



Kildare County Council - Housing Unit

DESIGN STATEMENT

**Proposed 39-unit Social and Affordable Housing Development at
Ardclough Rd., Celbridge, Co Kildare**

**Planning & Development Regulations, 2001
Part 10 Planning Application Process**



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INTRODUCTION

This Report has been prepared to describe the design rationale behind the proposal for a 39 units Social and Affordable Housing Scheme and works to the Pausdeen Bridge at Ardclough Road, Celbridge, Co. Kildare, which is to be submitted to An Bord Pleanála.

It follows the 12 points set out on the Urban Design Manual from the Department of Environment, Heritage and Local Government, in order to demonstrate compliance with such, as well as with the current Kildare County Development Plan.

This stand-alone scheme is located at the south end of Celbridge, on an area belonging to the townland of Newtown, Parish of Donaghcumper, which is undergoing recent new developments for housing schemes.

The subject development proposal is been brought forward by the Kildare County Council in conjunction with the Department of Housing, Local Government and Heritage, under 'Rebuilding Ireland – Action Plan for Housing and Homelessness' program, in order to carry out a 39 unit housing development on Ardclough Road, Celbridge, on a site of c. 1.4 hectares and close to a pronounced bend of the river Liffey.

The unit mix of the proposed 39 dwellings, includes single and 2 storey terraced and detached houses, 3 storey apartments and duplex apartments buildings, with landscaped public open spaces, with car and bicycle parking provisions and a boundary treatment proposal that takes into account its proximity to the Liffey as well as the hedges and tree rows existing on site, incorporating them into the development in a meaningful way and although rather secluded by the constraints of the site, it offers to Pausdeen Road a house design sympathetic with its surrounding, and thus able to blend in with it.

The application includes for improvement works to the Pausdeen Bridge also, to widen the bridge for a new footpath, to improve pedestrian safety along the route to Celbridge.

The Design Team for this proposal is led by Vincent Hannon Architects, supported by Tobin Consulting Engineers, Delap & Waller MEP Building Services Engineers, Tom McNamara & Partners Quantity Surveyors, Jensen Hughes Fire Consultants and Cunnane Stratton Reynolds Landscape Architects.

The attached Planning Application demonstrates that the Proposal addresses the requirements from the Department on housing design and also from the Kildare County Development Plan.

1. CONTEXT

How does the development respond to its surroundings?

Regional and Local Context

Celbridge, on the banks of the Liffey and located in the Metropolitan area of Dublin, is despite starting developing as a settlement during c.14th century, a vibrant and expanding town located some 22Kms West of Dublin, so it has developed strong economic and social ties to it, which has meant the town has grown rapidly over the past six decades with more modern growth and development being of a suburban form extending outwards from the historic town core. In more recent times, development has taken place in the south of the town and towards the Ardclough Road, where the subject site is located. Due to the location and setting of the Ardclough Road site, the proposed scheme is envisaged as part of this bigger picture.

The site of the proposed development is located at some proximity to the town centre, on the south side of the town on the Ardclough Road. The site occupies circa 1.4Ha of a larger parcel of lands of a total of 6.27Ha, comprising agricultural land along the banks of the river Liffey and close to the Pausdeen Stream and an old stone bridge over it, which lends its name to that stretch of Ardclough Road, which is officially called "Pausdeen Road".

Despite its relative proximity to the town centre (1.48kms), there are no public bus lines servicing the area at present. The existing house on the site is to be demolished as part of the proposed works.



General View of Celbridge's south end, indicating location of total subject site (in blue).



Closer view of subject site (in red) and overall site owned by KCC (in blue) (image includes OS Map and satellite view).

Natural Context



View across the site from the North-West looking to the South-East.

Flood Risk

Besides its urban context mentioned above, the fact that the subject site is located close to the banks of the Liffey (on two noticeable bends) imposes a major condition to be considered when proposing a housing development: Flooding.

In order to address such issue, a Flood Risk Assessment was commissioned to Tobin Consulting Engineers during October 2021 so as to inform the design of the proposal safely. The Report of this Assessment forms part of this Planning Application.

The said Assessment identified that there was only 1 event occurred on 1954 that could have affected the subject site (in red above), although it could not be confirmed. All the other registered results were “determined to be sufficient distance away that they would not affect the proposed site”.

The overall layout, then, was designed taking account of such unlikely possibility of flooding and incorporated it in the proposal, leaving the main Public Open Space to receive, if ever, any such event without compromising any residential unit.

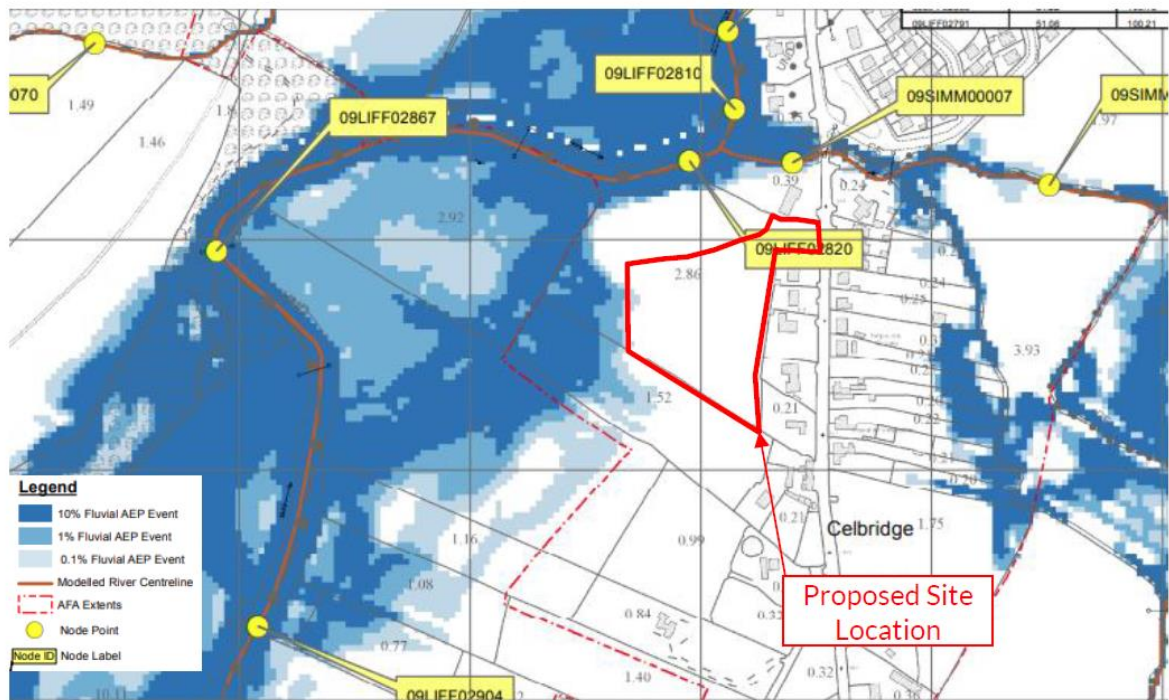


Figure 2-2: Extract from CFRAM Mapping

National Catchment Flood Risk Assessment and Management Study map, identifying predicted fluvial flood extents for 100 and 1000 years return periods, showing the site barely affected by any possible flood.

