Village design framework

- **Spatial framework -** purpose

- **Settlement -** landscape inter-action

- **Village consolidation & en-hancement**
  - appraisal
  - public realm
  - connectivity
  - framework

- **Rural fringe, green wedges & coastal edges**
  - appraisal
  - landscape amenity
  - connectivity
  - cluster design

- **Built environment**
  - design
  - massing
  - edges
  - finishes
  - low - impact

Accentuate the positive

"Find the best things about a place, then protect them and build on them.

Find the worst problems and design ways of making them better.

Make sure to use the new things to **connect** the best things in ways that fulfill the dreams of the people we serve."

Quality Place-Making

It is hoped that this document will fulfil a useful role in redirecting efforts, to create a framework for development as a contributor to the creation of quality places. There is a growing commitment in terms of guidance and policy to underpin this effort to ensure that developments will not be considered acceptable unless they **address the issue of place and do it well**.
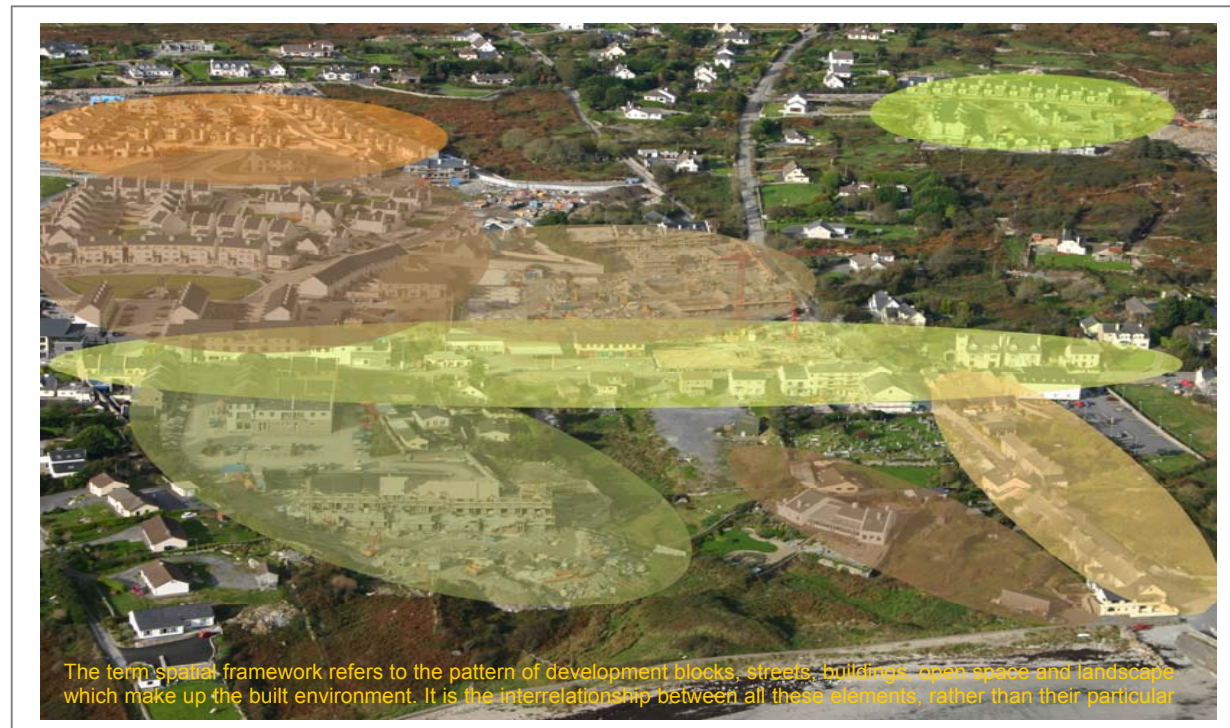
To make quality places the norm rather than the exception means considering the following ;

- A multidisciplinary design team approach.
- The role of the public sector in promoting high quality design.
- To reverse the trend on house product in favour of a 'place', lifetime design and community.
- The lack of innovation in respect of sustainable development, use of new technology, construc-

The importance of a spatial framework

The urban structure provides the foundations for detailed design of the constituent elements. It creates a coherent framework, which forms the basis of the design of individual developments, possibly by different actors - in order to achieve the following;

- **Integration**
  Connection and overlap with surrounding areas.
- **Functional efficiency**
  So that individual elements (buildings, streets and open spaces) work together as part of an efficient whole.
- **Environmental harmony**
  Creating development forms that are energy efficient and ecologically sensitive.
- **A sense of place**
  Creating somewhere that is recognisably distinct but simultaneously strengthens local identity.

The term spatial framework refers to the pattern of development blocks, streets, buildings, open space and landscape which make up the built environment. It is the interrelationship between all these elements, rather than their particular

Anywhere !

