CHAPTER 12

12

Urban Design & Opportunity Areas

Urban Design & Opportunity Areas

Aim: To create a vibrant and bustling town and to enhance the quality of the built environment.

12.1 BACKGROUND

Through the planning process, local authorities have a key role in relation to the formation of the built environment. This chapter outlines guidelines to support a key element of the core strategy to consolidate Naas Town Centre and support the achievement of a sustainable town through the identification of key opportunity sites and character areas. The chapter also sets out general guidance in relation to urban design.

The Council will proactively encourage the regeneration and conservation of the town centre whereby any expansion and growth is managed and coordinated with the emerging role of the town using the best practice principles and the detailed design considerations outlined within this chapter. It should be read in conjunction with the relevant DOEHLG guidelines and Government policy documents listed below;

- Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas (Cities, Towns and Villages) (2009).
- Urban Design Manual; a Best Practice Guide (2009).
- Government Policy on Architecture 2009-2012 (2009).

12.2 BEST PRACTICE

To guide sustainable urban growth and to create a distinctive and enduring environment, the following principles should inform future development proposals;

Character: Development which creates an identity and character reinforcing locally distinctive patterns of development and landscape.

Continuity and Enclosure: The creation of public and private spaces which are clearly distinguished and continuity of street frontages and enclosure of space by the built form.

Quality of the Public Realm: The provision of public spaces and routes throughout the area which are attractive, safe, uncluttered and work effectively for all in society, including older people and people with mobility impairments.

Ease of Movement: The creation of areas which are easy to get to, move through and by prioritising people before traffic.

Legibility: Forming legible places provided by identifiable routes, intersections and landmarks.

Liveable environment: The creation of a pedestrian friendly environment which facilitates access to public transport in order to reduce reliance on private cars, and provides a well connected open space network.

Adaptability: The creation of places that can change easily and can respond to changing social, technological and economic conditions.

Diversity: Promoting choice through a mix of compatible developments and uses to ensure a place that responds to local needs as well as providing for a diverse society of different incomes at different stages of their lives.

Environmental Sustainability: The enhancement of local ecology, promoting biodiversity, allowing new wildlife habitats to establish and protect existing ones.

12.3 STRATEGY

The Plan seeks to build on the existing strengths of the town such as its landmark buildings and architectural heritage, historic core, urban spaces and civic amenities by identifying key sites and opportunity areas which will complement the towns existing assets and act as catalysts for change. This chapter also contains general urban design guidance for new development throughout Naas. The Plan also seeks to enhance the factors which have a significant impact on the image of the town and the quality of the public domain. The urban design strategy seeks:

- To reinforce the heart of the town and create distinctive areas within the centre;
- To ensure that development is based on the concept of consolidating the existing town core;
- To ensure a mix of uses within the core;
- To provide a sustainable urban expansion area;
- To prioritise the development of derelict/brownfield and key infill / gap sites;
- To formalise approaches and entrances to the town centre in order to create a sense of arrival and departure;
- To enhance the physical environment and streetscape;
- To calm traffic flow and rationalise carparking with the use of high quality materials;
- To promote and encourage high quality urban design;
- To create a network of quality public spaces and a legible public realm;

12.4 OPPORTUNITY SITES AND CHARACTER AREAS

Consolidation is necessary to reinforce the town centre as the central hub of activity resulting in a vibrant and bustling core with a diverse mix of uses. The intensification of development in Naas can occur by utilising undeveloped backland and brownfield land within or adjacent to the town centre area.

The primary objective for town centre expansion should be to ensure that any expansion does not detract from the primacy of the Main Street as the core urban centre but rather reinforces the activities there.

Opportunity sites/character areas have been identified in order to assist in unlocking underutilised land in the town. Indicative urban design sketches suggest how the built form (street frontages, important buildings etc.), routes and spaces could be developed in these areas. Notwithstanding the indicative sketches a design statement which clearly shows how development proposals relates to a specific site/area will be required when deemed necessary by the Planning Authority.

These underdeveloped/opportunity sites and character areas include:

- Gateway Site
- Town Centre- Historic Core
- Abbey Street
- Devoy Quarter
- Fairgreen Area

12.4.1 Gateway

The Study Area

This opportunity site is located to the north of the Town Centre. The subject lands comprise of a corner site currently occupied by Tesco and Pennys along with their ancillary surface car parking as well as the Maxol Service Station. The lands are bounded by the Blessington Road to the north and east and the Dublin Road to the north. The current built form provides poor street frontage due to the vast expanse of surface car parking to the front of the site.

Design Objectives

This site provides an opportunity to intensify development by reinforcing the urban fabric of the area. In particular any new development should provide a strong built edge to the surrounding streets.

The site presents an opportunity to create a new gateway to the town centre by formalising the approach and entrance to the town centre in order to create a sense of arrival and departure. It is envisaged that a landmark building at the junction of the Blessington Road and Dublin Road will signal the significance of the site as a gateway to the Town Centre. Care should be taken that this building addresses both street frontages and must be designed to an exceptional standard on all elevations. Care should be taken with regard to the scale and massing of this structure to ensure that landmark does not become too bulky.

It is envisaged that the remainder of the site will comprise of buildings following a perimeter block/courtyard form, providing a strong street edge to the Blessington Road and Dublin Road along with a quality public realm. Development should comprise a high quality design, fine grained active frontage blocks with mixed use developments / schemes including community uses as maybe defined by the relevant zoning provisions. Buildings should provide a strong frontage that delineates the public realm. Development to the rear or adjacent to existing built form should have regard to amenity of these buildings. Car parking should be provided to the rear of buildings or preferably underground.

New buildings should be permanent, timeless and contemporary structures thereby promoting a town with a collection of new and historic buildings with an appropriate mix of building styles.