In terms of Drainage, the proposed scheme is to have a self-contained storm water drainage system designed by specialists. The site drainage will include measures in accordance with the requirements of SuDS to limit runoff from the development to greenfield runoff rates.



The Liffey at its closest point to the subject site, looking down-river (image taken on September 2021)

Ecology

Another item which informs the design of the Proposal is Ecology, and how the scheme minimises its impact on the environment among which it is proposed to be located.

To that end and due to its relative proximity to the Rye Water Valley/Carton Special Area of Conservation (SAC) Natura 2000 site (5.69kms), Ecological studies and assessments were completed by Planning Consultancy Services.

From those studies and assessments, the following reports are included in the Planning package:

1. Ecological Impact Assessment Report.
2. Appropriate Assessment Screening Report.
3. Report on Requirement for Environmental Impact Assessment Screening.
4. Natura Impact Statement (NIS).
5. Preliminary Construction Environmental Waste Management Plan.

As a result of the above, the **Ecology Report** concluded that the “proposed development will not result in any significant effects on any of the flora and fauna of the existing environment and no effects on receptors of international, national, county or local value”, provided that the proposal is constructed in accordance with same report.

The **AA Screening Report** concluded that “no significant impact/effects are expected on the qualifying interests of Conservation objectives of the Rye Water Valley/Carton SAC as a result of the development in question”.

The Report on **Requirement for Environmental Impact Assessment Screening** concludes that the Project is not of a class of development in Schedule 5, Parts 1 & 2 and, accordingly, it does not require mandatory EIA and that it is not “sub-threshold development” and no EIA screening is required in this case.

The **Natura Impact Statement**, subject to conditions indicated on same report, concluded that is not expected that the proposed development will give rise to any direct, indirect or secondary impacts on the Rye Water Valley/Carton SAC.

The Preliminary Plan for **Waste Management** indicate the requirements that are to be followed during construction, which will be implemented when due, as required.

Existing Trees

Due to the presence of existing rows of trees dividing fields and properties and to determine the best approach to avoid unnecessary damage and to include them on the design as much as practicably possible, a Tree Survey and an Arborist Report was carried out by Cunnane Stratton Reynolds across the 6.27Ha area. The resulting Report is included in the Planning Pack.

The extent of the Proposal required for some existing hedgerows and trees to be removed, which are detailed in the Report section 3.6, so compensatory measures were included, as described on the said Report.

A number of hedgerow trees within the development footprint itself are to remain unaffected and will be retained as part of the proposed estate; these are also detailed in the report and indicated on the site layout drawings.

Supplementary landscaping & select planting of the residual green areas form part of the proposed development along with adoption of key objectives of the new 'All-Ireland Pollinator Plan 2021-2025.'

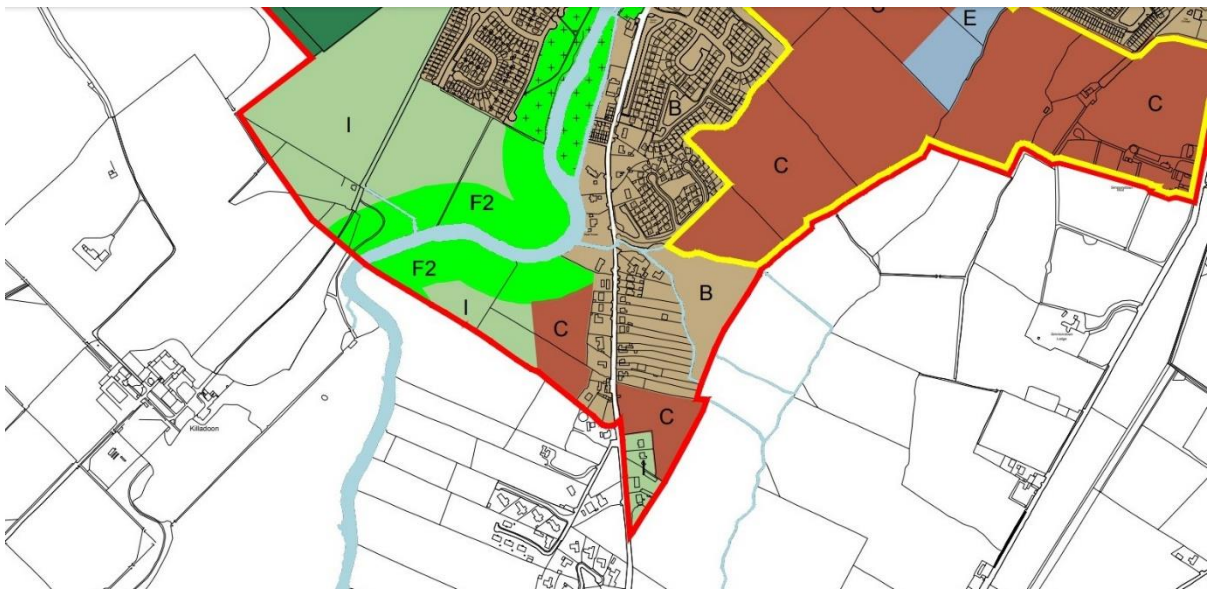


Panoramic view from the site's South-East corner towards the existing trees and hedgerows along the South boundary.

Planning & Built Context

Planning: Local Area Plan

The current Local Area Plan for Celbridge, which operates within the context of the Kildare County Development Plan 2017-2023 defines the subject site in particular as Zone **C**-New Residential- (as can be seen on the image below) which is "to provide new residential development", thus making the proposal consistent with it in terms of land use.



Fragment of the current Celbridge's Local Area Plan included in the Kildare County Development Plan 2017-2023 showing the relevant Zoning for the site

Built Context

As mentioned previously, the site is located at Pausdeen Road, which is a stretch of the Ardclough Road past Pausdeen Bridge to the South-West of Celbridge. That road has concrete footpaths only on the west side before the bridge coming from Celbridge, only on the East side to the South of it, with a temporary footpath with bollards at the bridge itself.

There is an existing dwelling on the site, which is derelict and in poor condition (see drawing 210303-03-002.1) The house is uninhabitable and needs to be demolished to provide safe access junction to site.

It is to be noted that the existing stone bridge is to be extended to allow for a new footpath and new parapet stone walls on its west side as part of this proposal.



Existing Pausdeen Bridge with the temporary footpath and bollards looking towards Celbridge (to the North). See drawing 210303-03-123 for detail of the proposed works to the bridge

The area, apart from more established houses and buildings from the 18th and 19th centuries spotted along the road to Ardclough, has cater for some more recent residential private developments for the last 20 to 30 years which have now been consolidated and matured.

Local visual context



View of Ardclough Rd. north of Pausdeen Bridge, looking towards Celbridge (to the North)



View towards Pausdeen Bridge and the site, towards Ardclough, looking also to existing Chelmsford housing development



View of Ardclough Rd. close to site entrance, looking towards Celbridge



View of Ardclough Rd. in front of site entrance, looking towards Pausdeen Bridge and Celbridge



View of Ardclough Rd. at the south end of Pausdeen Bridge (to South), looking towards the site entrance and Ardclough.



