

# CO-OPERATIVE HOUSING SYSTEMS

A 4TH YEAR ARCHITECTURAL ELECTIVE MODULE IN CONJUNCTION WITH THE SAINT MICHAELS ESTATE REGENERATION TEAM.

## STUDENTS

Amy Brosnahan  
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## MODULE COORDINATORS

Jim Roche  
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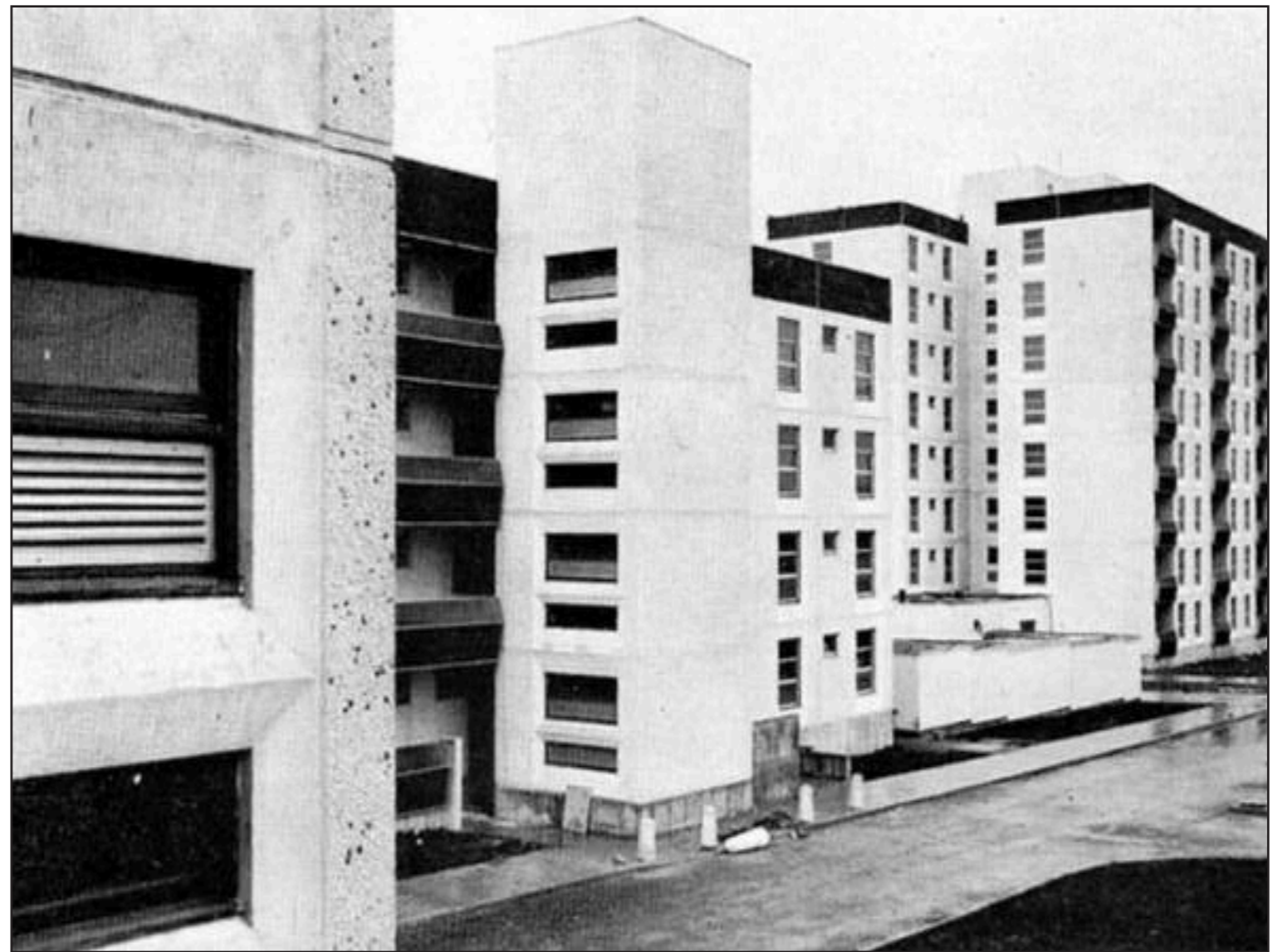
## Introduction

This year the elective group teamed up with the St. Michael's Estate Regeneration Team (SMERT). Due to restrictions because of the Covid-19 pandemic, we carried out our meetings and work remotely and online until restrictions allowed us to meet in person towards the end of May 2021.

The SMERT is comprised of a number of new groups and individuals who engage in various forms of social activism work regarding the estate and its surrounding areas. They are dedicated to the sustainable development of St. Michael's Estate in Inchicore. The original estate consisted of 8-story concrete apartment blocks built in 1970. In 1998 it was agreed that these apartment blocks would be demolished. The first of the blocks was demolished in 2004 and the last in 2013.

After various vision documents and various schemes by Dublin City Council (DCC) and developers were proposed, a public, private partnership (PPP) by Castlethorn/ McNamara Development Consortia was accepted in 2007. Previously, the SMERT and a large section of the community had rejected the PPP route as a methodology for developing the site.

McNamara withdrew from the scheme in May 2008 because of the serious economic recession and the PPP proposal collapsed. Little happened for many years following this. In 2019 the Development Framework Plan for Lands at Emmet Road published August 2019 under the auspices of DCC and Dept of Housing, Planning and Local Government through the Rebuilding Ireland plan. The SMERT were not consulted for this proposal. In March 2021 a webinar was held showing a proposal by Bucholz McEvoy. This webinar welcomed comments and opinions from SMERT, local residents and the general public. Our elective group attended this webinar in March 2021.



# Who was Involved?

This project was a collaboration between DSA and SMERT.  
From SMERT. Eilish Comerford, John Bissett, Paul McGartoll and Rita Fagan were involved.  
From DSA, Jim Roche was the module coordinator.  
The DSA Students involved were Gemma Ryan, Lera Dudina, Amy Brosnahan, Eoghan McCague, Moa Hogarth, Sasha Kushnirenko, Donal McLarnon, David Boles, Emma Curran and Jessica Doherty.

## The SMERT:



## DSA Module Co-ordinator:



## DSA Students:



## Module Descriptor: Co-operative Housing Systems

An elective that engages the most basic of societal needs by exploring alternative thinking, strategies and processes around the provision of housing.

Habitation is one of the most important social needs in our lifetime yet provision for all seems to allude to our society including here in Ireland. 'Housing bubbles' which often ruin economies, lead to housing crises which ruin so many lives. The global phenomenon of the 'fictionalization' of dwelling has increased speculation of housing as a commodity and led to a lack of affordable housing emergency in Ireland and elsewhere. Options for accommodation delivery are mostly based on the free market, whether they are in the private or the unsupported social and affordable sector. The prevailing procurement methods have clearly failed to meet such a basic need yet alternative options are limited and are not encouraged by government or the private sector.

### Aim of Module

This elective in the Spring Semester in 4thYear Architecture with 8-12 students will explore alternative systems around the procurement and delivery of housing, particularly, but not exclusively, the co-operative movement. It focuses essentially on housing as a system rather than what the finished product looks like and thus is about design in a holistic sense. It is divided into several parts:

1. Lectures, synthetic research and preparatory activity including guest lectures and seminars (internal and external to DSA) and a mini research project related to an interactive timeline on housing provision.
2. Self Organized Architecture [www.soa.ie](http://www.soa.ie) We will engage with this co-housing research group on some of their activities.
3. Participatory workshop and outputs (group work) For the main part of the elective we will engage with a community group in workshops to explore a number of issues related to their habitation needs. This will involve 2-3 workshops at most with the group (and possibly with LA or AHB officials) exploring strategies, brief development, system and design options and then reverting with some sketch and / or model studies, in poster or booklet form. We will design the workshop process and the outputs depending on the community group's needs. The main learning here will be actually engaging with a community group on a collaborative workshop process.

The intention is to work with people in housing need, learn from them, use our knowledge and skills to explore options and provide them with something useful which they can use to progress their housing procurement process.

### What the elective group did in 2020:

<https://brightspace.tudublin.ie/d21/le/content/117440/viewContent/1090007/View>

### Assessment

There will be individual grades for:

- Attendance & engagement
- PowerPoint Presentation on timeline research topic
- A3 sheet on timeline research topic

There will be a group grade for:

- Workshops with community group/s, guest lecturers etc.

### Research Projects

Following our various seminars, our site visit to St. Michael's Estate with Rita Fagan and our workshop with John, Eilish and Paul you are now asked to undertake some relevant research and present it back to the group and later at another workshop with the SMERT and finally into a group booklet. It has two parts; An exemplar housing project case study and a study related specifically to the latest Development Framework Plan for St. Michael's Estate.

## 1. Exemplar Housing Project Case Study

- You should now choose and identify one innovative housing project on the OneDrive sheet that has been shared with you, then research it under a series of topics and present it graphically and provide a written reflection. Some of the themes of the case study should be relevant to the St. Michael's Estate.
- The content is up to each student, pending your chosen case study, but should reflect on some of the issues raised in the seminars we have had thus far and ideally some of the issues that have been discussed with the SMERT e.g.:
- Housing system typology: public, private, mixed, philanthropic, cooperative, co-housing etc.
- Funding model – what is it? How financed?
- System of tenure – secure, long-term, short-term, rental, purchase, cooperative, Community Land Trust etc.?
- Procurement system; both how did the overall scheme come to be built and how did the residents acquire their dwellings?
- Social mix and age of residents
- Urban form typology - block, terrace, etc.
- Dwelling typology – no of beds, apartments, duplexes, houses, shared space etc.
- Relationship between private dwellers and the collective
- Physical and social relation of built project to existing context
- Building system employed
- Management and maintenance
- Etc.

You will likely need to dig deeper than the usual architectural journals / website to address these issues.

Your chosen case study can be from any country but please consider ones with a broadly similar climate to that of Ireland and the schemes should ideally be from an urban or edge city context.

This is a non-exhaustive list and is meant solely to act as a guide for you. Please research and discuss whatever else you feel is relevant to the theme of this elective - Cooperative Housing Systems - and specifically to the St. Michael's Estate Regeneration Team. You can also see in the OneDrive folder what previous years' students did but you must choose different projects – unless you bring something really new to the table!

## 2. Study of issue for the Community Team

Each student is to take a relevant topic, analyses it and graphically represent it to firstly the elective group and then to the SMERT at Workshop 2 and finally in the booklet.

This could be on any of the issues raised in our discussions so far and / or from the SWOT analysis e.g. sustainable development, accessible green roofs, sectional studies (height to width), relationship to context, public routes through scheme, open accessible public / communal spaces, micro-climate, food growing, density, balconies, deck / gallery access, ground floor use, courtyard use (do a plan and / or 3-d sketches?), Landscaping, community facilities, connections through and to places, inclusivity, recycling, climate change etc.

Your study should be on some topic that is relevant to the community team, something that will enlighten them and that they can possibly use in their further campaigning and work.

### Submission dates:

SMERT Workshop 1: 24th March 2021

SMERT Workshop 2: 4th May 2021

Research Slides Submission: 17th May 2021

Group Booklet Submission: 25th May 2021

## Working with St. Michael's Estate Regeneration Team

For the second year in a row, the students partaking in this elective worked closely with SMERT over the course of several months to discuss and exchange ideas for the future re-development of St. Michael's Estate.

The St. Michael's Estate Regeneration Team (SMERT) consists local residents, volunteers, activists and community workers pushing a sustainable, inclusive and affordable re-development for the lands at Emmet Rd. We were fortunate to meet and work with members Eilish Comerford, John Bissett, Paul McGartoll and Rita Fagan and Carol Hyland.

SMERT was set up in 2001 after St. Michael's Estate was designated for regeneration in 1998. The demolition of the 1970's 8 storey housing blocks saw the removal of 346 local authority homes, with only 175 being rebuilt in 2004 in the first phase of the redevelopment and 75 in 2014. The site had seen many proposals over the years from the initial publicly funded plan, which was rejected in 2004 by the Department of the Environment, to the PPP McNamara scheme of 2007, which collapsed after the 2008 recession. The subsequent years SMERT spent campaigning for the introduction of a Cost Rental Model into the Irish housing landscape with the pilot project being St. Michael's Estate, to which the government finally conceded. The plans for the new proposal were unveiled by Minister for Housing, Community and Local Government, Eoghan Murphy in July 2018. In 2020 the design team, Bucholz McEvoy, were appointed, and the planning application for the long-awaited development is due to be submitted by the end of 2021.

### 2020

Last year's students were the first group to have been introduced to SMERT and their on-going campaign for a successful regeneration of St. Michael's Estate. They were fortunate enough to meet the team in person and even attend a Community debate with electoral candidates at Fatima Community Centre where party representatives engaged the public in discussion about issues such as a lack of public housing on public land, security of tenure and the volume of student accommodation being built in the area. They then went on to attend two workshops with SMERT where the specific issues of the 2018 Development Plan for the lands at Emmet road were discussed at greater detail and a SWOT analysis was carried out. The students presented the research they had compiled on built exemplary housing projects that dealt with many of the problems identified or were beneficial to the community in a way they saw relevant to the re-development of St. Michael's Estate. They then picked a specific issue to tackle and proposed some design solutions which were discussed in relation to their suitability on the site. Comments from SMERT were taken on board and a more comprehensive submission of each student's precedent project and proposed solutions were made into last year's Co-Operative Housing Systems Booklet, which was then shared with the group.



*Guided site visit 2021*

### 2021

In 2021, the students of the co-operative housing elective were set a similar task of engaging with SMERT, learning about the issues they have identified with the re-development and proposing architectural ideas to eliminate those problems using research compiled on well-functioning existing housing developments both in Ireland and abroad. This year however, with the new Bucholz McEvoy-designed scheme being revealed to the public at the DDC webinar in March, we had the opportunity to interrogate a fresh design proposal with SMERT. The structure of our workshops remained much the same as last years, though all the meetings had to be kept to an online-format due to Covid-19. We looked at a new set of exemplary projects which we presented back to the group and proposed our own ideas for improvements to the newly available scheme. We hope that some of our ideas may be useful for the group as they continue their work. The next step in the plan for Emmet Rd. is the on-site outdoor exhibition which will take place in June 2021 where the public can get a chance to interact with the architects in a safe socially-distant manner and review the design strategy. SMERT and Bucholz McEvoy will also get the chance to meet ongoingly as the planning documents are prepared for submission in the last quarter of 2021.

# Dublin City Council Webinar

Date: Wednesday March 3rd, 6pm

On Wednesday March 3rd, Dublin City Council hosted a webinar on the current progress of the St. Michaels Estate redevelopment plan. The webinar began with a presentation from 'Connect the Dots', who are working with DCC in coordinating stakeholder engagement. This was followed by presentations from DCC relating to the cost rental model, as well as the planning process at large. The final presentation came from Merritt Bucholz, of Bucholz McEvoy Architects, who outlined the phase two design process for the scheme.

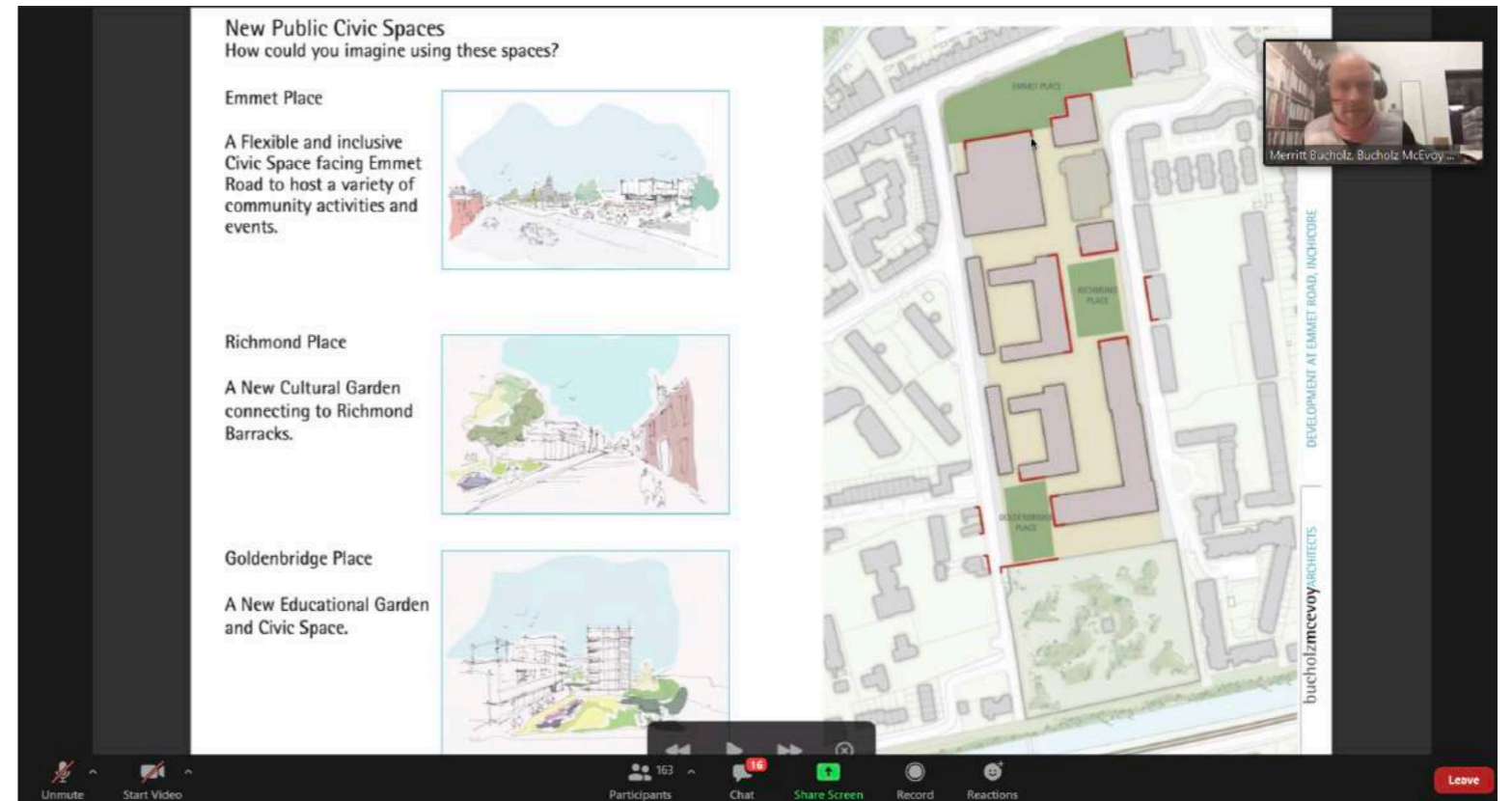
Some of the points discussed were:

- Current characteristics of the site in Inchicore
- Building height study
- Proposed new public spaces
- Regenerative new communal spaces
- Permeability through and pedestrian access on the site
- Community rooms and amenity space in the scheme

After this there was an opportunity for questions from the community. Issues were raised in relation to the character of the community rooms; the availability of parking onsite; whether the tenure types would be mixed within the scheme; as well as the maintenance of the community spaces.