KEY DESIGN GUIDELINES

- Signify gateway to Town Centre
- Provide strong street edge
- Use perimeter block urban structure
- Locate car parking to the rear of the built form or preferably underground
- Provide a quality public realm
- Have regard to the amenity of surrounding buildings

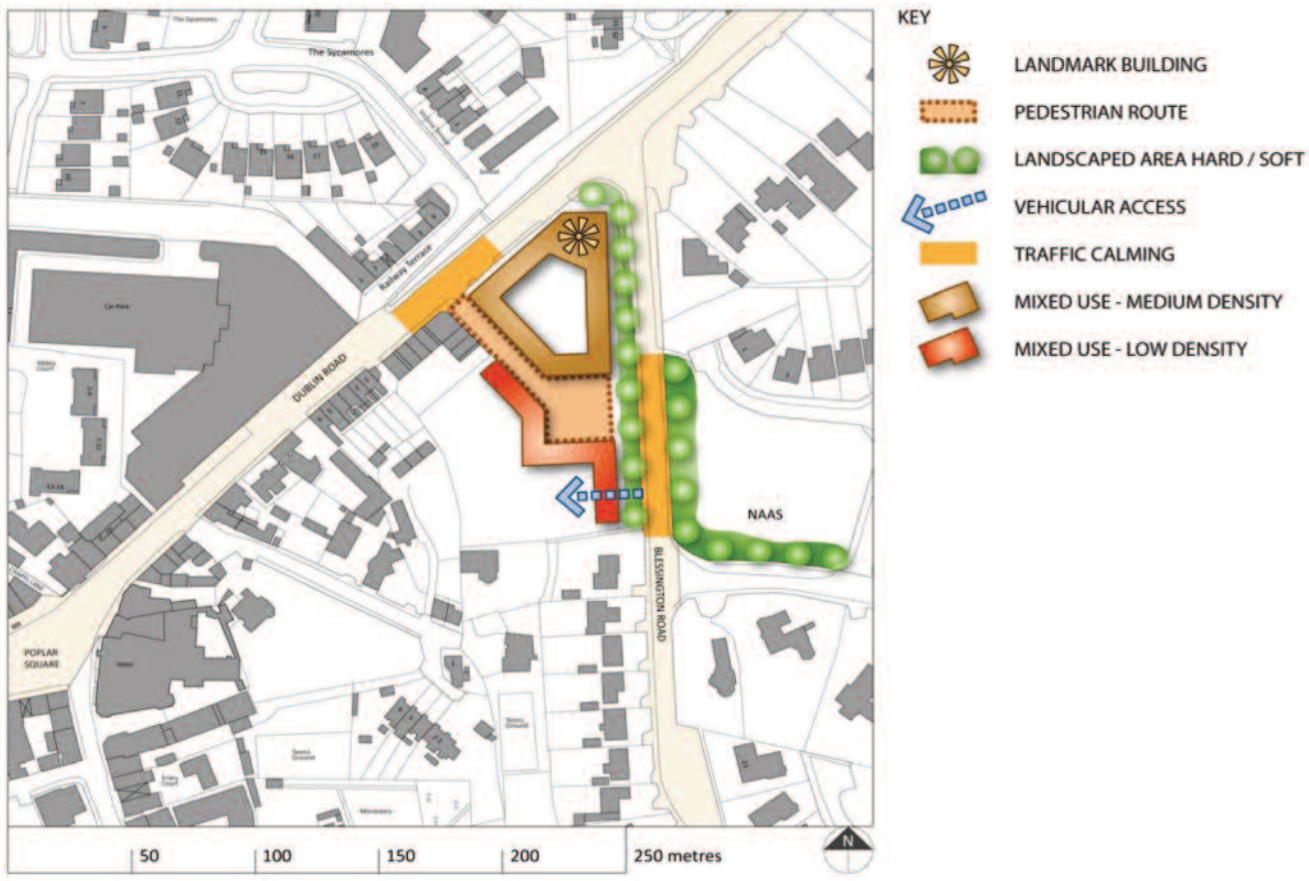

Figure 12.1: Indicative Strategy for Gateway Site

12.4.2 Town Centre - Historic Core

The Study Area

The study area provides an opportunity to revitalise an underutilised area in the historic centre by promoting the development of commercial buildings, public facilities and town centre living. It also promotes public realm improvements in the town centre. The historic core retains many buildings of architectural merit and squares such as Market Square which adds to the urban quality of the historic centre. The area contains many important buildings – Courthouse, Banks, Churches, etc. There is a great variety of buildings from the early 19th to the early 20th century, many with a distinctive visual expression, all joined together to form an impressive civic space. The Presbyterian Church and St. David's Castle act as punctuation elements and lead into the narrower North Main Street, with varying and distinctive views and character from the same space.

There are however, issues to be tackled in the historic core, principally those of traffic and parking, which at present, dilute the quality of the civic spaces e.g. the clutter of signs, poles and overhead wires; poor quality of some new developments including shop fronts and other architectural elements. This Plan seeks to improve the quality of new development in the town centre and to improve the general ambience of the public realm. It is also an objective to reduce traffic congestion and to pedestrianise parts of the town centre over the period of the plan. There are also under developed and backland sites to the east of Main Street in the vicinity of St. David's Church. These lands are bounded by the Shopping Centre at St. Corban's Lane to the south and St. John's Lane to the north and are currently in use as surface carparks.

Design Objectives

The lands form a pivotal site at the centre of the town. St David's Church and Castle are key buildings providing Naas with both a sense of place and its historic identity. Currently there is limited access to these buildings from the town centre. The site presents an opportunity to create an urban structure which will unveil these hidden gems by providing increased access and visual links to the historic heart of the town. In particular the site can play a unifying role by connecting the town's busiest areas - Friary Road with the Main Street a nd St Corban's Lane Shopping Centre with high quality pedestrian linkages thus providing alternative routes for traversing the historic core.