View of Pausdeen Bridge, looking South towards Ardclough



Outside view of existing site entrance



Inside view of site entrance, looking East to the existing houses across Ardclough Rd. / Pausdeen Rd.

The existing housing and built context consist mostly of residential 1 to 2 storey high constructions, with a low to medium density and a variety of designs, with the existing houses directly in front of the site including dormer and Mansard windows.

More recently, there is a new increase at Ardclough Road for housing schemes, as indicated above, this time at the South side of Pausdeen Bridge, with a 58 units housing scheme being built at the other side of the road to the south of the site by Lagan Homes (ABP Reference N°PL09.305886), which has recently been bought by Kildare County Council.

It is important to mention that the site has a rather singular shape, with the majority of the site to the rear, concealed from Ardclough Road / Pausdeen Road, and only an appendix of it exposed to that main road (site frontage to Ardclough Road: 34.4m).

Archaeology

Although it could not be envisaged beforehand that archaeology would represent an issue for the Proposal, an Archaeological Impact Assessment was commissioned to and carried out by Archer Heritage Planning Ltd. and their resulting Report accompanies the planning pack.

That Report finds that “no potential archaeological features were recorded within the subject site” and recommends that a geophysical survey should be carried out.

Such geophysical survey was done and was the subject of a Report dated 25.02.2022 by same Archer Heritage, which found that most located anomalies on site “relate to modern objects and/or geology registered by the device” used and that “test excavations should be carried out across the site to determine the nature of the geophysical findings and whether archaeological features exist that have not left a magnetic trace”. Therefore, the building process of the subject proposed development will include such recommendations.

Proposal

The Proposal comprises 1 four bed house, 13 three bed houses, 4 three bed duplexes, 3 two bed apartments, 6 two bed duplexes, 4 one bed apartments and 8 one bed houses, with a total of 39 units.

In view of the above and the context described previously, the proposal organises the required units in 3 ways, in response to the opportunities/constraints presented by the site:

- *Entrance Units.*
- *Peripheral Terraces.*
- *Central Building’s Core.*

All of which being connected by the green landscaped Public Open Spaces, to unite the entire Proposal from the Road right down to the Liffey, at the time for the proposal to be finished (if approved) and after, so as to fulfil the aim of the Celbridge’s Local Area Plan and to take the necessary precautions in case of flooding (see point above), as shown on the image below:



Conceptual diagram of key urban and context proposals of the Scheme, showing the intended landscape link

The proposed density is relatively similar to the neighbouring housing developments, in keeping with previous similar developments.

The following image, shows the final layout of the Proposal where the 3 ways mentioned above can be seen, such as:

- **Entrance Units:**
Units 01 and 02, which are related to the existing type of construction of its surroundings.
- **Peripheral Terraces:**
Units 03 to 25, which, being parallel to the East and South boundaries, are able to use the longest straight lines of the site, in order to free the centre, while considering a design which, although similar to the existing house at Ardclough Road, is a more contemporary interpretation of its context.
- **Central Building's Core:**
Units 026 to 039, which, due to its distance from the main Road, allow an increased height of the central buildings, designed to be the core of the development. Their increased height could be gazed at and acknowledged from Ardclough Road, but they would be at such distance that they would not interrupt nor distort the existing streetscape.

This core considers own entrance and own ground floor private open space for each unit, regardless it they are at ground or first floor level.



Proposal's Site Layout Plan

The details for the design of each residential unit type will be addressed at “12. Detailed Design” chapter.

2. CONNECTIONS

How well connected is the new neighbourhood?

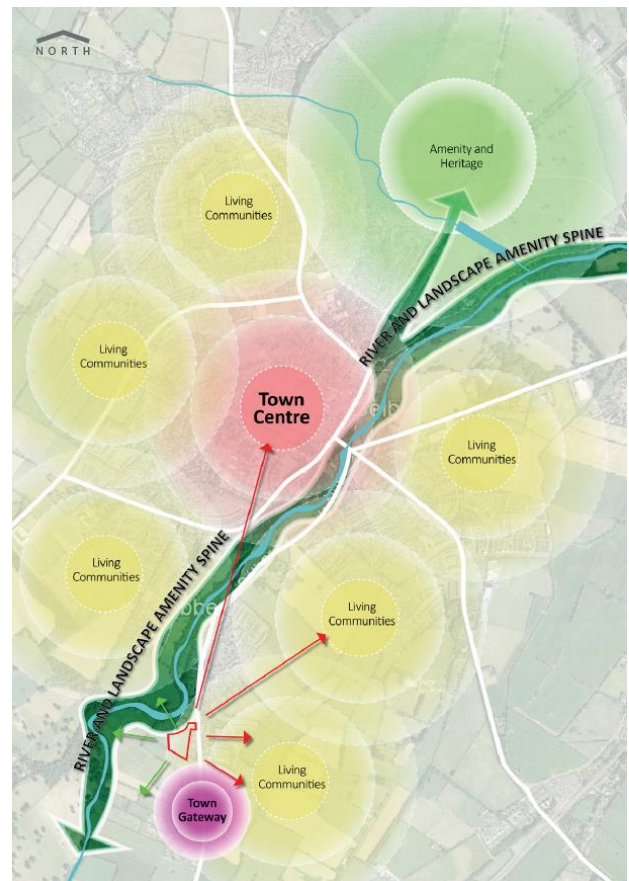
As indicated previously, Celbridge is located in the Dublin Metropolitan Area and so, it maintains strong economic and social links with the capital, meaning that the town has grown rapidly over the past six decades with more modern growth and development being of a suburban nature extending outwards from its historic core.

The site’s location, at Celbridge’s southern gateway, is recognised as important and therefore the proposed scheme should be acknowledged as having a role to play in linking communities and landscape within Celbridge. Its location means that it is within walking proximity to the town centre (approximately 8-10 mins walk/1.5km) and sits adjacent to the River Liffey, an important natural and environmental asset and potential recreational linkage to/from the town and beyond.

The proposal tries to match the site’s opportunities with a strong, cohesive and robust placemaking response which:

- Ensures inclusiveness has been ingrained in the design - facilitating integration at every level, between landscape, public realm and the new community.
- Provide a new neighbourhood that integrates seamlessly with the existing settlement of the Ardclough Road area, while considering linkages to the wider Celbridge area.
- Provide new homes in a robust and connected landscape and public realm that connects with the existing settlement along Ardclough Road; and
- Provides a mix of new homes of varying typologies to provide for multi-generational needs.

Diagram showing connectivity of the Proposal to Celbridge



Connectivity with the landscape

Celbridge has long been associated with the wider landscape setting within which the town sits. It is perhaps reasonable to assume that the landscape has influenced and shaped the growth and development of the town.

Characterised by natural, semi-natural, formal and informal landscape settings, features and destinations are notable around Celbridge. Parkland areas of Castledown Demesne, St. Wolstan's Demesne and Donaghcumper Demesne dominate the northern and eastern edges of the town.

Within the town itself, open spaces and landscape features are more varied, incidental in nature. The river Liffey, traversing North-East to South-West is a major recreation, amenity and environmental and biodiversity asset of the town and one that connects the subject site with the town centre.

