



Kilminchy Community Plan

A Green Infrastructure Masterplan for Kilminchy Estate, Portlaoise (March 2019)



Produced by:

Green Pine Consultants



Riailtas na hÉireann
Government of Ireland



Funded by the Department of Rural and Community Development

“Just as we must carefully plan for and invest in our capital infrastructure – our roads, bridges and waterlines – we must invest in our environmental or green infrastructure”

- Paris Glendening



Table of Contents

Section 1: Executive Summary	1
Section 2: Introduction	3
Section 3: Green Infrastructure	4
Section 4: Site Description	7
Section 5: Design Process	13
Section 6: Masterplan	18
Section 6.1: Lakes Park.....	29
Section 6.2: Central Park.....	34
Section 6.3: Commercial Centre	39
Section 6.4: Residential Pocket Parks	43
Section 6.5: Roadside Green Infrastructure.....	46
Section 6.6: Private Gardens & Residences	47
Section 6.7: Undeveloped Lands.....	48
Section 7: Engaging Community	49
Section 8: Costings & Phased Development	51
Section 9: Latest Developments	54
Section 10: Planting Details	57
Section 11: Management Plans	60
Section 12: Delivering on Local & National Plans, Policies and Guidelines	64
Appendices	65
Landscape Plans	65

SECTION 1:

EXECUTIVE SUMMARY

Green Infrastructure (GI) design can deliver multiple benefits for the community in Kilminchy, not only in terms of the physical infrastructure and amenities but also for the opportunities it creates to engage local residents and build a 'sense of place'. The plans aim to maximise these benefits and will deliver on a range of local and national targets and objectives from health to biodiversity. The proposals include;

- community woodlands, wildflower meadows and other biodiversity enhancement features
- new access throughout the estate
- natural play and recreation opportunities
- community events spaces
- proposals for how GI can be incorporated into the yet to be developed lands
- proposals for how to use the new GI features for community capacity building and community events

By taking this dynamic approach, which put community at the centre of the process of reimagining the estate, Kilminchy Homeowners have created opportunities for a transformation of the estate, both physically and socially in to the future. The community-based approach used here presents a blueprint for the transformation of similar sites throughout Laois and indeed throughout the country.



8 acres of
new
woodland &
wildflower
meadow

**Wildlife Habitat
for People &
Nature**

**Improving
Access**



3 new trails
over 1km
(150m of new
boardwalk)



New play park,
2 new multi-
use ball courts,
outdoor chess,
outdoor gym
trail

**Play &
Recreation
Opportunities**

**Community
Capacity
Building**



Community
Events Space
& Events
Opportunities



SECTION 2:

INTRODUCTION

The provision of Green Infrastructure in and around urban and residential areas is now widely recognised **as contributing towards creating places where people want to live and work. It is an essential component of good planning for urban and rural areas.** Although it can deliver multiple benefits that would complement grey infrastructure, it is rarely given the same consideration in urban (or rural) development.

However, increased awareness of the importance of Green Infrastructure (GI) does not always go hand in hand with a full understanding of what it is, the **multiple benefits** it can deliver and how it can be promoted and delivered through existing policies and process.

This report, and accompanying Masterplan drawing, explores opportunities to develop and maximise the benefits from good green infrastructure design in Kilminchy Residential Estate, Portlaoise. It follows two public consultation meetings held in October and December 2018 and the objectives laid out in the initial project brief:

1. Working intensively with the community to strengthen and enhance community structures.
2. Developing a Green Infrastructure Masterplan in collaboration with the community
3. Producing a detailed design & costing of GI Masterplan above

The areas / spaces in the Estate that were explored include the streetscapes and roadside verges, parks and lakes, smaller residential green areas, and the commercial centre. It suggests green infrastructure solutions / ideas to maximise the benefits for the community and how these features can be used to facilitate building on the sense of community.

The masterplan has been broken down into its different component parts so that they can be delivered in a phased way as resources become available. Each development phase is stand alone and not dependent on the previous or next phase happening.



SECTION 3: GREEN INFRASTRUCTURE

Green Infrastructure (GI) is a strategically planned network of high-quality green spaces and other environmental features. GI includes established green spaces and new sites. It should thread through and surround the built environment while connecting the urban area to its wider rural hinterland. Designed properly, it will deliver a range of economic, social and environmental benefits for community and the wider environment.



The potential for GI design to deliver benefits is vast and varied. It can help deliver across all sectors from economic to social to environmental and for a wide range of stakeholders. It can deliver at the individual, community, regional, national and international levels.

Economic	Social	Environment
<ul style="list-style-type: none"> • Creates more attractive places to live and do business • Creates more productive environments in which to work • Can create alternative business / employment opportunities • Minimises the need for costly grey infrastructure such as storm drains • Increases property values • Maximises tourism potential through • Reduces costly landscape maintenance e.g. grass cutting • Increase the profile of the commercial centre as an attractive place to shop and do business 	<ul style="list-style-type: none"> • Creates healthier places to live • Has positive impacts on people’s well-being • Can reduce anti-social behaviour • Creates a sense of place for residents • Can increase social cohesion within local communities and businesses • Improves off-road access for walking and cycling • Improves aesthetics • Production of local food 	<ul style="list-style-type: none"> • Improves air quality • Improves water quality and reduces storm water flow through Sustainable Urban Drainage Systems such as bioswales, rain gardens, permeable paving systems and natural absorption from planting • Creates ecological corridors from the town into the surrounding countryside • Increases and improves habitat for biodiversity • Sequesters and reduces the carbon footprint of a town • Can reduce air temperatures in urban areas during hot spells • Provides shelter and shade



Green Infrastructure Features - suitable in Kilminchy



Community Woodlands (Forest Gardens)

- Unused grass spaces and difficult to manage banks can be utilised as community owned and managed woodlands that adds interest to the Estate. Trails through them create a range of opportunities for the community.
- Opportunities: local food production; natural play & recreation; social events & volunteering; outdoor learning; biodiversity; community recognition (awards, publicity, etc.); reducing the Estate's carbon footprint; reducing water runoff; reduce grass maintenance costs



Wildflower Meadows

- Unused mown grass areas can be turned into interesting community spaces that are full of colour and wildlife. Mown paths and break out spaces invite people to wander through them and use them as outdoor learning spaces.
- Good for: natural play & recreation; social events & volunteering; outdoor learning; biodiversity; community recognition (awards, publicity, etc.); reducing the Estate's carbon footprint; reducing water runoff , can reduce grass maintenance costs



Lakes and Wetlands

- The lakes are a great natural resource for the community that could be utilised more to deliver a range of benefits for the community.
- Good for: social events & volunteering; outdoor learning; biodiversity; community recognition (awards, publicity, etc.)



Bioswales / Rain Gardens

- The design of bioswales in new developments on the Estate to manage storm water would deliver multiple benefits for the developers and the rest of the Estate.
- Good for: managing storm water; outdoor learning; biodiversity; community recognition (awards, publicity, etc.); reducing the Estate's carbon footprint; reducing grey infrastructure costs



Green Walls & Roofs

- The use of green infrastructure on the commercial centre buildings would enhance the building aesthetically and increase it's profile as a good place to do business.
- Good for: managing storm water; outdoor learning; biodiversity; business and community recognition (awards, publicity, etc.); reducing carbon footprint

SECTION 4:

SITE DESCRIPTION

Kilminchy Estate is a large mixed-use development situated on the north eastern side of Portlaoise. It consists of ~720 houses, apartment buildings, a large commercial centre, retirement homes / villages, and a central green spine of lakes and park spaces. Although the original masterplan was for one overall development, this quickly changed, with the Estate now been developed in different blocks by different developers. The result is a large Estate that has developed relatively quickly over the last twenty years that is made up of a range of smaller individual residential developments of varying styles anchored around a central green spine.





The are several distinct areas within the Estate that contain the bulk of the public spaces and combined with the private gardens make up the green infrastructure resource. A central spine of public green space runs through the Estate (~13 acres) linking the various areas and that could be a great asset for the Estate if properly utilised.

- 1) Lakes Park
- 2) Central Park
- 3) Commercial Centre
- 4) Residential Pocket Parks
- 5) Undeveloped Lands

On the whole, the Estate’s existing green spaces and green infrastructure, consisting primarily of mown grass, fails to maximise the benefits it could deliver for the community and wider environment. There are few amenities in the parks for the local community to use or to attract people to come and use the parks, which would in turn deliver economic benefits for the local businesses. However, there is great potential given the amount of green space available and the local enthusiasm and willingness to develop it for community good.

COMMUNITY GROUPS

Kilminchy Homeowners, are the elected committee (volunteers) that manage the Estate’s public spaces (Laois County Council currently have taken in charge the roads and footpaths). There is another group - Kilminchy Lakewatch - whose interest is in the improvement of the lakes.

For the most part it could be said that there has been limited community / social group activity and presence in the Estate, which is reflected in the lack of community events, social group outings and clubs or community driven projects to improve the current facilities / amenities.

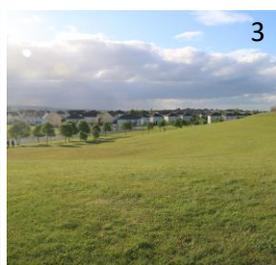
Lakes Park

This area is dominated by 3 large connected lakes that are fed by the now culverted stream that joins into the Triogue River further north. The lakes are surrounded by green space, consisting mainly of mown grass with occasional trees on the eastern side and an avenue of trees on the western side. There is an old gravel path on the western side of the lake that has grown over and is no longer functional, particularly in wet weather.



Central Park

This is a large central green space with the dominant feature being a large grass amphitheatre that overlooks the Slieve Bloom Mountains to the west. To the eastern side of the amphitheatre sits an area of flat green space, which is made up of mown grass and avenues of trees along the path and the roadside. This space is largely unused with residents complaining of it being wet underfoot due to poor drainage. There are two tennis courts, that are now in a state of disrepair, on the western side of the amphitheatre. There were originally plans to establish a tennis club here but this failed to materialize. There are two concrete footpaths through this park leading from the commercial centre to the estates – the Crescent and the Green. There are limited park furnishings in the form of benches, bins and signage in either the Central Park of beside the Lakes.