It is envisaged that the new development should complement and add to the existing town core providing a successful urban centre with a concentration of uses which should be timeless and contemporary structures. New proposals for this area should have regard to the surrounding character and comprise a high quality design with fine grained active frontage blocks. Buildings should provide a strong frontage that delineates spaces. Development to the rear or adjacent to existing built form should have regard to amenity of these buildings.

The more important buildings in the area have been constructed in brick and stone, the predominant stone being granite, and occasionally coursed limestone with granite details. The design and layout of new buildings should incorporate the principles of passive surveillance to encourage a community atmosphere and to discourage anti-social behaviour, by overlooked open space, cycle ways and pedestrian routes.

Layouts should provide for a hard landscaped public space within the new development which should be connected to the existing soft landscaped public space surrounding St. David's Church by a pedestrian link, thus providing a network of complementing and useable public spaces.

KEY DESIGN GUIDELINES

- Unveil the Historic Heart of Naas
- Create a new urban structure
- Provide new connections and increased permeability within the town centre
- Provide a quality public realm
- Seek pedestrianisation of parts of Main Street
- Have regard to the amenity and character of surrounding buildings
- Provide fine grained active frontage blocks

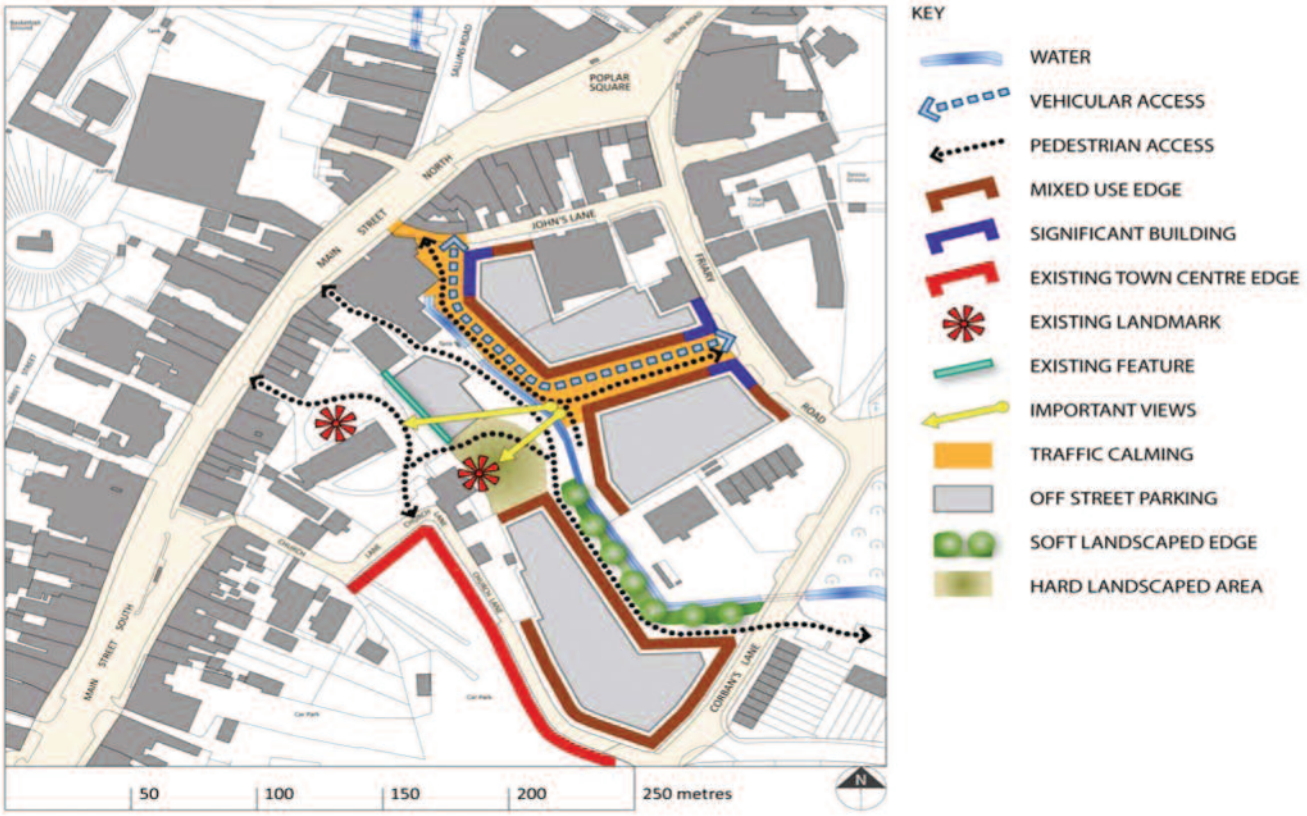

Figure 12.2: Indicative Strategy for Historic Care

TOWN CENTRE PUBLIC REALM

- A quality public realm using a high standard of quality finishes and treatments
- Retain the overall physical form and urban grain of the town centre
- More space and safety for pedestrians and shoppers
- Increase space for pedestrians and remove unnecessary street furniture and signage
- Design and location of street furniture can contribute significantly to the ambience and character of the town

Figure 12.3: Indicative Image of Public Realm Improvements/Pedestrianisation of Main Street
Source: Shaffrey Associates Architects, Draft Naas ACA Report, 2007

12.4.3 Abbey Street Area

Study Area

The subject lands comprise of the underutilised sites along Abbey Street.

