



## **PORTAFERRY COHOUSING**

### **Supporting Statement**

Prepared by Portaferry Cohousing and Bell Architects Ltd.

January 2023

## PORTAFERRY COHOUSING

This document has been prepared to assist Planning Officers and elected representatives in an understanding of the Cohousing concept as many of the proposals will be new. In terms of precedent, the examples of sheltered accommodation and retirement villages are more applicable to this model. **The proposals contained in these submission documents and drawings are as such, deeply intentional, thoroughly considered and core to the Cohousing approach.**

**Portaferry Cohousing** requests a considered response to this new approach to community-led design and the creation of supportive community spaces. People make communities - housing proposals should begin with people interactions, not movements of cars and other vehicles.

As a useful demonstration of the key design challenge of car-management, the below image was featured recently on social media.

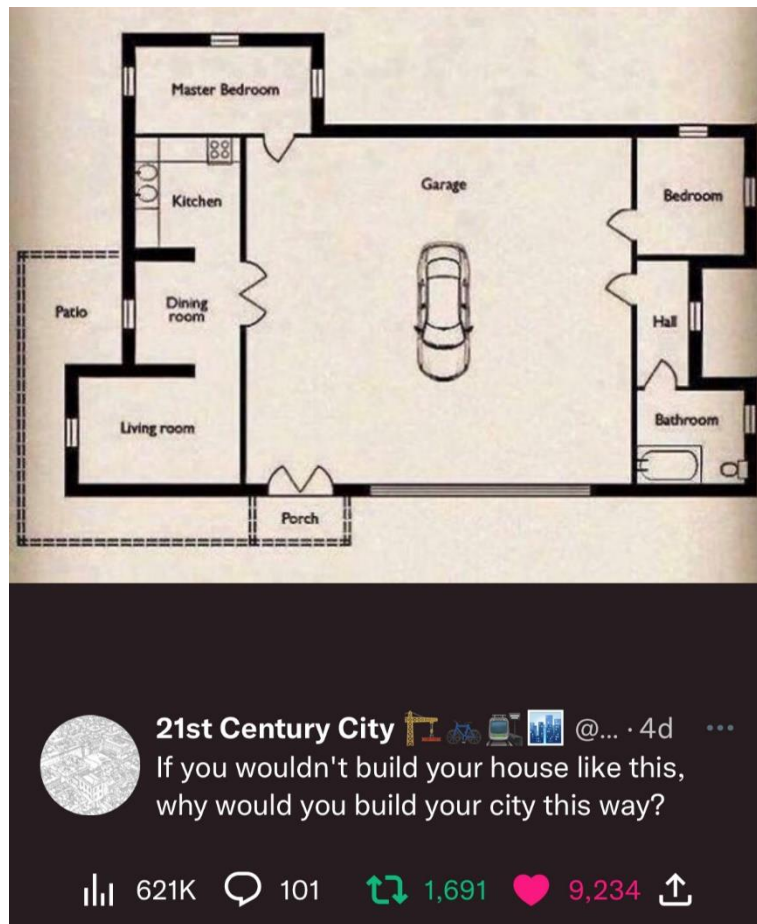


Illustration 01 – Social Media post by 21<sup>st</sup> Century City.

Why would we insist on designing our special living places around the issue of servicing cars – people and lifestyle needs should come before the organisation of vehicles.

**Portaferry Cohousing** is an ambitious, community-led residential housing development, rooted in traditional values, alongside eco-friendly practices. As the first of its kind in Northern Ireland, Portaferry Cohousing will offer inspiration for other similar developments, providing contemporary highly efficient, ecological and affordable private homes informed by vernacular housing design,

where community engagement is enhanced by access to shared internal and external spaces. Homes will be high-quality, energy efficient, and shared spaces will enable social interaction between people of all ages, life stages and abilities. As a partially pedestrianised development, Portaferry Cohousing will encourage and facilitate active transport, where cars are minimised in importance and people-movements are prioritised.

**Portaferry Cohousing** was formed by a group of people from both Portaferry and further afield and has undertaken extensive engagement with local residents and other key stakeholders, driven by the aim of bringing multiple positive benefits to the local community, the economy, townscape and surrounding area. **Portaferry Cohousing** aims to be future-proof and therefore proposes to exceed current standards on building design, walking and cycling infrastructure.

This document sets out how **Portaferry Cohousing** adheres to or surpasses quality standards for residential environments. It provides an introduction and brief history of cohousing as a concept, then moves to talk more specifically about the history of **Portaferry Cohousing** and the development of the site so far, as well as the community consultations that have taken place and adjustments made to the design as a result.



Illustration 02 – A Cohousing interior shot illustrating the importance of landscape and reduction of cars.

**Portaferry Cohousing** respectfully requests your support for this proposal in its entirety and hopes to see a dynamic progress towards approval as quickly as possible.

January 2023

# Planning Supporting Statement

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## 1.0 Introduction to Cohousing

### 1.1 Historical Context

The idea of Cohousing originated in Denmark in the 1960's among people who wanted a living environment with community at its core. Since then, Cohousing has spread rapidly, and today 1 percent of the Danish population live in cohousing projects. Throughout the UK, there are now many examples of Cohousing developments, with the most notable being:

1. Marmalade Lane Housing, Cambridge.
2. Lilac Cohousing, Yorkshire.
3. Rainbow Housing, Milton Keynes.
4. Springhill Cohousing Community, Gloucester.
5. Cannock Mill Cohousing, Wales.
6. Bowden House Community, Devon.
7. Findhorn Community, Aberdeenshire.
8. Threshold Centre Community Cohousing.

Many more examples can be viewed through an online search.



Illustration 03 – Marmalade Lane Housing, Cambridge.

Cohousing is an intentional community in which residents have private homes, but also share common facilities such as dining rooms, laundries, and recreational spaces. Members of a cohousing community typically participate in the design and decision-making processes for the development and management of the community. The goal of cohousing is to create a more interconnected and sustainable way of living, while still maintaining the independence of individual households.



Illustration 04 – Cannock Mill Cohousing, Colchester.



Illustration 05 – Springhill Cohousing, Gloucester.

## 1.2 The core principles for cohousing are:

1. The members of the project participate in both its physical design and in how they are going to live together.
  2. It includes private residences and communal facilities. Most cohousing communities have a common house, with shared facilities such as cooking and dining spaces, meeting and playing areas, laundries and guest rooms. This may mean that the private dwellings are smaller as residents also have the benefit of the common facilities. Shared outside space for gardens, childrens' play, parties and food growing often feature in a cohousing project. Car parking is generally on the edge of the site to improve the quality of the living environment and to promote interaction between the residents.
  3. The size is appropriate for communal dynamics, usually 12-35 households. Smaller than that and it lacks a sufficient body of people, plus there is a risk to the project if some do not get along. Larger than that and there are too many people for everyone to work closely together and to have full meetings where everybody can attend and be heard.
  4. Residents manage their own community looking after maintenance, finances, gardening and organising shared activities. The community is governed in a non-hierarchical way, using consensus decision making.
  5. Cohousing communities are inclusive and part of the wider community, they look to engage with their neighbours and the wider world.
- 1.3 This is the model that PC are working to, and all these five principles are fundamental to the project. Some projects are urban, some are rural, some are new build and some conversions, most are mixed occupancy while a few are for specific groups such as women or retired people.
- 1.4 A recent report has shown that the demand for senior cohousing in Denmark exceeds the supply by over 10:1. In Northern Ireland, we have a growing problem of a lack of affordable housing, and lack of senior housing, and this communal solution can provide housing for all.
- 1.5 It is well worth listening to some conversations to learn about cohousing, and there are many links on youtube to informative videos as below.  
<https://www.youtube.com/watch?v=WwhMljEqbjk>  
<https://www.youtube.com/watch?v=p1drtxhtpmk>  
<https://www.youtube.com/watch?v=RERpFJwbb8s>
- 1.6 There are cohousing projects across most countries in Europe and spread throughout the world. In the English language print, much has been written about projects in the USA and Canada and it is from there and the UK that we have been able to do most of our research.
- 1.7 There are 30 live projects in the UK and around 60 in development. As yet there are no live projects in Northern Ireland, there is another development group in Belfast and more in the South. Cohousing has been growing slowly but steadily in the UK. Cohousing often struggles with the difficulty of getting started; there is no state funding so it takes a group of people to get together and agree on a suitable site and then raise the funds between them to purchase it with the knowledge that it can still take several years before they will have anything to move into.
- 1.8 The coordinating body in the UK is the [UK Cohousing Network](#), it has support from the government. The website lists many of the UK Cohousing projects, both live and under development.

- 1.9 From what we know, all the live projects in the UK are successful; many have waiting lists for people to move in, and their property values often rise faster than the national average.
- 1.10 We are very much being guided by what has worked for cohousing projects in the UK. We have visited projects and taken courses on Cohousing that they have been running. We have met with the UK Cohousing network and they visited PC while we were forming the group. We have had a lot of assistance and advice from Wrigleys Solicitors; the legal firm in the UK who set up many of the UK projects. The legal system is different in NI so we have used local solicitors to set up the company.

## 1.11 Portaferry Cohousing

### Background

- 1.12 Portaferry Cohousing Ltd purchased the Portaferry site in April 2021. The site is split between two areas; [Portaferry Cohousing](#) has 32 residential houses (Zone B on the concept maps to follow) and the common house. The other 19 house sites will be sold for private development (Zone A). The reason for the split is that around 50 houses would be too large for a cohousing project. While the project needs to be financially viable this is not a profit making enterprise and all the people who are a part of it are intending to take up residence.
- 1.13 In 2022 we set up Portaferry Cohousing Ltd (PC) and the legal structure of the project is that the members of the group will be the directors of PC. PC will own the site - that is the area for Cohousing. Initially the members will be just those who are intending to have houses built. As houses are completed they will pass into private ownership. The remainder of the site; the Common House and the communal areas will continue to be owned by PC. We intend that some houses will be available for rental, they will be owned by members of PC and the tenants will also be eligible to become directors of PC.

### Governance

- 1.14 Cohousing projects are usually operated with Consensus decision making and this is the methodology that have been adopted for PC. Decisions are made by agreement of all members of the group rather than by an individual or managing body OR by a majority vote. We seek to reach agreement on what is acceptable to everybody (even if it is not the optimum outcome for some). This is a more inclusive process than making decisions by a majority vote where the minority may be overruled and thus excluded. All of the residents, whether owners or tenants, will be a part of this decision making body. Again, this is one of the core principles of cohousing - the residents own the project and the residents run the project.





Illustration 06 - Portaferry Cohousing Team Gathering as part of the design process.

### 1.15 Public Consultations / Community Consultation – from May 2021

- In accordance with the pre-application planning process, PC ran a formal community consultation event and engaged with the local and wider community to discuss the proposed development. There were many good conversations, and PC took cognisance of the comments and made revisions to proposals. The schedule of events are recorded as follows.
- 17th May 2021. Zoom consultation. We leafleted the houses in the neighbourhood, put adverts in Down Recorder and Ards Chronicle and emailed local groups and Councillors. Most of the local Councillors attended.

**PRE-APPLICATION PUBLIC INFORMATION EVENT**

**PROPOSAL:** Full planning permission for 17 unit mixed detached and semi-detached residential houses alongside a 32unit cohousing development. The cohousing development will consist of a mix of unit sizes from 1 to 4 bedroom, detached, semi-detached and terraced, a common house (consisting of a kitchen, function/dining room, two bedrooms & office, as a focal point of the neighbourhood & communal meals once per week) with extensive shared green spaces, play areas, shared gardens & wildlife areas.

**LOCATION:** Lands opposite 5G – 15 Cloughey Road and north west of 1-3 Rectory Wood and 8 Cloughey Road.

**PUBLIC INFORMATION EXHIBITION:** The Narrows Portaferry, Saturday 4th Dec 2021 from 10am to 3pm.

**FURTHER INFORMATION AND COMMENTS:**  
[www.portaferrycohousing.org](http://www.portaferrycohousing.org),  
[portaferrycohousing@gmail.com](mailto:portaferrycohousing@gmail.com), or phone Tyrone Currie on 028 4272 9066

Comments very welcome, as we prepare to submit a formal planning application in Spring 2022.