Residential Pocket Parks

The individual estates each have their own smaller areas of public green spaces. These are largely limited to mown grass only or with some occasional tree planting around the edges. Within the mix of estates on the north east (each beginning with the name 'Lake' and for the purposes of this report will be referred to from here as the 'Lake Estates') there are several areas of idle spaces earmarked for development that are open to the public. These sites have never been properly finished out / landscaped, even as temporary park spaces, and have grown over as rough grasslands on poor soils.



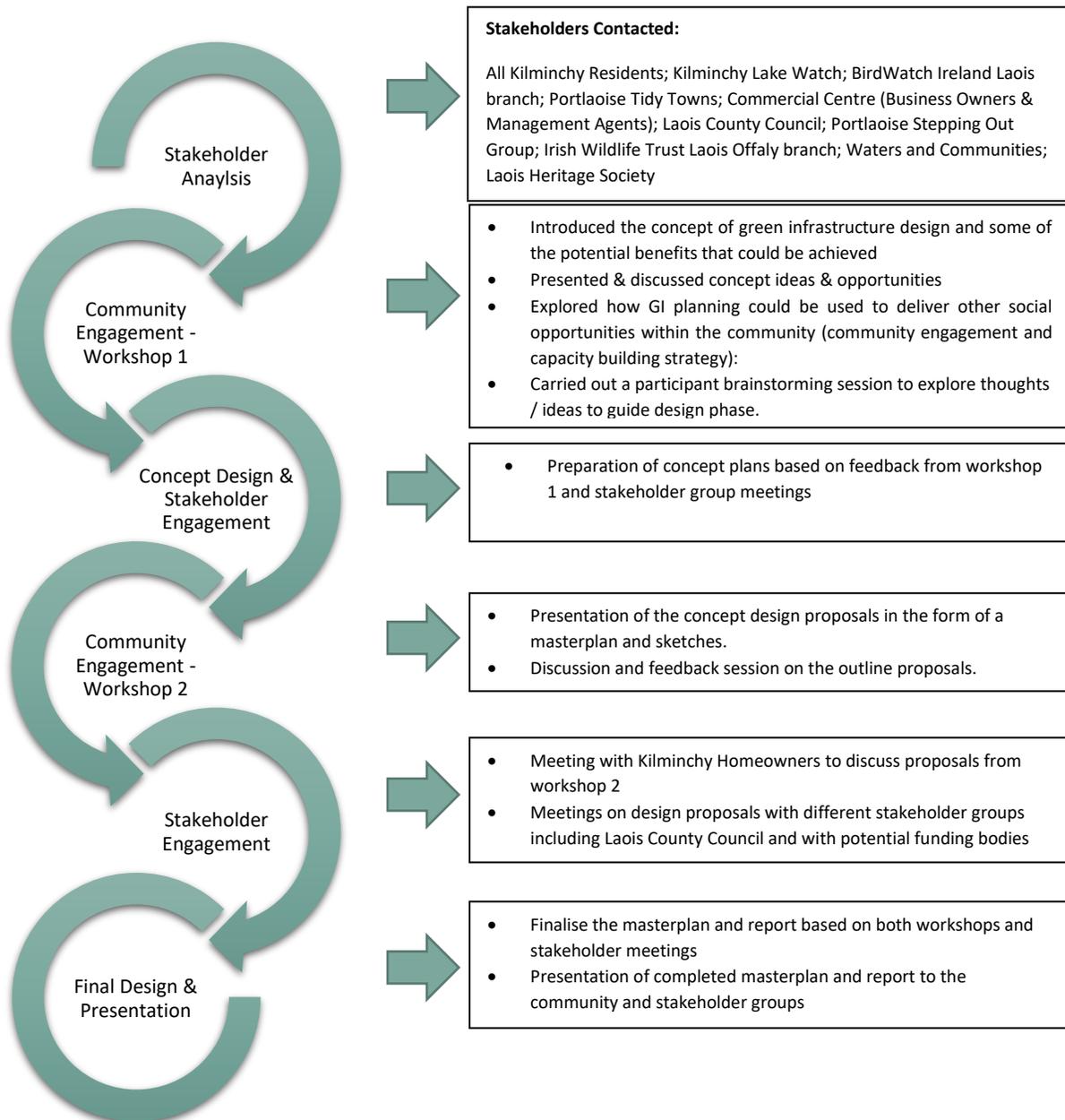
Commercial Centre

There is a large commercial centre located next to the Central Park, which has several important facilities (car parking, shops, etc.) that service the Estate and surrounding residential areas. It has a lot of varying types of public spaces, both hard (paths, buildings, car parking) and soft (grass verges, tree planting). The green spaces within it consist mainly of mown grass and tree planting (avenues and street trees). In 2018, the management agents created a wildflower meadow strip along the steep grass bank on the north western side of the centre, between the car park and Castle Road to remove the need for regular maintenance. This also served to increase wildlife habitat and create positive publicity.



SECTION 5: DESIGN PROCESS

To deliver a plan that receives the support of the community and maximizes opportunities and ideas, a period of consultation from the beginning of the design process was undertaken. Two community consultation meetings were held on October 22nd and December 6th 2018 in the Killeshin Hotel. These were widely publicized through posters in the neighbourhood, a leaflet drop to each household, local media and word-of-mouth. In addition, different stakeholder groups, which were identified in partnership with Kilminchy Homeowners and through desktop research, were consulted during the process.



Workshop 1 Feedback:

The feedback from the first workshop can be summarised as follows all of which was taken into consideration for the next phase of the design:

Access:

- Needs to be well designed to prevent anti-social behaviour

Community and Social:

- No youth opportunities or youth voice
- No sense of community
- Need community spaces

Lakes Park:

- Reinstate path around middle lake
- Clear back bushes from weir to create access
- Signage required – interpretation, maps
- Benches & site furnishings required
- Playground / equipment to green space near Rathevan Estate
- Improve access to the lake through a boardwalk
- Anti-social behaviour on the island

Commercial Centre & Bridle Walk

- Improve pedestrian access (railing) from the nursing homes side
- Make the place more friendly for all ages
- Not welcoming
- Access points from Bridle Walk apartments – too many?
- People need to feel safe
- Main sign not attractive
- Roundabouts; make features of these

Central Park

- Green space beside 'The Green' very wet – needs drainage
- Cricket and soccer played on tennis courts
- Safety an issue – children playing near the road
- Need flat spaces for recreation
- Need dedicated community space
- Need to cater for all persons – ages, abilities, etc.
- Connect paths and improve crossing points
- Storage for litter pickers

Written Feedback received after workshop:

- Redevelop tennis courts into multi-use ball courts for tennis, soccer, etc. with Kylemore Park in Ballyfermot identified as a good example
- Looped walks (waymarked) around the lakes and Estate
- Benches needed around lakes
- Trees planted in 'Lake Glade' in front of houses are unsuitable

Based on the initial project brief and feedback from workshop 1 the following design brief was used to guide the next phase of the design process. This was presented at workshop 2.



Workshop 2 Feedback:

The feedback received from this workshop and in subsequent correspondence was again largely positive. There was widespread support for plans and features proposed. They were happy that plans were being developed to address the lack of facilities and amenities on site. One participant made suggestions on specific details of some of the features proposed relating to the preferred location and materials for use for the site furnishings and the play park and equipment. Another individual raised perceived safety concerns about the proposed woodland and path in the Central Park. However, other participants expressed their support after the meeting and in further correspondence for the proposals as presented. All the feedback was taken into consideration as part of the final design and specific issues and concerns addressed using best practice landscape design principles, guidance from Laois County Council and from subsequent meetings with Kilminchy Homeowners.