Abbey Street is located within the town centre and runs parallel to South Main Street. It is mainly defined by the Eircom office building to the west and the rear of buildings which face South Main Street to the east. Although there have been a number of modern developments in recent years, the built form generally provides poor street frontage resulting in a low quality public realm and streetscape and lack of connection with the Main Street and surrounding areas including the Harbour.

Design Objectives Abbey Street

The urban fabric of Abbey Street is defined by the rear of the buildings along South Main Street and the large Eircom office building. Few active frontages and town centre uses occur along the street resulting in an underutilised and underdeveloped area within the town centre. An opportunity exists to transform Abbey Street into a bustling urban street within the town core by improving the quality of the public realm, in particular the existing connections and linkages to Main Street South and the Harbour area.

Several opportunities exist along both sides of the street for appropriate infill development. Infill development should have regard to the surrounding character, particularly where the proposed development is located on a small plot.

It is envisaged that the site of the Eircom building could be redeveloped in order to provide a new structure(s) with a strong building line and active frontages along the street. A quality public realm should be achieved using a high standard of quality finishes and treatments.

KEY DESIGN GUIDELINES

- Provide a quality public realm with exemplary built form
- Transform Abbey Street into a bustling street within the town core
- Redevelop the Eircom site
- Provide appropriate infill development along Abbey Street
- Provide active frontages with a strong building line along Abbey Street
- Improve the quality of the public realm and reinforce the existing linkages between Abbey Street, South Main Street and Basin Street

12.4.4 Devoy Quarter

The Study Area

The subject site is located immediately adjacent to the existing Town Centre and is zoned for town centre uses. Áras Chill Dara is located immediately west. The lands at Devoy are currently under-utilised mainly comprising of single and two storey buildings. The site of the former VEC school forms a large portion of these lands and currently presents a poor street frontage along the Newbridge Road due to the large expanse of surface car parking which is located to the front of the building.

Design Objectives

The intensive use of these lands through re-development presents an opportunity to create a sustainable urban quarter with a mix of uses. New development should seek to create a compact area with priority for pedestrians.

It is considered that a strong building line should be provided along the Newbridge Road with active frontages at ground floor level. It is envisaged that development should be provided in the form of clearly defined blocks with semi-private enclosed courtyard type open spaces providing car parking, rear access and communal spaces.

Mixed use buildings / schemes will be encouraged where compliant with the relevant zoning provisions. A mix of retail, housing, leisure, community uses and offices should overlook adjacent streets and landscaped courtyards/plazas. In particular apartment developments will be encouraged on the corner sites to enhance these prominent positions and take advantage of dual aspect locations.

Pocket parks should be incorporated throughout the layout to provide recreation for residents and amenity areas for the adjacent employment uses. Green links should be provided along the stream. A quality public realm should be achieved using high standard finishes and treatments.

Private and public areas should be clearly delineated. Private areas should be protected from undue overlooking and public areas easily accessible and overlooked. Good public lighting should be provided to the edge of open space, cycleways and pedestrian routes.

It is envisaged that a hard landscaped public space will be provided at the junction of the Newbridge Road, Harbour View and St. Itas housing development. Special attention should be focused on the design of this junction, to calm traffic flow along the public space. A shared surface treatment could be provided to link this new formal space to the Harbour Area. Any development proposals within the Devoy Quarter should have regard to the *Devoy Quarter Spatial Strategy*, (2009), prepared by Hassett Ducatez Architects on behalf of Naas Town Council.

KEY DESIGN GUIDELINES

- Create a sustainable urban quarter with a mix of uses
- Create a compact neighbourhood with priority towards pedestrians
- Provide a strong building line along the Newbridge Road
- Provide new connections and increased permeability to the historic town centre.
- Provide a public space at the junction of the Newbridge Road, Harbour View and St. Itas Place.
- Provide a quality public realm
- Provide pocket parks and green links