Avoid such layouts determined first, by the road. The placing of dwellings should always come first, creating a sense of place.
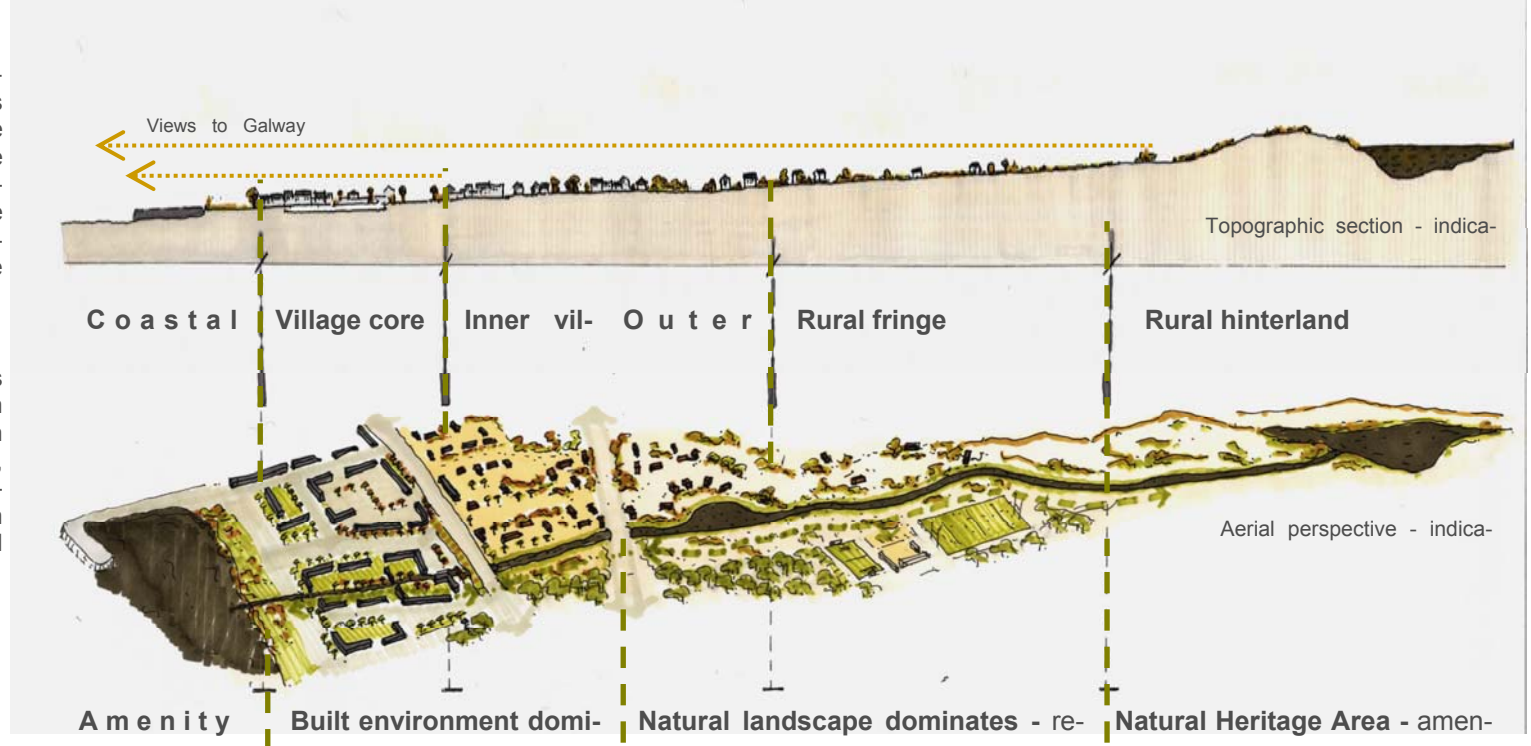
Place-making

Innovative layout typologies which explore historical precedent which challenge the uniformity of current sub-urban living. Source - C.A.B.E.

Settlement / landscape interaction

Reading the land-

In order to develop an over-all spatial framework, it is first necessary to visualise the existing landscape characteristics, and illustrate in indicative terms the type and form of development, appropriate to the sites inherent character.

While such an illustration is indicative, it does underpin a sound rational, based on extensive site appraisals, which then inform considered decision making in relation to settlement and sensitive siting.

The sketches below are indicative only - and are used to illustrate the over-arching principle of

Views to Galway

Topographic section - indica-

C o a s t a l | **Village core** | **Inner vil-** | **O u t e r** | **Rural fringe** | **Rural hinterland**

Aerial perspective - indica-

A m e n i t y | **Built environment domi-** | **Natural landscape dominates -** re- | **Natural Heritage Area -** amen-

These images illustrate appropriate residential typologies which best assimilate their respective contexts and allow for a sensitive scaled response

Village streetscape - while this new intervention may appear austere - it provides a distinctive edge which can over time soften out with landscaping interventions. Pedestrian safety is paramount for the long-term strategy to make this

Intensive residential development which provides a sense of spatial enclosure, necessary for the consolidation of a village core. Over time, landscaping will soften the impact and create a rich tapestry that

Extensive surface parking creates 'spatial leakage' within the village core, resulting in isolated buildings which have little potential of been assimilated within a village fabric. Such problems are in part created by dogmatic requirements and the frame-
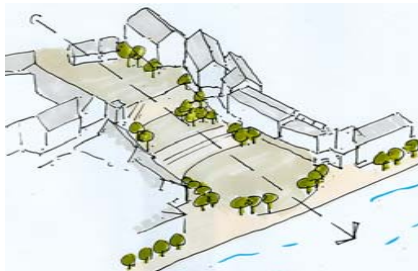
Landscape features retained adjacent to residential development which minimise the visual impact and provide a harmonious balance between the built and natural environments.