Finally, the attendants were divided into breakout rooms and had an opportunity to discuss in greater detail some queries they had relating to the presentations that were made. Again, issues arose with parking spaces and management of the community spaces. Some residents were concerned about future antisocial behaviour and how the design might reduce this.

Overall the presentations were well received and the level of engagement from the stakeholders was compelling. The feedback received from the community at this stage of the design process will be an important continuation point for the architects and design team at large.



# Workshop 1

Date – 22nd March

Our first meeting with the St. Michael's Estate Regeneration Team took place online this year. The SMERT group began by introducing themselves and explaining their history, aims and what they do. The students then introduced themselves and presented studies of various topics related to the scheme and exemplar projects from Ireland and abroad. Density, affordability, safety, transport, permeability, community involvement, waste management and building materials were among the topics discussed. A SWOT analysis was done of the current Dublin City Council/ Bucholz Mc Evoy outline proposal.

## Strengths

- Semi private block courtyards
- A new civic and community centre and a modern new library
- Massing of blocks – outer blocks relate to existing context, high blocks are screened in middle
- Blind tenure proposal
- Good mix of uses open to public place on Emmet Road
- Publicly owned scheme on public land
- Healthy mix of dwelling typologies hopefully – good mix of different people
- Green public spaces are more than 10% of the land area (which is the DCC standard)

## Opportunities

- Good consultation with BME Architects so far
- Scope for SMERT to positively influence the scheme
- Possibilities for new innovative waste management systems?
- Covid 19 pandemic – could impact positively on space standards and internal planning of apartments
- Good that architects have environmental concerns – biodiversity
- Good balconies
- Social enterprise units – mens' sheds
- Public space at Emmet Road end
- Encourage people to live a car free way
- Possibilities for a good mix of public, semi-public, semi-private and private spaces

## Weaknesses

- Lack of external sports facilities
- Open space at front on Emmet Road end – how will this be managed? Could become anti-social area
- Lack of integration of cycleway on canal and on Emmet Road
- Not enough bicycle storage and not dispersed throughout the scheme
- Security of bicycles
- Few car parking spaces
- Lack of pram stores for families
- Designing in isolation – look at existing facilities and complement them rather than duplicate

## Threats

- Design of green public spaces - Use of the public space must be carefully thought through
- Management of public spaces
- Quality of natural light on street and in open spaces due to the high buildings
- Apartment layouts – need to see and influence; must have good amount of dual aspect
- Transport infrastructure may not be developed properly
- Lack of adequate storage space in apartments

# Workshop 2

Date - 28th April

The second workshop began with the students introducing exemplar projects and discussing issues that were solved in those examples. The students then presented the relevant issues they had been exploring for the development, following on from the previous workshop. The SMERT members then posed questions and a discussion was opened up reflecting on the work done. The SMERT Team had concerns over the utopian or idealistic nature of some designs and the reality of anti-social behaviour on the site and the issue of safety. The question 'would we like to live there' was posed and we discussed that that should be at the forefront of the design intentions. We concluded we would like to live there if the relevant threats outlined in the first workshop were dealt with and the weaknesses addressed. It was evident that community is of utmost importance to the residents.

## Some of the Housing exemplar slides presented in workshop 2

**CO-OPERATIVE HOUSING SYSTEMS ELECTIVE**

**WORKSHOP 2**

with

**ST. MICHAEL'S ESTATE REGENERATION TEAM**

Wednesday 28 April 2021

**PROPOSED AGENDA**

1. Introductions – Jim
2. DSA Students – exemplary housing project
3. SMERT feedback and Q&A
4. DSA Students – issue for Emmet Road Development
5. SMERT feedback and Q&A
6. Reflections and close

**DSA STUDENTS THIS YEAR**

Surname	First name
Mc Cague	Eoghán
Kushnirenko	Sasha (Oleksandra)
Ryan	Gemma
Curran	Emma
Boles	David
Healy	Neil
Hogart	Moa
Dudina	Kaleriya
McLarnon	Dónal
Brosnahan	Amy
Doherty	Jessica
Sheridan	Cian

**CO-OPERATIVE HOUSING SYSTEMS ELECTIVE**

**WORKSHOP 2**

with

**ST. MICHAEL'S ESTATE REGENERATION TEAM**

**EXEMPLAR HOUSING PROJECTS**

**CO-OPERATIVE HOUSING SYSTEMS ELECTIVE**

**WORKSHOP 2**

with

**ST. MICHAEL'S ESTATE REGENERATION TEAM**

**EXEMPLAR HOUSING PROJECTS**

**HOUSING EXEMPLAR: COOPERATIVE HOUSING COMPLEX wagnisART, MUNICH**

- Area: 200,000
- Approx. 200 people in 130 apartments
- Collection of courtyards
- 5 Renaturing buildings
- Shared facilities available to residents and neighbouring on ground floor
- Facilities include: event room, restaurant, workshop space, offices, guest apartments and a laundry room
- The buildings are connected to each other by bridges
- The bridges between the buildings provide a shared, level space to area between the houses
- Passive House Certified

**STUDENT: DANIEL WILLIAMS**

**REFERENCES:** [The Urban Housing Complex](#) [The Urban Housing Complex](#) [The Urban Housing Complex](#)

## Some of the Study issue slides presented in workshop 2

**CO-OPERATIVE HOUSING SYSTEMS ELECTIVE**

**WORKSHOP 2**

with

**ST. MICHAEL'S ESTATE REGENERATION TEAM**

**STUDY ISSUES FOR EMMET ROAD DEVELOPMENT**

**Edge | Boundary Emmet Road Development**

Looking at the area facing onto Emmet road for a potential connection between the residential plot and the existing community of inchicore.

- Inclusion of all age groups
- Active space with over-view for safety and control
- Creating an amenity for local community

**Retail/Resident Relationship:**

- Like La Bords, the large scale retailers can play a part in serving the community in ways more than providing amenities.
- Open conversation with the supermarkets who may be competing for the 2000sqm retail unit can create some opportunities.

During meetings there were some points made about anti social behavior among teenagers, the retailer could provide employment and added responsibility to the life of a young resident here

It could also be set up so that women, people with disabilities, any person in need of opportunity may be provided with the ability to work with the large company

**Retail/Resident Relationship:**

- During covid we have seen the beginning of many small businesses spring out of homes – ranging from art shops to nail technicians
- If there was a dedicated street to these small niche business to open daily or small stores there is opportunity to add a richness led by the residents to the scheme. Ground floors can be used for retail and leave room for a growing market to open weekly/biweekly etc.

**Retail/Resident Relationship:**

- Roof space, particularly a section of the large retail units roof space can be utilised for an on site resident garden
- These gardens can provide hobby/new skills/clubs/lessons on horticulture, or to provide fresh produce for the residents or can be sold at the potential markets.
- Alternatively, the garden can be spread across the ground floor in green areas, using small plots dotted around the site if space was an issue.

**CYCLISTS + CYCLING**

- Sarah Higginbotham Architects bike store in Bermondsey, London
- Constructed from 12 Douglas Fir portal frames, clad externally with triangular stainless steel panels and internally with translucent glass reinforced plastic sheeting.
- This enclosure can store 78 bikes.



## What We Did

Throughout the programme, the Covid 19 lockdown was in full implementation since late December 2020. This has really limited what interactions would be possible, requiring the module to be delivered completely remotely. It lends itself to its own challenges of how to communicate and keep a large group informed and on track. Through the use of virtual platforms we all communicated ideas through a shared OneDrive document that allowed each of us to suggest proposals for engaging with the SMERT. We were very keen to engage with the community group and to learn from them, as well as sharing some ideas on design with them. The series of SMERT workshops provided us with a great opportunity to engage, develop and even evolve our ideas in the ones you see present within this booklet. It was very clear that we wanted our ideas and the importance of them to be relevant to what type of project we could do that might inform the community activists about housing design issues and that could also help develop their own community engagement with the current proposal on Emmet Road.

Finally, it was agreed that we would try two online workshops with ourselves and four members of the SMERT; Eilish Comerford, John Bissett and Paul McGartoll and Rita Fagan. The first workshop consisted of a general discussion around the community group's concerns with the latest Framework Development Plan accompanied with a short proposal and questions from each student. The first assignment was to explore an idea in which we thought to be relevant and that may have good attributes which could possibly be applied to St. Michael's Estate

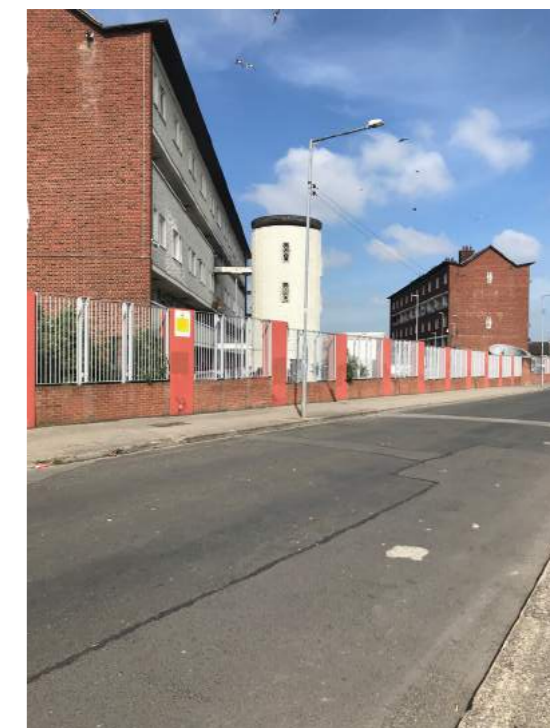
We concluded this workshop with a SWOT analysis of the plan where each of us were encouraged to identify the strengths, weaknesses, opportunities and threats. The elective group then agreed two exercises they would undertake for a second workshop with the SMERT. These were written up as formal assignments to be presented on A3 sheets, uploaded to Brightspace and also to be presented in a unified Power Point presentation at the next workshop with the SMERT.

The second assignment was to explore an exemplar housing project with some relevant issues to the latest Framework Development Plan. Guidelines were given as to the kind of issues to be explored. The idea was to interrogate an issue with the Framework Development Plan and/or one that had been raised by the SMERT in the first workshop. We, the students and Jim were able to communicate with each other through a shared OneDrive document as the students began to research and share their ideas and choice of project /issues. Each student could see what the others were proposing and Jim could comment and encourage each of us through constructive feedback. The final online workshop occurred with the SMERT in May. At this we presented our more developed ideas and proposals to the SMERT group drawing similarities between Emmet Road and our chosen exemplar scheme. Each student presented their analysis via the BONGO online virtual classroom platform on Brightspace followed by questions and comments from John, Eilish and Paul all moderated by Jim. Though frustrating at times due to technical and Wifi difficulties, the quality of the students' work and the important issues that their analysis generated really shone through to show and achieve a very engaging encounter by all participants.

Our final assignment, was to compile our fully coherent ideas which are most relevant and could be relevant to Emmet Road. This is collectively compiled in this booklet which we hope captures the enthusiastic engagement and commitment of all parties to this elective and that it can be useful to the SMERT activists in their future endeavours in their search for a truly sustainable housing project for the former St. Michael's Estate.

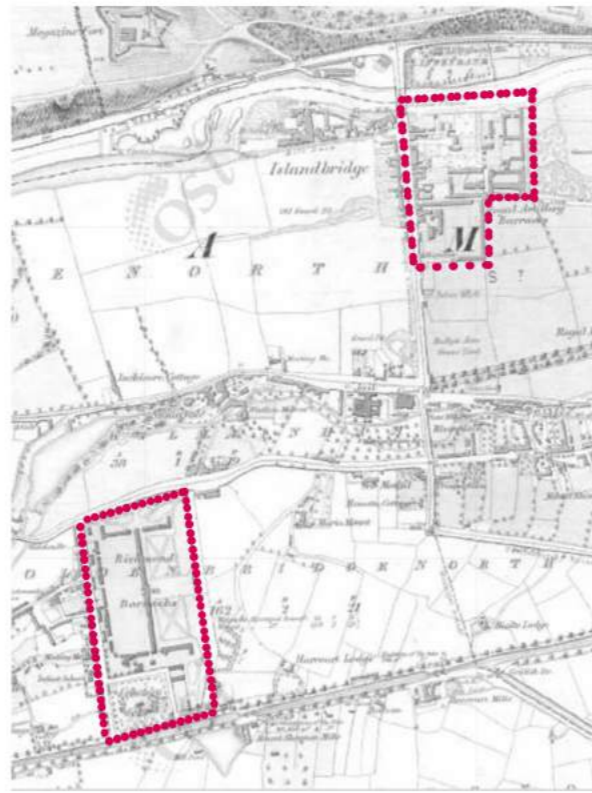
Finally, with restrictions starting to ease. We were allowed to visit the site with Rita and Eilish, two members of the SMERT, who gave us a comprehensive full morning guided tour of the site and the current community facilities. Collectively we were really impressed and just wish we could've seen it early due to Covid 19. Thank you Rita and Eilish for your time and knowledge.

We wish them the best of luck with their progress in developing St. Michael's Estate.



# Clancy Quay, Phase II, Islandbridge

Architects: O'Mahony and Pike  
 Site Size: 2.1 Ha  
 Number of Units: 163  
 Density: 77.6 dph  
 RIAI Architecture Award for Housing 2018  
 Entire Scheme: Phase I, II & III  
 Site Size: 5.5 Ha  
 Number of Units: 845  
 Density: 153 dph



Geohive, 1837-1842 Historic map showing Richmond Barracks in context with Clancy Barracks

## Introduction to Precedent

Clancy Quay is located in Islandbridge, Dublin, in close proximity to the Emmet Road development. The project was completed in three phases with phase 2 of the development designed by O'Mahony Pike Architects. The site is located on the South Circular Road, with the River Liffey to the North, Heuston Station to the East and existing corporation flats to the West. Phase 2 of the development concentrated on the restoration of the 18th century stables of Clancy Barracks (shown in the image on LHS in context with Richmond Barracks). It is Ireland's largest residential conservation and restoration project and won the RIAI Architecture Award for Housing in 2018. The site was sold by the state to a private developer in 2002 who sought to demolish the existing protected structures on the site. Following the economic crash, the plans to demolish the barracks were abandoned and the site was bought by American global real estate investment company, Kennedy Wilson.



Lavery House (LHS), 2 Storey  
 2 x 3 Bed Apartments  
 2 x 3 Bed Houses

## Clancy Quay, Site Plan



**SITE LEGEND**

- APARTMENTS & HOUSES
- COMING SOON
- RESIDENTS' GYM (RIVERBANK)
- ONSITE MANAGEMENT OFFICE & RESIDENTS' AMENITIES (COBBLES)
- ONSITE FOOD OFFERING
- ROOF TERRACE
- ART STUDIO IN PARTNERSHIP WITH THE NCAD



Collonade, 2 Storeys  
 2,3,4 Bed Houses



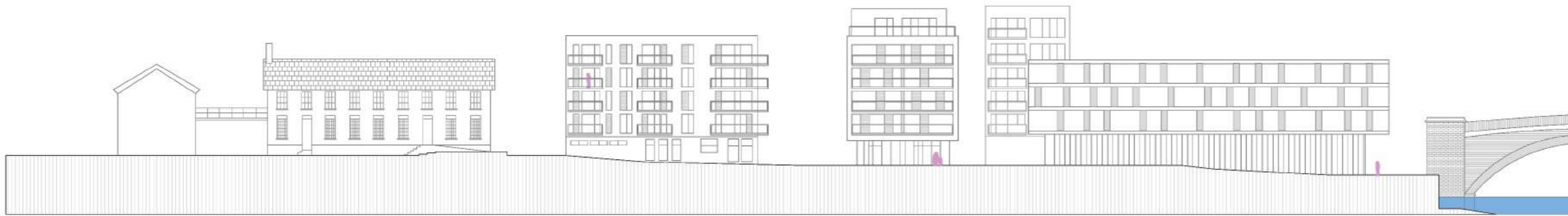
Foley House, 2 Storeys  
 2x 3 Bed Apartments



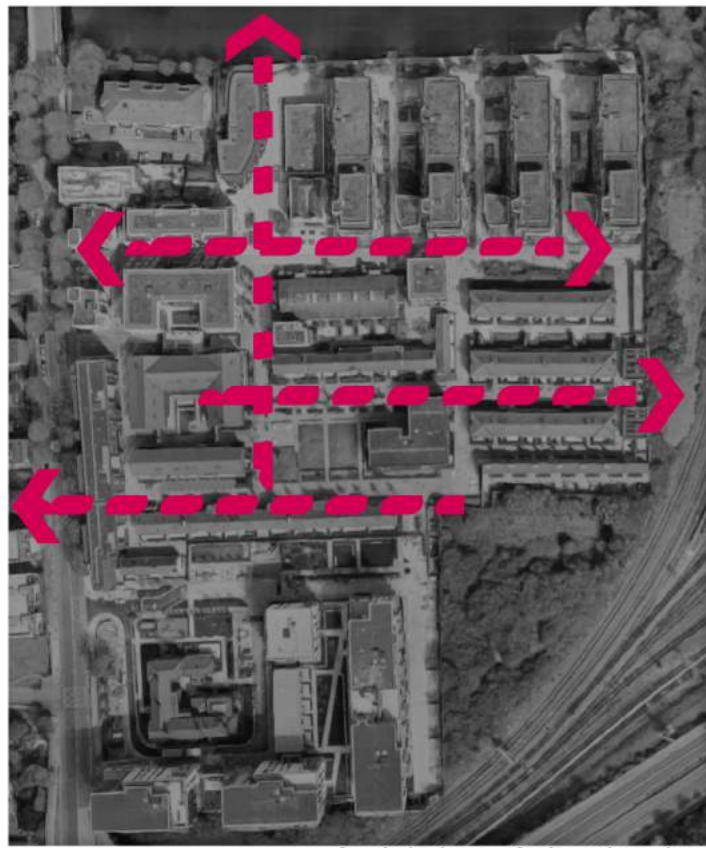
Worthington House, 6 Storeys  
 1 & 2 Bed Apartments

## Urban Form and Dwelling Typology

Phase 2 of the scheme consisted of the construction of two new apartment blocks and the conversion of the stables into terraced housing. The storey heights range from 1-6 storeys which sit comfortably within the context of the 8 storey apartment blocks adjacent to the Liffey and the surrounding 2-6 storey buildings on South Circular Road. The typologies are diverse, including: 1-3 bed apartments, 2 bed duplexes, and 1-4 bed townhouses. There is ample space between the building blocks which are thought to be quite generous and beneficial in making the scheme feel spacious and open.