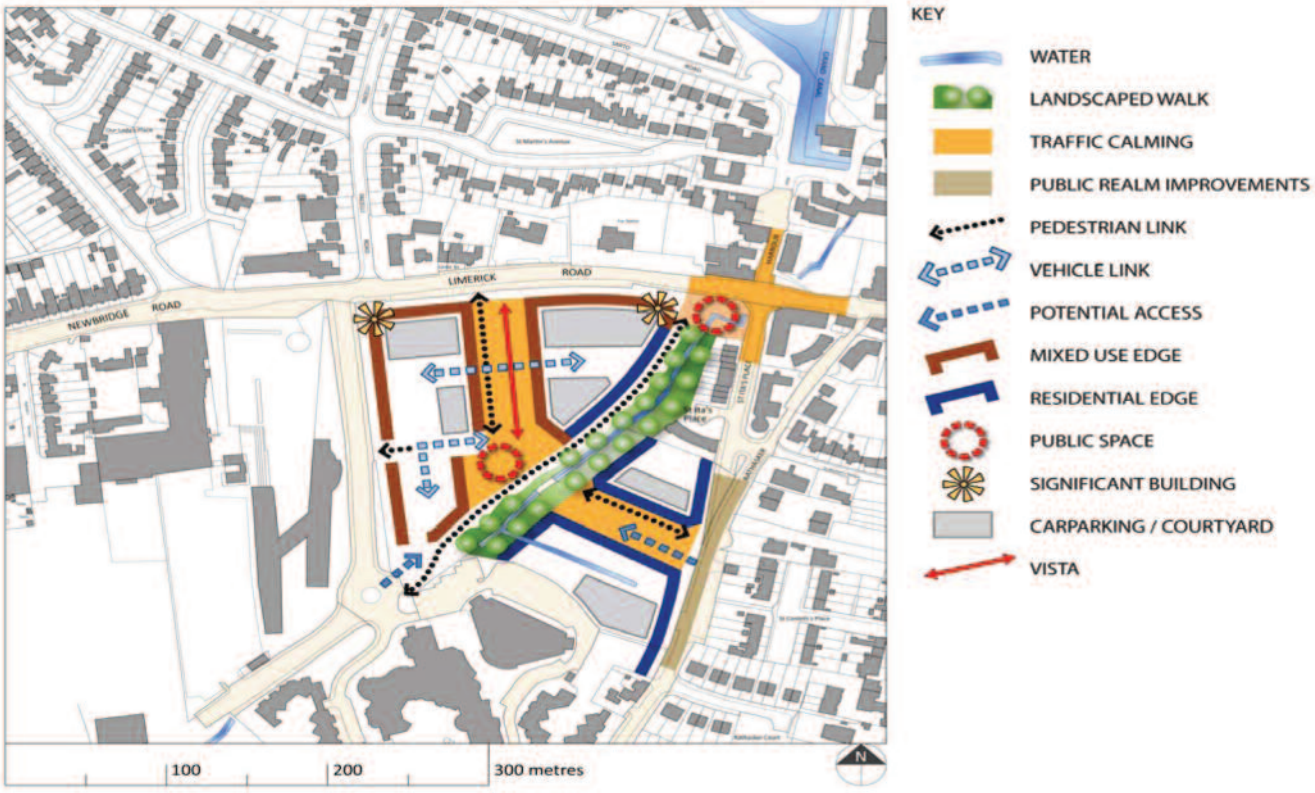

Figure 12.4: Indicative Strategy for Devoy Quarter

12.4.5 Fairgreen Area

Study Area

The Fairgreen is located to the south of the town immediately adjacent to the Town Centre. The study area is bounded by the Ballymore Road, the Lakes, the Kilcullen Road and St. Corbans Lane. The area contains St. Corban's Primary School and Naas C.B.S., the Fairgreen, the Lakes, the former swimming pool site, the former fire station building and the Eurospar development.

Design Objectives

Education is the primary land use at Fairgreen given the siting of both a primary and secondary school at this location. This Plan supports education as the dominant land use and allows for an expansion of the education and community zoning by approximately 1 hectare. The Fairgreen area can be divided up into a number of different opportunity areas.

- Eurospar

An opportunity exists to intensify development at this location to provide a key landmark or gateway building, to signify the approach and entrance to the town centre in order to create a sense of arrival and departure.

Care should be taken that this building addresses both street frontages and be designed to an exceptional standard on all elevations. Care should be taken with regard to the scale and massing of this structure to ensure the landmark does not become too bulky. In particular any new development should provide a strong built edge to the surrounding streets. Car parking should be provided to the rear of the building or preferably underground.

The built form should comprise of buildings following a perimeter block/courtyard form, with a quality public realm. Buildings should provide a strong frontage that delineates the public realm. Development should comprise of active frontages at ground floor level with commercial and or residential uses above.

- St Corban's Lane

The existing built form along St. Corban's Lane provides a poor sense of enclosure. New development along this edge should provide a formal urban structure and strong building line in order to create a sense of enclosure.

Development shall comprise a high quality design, fine grained active frontage blocks continuing the existing building line. New buildings should be permanent, timeless and contemporary structures. It is envisaged that the built form should mainly comprise of background architecture- creating the fabric of the town. Streets may be punctuated intermittently by individually designed buildings to ensure visual interest and to develop a stimulating streetscape where appropriate.

Development to the rear or adjacent to existing built form should have regard to amenity of these buildings. Quality public realm shall be achieved using a high standard of quality finishes and treatments

- The Lakes and Fairgreen

An opportunity exists to redevelop the swimming pool site to provide community uses for the town. The design and layout of this development shall incorporate the principles of passive surveillance to discourage anti-social behaviour, by overlooked open space, cycleways and pedestrian routes.

Alternative vehicular access should also be provided to the rear of existing schools which will also serve the proposed community uses.

KEY DESIGN GUIDELINES

- Signify gateway to Town Centre
- Provide strong street edge
- Use of perimeter block urban structure
- Provide a quality public realm
- Have regard to the amenity of surrounding buildings
- Provide passive supervision of the public realm and areas of open space
- Improve the appearance of the educational edge onto the Lakes and Fairgreen