Innovative residential layouts and typologies contribute to the distinctiveness of place-making and illustrate the possibility of high quality design and its overall contribution to the

Existing spatial context

k e

Spatial leak-
age
Ill defined
edge
Strategic

Spatial framing to provide amenity views of landscape and allow active participation in the public domain

Bearna spatial analy-

Before any framework can be visualised, it is necessary to carry out an appraisal of the existing context and annotate the spatial experience. Such mappings form the basis for any future strategic interventions within the built environment , which will contribute to the spatial quality over a long-term basis.

The key concepts which have helped to guide the interventions are **place and integration**.

The concept of **place** includes relating to the making of edges, of enclosure, the retention and reinforcement of existing character and identity, the maximising of community opportunity, and the building of an appropriate public domain.

Integration means that we combine inputs, energies, ideas and investment from programmes as diverse as roads and sanitary services, village enhancement, derelict sites eradication, community

Village core - framework

Bearna

6

An integrated strategy

The framework facilitates and upholds access to zoned lands to the rear of road frontages which would otherwise remain undeveloped and potentially become land-locked. Increased permeability is encouraged through the identification of additional pedestrian and vehicular routes. Permeability relates to pedestrians and vehicles and involves ease of movement between places.

The contribution of natural heritage and landscape features to the village's character and unique identity is recognised. The framework advocates the retention of existing landscape features and encourages increased access to the area's natural amenities.

While guidelines are indicative, any development proposal shall take cognisance of these principles. The framework aims to consolidate the existing village core by encouraging infill, redevelopment of dere-
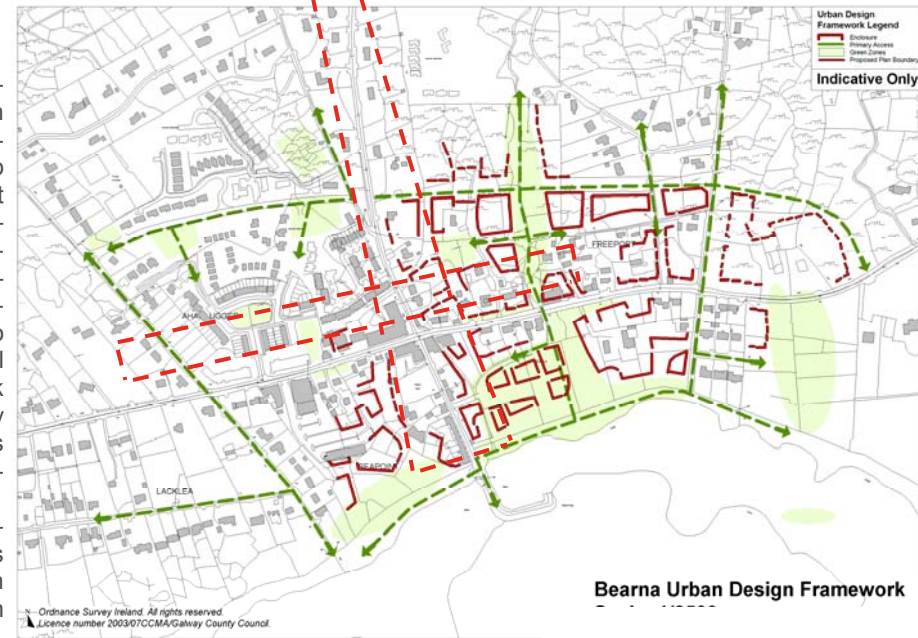
Residential consolidation allows for enhanced amen-

Place-making

This approach to place-making is based on basic human requirements and a desire to create strong vibrant communities, memorable places and sustainable architecture. Traditional housing developments have tended to ignore architectural quality confirming a lack of ambition and dignity towards its residents and the wider community.

A new approach is necessary to reverse this current malaise through an integrated approach

Bearna Urban Design Framework

A human scale inten-

With an ever increasing urban migration there is a need to foster more integrated neighbourhoods which offer opportunities for **intensive human scale compositions** through the grouping of dwellings and other essential facilities. We can identity with this approach through our experience of squares, crescents, avenues, terraces and diamonds which have evolved over generations and contributed to a sense of place.

The fundamental aspect of these urban components were the varying scales and complexity, interwoven with mixed uses. They remain in our memories through this basic evolution for human

Perimeter enclosure typologies give good spatial definition and street legibility and make for a high quality public open space network.