Illustration 07 - Portaferry Cohousing Pre-Application Public Information Event newspaper advertisement.

- 7th June, 14th June and 21st June 2021 - Three follow up Zoom consultations.
- We collated the questions from these meetings and posted them with answers on our [web site](#). – summary in the appendix.
- 4th December 2021. Public exhibition in The Narrows, Portaferry. With an exposition of the project and the proposed site layout. We leafleted the houses in the neighbourhood again and emailed our contact list.



Illustration 08 - Portaferry Cohousing Pre-Application Public Information Event presentation meeting.

- 9th December 2021. Meet the Architect on Zoom. Murray Bell of Bell Architects Ltd attended the meeting to answer more detailed questions on the design.
- The Ards Chronicle and Down Reporter have run articles in June 2021 and Oct 2022.

(see next page)



Illustration 09 – Ards Chronicle article.

Down Recorder Wednesday, 2nd June, 2021  
 thedownrecorder.co.uk

**NEWS 13**

# Resident-led housing scheme

**BY DAVID TELFORD**

PORTAFERRY is to become home to Northern Ireland's first resident-led housing development.

A 13-acre site at the Cloughiey Road has been purchased by Portaferry Cohousing, paving the way for the construction of 24 new homes.

Under the innovative scheme, residents will design and own the entire development, where priority is placed on 'designing in community', rather than developer profit.

A small group of individuals have created the not-for-profit organisation which aims to create a housing development that demonstrates sustainable design and supports a rich community life.

The focus will be on building energy-efficient homes suitable for an inter-generational mix of households and incomes, designing in-shared spaces including a common house, safe play areas, wildlife habitats, allotments and workshop spaces.

And the Portaferry group hopes that its proposal will act as a catalyst and inspiration for others.

Resident-led cohousing projects originated in Denmark and are now spreading worldwide, with cohousing offering a strong sense of neighbourhood and community, something those associated with the group say is often missing in modern society.

The Cloughiey Road scheme will be a private development and won't be linked to any Housing Association or Housing Executive. Residents will purchase their own homes and own a share of the communal house and the rest of the site.

The group is looking for new members who are interested in designing their own home and neighbourhood.

Last month, an online meeting which was well attended by 35 individuals including three local councillors took place to outline the detail of the scheme.

Additional meetings are planned for next Monday, June 7, between 7pm and 8pm, specifically for residents in Portaferry, while seven days later – June 14 – another online meeting will be held, also between 7pm and 8pm which is open to everyone, with further information available at [www.portaferrycohousing.org](http://www.portaferrycohousing.org)

Portaferry Cohousing member Andrew McMurray says the group is delighted that the land earmarked for the new homes is so close to the town.

"We are now able to begin thinking about the design of the project," he said.

"It is our dream to have safe, pedestrianised areas for children, lots of wildlife and a communal building to share meals together and to act as a catalyst for others who want to develop their own housing projects."

Andrew added: "We would especially like to see more members of our group from Portaferry. This is the first of, we hope, many similar projects in Northern Ireland."

the down recorder.co.uk • Thursday 27th October 2022

## Ireland's first cohousing project takes root in Portaferry

**PLANS** for Ireland's first cohousing community have taken root in Portaferry and there is an appeal for new members. Cohousing is a concept that was first started in Denmark in the 1960s among people who wanted a living environment with community at its core, whilst at the same time wanting to live more sustainably, where the design of the project and decisions about running it are community-led.

The project has thousands of international members as well as its own chapter with 11 of the population of Denmark now living in such communities. There are currently several in the UK and one in the Republic of Ireland.

The Portaferry group has employed an architect with experience in sustainable architecture, who has helped them to plan the site. A lot of design features have been made using sustainable principles, especially in the landscape design.

The project will be located along natural lines of the ground and will be designed to be energy-efficient, using renewable energy sources and passive solar heating. It will also include a communal house, which is designed for communal eating with a kitchen, play area for children, laundry facilities, hot desk office facilities, guest rooms and reception.

The current climate change and energy issues will be a focus for the design. Solar panels and electric charging points will be available on the site. There is a plan to have a shared car and a shared bicycle. There will also be a shared garden, a shared play area, a shared allotment and a shared workshop.

The Portaferry group is looking for new members who are interested in designing their own home and neighbourhood. Last month, an online meeting which was well attended by 35 individuals including three local councillors took place to outline the detail of the scheme.

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Andrew added: "We would especially like to see more members of our group from Portaferry. This is the first of, we hope, many similar projects in Northern Ireland."






Illustration 10 – Down Recorder article.

1.16 As a follow up to the public meetings we have had many private meetings and telephone conversations. As a result of one of these and at the request of two of our neighbours we extended the wooded belt to the Western side of the site from 10m to 20m deep.



## Portaferry Cohousing

Spring 2021 update • [www.portaferrycohousing.org](http://www.portaferrycohousing.org)

Portaferry Cohousing is located on the Cloughey Road, on the edge of the small coastal town of Portaferry.

Our vision is to create a cohousing project that demonstrates **sustainable design** and supports a **rich community life**.



We aim to build **energy-efficient** homes suitable for an **intergenerational** mix of households and incomes, designing in shared spaces including a **common house**, safe **play areas**, **wildlife** habitats, **allotments** and **workshop** space. We hope it will act as a catalyst and inspiration for others.

Cohousing is a form of collaborative housing that offers residents a strong sense of neighbourhood and community, where residents know their neighbours well, and **actively participate** in the decision making around the **design and development** of the community. There are 18 cohousing projects in the UK, but none so far in NI.

We have purchased a site of **13 acres** and will use the majority for the cohousing project, with the remainder sold for traditional housing development. We envisage the cohousing element to be up to **34 residential self-contained homes**. The homes will be privately owned with a share of the communal house and rest of the site. We hope there will be some private rental.

### Join Us

Do you want to live in a neighbourhood where children play together in safe pedestrianised areas, neighbours look out for the older residents, and meals can be shared together in the common house? Do you want to help design the layout of the houses and shared spaces, and bring the project into reality? If so, then perhaps you are interested in becoming a member of our group.

### Timeline

- 2021: Architect design process
- 2021: Public community consultations
- 2022: Submit planning application
- 2023+ Construction

### Meet Us

With Covid we can't meet in person, so instead join us for an online meeting:

- Mon 7th June 7-8pm - Portaferry residents only
- Mon 14th June 7-8pm - Open meeting, all welcome
- Mon 21st June 7-8pm - for people interested in becoming members

The Zoom links will be available at <http://www.portaferrycohousing.org/latest>

Contact us: Tyrone Currie 028 4272 9066,  
Andrew McMurray 0790 99 00 883,  
[portaferrycohousing@gmail.com](mailto:portaferrycohousing@gmail.com)

Portaferry Cohousing, Cloughey Rd, Portaferry,  
Co. Down, Northern Ireland.

Illustration 11 – Advertising for the Community Consultation events.

## 2.0 Site Description and Context

### 2.1 Location

The Portaferry Cohousing development site is zoned agricultural lands of 5.49 Hectares situated to the north of Cloughey Road, located within the townland of Ballyphillip and the settlement development limits (SDL) of Portaferry of the extant Ards and Down area plan 2015, with the lands identified as housing land zoning HPA4 as below extract from Map\_no\_2\_015a\_ Portaferry. It is important to note that the site is part of HPA4 and not the entire zoned area.

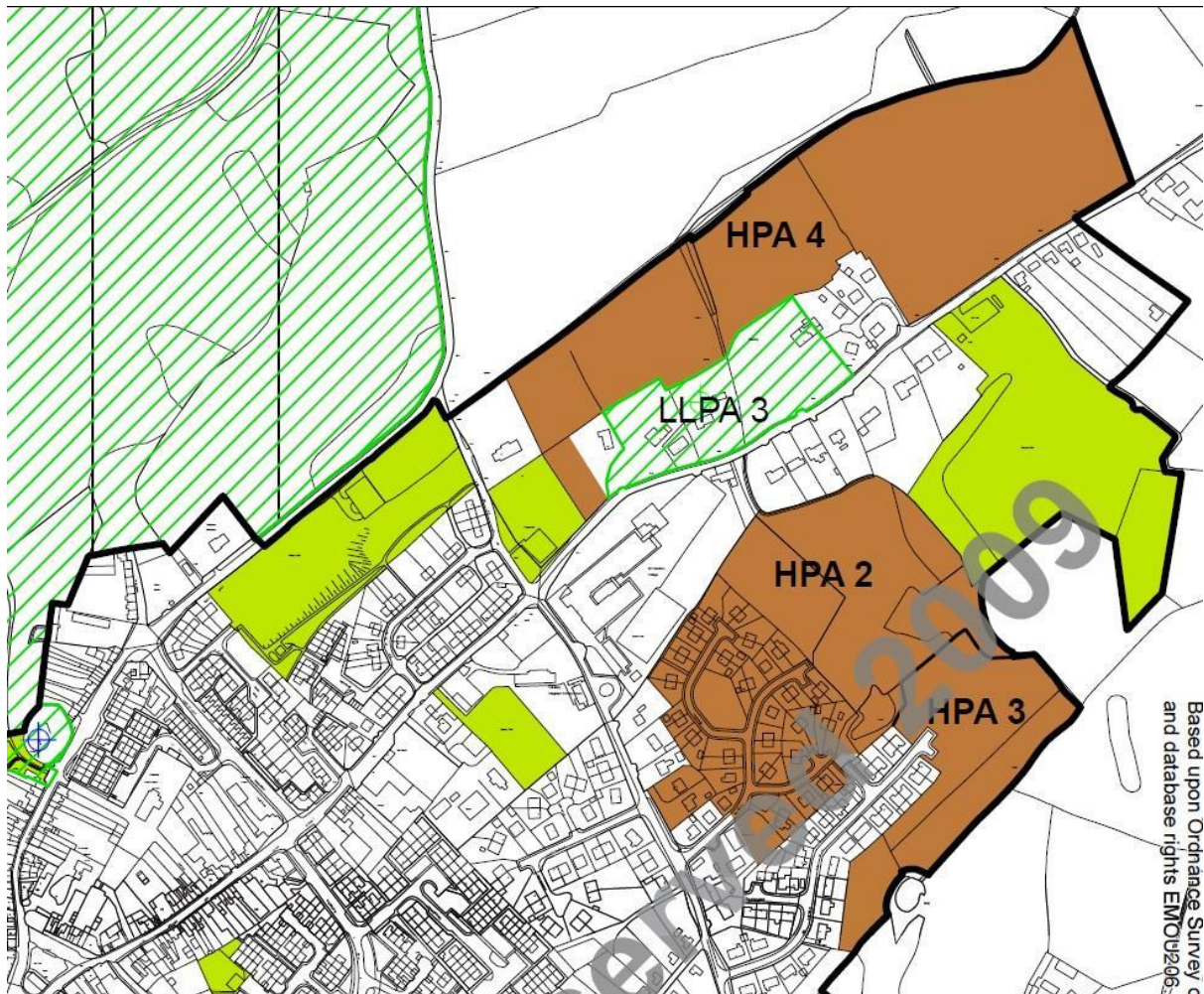


Illustration 12 – Map extract from Portaferry Area Plan Map.

- 2.2 Part of the south western boundary to the Portaferry Cohousing site will be shared with the property known locally as the Rectory, a period home in extensive grounds accessed from Cloughey Rd.



Illustration 13 – Aerial Photograph of the site outlined in red.



Illustration 14 – Extract from NI Flood Map illustrating areas of site potentially affected by flood waters.



Illustration 15 – Aerial view looking South over the site with Portaferry and Strangford on the right.



Illustration 16 – View South West along Cloughey Road.





Illustration 17 – View North East along Cloughey Road

- 2.3 Neighbouring agricultural fields on the southern, east and western boundaries support arable (crop cultivation) and/or pastoral (livestock grazing) farming.
- 2.4 Opposite the proposed Portaferry Cohousing site are a row of cottages with various character and extensions.
- 2.5 Land use on the South side of the cottages, opposite both proposed development sites currently provide playing fields, with parking and a supporting amenity building. The playing fields are known locally as the Cloughey Road Playing Fields and are currently the home of the Portaferry Rovers FC.