In addition to the parklands areas, as mentioned above, the river Liffey provides an important opportunity for strategic landscape, environmental and recreational links. Connecting local and wider open space networks, as identified for example in the "Towards a Liffey Valley Park" (published 2006), the role and opportunities of the river are fully recognised in the proposal. The opportunity to stitch, extend and enhance the landscape, amenity and linkage offerings along the Liffey are recognised as an important aspect of the placemaking and design response for the Ardclough Road scheme. Stitching together and "bringing-in" the river and landscape into the site is aimed to offer the opportunity for a better-connected public realm between living communities, landscape and the town as a whole.



Panoramic view of the existing site condition from the Liffey (at NW, to the right), including lands within blue and red lines, towards its entrance (East, to the left of the photograph).



Bird's eye artist's impression of the Proposal looking towards the West (Liffey).

3. INCLUSIVITY

How easily can people use and access the development?

The proposal has been designed to be easy to read, be fully accessible to all its future residents, in compliance with current Building Regulations, and with internal layouts that allow universal use, as well as endowed with meaningful public amenity areas.

Detailing to streets and footpaths as well as landscaping are aimed to provide the maximum freedom of movement as possible and access to impaired and not impaired persons, including lower kerbs and level crossings at all streets, footpaths and corners.

Houses have been designed, although not fully UD sized, to cater for people with a number of abilities and disabilities.



Artist's impression of the Scheme's entrance from Ardclough / Pausdeen Road, showing ditched disabled access footpaths (subject to Traffic audit, Planning Permission and compliance to current legislation).

Inclusivity is also achieved on the wide range of unit types included on the scheme, from 1-bedroom single storey houses and 1-bedroom apartments to up a 4-bedroom house with a generous back garden and up to single storey and duplex apartments, catering for varied types of households, occupiers, ages and stages in life, considering families with children and single persons.

The proposed housing mix is as follows:

1B	<i>Houses (22)</i>	<i>8</i>	<i>Apartments (17)</i>	<i>Single storey</i>	<i>7</i>
3B		<i>13</i>		<i>Duplex</i>	<i>10</i>
4B		<i>1</i>			

The units and rooms sizes were reviewed and audited by the Kildare County Council prior to submission to comply with KCC Development Plan as well as current DoHLGH housing guidelines, with 3 house types (A, B2 & D2) with bathrooms fully sized for wheelchair access at Ground Floor level, in line with Part M TGD.

In terms of inclusivity on Public Open Spaces, the Proposal includes 2 main open space areas, one as a sort of general triangular courtyard (OS02) and a main public open space at the end of the development (OS01), towards the Liffey, both of which are to be fully accessible, secure, passively supervised from the housing units and also each with its own distinctive character.

The above same features are shared by the smaller green areas, so as to render fully occupiable.



Artist's impression of the proposed development, looking from the South-Eastern corner towards the 2 main Public Open Space area

The public lighting layout has been also designed so as to avoid dark corners, passages or nooks, in order to increase security for the future residents.

There are 2 Home Zones where front gardens are visually joined into the internal street, aiming to create a notion of place and ownership, besides of making meandering about easier.

And, as shown above, despite having a minimal frontage to Ardclough/Pausdeen Road, the scheme has been designed to be fully integrated to the existing community, with a visual relation through design (at the 2 front units and internally as well) and with an open and inviting entrance.

4. VARIETY

How does the development promote a good mix of activities?

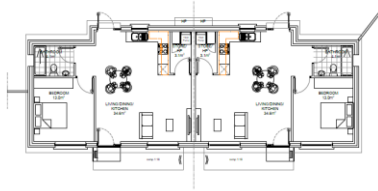
This residential proposal aims to provide for various activities and users. On one hand, it achieves Variety mainly through the diversity of housing unit types and sizes, which looks after most stages in the resident's lifetime, allowing them to choose on different units for different needs, affording the opportunity to create a more diverse and vibrant community.

Housing Units

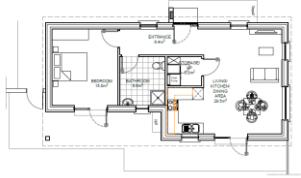
House types



D1



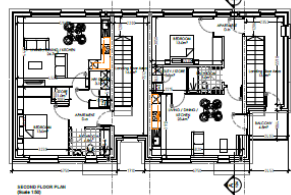
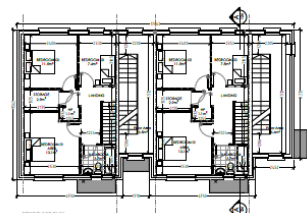
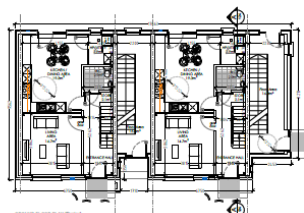
D2



Apartment types (Duplexes)



DX2
(3B Duplex Apartment +
1B Apartment on top)



On the other hand, the scheme also addresses Variety through landscape, as indicated in the previous point, whereby the public open spaces are designed to afford different ways to enjoy the green areas: a more intimate area, a more public area or a more exposed-to-nature setting, depending which one is used. Anyone could go from the smaller ones closer to the units (OS03 & OS04) or to the courtyard-like larger public open space right in the middle of the scheme (OS02), or down to the main public open space to the rear of the development (OS01), where a more transparent railing has been especially designed to accommodate a view that could extend even to the Liffey.



View of central triangular court-like public open space (OS02), looking toward the East from its West end.

5. EFFICIENCY

How does the development make appropriate use of resources, including land?

As a standard, the units proposed for this site will be energy-efficient in line with current legislation, and, as indicated previously, the unit sizes can cater for different stages in the life for its occupiers, making the trading up or down in required dwelling types possible.

Due to the existing conditions of the site (limited entrance width, larger portion of the site behind and proximity to the river) the proposed scheme makes the most of it as, together with a density in line with similar more recent developments along Ardclough Road, it aligns its units to the South and the East boundaries, with a twofold intention:

- 1) Free up, as much as possible, the West and North boundaries, so that if ever a flood reaches levels beyond the estimate, it would be absorbed by its main Public Open Space area at the end of it, aiming to assume that possibility as a feature rather than a problem.
- 2) Increase the level of sunlight availability as much as possible, with most units' rear elevation (and bedrooms) being South-facing.



Artist impression of the proposal from the North-West looking eastwards, showing how it efficiently and purposely are units organised on the site.

Refuse and recycling facilities are an important factor for the detailed design of the proposal, as the Kildare County Development Plan requires provision of 4 bins spaces, in order to allow for different types of recycling, number which is increased from the usual 3 normally required. To meet such requirement, the layout organises its landscape strips, sometime in front of the units and sometimes on the side or in boundary walls, always integrated into the design of each unit, so as to be efficient, effective and contributing to accentuate the Architectural proposal.



With the above, the scheme efficiently addresses its requirements and its constraints, while providing its future residents with comfortable units and a layout that would allow them to appreciate its setting.

6. DISTINCTIVENESS

How does the proposal create a sense of place?