Village core - connectivity

A hierarchy of movement and connectivity allows people to choose an appropriate mode of transport. A permeable network allows greater interaction with the

High quality public realm with shared surfaces for both pedestrians and cyclists. Passive surveillance and spatial enclosure is achieved through innovative de-

Pedestrian connectivity through pocket spaces, contribute to a structured and legible public realm and encourage active citizenship. Quality open spaces provide an intimate relationship with the building enclosure rather than

Primary
Secondary
Tertiary
Local
A c c e s s

Permeability & legibility - a street layout that encourages walking and cycling is permeable, in that it is well connected and offers a choice of direct routes to all destinations. It is also legible, in that it is structured by a distribution of distinctive places and spaces so that it can 'read' and is thus easy to

Permeability : it should be possible for pedestrians and cyclists to move freely between all parts of a layout, both locally and on a wider scale. The disadvantage of a layout based entirely on cul-de-sacs and loops is that routes for pedestrians are indirect and boring and therefore pedestrian movement is discouraged. Furthermore, cul-de-sac layouts result in higher traffic levels on feeder roads, with a consequent loss of amenity to residents of those roads.

The residential area should be structured by a street system made up of spaces formed according to a clear, legible and articulated structure for the area, not from the technical demands of traffic. Layouts may, in part, be suggested by the topography, natural de-

Residential cul-de-sac layouts such as this should be avoided. Their typology offers little in terms of connectivity and will erode the village character.

A water edge - the basic premise of good place-making is to enhance existing natural features which provide a unique context for public activity and contribute in a positive way to the public realm.
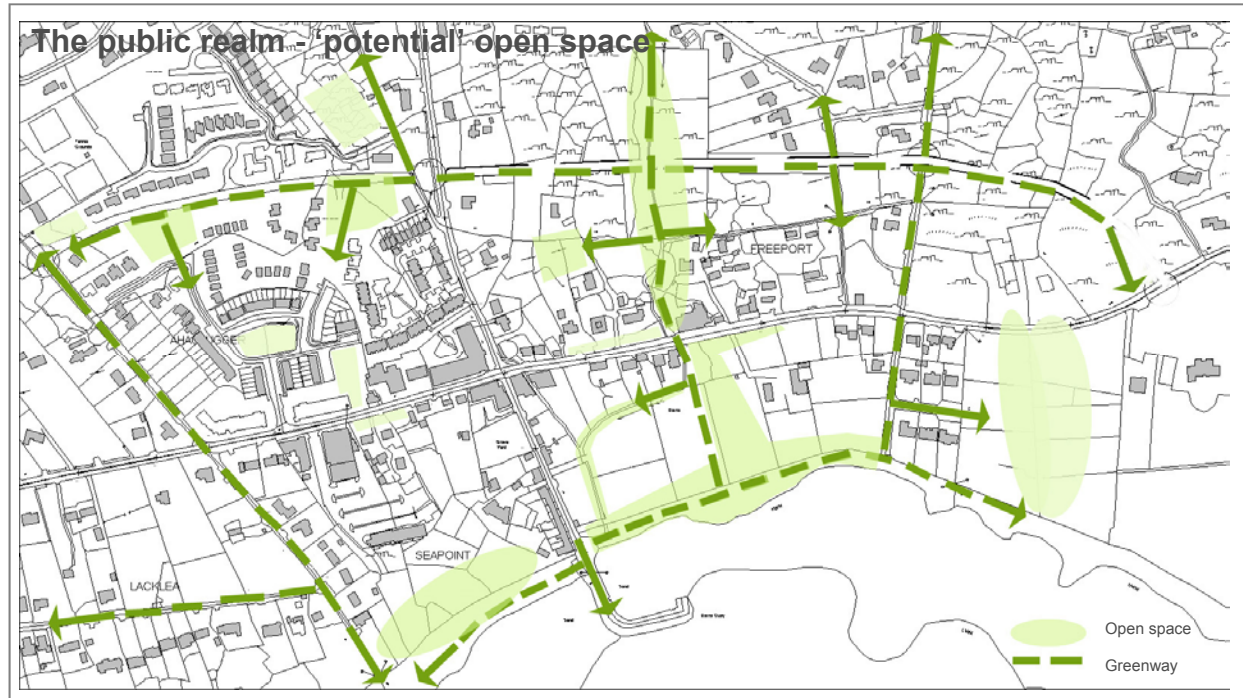

Natural resources such as rivers and streams provide a unique opportunity to provide an active amenity edge and ecological corridor.
Bringing these areas within the public domain will encourage participation

The built environment can be enhanced through 'soft landscape' interventions which encourage greater bio-diversity. Trees and planting provide a natural privacy buffer and create a strong sense of enclosure

Public pocket parks in built up areas and nature walks through mature woodlands are a vital ingredient in providing an integrated strategy for public open space networks. Active amenity corridors which are connected through stra-

'soft land-

'hard land-

The public realm - 'potential' open space

Open space

Greenway

A Route to Civic Pride - fostering a sense of

The sequence of approach is an important consideration with such schemes and it is imperative that the following considerations are integrated within a residential layout which fosters a strong sense of identity, high levels of surveillance without compromising privacy, pedestrian priority and safety.

The arrangement of dwellings provides the community with a high degree of passive and active surveillance of the street.

