

Sean Mangan C13510147

Cabra: A Legacy Reimagined

Diversifying A Monotype Suburban Block

Dublin School of Architecture
B. Arch 2023
Theme of the Year: Urgency

Acknowledgements

My sincere thanks to every person who has helped me during my studies here at TU Dublin, from the tutors, lecturers, my studio colleagues and all the staff.

Special thanks this year must go to Sima Rouholamin and Martin Spillane.

To my friends and family thank you for your patience and understanding.

Contents

Introduction	1
Objectives	1
Diversity and Density	1
Context	2
Ireland and the Suburb	
Cabra and The Tolka Valley	
SDG 11 – Sustainable Cities and Communities	
Precedents and Analysis	6
Precedents	
Analysis	
Proposition	9
The Project	10
Traffic and Parking	
Upgrading the Houses	
Increasing Diversity and Density	
New Blocks	
Conclusion	12
Bibliography	13
Table of Figures	14
Final Design Proposal	15

Introduction

There are many crises that we face today. On a global scale, we recently emerged from a pandemic and the climate crisis has been a constant presence in the news cycle since the turn of the millennium. Here in Ireland in particular there are two main crises that architects are uniquely suited to tackle, the growing housing crisis, and the energy crisis which is linked to the previously mentioned climate crisis.

It was Carl Elefante who once said, “*The greenest building is the one that already exists.*” This statement influenced a lot of my early thinking this year in choosing the issues I saw as urgently needing a strategy. [1]

Do we always need new buildings?

So many buildings are empty and neglected, awaiting use. In Dublin alone since 2017 the City Council has identified 983 homes as vacant and as of 2022, 655 of those homes are still empty. [2]

Why do we feel the need to build entirely new structures when we have an existing supply sitting vacant for so long that may need little more than moderate intervention?

On the other hand, are there situations when replacement is the more appropriate solution? Some buildings are in a condition that is no longer safe for use or it not a realistic option to intervene. How do we tackle these?

In *Critical Care. Architecture and Urbanism for a Broken Planet*, Angelika Fitz and Elke Krasny propose several treatments of Care for the Planet. The one that stands out to me is the idea of “Care for Repair.” The principle being that, rather than simply adapting a building to a new use or restoring it to how it was, we take the care to truly repair and sometimes reimagine a building. We approach this both in a structural and a functional way, allowing it to be transformed so that it can be used for a new function while being “respectful to the original building(s)” or, alternatively, evolving to suit its original function in a contemporary setting. [3]

Architects create the spaces that people work, live, and play in. I want to explore how we can use this knowledge with Care for Repair to tackle these urgent issues in one building type.

Objectives

Working from an initial ambition to increase the diversity and density of the existing area I sought to identify ways in which this might be achieved. To do this I looked at various housing models and density strategies. These are discussed later in Precedents and Analysis.

This research and my early studies of the existing Tolka Valley, its fabric, its community and the existing condition led me to approach the challenge with the objective of creating a more sustainable community from an environmental approach, a personal comfort approach and a social approach through the adaptation of the original housing model and the existing site framework.

This led me to develop a strategy with various components that would allow the area to develop a more diverse style of housing while also increasing the existing density. Taking a small area of Cabra the specific objectives I set myself to help accomplish this larger goal were as follows:

1. To improve the existing homes in terms of both comfort and environmental quality.
2. To increase the density of the area from both a unit count and population aspect.
3. To develop a strategy that would improve the street level experience of the area.
4. To provide new social, recreational and community focused facilities.
5. To improve pedestrian access through the area.
6. To develop a system that could be rolled out across the wider Cabra area.

Diversity and Density

One of the key issues faced by Ireland is that so much of the style of the existing fabric drives new housing to the fringes of urban areas, furthering the sprawl outwards. How can this be stopped? How can a population be grown in one area? Can an area be adapted to allow for growth? I believe it can. I believe we have a responsibility to do so.

Ireland has long focused its housing construction to suit a particular type of family lifestyle - The Nuclear Family.

How did this single-minded approach to development shape communities? What are the results in modern Ireland?

Throughout the 20th century housing developers focussed almost exclusively on two and three bed semi-detached houses with small gardens front and rear. With only limited exceptions, local authorities were the only bodies providing multi storey apartment housing - ‘flats’ as they were then called. Unfortunately, these were built without any social or community facilities and provided poor quality environments.

These early thoughts and questions helped direct the investigations during the first part of this academic year leading to development of the objectives that have shaped/influenced both the design of the main studio project and this thesis.