## 2.6 History of the Site and Context Assessment

The land for development, currently open agriculture lands previously belonged to the Church of Ireland, Parish of Ballyphilip. Historically the open field was a conjoined landholding with the Rectory and an extensive Walled Garden. The Rectory is now 8 Cloughey Rd and the Walled Garden, the land where Rectory Wood development is now sited.

- 2.7 Built in 1818 the former Rectory is listed as a Building of Special Architectural and Historic Value (Category B1). It stands on the site of the mediaeval church of St. Nicholas and its adjoining graveyard, surrounded by mature trees on circa 2 acres. HB Ref No: HB24/01/052.

The rectory is not visually linked and satisfactorily set away from the site in question such that there will be no threat to this interesting, listed building.

- 2.8 Rectory Wood is a cul-de-sac housing estate of five two-storey residential houses built circa 2000 by Marm Properties Ltd. This appears to have been built entirely on the walled garden of the listed Rectory as is evident from the historical maps to follow.
- 2.9 On Lands Opposite the Proposed Portaferry Cohousing Development, Five roadside, 3-4 bay, single storey cottages with ribbon plots of land and rear gardens. A typical linear roadside pattern of settlement in rural Northern Ireland prior to WWI, with the plots of land large enough to support the cultivation of food.
- 2.10 Ordinance Survey (OS) Historical Maps  
On the historical map OS County Series 1st Edition (c1830) the Rectory House, walled garden, outbuildings, stone walls and a perimeter line of mature trees/woodland area are clearly illustrated. Also notated is a Gravel Pit in the upper north west area of the open field. On the roadside boundary and part of the north east boundary of the open field the line notation may be indicative of stone walls. Also illustrated are field boundary hedgerows, watercourses and an area demarcated as *Flooded in Winter*. Water management of this area was aided by a *Sluice* which is shown at the junction of Demesne View and Coach Road on adjacent land further towards the demesne of Portaferry House.

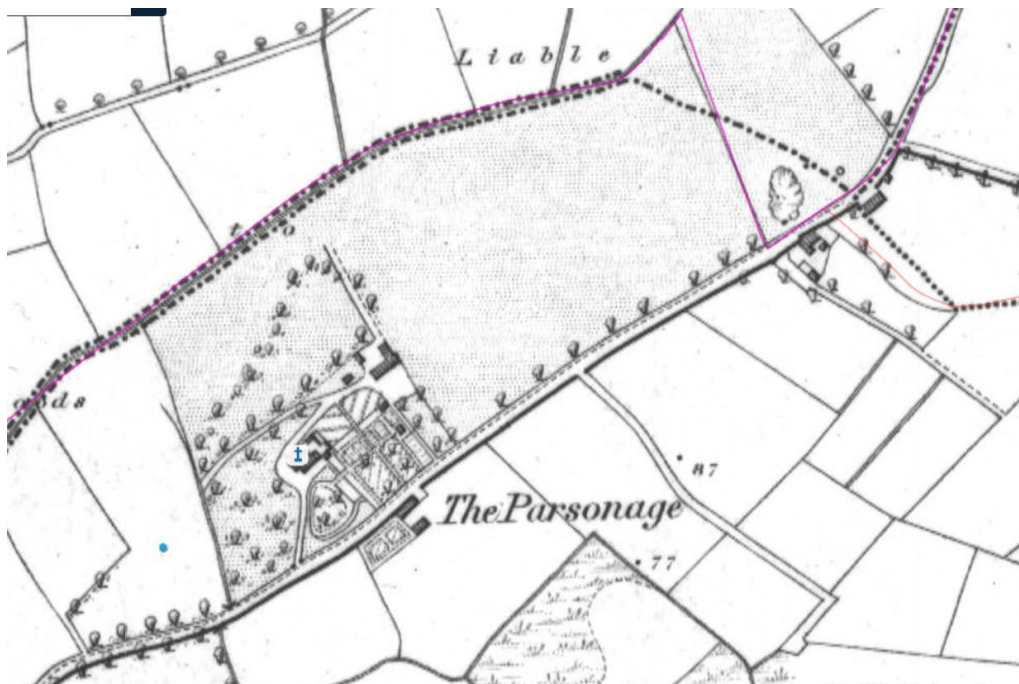


Illustration 18 – Extract from PRONI Historical Mapping 1860

- 2.11 By the time of the OS County Series 2nd Edition (c1860), the function of the walled garden has changed, more trees have been planted along the roadside boundary of the open field and the eastern boundary has been extended.

- 2.12 Later OS Historical Maps show no significant changes until the walled garden and some of the adjacent land is sold by the Church of Ireland for the development of Rectory Woods. As such, the open fields have retained the same boundary pattern for the last 200 years or so.
- 2.13 On the OS Historical Maps the site is not listed as an area of Archaeological Potential, Interest or Investigations, and we will await response from NIEA:HED on this point, however we do not see the location as having special significance.
- 2.14 DAERA Small Woodland Grant Scheme 2022**  
Woodland Planting and Maintenance has recently been undertaken by Portaferry Cohousing and Volunteers following the guidelines as set out in the Small Woodland Grant Scheme Information Booklet. This important landscaping investment is a demonstration of the different approach to lands and housing design, and conveys the intent of the group to ensure that the proposal integrates into its context. It should be noted that pre-landscaping is virtually absent in any commercial housing endeavour.
- 2.15 An appraisal of the site was carried out to assess the topography, boundaries, features and constraints of the site. A topographical survey of the site was carried out by Land Survey Services in order to assist with design proposals. The local landscape setting is identifiable and can be described as classic “drumlin swarm” or “basket of eggs” topography, a glacial landform created by depositions of glacial sediments or till.

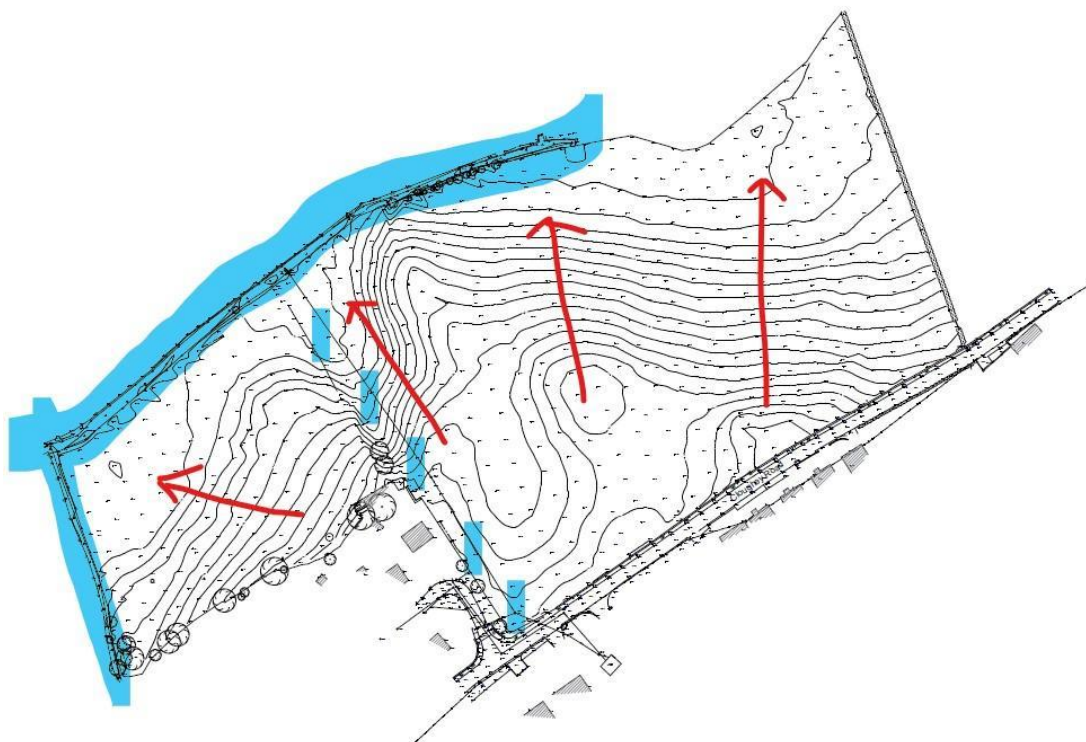


Illustration 19 – Illustration conveying site topography and direction site falls.

- 2.16 More broadly, the region is described as the Uplands and Drift Covered Lowlands of Down and Armagh where the underlying basement complex of highly folded Palaeozoic strata provides the unity of the region. Below ca 350m, there is an almost complete mantle of drumlins.
- 2.17 In the Land Character Assessment 2000 Portaferry and North Lecale the region is described as follows:

*The North Lecale Hills extend from Downpatrick, along the southern edge of Strangford Lough, to Portaferry on the Ards Peninsula, where they create a 'gateway' at the mouth of Strangford Lough. The strong visual connection between Strangford and Portaferry is reinforced by the wooded estates on both shores and the physical link provided by the ferry between the two settlements. The hills form a highly visible undulating ridge of gorse covered hills which create a setting for Downpatrick at one end and settings for both Portaferry and Strangford at the other. The hills rise to over 100m at Castlemahon Mountain and at Slieve Patrick, where the landmark of St Patrick's shrine is visible from the surrounding low ground. The foothills support grazing and well structured farmland with well maintained stone walls and white-rendered buildings. Estates and shoreline parkland are an important influence in the landscape contributing stone walls, deciduous woodland and buildings of stature. The overall effect is that of a well managed landscape and the use of traditional colours such as red painted doors, windows, gates and outbuildings create a sense of continuity throughout.*

*It can be argued that an equally important component of any 'drumlin landscape' are the similarly numerous inter-drumlin hollows. The majority of these hollows would have held open water from local runoff at the end of the Pleistocene. Whilst some continue to exist as isolated small loughs, many have now been infilled by sediment washing off the surrounding drumlins. This has created typically flat-bottomed, marshy areas between the drumlins that are subject to seasonal inundation. Much of the infilling probably occurred early in the Holocene, as the landscape adjusted to increasingly temperate conditions. However, erosion may also have been accelerated in historical times, when rural population densities were considerably higher and much of the lowland landscape of Northern Ireland was more intensively cultivated. Whatever the stimulus for erosion and deposition, the sediments within these hollows typically contain an important record of local environmental change.*

- 2.18 The Cohousing and Housing Site Masterplan will illustrate a considered response to the sites undulating topography, with the housing and landscape proposals following the alignment of the lands with respect.
- 2.19 In order to retain the character of the landscape and minimise land disturbance, the access routes, amenities in the landscape and building footprints have been designed to follow and integrate into the natural contours of the site.

## 2.20 Ground Conditions

Observationally, the top soil across parts of the site is very rocky, with bedrock protruding on some of the higher slopes. Soil samples on some of the lower-lying areas have revealed a rich and fertile soil with abundant life and a high number of earthworms. In other areas the soil is heavily compacted as an outcome of the field being waterlogged and grazed by cattle until 2021.

2.21 No chemical fertilisers, herbicides, fungicides or pesticides have been applied since circa 2018. Currently the intention is to maintain this approach through minimising the broad spectrum usage of all non organic chemicals, to allow the lands to return and re-wild where possible.

## 2.22 Current Site Constraint: fluvial flood risk

The water table level, water courses and susceptibility to flooding are important considerations and mitigating water management strategies will be implemented.

2.23 PC have instructed MCL Consulting to report on flood risks as it is evident that some ground water effect is visible from the stream that bounds to the north of the site.

2.24 The design will respond to all of the issues raised in the FRA.  
Refer Appendix D: Flood Risk Assessment by MCL Consulting

2.25 The site is bordered to the north by a sheough / stream, with the contours of the land sloping downward from south to north, the inter drumlin area in the north of the site is potentially at risk of seasonal flooding.

2.26 The area to the northwest of the site is lower-lying and at the confluence of the 2 small boundary streams is inclined to gather water as has been noted in the historical mapping, however this area has been set aside for re-wilding and will not be used for development.

## 2.27 Flora and Fauna

An Environmental and Biodiversity Survey was carried out by Spouncer Ecology in September 2021.

Refer Appendix G – Biodiversity Survey and Report – Spouncer Ecology

2.28 The site was considered to be relatively low in relation to biodiversity. During the time of the survey the site was still intensively grazed by cattle and has a year of recovery (ie no livestock grazing).