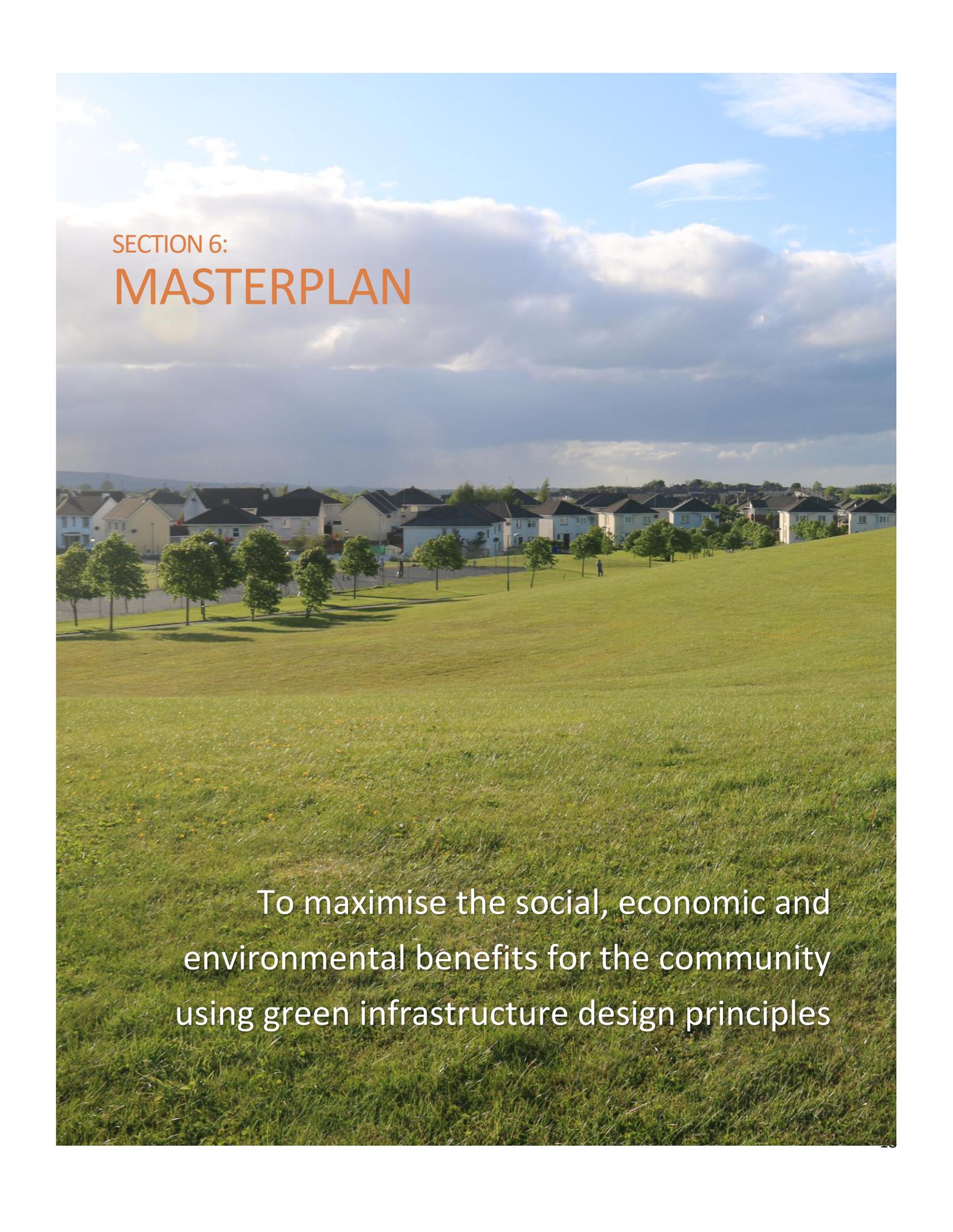
Feature	Feedback	Response
Site furnishings	Question raised about the use of timber for park benches – unsuitable in wet weather and it will become slimy in the Irish climate	All park features will need maintenance to keep it good condition, timber is commonly used in park settings
Play equipment and playground location	It was suggested by one participant that the play equipment should be made from or include steel play features.	Timber play equipment will be more in keeping with the natural play, only high-quality timber play equipment is recommended. Laois County Council have provisionally stated that any playground development will have to meet their requirements; natural play and timber play equipment is preferred
	It was suggested by one participant that the playground or a second playground with steel equipment should be located within the estate (beside the lake)	Timber play equipment will be more in keeping with the natural play, only high-quality timber play equipment is recommended. Laois County Council have provisionally stated that any playground development will have to meet their requirements; natural play and timber play equipment is preferred; site location will need to meet health and safety (a lakeside location will not be approved on these grounds).
	Several participants expressed their support at the workshop and in subsequent correspondence for the use of natural play and natural play features	Demonstrates support for the proposals.
Tree species selection	It was suggested that fruiting tree species be used in woodland planting schemes	This is a good idea and edible plant and tree species will be included in proposed planting mixes
Woodland in the Central Park	One participant raised her concern about creating woodland in the Central Park as it was perceived that this may give rise to anti-social behaviour	Woodland is a common feature in parks throughout the country. Properly designed paths (with sculptural trail) and management will keep an open woodland to enhance the feeling of safety for users. The planting is kept well back from the main existing path network so that the

	There was also support for the creation of woodland from other participants and in subsequent correspondence (a tree planting day in the Central Park in March 2019 had over 20 volunteers)	proposed new woodland doesn't close in on these routes and thus impact the sense of safety for users. The proposed path through the woodland is an optional route for people to enjoy the park. Incorporating features of interest along the route will also increase community use of this route and therefore act as a deterrent to anti-social behaviour. Building a sense of community through regular events and social clubs will help alleviate anti-social behaviour
Access to the commercial centre	It was suggested that access should be improved into the car park of the commercial centre	The plans have identified new ramps and railings to the car park to improve access. However, certain new official access points into the car park may not be possible for health and safety reasons but can be explored further. All access improvements will need approval by the commercial centre.
Pedestrian crossings	New speed ramps / pedestrian crossings are needed at certain locations throughout the Estate	Councillor Tuohy (present at the meeting) suggested that residents come up with a plan for pedestrian crossings / speed ramps which could be taken to Council for consideration (recommendations are included in this report)
Residential green spaces for development	It was suggested that one of the rough green spaces on the north of the site has had ground works to prepare it for development	This will affect proposals for a new meadow depending on planned timeframe for development. Confirmation of planning status for all these open spaces needs to be ascertained and should not affect the creation of temporary meadows if the proposed timeframe is significant.

Engagement with Laois County Council

Two formal meetings were held with Laois County Council during the process:

- A meeting with the senior planning officer Ms. Angela McEvoy on November 9th 2018 to discuss the initial concept plans and presentation from Workshop 1
- A presentation to invited Council offices showing the agreed plans developed after the two Workshops: Ms Catherine Casey, Heritage Officer; Ms Maeve Flynn, Horticultural Officer; Ms Ann Marie Maher, Sports and Leisure Officer; Ms Muireann Ní Chonaill, Arts and Creative Ireland Coordinator; Ms Angela McEvoy, Senior Planning Officer; Ms Linda Meredith, Staff Officer Business Support Unit; Ms Natasha Moriarty, Tenant Liaison Officer. (Also present were: Mr Mark Clancy, Laois Partnership Company; Mr Murt Moriarty, Kilminchy Homeowners; Mr Bernard Meehan, Kilminchy Homeowners)



SECTION 6:

MASTERPLAN

To maximise the social, economic and environmental benefits for the community using green infrastructure design principles

Masterplan Description

The Masterplan uses current land forms and suitable green infrastructure features to deliver maximum social, recreation, economic and environmental benefits for the local community and other stakeholders. The proposals will create a landmark park in the area for local people and families from the surrounding area.

Aims

- Maximise the potential benefits from green infrastructure;
- Create practical and necessary facilities including play and recreation opportunities, meeting and leisure areas, picnicking, etc.;
- Create a 'sense of place' and strengthen local community pride in the Estate;
- Enhance visual interest;
- Showcase and create awareness of cultural and natural heritage features of the area;
- Act as outdoor learning spaces; and
- Increasing the biodiversity value of the park and facilitate an intimate connection between people and nature.

KEY PROPOSALS

- Improve access and interpretation around the Estate including the lakes
- Develop the 'central park' as the main outdoor community hub for events, play and recreation
- New community woodland and wildflower meadows for people and nature
- Improve the user friendliness and feel of the commercial centre area
- Develop temporary park spaces on undeveloped parcels of lands
- Green infrastructure ideas for all new developments in the Estate
- Use these proposals to build a 'sense of place / community' amongst residents





Undeveloped lands developed as temporary park spaces (wildflower meadows)

Lakes and surrounding public green spaces managed and developed for people and wildlife

Central Park developed as the main outdoor community activity hub

Improve the appearance and user friendliness of the public spaces around the commercial centre area

Incorporate green infrastructure design features into new developments

Community Access:



- Feature pedestrian link to Rathevan and St Mary's CBS & Scoil Chríost Rí – to be discussed and agreed with residents of Rathevan
- Suggested waymarked trails:
 - Estate Trail (blue) – 2.6km
 - Lake Trail (orange) – 1.2km
 - Lime Avenue Trail (pink) – 1km
- New natural trails through the proposed wildflower meadows and woodland
- Opportunities to establish a community jogging / walking / fitness group and to run community events
- Primary path widths to be 1.5-2m

WAYMARKING ROUTES

Simple waymarker posts are a good way to highlight the new routes created and to encourage the community to use them to exercise and stay fit. These can also double up as cost-effective options for interpretation, adding another layer of interest.



PATH SURFACE OPTIONS

Option	Pros & Cons	Image
Crush & Run	<ul style="list-style-type: none"> - Least expensive hard surface option to install - less durable on heavy trafficked areas - not the most aesthetic finish <p>Paving construction detail:</p> <ul style="list-style-type: none"> • 100-150mm base of well compacted 804 hardcore • 20-35mm fine limestone quarry dust compacted finish • Treated timber edging optional finish 	 <p>The image shows a photograph of a paved path on the left and a cross-section diagram on the right. The diagram labels the following layers from top to bottom: 35-50mm of Self-binding gravel, 75-150mm sub-base, Optional Separation Membrane, and Sub-grade. An Optional Edging is also shown on the right side of the path.</p>
Hoggin	<ul style="list-style-type: none"> - attractive finish - less durable on heavy trafficked areas - more expensive than plain crush and run 	
Concrete	<ul style="list-style-type: none"> - more durable than aggregate only paths - not the most aesthetic finish - least expensive of the non-aggregate options - ties in with concrete paths already in the Estate 	
Tarmac	<ul style="list-style-type: none"> - durable - more expensive initial outlay 	
Resin Bound	<ul style="list-style-type: none"> - durable - attractive finish - most expensive option 	
Bark Mulch	<ul style="list-style-type: none"> - low cost - natural finish for woodland areas - less durable on heavy trafficked areas - not suitable for wheelchairs or buggies 	
Grass	<ul style="list-style-type: none"> - no material cost - natural finish for wildflower meadows - requires regular mowing 	

SITE FURNISHING OPTIONS

There is a need to significantly improve the amount and quality of site furnishings throughout the Estate. The selection of all site furnishings (lighting, benches, signage, etc.) should follow the same style and should be robust and easily maintained. Some suggestions:

Option	Modern	Traditional	Other
Benches			
Bins			
Lighting – Commercial Centre			
Interpretation Signage			

Other furnishings will include proposed shelters for the central park to tie in with the preferred style.

Community Wildlife Habitat:

The proposals will significantly increase the amount of different habitat that will have significant benefits for the local community and native wildlife.