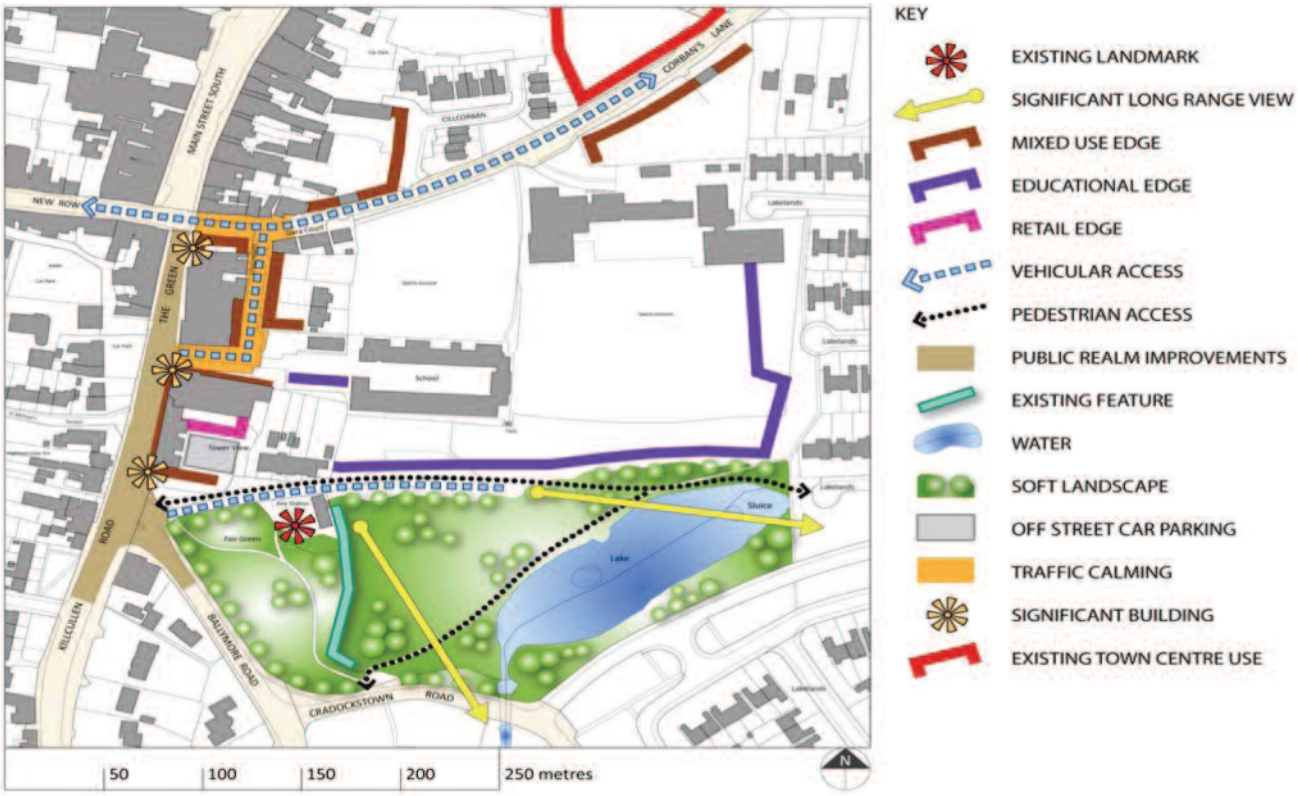

Figure 12.5: Indicative Strategy for Fairgreen

12.5 GENERAL URBAN DESIGN CONSIDERATIONS

The following sub-section outlines detailed urban design considerations:

12.5.1 Scale / Mass / Composition

A buildings size should be relative to its surroundings. Scale is therefore one of the key elements in the design consideration for new buildings.

Scale, mass or bulk essentially refers to the size of the plot, average storey height and also the manner in which the façade is articulated. If these aspects of a building's design are excessively large when compared to adjoining buildings along a street, then the building is likely to be out of place on the streetscape. Exceptions may be permitted in the following circumstances:

- If it is a building of major public significance.
- If the nature of the use demands such a building and if the location is suitable for such a building.
- The degree to which it can contribute to the economic vitality of the town centre.

12.5.2 Key Buildings

Gateway and landmark buildings can emphasise the urban identity of a place. Their purpose is to provide a signal of a significant place either in terms of movement or use. These buildings have the potential to act as important landmarks and should therefore address the significance of the site.

Suitable locations for these buildings include important street corners or junctions, corner sites, the end of vistas and gateways, local centres and the edges of public squares. They ensure visual interest and develop a stimulating streetscape and should only occur at these locations.

In such instances, it may be appropriate to increase building heights so as to provide greater emphasis on the building, but there will also be a greater expectation of design quality and architectural treatment. The significance of these buildings does not always need to be expressed in terms of height. Differentiation in building materials and form can also convey their importance.

12.5.3 Corner Sites

Corner sites should be reinforced by buildings which address both street frontages. These buildings should be designed with windows and where appropriate, entrance ways onto both streets.

Various options can be explored e.g. an increase or stepping up in building height, a round corner, a stepped back corner (for example, to create a civic space), or a simple splayed corner. Such buildings should be designed to an exceptional standard on all elevations.

Figure 12.6: Example of Corner Building

12.5.4 Building Line

Building lines are created by the position of the building frontage along the street edge. This is important as the position of the building line determines the width of the street, therefore influencing the sense of enclosure created.

Building lines generally are continuous but not rigidly straight. They tend to be more organic in nature, staggering at certain intervals, adding significantly to the character of the street and sense of enclosure.

Generally, existing and established building lines should be maintained. Building lines may be relaxed to accentuate an important building or place or where important areas of public or civic space are required. Existing building lines may also be relaxed where innovative design solutions can demonstrate that the design will positively enhance the streetscape.

12.5.5 Roofline

The scale of buildings has a direct influence on the skyline. Roof tops of traditional buildings are generally constructed of slate and contain features such as chimneys which add visual interest and variety to the skyline. In many contemporary buildings, roofs tend to be flat, where this type of roof occurs on a building with a long façade it can result in monotony. In such cases the monotony can be relieved by variations in building height at appropriate locations (i.e. stepping up heights at the corners or at the centre of a symmetrical building). Regard should be had to the following:

- Rooflines should respond to the articulation of the rest of the façade so that the building can be read from the bottom to the top.
- The roofline should acknowledge the rhythm, harmony and scale of the entire street frontage.
- Materials should be chosen for their compatibility with the existing roof tops of towns in the county, i.e., dark grey slate.
- Machine and mechanical plant rooms should be designed as an integral part of the building and should not appear as a disruption of the roof line

Figure 12.7: Traditional building line and roofline typical throughout Naas.

12.5.6 Perimeter Block

Residential layouts should generally utilise the perimeter block principle, as a departure from more recent cul-de sac type layouts. This will increase pedestrian permeability and legibility of a new development area and will help to define streets and public spaces.

12.5.7 Courtyard Buildings

Courtyards can occur primarily in town centre developments. They should be treated as semi-public/private space and their use is to provide:

- A communal outdoor space;
- A threshold space prior to access to the rear of properties; and
- A location for secure cycle and car parking.

These spaces must be safe environments that are policed by natural surveillance from the individual properties; it is therefore imperative that dead corners that may be hidden from view are avoided.