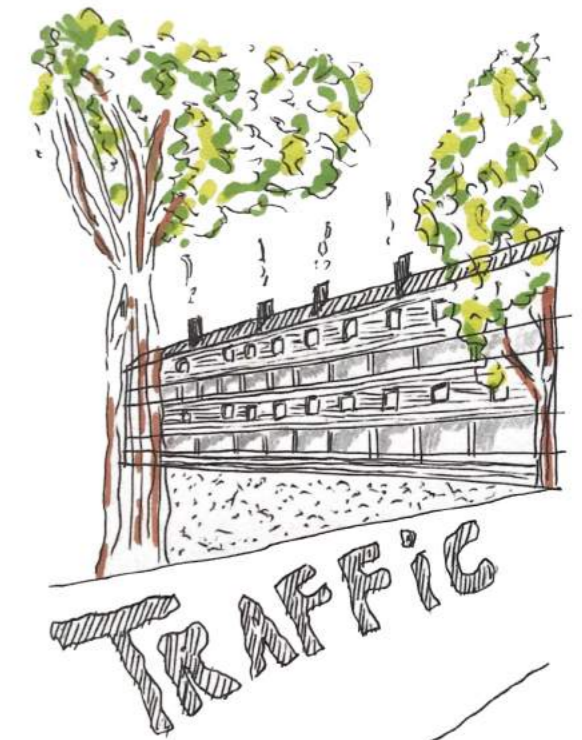
Section through site showing restored stables in context with taller blocks



Aerial view of site showing lines of axes

### Relationship to Context

Within the centre of the development is a communal park, Cambridge Square. O'Mahony Pike describe the square as a visual and permeable link connecting the scheme to the adjacent communities. Permeations in the blocks create direct views to the existing corporation flats that face the new apartment block on the South Circular. The development provides a variety of amenities including a business centre, art studio in partnership with NCAD, playground, coffee shop and retail units – a number of which service the existing communities.



View of existing corporation flats adjacent to development



Phase II - 3 bed house

### Residents

Clancy Quay is targeted at young professionals within the ages of 25-35 years. The focus on the young mobile workforce is centred around annual leases and rent reviews.

### Management and Maintenance

Clancy Quay is a managed scheme with an onsite management building located in the 'Cobbles' which operates from 8am-10pm daily. There is also an afterhours management service, concierge, mail room, and package management services.

### Funding Model

The development is Ireland's largest private rented sector scheme. To maintain a steady flow of stock for rent, about 40% of the apartments/houses are rotating in or out of tenancy throughout the year. There has been an annual increase of 5% in the rent since the development entered the market. Clancy Quay now offer what is known as a tenant amenity package, where a monthly fee on top of their rent grants tenants' access to shared services. The DCC Dublin City Development Plan for 2016-2022 describes Clancy Quay as a notable example of a good quality, high density development. A portfolio of good quality rental property is needed in Dublin as we see a growing popularity for the rental sector in Ireland.

### References:

- Clancy Quay, (2021) Clancy Quay. Available at: <https://www.clancyquay.ie/>
- Council, D.C. (2016) 'Dublin City Development Plan 2016-2022'. Available at: <https://www.dublincity.ie/dublin-city-development-plan-2016-2022>
- Glenbeigh Construction (2021) Clancy Quay Residential. Available at: <https://gcon.ie/project-portfolio/clancy-quay-residential/#&gid=1&pid=5>
- Lyons, M. (2014) 'The future of renting – US style', Irish times, 4th December. Available at: <https://www.irishtimes.com/life-and-style/homes-and-property/the-future-of-renting-us-style-1.2024300>
- O'Mahony Pike (2021) O'Mahony Pike, Clancy Quay. Available at: <https://omahonypike.ie/projects/clancy-quay/>



Cambridge Square

# Project | Nightingale 1

**Architect** | Breath Architecture

**Location** | Brunswick, Melbourne, Australia

**Dwelling Typology** | Apartments

**Number of Apartments** | 20

**Year of completion** | 2017

## Introduction

Nightingale 1 provides small foot-print homes where communal spaces throughout the building becomes an extension of the living areas.

Based on the idea of 'living simply' the group focus on well built, sustainable homes. Each dwelling is minimal in its design, in order to reduce building and maintenance costs and instead focuses on health and comfort of its residents.

Nightingale 1 is just one of many completed and on-going projects by the nightingale group. Other projects include: Nightingale lifepark and nightingale village.

## Tenure Model

The Nightingale Housing scheme excludes developers and real estate agents, and instead turn straight to the buyer.

This residential project attempts to follow the German exemplar of R50 Baugruppen in Berlin. A model for constructing housing, collectively funded and community-based living.

The model is made possible through specialised programs offered by select banks. Indi-



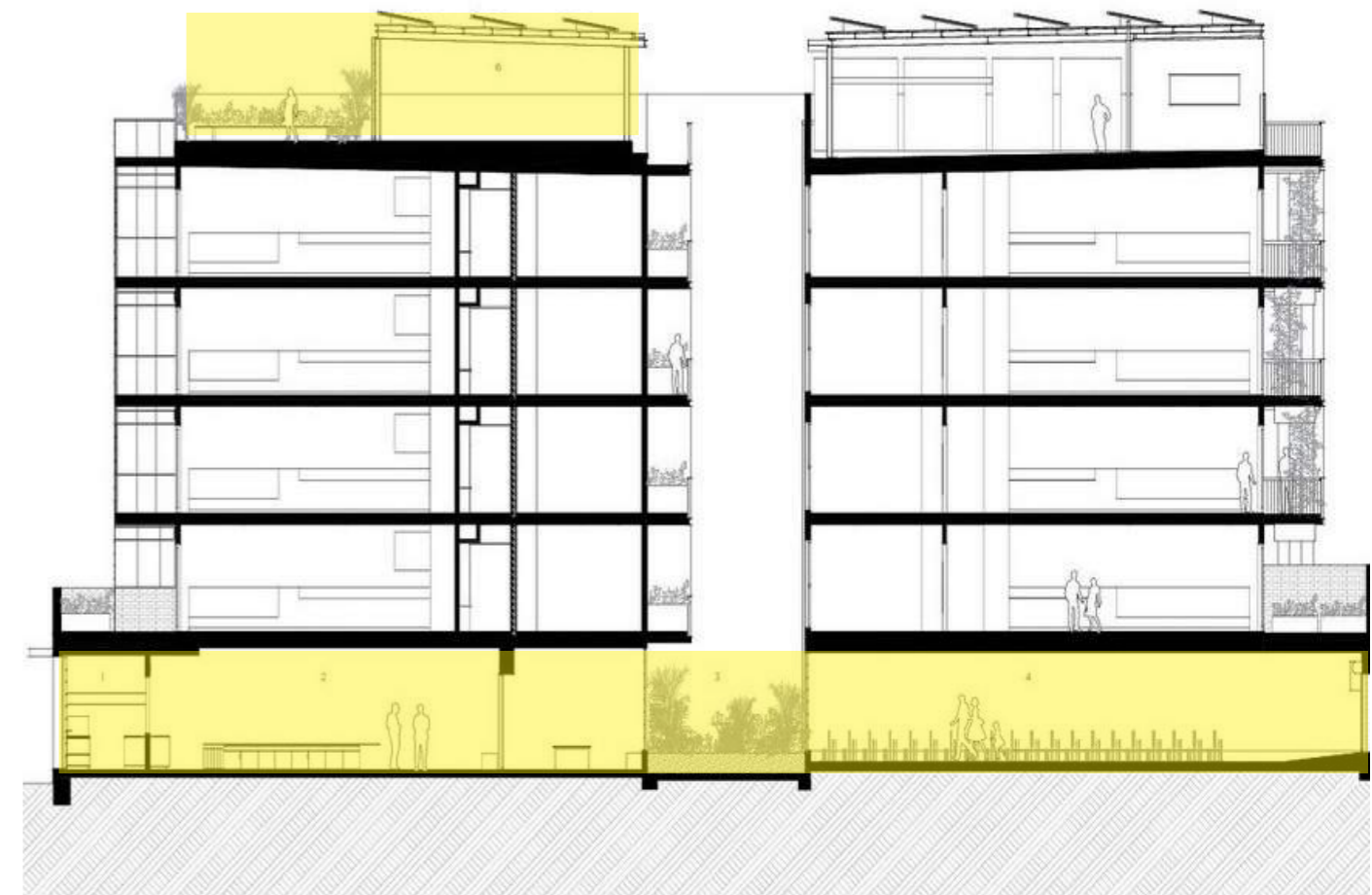
Minimal Design

vidual mortgages (for the proposed units) are pooled together to buy the plot and fund all stages/phases of construction. The owner-occupied and participatory planning push the design towards flexibility and allow the residents to be involved in the entire process.

## Sustainability

Consideration for sustainability is embraced and incorporated from the beginning of each scheme, on a local as well as global scale. Each housing project is 100% carbon neutral and powered by green power. As part of their sustainability 'lifestyle' each project is located within close proximity to public transport and cycle routes. There is also a car sharing initiative for each building.

Emphasis on thermal insulation, passive ventilation and solar shading for the comfort of its residents, while many materials are either locally sourced, recycled or simply natural.



Communal Facilities on the Groundfloor and Rooftop



Narrow apartment units

## References:

- <http://www.breathe.com.au/project/nightingale-bowden>
- <http://www.archdaily.com/912227/nightingale-1-breath-architecture>
- <http://nightingalehousing.org/nightingale-1>



### Public Space

Nightingale housing contributes to the local urban community through active street frontages, tactile pedestrian experiences, and commercial spaces.

The street activation happens through retail units on the ground floor (café spaces and small businesses) which blurs the lines between private and public space.



Rooftop Communal Garden



Built in seating arrangements

### Relevance

The nightingale project promotes interaction between the residents and the local community by extending the use beyond the building envelope. By allowing the ground floor to be used for retail, the area becomes active. Seating areas welcome passersby.

This scheme highlights the importance of thinking beyond the individual dwellings from the beginning. With the extended community in mind, the use of communal spaces and the design of these spaces can bring solutions to antisocial behaviour (passive surveillance) while providing amenities for the wider community and giving a sense of belonging.



### Communal spaces |

Communal laundries, productive gardens, short-term rentals for visitors, bath houses, multi-purpose rooms and commercial tenancies.

Dining space on the roof in order to come together and get to know your neighbours

Spaces where the broader community can gather

### Purchaser engagement |

Early engagement with the residents through design process of communal areas and facilitating regular meetings during construction.



### Urban community contribution |

Contribution to the local urban community through the creation of connected communities, active street frontages, fine grain and tactile pedestrian experience for passers-by and commercial spaces for values-aligned businesses.

### Connected communities |

A rich street life, cafes, workplaces and places for people to meet commitment to public space and public life.

## Lime Tree Court (Buccleuch House)

**Development type:** Multigenerational housing

**Location:** Clapton Common, Hackney, London

**Architect:** Levitt Bernstein

**Client:** Hill, Hanover and Agudas Israel Housing

**Site size:** 0.59ha

**No. Of dwellings:** 107

**Density:** 181dph

**Dwelling mix:** 49 x 1-bed, 36 x 2-bed, 12 x 3-bed, 10 x 4-bed

**Tenure mix:** 36% private sale, 64% affordable housing

**Parking spaces per home:** 0.3



**Project Aim:** Unifying three different communities into one truly intergenerational housing project in north London.

This multigenerational housing scheme provides three tenure types for each of its three clients. There are 41 assisted living apartments for older people (Hanover), 28 affordable rent and shared ownership apartments for the local Orthodox Jewish population (Agudas Israel Housing Association) and 38 private sale apartments (Hill).

Hanover sought to provide affordable rented one and two bedroom apartments and supporting communal space for older people. Agudas Israel Housing were looking for mainly larger family homes for the local Orthodox Jewish Community, and Hill, a mix of one and two bedroom apartments for first time buyers and young families.



*The site has a prominent frontage onto Clapton Common*



*Ground Floor Plan*



*The site fronts onto a protected London square*

Despite the three different types of accommodation, the building does not immediately or obviously distinguish between tenure types creating a sense of equality across each of the groups and helping to foster a sense of community. Although the facade maintains a consistent architectural language, there are subtle elevational differences in the balcony types, which were designed with the practical and cultural requirements of the residents in mind. The private apartments have simple stacking balconies to provide the additional outdoor space while those for the Orthodox Jewish families are staggered to provide a clear view of the sky for the Sukkot festival. The independent living homes have single glazed winter gardens for an extra sheltered 'living space' for residents who spend more time inside. Sliding glass panels allow them to be enclosed in colder weather to provide a protected 'conservatory' and opened up on warmer days to form a semi open balcony.

The building adopts the principle of progressive privacy, where the building becomes more private and more secure the deeper and higher you go. There is a lively double height reception area that faces the square with space for outdoor seating. A secondary entrance bypasses the more public areas and leads directly up to the residential storeys, giving residents the choice to come and go discreetly, or seek company as they do so. Communal spaces include a large, ground floor lounge, smaller double height sitting spaces on all terrace floors, two enclosed rear gardens and a roof terrace. The clubroom has direct access to the two different semi private outdoor spaces, a peaceful sunken courtyard featuring sensory planting, pergolas and seating areas for quiet respite, and the other, a kitchen garden, has raised beds for food growing.

All apartments accommodate wheelchair users and a portion of the older peoples' homes follow HAPPI design recommendations, featuring flexible open-plan layouts with sliding portions between rooms to assist residents mobility issues.

LimeTree Court is a multicultural, mixed age community. Its architectural and social strengths lie in the ease with which it accommodates diversity without prioritising or disadvantaging any group of residents. The design focused on creating a new community within one new unified building, a diverse scheme where very different residents enjoy interacting and sharing space and time together.



Section illustrating the internal layout of independent layout



Courtyards provide external space for the older residents

References:  
<https://www.levittbernstein.co.uk/project-stories/buccluch-house/>  
 The Housing Design Handbook by David Levitt and Jo McCaffery  
 Age Friendly Housing by Julia Park and Jeremy Porteus



**Katrineholm Market Hall and Housing, Katrineholm, Sweden.**



**Katrineholm Market Hall and Housing**

- This project won second place in a competition to construct affordable housing over an existing bus stop and arcade. The project manifests itself in a public ground plane open for activities such as markets as well as concerts and other community events, and 3 floors of affordable housing floating above this.

-Acquiring one of these affordable homes is done through Katrineholm Municipalities website, where you can join a queue, or directly contact their real estate developers for availability in their projects. As this project didn't win the competition, it is not available, however these processes apply to the winning project.

- The public ground plane being made into a market vitalises the spaces and creates a social environment, also connecting urban spaces either side through the permeability of the block on the ground floor.



*DCU Community Garden, Glasnevin DCU Campus, Dublin.*

- **DCU Community Garden** is a great local example of just how far the capabilities of a small patch of land can be. The garden works out of a 1.6 acre plot, only utilising about 1/5 of that for growing.

- This garden has achieved a great intensity of production by prioritising quality of soil and maintaining a well kept schedule of planting and harvesting.

-This garden is run by a team of 3 who call themselves 'The Gnomes' for profit, where they sell their produce at 2 weekly markets, and during COVID 19, by delivery. They produce an extensive list of vegetables and herbs.

-The land was given to the Gnomes by DCU as it was an abandoned section of their campus. They have an agreement with DCU where they can only farm on certain parts of their site and they are also given access to DCU water supplies, everything else is built and provided by the gnomes themselves.





## Project: WagnisART Cooperative Housing Complex

Architects: SHAG Schindler Hable Architekten GbR, bogevuschs buero architekten & stadtplaner GmbH

Where: Munich, Germany

Area: 20275m<sup>2</sup>



cooperative housing complex  
wagnisART



WagnisART has been described as being Germany's most radical housing cooperative. WagnisART is located in the former barracks area of Domagkpark in Munich. The project was completed in 2015 and provides 138 apartments, consisting of a mix of subsidized and freely financed facilities. The juxtaposition of different funding levels within the building is interesting: 30% of the apartments are freely financed, 40% are funded in the "Munich Model". 30% are funded according to EOF (income-orientated funding). 84 of the total of 138 apartments are organised as shared flats: each cluster apartment has a private sphere with its own cooking niche and bath for every one to three residents.

Even from afar, the windows irregularly distributed along the facade are striking to the visitor. The apartments are spread over five buildings. These buildings are all connected through bridges. The buildings combine housing, living and working areas. Since the stairwells have an abundance of daylight they are used as communication spaces, while the wide landings offer spaces for benches and artworks. There was co-operation between the architects and the future residents of the complex in the early stages of the project. This allowed the inhabitants to more closely identify with the project and its community.



There are plenty of building elements in the project which promote the cooperative idea. Adjacent to the public square, the bridges between the five buildings provide a second semi-public area between the houses. The roof terraces form another important part of the extensive communal open space. Two of the five buildings provide roof gardens for the inhabitants. Some of the other facilities include studios, offices, event room, workshops, a laundry, a cafe, a sewing room and a rehearsal room. The buildings are at passive house standard. For this community, cooperative living does not just mean inexpensive rents, but an engagement for the community. Each cooperative member must contribute at least 20 hours of work annually. The deposits for start up funding cover about 30% of construction costs. The total cost of 41 million euros in passive building standards is astonishingly low. If a resident moves out, they are reimbursed their entire deposit.