Feature	Proposals	Benefits
 <p>Community Woodland</p>	<ul style="list-style-type: none"> • Existing: minimal woodland, mainly scattered park trees and avenues of street trees • Proposed: ~16,600m² (4.1acres) • Species specific conservation programmes • Interpretation 	<ul style="list-style-type: none"> • Social: benefits for health & well-being; creates opportunities for community events; increased civic pride amongst community; reduction in anti-social behavior; improved visual aesthetics; community recognition • Economic: increased property values; reduced grass cutting; increase footfall for local businesses • Environmental: new wildlife habitat; species specific conservation measures; reduces the Estate's carbon footprint; reduces rainfall run-off; increase environmental awareness
 <p>Community Wildflower Meadows</p>	<ul style="list-style-type: none"> • Existing: 280m² (0.07acres) • Proposed: ~15,785m² (3.9acres) • Species specific conservation programmes • Interpretation 	<ul style="list-style-type: none"> • Social: benefits for health & well-being; creates opportunities for community events; increased civic pride amongst community; reduction in anti-social behavior; improved visual aesthetics; community recognition • Economic: increased property values; reduced grass cutting; increase footfall for local businesses • Environmental: new wildlife habitat; conservation of a threatened habitat; species specific conservation measures; reduces the Estate's carbon footprint; reduces rainfall run-off; increase environmental awareness
 <p>Kilminchy Lakes</p>	<ul style="list-style-type: none"> • Management plan • Habitat boxes (see biodiversity enhancement features below) • Boardwalk and pond dipping platform • Interpretation 	<ul style="list-style-type: none"> • Social: benefits for health & well-being; creates opportunities for community events; increased civic pride amongst community; reduction in anti-social behavior; community recognition • Economic: increased property values; increase footfall for local businesses • Environmental: new wildlife habitat; conservation of a threatened habitat; species specific conservation measures; reduces the Estate's carbon footprint; reduces rainfall run-off; increase environmental awareness
 <p>Biodiversity Enhancement Features</p>	<ul style="list-style-type: none"> • 15-20 Swift nesting sites • 20 song bird boxes • 20 bat boxes • 1 Kingfisher nest box • 1 Sand Martin nest box • 1 Solitary bee bank • 1 Bug hotel • Wildlife interpretation 	<ul style="list-style-type: none"> • Social: benefits for health & well-being; creates opportunities for community events; increased civic pride amongst community; community recognition • Environmental: new wildlife habitat; species specific conservation measures; environmental awareness

Community Sustainable Energy:

Sustainable Energy Authority of Ireland (SEAI) assists energy efficiency community projects through capital funding, partnerships, and technical support.

With over 720 households in the Estate there is great potential to improve energy efficiency through a community approach. The **Better Energy Communities** is the national retrofit initiative with grant support of up to €28 million each year from SEAI. SEAI support new approaches to achieving energy efficiency in Irish communities. Upgrades can take place across building types to reduce energy use and costs throughout the community. SEAI aim to deliver energy savings to homeowners, communities, and private sector organisations. All projects should be community oriented with a cross-sectoral approach, and must show that the community can sustainably finance the proposed project.

What is funded?

PROJECTS SUPPORTED

- Community benefits
- Multiple elements, not a single focus
- Mix of sustainable solutions
- A clear road map
- Innovation and project ambition
- Justified energy savings
- An ability to deliver the project

MEASURES SUPPORTED

- Building Fabric Upgrades
- Technology and System upgrades
- Integration of Control Systems
- Integration of renewable energy sources
- Domestic Combined Fabric Upgrade
- Single Building Demonstration projects will be considered under the Communities Grant

For more details please visit:

<https://www.seai.ie/grants/community-grants/>



Kilminchy Heritage Interpretation:

Kilminchy has a rich heritage dating back to the 16th Century that needs to be brought to the fore and interpreted through signs, sculptural art pieces, webpages and social media, and in community talks.

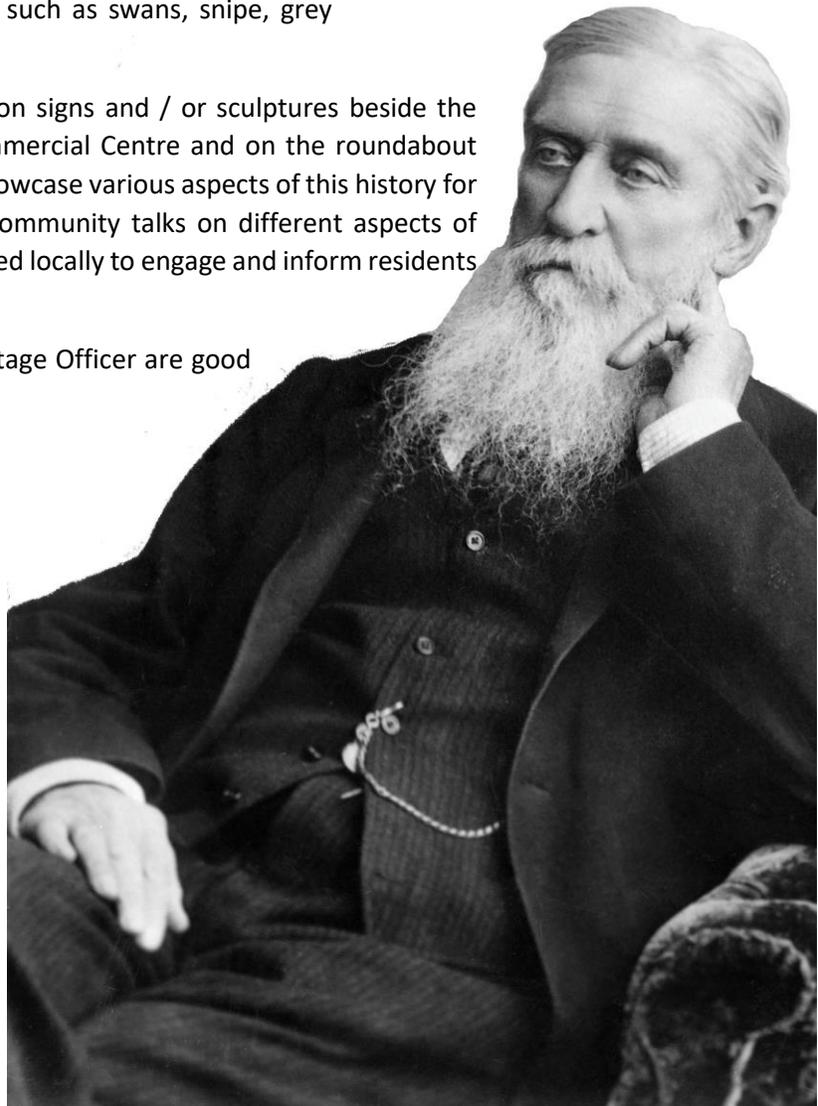
Kilminchy has an enormous wealth of history from the time the Fitzgeralds first settled in the area in the mid-1500's and built Kilminchy Castle to its use as the Mail Coach Station in the 1800's right up to its most recent use as a farm before the current development of the commercial centre. The area is now an important biodiversity hotspot in Portlaoise, particularly around the lakes, which is rich in bird life such as swans, snipe, grey herons and other water birds.

The plans include new interpretation signs and / or sculptures beside the lakes, in the Central Park, the Commercial Centre and on the roundabout beside the Commercial Centre to showcase various aspects of this history for locals and visitors to appreciate. Community talks on different aspects of local heritage should also be delivered locally to engage and inform residents about their local heritage.

Laois Heritage Society and the Heritage Officer are good sources for further information.

The Gaelic for Kilminchy is Choill Mhinsí, meaning the 'Wood of the Nanny Goat'

Kilminchy has a rich heritage, with both the area and its people having played pivotal roles not only in Irish history but also on the world stage. James Edward Fitzgerald (right) heralded from the Fitzgeralds of Kilminchy Castle.



Natural Play & Recreation:

The masterplan proposes the use of natural design policies to deliver new play and recreation in the Estate. Natural play has proven benefits that traditional steel and plastic playgrounds don't provide:

- Much more interesting and stimulating for children, it incorporates risk and imaginative play
- Better for a child's cognitive development
- Engages children in the natural world
- Visually more attractive and in keeping with surrounding park spaces
- Doesn't have to be fenced in like traditional playgrounds; can incorporate other green infrastructure features such as meadows and woodlands
- Can be less costly to install and maintain

In addition, Laois County Council has adopted a policy that all new playgrounds must be natural play parks.