Measures to slow traffic on the road (shared surfaces / Home-zones), increasing the safety of pedestrians and children at play.

 To demarcate areas for parallel car-parking within a shared surface public realm which facilitates an increased rear garden by removing the car park to the front garden. This is an area which contributes or detracts in a significant way to the above issues.

A structured approach to open space providing a linked sequence for amenity walks and cycle network. Such a greenway presents an opportunity to develop a
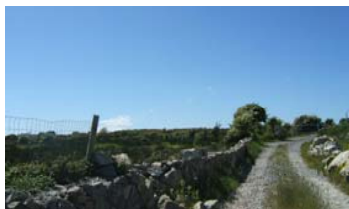
Rural fringe - appraisal

Dwellings which are sited to face due south, avail of passive solar gain and create a varying relationship with the road. Privacy conflicts can be over-come with landscap-
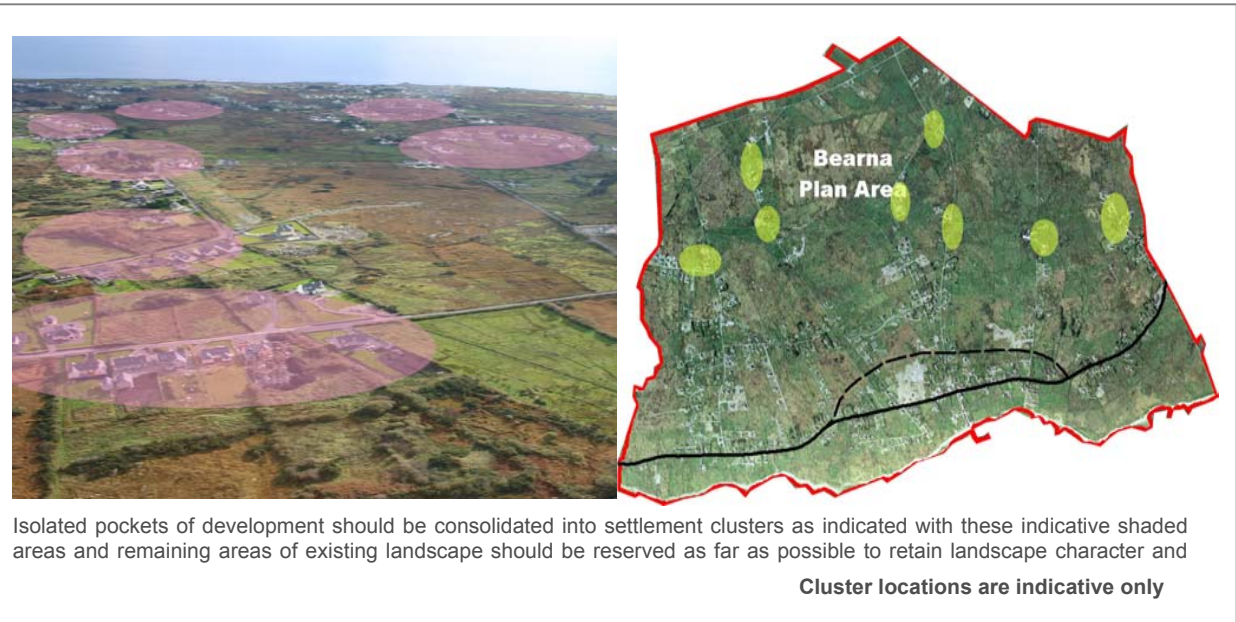
Vernacular dwellings illustrate a sensitive and low-impact under-standing of the sur-rounding landscape and context.

This grouping of ver-nacular farm-buildings are a timely bench-mark to our past tradi-tions, yet offer consid-erable scope for re-interpretation for mod-ern vernacular design.

Isolated pockets of development should be consolidated into settlement clusters as indicated with these indicative shaded areas and remaining areas of existing landscape should be reserved as far as possible to retain landscape character and

Cluster locations are indicative only

These country lanes and boreens are increasingly becoming eroded due to the nature of rural dwelling development. It is imperative that such natural edges are retained and any development should be sensitively integrated with these features. Trees, hedges and stone walls have important bio-diversity

Spatial analysis

A site survey examines the existing visual and physical character of a site. This should be represented by a sketch of the site with explanatory notes at not less than 1:500 and supplemented by photographs. This checklist identifies the key questions that should be addressed in evaluating the site characteristics.