Context
Ireland and the Suburb

Ireland experienced significant changes during the late nineteenth and early twentieth centuries- economic, political, and social. At the same time a large shift occurred in the population as Ireland changed from a predominantly rural population to a more urban population. The overall population had declined from 6,950,000 in 1841 to 2,950,000 by 1943. The rural population was most significantly hit during this time falling from 5,429,000 in 1841 to 1,907,000 in 1941. [4]

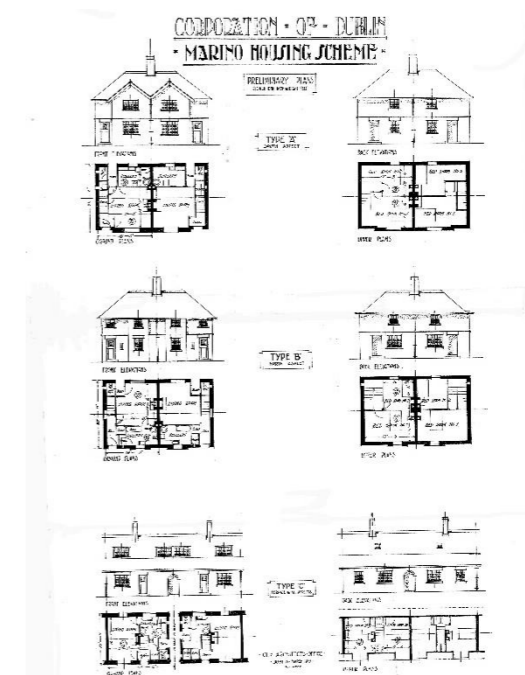
“There are tenements today with paneless fanlights and mouldy portals ...Here cobble-stones which once echoed to the tread of Jonathan Swift now swarm with children who crawl into the toppling tenements only when hunger or sleep drives them off the streets.”
‘The Housing Program in Ireland’, Arthur and Mary Bromage (USA), 1942 [5]

In the early Twentieth Century action was taken to attempt to improve the quality of life of the working class of Dublin’s living arrangements. Decisions were made to relocate the population of the tenement slums to new residences. The slums were seen as an area of national shame having been described as ‘unfit for human habitation’, ‘foul blot on the social life of Dublin’ and simply ‘evil’. The 1911 Census caused the stark revelation that there were some 87,000 people living in Dublin’s tenements. The city’s population had grown by over 20,000 since 1891 and in the same period only 2600 new dwellings had been constructed. A motivation to accelerate the clearing of the slums can be attributed to the collapse of two inner-city tenement houses in 1913. The Cowan Report led to the identifying of numerous greenfield sites at the fringes of the urban environment as potential locations for rapid development. These included the areas of Marino, Crumlin and Cabra. [6]

This population shift was reflected in the changing nature and form of the built environment. Housing construction in Ireland was impacted by World War 1 causing a shortage of labour, materials and an increase in construction costs. This, along with the unstable political climate brought about by the War of Independence caused a delay in construction before the new State was able to introduce measures in the 1920s to promote housing construction. The ‘Housing of the Working Classes in Ireland’ Report of 1919 provided “plans for the layout of typical sites and for various types of houses” (Electronic Irish Statute Book). This would lead to low density housing with large gardens and wider frontages being developed. These homes also saw an improvement in standards in terms of overall size, amenity, and the construction quality. [7]

The late 1920s saw the introduction of a new programme of development for working-class suburbanisation by the State, one where the State played a larger role in the location and form of the new housing estates. The layouts were inspired by early British town planning, which was based on the Garden City principles which advocated for combining “The amenities of urban life with the ready access to nature typical of rural environments” [8]

Possibly the most well know example of one of these housing estates was Marino, which was also Dublin Corporation’s first large scale suburban development. The houses at Marino featured long private back gardens, averaging more than 45m in length. These gardens were intended to be used by residents who had an agricultural background and an interest in growing vegetables which would be the influence of the rural background while the number of houses more closely reflected the denser urban life of inner cities. The houses themselves were a variety of two, three and four bedroom units, predominantly in a terrace or semi-detached nature.



[Figure 1] Marino House Types

Perhaps for historical or cultural reasons, there is a huge attraction for home ownership in Ireland. A preference for particular housing forms is also seen in the demand for housing here. The Local Authority tenant purchase scheme means that a large number of today’s residents in state built estates include the families of the original tenants. With houses in the new suburbs being more affordable than the inner-city flats/apartments, most of the supply and demand was concentrated in this sector.