Architecturally, the proposal is based on 3 existing features of the site (akin to the ones mentioned at the previous point) which provide the scheme with a distinct sense of place, whether within the proposed development itself or related to its context:

- a) The typology of the surrounding area.
- b) How secluded the site is.
- c) The proximity of the river Liffey.

These three features/conditions have informed and shaped how the Architectural proposal addresses the Brief and the setting in which that Brief is to take place (subject to Planning Permission, of course). Therefore, most of the features already mentioned above are, directly or indirectly, related to these 3 features and they manifest themselves in the scheme as follows:

A) *Typology:*

Although having a limited frontage, compared to its overall size, the scheme offers to Pausdeen Road a more contemporary approach to the typology already existing in its surroundings, so as to create a relation with it, without antagonising.



Existing houses facing the site entrance at the other side of Pausdeen Road.



Proposed 2 units at each side of the entrance to the scheme at Pausdeen Road

B) *Seclusion from the road and openness to the river:*

The proposal instead of compensating for how secluded the site is, celebrates it with its Court-type Public Open Space (OS02), which is the second largest of the development, making it one of its main focal points and one that allows a more intimate setting to appreciate it.



Central court-like public open space, looking South



Central court public open space looking West



View from "Courtyard" public open space towards single storey one-bedroom units



View from "Courtyard" public open space towards Type A 4-bedroom corner unit

The proposed location of the main Public Open Space and the treatment of its boundaries is a response to the idea of visually bringing in the view to the Liffey to the development, as an asset rather than as a liability, avoiding negating its influence through design.

The higher buildings, the 3 storey apartments, are afforded, as much as possible, a view to the river and its banks and the transparency of the railings are direct consequence of the aim of making such relationship a feature.



View from most NW corner of the main public open space towards the SE, showing transparent treatment to include the view to the Liffey



Inside view from the NW corner of the main public open space looking towards the SE, showing the central and rear 3 storey buildings



View from the other side of the North boundary, showing transparent treatment and first 3 storey apartment buildings from entrance



View from the other side of the North boundary, showing 3 storey buildings and main rear public open space

7. LAYOUT

How does the proposal create people friendly streets and spaces?

Based on the same 3 principles mentioned at the previous point (Distinctiveness), the layout is the frame within which the proposed sense of place occurs, where front units are organised to match the existing at Pausdeen Road, lower units are located to the rear of the existing houses at same road and higher units to the back of the site, so not to detract from the existing streetscape, while creating a character of their own for the proposal.

The layout, whilst open in aspect, has been designed to achieve a careful balance between infrastructural footprint and integration with existing green area. Distance from unit façades (building line) to the adjoining houses along the Ardclough Rd. are at least 22m.

With secure yet permeable and well illuminated pedestrian routes throughout the scheme (as it will be explained in the next point), and internal roads designed and treated to create communities rather than just accesses and having the end-of-terrace 3-bedroom houses with dual aspect providing the necessary passive supervision on all sides (therefore, no blank gables).



Site Plan Layout showing Pedestrian and vehicular routes

PROPOSED SITE LAYOUT
(Scale 1:500)

The road design is kept simple and efficient, in an effort to reduce them as much as possible in favour of pedestrian routes (including 2 Home-Zones), without losing its efficacy.

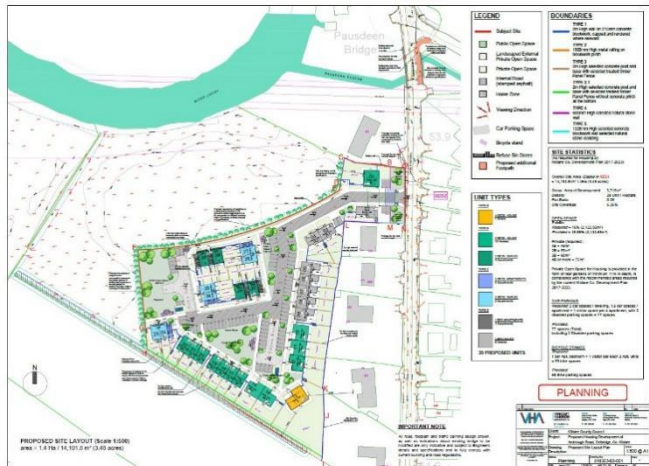
Same was applied to cul-de-sacs, which are being meaningfully reduced to the minimum necessary and helping in enhancing the residential court public open space and thus helping to consolidate the idea of a distinct place.



Overall view from above, showing the relation between units, green areas, roads and footpaths



Cul-de-Sacs contribute to create a distinct living space



General Site Plan

In terms of the layout, there has been an effort to provide each housing unit with its own entrance (meaning no shared access) and own private amenity space as much as possible, as it will be explained in more detail in point 10, with even the top apartments (1 and 2 beds) availing to their own private back garden, which was a central tenet of the whole proposal and one its main design aims.

Similarly, and as indicated previously, many of the units have their refuse bins located at the own back garden and for the ones that was not possible to achieve that, they are integrated into the front design, so as to be a contribution to such design instead of a nuisance.



View of rear of 3 storey apartment building to the West of the proposed development, showing private amenity space for all apartments (See Point 10. Privacy & Amenity).

The public realm on this proposal consists of Public Open Spaces, Roads, Home-Zones, Parking Areas and Footpaths, all of which have been designed to benefit from permanent passive supervision from the residential units along their extension, avoiding concealed or secluded areas (not to be confused with the concept mentioned in point 6 above, which is of a completely different nature), considering the necessary public lighting to make them safe for their future users.



Public Realm Site Plan, showing Public Open Space areas location and passive supervision to them from all the residential units

(Scale 1:500)



Private areas are designed to be clear and distinguishable from Public Areas, in a way to avoid potential issues among future residents.

Landscape has been designed to follow that concept so as to be easily distinguishable, with the view of making front private landscaping to act as a buffer between both public and private areas.

The roads design (whether the main road or the Home-Zones) has been approached following the landscape design, in a way to make it practical, minimal, efficient and meaningful, with all footpaths to be well passively supervised and well illuminated.



Fragment of the Site Plan, showing Landscape including public landscaping and private landscaping, to buffer the approach to individual units

From the particular shape of the subject site, the proposal has been designed in such a way so as to not lend itself to be used as a thoroughfare by any standards, therefore, internal roads layout facilitate slow movement and attention to pedestrians, including that any possible area to be used for a future children's playground would reasonable distanced from any street.



Artist impression of rear main Public Open Space (OS01) viewed from the South, where a children's playground could be located

9. ADAPTABILITY

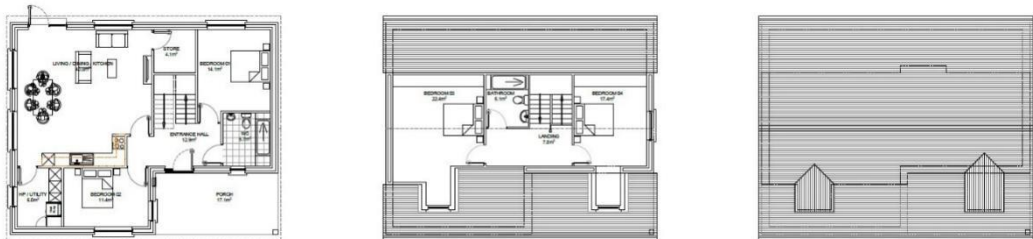
How will the buildings cope with change?