Have you assessed the following ?;

Natural Features
        slopes (contour and heights)
        natural water bodies

Site Features
        buildings (including identification of protected structures)
        walls
        pavings
        vegetation (type and location)
        notable boundary features
Connections
        pathways and entrances to site
        existing circulation patterns across and around site
        existing or potential focus points within or near the site
        way-leaves and easement strips that cannot be built on
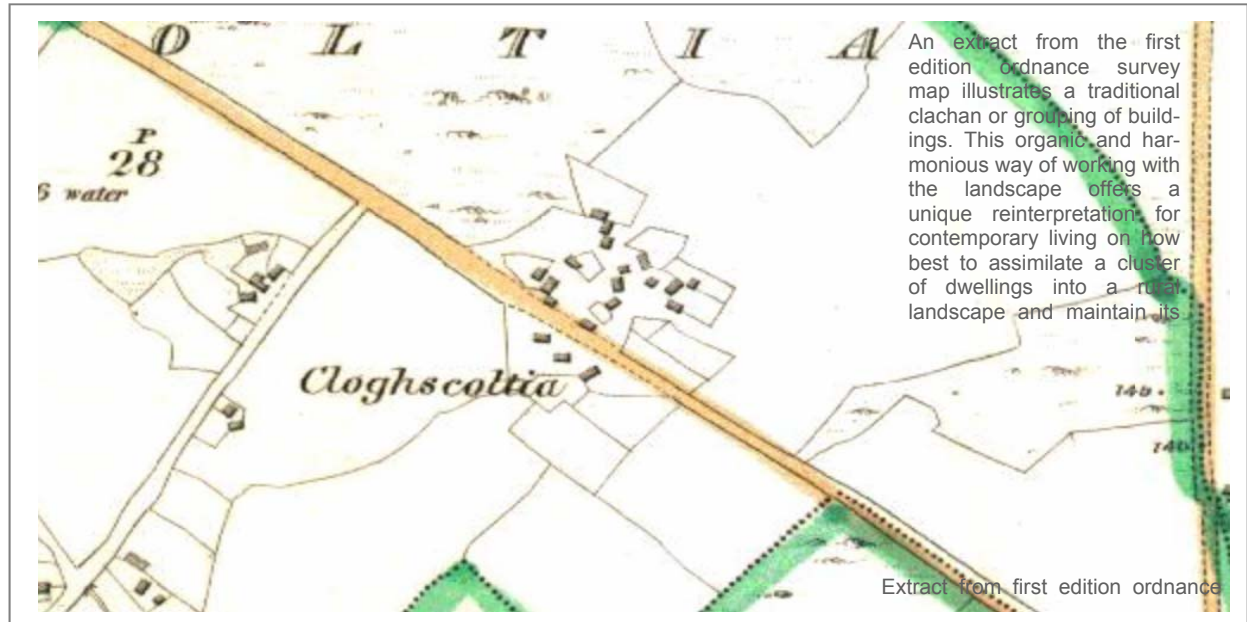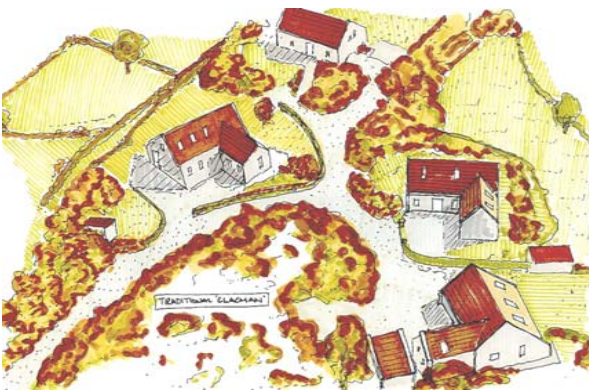**Microclimate**

The sustainable set-

The sustainable settlement is one which provides an appropriate balance of social, cultural and economic activity, and does so in an environmentally responsive manner, consistent with

A sensitive cluster of houses wrapping around a local outcrop feature - providing both a natural shelter and minimising the visual impact on this open landscape. **Place-**

Clustered residential layout which consolidates development and retains the landscape characteristics of the surrounding
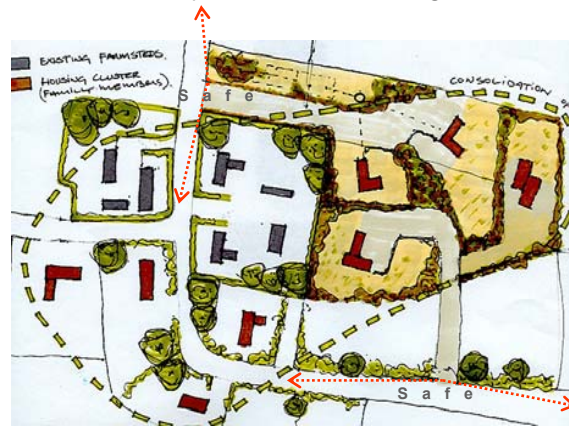

An extract from the first edition ordnance survey map illustrates a traditional clachan or grouping of buildings. This organic and harmonious way of working with the landscape offers a unique reinterpretation for contemporary living on how best to assimilate a cluster of dwellings into a rural landscape and maintain its
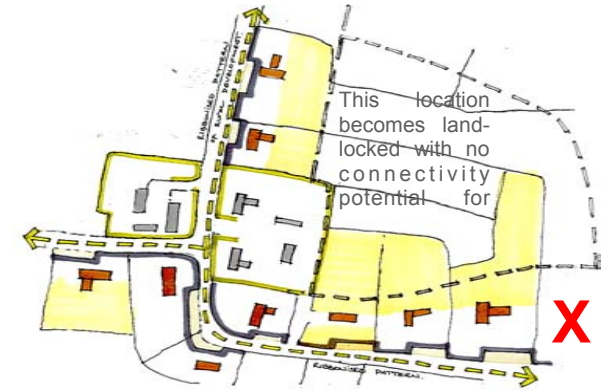
Extract from first edition ordnance