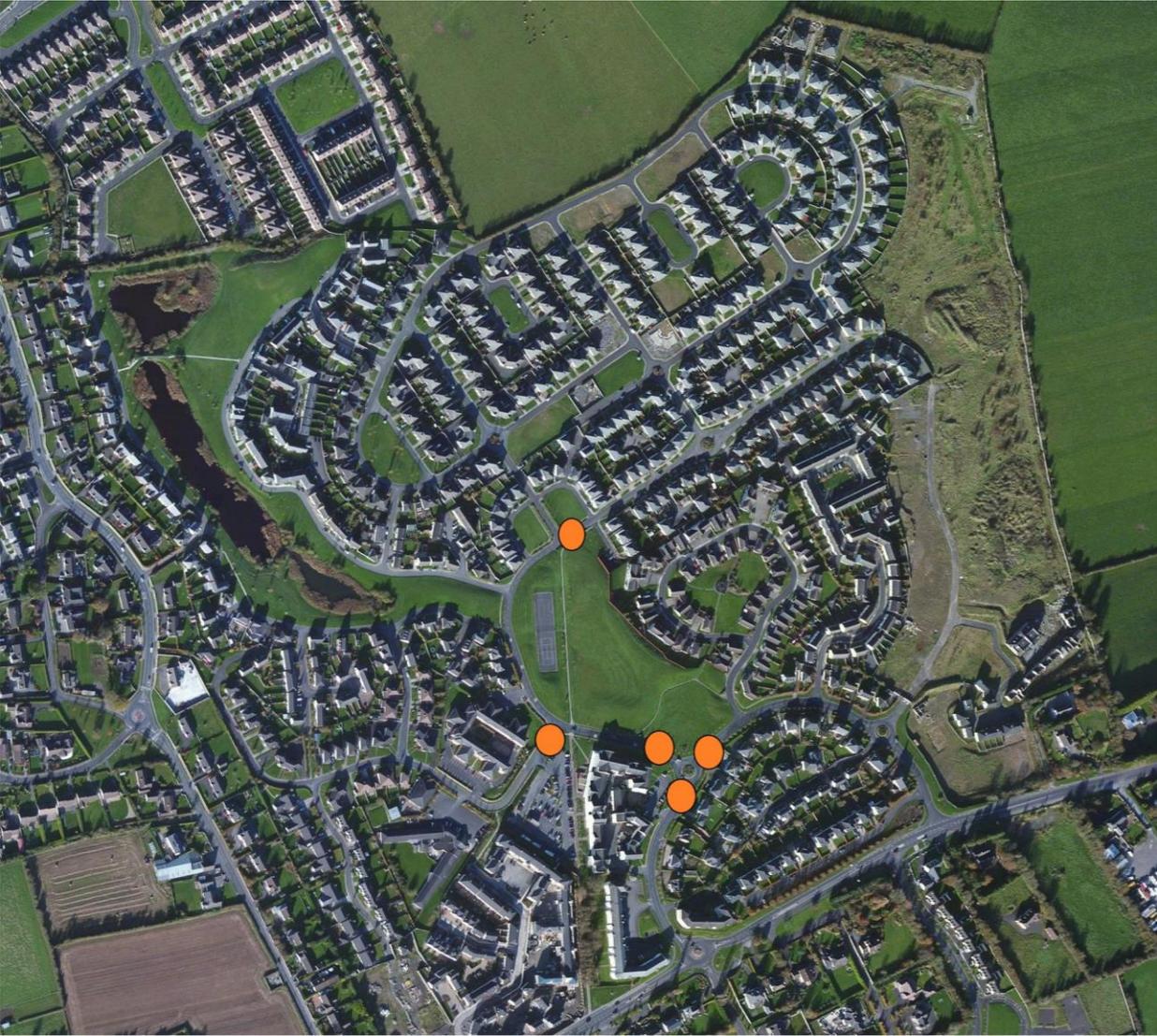
Natural play and recreation permeate through the design of all the park spaces and is not confined to set boxed in locations. Although new specific spaces for play and recreation are proposed such as the new adventure play park or the multi-use ball courts, the rest of the park design features also create opportunities for delivering these benefits. These can be in the form of simple mown paths in the wildflower meadows, the use of woodlands to create adventure trails, and other natural features such as fallen trees or large boulders set safely at selected locations.

This complements the retention of amenity lawn space at selected locations for ball games and other recreation.



Road Safety:

There is currently only one ramped pedestrian crossing in the Estate, connecting the commercial centre and the Central Park. A new speed ramp was installed on Lake Drive as a result of the community consultation for this Masterplan. This is completely inadequate for a development of this size and was raised at both workshops. We recommend that a road safety masterplan should be developed to properly plan the necessary measures (including speed ramps, signage, etc.). This can then be delivered, in a phased process if necessary, as resources become available. The plan below highlights where new ramped pedestrian crossings have been requested by the local community (shown in orange dots).



Section 6.1: Lakes Park

A Place for People & Nature

KEY PROPOSALS

- Boardwalk and pond dipping platform on the middle lake
- Pedestrian path around lakes with park benches
- Sign & sculptural piece interpreting aspects of local heritage
- Formal feature link to Rathevan (to be discussed and agreed by both estates residents)
- Community woodland and wildflower meadows
- Biodiversity enhancement features such as bird and bat boxes
- Management plan for lakes
- Retention of amenity grass areas
- Natural play feature(s) such as a fallen tree

The lakes already are one of the main attractions within the Estate and the plans aim to further enhance them as a family friendly park space. This includes both improving access infrastructure around and onto the lakes and complementing the natural feel of the park with other community managed natural features (woodland and meadows).

Improving Access: A new circular path will be built around the lakes consisting of; 1) a reinstatement and improvement the old gravel path on the western bank; 2) a new path on the eastern side sweeping around the upper and lower lakes to complete the loop; and 3) re-opening the link at the junction of upper and middle lake and connecting into the junction of the middle and lower lakes. The new path on the eastern side will consist of a ~150m stretch of boardwalk and pond dipping platform. This will bring users onto the lake at the narrowest and steepest stretch of the bank on this side. This route will also form part of the proposed Estate master route.

The creation of new areas of natural habitat on parts of the areas of mown grass surrounding the lakes will create opportunities for new natural trails, significantly increasing the overall length of walking opportunities. This can be done simply by mowing paths in the wildflower meadows and maintained natural trails through the woodland.

It is also proposed to create a formal link to Rathevan Estate at the point of the existing informal opening in the fence. A feature structure such as a moon gate, would mark the boundary between the two estates. This link would deliver a range of benefits for both communities improving access to the nearby schools, shops, and for friends within the estates. **This proposal would need to be discussed and agreed with the residents from Rathevan.**

At selected locations along the new paths new site furnishings (benches, bins, etc.) and interpretation will be installed. The interpretation will be in the form of new signage and sculptural pieces depicting aspects of local heritage. This is proposed at the point of the old stone bench at the junction of the middle and upper lakes.

New People Friendly Wildlife Habitat: To complement the lakes and the natural feeling of this park area new community woodland and wildflower meadows have been proposed. The plans propose to create a new wildflower meadow (~4,300 m²) - lowland hay meadow, a threatened habitat in Ireland – on the southern side of the park. The meadows should have grass paths maintained through them to allow and invite people to walk through and experience the wildlife in them at close hand. On the south western side of the meadow there is a proposed break out area with picnic benches. These meadows will have the added benefits for community; reduced maintenance costs, potential for new natural trails, creation of natural play opportunities and outdoor learning classrooms, visual enhancement and increased biodiversity value (which will deliver on local and national biodiversity targets). The creation and management of the meadows create opportunities for engaging the local community and environmental NGOs. This can include volunteering opportunities such as wildflower seed harvesting, meadow management, and growing and planting wildflower plug plants.

A new community woodland (forest garden), with access through it, is proposed on the north eastern side of the park on the large earth mound (~4,250 m²). The woodland can be managed by local volunteers as a forest garden style woodland, which maximises each layer (ground floor to canopy) for food production and timber products.

The main Estate waymarked path (Blue loop) will run through the woodland and meadows proposed.

Natural Play: Natural play is an important part of the design of the new Lakes Park. The new wildflower meadows and woodland with their natural trails create interest for imaginative play. In addition, it is proposed that other natural features could be placed at selected locations (e.g. a large fallen tree) or a new natural play area, similar to the new natural play space in Páirc an Phobail, Portlaoise, to create informal play opportunities.



Item	Description / Actions Req.	Qty / Measure
Lakeside trail	Boardwalk; to include built-in interpretation and seating	~150m
	Path; both around the lakes and through the proposed new woodland	~1.2km (~2,500m ²)
Site furnishings	Sculpture at crossing between upper and middle lake	1
	Interpretation sign at crossing between upper and middle lake	1
	Park benches along the lakeside path	3-4
	Picnic tables in the meadow	2
Natural Play Area	Natural play area and features beside proposed new woodland	1
Natural Habitat	Wildflower Meadow	~4,300m ²
	Forest Garden / Woodland	~4,250m ²
	Upper Lake; managed for wildlife	
	Middle Lake; managed for agreed community access and events	
	Lower Lake; managed for wildlife	



~4,300m² of new wildflower meadow



~1.35km of new paths



~4,250m² of new community woodland

Mood Board



Community Wildflower Meadows, Woodlands & Biodiversity Features



Natural Play Features; fallen trees, mounds, boulders, etc. Access to Lakes; new boardwalk, pond dipping platform, interpretation & used for community events



Community Access; new walking/jogging paths, formal links to Rathcree, signs and sculpture interpreting local heritage, benches & site furnishings

Section 6.2: Central Park

Kilminchy's Outdoor Community Hub

KEY PROPOSALS

- Feature adventure / natural play park
- Multi-use ball courts and outdoor gym trail
- Adventure woodland & sculptural trail
- Community events space

The Central Park is the ideal area to act as the main central hub for outdoor amenities for the Estate. It's central location in the Estate amongst the houses and retirement / nursing homes allows all residents easy access and its location next to the car park and shops provide the necessary facilities to cater for users. Its size and the topography will facilitate the development of the proposals in a contained way that is easily blended into its surroundings.

Improving Access: A new adventure woodland path, that forms part of the Estate's proposed Blue Trail, will be built onto the hill and through the new woodland planting area. This will lead up to a new seating area at the top of the hill which overlooks the Slieve Bloom Mountains. Along this woodland trail there will also be a series of sculptures depicting an interesting aspect of

local or Irish heritage such as species of Irish wildlife that have gone extinct (e.g. wolf, bear, boar, lynx, Irish elk, etc.). This sculptural trail can be complemented with interpretation signage on the same theme and form part of the overall sculptural plan for the Estate.

A new plaza space between the proposed new multi-use ball courts and the footpath and play park will create an area for social gathering and relaxation for all. Under the existing lime trees new seating and outdoor chess tables are proposed alongside feature lighting of the area.

New People Friendly Wildlife Habitat: The Central Park will be contained within swathes of new predominately native woodland (~9,205m²). This will consist of the new adventure woodland trail mentioned above and belts of perimeter woodland planting around the multi-use ball courts and the community events space. The planting on the mounds between the ball courts and the road should be carefully selected using mainly smaller native tree species that won't impede the views out onto the Slieve Bloom Mountains in the future. Some larger native trees such as pine and oak can be used at the ends of this planting to frame the views. Some traditional Irish fruiting trees should be planted throughout that can be used by the community. The understorey of the woodland directly along the trails should be kept open to alleviate any safety issues for users. This can be managed as part of selective thinning and good woodland management procedures in the future as the woodland matures.

Natural Play & Recreation: The entire Central Park can be viewed as one large natural play park. It will consist; 1) the core adventure playground with dedicated bespoke and/or high-quality timber play equipment alongside natural features such as boulders, logs, etc.; 2) the natural grass bank of the amphitheatre, which allows for more free play (e.g. toboggan in snow, rolling, running, etc.) and some

clever use of play equipment and design e.g. slides and climbing activities; and 3) the adventure woodland trail.