**References:**

1. <https://www.archdaily.com/889159/cooperative-housing-complex-wagnisart-bogevischs-buero-architekten-stadtplaner-gmbh-plus-shag-schindler-hable>
2. <https://www.auboek-karasz.at/project/wagnisart>
3. <http://www.deutscherbauherrenpreis.de/projekt/wohnanlage-wagnisart-muenchen/>
4. <https://www.guiding-architects.net/wagnisart-cooperative-housing-munich/>

# Rigaud 55, Co-operative Housing in Chêne-Bougeries

**Location:**  
Chêne-Bougeries, Switzerland

**Architect:**  
Bonhôte Zapata architectes SA

**Clients:**  
CODHA, Cooperative for Associative Housing

**Project timeline:**  
2011 (competition) - 2017 (handover)

**Build timeline:**  
2015 - 2017

**Number of dwellings:**  
49 apartments

**Plot surface:**  
8,645 m<sup>2</sup>

**Gross floor area:**  
5,200 m<sup>2</sup>



AERIAL VIEW / SITE PLAN

**Overview:**  
This housing scheme was a winning proposal of a completion organised by the Council of Chêne-Bougeries to assign a plot of land to a cooperative for a social and architectural project. The conditions were for the cooperatives to provide innovative, economic and sustainable housing, put on the market at cost price.

In a region of the Geneva periphery in full densification, and located on the edge of a residential area, the 'Rigaud 55' building precisely articulates these two urban worlds. Thanks to a staggered volume, which divides a programme of 49 housing units into six almost equivalent parts, the territorial listing is enriched with small squares, clearings or other carefully controlled dilations. To meet the needs of a cooperative well known for its open-mindedness, the typologies implemented provide an innovative solution. It is mainly the distributive system that gives this complex its spatial and social richness.

The morphology of the building is designed to appear as an intermediate between the private houses nearby and the little apartment blocks surrounding the site.



ELEVATION



SECTION



FACADE VIEW



OUTSIDE VIEW

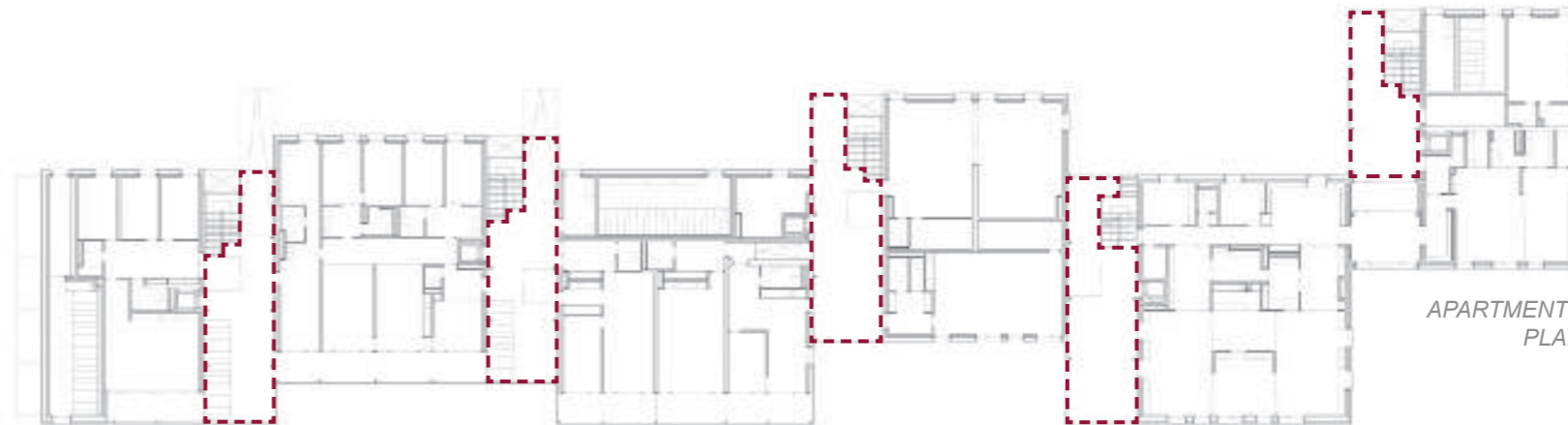
**Project had two major goals:**

To offer large open and shared spaces

To lean towards an energy-autonomous build

**These goals are met by a number of means:**

- Giving particular attention to the layout of apartments and offering appropriable parts of **common spaces** such as landings.
- Offer a **large communal space** that the residents can get together in and independent guest rooms that they can use.
- Offer a communal housing solution, or 'cluster', that allows for **communal living** for 3 renters in one apartment, all the while keeping some private spaces.
- Offer **diverse exterior spaces** of different types and sizes, including a permaculture vegetable garden.
- Obtain the Minergie P and Eco labels through **geothermal heating** solutions and hybrid thermal and photovoltaic **solar panels**.



COMMON SPACES GIVEN TO COMMUNAL AREAS

APARTMENTS PLAN



COMMUNAL AREAS



LANDINGS AND COMMON CIRCULATION AREAS ARE EXTENDED AND USED AS COMMUNAL ZONES

**Project includes:**

- A variety of apartment types ranging from 1 to 4-bed
- 11-room 'cluster' community apartment (two 4-rooms studios & one 3-room studios)
- 1 communal space, 1 workshop, 1 music room
- Crèche for 32 children
- Underground parking for 58 cars
- Public square and gardens
- 3 guest rooms & 3 shops



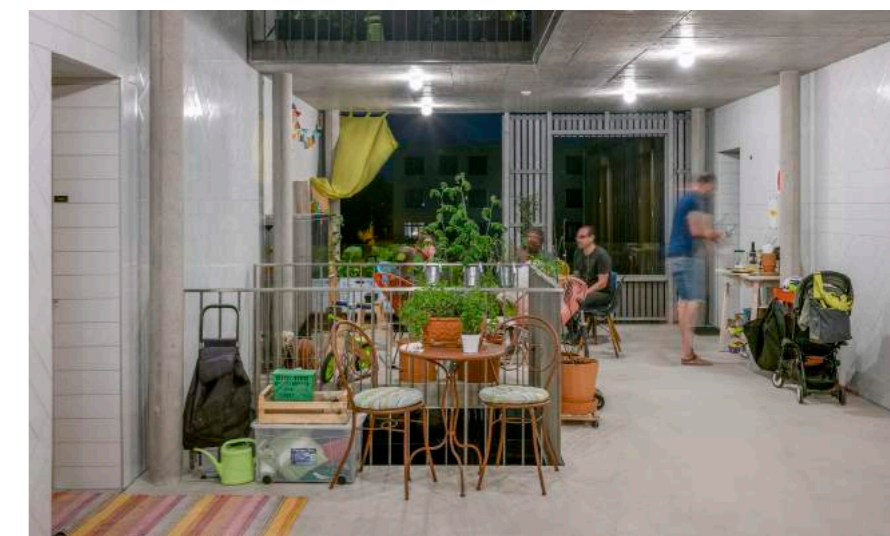
FACADE TREATMENT

The building 'skin' is made out of a wooden cladding, naturally treated to keep a light grey colour in time, surrounding the six houses and making them appear as one whole.

PERMACULTURE VEGETABLE GARDEN



COMMUNAL LIVING 'CLUSTER'



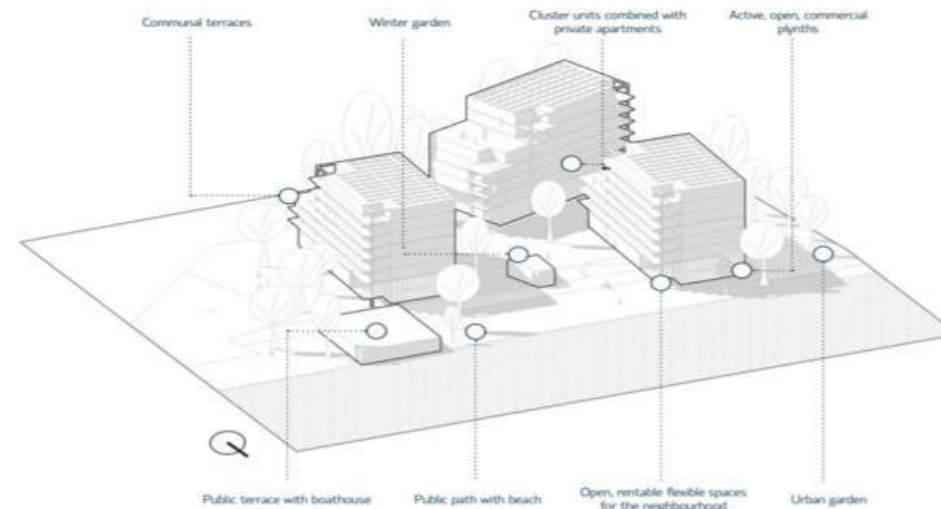
REFERENCES

- AFASIA ARCHZINE: <https://afasiaarchzine.com/2017/11/bonhote-zapata/>
- BOHNÔTE ZAPATA ARCHITECTS: [https://www.bonhotezapata.ch/fr/chronology/chene\\_bougeries\\_rigaud\\_55](https://www.bonhotezapata.ch/fr/chronology/chene_bougeries_rigaud_55)
- DIVISARE: <https://divisare.com/projects/372050-bonhote-zapata-architectes-johannes-marburg-housing-and-nursery-in-chene-bougeries>
- GVARCHI: <https://www.gvarchi.ch/fr/home/site/stamp/Lbl9Mu22fRUy01ve>



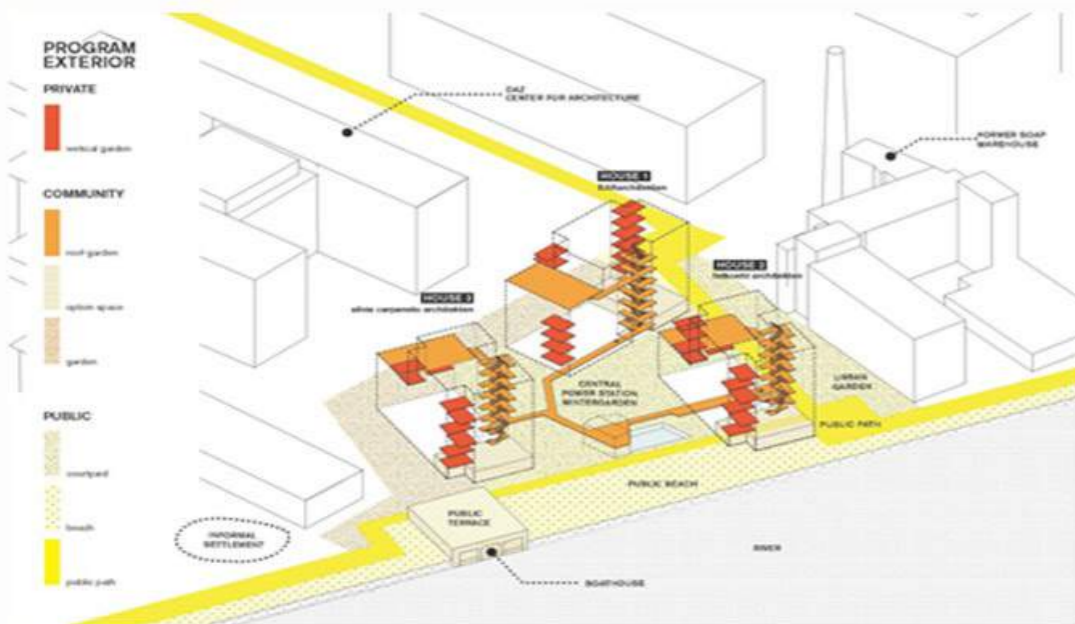
### Pros of Spreefeld As A Successful Co-housing Project

- Open to the neighbourhood and city being very urban in its location
- Differentiation between private, communal, public spaces which is really evident due to the careful density of the site (not over densifying it)
- Rents are staggered and start at a level on par with government subsidized housing in Germany, without having received this subsidy. This has helped many of the Spreefeld residents, who could not otherwise afford to live in the city center under today's conditions make it very feasible and open
- The social skills that have developed throughout this process both enrich and facilitate a co-housing way of living and more so the cluster home way.
- The community shares responsibility for a lot of amenities within apartments and outside of the apartments e.g. workshop, creches, boat sheds, guest accommodations. Spreefeld is a brilliant example of balancing public and private spaces, through providing public balconies on the higher levels and shared gardens on the lower making the outdoors more available and accessible to residents



Top: Key Spaces Diagram For Spreefeld's Programme

Left: Spreefeld's Programmes Organisation, Identifying Living Private And Social Areas



Right: Cluster Accommodation At Spreefeld Apartments Consisting Of Shared and Communal Spaces Relieving The Reliance On Them Through Providing Individuals With Private Facilities Aswell In There Apartments



# Royal Road- Panter Hudspith Architects

LOCATION: Kennington, London

COMPLETED: 2013

GIA: 9,240m<sup>2</sup>

NO. UNITS: 96 (1 & 2 bed apartments, 3 & 4 bed duplexes)

BUDGET: £12.5 million

## DESCRIPTION:

Royal Road, formed part of the Elephant & Castle regeneration early housing sites in the London Borough of Southwark and subsequently won the 2016 RIBA Award National and 2014 British Homes Award: Affordable Housing Development. The development is cruciform in plan with a configuration with four corner cores placed around a communal courtyard and allowing all units to be dual or triple aspect. The four main core buildings are linked along Royal Road and Cooks Road by spacious three and four bedroom duplex homes with front and rear gardens, in addition there are flats with roof terraces above. The massing of the building varies from four to nine storeys, as defined by the heights of surrounding buildings across the site. The linear link blocks have a subtle variation in their facade alignment which, combined with varying heights and brick tones of each element, creates a sculptural quality which is lacking in the stereotypical apartment block of this scale.

## TENURE TYPE:

The scheme provides 80% affordable rented units, including 20% shared ownership homes. Affordable Rent units, in the UK are classed as being set at only 80% market value.

## SUSTAINABILITY:

All of the units were constructed to a Code for Sustainable Homes 'Level 4' standard with photovoltaic panels and a communal combined heat and power unit meet 20% of the site's energy demand. Retention of mature trees was key to scheme and the building form was developed which stepped around these trees and created a central communal garden.

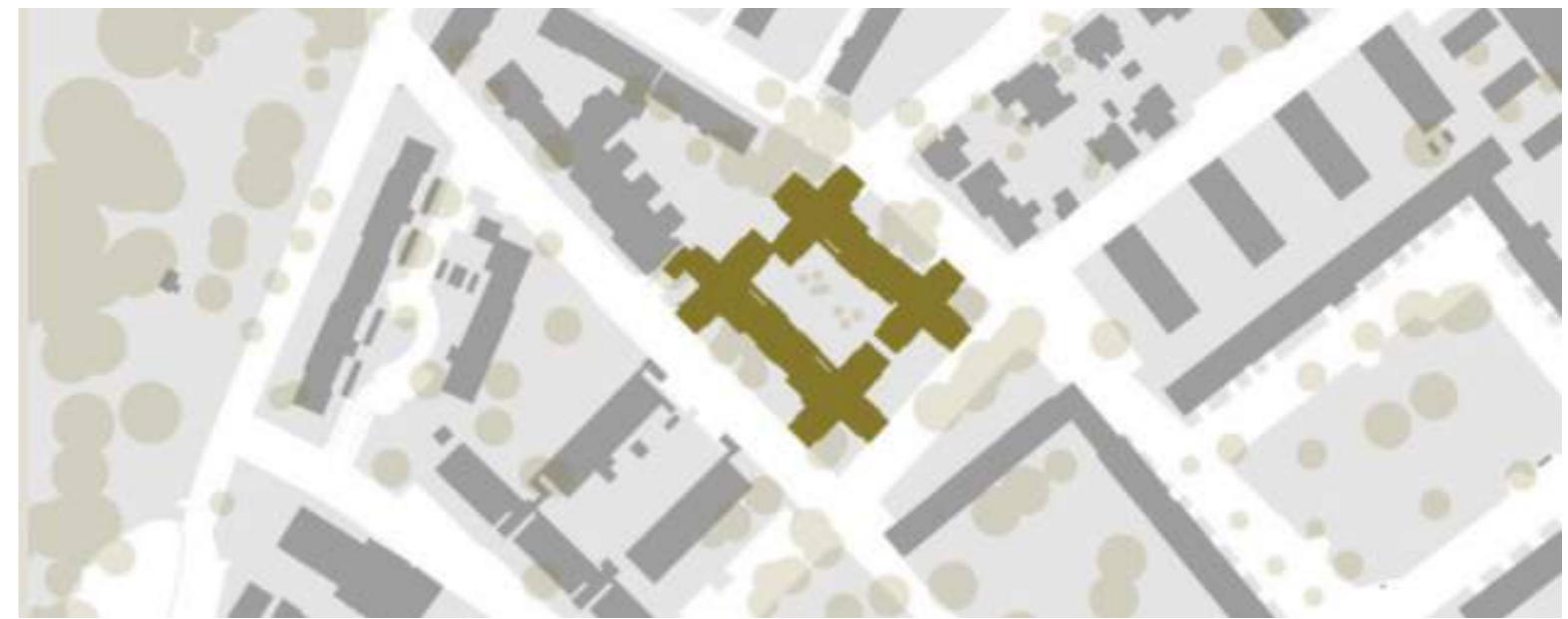
## WHY THIS PROJECT FOR EMMET ROAD?

Although the development was over the recommended density threshold at 788hr/ha, it was approved for its exemplary design. This demonstrates that density can be achieved without compromising quality, which is crucial for Emmet Rd. The affordability of this scheme is akin to the cost rental proposal for St. Michael's Estate, with the latter hopefully achieving an even lower rent.

The way in which the scheme deals with transitions between public street and private garden is also an important factor in designing a comfortable and safe environments for both residents and visitors to the site.

## REFERENCES:

<https://www.ribaj.com/buildings/royal-road-southwark>



SITE PLAN



EXTERNAL VIEWS SHOWING STREET/GARDEN RELATIONSHIP



EXTERNAL VIEWS SHOWING COURTYARD/GARDEN RELATIONSHIP

TOPIC: Entrance typologies & Ground Floor Realm  
STUDENT NAME: Sasha Kushnirenko

COOPERATIVE HOUSING SYSTEMS ELECTIVE 2021  
4TH YEAR ARCHITECTURE, DUBLIN SCHOOL OF ARCHITECTURE





GROUND FLOOR PLAN

- SEMI-PRIVATE SHARED RESIDENTS' SPACE
- CORES
- DWELLINGS AND PRIVATE/ SEMI PRIVATE OPEN SPACE

The mix of typologies in this scheme gives it a rich expression at ground level with duplexes having a garden that faces streetside and one that backs onto the courtyard. These dwellings are entered from their own gardens (at arrow points) making them suitable for families and the elderly (at arrow points). Above apartments are entered through the cores (shown in green) which also contain bike stores and utilities. The upper units are equipped with generous balconies and terraces.