A future foot-

This illustration is an indicative example of how rural dwellings may assimilate into a rural landscape and respect historical settlement patterns which were organic in na-

The increased dependence on vehicles has created a road-side culture with houses sited in a linear or ribbonised pattern. This linear pattern increases the distance to local services which perpetuates the dependence on private

This location becomes land-locked with no connectivity potential for

Environmental considerations

Connectivity is to do with ensuring that new development does not impose unacceptable burdens on both natural and public resources, is located with easy access to public transport and facilities, is designed to last a long time to adapt to changing needs and to use resources efficiently in construction and use.

Sustainability, requirements will need to be addressed in the following respects:

- Development is laid out in such a way as to maximise proximity to facilities and public transport and to encourage walking and cycling instead of the use of cars.
- Development is laid out in such a way as to safeguard the existing ecology, improve the natural habitat, retain the landscape characteristics such as natural edges of field boundaries, hedgerows & stone walls.
- Buildings should be designed and constructed to minimise energy consumption,

This aerial image illustrates the nature of rural development along country roads. This linear expansion increases the demand on local services and the necessity for car dependency to reach local services.

Shop

Sports

School

Public trans-

Permeability - it should be possible for pedestrians and cyclists to move freely between all parts of a layout, both

The location of dwellings, facilities and public transport in close proximity encourages walking and cycling instead of car use

Avoid boundary treatments which do not consider long-term connectivity. They result in isolated and austere interventions on the built environment and are a visual scare on a rural land-

Rural

A sensitively designed dwelling cluster which retains the natural edge characteristics of field boundaries with private gardens having an aspect towards to front, will create a unique rural experience. A clear hierarchy provides a safe means of connectivity by

Built & Natural - a harmonious

The rural hinterland offers a unique perspective and contextual setting for the village of Bearna. The expansive landscape provides a contrasting quality to the spatial inten-

Stone-scapes
This photo illustrates the rich layering of granite stonewalls which provide a distinctive textural quality to the rural landscape.

A significant feature along the various country roads are its spatial qualities from an open landscape to a closed vista. These qualities vary along any

Surface water from large developments can overload small watercourses. An attenuation pond may be required. Provision should be made for rainwater harvesting for

This illustration demonstrates the potential of natural resources to contribute to the amenity and open space network.

Local Eco-systems

The two ecosystems - one created by nature, the other by human beings - have fundamental principles in common. Both types of eco-systems require much diversity to sustain themselves.

In both cases, the diversity develops organically over time, and the varied components are interdependent in complex ways.

In both types of ecosystems, many small and obscure components - each overlooked by superficial observation can be vital to the whole.

Due to this complex interdependence of components, both kinds of ecosystems are vulnerable and fragile, easily disrupted and

Architectural

Award winning residential development.
The scheme illustrates a contemporary architectural idiom, yet resonates with traditional materials such as rendered walls, timber windows and zinc metalwork. The design is a striking example of iconic architecture which can contribute to quality place –

Another example of award winning contemporary vernacular design which reinterprets the traditional idiom and sets a benchmark for future genera-

This residential scheme has been designed to create a strong spatial enclosure yet maintains high degrees of privacy through careful siting and

Award winning civic design - OPW architects

Design criteria

Legibility
New housing clusters should have a legible relationship to their surroundings. They should compliment and enhance adjacent buildings, routes and spaces.

Clusters should also be legible internally. They should have a hierarchy of distinctive spaces and buildings and provide orientation points. Users should feel inclined to use the network of routes and open spaces provided.

Continuity and enclosure
Housing clusters must balance a feeling of continuity with a sense of enclosure. Continuity assures that the development is well-integrated into its surroundings. It can be achieved by:

- Limiting the use and number of entrance roads
- Arranging buildings so as to address sur-

A sensitively scaled residential scheme adjacent to water context - this example illustrates a high intensity footprint yet maintains a scale reflective of the existing built form. The massing is articulated to give an undulating rhythm to the composition of forms which is unified by a common architec-

This award winning design illustrates the principle of massing and how individual elements are connected and arranged to create an enclosure which forms a courtyard which

An example of massing at a domestic scale which creates a sensitive relationship with the road edge and the site. The single storey addresses the road to minimise the visual impact while the two storey

A linear horizontal massing is utilised to give a human scale presence to this courtyard open space. The transparent façade creates an inviting presence and encourages passive surveil-

This award winning scheme illustrates the importance of proportion and the articulation of punctuated elements to create a rhythmic fenestration, avoiding an austere monolithic elevation. The façade curves to address the landscape