Priority should be given to pedestrian movement as it is intended that these areas will provide informal play for small children. Courtyards should therefore be treated as shared surfaces. Seating should also be provided and orientated to capture the sunshine, This will allow casual residential users to engage with courtyard activities. Small areas of ornamental planting and patches of lawn should be discouraged.

12.5.8 Mix of Uses

In order to conserve and develop the vitality of urban cores, a mix of uses and a healthy balance of economic, residential, cultural and recreational activity should be maintained. By increasing the amount of services and amenities within urban centres, the provision of a wide range of local jobs will be encouraged. It is therefore imperative that urban centres provide a diverse range of activities and uses. Development should be designed for a diverse community which encourages sustainable living and reinforces neighbourhood values.

Residential development should provide a variety of designs to accommodate a good mix of household types – including first time buyers, single people, families, empty nesters and the elderly in order to ensure a social mix and balance is achieved.

12.5.9 Building Height

Height determines the impact of development on views, vistas and skyline. Building height shall generally be considered in terms of the extent and location of the site. In assessing development applications the planning authority will have regard to the height of existing development in the vicinity of the proposed development site.

12.5.10 Neighbourhood Centres

Local or neighbourhood centres, where appropriate, typically include services and facilities such as shops, pubs, post office, crèche, doctors surgery, health centre, community centre, civic space, park, playground, primary school as well as some local services and/or employment uses and should comply as appropriate with the relevant provisions of Chapter 6 Retail.

12.5.11 Car Parking

Parking standards are set out in Chapter 13. Regard should be had to the following in relation to the location and layout of car parking areas:

- Car parking should generally be sited within established site boundaries in such a manner as to ensure minimal impact on the amenity of adjoining premises.
- In town centres parking spaces should be located behind buildings or underground wherever possible, to encourage the continuity of streetscapes.
- Landscaping and tree planting must be provided to counteract the appearance of parking areas.
- Where on-street parking is proposed properly marked car parking spaces should be provided with regular tree planting and a high standard of kerbing and paving. Generally not more than five perpendicular or two parallel car parking spaces should be provided between trees.
- Where surface car parking is required it should be designed to be overlooked to provide passive surveillance and should not dominate the street frontage.
- Cycle parking facilities should be conveniently located, secure, easy to use, adequately lit and well posted. Weather protected facilities should be considered where appropriate. In addition, parking should be placed within a populated, well-supervised area, and monitored by CCTV where possible.

12.5.12 Protection of the Existing Environment

All development proposals immediately adjoining existing development should provide for the protection of existing residential amenities and have particular regard to minimising overlooking and visual intrusion. Naas Town Council places significance on the existing heritage fabric of the town. This represents a key heritage and cultural asset and includes protected structures of special architectural, historical and cultural interest. (Refer to Chapter 11).

12.5.13 Building Language and Finishes

Good modern architecture and design should prevail throughout developments. There should be consistency in materials, colour, proportions, roof pitches, building detail, street/ route surfaces, planting and street furniture within a development.

Certain principles will apply in relation to materials and finishes of development as follows:

- In general, finishes and materials should be of a high quality and should be used in a consistent and restrained manner.
- Where possible natural materials should be used including wood, stone, slate etc. The use of native Irish material should be maximised.
- Materials and finishes should as far as possible reflect an Irish vernacular and, where appropriate and feasible, a Kildare and local vernacular.
- Use of non-natural materials such as clay pantiles will be permitted in limited circumstances where it is considered that such use contributes to the overall design quality of the scheme.
- Use of uPVC window frames and doors etc. should in general be avoided unless a particular and specific case can be made for their use. This is in the interests of sustainable development and to help to promote the use of natural and native materials and more environmentally friendly materials.
- In cases where it can be demonstrated that the design of a building is of an exceptional nature and particularly in the case of gateway and landmark buildings, consideration will be given to the use of modern materials in the context of a modern design approach to such buildings.
- External wall finishes may include timber cladding, render, dry dash and brick.
- The use of colour should form part of any design proposal, however this should have regard to the traditional use of colour in the Irish context.
- In general, the design of schemes should focus on having a commonality of approach in terms of particular housing areas, with a clearly different approach between housing areas.

In addition, there should also be an overall and consistent design concept for the entire scheme.

12.6 OVERALL LAYOUT DESIGN CONSIDERATIONS

Understanding the context and the potential of a site through a detailed site analysis will inform the design process for development proposals. The new urban structure should consist of a framework of routes and spaces that provide connectivity within a development, as well as to existing and planned routes in adjoining developments.

Design considerations include:

- Recognisable routes, intersections and key buildings should be provided to help people navigate.
- Priority should be given to pedestrians and cyclists by providing routes that are direct, safe and secure.
- Streets should be designed to prioritise pedestrian movement and therefore encourage pedestrian activity.
- Attractive and successful outdoor areas should provide a quality public realm.
- Passive supervision of the public realm is the most effective means of preventing anti-social behaviour.
- Buildings should be orientated to maximise privacy and elements such as planting and boundary treatment used to maximum effect.
- Residential layouts should, where appropriate, utilise the perimeter block principle as a departure from more recent cul-de sac type layouts.
- Housing should at a minimum be dual aspect and designed so that greatest advantage is taken of southwest orientation.
- Development should be designed for a diverse community which will encourage sustainable living and reinforce neighbourhood values.

12.6.1 Permeability

Central to the vitality of any urban centre is its network of pedestrian paths and routes. A fine grained network is critical to the creation of a human scale environment, attractive and accessible for the pedestrian. All new development should provide a fully permeable and recognisable, interconnecting network of streets. Permeability within town and village centres must be protected and where possible improved. Any new development should open up new routes as part of the development.