There are two new multi-use ball courts proposed to replace the existing tennis courts. This will allow for a wider range of games to be played on them and allow more users to use it at any one time. A new outdoor gym trail is proposed at the end of these courts.

Community Events: The area of grass space beside 'The Green' will form a new community events space consisting of paving, a bespoke shelter, drained grass area and feature perimeter planting. An assessment of the drainage on the green is required.

Item	Description / Actions Req.	Qty / Measure
Adventure Woodland Trail	New native woodland planting (including community events space and play park)	~9,205m ²
	Path (sculptural trail) through the proposed new woodland	325m (~650m ²)
	Entrance signs	4
	Themed sculpture trail (extinct Irish animals or other agreed theme)	5-10
	Interpretation signs	1
	Seating area & gazebo	1
Site furnishings	Benches (throughout all spaces)	10-15
	Litter / dog bins	4-5
	Paved seating area	~500m ²
Play Development	Feature adventure playground	1
	Multi-use ball courts	2
	Outdoor gym trail area	1
Community Events Space	Feature pergola	1
	Path and paving area	~760m ²



~19,000m² of new natural play space



~0.35km new adv. trail

~9,205m² of new community woodland



Mood Board





Adventure / natural play park incorporates natural features with high quality play equipment to create interesting and stimulating play spaces



Multi-use play and recreation space including multi-use ball courts, outdoor gym trail, outdoor chess tables, etc. Feature lighting and site furnishings in the plaza space.



Adventure woodland trail



Community events space

Section 6.3: Commercial Centre

Kilminchy's Green Commercial Heart

KEY PROPOSALS

- Enhance the feeling and look of the centre and shop fronts – new interpretation, plaza, seating, etc.
- Improve access around the site
- Green walls at selected locations
- Pollinator friendly planting & wildflower meadow creation
- Replacement tree planting
- Biodiversity enhancement features

The Commercial Centre has the potential to utilize green infrastructure design principles to maximise business potential and improve its user friendliness.

Improving Access, User Friendliness & Appearance:

The public areas outside the shops on the car park side is to be enhanced to improve user friendliness, appearance and feel of the complex. This includes a new feature plaza outside Clelands shop that features interpretation (sign and / or sculpture) of the rich heritage of Kilminchy. This will complement the new beer garden being developed at the front of O’Gorman’s. Another seating area with raised beds planted with pollinator friendly plants will replace two of the grass areas, which are worn due to foot traffic.

The current pedestrian access from the Sue Ryder side can be difficult for less able-bodied persons and should be improved with safety features such as a railing.

The building offers the chance to develop green walls and / or heritage murals that will improve the complex visually and further enhance the profile of the area to do business.

Signage: The current signage around the complex and entrance to the Estate has been developed in an ad-hoc manner over the years. It offers little benefit to the businesses in its current form and is unsightly for residents and visitors. A new feature entrance sign for Kilminchy Estate should replace the old sign on the Dublin Road. A new sign for the businesses should be installed at an agreed location on the commercial centre site that maximises the profile for the businesses and removes all the other small signs erected around the complex.

New Wildlife Habitat: The newly created meadow on the bank adjacent to the Castle Road should continue to be augmented with local provenance native wildflower species to increase the floral diversity. New areas of meadow are proposed along the northern boundary of the site on the wide grass verges.

The grass verges under the mature lime trees on Bridle Walk should be managed as woodland gardens with woodland bulb and wildflower planting. This will create a striking entrance to the complex from the Dublin Road, particularly during the spring and summer months.

The building should also be used as a high-profile site to aid the conservation of certain native species of wildlife such as the Swift. The northern face of the building would act as an ideal location to establish a new Swift colony. This will add to the work carried out in Portlaoise in recent years to conserve and raise

awareness of this species. For more information on this species: <http://www.swiftconservation.ie/> or <https://www.birdwatchireland.ie/IrelandsBirds/Swift/tabid/1127/Default.aspx>

The proposed green wall mentioned above will also create significant new vertical habitat for wildlife including our native pollinators. Green roofs should also be explored as an option where they are capable of supporting it. The roof spaces should also be explored for their renewable energy potential.

Item	Description / Actions Req.	Qty/ Measure
Shop Frontage	New plaza space in front of Clelands Shop	~400m ²
	New plaza space with 2 large pollinator friendly raised planters in front of off-licence	~170m ²
	Possible new mural on local heritage including local history, natural heritage and recent social interpretation	1
Buildings Biodiversity Enhancement	Install swift boxes (triple cavity) on north facing side of building	10-20
Access	New steps with railing beside main entrance to car park	1
Car park	Replacement street tree planting	4
	Pollinator friendly planting in raised bed	~25m ²
Wildflower meadow	Extend area of wildflower meadow along northern grass spaces	~460m ²
	Continue to enhance existing meadow	~280m ²
Roundabout	Replace planting with new landscaping	~160m ²
Bridle Walk & Dublin Road	Replace main sign with new feature sign for the Estate and Commercial Centre	1
	New woodland wildflower planting (bulbs and seed) under lime trees	~1,125m ²



~2,060m² of pollinator habitat



60 new nesting sites for Swifts

Mood Board



Enhance existing and create new wildflower meadows, woodland wildflower garden & pollinator friendly planting beds



Use the green walls, roofs (where possible) and other biodiversity features on the building to enhance visual appearance & wildlife

Roof spaces can act as source of renewable energy



New feature signs and strategy to replace existing throughout

Enhance the feel, appearance and user friendliness of the commercial centre public spaces

Section 6.4: Residential Pocket Parks

Greening the Residential Parks

KEY PROPOSALS

- Temporary parks on undeveloped idle lands, using wildflower meadows
- Small seating areas
- New tree planting and biodiversity enhancement features such as bird and bat boxes

The outer pocket parks and green spaces within the different individual estates in Kilminchy are also lacking in green infrastructure and landscaping that delivers the maximum benefit for the communities involved. Simple measures such as tree planting, wildflower meadows and small seating areas on some of these spaces would add significantly to them in terms of aesthetics, functionality and biodiversity.

Holdbrook: New woodland strips along the boundaries of the green area would add visual interest and help blend the development into its surroundings, reduce grass cutting and create wildlife habitat. Fruiting shrubs and trees could also be added to the mix to provide small amounts of free wild food at certain times of the year.

Lakes Estates: There are several idle and rough plots of ground throughout these developments that should be converted into new park spaces (approx. 7,300-9,600m²). If there are plans to develop some or all of these sites in the future for housing these parks could still be managed as temporary wildflower meadows, which will tidy the spaces up, add visual interest, act as natural play areas and enhance the area wildlife.

New tree planting is proposed on the green spaces at Lake Crescent, Lake Place and Lake Glade. These should consist of small street trees and be planted into planting pits with good topsoil. The bases of each tree should be protected to avoid damage from lawnmowers. New seating areas could be built in these spaces and the specific design for each should be agreed with the local residents.

Some of the smaller roundabouts may need to be re-landscaped to improve visibility lines.

Bridle Walk: An avenue of ornamental trees should be planted to help blend the 3-storey development into the surroundings. Some of the grass areas around the building should be managed as wildflower meadows.

The Green: If there is an interest amongst the residents in this estate the large communal grass area could be developed into an intimate garden area that they could manage themselves. This could include ornamental trees, shrubs and perennial plants as well as small raised vegetable gardens. This would add visual interest and act as a community social resource.

Mell Street: There is scope for additional street tree planting in this estate at selected locations. These should consist of small street trees and be planted into planting pits with good topsoil.



Intimate ornamental garden spaces managed by local residents



Small feature seating areas for local residents on the communal green spaces



New wildflower meadows would tidy up the idle rough grounds and add interest

Item	Description / Actions Req.	Qty / Measure
Wildflower Meadows (temporary)	Create new wildflower meadows on unused / idle open spaces (these can be temporary depending on planned development). Ground works and seeding required.	7,300 - 9,600m ²
Seating / Garden Areas	New small seating spaces and garden spaces in 'The Green', Lake Place, Lake Crescent, Lake Glade	-
Tree planting	New woodland planting at Holdbrook	~2,150m ²
	Street tree planting as required throughout Kilminchy	-



Section 6.5: Roadside Green Infrastructure

Greening the Grey

KEY PROPOSALS

- Feature landscaping on roundabouts
- Street tree planting
- Bioswales on new roadsides

The roadside green infrastructure (roundabouts and grass verges) should be utilized to deliver a positive impression of the Estate through the use of street tree planting, sculptural pieces and soft landscaping.

Roundabouts: The roundabout at the Commercial Centre should be re-landscaped to deliver a positive first impression as one enters the Estate. This could include a bespoke sculpture and soft low maintenance landscaping. There are several other small roundabouts within the Estate. Two of these in the Lake Estates may need to be re-landscaped to improve sightlines. Low planting with an ornamental tree in the centre is a simple design option for these.

Roadside verges: In general, the quality of the roadside tree planting throughout the Estate is good. New street trees should be planted where there are gaps. These should fit in with the existing tree species used.

Bioswales: Ideally all the street verges should act as natural bioswales but this hasn't been done to date. For all new developments in the Estate, bioswales should be considered as a way to reduce storm water runoff and reduce costly grey infrastructure.



Create a feature roundabout at the Commercial Centre to give positive lasting first impression for visitors. Design proposal for roundabout at the Commercial Centre; bespoke sculpture relating to the meaning of Kilminchy (Wood of the Nanny Goat)

Section 6.6: Private Gardens & Residences

Greening the Private Green Spaces

KEY PROPOSALS

- Wildlife gardening and tree planting
- Community growing

The private gardens and green spaces within the nursing / care homes are a major component of the Estate and simple steps could be taken to; 1) improve the green infrastructure of the Estate; and 2) engage and involve all the residents in the plans and build community spirit.

Private Gardens: A free garden tree for each house is a simple and effective way of enhancing the Estate's green infrastructure. There are also opportunities to engage residents through community talks and demonstrations about wildlife gardening.

There are free information packs available on the All-Ireland Pollinator Plan that should be promoted on the Kilminchy Community webpage; (<http://pollinators.ie/gardens/>).