Perimeter block development offers a balance on achieving density with an appropriate scale. This low-scale yet intensive typology contributes to the quality of the public realm by defining a strong edge. Requirements such as car-parking need careful consideration in such layout designs to avoid a 'tarmac desert' with an isolated bulky building.
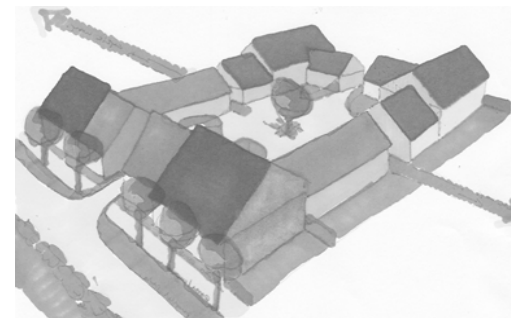
Massing , Scale & Diver-

Massing - refers to the combined effect of form and volume. Particular attention should be paid to break down the appearance of large masses. Breaking down massing is important in creating a sense of human scale and contextual continuity. Larger massing should be associated with strategic locations, such as, at an entrance, a corner or a public open space.

Scale - the appropriate height for a new development depends on the surrounding buildings and spaces. Proposed heights should generally reflect the heights of contextual buildings. When proposing a building of a higher scale than the surrounding context, the following issues must be addressed ;-

- The degree of overshadowing
- The degree of overlooking and resulting loss of privacy

These sketches advocate low scale / intensive buildings which define an intimate relationship with street, open space and the pedestrian. Large isolated bulky buildings with a sea of sur-

The unifying treatment of these stone boundary walls creates a layered tapestry between the landscape and associated buildings. Utilising the indigenous stone reinforces the character which

Buildings define a strong edge definition with the existing road edge. The white render finish creates a strong sculptural quality and frames the association between built form and

Buildings integrated with surrounding landscape. This sensitive relationship evolves with the changing nature of the landscape over a long period of time. It is this long-term vision which best characterises

Retaining stonewall feature - hard

Retaining treescape - soft

Natural edges - form a rich tapestry of both natural and man-made interven-

Careful consideration and sensitivity is needed for native planting, which provide ' green lungs ' and contribute to the biodiversity for the overall development of the area and context.

Trees & Hedgerows
- provide an instant scale, visual screening and natural edge to any built environment and soften the visual impact of a man-made built environment. They also provide an important role in contributing to the micro climate of the site in terms of solar shade and as a wind break.

Stone walls -
- are a visual reference to the rich tapestry of cultural evolution and craft which are unique to a place and contribute in a visual way the character of the locale.

Modern roof materials provide opportunities for low pitch roof constructions where there are sensitive views to be maintained. An objective consideration of contemporary design allows for such strategies to pre-

domestic design -
Sean Dockry Architect

A harmonious dialogue between old and new. The existing house is restored with a modern ancillary extension which complement each other through a refined

domestic design -
Aonghus McGann

Natural stone with untreated timber cladding illustrate a contemporary design palette

A successful interpretation of local materials which assimilate the existing road edge stone walls. This design has carefully considered its context with a design that is anchored to its site and has created an important association and presence

domestic design -
Richard Murphy Architects

Robustness & refinement - doing

An important and somewhat visible element which makes up the fabric of the built environment is the attention to external finishes, materials and their details.

The choice of materials and the refinement of the detail play an integral part in creating a sense of place and identity. While details are at the micro scale, they are none the less vital to the success of the architectural quality, and illustrate an important aspect of the local context. Robust details such as plastered verges are a register of the exposure to prevailing winds along coastal areas, while the local granite gives a place a connection with its geology. When considering external finishes it is impera-

Award winning domestic design -
Source - Architecture + Detail

Orientation and solar panels provide an active technology solution for the innovative residential 'BedZed' carbon neutral design.

Orientation allows for a passive design solution while projecting gables maximise privacy conflicts in this successful housing cluster.

The strategy to anchor this design successfully into an existing unique landscape contributes to the sense of place and is a benchmark for low impact siting and landscaping.

Utilising the existing contours, stone walls and deciduous trees enhances the microclimate for this dwelling while maximising privacy and limiting visual impact within this natural landscape context.

The first passive solar design dwelling in the west of Ireland. The house is sited to a south aspect, has high levels of insulation, heat recovery, solar panels and no fossil-fuel heating source.

This house is oriented to a south aspect to maximise passive solar gain with outbuildings providing enclosure and a wind break. These vernacular principles provide a register on integrating with the rural landscape and illustrate how low-impact

Integrating sustainable design

When developing a vision for a place there is also a need to create a strong image. Architecture is critical to achieving such a memorable place through its considered contextual approach in determining an identity to place.

This may be achieved through various typologies, spatial compositions of massing and materials to orientation and the need for privacy. It is through a complexity of these issues that standard generic layouts and designs for any place can be avoided.

A high quality design led approach should be challenging conventional and traditional wisdoms which avoid pastiche yet carry an echo of the past into the future with a contemporary vernacular idiom.

The necessity for energy conservation should also be central to any design as is the need for flexibility through life-time design criteria which cater for a varied population demographic and long-term sustainable living

The architectural language is consistent, with variation found in

Award winning domestic design -
Micheal Kelly Architect