2.29 A greater variety of wild flowers have been observed and these are providing a greater food source for bees and other pollinators. It is hoped that these interventions and planting of indigenous species will assist in the return of interesting flora and fauna.

## 2.30 Climate

Portaferry enjoys a temperate maritime climate. The micro-climate of the southern tip of the peninsula is particularly mild, due to the influence of two bodies of water with Strangford Lough to the west and the Irish Sea to the east.

2.31 Given the northerly location frost and snow are relatively rare events.

2.32 The predominant wind direction is from the southwest, and with the Mourne Mountains lying some 30 miles to the southwest of Portaferry, often acting as a rain shield, the resulting average rainfall is 860mm per annum, which is lower than the recorded rainfall of surrounding areas.

2.33 In the future any adverse effects of exposure to wind will be alleviated through the filtering and buffering provided by the belts of trees now planted as part of the Small Woodland Grant.

### **2.34 Noise and other nuisances**

The A2 Cloughey Road, adjacent to the site carries a fair amount of motorised traffic (cars, vans, lorries, buses and agricultural vehicles) during the day, but quietens down considerably at night.

2.35 The site is bordered by agricultural fields with the associated seasonal activities and noise from animals, heavy machinery and spraying of slurry. The noise level is not excessive and is commensurate with normal levels of activity for a townland edge environment.

2.36 Opposite the site is a sports field, the home of Portaferry Rovers Football Club which can get a little noisy on match days, but again, it is not excessive.

2.37 Over time the existing boundary planting as part of the DAERA Small Woodland Grant Scheme will ameliorate the environmental noises by acting as an acoustic filter and buffer.

## 3.0 Planning Context, Policy and Design Approach

- 3.1 The proposals are advanced in the context of the extant area plan, with the lands identified as HPA4 as detailed below.

### HPA 4 Land to the west of Cloughey Road

- provision of a satisfactory sited access onto the Cloughey Road to include the provision of a right turn facility;
- design of development layout and access details to ensure that houses front onto Cloughey Road and proposed public access roads;
- the retention of existing vegetation and the provision of a 8-10 metre planted landscape buffer using appropriate indigenous species on all boundaries to ensure a definite edge to the settlement adjacent to the Countryside;
- consideration of all views to the site, particularly from the A21 and Cloughey Road;
- provision of a pedestrian link to connect housing to schools and playground at the junction of Demesne View, High Street, Cloughey Road and Ballyphilip Road; and
- interim sewage disposal measures may be necessary until such time as the required upgrade to the Waste Water Treatment Works for Portaferry is complete and fully operational.

Illustration 20 – Extract from Portaferry, Ards and Down Area Plan.

- 3.2 A flood risk assessment has demonstrated that the proposals are located outside the floodplain and that the remainder of the site which is affected by some flood risk is not required for development and will be left as wetland areas in support of biodiversity.
- 3.3 The proposals will not detrimentally affect any protected species or protected habitats, and the efforts of the PC have already begun to contribute to habitat rebuilding, and re-wilding.
- 3.4 The Zone A housing development will meet the requirements of street frontage as defined within HPA4, and will have its own access, however due to the low vehicle numbers it will not require a right turning pocket.
- 3.5 The Zone B housing – the cohousing site proper will also have its own access and will not require a right turning pocket due to exceedingly low vehicle movements, and the character of street frontage will change here to address the reduction of density out into edge-of-countryside format, and to ensure that the internal character of the cohousing site and arrangements are achieved. It is not deemed appropriate to have a road-facing frontage onto Cloughey Road on this portion as it would disturb the dwelling relationships within the site arrangements and there is no desire to have a service road inside the splays.

- 3.6 This development will provide important housing and a new characterful housing type for Portaferry, for Ards and Down, and for Northern Ireland in its widest context. This opportunity should be grasped and Ards and Down planning and elected members are asked to proceed with speed to facilitate this development.

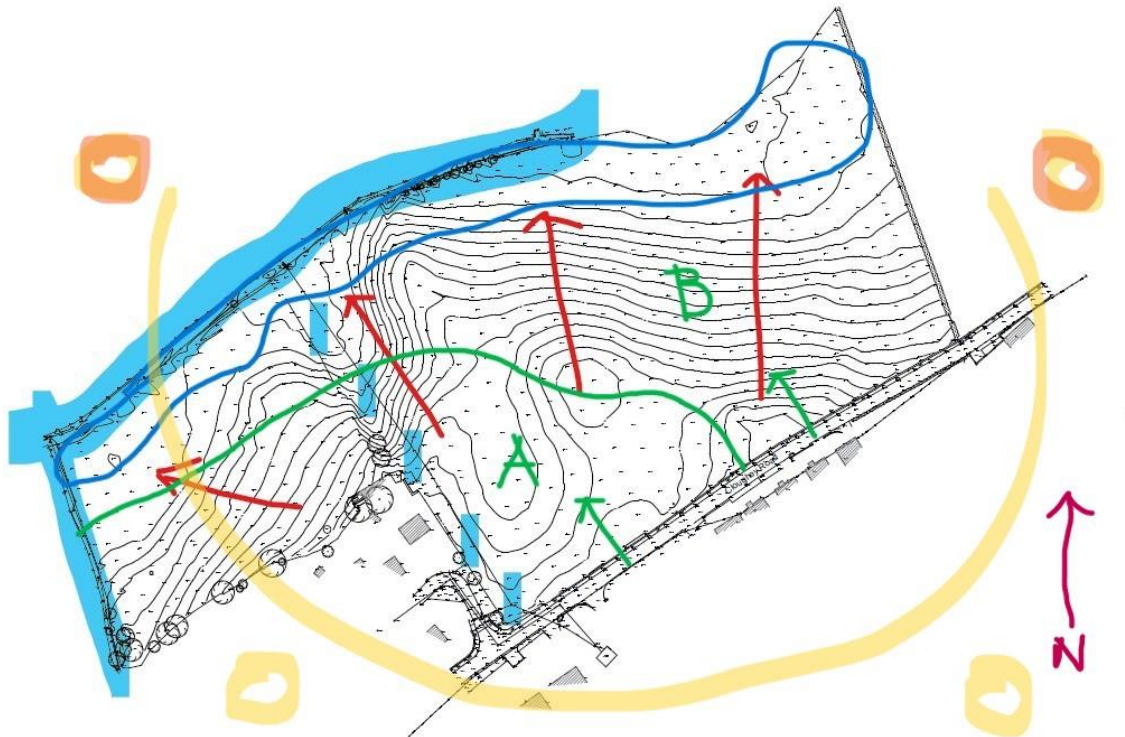


Illustration 21 – Concept sketch conveying Zones A & B including extent of flood risk.

### 3.7 Environmental Sustainability:

As a practice, Bell Architects address all aspects of environmental sustainability within every project we undertake, and this includes measures within all of the following:

- 3.8 Sustainable design is an approach to designing buildings, products, and systems that aim to minimize the environmental impact of human activities. There are several key factors that are important to consider when practicing sustainable design. These include:
- 3.9 Energy efficiency: One of the most important factors in sustainable design is reducing energy consumption. This can be achieved through the use of energy-efficient technologies and materials, such as insulation, energy-efficient lighting and appliances, and solar panels. For example, a study published in the journal *Building and Environment* found that the use of energy-efficient windows in buildings can significantly reduce energy consumption (Bertoldi et al., 2009).
- 3.10 Water conservation: Another key factor in sustainable design is reducing the amount of water used. This can be achieved through the use of water-saving technologies, such as low-flow toilets and faucets, and the use of drought-resistant plants in landscaping. For example, a study published in the journal *Environmental Science & Technology* found that the use of water-efficient appliances in homes can significantly reduce water consumption (Mueller et al., 2010).



- 3.11 **Materials selection:** The materials used in the design of buildings and products can have a significant impact on their environmental impact. Sustainable design seeks to use materials that are renewable, recycled, or produced using environmentally-friendly methods. For example, a study published in the journal *Environmental Science & Technology* found that the use of recycled materials in the construction of buildings can significantly reduce their environmental impact (Gambatese et al., 2008).
- 3.12 **Indoor environmental quality:** The quality of the indoor environment can have a significant impact on the health and well-being of building occupants. Sustainable design seeks to create healthy indoor environments through the use of natural lighting, ventilation, and the selection of materials that emit low levels of pollutants. A study published in the journal *Environmental Science & Technology* found that the use of natural ventilation in buildings can significantly improve indoor air quality (Fisk et al., 2000).
- 3.13 **Passive solar gain** refers to the use of the sun's energy to heat a building without the use of mechanical systems. This can be achieved through the use of design elements such as south-facing windows, thermal mass materials, and insulation to capture and store solar energy. Passive solar gain can significantly reduce energy consumption and costs in buildings.
- 3.14 **Active solar gain** refers to the use of mechanical systems to capture and use solar energy. This can be achieved through the use of technologies such as solar panels, solar hot water systems, and solar-powered ventilation systems. Active solar gain can be an effective way to generate electricity and heat in buildings.
- 3.15 Both passive and active solar gain can be used in sustainable design to reduce energy consumption and improve the efficiency of buildings. The use of passive solar gain is often preferred because it is a more cost-effective and low-maintenance approach, while active solar gain requires more initial investment and maintenance. However, the choice between passive and active solar gain will depend on the specific needs and goals of the building and its location.
- 3.16 **Site Development**  
All sites and existing buildings are assessed for suitability / viability of development whether for retention or demolition, and an asbestos survey (if required) is carried out prior to any demolition works to ensure clean and safe disposal of any potentially dangerous materials.
- 3.17 **Site Design and Orientation**  
As a rule of thumb, as part of our design process, we assess viability of solar orientation, alignment to view and light as the first assessment of any application, and flowing from this is then the opportunity to make use of roofing for solar panels, or windows to gain passive solar warmth from the sun. These issues cannot be considered **after** approval as it is then too late. The proposed scheme has been designed to make **maximum** use of passive solar gain, daylighting and natural ventilation. Maximum exposure to solar gain – whether passive or active can only occur if the houses are orientated correctly as per the following diagram. This is not a negotiable, this is a rule for solar design in buildings.
- 3.18 The buildings have been shown to have a Westerly patio space so that they can make use of the evening and afternoon warmer sun, and this outdoor space will be a vital part of the enjoyment of the resource for the owners.
- 3.19 **Technology and Material Specification**  
Our designs are always assembled to incorporate best practice and best values in efficient design of our buildings. The priority is to use sustainable materials with an emphasis on

re-useable and recyclable materials so that the project achieves the best in terms of cost to client and costs from a one-planet perspective.

### 3.20 Cradle to Cradle

All materials needing to be used have an impact on the environment, and buildings are one of the significant consumers of materials. As such, we avoid materials that are detrimental to processes of recycling and reclamation (such as ICF or suchlike) as the materials become enmeshed and extremely difficult to separate at end of life.

### 3.21 Lifetime analysis & Future-proofing

From a cost perspective, it is sometimes impossible to provide all measures at the initial stages of a build to make all our buildings zero-carbon, however we endeavour to build in options for the building owners to incorporate more efficient renewable systems into the building in future – such as solar panels or heat pumps. These allow the buildings to evolve and improve over the years rather than regress when compared with other structures.

### 3.22 Provision of Space

We design all our residential projects to have adequate space standards and to take cognisance of addendum to PPS7, and we believe that good environmental design relates to human well-being and happiness. This project is vital as it encourages awareness of our history and external environment.

### 3.23 General

Consideration has also been given to embodied energy, waste, noise pollution and conservation of water.

### 3.24 Site Access:

The southern roadside boundary along Cloughey Road is defined by a traditional capped dry stone wall with round capped pillars framing the only gateway access. Parts of The dry stone wall are in reasonable condition and should be retained or remodelled where possible. However there are areas of degradation and dilapidation.

3.25 A significant portion of the wall will be lost due to the creation of the new accesses – however achieving smaller splay requirements with access is critical otherwise larger splays will obliterate all of the walling. We propose to recycle the stones for use in landscaping and small building projects where they will make a useful heat sink.

3.26 As previously mentioned and indicated in by the proposed site layout drawings and masterplans for both applications vehicle and pedestrian access to Zones A and B will be made available by the creation of new access roads from Cloughey Road which will be designed accordingly to meet the standards required to be adopted.