ROOF PLAN



TYPICAL FLOOR PLAN



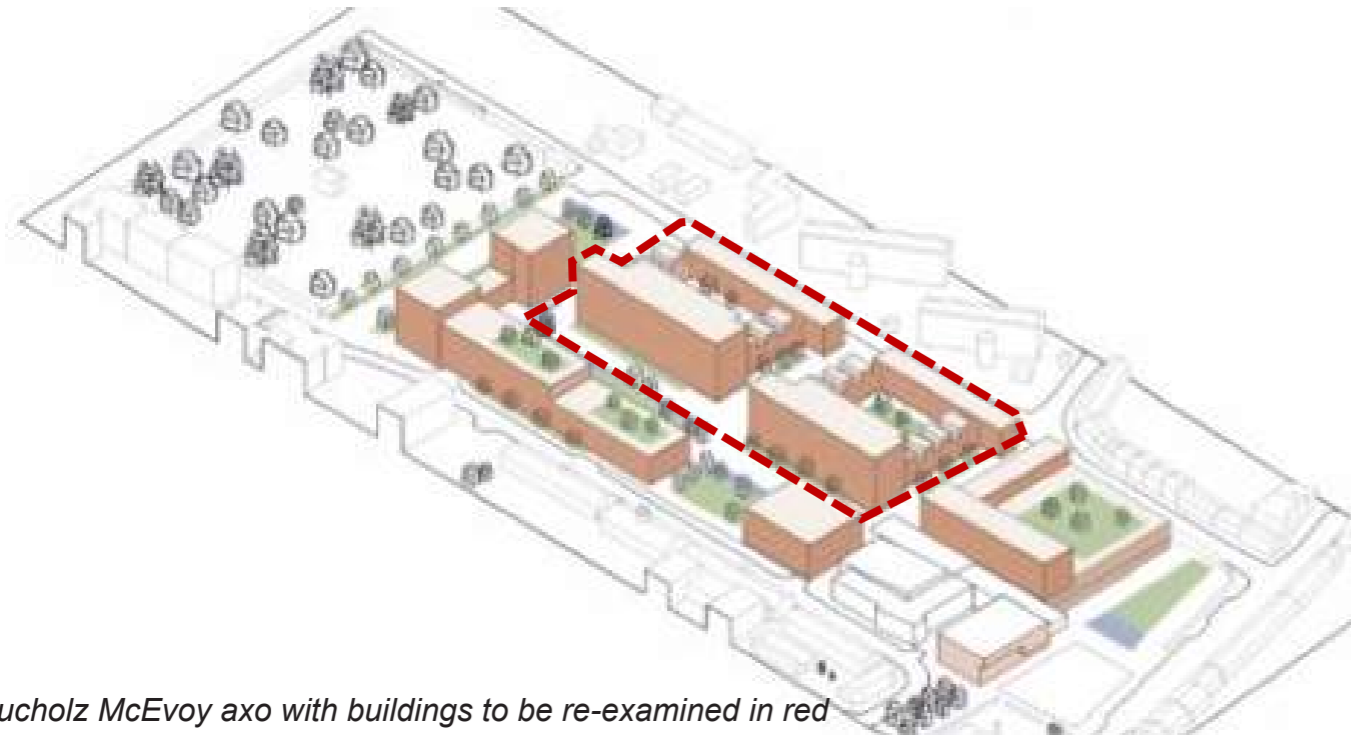
CORE PLAN



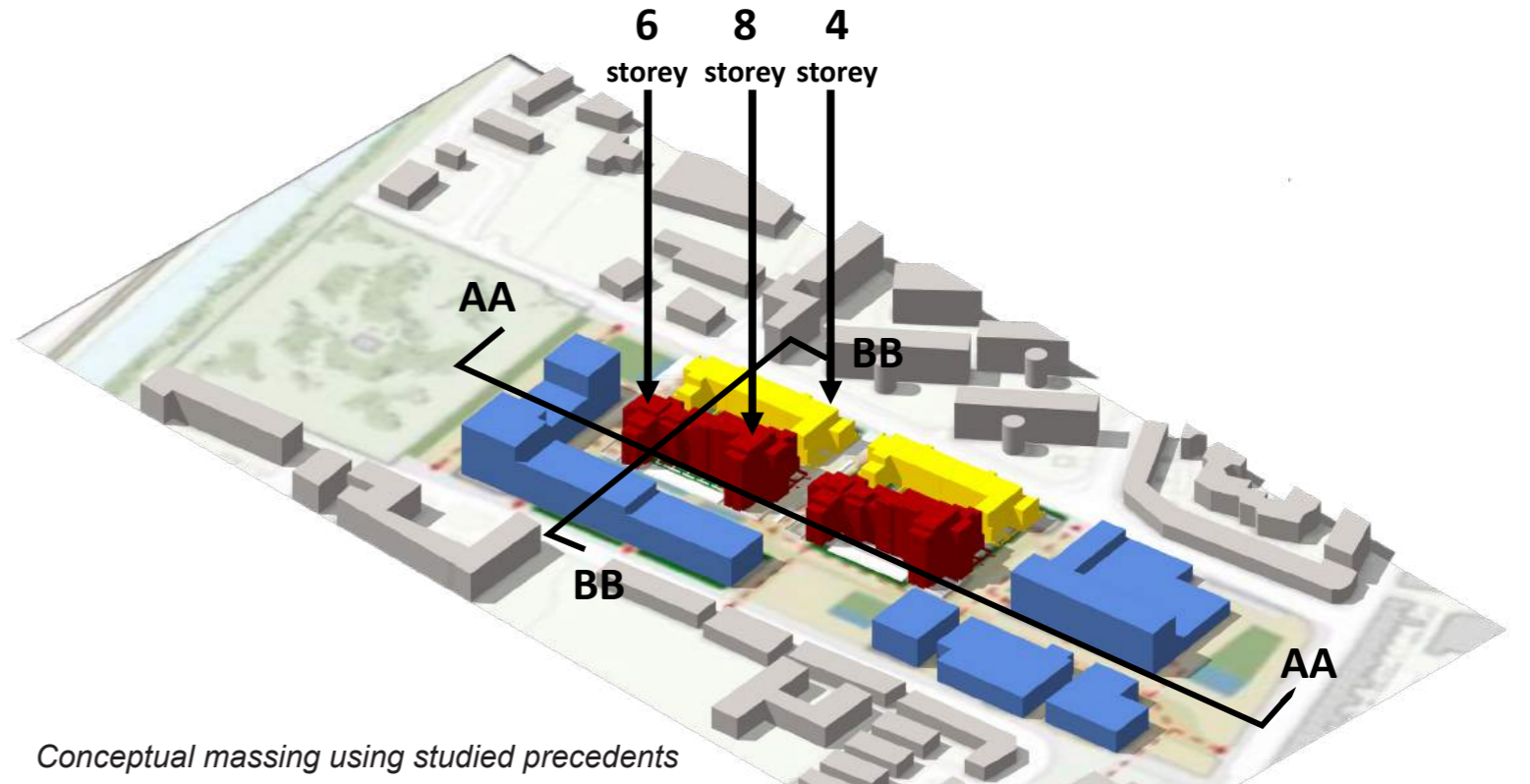
ROOF GARDEN VIEW

# Issue Study

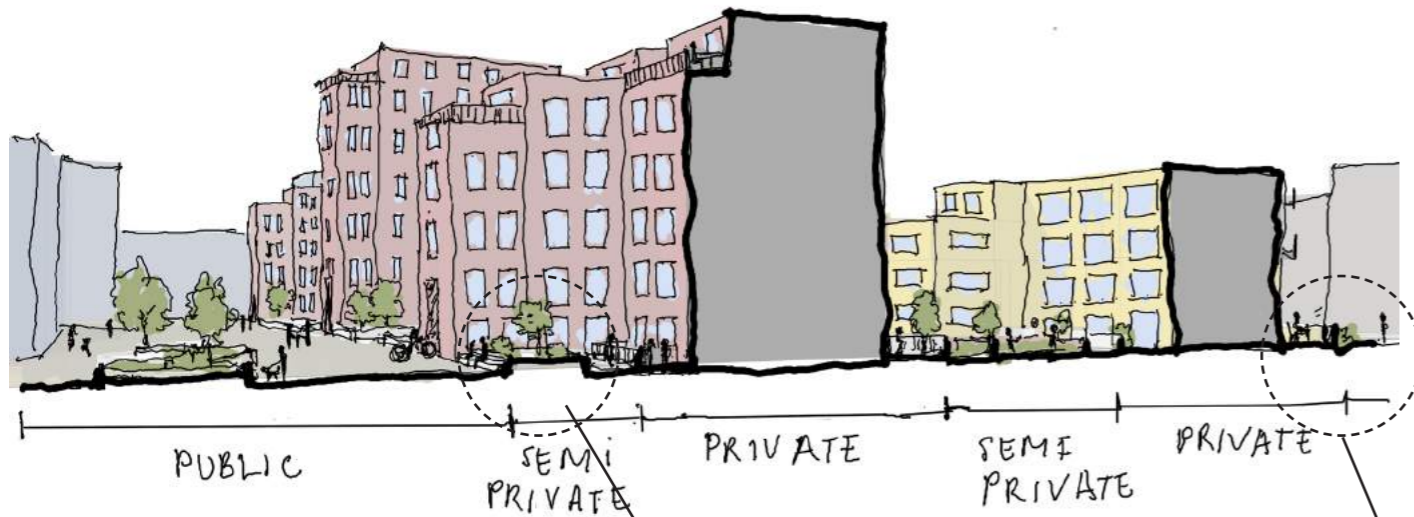
Revisiting Bucholz McEvoy scheme in relation to entrances, ground floor use and thresholds



Bucholz McEvoy axo with buildings to be re-examined in red



Conceptual massing using studied precedents



Swales and raingardens can be used to create green buffers between public streets/ roads & residents' outdoor spaces as well as sustainably tackling stormwater runoff. Plants such as reed mace, reed canary grass, bulrush, flag iris thrive in these SUDs and help to develop habitats for birds and pollinators.



**KEY:**

- Residents circulation
- Shared residents' green space
- Private back gardens
- Public green space
- Semi private front entrance garden
- Street planters



BLAUW PEOPLE DRIVEN ARCHITECTURE  
CPO AMSTELWIJCK, AMSTERDAM



PANTER HUDSPITH ARCHITECTS  
ROYAL ROAD, LONDON



# Detailed Study

ACCESS TYPES FOR GROUND FLOOR MAISONNETTES AND UPPER FLOOR APARTMENTS



BLAUW PEOPLE DRIVEN ARCHITECTURE, AMSTELWIJCK  
Distinct material difference between ground floor dwellings and upper floor units gives character to buildings and allows passers by to read what is part of the public realm and what is not



EM2N - HOUSING ON BRIESESTRASSE, BERLIN  
Allowing more sunlight to enter deck by cutting through slab, added privacy for units with windows facing deck with railings and planting

Deck accessed upper floor units give flexibility with arrangement and passive surveillance to neighbouring street

Access core solid on ground floors for security and light weight on upper floors for light penetration

Street access for ground floor maisonnettes with own front gardens  
Vegetated buffer with private crossing shapes threshold and adds biodiversity with native planting

Slight level change between street and front gardens gives sense of transition from public to private and diminishes need for high walls or fences

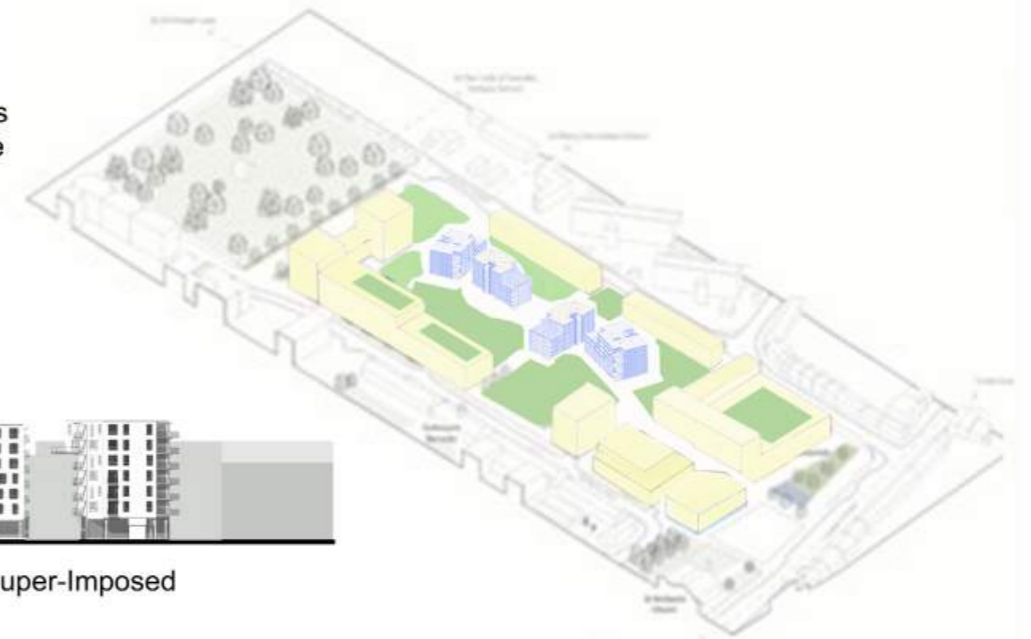


# Spreefeld, Berlin



Left: The Current Emmet Rd Scheme

Right: Spreefeld Building Complexes Imagined In The Emmet Rd Scheme



Spreefelds Programme Super-Imposed on Emmet Rd in Section

Spreefeld is rather quiet, pragmatic project. It attempts to address concerns about individuals or group entrepreneurs which could rent from the Emmets Rd council for shared work, leisure and storage facilities. It gives Spreefeld residents shaping control of development in the area. Is it really the model project it claims to be? It is a 'Third Way' between the ever-temporary projects reserved to the alternative class and more needless offices or faceless shopping malls with the aesthetics



Spreefeld Cafe

Emmet Road similarly can serve in such a way. It allows these ground floor commercial units to provide carefully chosen retail units and retailers which will enhance the area and help it grow the community within and around Emmet Road. Spreefeld demonstrates this idea through the successful use of the original Kiki beach bar. It is located within the boat house which since the projects conception has been converted into a successful more social and family friendly, behaviour bringing more life to the area within the day time and helping to create a social hub



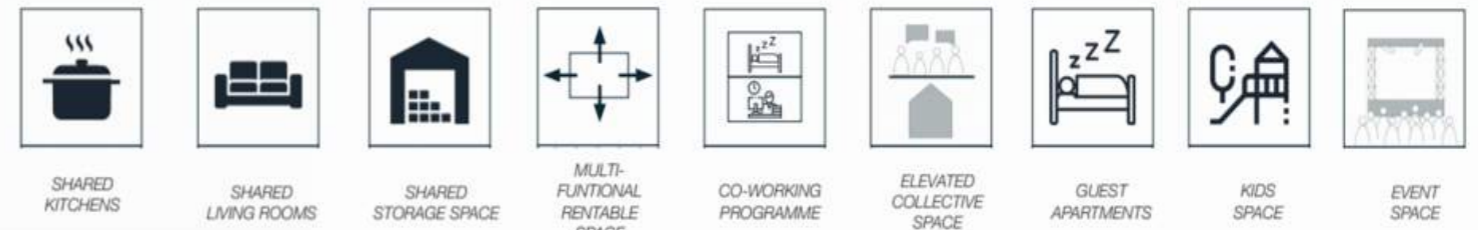
Shared Community Workshop

The idea of shared workspaces in the form of small shared work offices and meeting rooms or even larger workshops and studios within which the community of Emmet's Road can encourage creativity amongst its inhabitants. These spaces need to be very low maintenance and up to date with the latest technology and connectivity access. The spaces positive pride to the residence of the area. A workshop facility could encourage their entrepreneurship and also lead to the creation and maintenance of community fixtures like planters, park benches, etc all in exchange for the use of the workshop and its tools



Outdoor Communal Garden

Opportunity for more Shared Facilities and Spaces at Emmets Rd



Innovation Ireland has been long pushing Innovation within Ireland through enterprise centres around the country. The incorporation of an idea of a shared rent'a' space, Emmet Road could integrate a studio idea without the rented part that would be open to the residents. It would help encourage entrepreneurship and innovation giving residents a tool towards success. It creates a plan which people from all backgrounds thrive. Diversity and inclusion make us stronger

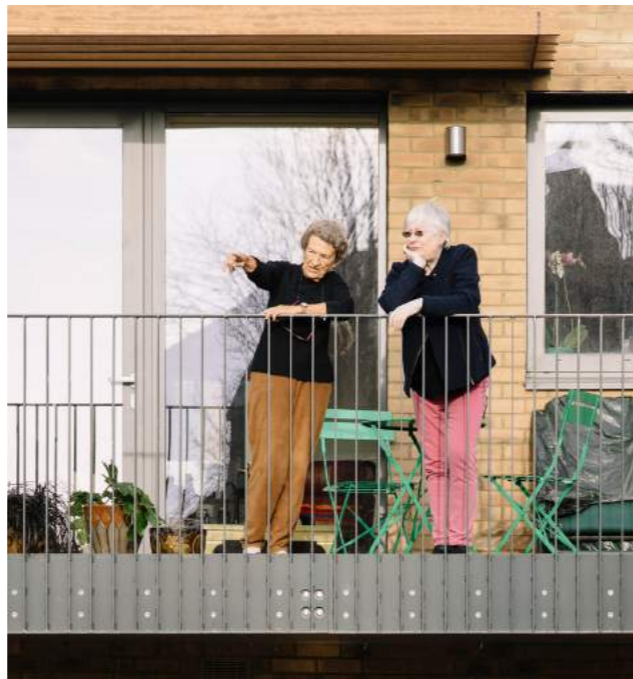


## Balconies and Access Decks

Balcony designs are often overlooked. Now especially, with the pandemic sweeping through the world the importance of balconies and decks becomes apparent. For apartment dwellers under quarantine, balconies have become **new platforms for social interactions and entertainment**. And not only the pandemic that highlights the need for outdoor urban spaces but a constant push towards greener cities. They have become not just places to get fresh air but **urban gardens** and connectors of humans with nature. Balconies also influence the facade design, promote social interactions, improve quality of life for inhabitants, etc. It's time we rethink how we approach decks and balconies in all the developments, especially in residential ones and also see balconies, not as an object on its own but as a **tool to solve other issues** such as privacy, security, sustainability and others.

### Communality

Introducing shared balconies and entrance decks can increase a sense of community within the development, as communal circulation spaces **encourage encounters** and exchanges. Design can specifically focus on introducing areas along with the access decks where residents can get together and socialise. Not only it would improve the social aspect but also add a layer of security through **passive surveillance**.



