surrounding infrastructure, local communities and how the development will affect them.
- The area context and how it has informed the design of the development.
- The sustainability of the development and the implementation of management plans to ensure future maintenance.

Development proposals must always consider the far greater extent of the locality rather than the constraints of the site boundary.
To explore and maximise the potential for good urban design the guide has focused upon the important parameters relating to the substance of Dundee’s built form to nurture an excellent end product of quality urban buildings, places and life. With the advent of the Scottish Executive’s ‘Policy on Architecture for Scotland’, ‘Designing Places’ and the aspirations of good design and the environment expressed in the National Planning Policy Guidelines 1 and 3, Dundee City Council are well placed to lead and manage this urban renaissance within the city.

The quality of the built environment is critical to the way Dundee functions as a city as we seek to encourage a mix of activities, services, tenures and incomes within neighbourhood areas. In the promotion of sustainable improvements in urban quality, and citywide image, we will raise the quality of urban design by producing detailed development briefs for important sites and the use of the Urban Design Guide as a material consideration for Development Quality planning application assessment. Developers are encouraged to liaise with the Planning and Transportation Department at an early stage of the development to enable a swift decision making process.

The talents of skilled architects and designers must be engaged by developers to provide the best solution for each particular context and to take a holistic approach to development considering design details at an early stage. Good design will ultimately contribute to the marketability of a development though how it is looked after and managed will determine the quality of the urban environment inherited by forthcoming generations.
Further Reading

Birmingham City Council
PLACES FOR LIVING (2001)

DETR / Commission for Architecture and the Built Environment
By Design / Urban Design in the Planning System : Towards Better Practice

Urban Task Force
Towards an Urban Renaissance (1999)

Dundee City Council
Dundee Local Plan Review (2005)

Enfield Council
SUSTAINABLE DESIGN AND CONSTRUCTION GUIDE (2000)

English Partnerships
Urban Design Compendium (2001)

Essex County Council Planning Officers Association
THE ESSEX DESIGN GUIDE for Residential and Mixed Use Areas (1997)

Peter Katz
THE NEW URBANISM - Towards an Architecture of Community
McGraw-Hill, Inc. 1994

Scottish Executive
A POLICY ON ARCHITECTURE FOR SCOTLAND (2001)
DESIGNING PLACES (2001)

Urban Design Group
THE URBAN DESIGN SOURCEBOOK (1994)
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This Urban Design Guide is produced by the Policy, Development and Regeneration Division of the City Development Department, Dundee City Council