3.27 However, as previously expressed the program characteristics and operational needs for a cohousing (Zone B) development will be inherently different by design than that of a more conventional housing development (Zone A), due to a significantly lower number and presence of cars and dependency/use of public transportation.

3.28 Access to individual dwellings will also be made available through hard surface private roads, pedestrianized service lanes laid in gravel or a similar permeable surface to allow the natural attenuation of rain water to occur, and private drive ways.

- 3.29 As the access routes such as pathways and service lanes will not be adoptable beyond the main site access road within the Cohousing development PC will provide and maintain lighting throughout the site. The intention is to use solar powered low-level Bollard-lighting and minimise unnecessary light pollution – friendly to wildlife and yet protective for people and children moving around the site.
- 3.23 Careful attention will be paid to trees and scrubs selection planted at junctions and on bends, to not significantly obscure horizontal sight lines or impact site access visibility splays.
- 3.30 To facilitate access for a disabled person, the proposal will include a level approach at entrances, adequate circulation space and turning space. The proposed scheme will be fully compliant with the requirements of Part R (Access to & Use of Buildings) of the Building Regulations as much as possible due to the constraints of the existing buildings and this has been taken into consideration in finalising the design.

### 3.31 Local Neighbourhood Facilities

Portaferry Town Centre is within walking distance from the development site and can be accessed by footpaths along the entire route. The town centre provides a variety of services with retail shops, hospitality businesses, leisure and cultural spaces, post office, credit union, churches of various denominations and service providers. (500m)

#### 3.32 Types of local facilities:

- Portaferry Integrated Primary School (200m from the site)
- St. Mary's Primary School (600m)
- St. Columbas College (150m)
- Nearest General Store and Petrol Station: Centra (250m)
- Portaferry Leisure Centre (100m)
- Play Park (150m)
- Household Recycling Centre (400m)
- Windmill Surgery (300m)
- Portico Arts and Heritage Centre (500m)
- Exploris Aquarium: (700m)

### 3.33 Pedestrian and cycle routes

A central tenet of cohousing is that spaces should be for people as much as possible, not for cars. Community infrastructure has been designed to enable car-free living as much as possible. As a result, one of the design principles for the site was to maximise space that is accessible on foot and bike. This will enable children to play safely, people to stop and talk without being interrupted by cars, and will reduce sound and air pollution within the site. Pedestrians (children and adults) have priority over cyclists and cyclists have priority over cars.

- 3.34 The access routes to the houses towards the north-west and north east are critical to the project's pedestrianisation, forming a central space for community interaction and access around the site. The route will be a segregated pedestrian and cycle path with a white line delineator (without physical segregation) of 5 metres width.

### 3.35 Public Transport

#### Bus

- 3.36 The Translink Bus Service Timetable operates at regular intervals throughout the week days, with lowered frequency during the weekends. The No.9 Translink Bus Service travels along the Cloughey Road past the site, connecting to Portaferry, Newtownards and Belfast. The nearest official bus stop is at the Portaferry Bus Depot, 100m from the site. However bus drivers if hailed will stop on request.
- 3.37 Also the No.10 Translink Bus Service from Belfast to Portaferry and Portaferry to Belfast arrives and departs from Portaferry Square, 500m from the site. Other Translink Bus Services arrive and depart from Strangford to Downpatrick and beyond. (School Bus Services are operational transporting local students to their schools.)

#### Ferry

- 3.38 The Strangford Lough ferry sails between Portaferry and Strangford in County Down every day of the year, except Christmas Day, 700m from the site. From Portaferry the ferry departs on the quarter past and quarter to the hour from early morning to mid evening, with timetable variations for Weekdays, Saturday and Sunday

### 3.39 Cohousing Parking Principles, Provision & Management

Centralised parking is one of the key differences in cohousing from traditional housing developments and this section will set out both the rationale for this approach, as well as the multiple quality standards that PC will adhere to in its parking provision. Parking has been carefully considered and designed to preserve visual character, minimise land use for cars and avoid excessive provision.

- 3.40 This is especially important given that anyone who chooses to move into PC will likely prioritise walking, cycling and public transport as their main modes of transport. Although not a 'car-free' development, PC will minimise car ownership through:
- a) self-selection in residents who prioritise active transport,
  - b) access to informal and formal shared car ownership schemes,
  - 3) accessible public transport, and
  - 4) proximity to services in Portaferry town accessible via active transport.
- 3.41 People who choose to live in PC recognise that the benefits of living on a largely car-free site and that having more interaction with other community members outweighs the loss of convenience of having a car right outside one's house. Our experience of the group design process is that most members want to live in the housing sites that are furthest from the car park.

- 3.42 PC has specified that the communal car parking space for residents and visitors, is easily accessible from the adopted road 'hammerhead', to provide accessible, safe and convenient off-street parking close to the shared common house.
- 3.43 The parking site will not be visible from the road due to screening by houses, trees and shrubs, as well as by the garages and greenhouses. The car park will be visible from multiple residences for informal surveillance for security, and close to the entrances to the houses to the south east of the site.
- 3.44 Spaces will also be designated for disabled drivers/car users located in close proximity to the Common House.
- 3.45 The car parking area will be surfaced with a permeable material through which grass can grow, for example Geogreen, reducing run-off and minimising hard surfaces.
- 3.46 The car parking will have electric car charging points to the majority of spaces. As explained above, residents will have minimal car use and will also choose to share cars (predominantly electric cars).

### 3.47 Cohousing Waste Management

An outdoor visually screened waste management collection area, designed to house large bins will be sited external to the common house with good access for both residents and council collection services. Food waste will be composted on site for use in the communal gardens so the waste management collection area will only be utilised for general (non recyclable) waste and materials for recycling.

- 3.48 It is expected that each home within PC will compost their own organic waste as well as a central compost station near the communal garden so there is less need for central organic waste collection. The communal ethos of the cohousing project will ensure that those that are less able to carry refuse will be supported by the well able residents.

### 3.49 Cohousing Rain Water Collection / Water Management

- 3.50 The collection of rainwater will relieve pressure on municipal waste water collection systems, reduce flood risk and save mains water consumption.
- 3.51 Rainwater will be collected and stored either in rain barrels sited adjacent to buildings or in larger tanks sited downhill from both the residential houses and common house.
- 3.52 Rainwater will be collected from the roofs of all buildings in Portaferry Cohousing Development.
- 3.53 Collected rainwater will be used in the polytunnels, the communal garden and private gardens. Any overflow from the storage capacity is to be directed into the SuDs Pond.

### 3.54 Landscape Design & Management – A Permaculture Approach.

Shared growing space and amenity space will allow community members to work together to grow food, as well as being able to enjoy their own private gardening space.

- 3.55 Permaculture design is a sustainable land use and community design system that seeks to mimic the patterns and relationships found in natural ecosystems. It is based on the principles of caring for the earth, caring for people, and sharing the surplus.
- 3.56 The Permaculture approach aims to create diverse, productive systems that provide for human needs while also supporting the health of the ecosystem. This is achieved through the use of techniques such as agroforestry, natural building, and water management.
- 3.57 Permaculture also emphasizes the importance of creating a strong, resilient community by promoting cooperation, self-reliance, and the use of local resources. Overall, permaculture aims to create a more harmonious and sustainable relationship between humans and the natural world.

### 3.58 Main Objectives of Landscaping

- provide recreational amenities and social spaces
  - provide gardens for communal food production
  - plant and maintain a small woodland
  - plant and maintain a food forest
  - enhance and maintain existing hedgerows and boundary planting
  - increase biodiversity
  - provide habitat for native wildlife
  - enhance water management
  - create a sense of place
  - support a rich community life
  - enhance the visual character of the landscape
  - integrate public and private open spaces
  - Increase biodiversity
  - provide a habitat for wildlife
  - create a sustainable and resilient environment
  - integrate the development into its wider landscape context
  - provide space for future landscape/garden projects in a variety of location
- 3.59 The majority of existing trees forming the landscaping buffer (mixed native species) were planted along the boundaries and within the site as part of the Small Woodland Grant Scheme in spring of 2022 (further information provided within the Supporting Statement). Mature planting of trees and dense vegetation exists along the south west site boundary with Rectory Wood.

- 3.60 The existing mature trees, the Small Woodland and the Fruit Forest Canopy and the existing vegetation of the hedgerows, the scrub/bramble layer and wetland will be retained and protected where feasible during the construction period. Thus all mature trees will be retained subject to a dead, dying or diseased assessment by a qualified arborist.
- 3.61 The primary aim of the proposed landscaping is to create an attractive quality environment that integrates with the built forms and provides the opportunity for both to mature over the coming years. Boundary planting will be retained where possible and strengthened as indicated.
- 3.62 The developer will provide areas of foundation planting strip to facilitate the growth of prostrate or arching shrubs and self clinging vines. Most should be evergreen. The effect of these will be to soften the appearance of building facades as the planting matures.
- 3.63 The proposed streetscape/throughfares are designed to provide welcoming friendly environments. The trees along the access road will give a welcoming natural feel to the development and will enhance the enjoyment of the site.
- 3.64 All planting selected within both developments are a diverse mix of native species suitable for the local regions ecological environment.

### 3.65 Cohousing Landscape Management

All maintenance will be undertaken, organised and reviewed by members of the Cohousing community under the direction of an appointed specialist:

#### Grass Areas:

- (a) Fine grass cut 16 times per year.
- (b) Rough Grass/Wild Flower areas cut 2 times per year, after flowering and at the end of the growing season with cuttings raked and removed from the site.

Invasive ragwort has been and continues to be controlled by hand to prevent spread to neighbouring livestock farms.

#### Trees:

Trees have been chosen for their appropriateness to their individual location. Pruning, other than for health and safety reasons, should not be necessary. They should however, be inspected by a suitably qualified arboriculturalist annually.

- (c). An area 1m diameter at the base of the trees shall be kept clear of weed and grass either mechanically or by using an approved herbicide.
- (d) Tree stakes and ties should be inspected 3 times per year (Autumn, Winter and Spring).
- (e) All dead and diseased branches, or those broken due to malicious action or wind damage should be cleanly removed and the scar cleaned up.

(f) All trees which have been removed or which are found to be dying severely or damaged will be replaced by trees of similar size and species to those originally planted. These should be replaced as soon as seasonal weather conditions allow.

Native Hedge:

The objective is to provide a thick, healthy impenetrable hedge. Pruning should be undertaken where necessary to achieve a neat and compact finish.

(g) Hawthorn/blackthorn hedge to be pruned back to an even hedge line to encourage thickening twice within the first growing season after planting and twice a year thereafter.

(h) Hedge planting that provides screening between dwellings and private amenities is to be supplemented with temporary solid timber fencing until the hedge is sufficiently established. (see fencing details).

The hawthorn hedge on the eastern boundary is currently managed by the neighbouring farmer. It has been agreed to leave the hedge un-managed for 2-3 years to allow for sufficient growth to carrying out the practice of layering a hedge in order to thicken the vegetation and infill gaps. This will improve the hedgerows functionality as a windbreak, as an enclosure for grazing animals and as a protective habitat for nesting birds. The responsibility for layering the hedge will be with Portaferry Cohousing.

### 3.66 Housing Landscaping & Management

The development is to be maintained throughout its life a management company which will be responsible for the maintenance, upkeep and replacement of all plant materials and pruning of trees as required.

Grass Areas:

(a) Fine grass cut 16 times per year.

(b) Rough Grass/Wild Flower areas cut 2 times per year, after flowering and at the end of the growing season with cuttings raked and removed from the site.

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(g) Hawthorn/blackthorn hedge to be pruned back to an even hedge line to encourage thickening twice within the first growing season after planting and twice a year thereafter.

## 4.0 Precedents

The proposals are advanced in the context of the many examples given earlier in this document and it is important to note that precedents have already been set in these many UK cases. Whilst there is not currently an example of cohousing in Northern Ireland, it is possible to reference the many sheltered housing schemes which come close in reference to the Cohousing arrangement.