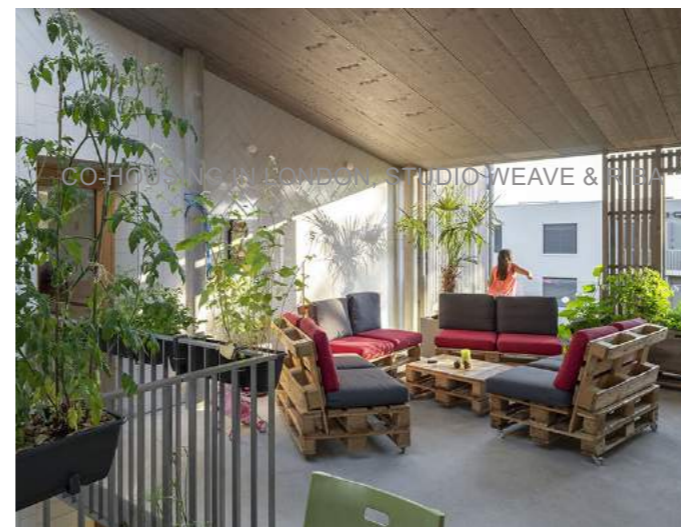
CO-HOUSING IN LONDON, STUDIO WEAVE & RIBA



18 LOGEMENTS COLLECTIFS SOCIAUX, LA ARCHITECTURES



STORA KATRINEBERG, KJELLANDER SJÖBERG



CO-OPERATIVE HOUSING IN CHÊNE-BOUGERIES, BONHÔTE ZAPATA



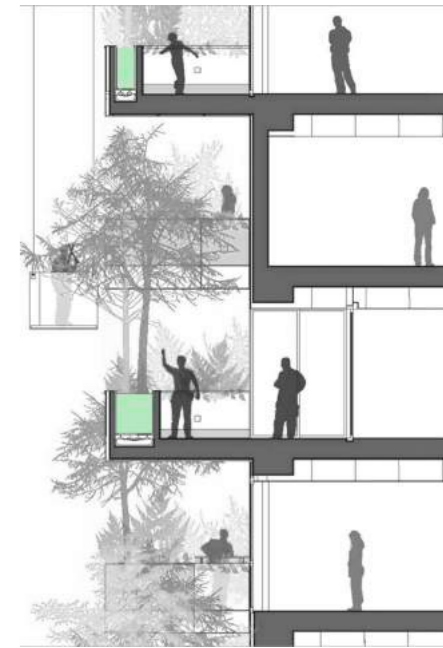
80 VIVIENDAS DE PROTECCIÓN OFICIAL EN SALOU, TONI GIRONÈS



### Sustainability

Planters can be integrated into balconies and access decks to enhance facade quality and animate the streetscape. However, it is not only the aesthetic quality that is important but the benefits to both the environment and the structure. Extending the plant or greenery onto the building facade has shown potential in improving **air quality** and reducing the surface temperature in the built environment. Greenery also acts as shading, **noise insulation**, shield against extreme weather conditions, **CO2 filter** and living space for a variety of animal species.

### INTEGRATED GREENERY



INTEGRATED PLANTERS



MA 4519 RESIDENTIAL BUILDING, ARQTIPO

### Facade Diversity

Balconies play an important role in facade design. They can animate the building by incorporating greenery, interesting balcony shapes, a variety of colour and glazing. It adds interest to the overall look of the built environment and could improve the relationship with the residents.



XIZHIMEN PORT APARTMENT, SZA



26 NAM NGU HOMESTAY, NEMO STUDIO



BONDY, GUÉRIN & PEDROZA ARCHITECTES

### Wellbeing

Creating indoor gardens and winter gardens can enhance the aesthetic quality of the living space and **improve health and productivity** of the residents. Indoor plants can help eliminate indoor air pollutants called Volatile Organic Compounds (VOCs) that emanate from adhesives, furnishings, clothing, and solvents, and are known to cause illnesses. Indoor gardens also **reduce energy use** and cost as a result of the reduced need for air circulation.



WINTER GARDEN

BONPLAND BUILDING, ADAMO FAIDEN

### Quality Design

Access decks and balconies add another layer of **privacy** to inhabitants as entrance or/ and internal rooms are pulled away from the buildings face.

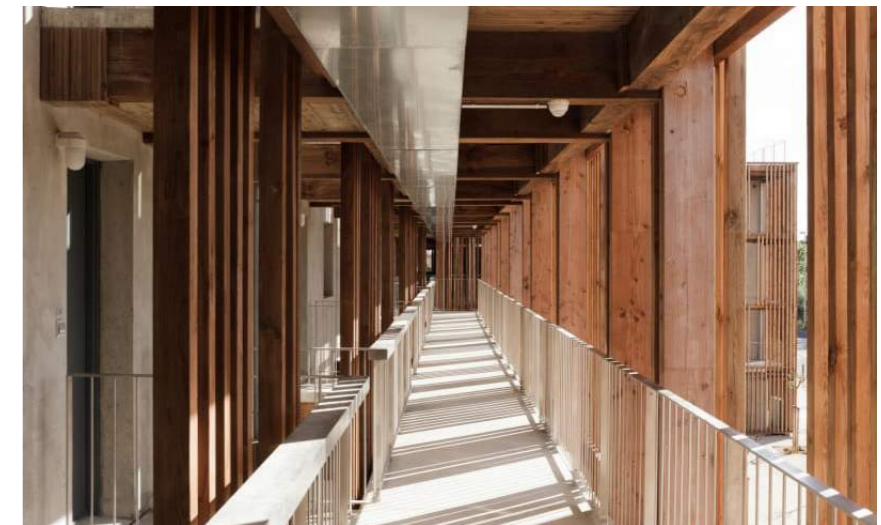
Extension of living space. Balconies can be used as dining areas or **recreation zones**.

**Storage** space could be carefully introduced into the balcony zone, therefore, space will be provided to household items that are not used in day to day life without compromising the internal layout of the apartment.

**Bike access.** Balconies and decks could play a very important role in encouraging residents to opt for bike use instead of other transport. If the design includes wide enough balconies inhabitants would have an opportunity to store bikes in their private area rather than leaving them at the street-level storage (security reasons). And if wide deck access is introduced then bike users could even reach their home door by bike.



OH BOY - THE BICYCLE HOUSE



PRIVACY LAYER

LOGEMENTS SOCIAUX, PASSELAC & ROQUES ARCHITECTES

INTEGRATED STORAGE



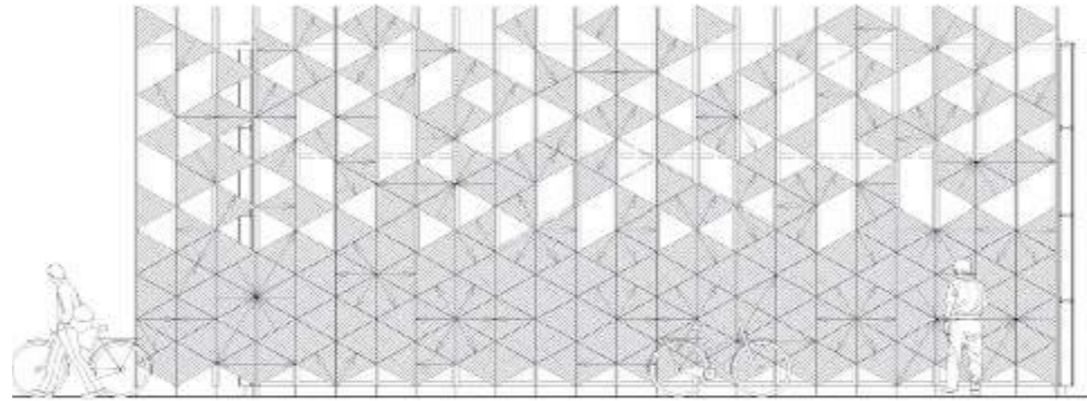
ESTEBAN, LEIBAR SEIGNEURIN



SOCIAL HOUSE, ALCOLEA & TARRAGO ARQUITECTOS

# Cyclists & Cycling

- The Buchloz McEvoy current design presentation of the proposal for St Michaels Estate caters for 1000 bikes with storage.
- The Sarah Wigglesworth bike store (below) in London exemplar is useful to show scale. This enclosure can store 76 bikes.



- It is important to consider facilities to accommodate a large influx of cyclists to the development and the area.
- Via6 (bottom right) is a bike friendly residential and mixed use development in Seattle. The aim of this development is to show people you don't need a car.
- Research finds that a barrier to the bicycle community is lack of end trip facilities like showers, lockers, bike maintenance and secure bike parking.
- Via6 accounts for all of these things and these practices could be considered at St Michaels Estate's new development to ensure the success of the new cycling community.
- Alternative options for secure bicycle storage can also be seen in the Colombo and Serboli apartment (bottom centre) in Barcelona with decorative wall mounts for hanging bicycles.





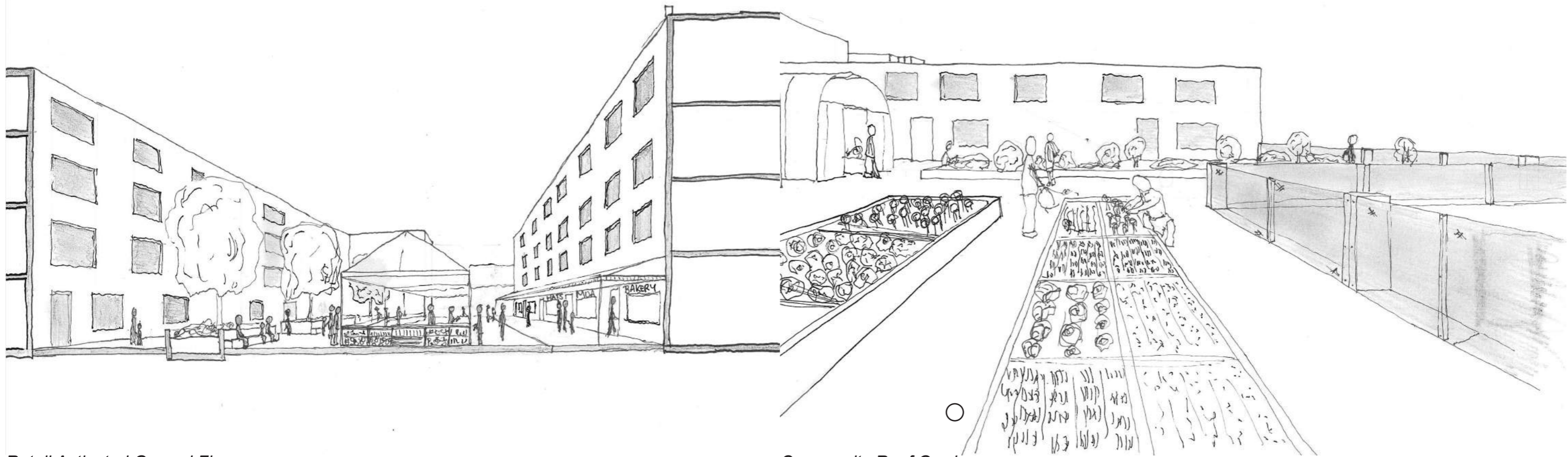
The Drimnagh Luas stop is the closest stop to St Michaels Estate. Unfortunately the bridge at present is inaccessible to people with limited mobility, buggies and bicycles. In the above top left image I have illustrated the possibility of installing a lift to make the Luas stop more accessible to everyone. The map on the top right is an example of a cycle route that could be proposed from St Michaels Estate to Dublin's city centre. With the planned influx of cyclists to the area, this new cycle route promotes this more environmentally friendly and healthier mode of transport. The image below shows an example of the new designated cycle path that leads towards Dublin City Centre. The image is taken from just east of the Drimnagh Luas stop. This is prioritizing the cyclists over the car users as this street is shown here as a one way system for cars. This makes the area more accessible for the influx of bicycle users that are planned to live in the Inchicore area.

The image below shows spaces on a London train blocked off for social distancing measures due to the Covid-19 pandemic. These spaces are now used as bike stores. This helps commuters complete journeys between their home and work at either end on a bike. This helps travellers to avoid other forms of public transportation such as buses etc.



**References:**  
 1. <https://www.dezeen.com/2009/02/16/bermondsey-bike-store-by-sarah-wigglesworth/>  
 2. <https://cascade.org/2013/07/a-look-inside-via6>  
 3. <https://www.dezeen.com/2017/06/14/ bespoke-storage-bicycle-rack-barcelona-flat-renovation-colombo-serboli-architecture-casa/>  
 4. <https://www.dezeen.com/2020/05/21/priestmangoode-train-bike-storage-seating-coronavirus/>  
 5. [https://emmetroad.ie/news/online-consultation-event-march-2021?fbclid=IwAR2bQKA-ziMcwdfasdcPvFP0hwrtE91PkJrdRFT\\_pOTkAFDPHWB3hY7ACFiM](https://emmetroad.ie/news/online-consultation-event-march-2021?fbclid=IwAR2bQKA-ziMcwdfasdcPvFP0hwrtE91PkJrdRFT_pOTkAFDPHWB3hY7ACFiM)

# Residential/Retail Relationships



Retail Activated Ground Floor

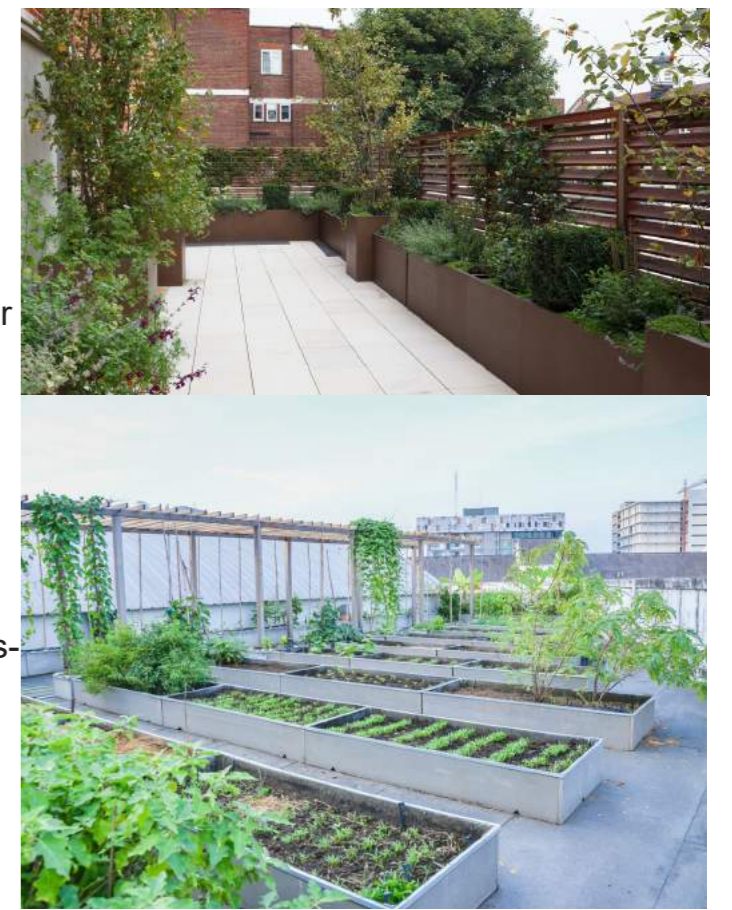
Sketch Key Plan

Community Roof Garden

- During COVID 19 we have seen the emergence of a huge industry of out of home micro commerce. These Business' range all the way from artists selling their work through the internet, to makeup and nail technicians building a client base from their sitting rooms.
- My proposal is to provide a space for these small business'. By freeing up ground floor streetfront units, and incorporating some anchoring retailers such as coffeeshops or bakeries, there is an opportunity to create a lively street within the scheme led by resident business.
- Opportunity to also incorporate a weekend marketplace also opens up.



- My proposal also includes plans for a community garden. Community serve as great catalysts for a range of practical and social benefits.
- The community garden I have proposed is located on the roof of the primary retail unit, utilising space which would go unused otherwise. Alternatively, it can be located on the ground floor, even split up into a series of smaller gardens or planters.
- The gardens practical benefits lie in having access to a space to grow your own fresh, organic produce, teaching yourself new skills while saving money.
- Social benefits can range from a place to meet neighbours and learn from eachother, to having yout clubs or adult classes in horticulture. The intention is also that one of the resident led small business could utilise the garden to produce home grown foods for the residents and locals.



# Roof(e)scape

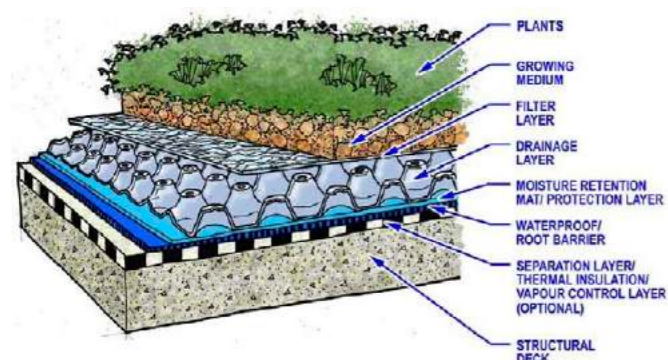
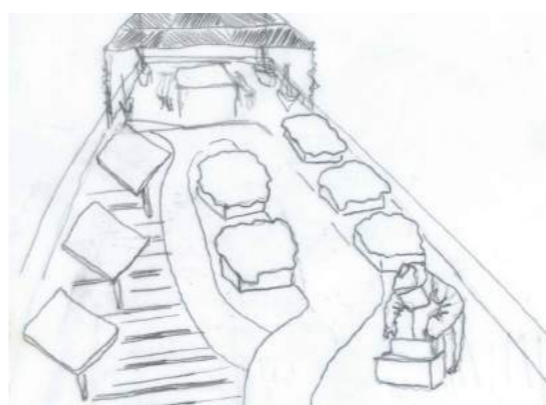
Exploring the potential of roofs on the Emmet Road development in Inchicore.



existing roof plan.



potential greenroof plan.



Typical build-up of intensive green-roof.

### Benefits of green roof systems:

Green roofs improve air quality by filtering the contributing to the reduction of polluting air particles. The plants remove CO2 from the air and expels Oxygen.

By absorbing storm water run off, green roofs reduce the overflow of rainwater into the district drainage system.

Insulation - green roofs increase the depth of the roof build up and provide a natural insulation method, reducing heating costs.