Nursing Homes (Sue Ryder Centre & Kilminchy Lodge Nursing Home): The outdoor spaces in these residences could be developed as community gardens to be managed by the residents. These should be designed to cater for their needs. It could also act as a potential site for a community polytunnel that would be managed by the residents for growing their own food but also grow native wildflowers in the off-season for use in the rest of the Estate.



Gardening for nursing home residents for health and well-being



Community growing spaces that can be used to grow local food and wildflowers



Free garden tree for every house and wildlife gardening events organised

Section 6.7: Undeveloped Lands

Greening from the Off

KEY PROPOSALS

- Designing and planning GI into new developments from the outset e.g. bioswales, woodland, green roofs, etc.
- Sustainable community group initiatives such as community energy schemes
- Waymarked Estate walking routes

All new developments in the Estate have the opportunity to demonstrate the benefits of designing GI into the plans from the outset. If given the same level of consideration as the grey infrastructure then there are multiple benefits to be gained for the developer, future residents, wider Kilminchy community and local authorities.

Some of the GI design features that should be considered include the use of bioswales, tree planting and woodland including fruiting trees and shrubs, wildflower meadows, green walls and roofs, habitat boxes built into the buildings (e.g. swift bricks), and natural play features.

Sustainable community initiatives such as community energy schemes, community gardening schemes, etc.

should be considered from the outset.

In addition, the new development should incorporate any new Estate waymarked route (Blue route) into the design.



SECTION 7: ENGAGING COMMUNITY

The implementation of the green infrastructure proposals is an opportunity to engage the community and help build a 'sense of place', which was identified as being missing during the consultation period. Each action or project identified should be used to involve the community through practical volunteer work, project management & organization, social events, signage and interpretation, etc.



Volunteering Opportunities:

- **Wildflower Meadows:** Collecting local native wildflower seed and growing some of them on to plugs for use in the new meadows. This can be an annual multi event activity involving volunteers of all ages and abilities to harvest the seed, volunteers to help grow them onto plugs and another volunteer day to plant them into the meadows. There are also volunteer events to manage the cutting of the meadows at the end of the season. The Glens Great Grassland Trail is a good case study to follow.
- **Woodlands / Forest Gardens:** Volunteers can be involved throughout this process from community tree planting days to management. Forest gardens are great ways to engage the community in the management of all aspects of the woodland for productive use.
- **Other Volunteering Opportunities:** Litter picks; installation of biodiversity enhancement features e.g. bird and bat boxes and bug hotels

Community Events:- these can be best delivered by partnering with local interest groups & organisations

- **Walks, Talks & Social Events:** Regular walks and talks should be organized for the community on a range of topics e.g. local wildlife, gardening, local heritage, traditional music events, etc. Outdoor community festivals could also be catered for in the proposed community events space.
- **Training Events / Workshops:** Regular workshops to cater for a range of ages and interests should be delivered to upskill local people in the community. This can cover a range of practical skills, art, traditional skills, etc.

Community Groups:

- **Social Groups:** The new park spaces and amenities can create opportunities and the impetus to establish new social groups within the community such as gardening clubs, fitness clubs (walking, jogging, outdoor gym classes, etc.), new parent clubs, wildlife clubs, etc. Existing NGOs and interest groups may also be encouraged to make more of a presence in the community and attract new members e.g. Laois Heritage Society, IWT, BirdWatch Ireland, Step Out Portlaoise, etc.
- **Classes:** There may also be scope for local persons to set up and deliver classes e.g. outdoor fitness, outdoor learning, etc.

Project Management & Delivery:

- **Committees & Sub-Committees:** The delivery of the different aspects of the plans from the Central Park to the Lakes Park to the different biodiversity features can be delivered through specific sub-committees made up of select groups of interested residents for each project. The main Committee are also seeking new interested persons to get involved in different roles / capacities.

SECTION 8:

COSTINGS & PHASED DEVELOPMENT

The Masterplan is designed in such a way that it can be developed in phased stages if required as resources become available. Certain projects / actions can be delivered at relatively low cost and indeed could deliver cost savings (particularly on medium to long term maintenance resources) such as the woodland and wildflower meadow creation. The larger built infrastructure projects, such as the Play Park, multi-use ball courts or boardwalk, require more significant investment and planning for development.

The following tables suggest how the works could be delivered in a two phased process based on project starting dates. For some of the bigger infrastructure projects the starting date may refer to the beginning of a grant application, detailed design / construction ready drawings or planning process with the actual delivery on the ground in subsequent years.

Costs provided are indicative prices only. Quotes are required to ascertain exact pricing for each project / action.

The costings for the proposed actions in the Commercial Centre are not included.

POTENTIAL COST SAVINGS

Converting sterile, unused mown grass to more productive and diverse forms of green infrastructure such as woodland or wildflower meadow can potentially lead to significant cost savings in the short-to-long term.

Cost savings can be made in new developments by using green infrastructure solutions to complement grey infrastructure. For example, bioswales can reduce the amount of traditional storm water drainage pipes required.

Green infrastructure also has other economic benefits in terms of energy savings, business productivity, property values, and more.

Phase 1 Projects (2019 start)

Project	Item	Location	Potential Funding Source and/or Project Partner	Indicative Cost (€)
Lakes Park Environmental Development	Wildflower Meadow – trial area	Lakes Park – east of the upper lake	IWT	-
	Interpretation & park benches	Lakes Park	Waters and Communities	€5,000
Central Park Natural Play Park	Adventure Woodland – tree planting	Central Park	Trees on the Land; IWT	-
	Natural Play Park & Adventure Woodland Trail	Central Park	LEADER; Laois County Council; IWT	Up to €250,000
Commercial Centre Green Infrastructure	Tree planting	Commercial Centre	Private	€240
	Raised pollinator bed	Commercial Centre – car park	Private	€500
	Wildflower meadow – enhance existing	Commercial Centre – bank adjacent to Castle Road	Private; IWT	-
	Woodland garden	Commercial Centre – Bridle Walk	Laois County Council (LA21); IWT	€1,000
Streetscape Enhancement	Roundabout landscaping	Roads – beside commercial centre	Laois County Council	€5,000 (excl. new sculpture; allow a pc sum of an extra €10-15,000)
Pocket Park Enhancement	Temporary wildflower meadows	Lakes Estate	Laois County Council; IWT	€8,000

Phase 2 Projects (2020-22 start)

Project	Item	Location	Potential Funding Source and/or Project Partner	Indicative Cost (€)
Lakes Park Environmental Development	Boardwalk, pond dipping platform & interpretation	Lakes Park	LEADER; Laois County Council (LA21); IWT	€25,500
	Circular path network (1.2km) – crusher run option 2m wide with edging			€30,000 (€25/m)
	Sculpture			€15-20,000
	Wildflower meadows (4,300m ²) & picnic tables			€1,000
	Community Woodland Garden (4,250m ²)			€5,000
Community Events Space	Pergola, paving & drainage	Central Park	Laois County Council	Up to €50,000
Kilminchy Active Play Facilities	Multi-use ball courts	Central Park	Laois County Council / National Lottery	€105,000 (Quote from OMW Supplies)
	Outdoor gym trail – 20x20m area including a range of equipment and surfacing			€55,000
Pocket Park Enhancement	Seating Areas	The Green; Lake Place; Lake Crescent; Lake Glade	Private	€7,500 each
	Tree planting	Supply and install	Private	€60 each
	Woodland planting	Holdbrook	Private; IWT	-

SECTION 9: LATEST DEVELOPMENTS

The design process, and the plans that have been proposed (as outlined in this report), have already led to some positive actions within the community. A new community Facebook page has been set up, trees have been planted, the first of the wildflower meadows is being planned, grants have been sought and the wheels have been put in motion exploring how to deliver some of the larger infrastructure proposals.



The following actions have been completed or started at the time of production of this report:

Lakes Park

- An application submitted to Waters and Communities for their small community grants was successful for half the total sum requested. The proposals included the installation of the interpretation sign and park benches at selected locations around the lake and the delivery of community events during National Heritage Week 2019.
- Part of the proposed wildflower meadow beside the upper lake is to be created this year.
- A community event is planned for National Biodiversity Week in May 2019, in partnership with the Irish Wildlife Trust Laois Offaly, to install bird and bat boxes on suitable trees.

Central Park

- Woodland creation: in partnership with the Irish Wildlife Trust Laois Offaly, they carried out a volunteer tree planting event to create parts of the new woodland proposed in the Central Park. This involved the planting of 1000 native trees by over 20 local volunteers. Coverage of the event was carried out in local media (Leinster Express and Laois Nationalist) and on social media (the IWT LO



Commercial Centre

- Augmentation of the wildflower meadow created in 2018 on the grass bank at the entrance to the commercial centre. This was a partnership between the management agents and the Irish Wildlife Trust Laois Offaly. The species mix included a range of native wildflower species such as Yellow Rattle, Ox-eye Daisy, etc. Local provenance Wildflower plugs were also planted in March 2019 including Ox-eye Daisy and Cat's-ear.
- Four new street trees have been planted in March 2019 into the car park grass verges to replace those trees that failed.
- Plans are in place to plant the raised bed in the car park with pollinator friendly plants.



Community Capacity Building

- Kilminchy Homeowners have set up a Facebook page to update the community on latest events and news.
- Kilminchy Homeowners have designed a new logo for the group.
- Community events; the volunteer tree planting was the first of the planned community events for this year. Talks are in place to deliver another event (bird and bat box installation) in April with the Irish Wildlife Trust Laois Offaly. The application to Waters and Communities has three proposed events that would take place during National Heritage Week 2019 if successful.



SECTION 10: PLANTING DETAILS

The plant species used to create the new areas of woodland and wildflower meadow should be native Irish species and of Irish provenance. Exotic, non-invasive street trees, shrubs and perennials will add extra colour and variety in selected locations.