- 4.1 The following example from a recent approval in Rathfriland is strategic in reference and supports some of the key issues within our proposal – Ref LA08/2019/0481/F

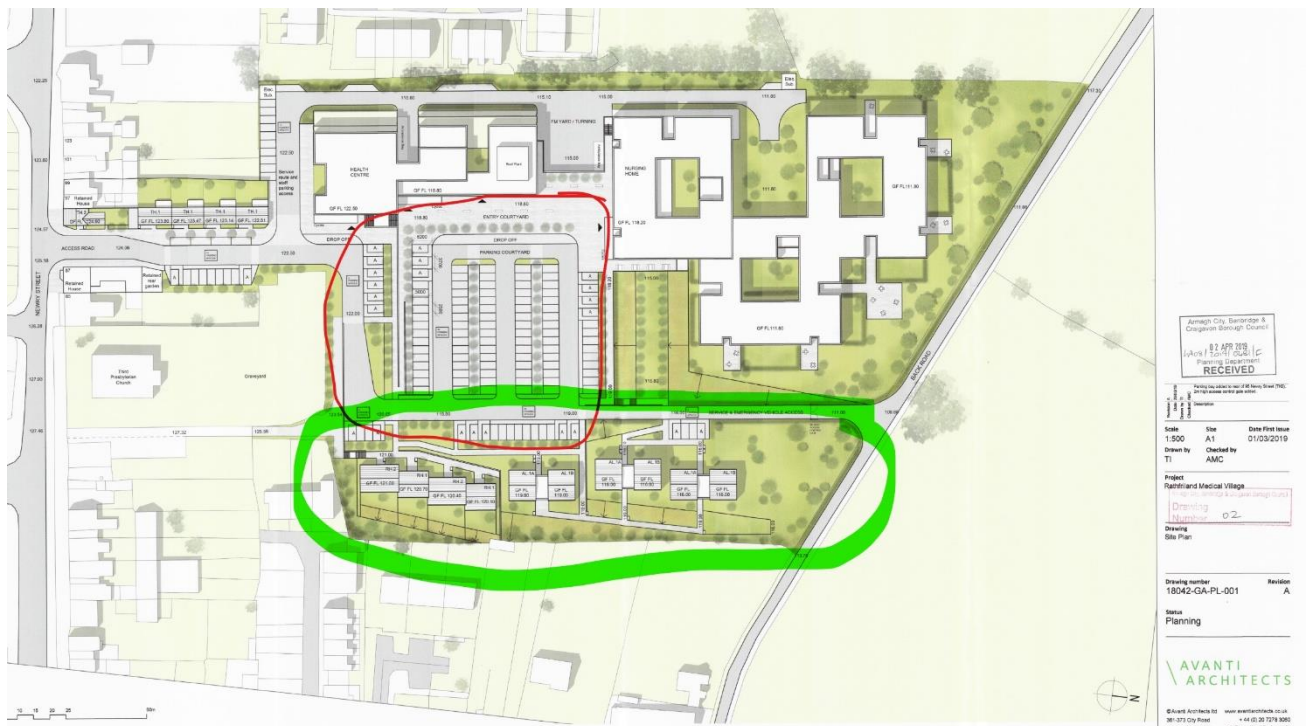


Illustration 22 – Rathfriland approval illustration extracted from planning portal.

- 4.2 It is notable that the dominant parking area circled in red is exactly what PC want to avoid – it is a great shame that the arrival into this site is dominated by cars and the visual impact of cars rather than nature, trees and environment.
- 4.3 Further, it is important to note that the lower portion circled in green has been approved as a satellite housing arrangement of apartments and dwellings, and the occupants walk to each dwelling from the parking area, akin to our proposal.
- 4.4 This walk from car park is a fundamental part of our design, and is deeply ingrained in the sociological arrangement of our scheme in that PC do not want to have cars parked adjacent to dwellings – this is why the car park area is off to one side of the development.

## 5.0 Concept and Design Proposals

### 5.1 Overall Concept evolution

PC have engaged in a lengthy design process with Bell Architects, and over the last 18 months have put together a robust proposal that addresses the vision of the community. As a community initiative, there were many word pictograms that demonstrated the key words for the development, and the gathering of words led to the evolution of ideas.



Illustration 23 – Word Pictogram formed of core principles and key words.

5.2 The core concept, that was developed, considered a semi-rural Cohousing development, based on aspects and themes from other established Cohousing developments tailored to the context of Northern Irish community typologies and other similar precedents following a site appraisal. While prioritizing and creating a communal and sustainable living environment for the cohousing community members. A long side the creation of a neighbouring housing development which will be more conventional in design, and for the fiscal support of Portaferry Cohousing and community offering.

- 5.3 The proposed Cohousing development will be one of Northern Ireland's most community focused and sympathetic housing development, and the community members proceeds with courage. We ask the same of the Officers and elected members as they consider these proposals.
- 5.4 Notwithstanding due process, we would request that the application proceeds quickly due to the fact that community consultation has already been carried out, and considering the important demonstrative benefit to Portaferry taking a Northern Ireland lead in this exciting initiative.
- 5.5 The beginning of any site assessment is location, orientation, solar benefit, exposure, access, topography, hydrology, context – and to this PC add many other considerations such as 'cradle to cradle', permaculture, ecological design, NZEB, passive, etc.
- 5.6 Early site concepts developed through consultations with Portaferry Cohousing members explored positioning Zone A along the Cloughey Road with Zone B situated behind. However this would have resulted in a longer stretch and linear rhythm of new dwellings with private driveways accessing the Cloughey Road, disconnecting the cohousing community - hiding it from view within the local community.
- 5.7 This layout would have also caused difficulty to achieve appropriate visibility splays as the entrance pillars of Rectory Wood would have been within the line of the splay.
- 5.8 Another concept explored positioning Zone A to the north east allowing the Cohousing development (Zone A) to possess a greater presence along the road almost as a low density buffer between the two densities of Zone B and Rectory Wood.

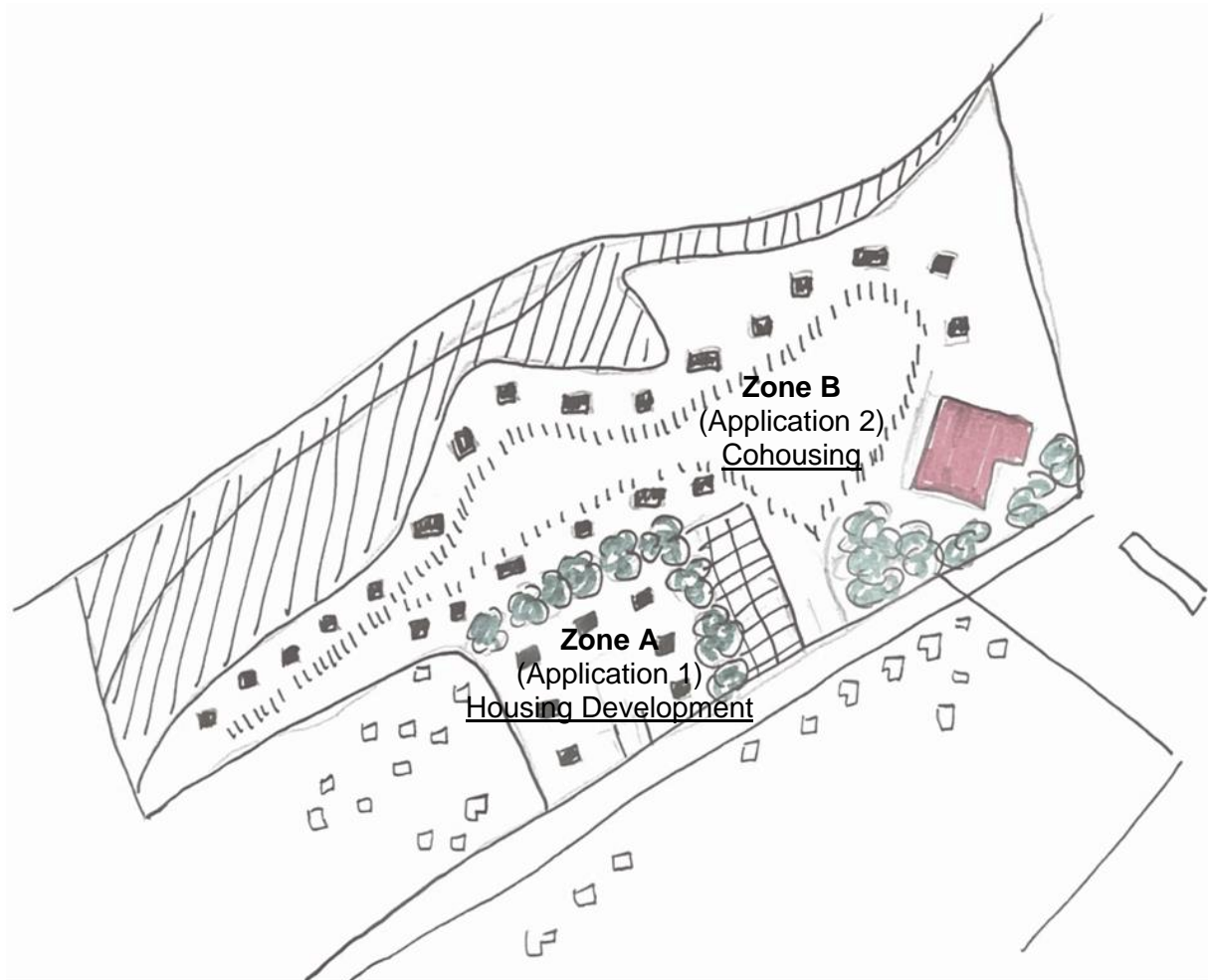
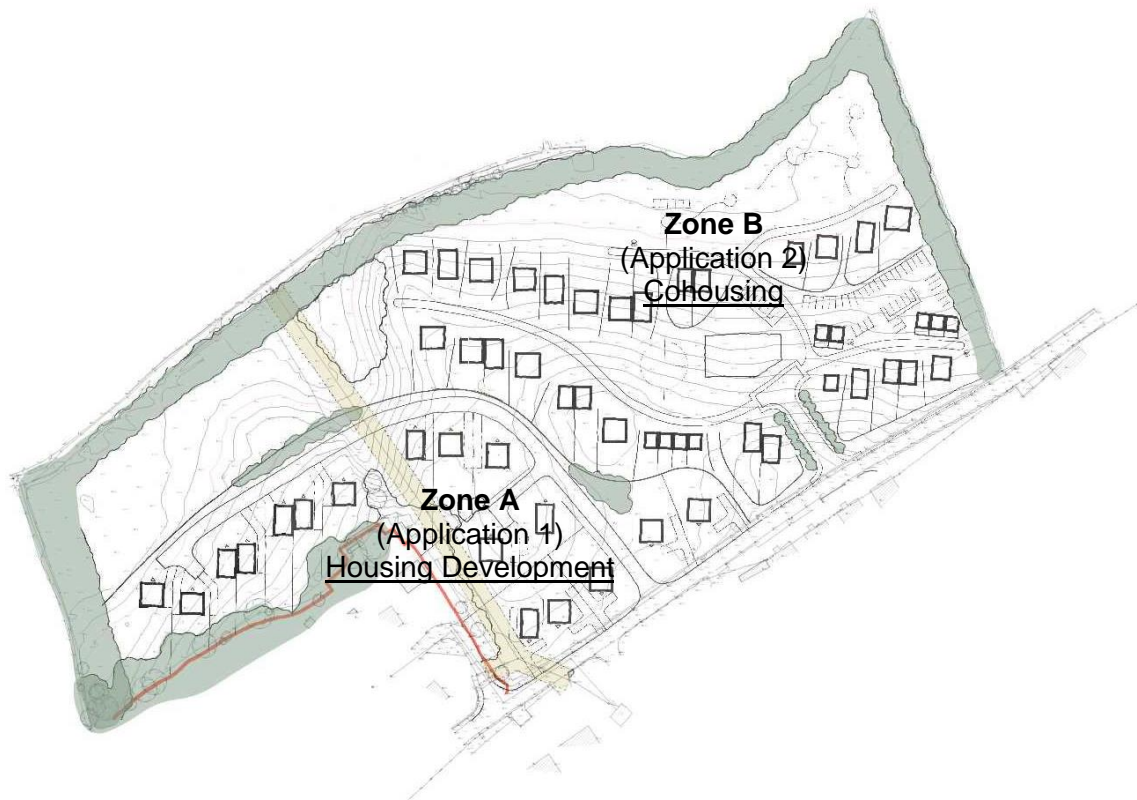


Illustration 24 – Early Masterplan Concept sketch of proposal Zone A (Housing Development) & Zone B (Cohousing Development).<sup>1</sup>

- 5.9 Another concept was developed to position the site entrances of Zone A and B towards the center of the site and repositioning Zone A closer to the boundary with Rectory Wood and reducing its size and number of units. The relationship between Zone A and Rectory Wood was beginning to work in all aspects.
- 5.10 However the reduced size of Zone B resulted in a reduction in dwelling units which are required to support the Cohousing Development.
- 5.11 The Common House within Zone B was also repositioned from the center to the corner of the site. However this moved against the principles of the community and would upset the rhythm of development along the Cloughey Road.
- 5.12 The relationship of dwellings was still disconnected and the road network created a defensive moat around an island social space.