Improves biodiversity encouraging a wider spread of species in the area.

Provides a diverse habitat in an area that could have otherwise been left empty.

Can be used in tandem with photovoltaic panels.

Roof tops can provide vital communal space for a community. Ensuring their correct maintenance and management is essential to their success.

With the example of London Bees, the urban hives are supported and managed by the cooperative. This commercial relationship could be applied through Dublin based honey producer OpenHive.

Another successful management structure can be seen in Enlisberg, where specific community spaces are allotted for residential community groups. This relationship could be applied with great success to the variety of roofs in the proposed Emmet road scheme where by prospective community groups could petition for allocation of space and funding for their use. such as a urban farm production space where the community could provide for its own food. excess produce could be sold at local markets.

References:  
<https://zinc-greenroof.com/systems/urban-climate-roof>  
<https://www.mdpi.com/2076-3417/10/5/1791>  
<https://www.kobenhavnergron.dk/place/ostergro/?lang=en>  
<https://roefamsterdam.nl/en/>  
<https://livingroofs.org/gallery-home/solar-intensive-green-roof/>



# An investigation of the Public Edge towards Emmet Road and how we can enable the wider community to grow through high-use communal space.



The site, Emmet Road.

## Pre-design considerations

Integration becomes a very important part when considering the new proposal. Integration of various activities and categories of people in and around public space allows people to be involved and to function together side by side. Jan Gehl writes in his book *Life between buildings*, that it is not only about proximity to amenities but ‘...whether the people who work and live in the different buildings use the same public spaces and meet in connection with daily activities.’ Therefore, we cannot look at the proposed housing scheme in isolation but as part of a larger community. By integrating access to transport, employment, and services we can create a space which is inclusive of Inchicore as a community and not just for the residents of the new development.

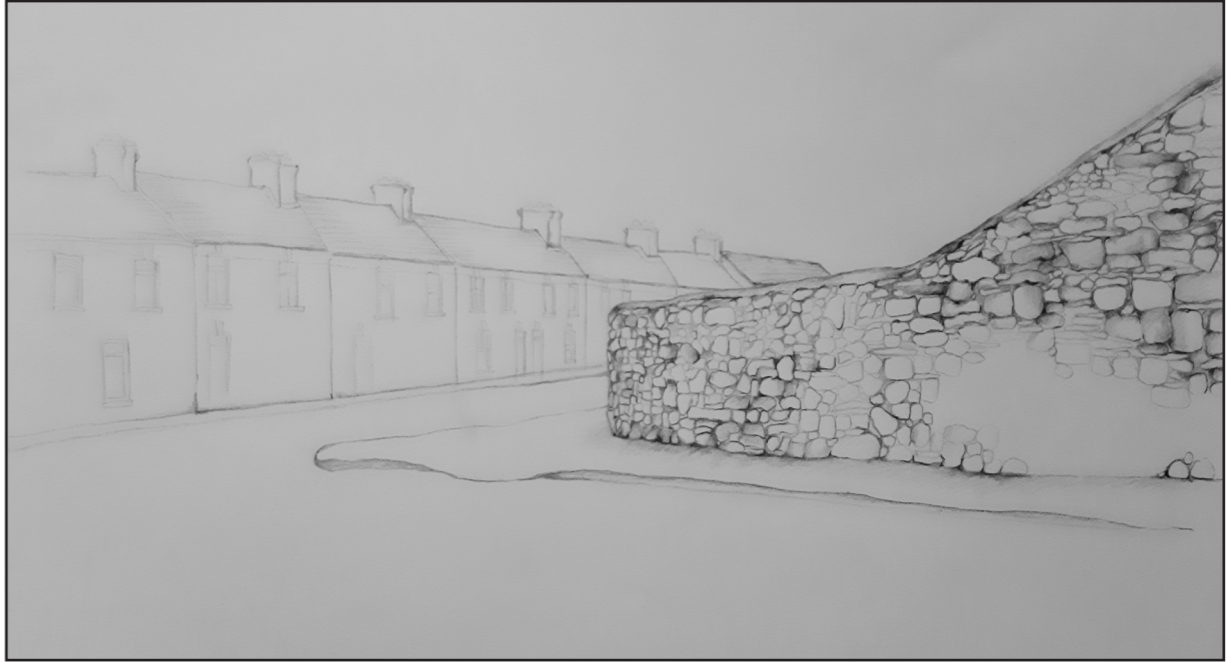
Public spaces in residential areas present not only an opportunity to walk and sit but activities and things to do, encouraging loitering and use. We need to ask what kind of places and interactions we want to support? How do we include diverse user groups, so that one group does not dominate the space and make others feel unwelcome?

Currently, the site is situated between the Goldenbridge cemetery and Emmet Road. The scheme includes a number of semi-public spaces with a larger plot of land towards Emmet Road, reserved for a new library and community centre. This edge, towards Emmet road, is important in the integration and success of the new housing scheme.

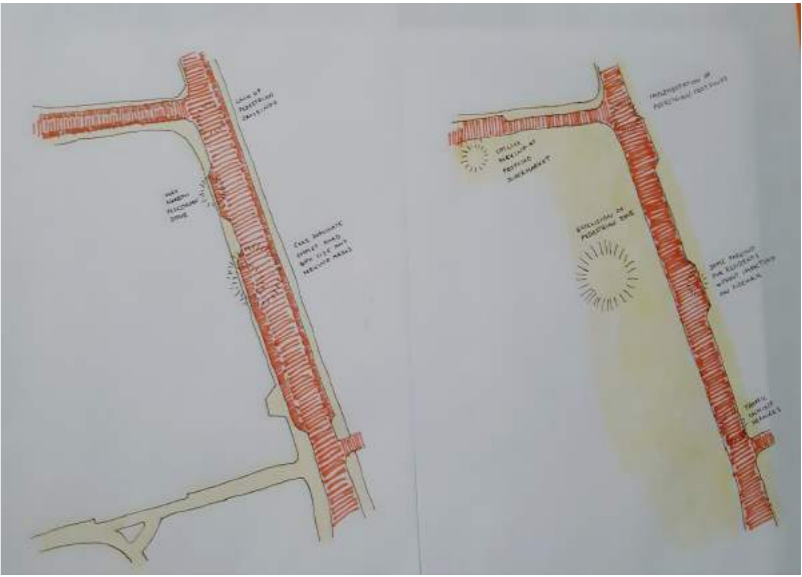
How do we make something feel inviting and more open? A ‘public’ space needs to be accessible to all. Public buildings need to be transparent as to their function and not hidden behind a wall with only a sign indicating its use. An attractive ground floor creates a valuable experience along a street. Activities could spill out onto the sidewalk to blur the distinction between public and private.

At the Webinar, the local community raised concern regarding antisocial behaviour and safety. A busy public space provides protection in terms of ‘safety in numbers’, and a lively street will also provide entertainment for residents who can observe from their windows, thus providing passive surveillance. This idea encourages use of the public realm, not only throughout the day but also in the evenings. Currently the issue with Emmet road itself lays with the lack of pedestrian crossings, the heaviness of the traffic, and the speed at which vehicles travel. Given these concerns, access becomes difficult and needs to be addressed.

‘To not Through’ is a concept that has been raised in relation to Inchicore via D8 Development, a social enterprise. As they continue to advocate for narrowing of the roads to slow traffic down, implementation of roundabouts and possible ‘car-free’ weekends. Involvement like this, from local groups show that there is an interest in the future of the area. The success of the new development on Emmet Road lays in the integration with the wider community, partly through the design of public space.



Corner of site, incl. stone wall, towards Emmet Road.



Current condition of Emmet Road vs widening of sidewalk for pedestrian access.

References:  
Gehl, Jan (2011) *Life between buildings, using public space*. London: Island Press.  
[www.d8development.org](http://www.d8development.org)  
<https://www.pps.org/article/streets-as-places-how-transportation-can-create-a-sense-of-community>

# Seven ideas to consider when designing a public space for Emmet Road, Inchicore.



## Identity

Public spaces and squares are the centre of communities and neighbourhoods. It is therefore important that these spaces reflect the surrounding area and inhabitants. A clean and well maintained space creates a positive image. These spaces are often (traditionally) tied to civic buildings located nearby eg. a church. In the past, fountains have been used to give squares a sense of place.

## Flexible Design

The use of a space can change during the course of a day, week and year. Flexible design needs to be considered and preferably built in. For example, storage, needs to be incorporated and not treated as an after-thought. This could also include sheltered spaces which could be retractable.

## Active Edge

Zones between one space and the next are often used for congregation. It provides a possibility to view both spaces at the same time. People find it difficult to approach unfamiliar spaces and often place themselves along walls or near furniture. The 'edge' is important to consider in the overall design. These are great opportunities for both primary seating areas (benches) and secondary (steps) ones.

## Management

People want to return time and time again to a place that is being looked after. A good manager that understand existing and potential users, will create a sense of comfort and safety while maintaining the standard.

## Seasonal Strategy

The use and activity in the public space could change depending on the season. It can be difficult to attract people all year round, but if the program is engaging enough, the weather is often less of a factor. Seasonal strategies could include markets, ice skating rinks or outdoor cinemas.

## Access

We need to think of the the street as a public space. The road can serve more than one purpose (movement). By making the side walk wider, well lit and accommodating, it can become a shared space between cars, bike lanes and pedestrians. A public space needs to be easy to get to, especially on foot, and it should be visible from a distance and at close range. The implementation of pedestrian crossings and speed bumps will further encourage access and use of the site.

When cars are parked at the end of the road as opposed to at an entrance or at the curb, pedestrian traffic replaces the vehicular traffic. Activities in the public space will be increased as a result. Pavement and surface conditions are important when considering the pedestrian.

There is an example along Inchicore road, where the pavement has been extended and lined with trees (fig a).

## Attractions | Destination

Giving people a reason to come to and return to a place. Creating an enticing path by linking together a variety of activities for people alone and in groups, different ages and different times of day. Smaller places within a larger space will attract and appeal to a variety of users.

### Emmet Road | Inchicore

The site is surrounded by historical buildings, retail and residential units, all of which play an important part in forming the identity of the area.

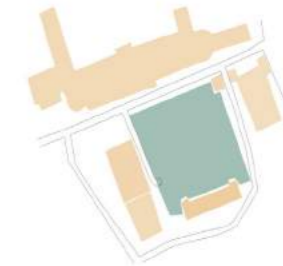


### Le Fanu skate park | Ballyfermot (fig d)

Close proximity to Ballyfermot Leisure Centre. The park has both a skate bowl and a playground.

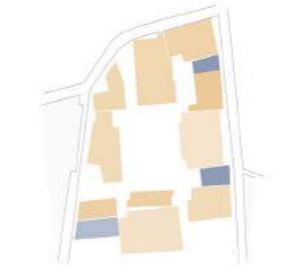


A skate park would appeal to already established groups (e.g. Dublin chicks in Bowls and Dublin Roller Derby) in the area.



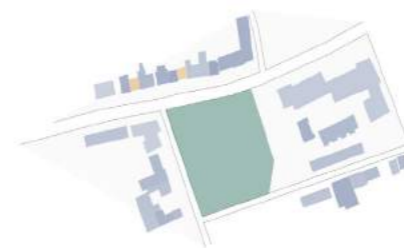
### Dubh Linn Garden | Dublin Castle (fig b)

At the back of Dublin Castle the garden provides a large space with access to Chester Beatty Library. Smaller more intimate spaces are located around the perimeter. The surrounding wall has openings/windows providing views into the park.



### Meeting House Square | Temple Bar

The square is mixed use, with emphasis on culture (Retractable stage, outdoor cinema and galleries with space for markets).



### Weaver Park | Cork Street

Surrounded by residential units, the park is taking advantage of passive surveillance. There is plenty of seating, a playground and skate park.

# Mixed Tenure Communities

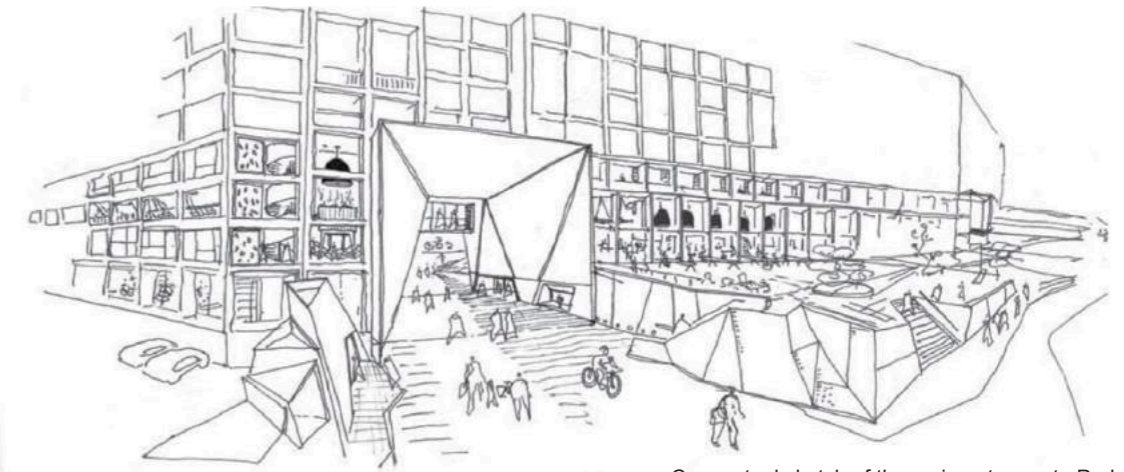
One of the issues brought up in the group discussions at the SMERT web seminar was how to deal with an “us vs them” mentality, which could be a potential problem if one half of the neighbourhood feels that the other half poses a threat to their current lifestyle. This issue could be with the existing residents in the area and the new occupants of the development, or within the development itself, between the different tenure types.

The ‘Development Framework Plan For Land At Emmet Road’ states that “Variety in housing tenures and unit types will be sought in order to achieve a balanced and sustainable community”. Dublin City Council has also shown its intent to mix two tenure types, Social Housing and Cost Rental Housing, within the development.

The current recommendation for the Emmet Road development is for pepper-potting, which would mean randomly mixing all types of tenures. Pepper-potting has its benefits as it would help combat the stigma associated with social housing, and a higher density scheme like the proposed one provides better anonymity opportunities. Successful pepper-potting could be achieved more easily if the social and cost rental elements are under the same management. It also works better in developments where service charges generally do not apply.

An example of successful pepper-potting in a scheme is the regeneration of the Park Hill estate in Sheffield. The first phase of development was lead by architects Hawkins/Brown with Studio Egret West and involved pepper-potting homes for affordable rent, with the principle of mixing tenure types as indistinguishably from each other as possible. At Park Hill, they have successfully overcome the contentious issue of managing mixed tenure housing by installing a 24-hour concierge. The concierge monitors comings and goings from all cores next to the main lobby and liaises between residents and businesses. In addition, they oversee access to the new landscape, collect parcels and large deliveries and provide a meeting place for the active residents association. Perhaps something similar could be incorporated into the Emmet Road development to help manage the mixed tenure types.

While pepper-potting would be the more desirable option, it does come with some potential issues. These issues could arise between owner-occupied and tenants concerning maintaining shared facilities such as common circulation areas and lifts. For example, having mixed tenures on the same stair and lift core can result in a difference in the level of expectation on how they will be managed, leading to potential conflicts between neighbours.



Conceptual sketch of the main entrance to Park Hill



The Park Hill Development



Images showing one of the lobbies at Park Hill

There was post-occupancy research carried out on residents of three large mixed tenure developments at the upper end of the London Plan density matrix. Each development had between 800 to 1,000 households, and each household had been occupied for three to five years. This research highlighted that any visible separation between tenure types could cause resentment. There also was only one stair and lift core in all the buildings across the three developments shared by different tenures types in the study. This core had the most divided group of residents with 'us and them' comments dominating the research interviews.

This issue can be largely eliminated by design solutions that keep stair and lift cores separate for certain tenures while at the same time minimising any noticeable external differences. Using this method of clustered tenure mixing within a building allows for a good level of tenure mixing while still accommodating different service charge regimes for different tenures. By creating identical separate cores, it enables separation without the separation being visibly expressed. The cores may need to be handled in a way that reflects the ability of residents to pay for services and their expectations, which could result in different levels of finishes. The same principles of tenure blindness as the external elevations should be applied to the cores on the ground floor and any visible upper floors. Using more tenure blind, external quality materials within the core is an effective way of achieving this.



The three different cores for the three different tenure types at Lime Tree Court and how it is reflected in the facade

Lime Tree Court (Buccluch House) is an excellent example of clustered tenure types as they have three separate stairs and lift cores for the three different tenure types within the development. The building does not obviously distinguish between the tenure types, with only minimal differences reflected through the facade, which creates a sense of equity across each group and helps foster a sense of community.

In conclusion pepper-potting has the potential to be quite successful in the Emmet Road development if done right and managed properly using some of the proven management methods such as little or no service charge, different tenure types being managed by the same management company or adding a 24-hour concierge. However, it does have the potential to cause more problems if these methods can not be implemented. If that is the case, then clustering the different tenure types may be more beneficial and successful at creating a balanced and socially integrated development.



Pepper-Potted Mixed Tenure

vs

Clustered Mixed Tenure



These plans show the difference between pepper-potted mixed tenure and clustered mixed tenure within one of the buildings on the Emmet road development. The image on the left shows the social housing dispersed randomly throughout the plan while the image on the right shows the different tenures clustered together around the same stair and lift cores.