As already indicated in previous chapters, all units (houses and apartments) have been designed to cater for different stages in life (from single living, families and, eventually, special needs), providing the potential occupants with an array of units, depending on their particular needs and situation.

All units will be energy efficient and reasonably equipped for the challenges that could be anticipated from climate change, with areas that allow for special need users and some units designed to eventually meet universal design standards (see point 3 above).

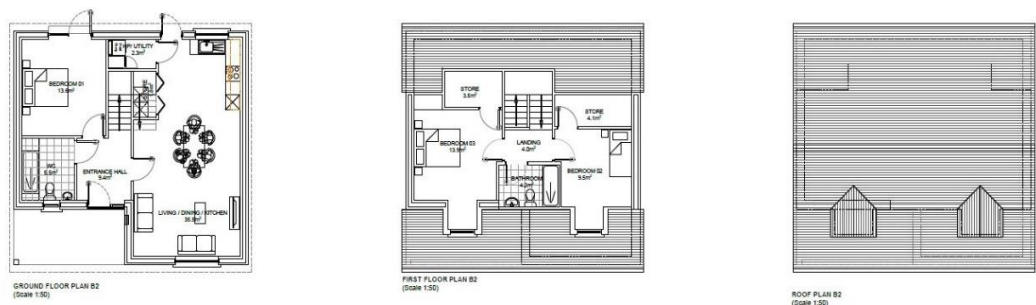
Most houses have the potential to be extended if so required in the future, subject to planning permission and without compromising on the character of the proposed development, to facilitate household enlargement, mobility issues or special care requirements.

A



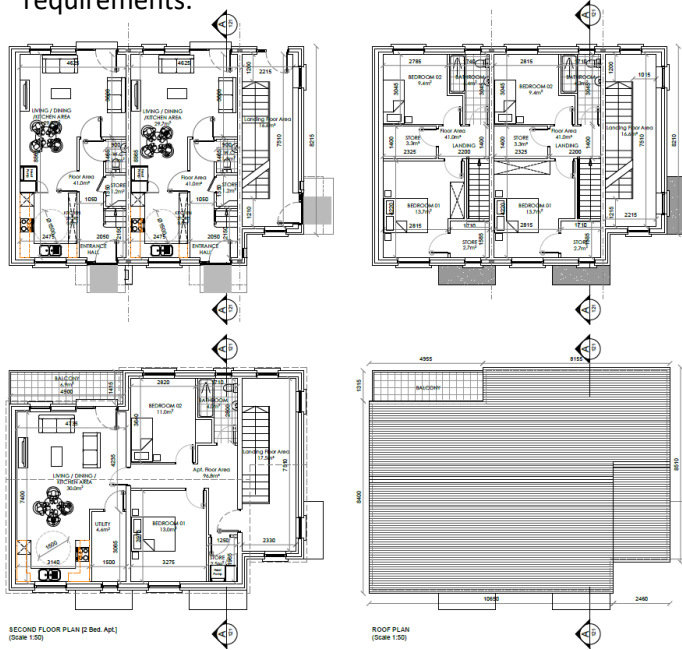
House Type A is designed with UD design standards in mind and to allow the care of an elderly or a sick person at Ground Floor level

B2



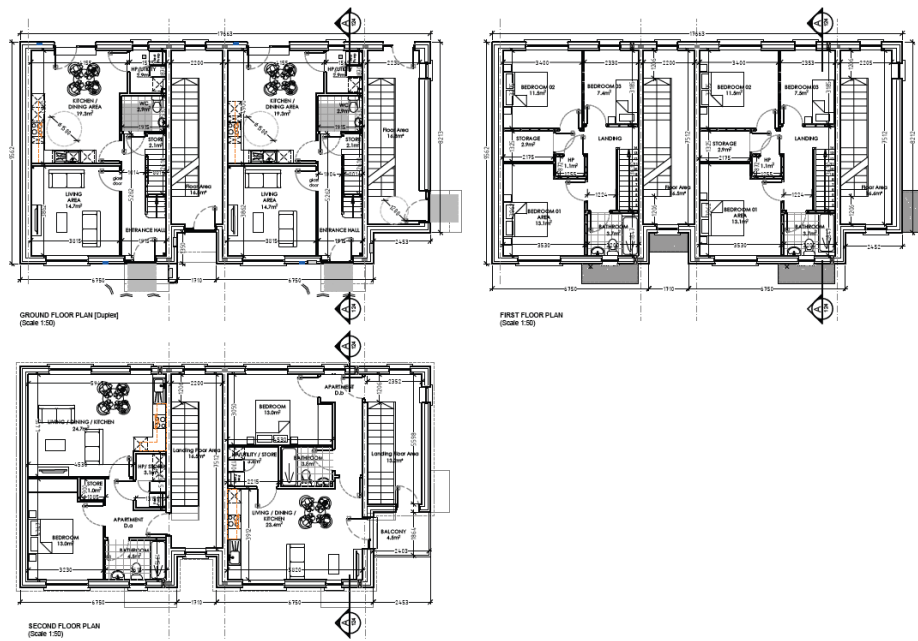
House Type B2 would lend itself to be extended, should the need arise

In the case of Apartments, although extensions are a restricted alternative, they are designed to meet the Department’s guidelines and so, adaptable to a number of occupiers with different needs or requirements.



DX1 Apartment Building plans, showing two types of flexible arrangements for 2beds, either at GF or SF levels, even the top floor that have balconies.

DX2 Apartment Building plans, with varied arrangements for 3 bed (ground floor level) and 1 bed (at second floor level) apartments.



10. PRIVACY & AMENITY

How does the scheme provide a decent standard of amenity?

The scheme aims to provide a high standard of privacy and amenity for each residential unit. In order to achieve that and to comply with the Brief, the private amenity issue has been at the centre of the

design proposal, as indicated in point 7 above, so as to be able to provide each unit, whether house or apartment, with their own entrance and their own private amenity space.

Furthermore, since the Brief required duplex units, there was the challenge to address Duplex apartment in a more rational way, trying to avoid the widely used (although contradictory) arrangement of having the smaller unit at ground floor level with direct access to a backyard and the bigger duplex unit at the top, availing to only a terrace or balcony.

Thus, the proposal is to have the bigger unit (the duplex) availing directly at ground floor level to a private amenity area relevant to its size and future expected use (family or larger household), while at the same time avoid compromise and provide the smaller upper units also with a ground floor level.



All apartments (Duplex and single storey) are proposed to avail to their own ground floor level private open space



Diagram showing Private Open Space allocation for Apartment Buildings

On the other hand, all houses have substantial rear gardens spaces, with most (except for some 1-bedroom units at the entrance) having a minimum 11m distance provided (22m between rear faces

of back-to-back units). When in relation to existing houses facing Ardclough Road, again a minimum of 22m from such houses is provided, avoiding any privacy issues with the existing neighbours.