12.6.2 Legibility

All new development should provide:

- Recognisable routes which provide a coherent and easily read pattern of streets, lanes, squares, urban and green spaces.
- Intersections and landmark buildings which are provided to aid orientation.
- Main routes should be distinguished by exploiting vistas, key buildings and landmarks.
- The activities and functions of places should be made visible, thus bringing a sense of liveliness to places.

12.6.3 Streetscape

The streetscape should be characterised by quality buildings and a high standard of finishes and treatments such as paving, landscaping and street furniture, creating an environment with a definite sense of place.

All streets/roads, walking/cycling routes and public spaces should be overlooked by adjoining accommodation to ensure passive surveillance. The creation of observed public spaces and route ways should not reduce or detract from the private nature of other spaces and buildings.

12.6.4 Public Space

To create a vibrant bustling town and to integrate new development into backland areas the provision of a network of public spaces should be explored. These spaces should be designed to vary in size and use providing for children's play, kick about spaces, passive recreation and landscaped and planted areas to serve the entire community. Public spaces should be linked through high quality pedestrian and cycle routes combined with views and vistas and should be overlooked by adjoining accommodation to ensure passive surveillance.

12.6.5 Transportation Network

Development must emphasise permeability for all modes of transport and should be designed on the basis of the following considerations and users:

- Pedestrians and cyclists
- Public Transport
- Access for emergency vehicles
- Efficient circulation of local traffic
- Externalising non local traffic

12.6.6 Cycling and Pedestrian Linkages

Cycling and pedestrian linkages are necessary to promote integration and sustainable development patterns. New development should seek to achieve:

- Convenient and prominent pedestrian access points in terms of signage, lighting and gradients;
- A pattern of footpaths/pavements, which allows easy permeability; a choice of routes filtering through the area;
- Routes from houses to local facilities, including shops, schools and bus stops, should be direct and pleasant, avoiding steep slopes or steps/kerbs where possible.
- Utilising green open space networks for longer distance walks.
- Providing dedicated pedestrian routes along green corridors.

For a cycle network to be successful it should be continuous and convenient with appropriate trip-end provision.

12.6.7 Street Hierarchy

A network of high quality, attractive streets comprising high quality finishes and treatments such as paving and landscaping, to create an environment with a definite sense of place should be achieved. All development should include a hierarchy of streets designed to recognise the needs of pedestrians and cyclists and therefore encourage healthy activity. This can be achieved by paying close attention to the design of street surfaces and planting which should be integrated with passive traffic calming measures.

The purpose of any proposed network is to adequately serve the maximum extent of development whilst discouraging unnecessary through-traffic.

Boulevards - Access roads should be provided in the form of spacious, tree-lined boulevards to provide a safe environment for pedestrians and cyclists with associated cycle lanes, footpaths and verges should be fronted by buildings. Boulevards should comprise a high quality public realm, planted with appropriate native species.

Figure 12.8: Boulevards

Neighbourhood Streets - The majority of circulation routes within new developments should be provided by neighbourhood streets. The design of the neighbourhood street including associated parking should vary according to the density of the area.

In most urban areas where the density is at its highest, the neighbourhood street will have a carriageway width of between 5m and 5.5m and should maintain a constant road width and continuous kerb edge. They will have dedicated 2m minimum footpaths either side and 1.5m wide grass verges. Cyclists will use the road surface. On-street parking will be provided on both sides of the street.

Figure 12.9: Neighbourhood Street

Where the density is medium the road width will be maintained as above but the parking will be provided on one side only and staggered along the length of the street.

Figure 12.10: Neighbourhood Street

Where the built density decreases away from the urban area, the street design will largely be less formal in character as appropriate at the edges of a built up area, such as variable kerb alignment and road width.

Figure 12.11: Neighbourhood Street

Mews / Shared Surface Streets - Shared surface streets may occur where the character is mostly urban, typically in the town centres. These streets should be designed as shared level surfaces, where pedestrians and cyclists have equal priority with vehicles, therefore having the advantage of providing sufficient space for large vehicles to approach close to buildings without giving the impression of a 'tarmac prairie'. These streets must have building frontages on both sides.

Figure 12.12: Shared Surface Street

12.6.8 Storm Water Run-off

Permeable surfaces (gravel, turf and structurally reinforced turf, 'grass-crete, trees and shrubbed areas etc.) should be used to mitigate surface water runoff wherever possible.

Porous pavements give trees the rooting space they need to grow to full size and in the void spaces within these surfaces, naturally occurring micro-organisms digest car oils and oil ceases to exist as a pollutant.

Rainwater infiltration through the pavement into underlying soil reduces stormwater volumes and restores natural subsurface flow paths.

12.6.9 Sustainable Urban Drainage Systems (SUDS)

SUDS should be an important part of the drainage infrastructure of a development. The drainage system should provide the major structuring element of landscape and it is important that all development considers the relationship with SUDS as an element of drainage infrastructure as well as a leisure and visual amenity.

The use of 'swales' should be explored as part of SUDS to mitigate water. Swales should be linked, have a storage and infiltration function and mainly convey runoff to shallow appropriately located storage wetlands. Swales located throughout the development lands should also provide the underlying basis of the landscape structure of new development and form part of a cohesive urban structure, integrated with both the streets and built form.

SUDS areas should be planted utilising indigenous species that can withstand both dry and very wet conditions. A similar landscape treatment will be utilised across the system so that it reads as a single network.

The system should be capable of accommodating all storm events. The design of future surface water drainage systems should be mindful of the natural drainage of areas. The development of an appropriate management regime is critical for the avoidance of future problems. The following illustration below shows how swales may be incorporated into the design of a new area and could assist in providing developments with a sense of place.

Figure 12.13: Swales at Upton, Northhampton, UK