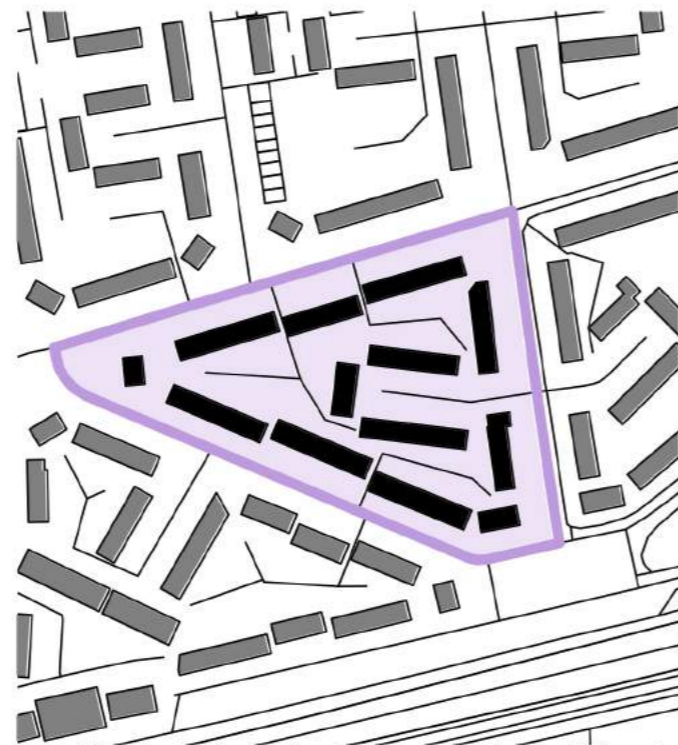
- stair and lift core and shared circulation
- cost rental housing
- social housing

References:

The Housing Design Handbook - A Guide To Good Practice by David Levitt and Jo McCafferty  
 Development Framework Plan For Land At Emmet Road 2019 - <https://www.dublincity.ie/sites/default/files/2020-10/development-framework-plan-for-lands-at-emmet-road-190820.pdf>  
 Rebuilding The Irish Neighbourhood - How Can We Make Mixed Tenure Communities Work? by Aideen Hayden and Bob Jordan - <https://www.opr.ie/wp-content/uploads/2019/11/Rebuilding-the-Irish-Neighbourhood.pdf>  
 Park Hill Sheffield - Urban Splash - [https://s3-eu-west-1.amazonaws.com/us-website-content/Downloads/park-hill/PARK\\_](https://s3-eu-west-1.amazonaws.com/us-website-content/Downloads/park-hill/PARK_)



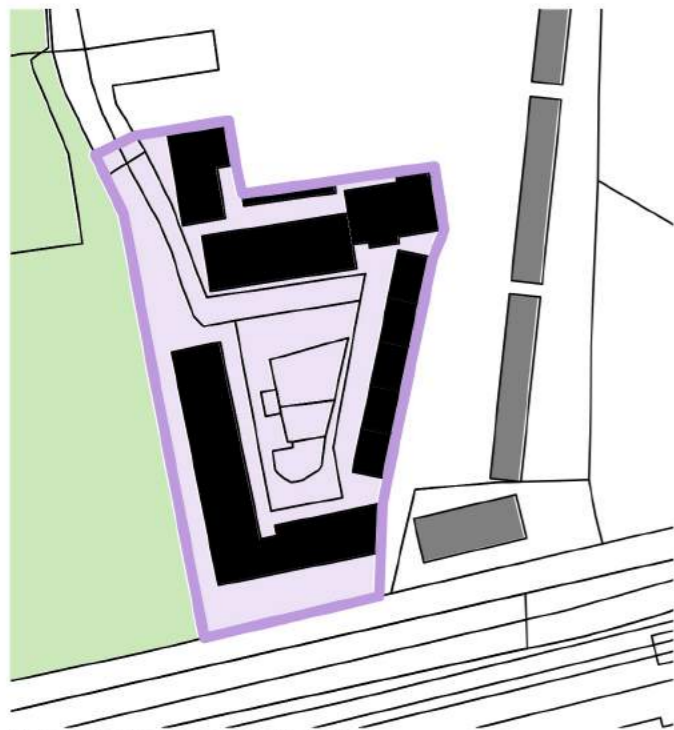
SITE LOCATION MAP



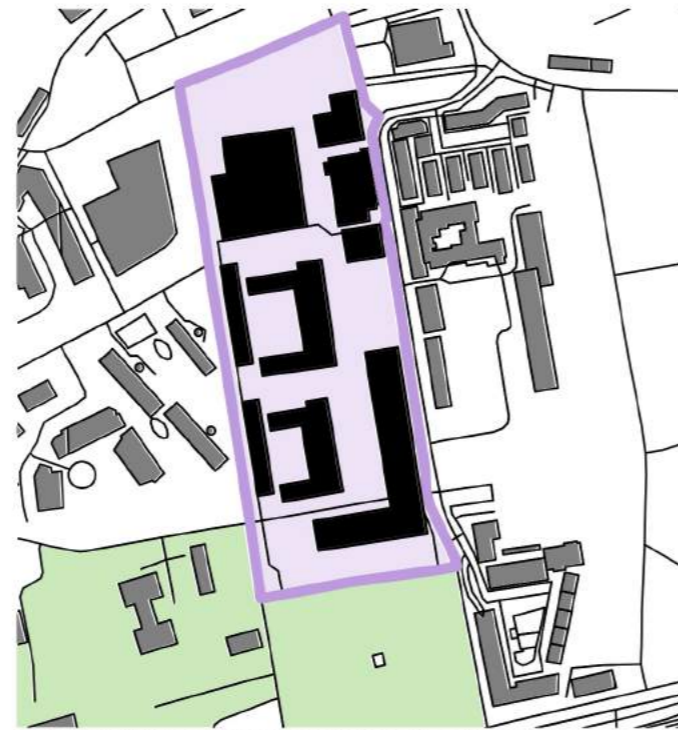
LOCATION: Goldenbridge Avenue/ Stephens Rd Junction  
 SITE SIZE: 1.55ha  
 NO. OF DWELLINGS: 82  
 DENSITY: 53 dph  
 TYPOLOGY: Terraced housing  
 STOREY HEIGHT: 2  
 YEAR OF CONSTRUCTION: 1940  
 DRAWING SCALE: 1:3000



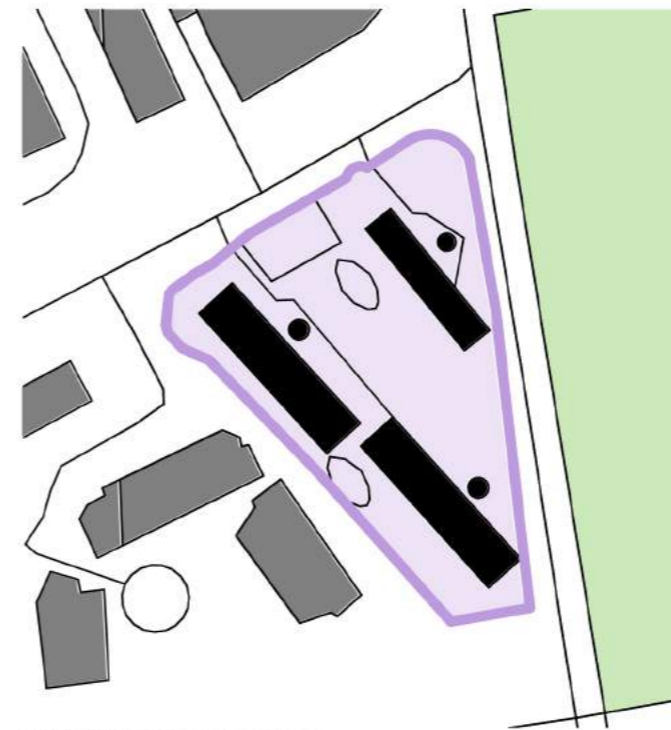
LOCATION: St. Michael's Estate  
 SITE SIZE: 6.2 ha  
 NO. OF DWELLINGS: 336  
 DENSITY: 54 dph  
 TYPOLOGY: Apartments  
 STOREY HEIGHT: 4-8  
 YEAR OF CONSTRUCTION: 1969  
 DRAWING SCALE: 1:5000



LOCATION: Thornton Heights  
 SITE SIZE: 0.72 ha  
 NO. OF DWELLINGS: 75  
 DENSITY: 104 dph  
 TYPOLOGY: Apartments/terraced housing  
 STOREY HEIGHT: 2-8  
 YEAR OF CONSTRUCTION: 2014  
 DRAWING SCALE: 1:2000



LOCATION: Emmet Road Development Plan  
 SITE SIZE: 4.0 ha  
 NO. OF DWELLINGS: Proposed 470-500  
 DENSITY: 117.5-125 dph  
 TYPOLOGY: To be confirmed  
 STOREY HEIGHT: Varied  
 YEAR OF CONSTRUCTION: To be confirmed  
 DRAWING SCALE: 1:5000



LOCATION: Tyrone Place  
 SITE SIZE: 0.69 ha  
 NO. OF DWELLINGS: 90  
 DENSITY: 130 dph  
 TYPOLOGY: Apartments  
 STOREY HEIGHT: 5  
 YEAR OF CONSTRUCTION: 1965  
 DRAWING SCALE: 1:2000

## Density and Typology

### Comparative Study of Densities in Inchicore

Density and typology are important issues when designing a sustainable, compact city that can benefit existing local communities and infrastructure. Ireland's National Framework Plan seeks to consolidate Dublin and prevent the growth of urban sprawl. The Dublin City Development Plan 2016-2022 lists St. Michael's Estate as a SDRA (Strategic Development and Regeneration Area) with an estimated capacity of 500 residential units. The Development Plan goes on to say that, 'Higher densities will be promoted in the city centre, within KDCs, SDRAS' (Dublin City Council, 2016).

The identified sites for this study have been chosen due to their proximity to the Emmet Road development. Each area has been measured in dwellings per hectare. DPH is a quantitative standard for measuring the number of dwellings on one hectare (ha) of land. (1 hectare = 2.47 acres). Using the density standards set out in 'The Housing Design Handbook, A guide to good practice', densities are grouped under low (35-90dph), medium (90-250dph) and high (250-350dph) categories. The study shows that the area around Golden Bridge Avenue/Stephens Road Junction (53dph) and the previous St. Michael's Estate (54dph) development are low density schemes. Thornton Heights (104dph) and Tyrone Place (130dph) achieve a medium density result. Based on figures published in the DCC 2019 Development Framework Plan for Lands at Emmet Road, the proposed scheme would be categorised as medium density achieving approximately 125dph.

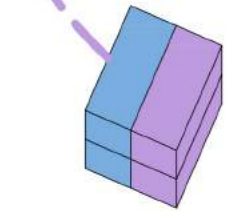
These results prove that high rise does not equal high density. This is evident from the previous St. Michael's estate development which only provided 336 dwellings over 6.2ha of land. Thornton Heights shows that the introduction of varying building heights and typologies can still allow for medium density figures to be achieved. This variation also allows for a layering of architectural richness, breaks up the monotony of large blocks, and introduces diversity amongst the residents.

For an increase of +35.8 sqm (8.95sqm per person) there is the possibility to house an extra 4 people per hectare

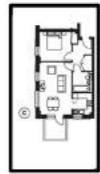
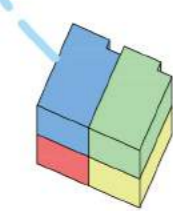
**Diagram of Harvard Gardens maisonettes vs 1 bed apartments**

2 x 121.7 sqm Maisonettes can house 12 ppl

4 x 51.9 sqm apartments can house 8 house ppl



Harvard Gardens - Ground and first floor plan of 4 bed maisonette

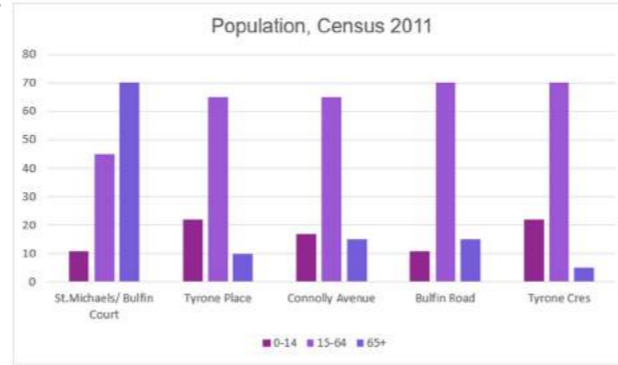


Harvard Gardens - Plan of 1 bed apartment



**Sustainable Communities**

Density has an impact on the social and economic factors of a community. The introduction of height variation allows for the inclusion of mixed typologies. This results in a broader, more diverse demographic and variation in income. Inner and middle suburban areas tend to have quite a balanced demographic. In the 2011 census, the immediate area surrounding Emmet Road was lower in the 0-14 and 65+ year old category. The increased density of the area and variation in typology and height that is suggested in the BME drawings can help create a more even balance of the demographic.



Bar chart showing Inchicore demographic

**People Per Hectare**

Another way to measure density is people per hectare (PPH). As seen in recent Dockland developments, the immediate response to achieve high density is high rise apartment schemes. This is not necessarily the correct method. Looking at the Harvard Gardens development in London, I have compared how many pph could be achieved using 2 maisonettes side by side vs 4 one bed stacked apartments of a similar area. The integration of the maisonettes achieves a higher pph and caters for a wider community. DPH should not be thought about in isolation and should consider PPH as it helps accommodate an increased number of people whilst creating a sustainable city.

**Plot to Height Ratios**

One of the main concerns raised in the DCC Webinar with Bucholz McEvoy was the proposed height of the development. The current DCC Development Plan 2016-2022 requires 10% of the site to be reserved for open space. As requested by the residents of Inchicore, this 10% has been increased and as a result the scheme has grown in height to accommodate for this whilst still achieving their density goal. This fear of height stems from the failure of the original St. Michael's development. However, steps can be taken to ensure a more sustainable approach to the integration of mid-rise developments in medium density schemes. Medium density schemes can easily integrate variations of 5-8 storey blocks. According to research carried out for 'Super Density, The Sequel', taller blocks can be successful when accommodated within varying street-based typologies and generous open space. The perception of how dense a space feels is largely due to the height:space ratio. The request for increased open space should counteract the increased height of the development, and the generous spacing between the blocks should be encouraged.

References:  
Bernstein, L. et al. (2015) 'Super Density, The Sequel'. Available at: <http://www.superdensity.co.uk/>  
Council, D.C. (2016) 'Dublin City Development Plan 2016-2022'. Available at: <https://www.dublincity.ie/dublin-city-development-plan-2016-2022>  
Council, D.C. (2019) 'Development Framework Plan for Lands at Emmet Road'. Available at: <https://www.dublincity.ie/residential/housing/strategies-policies-and-initiatives/housing-land-initiative/emmet-road-formerly-saint-michaels-estate>  
GeoHive (2021) GeoHive. Available at: <http://map.geohive.ie/mapviewer.html>  
Keogh, P. (2021) 'How to build the 15-minute city', Irish times, 13th March. Available at: <https://www.irishtimes.com/business/real-estate/2021/03/13/how-to-build-the-15-minute-city/>  
Levitt, D., McCafferty, J. (2018) 'The Housing

Design Handbook, A guide to good practice 2nd edition'. Oxon: Routledge

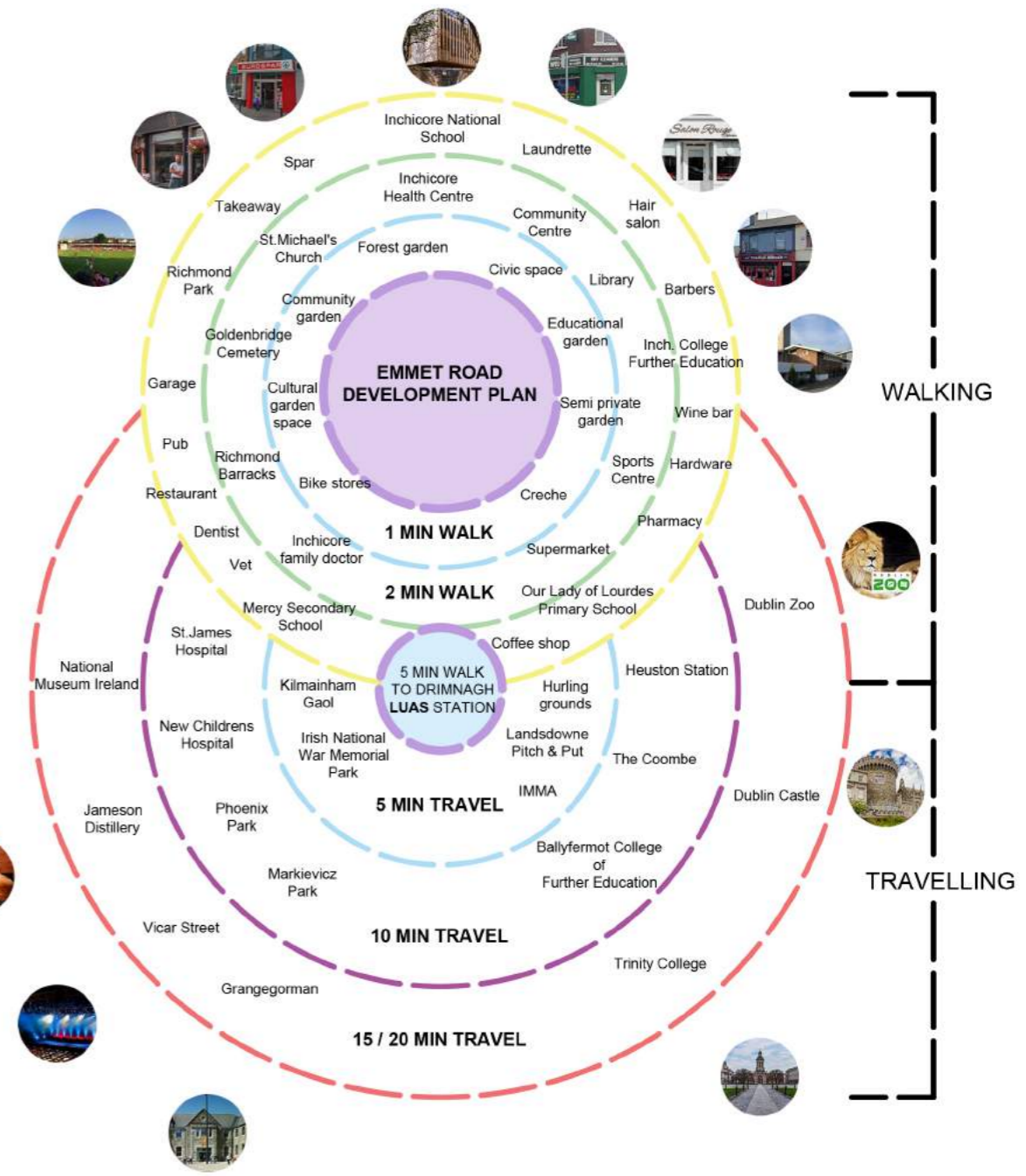


Diagram of amenities in 5-min walking/15-min travel from Emmet Rd

**15-Minute City**

This map highlights the advantageous location of the Emmet Road Development and its proximity to multiple resources within 5-minute walking/15-minute travel distance. Larger densities can support a wider network of facilities and infrastructure. In Paul Keogh's article on 'How to build the 15-minute city' he states that a compact city must have, 'a conurbation of mixed-use neighbourhoods that are well-designed, walkable, affordable, well-connected, socially diverse and environmentally efficient' (Keogh, 2021).



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