1.8m high (min.) garden dividing walls have been considered, which will provide screening to private open spaces and prevent overlooking.

Houses are grouped generally in fours, so that the two end-houses have side access to the rear gardens. Lockable gates will be provided for security and to prevent casual access to these areas.



Bird eye's view of the proposed scheme showing allocation of private open space



Dividing garden walls to be at least 1.8m high, with blockwork at first 2.5m and paved patio areas, with distance to rear elevations of existing houses is at least 22m.

11. PARKING

How will the parking be secure and attractive?

The recommended parking standard of 1.5 spaces per apartment and 2 per house have been provided. A total of 77 spaces is provided, including 2 disabled person car parking spaces, with front units availing to en-curtilage parking and communal parking arrangements for the remaining.

Passive supervision & security is inherent due to the parking spaces being close to the houses and the appearance of the development remains uncluttered without overwhelming the kerb appeal with excessive parking throughout.



En-curtilage parking for units at the entrance of the scheme



Passively supervised parking (and green areas) throughout the proposal



Variations of the parking arrangements have been allowed to reduce regimented appearance and small outdoor spaces included to the front of the dwellings which could accommodate small grassed/planted area thus reducing the dominance of hardscaping. It is also be proposed to provide tree planting to soften the impact further within an intended homely streetscape.



Softened impact of parking through landscape



Home Zones designed to support the sense of place and as part of the landscaping

A reduced kerb upstand height within Home-Zones, together with appropriate warning signage at entrance points will further define and identify these high value amenity spaces.

Bicycle parking is proposed within the estate to promote an alternative to travelling by car and in compliance with Kildare County Development Plan requirements. There are 60 bicycle parking for the entire scheme.

12. DETAILED DESIGN

How well thought through is the building and landscape design?

The proposal’s principles, requirements and conditions explained above has informed the detailed design of the different elements of it and the selection of the materials and methods.

The ideology of the layout is to root the estate firmly in its pre-determined setting, create a sense of place that integrates with the existing established neighbourhood, while making a positive contribution to the existing Celbridge locality.

General Information

Area of site 14,101m² (1.4Ha).

39 Social & Affordable housing units, with a Density of 27.8 units per hectare, within the 30 units per hectare permitted by the Celbridge Local Area Plan 2017-2023.

Total units can be divided as follows:

- Type A – 4 bed house. 1
- Type B – 3 beds (houses and duplex apartments) 13 + 4 = 17
- Type C – 2 beds (apartments and 2 bed duplexes) 3 + 6 = 9
- Type D – 1 bed (houses and apartments) 8 + 4 = 12

Public Open Space provided 2,132.65m² or 15.06% of the Site area.

Detailed Design

The proposed typology and palette of materials has been selected to provide for, at the same time, a connection with the existing built context and also to create its own distinctive character.

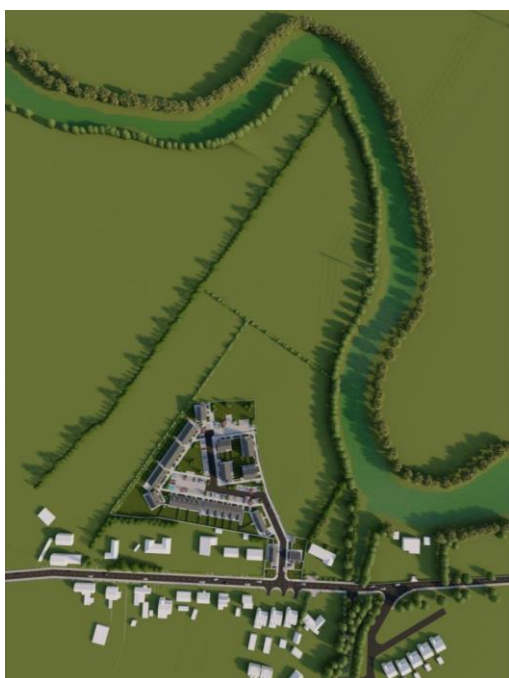


CONTEXT ELEVATION - SECTION A-A



Artist impression of Scheme's Entrance

The design of the proposed development arranges the houses in groups. All houses have private open space to the rear and a small front garden to accommodate bin stores (mid-terrace units only).



General overview of the Proposal in full context, showing the grouping of the proposed units.

General Site Plan, showing proposed layout and the proposed heights in relation to how the units are grouped



The proposal has been developed and refined hand-in-hand with the landscaping and the materials palette to ensure the finished estate will make a positive contribution to this established locality. The overall scheme will create a usable and appealing high-quality public realm with the landscaped areas providing enjoyable, functional and a visually appealing environment.

Sustainable, stable and low maintenance materials are proposed throughout. Concrete laid with ample positive drainage (dished channel & gully) will be used for footpaths. Closed-texture bituminous materials (asphalt, wearing course macadam / thermoplastic coatings) will be considered for parking areas having regard to longevity, maintenance needs and degree of susceptibility to ice formation. Materials will be laid to falls to ensure positive drainage and removal of surface water. Prevention of ice underfoot will be a primary consideration.



Landscaping led street design is proposed, with durable and sustainable materials to be used, as described above



A palette of durable and stable materials has been chosen to be arranged by a landscape-led design

All units, whether houses or buildings, incorporate selected brick around the front entrance to provide a distinct finish demarking the front door to make that the focal point to the entrance.

That principle is varied according to every unit type, so as to create distinctiveness and to avoid unnecessary repetition, and also (as in the case of the Apartment Buildings) as a way to address and highlight prominent corners, so as to create character, as can be seen on the following images:

Housing Units



All houses have selected brick entrances, which, in the case of mid-terrace units, incorporate bin stores as part of the design.



The brick surround entrance is a motif that is developed throughout the proposed scheme, providing distinctiveness.

Apartment Units



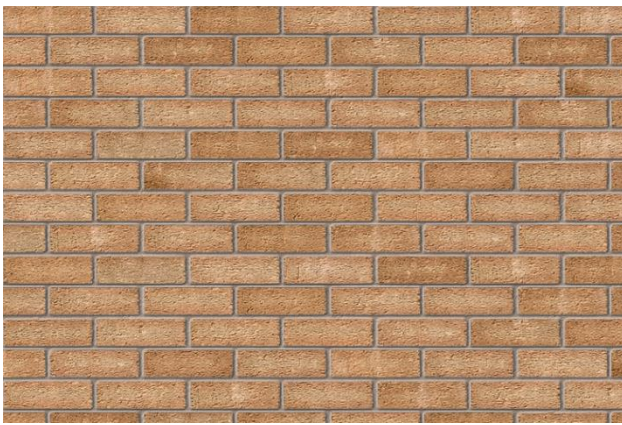
As with the houses, Apartment Buildings include a focal point at prominent corners and entrances demarked by selected brickwork, incorporating bin stores when required.



The Apartment Building use brickwork as a way to address and highlight prominent corners, and entrances in general.

Materials

- *External Walls*
Selected brickwork to main part of façades, with an accent on Entrances, used to afford distinctiveness to the scheme and to provide a focal point and intention to the unit. Selected render elsewhere, as a highlighting contrast.
- *Roofs*
Selected concrete roof tiles.
- *Windows*
Triple glazed, uPVC framed.
- *Rainwater goods*
Selected aluminium.
- *Fascia & Soffits*
Selected aluminium.