Woodland

The following native tree and shrub species (Irish provenance) are suitable to create the new woodland areas:

High Canopy Species; 40% of total mix planted @ 1.5-2m centres, all trees planted as whips

Quercus robur (oak); *Pinus sylvestris* (Pine); *Betula pendula* (Birch); *Alnus glutinosa* (Alder); *Prunus avium* (Wild Cherry)

Understorey and Fringe Species; 60% of mix planted @ 1-1.5m centres, all trees planted as whips

Corylus avellana (Hazel); *Crataegus monogyna* (Hawthorn); *Ilex aquifolium* (Holly); *Salix caprea* (Goat Willow); *Sambucus nigra* (Elder); *Sorbus aucuparia* (Rowan); *Euonymus europaeus* (Spindle); *Prunus spinosa* (Blackthorn); *Rosa canina* (Dog Rose); *Rubus fruticosus* (Bramble); *Viburnum opulus* (Guelder Rose)

In addition, some fruiting tree species at selected locations along the paths should be planted. These should be of traditional Irish stock where possible and can be sourced from Irish Seed Savers (<http://irishseedsavers.ie/>).

If the woodland beside the lake is going to be managed as a Forest Garden then some non-native species can be used in the different layers (canopy, shrub, and ground).

Wildflower Meadows

The wildflower meadows will be created by allowing the existing grass sward to grow and following the management guidelines in Section 12. The meadows can be enhanced by spreading locally harvested wildflower seed mix onto the meadows after it has been cut in late summer. It is important to introduce Yellow Rattle into the meadow early on. After this the following are some of the wildflowers that will enhance the meadow if not already present: Ox-eye Daisy; Meadow Buttercup; Knapweed; Cat's-ear; Ragged Robin (wetter areas); Devil's-bit Scabious; Yarrow; Selfheal; Ribwort Plantain; Orchids

Woodland Wildflower Garden -

The new woodland wildflower garden under the mature lime trees on Bridle Walk should be created using native woodland species. These can be planted or sown as bulbs, seed or plug plants. The following are some species that should be considered:

Bluebell; Wild Garlic; Wood Avens; Wood Sorrell; Red Campion; Foxglove; Wood Anemone; Wild Angelica; Bugle; Lesser Celandine; Enchanters Nightshade; Golden Saxifrage; Herb-Robert; Pignut; Primrose; Wild Strawberry; Woundwort; Woodruff; Greater Stitchwort; Ivy

Exotic Tree Planting

To infill gaps in the street tree planting the same species as is currently there would be used. For the most part Lime (*Tilia* spp.) has been used throughout and should continue to be used where possible.

Bridle Walk: The proposed ornamental tree planting in front of the Bridle Walk apartment should contain trees for their colour and shape. The following tree species would be suitable (they should be planted at standard size):

Amelanchier lamarckii; *Betula Ermanii*; *Betula Jacquemontii*; *Pyrus Chanticleer*; *Sorbus Vilmorinii*; *Sorbus Joseph Rock*

Ornamental Planting Beds

There are four new proposed pollinator friendly planting beds in the plans. Three of these are planting beds in full sun (two new raised beds in the Commercial Centre and the planting bed beside the Play Park) and a tree shaded raised planter bed in the car park of the Commercial Centre.

Pollinator planting beds in full sun:

Herbaceous species planted at approx. 4-6 plants / m²; the following are some good pollinator plants to select from:

Exotic species: *Bergenia* spp.; *Aubretia* spp.; *Aquilegia* spp.; *Astilbe* spp.; *Brunnera* spp.; *Delphinium* spp.; *Geranium* spp.; *Dicentra* spp.; *Helleborus* spp.; *Heuchara* spp.; *Hosta* spp.; *Hylotelephium spectabile*; *Pulmonaria officinalis*; *Centranthus ruber*; *Echinops ritro*; *Iberis sempervirens*; *Aster amellus*; *Verbena bonariensis*; *Lavandula* spp.; *Rosmarinus officinalis*

Native Species: Bluebell; Wild Garlic; Wood Avens; Wood Sorrell; Red Campion; Foxglove; Wood Anemone; Wild Angelica; Bugle; Lesser Celandine; Enchanters Nightshade; Golden Saxifrage; Herb-Robert; Pignut; Primrose; Wild Strawberry; Woundwort; Woodruff; Greater Stitchwort; Ox-eye Daisy; Meadow Buttercup; Knapweed; Cat's-ear; Ragged Robin (wetter areas); Devil's-bit Scabious; Field Scabious; Yarrow; Selfheal; Ribwort Plantain

Pollinator planting beds in partial sun:

Herbaceous species planted at approx. 4 plants / m²; the following are some good pollinator plants to select from:

Exotic species: *Bergenia spp.*; *Aquilega spp.*; *Astilbe spp.*; *Brunnera spp.*; *Delphinium spp.*; *Geranium spp.*; *Dicentra spp.*; *Helleborus spp.*; *Heuchara spp.*; *Hosta spp.*; *Sedum spp.*

Native Species: Bluebell; Wild Garlic; Wood Avens; Wood Sorrell; Red Campion; Foxglove; Wood Anemone; Wild Angelica; Bugle; Lesser Celandine; Enchanters Nightshade; Golden Saxifrage; Herb-Robert; Pignut; Primrose; Wild Strawberry; Woundwort; Woodruff; Greater Stitchwort

Native fern species can also be planted in this mix to provide architectural leaf structure.



SECTION 11: MANAGEMENT PLANS

There are certain steps that need to be taken to ensure that the different areas of habitat created reach their peak in as short a time as possible, and maintain it, and deliver the maximum benefits for the community. Management plans are a useful tool to help guide the responsible persons on how to achieve this potential. The following simple steps can be used to manage the lakes and the new areas of wildflower meadow and woodland.



Wildflower Meadows

Wildflower meadows that are being created from existing amenity grass spaces with minimal interventions, such as stripping the topsoil or spraying the grass and seeding with specific wildflower meadow seed mixes, generally may take longer to develop into a typical balanced summer hay meadow. It is very much dependent on the soil type and length of time it has been managed as amenity grass. In these scenarios where the soil is likely to be rich and where the site managed over a long period of time as amenity grass, it is expected that the development stages of the meadow will move from one dominated by broadleaf grasses and low wildflower species diversity to a balanced mix of fine grasses and wildflowers. This will happen over the course of several seasons (each season should see gradual improvements) until it reaches a balanced state if these simple management steps are followed:

- The meadow should be allowed to grow between mid-March and mid-August / early September.
- Mow paths and meadow borders (along footpaths and roads) at least every ten days (or as required). This allows access through the public meadows and adds to the aesthetics of public amenity sites. Try to maintain the same line of paths each year to avoid damaging established wildflowers.
- Control of noxious weeds; cut or pull entire plant, including the roots, before they go to seed. If manual control measures aren't practical then spot spraying may be considered (where possible this should be a last resort as it is deleterious to wildlife and people).
- Ensure minimal dog fouling on meadows. This can have health implications and can make the hay undesirable as potential fodder for farming.
- Tight mowing and removal of long meadow areas should be carried out between mid-August and early September. Cuttings must be removed from the meadow. (Note: meadows with late flowering species such as Devil's-bit Scabious may require a delay of cutting until after they have set seed).
- In the first few seasons of meadow creation, augmentation with locally harvested native seed and / or plug plants will speed up the establishment of a range of suitable species. This is best carried out in the autumn period directly after mowing and removal of meadow sward.
- Put up small signs to communicate to the community why there is a change in maintenance.



Woodland

To establish the new areas of woodland it is important that the threats to the young trees (whips) are minimised. These threats include damage from lawnmowers and strimmers, spraying with herbicide, rabbits (although this does not appear to be an issue in Kilminchy) and vandals. Therefore, we recommend that the grass in the new tree planting areas be left uncut throughout the year. If necessary, any strong grass and weed growth around some of the smaller trees (approx. one-foot radius) be trampled during the summer months in the first season or two to allow the trees to establish. As the trees establish and the canopy closes-in, the trees will out-compete the grass. A 1-2m wide mown grass margin should be maintained along the footpaths and roadsides to create a tidy appearance for the new woodland. Small signs should be put around the planting to communicate why the grass is not being cut.

The site should be monitored for the first 3-5 years with replacement planting carried out as necessary. Thinning may be required at different stages in the future. As the woodland starts to mature there may be opportunities to increase the diversity of ground flora composition through bulb and plug planting of local provenance woodland wildflowers e.g. bluebells, wood sorrell, wood anemone, etc.

Lakes

The upper and lower lakes will be managed to maximise biodiversity value. The middle lake will be managed as a place for the community to engage with the water body and so will have a dual management focus for people and wildlife. The main steps required to manage the lake habitat are:

- Retain approx. 30% of the overall lake area as reed beds. Reed beds to be cut on a rotational cycle ever 3-4 years.
- Create natural catchment and filtration areas around the major inlets to help cleanse the water and capture pollutants
- Island on the lower lake should be cleared of shrub and tree vegetation and managed as meadow for snipe. A clear flight line should be maintained to the amenity grass on the west and all trees should be removed in this line.
- Carry out regular litter picks



Manage island for snipe as meadow; retain flight lines to grass space

Litter picks carried out on a regular basis

Manage approx. 30% of all the lakes as reedbeds

DELIVERING ON LOCAL & NATIONAL PLANS, POLICIES & GUIDELINES

Green infrastructure design contributes to the delivery of key goals and objectives proposed across numerous local and national plans, policies and guides.

The following are just some of these plans.

National Biodiversity Action Plan

Portlaoise Biodiversity Action Plan

All-Ireland Pollinator Plan

Laois Heritage Plan 2014-19

Heritage Ireland 2030 – National Heritage Plan (Draft)

Sustainable Development Goals National Implementation Plan 2018-20

National Physical Activity Plan

Healthy Laois Plan

Ready, Steady, Play – A National Play Policy

Creating Green Infrastructure for Ireland - Comhar 2010

Ireland's Transition to a Low Carbon Energy Future 2015-30

National Policy Position on Climate Action and Low Carbon Development 2014

Laois Stormwater Management Policy 2007

APPENDICES:
LANDSCAPE PLANS