- 5.13 The next concept developed combined elements of the previous concepts and was developed further to explore massing and layouts. This concept kept Zone A close to Rectory Wood and incorporated the cohousing sites to the west of Zone B within Zone A to blend the developments appeal.
- 5.14 The entrances of both zones were organised to the center of the site accessing from the Cloughey Road and ensuring that clear visibility and clear splays would result in both directions and from both locations.
- 5.15 The cohousing development organized itself around the Common House and social space keeping community space at the core and accessible to all members. The communal car park was also repositioned towards the edge of the development.
- 5.16 The layout was then continually tweaked by and evolved through ongoing design feedback and engagements with the cohousing community members to achieve a solution that was seen to be of most benefit for all.

## 5.17 Cohousing Development Concept & Design Proposals (Zone B)

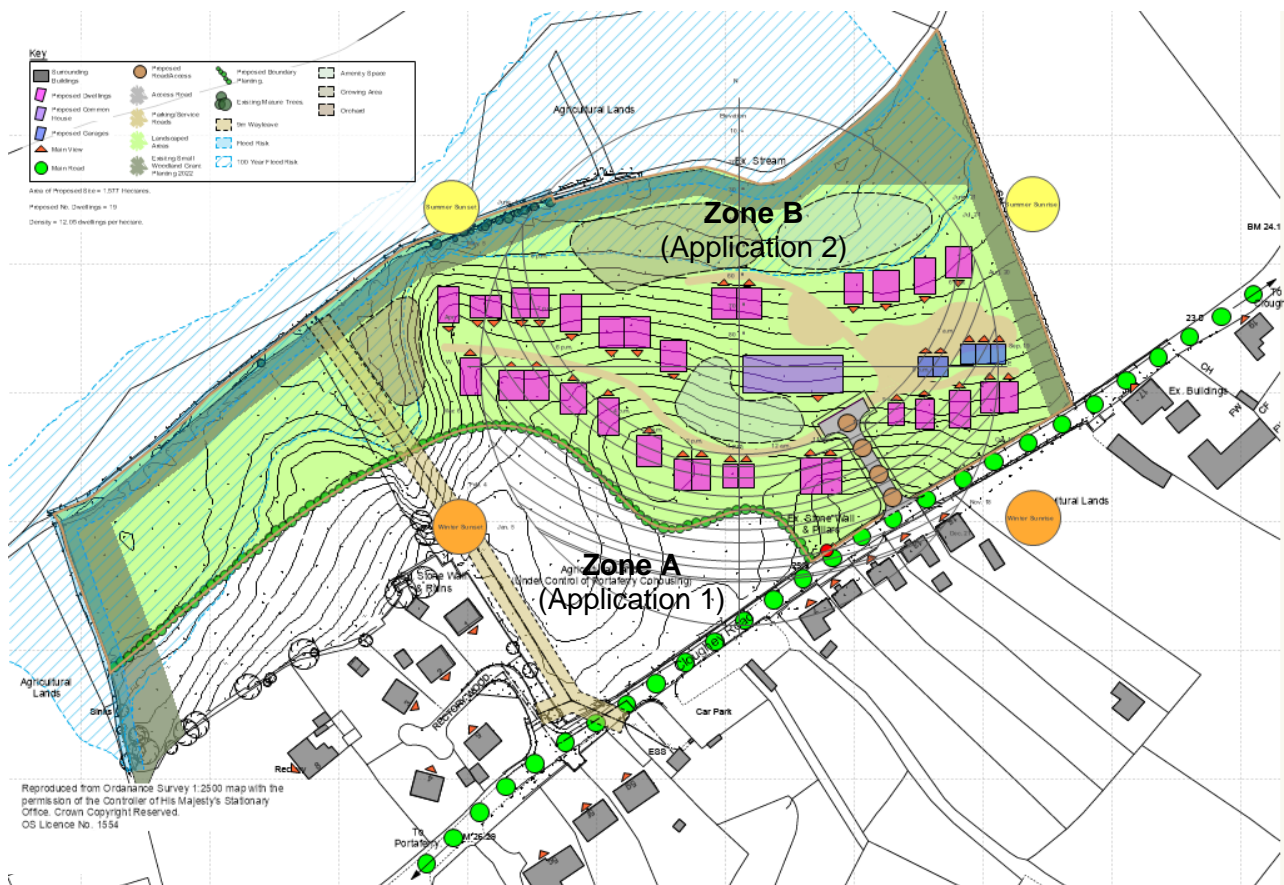


Illustration 24 – Cohousing development site concept of proposal.

- 5.18 The Cohousing site is designed and arranged to accommodate 32 dwellings positioned around a central Common House and social space, placing the communal provisions and community life in the core of the development.
- 5.19 The 32 dwellings are to be a mix of semi-detached, detached and terraced units situated along the natural contours of the site between the boundary for Zone A and northern flood zone.
- 5.20 The proposals arrangement of dwellings consists of 5 housetypes of different scales designed to accommodate the various needs and household sizes of the cohousing communities' members. The ambition is to create a sense of personality and diversity throughout the developments thoroughfares.
- 5.21 Additional amenity space providing communal gardens including space for a polytunnel and growing space for vegetables and other food crops is provided to the north of the site within the flood zone. A large portion of the site to the East is heavily within the flood zone and as such is to be set aside for rewilding to provide and reclaim natural habitats for local and native ecosystems.

- 5.22 The ambition of the cohousing development and community members is to reduce the presence of cars within the site by providing and promoting communal car sharing therefore reducing the need for additional service road infrastructure and individual private driveways.
- 5.23 A new adopted access road will provide both vehicle and pedestrian access to the site from the Cloughey Road.
- 5.24 As the development will have a lower flow of traffic to, from and within the site, due to a reduced number of private cars within the cohousing community, the proposal creates a centralised communal car parking area in close proximity to the proposed new access road in close proximity to the common house and community garages which will provide additional turning facilities.
- 5.25 The development site has included and positioned ,garages/stores designed with greenhouses to the southern side (with a 'lean to' design), this will enable the growing of plants year round and will also visually screen the car park (and there will be additional green landscaping on the car park periphery) from both the road and the houses to the south and north of the car park.
- 5.26 Pedestrianised service roads within the site will be accessed off the main site access road and act as service lanes to provide the opportunity for temporary/short-time vehicle movement to houses for emergencies or convenience/deliveries. These service lanes intend to act as private drives for the community members.
- 5.27 There is a pedestrian access to the site separately from the main access route used by vehicles. This 2 metre wide pathway is placed closer to Portaferry town and connects to the existing pedestrian footpath along Cloughey Road. This pedestrian access will therefore be used by the majority of people accessing the site on foot or on bicycle.
- 5.28 As the access routes will not be adoptable, Portaferry Cohousing will provide and maintain lighting throughout the site. The intention is to use solar powered low-level Bollard-lighting and minimise unnecessary light pollution – friendly to wildlife and yet protective for people and children moving around the site.

### **Cohousing Common House**

- 5.29 The Common House is at the core of the Cohousing Development for the enjoyment of the Cohousing Community members. It is a primary characteristic of Cohousing and is designed to provide additional ancillary resources and residential utility facilities.
- 5.30 The Common House acts as an extension to the dwellings within the development and provides a shared space for community members to meet, eat, socialise and plan together.
- 5.31 The Common House consists of a multifunctional hall for community dining, a large kitchen with food store, a space for children to play, a shared office space for working from home, guest accommodation, laundry facilities and entrance lobby/lounge space with a central postal delivery space.



- 5.32 The design and form of the Common House is similar to that of the Cohousing housetypes to maintain/create a sense of continuity within the development distinct to its character.
- 5.33 The design of the Common House will provide sustainable and efficient accommodation through the incorporation of renewable technologies including but not limited to an air source heat pump, PV solar panels for heating water and producing energy, and will incorporate water collection barrels for the flushing of toilets etc.
- 5.34 To facilitate access for a disabled person, the proposal will include a level approach at entrances, adequate circulation space and turning space. The proposed scheme will be fully compliant with the requirements of Part R (Access to & Use of Buildings) of the Building Regulations as much as possible due to the constraints of the existing buildings and this has been taken into consideration in finalising the design.

### Cohousing Housetypes

- 5.35 The dwellings are a mix of single storey and one and a half storey semi-detached, detached and terraced units to provide a wide variety of housetypes to meet the needs of the Cohousing community members ranging from 1 bed to 5 bed dwellings.
- 5.36 The presence of centralised, shared community space and facilities (Common House) means that individual residential houses do not need to provide everything needed by a conventional household (such as spare rooms, washer/dryers, storage of tools, or a home office). This means that houses can have both smaller rooms, and a lower number of rooms. This is the reason that PC has more 1-2 bedroom houses than would be usual in a traditional housing development.
- 5.37 The dwellings are designed to be orientated North and South. Bedrooms are allocated to the north of the plan with open plan kitchen, dining and living spaces to the south to benefit from passive solar gains.
- 5.38 The dwellings lack utility facilities as these functions are provided by the Common House. The design intention is to improve community relations by sharing communal utilities.
- 5.39 The Cohousing housetypes are designed as an archetype to promote a shared sense of identity through a contemporary form informed by local and historic domestic cottage style frontages and proportions.
- 5.40 The cohousing housetypes are designed to reflect aspects of traditional Irish cottage frontages and proportions in a contemporary style. The north facades feature small windows to reduce heat loss. While southern facades prioritise glazing to maximise passive solar thermal gains and natural day light into the primary daytime living spaces.

- 5.41 The primary archetypal feature shared by each housetype is a south facing roof pitch to accommodate the dwellings solar energy capture comprised of solar PV panels to produce energy and solar thermal panels to provide hot water. The low pitch allows for a longer roof span to the south facing section of the roof while also reducing the creation of any unnecessary loft space that would require additional consumption of material and finishing.
- 5.42 Materials and finishes will be select to reflect the aesthetics of the local context through the use of white render and dark roofing material and feature cladding systems that are sympathetic in appearance to the context yet characterful in appearance, sustainably sourced, manufactured, long-lasting, easily repairable, replaceable and or recyclable/compostable.
- 5.43 The housetypes are to be timber frame in structure and thus will help to minimise the embodied energy/carbon of the dwelling.
- 5.44 The characteristics of the cohousing housetype typology are shared by the Common House at the heart of the scheme.