Sample of selected brick

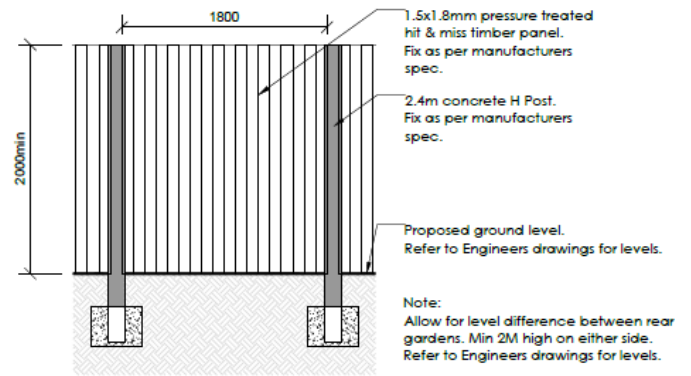
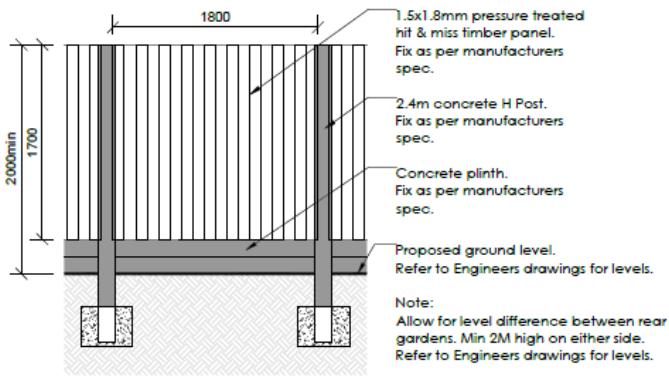


Sample of selected concrete tile

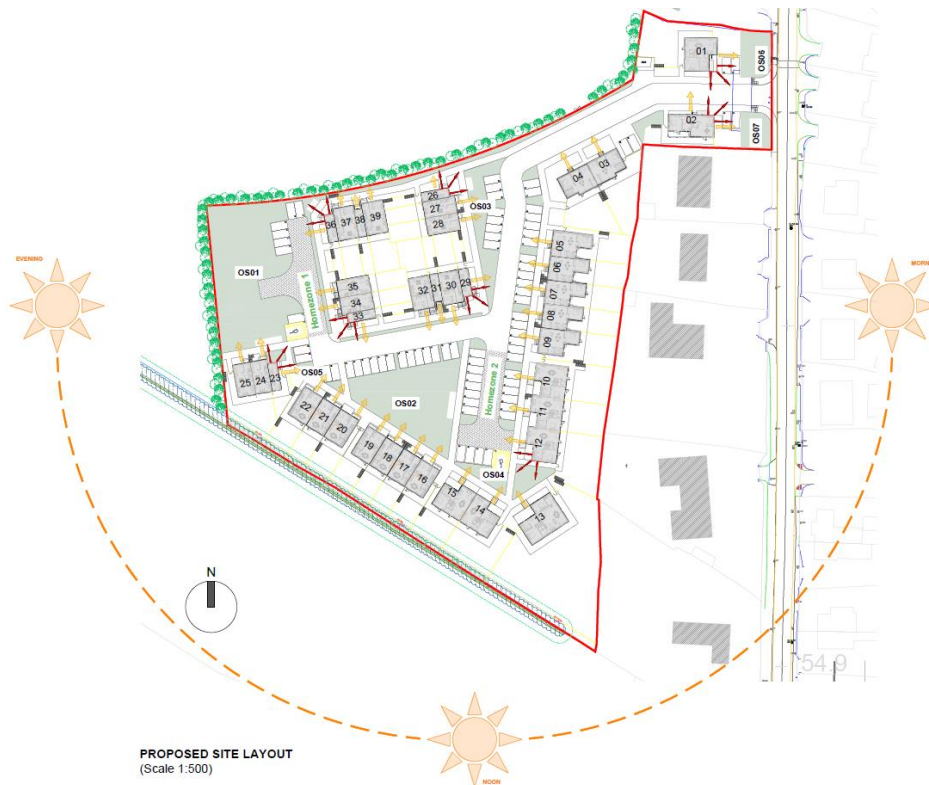


Indicative Bin Stores at front of mid-terrace units

Party walls will be detailed and constructed to meet the requirements of TGD Part E and minimize the transmission of sound from unit to unit.



The housing is orientated north-east and south-west, so that all houses will get optimum sunlight, on both sides of the houses. The two-bed unit has a kitchen/living area that can be combined into one large space (or separated as the case may be). This allows for flexibility and ensures that occupants have access good sunlight at various times of the day.



Sunlight diagram for the proposed scheme

The units will be BER A2 energy performance rated. This is being achieved mainly by use of Air-to-Water heat pumps for space heating & hot water needs. Demand-control ventilation will provide only the required amount of ventilation.



House Type B1

Over half the energy consumption worldwide is attributable to that used in buildings, the resulting CO2 release adding significantly to climate change. The Energy Performance of Buildings Directive aims to address this issue requiring that post-2020, all buildings should be near zero energy buildings (nZEB). The 39 units proposed in this development are A2 energy rated and nZEB compliant. Further climate friendly features include:

- Designed to optimise the orientation and aspect of each unit / maximise solar gain
- Reduce heat loss through openings with efficient window specification
- Air-tight construction, reduced thermal-bridging, high levels of insulation
- Ventilation requirements met via 'demand control ventilation'
- Departure from fossil-fuel dependent heating system
- Specification of a high efficiency air source heat pump providing space heating and hot water needs
- Measures for reduction in water consumption, e.g. low-flow cisterns
- significantly reduced operating costs of the dwellings
- Substantial materials and energy savings from not having to construct chimneys from foundation to chimney-pot level
- Construction phase will require a 'Construction & Demolition Waste Management Plan', stipulating maximum reduction, reuse and recycling of all materials
- The site location will afford opportunity for more sustainable modes of transport
- Landscaped to promote biodiversity
- Street lighting will be energy efficient LED lighting
- Kildare County Council habitually utilise an energy supplier that is committed to the development of renewable and sustainable energy sources

This approach will foster a reduction in energy consumption, a reduction in carbon footprint, and a corresponding reduction in factors contributing to climate change.

13. CONCLUSION

As is the situation in the entire country, the demand for housing in Celbridge, being now part of the Greater Dublin, has been proven intense by a number of years already.

The proposed development will result in the utilization of existing Residential zoned lands owned by Kildare Co. Co. in direct response to such significant public housing need.

The proposal results in a development which accords with the proper and sustainable development of the area and, which is in accordance with relevant local, regional and national planning policies and objectives, as well as putting forward a scheme with both identity and sense of place, which celebrates the context in which it is to be placed.

Thus, this planning application process, if successful, will allow Kildare County Council, in conjunction the Department of Housing, Local Government and Heritage, to move forward with the construction of 39 houses amid an ongoing national housing crisis.