## 5.45 Housing Development Concept & Design Proposals (Zone A)

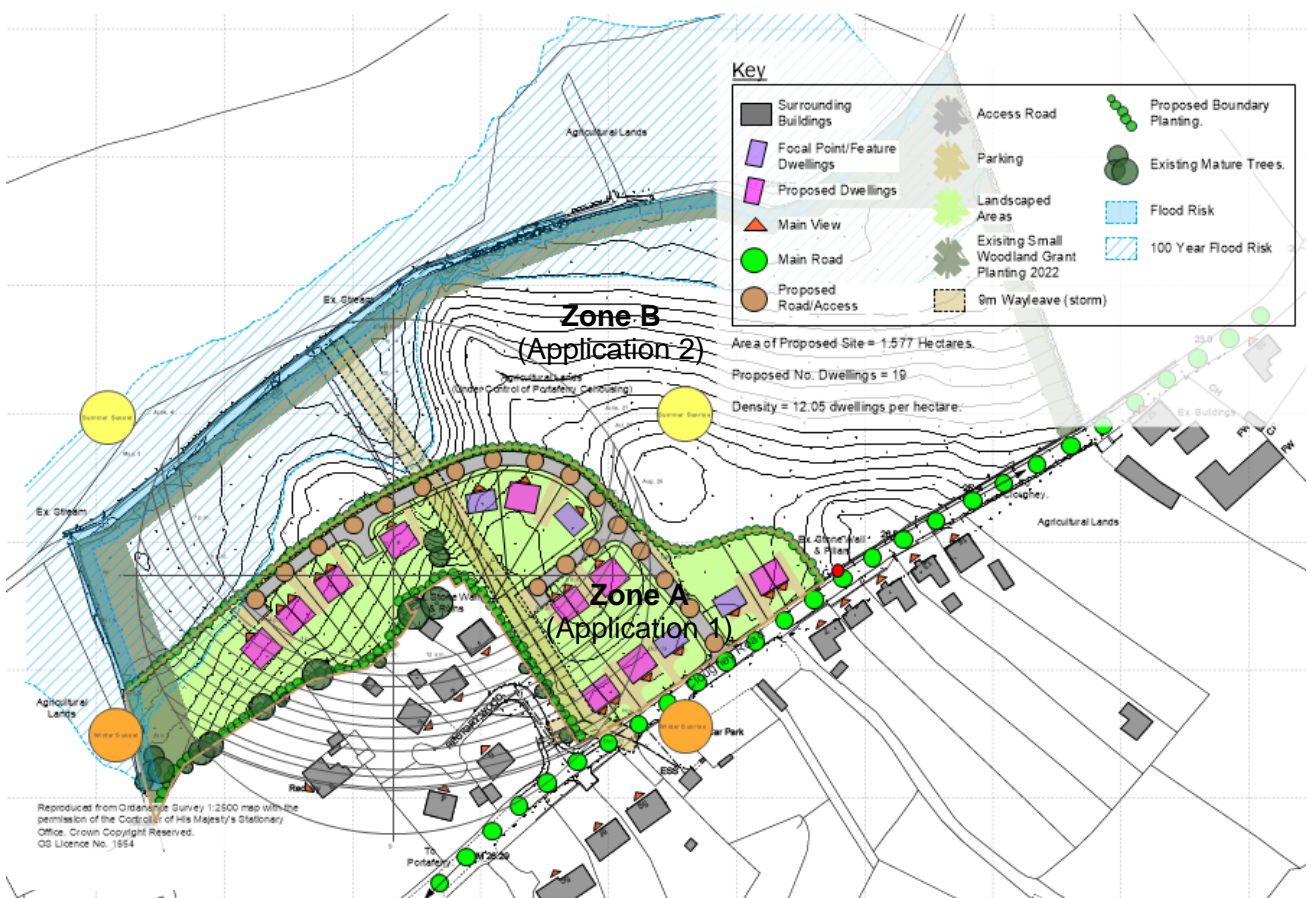


Illustration 24 – Cohousing development site concept of proposal.

- 5.46 The Housing development site is designed and arranged to accommodate a low density offering consisting of a mix of semi-detached and detached housetypes providing 19 dwellings between the boundaries of Zone B and Rectory Wood.
- 5.47 A storm drain runs through the site from the Cloughey Road towards the northern boundary along the western boundary with Rectory. Therefore, a 9m wayleave is intended to be allowed for and incorporated along its path.
- 5.48 The Housing development takes inspiration in its arrangement, scale, and density from its surrounding context. The orientation of houses differ from the North South orientation of the Cohousing development
- 5.49 Access will be granted to the site from a new adopted access road from Cloughey Road and private driveways from the front row of dwellings facing directly onto the Cloughey Road in response to the local context and orientation of residential houses and along the road.
- 5.50 The dwelling units, access road and private roads are situated along and follow the natural contours of the site.
- 5.51 Parking for residents will be provided by in cartilage parking on private driveways. Additional parking and turning facilities will be provided by the primary access road and private roads.

### **Housing Development Housetypes**

- 5.52 The dwellings are a mix of single storey and one and a half storey semi-detached and detached units comprised of 3-5 bed units.
- 5.53 The dwellings are more traditional in their form and appearance in comparison to the proposed housetypes of the Cohousing development but are still contemporary in their design and materiality. Utilising traditional white painted render, feature timber cladding and natural slate roofs or similar products and materials to achieve a finish or appearance of an equal or higher quality and character sympathetic to the local context and the sustainable design ambitions.
- 5.54 The orientation and position of each dwelling has been considered to provide warm south and southwest benefiting private amenity spaces to the rear of each dwelling. Also future developers or occupants/home owners can take advantage of the south south/southwest orientation further by mounting solar panels on south facing roofs.



Illustration 24 – Portaferry Cohousing Masterplan conveying combined relationship of both applications for Zone A (Housing Development) & Zone B (Cohousing Development).



Illustration 25 – Portaferry Montage with proposals in context – Architects illustration

## 5.55 Existing Landscape Features

### Dry Stone Wall

- 5.56 The southern roadside boundary along Cloughey Road is defined by a traditional capped dry stone wall with round capped pillars framing the only gateway access. Parts of The dry stone wall are in reasonable condition and should be retained or remodelled where possible.
- 5.57 However there are areas of degradation and dilapidation. A significant portion of the wall will be lost due to the creation of the new accesses – however achieving smaller splay requirements with access is critical otherwise larger splays will obliterate all of the walling.
- 5.58 We propose to recycle the stones for use in landscaping and small building projects where they will make a useful heat sink.

### Existing Vegetation

- 5.59 As Previously mentioned the Small Woodland Grant Scheme administered by Department of Agriculture, Environment & Rural Affairs (DAERA) and offered through the Rural Development Programme. Work commenced in the spring of 2022 during the months of March and April and has been subsequently continued by Portaferry Cohousing members and volunteers both local and international.
- 5.60 The Small Woodland Project was undertaken to enhance the biodiversity and ecosystem services of the landscape the planting and maintenance activity days have also created convivial communal gatherings and engagement for the current stakeholders in Portaferry Cohousing.
- 5.61 Following the guidelines as outlined by DAERA in the Small Woodland Grant Scheme - Information Booklet 2021, approximately 1500 bare root saplings and young trees have been planted to the following standards:
- tree species selection for planting matches the site conditions
  - planting has been undertaken with minimal soil disturbance
  - over 80% of the tree species planted are native priority woodland type with
  - a mix of tree species which includes a minimum of three tree species or varieties, with the least abundant making up at least 10% of the area
  - local provenance stock has been used wherever possible in accordance with the Native Woodland Definitions & Guidance booklet
  - the woodland does not include any non-native invasive species
- 5.62 20 metre wide strip has been planted with sessile oak, pedunculate oak, downey birch, silver birch, grey willow and goat willow. The oak occupies the drier south of the strip, the birch the damper middle part and the willows the wetter northern part.

- 5.63 10+ metre strip of native trees has been planted along the northern boundary. Willows have been matched with areas more prone to flooding, birch along transitional areas between wet and dry and the remainder has been planted with a mixture of native trees, namely sessile oak, pedunculate oak, rowan, hazel, hawthorn, blackthorn, guelder rose, elder, wild cherry and crab apple. The latter two have been planted on a section of the earth bank by the stream adjacent to the proposed communal vegetable garden in order to attract pollinators to the area.
- 5.64 Planting in the upper northeast corner of the site includes willow, alder, birch and hazel. The planting of alder and willow in this area is part of the integrated water management plan, as in the medium to long term the root systems will break up the soil, act as a sponge to soak up excess water, filter any pollutants and thereby reduce water run-off into the boundary stream and potentially impact on reducing flood risk further downstream.

PORTAFERRY COHOUSING: WOODLAND PLANTING 2022			
Trees:	No.	Common Name	Botanical name
Dominant tree species:			
	75	Alder	Alnus Glutinosa
	126	Downy Birch	Betula Pubescens
	146	Hazel	Corylus Avellana
	253	Sessile Oak	Quercus Petraea
	63	Pedunculate Oak	Quercus Robar
	125	Rowan	Sorbus Aucuparia
	113	Silver birch	Betula Pendula
	50	Hawthorn	Crataegus Monogyna
	30	Crab Apple	Malus Sylvestris
	40	Wild Cherry	Prunus Avium
	27	Blackthorn	Prunus Spinosa
	25	Guelder Rose	Viburnum Opulus
	157	Goat/Grey Willow	Salix Caprea/Salix Cinerea
	25	Bird Cherry/Sweet Cherry	Prunus Padus
	205	Mixed Native Species Donations	
<b>Total</b>	<b>1473</b>		

- 5.65 The eastern site boundary portion of the woodland planting is a Food Forest to take advantage of the prevailing microclimate, the woodland edge and sun orientation. As the Food Forest Overstory layer takes the longest to mature, Phase One of planting was undertaken in the spring of 2022 alongside the Small Woodland Planting.

<b>Food Forest Canopy Layer</b>			
<b>Trees</b>	<b>No.</b>	<b>Common Name</b>	<b>Botanical name</b>
	10	Apple	Malus
	4	Bay	Laurus Nobilis
	3	Cherry	Prunus
	3	Linden	Tilia
	2	Medlar	Mespilus Germanica
	3	Pear	Pyrus
	4	Plum	Prunus Domestica
	1	Walnut	Juglans
<b>TOTAL</b>	<b>30</b>		

- 5.66 A food forest is a diverse multi layered ecosystem of edible plants. The concept is based on seven layers of planting; the overstory, the understory, the shrub layer, the herbaceous layer, the root layer, the ground cover layer, and the vine layer.
- 5.67 In the food forest, the close proximity of compatible plants ensures that yields are maximised whilst the need for maintenance and intervention is minimised.

## 5.68 Proposed Landscape Features

### Communal Garden

- 5.69 An area envisioned for food production for the benefit of the whole community. Unlike traditional allotments, the communal garden will be a shared growing plot where everybody contributes to their abilities and time restrictions.
- 5.70 It is envisaged that the shared activity of tending to the garden will not only promote the production of food, but also catalyse a sense of community and neighbourliness. In looking to the future there may be the potential to engage with the wider community (non residents), through providing growing space and/or allotments in the community garden for food production.

## **Fruit Orchard**

- 5.71 A traditional fruit orchard in addition to the northern growing area is to be planted on the well drained ridge for the Cohousing side of the site for the benefit of its members. Species to include both heritage varieties and contemporary cultivars.

## **Social Space**

- 5.72 An outdoor amenity space adjacent to the Common House. Designed to function as a centralised meeting point and activity zone for cohousing community members and guests. Incorporating trees for natural shade and well drained grassed areas for safe play.

## **Wetland Area/Rewilding Zone**

- 5.73 Wetlands are an important ecological niche for many native species of plants and their unique environment provides a valuable habitat for wildlife.
- 5.74 The preservation and managed rewilding of the flood-prone area to the northwest of the site will potentially provide future habitats for threatened species such as the willow warbler and curlew. The zone also functions as a seasonal flood plain which alleviates water levels further downstream. With minimal disturbance to the soil in the Wetland Area the zone will act as a carbon store and active carbon sink.

## **SuDS Pond (Water Management)**

- 5.75 The purpose of the SuDS Pond is to slow the flow of water through the landscape and alleviate flood risk on lower lying ground.
- 5.76 Excess water from the overflow inlet in the adjacent field along with overflow from the natural reed bed will be directed to collect in the SuDS Pond to then slowly infiltrate into the subsoil.
- 5.77 The SuDS Pond will also provide habitat for native species such as frogs and newts and aquatic and marginal sub-aquatic plants. Some narrow channels through the earth bank on the northern edge have already been dug to drain some of the excess water into the stream.

## **Nature Walk**

- 5.78 The Nature Walk is intended to be a future cohousing community project to enhance the amenity offering of the development for the benefit and enjoyment of its members. The design intention is that it will be a landscaped feature constructed of timber decking designed to withstand future flooding.

## **Willow Tunnels**

- 5.79 This will be a future cohousing community project constructed by its members to mark the pedestrian entrance from the cloughy road.



## Hard Surfaces/Landscaping

- 5.80 All hardsurfaces will be designed and constructed to be permeable to allow water to naturally soak into the earth and reduce additional risk of surface water flooding within the site.