All of these factors mean that much of our housing stock is in estates of terraced and semi detached two storey houses with large gardens front and back.

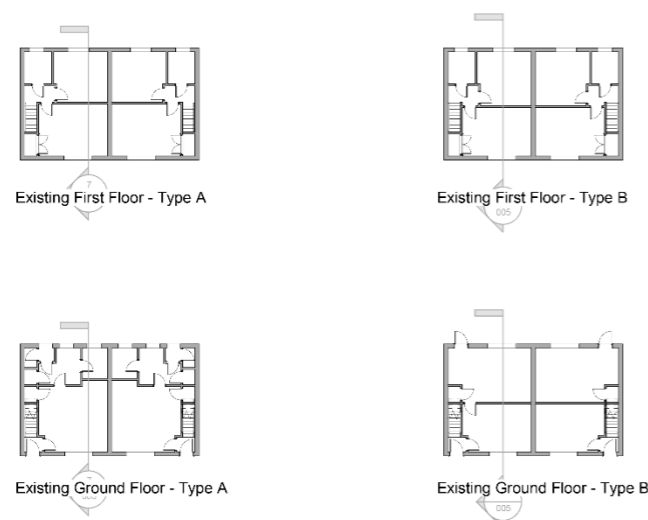
Cabra and the Tolka Valley

In the 1930s Cabra saw extensive house building throughout the area, facilitated by the 1931 and 1932 Housing Acts. The Cabra houses were a more streamlined version of the houses originally seen in Marino and other schemes, such as the Tenters in Dublin 8, comprising terraces of houses most often in a four room parlour scheme. They comprised a ground floor featuring a kitchen and parlour off a small entrance and stair hall accompanied by an upstairs featuring one large bedroom, one smaller bedroom and a bathroom. This housing design had a sense of similarity to the traditional set up seen in Irish rural homes. It was also likened to international modernist approach of open plan living.

One of the basic ideas in modern architecture – the desire to create a sense of space – is already traditionally Irish. An architect no longer designs a house with a breakfast room, a sitting room and a dining room. Instead we give people living space, which divides into different zones or areas for different purposes... The modern tendency is to provide space for all these activities in one big room. This gives to a small house a very definite sense of space. It is easy to carry this out in Ireland because the ordinary plan of the Irish cottage consists of the kitchen – which is also the living room and which you enter directly from outside the house – and a number of bedrooms opening off the kitchen.

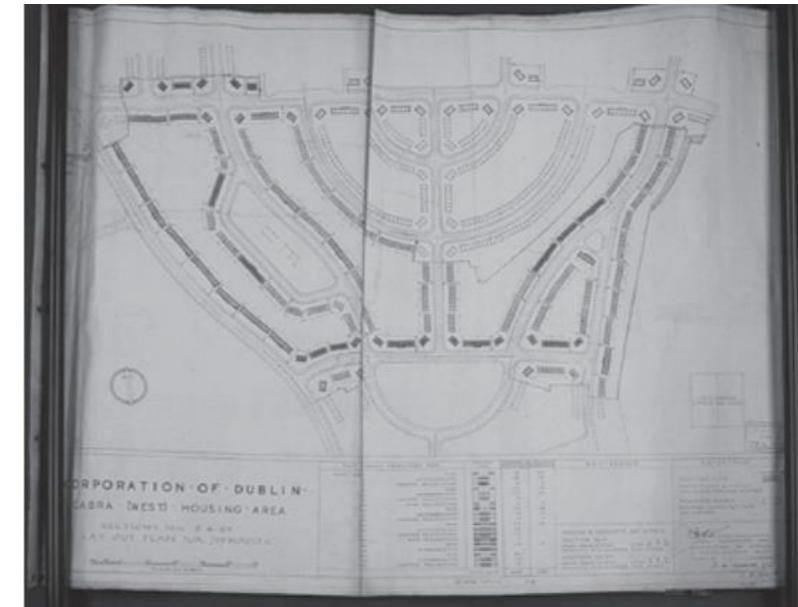
Noel Moffett in interview (by Marie O'Dwyer), 'Prefabricated Houses for Eire', (September 1946)

[9]



[Figure 2] Cabra House Types

Cabra saw well over 1500 homes being built during this time, divided almost evenly by Faussagh Avenue. In addition to the houses the area saw the construction of St Finbarr's Boys National School which opened in 1944 and the Church of Most Precious Blood in 1954 both located to the centre of the new suburb. Apart from a few shops little else was provided in terms of amenities for the area.



[Figure 3] Cabra Estate Layout

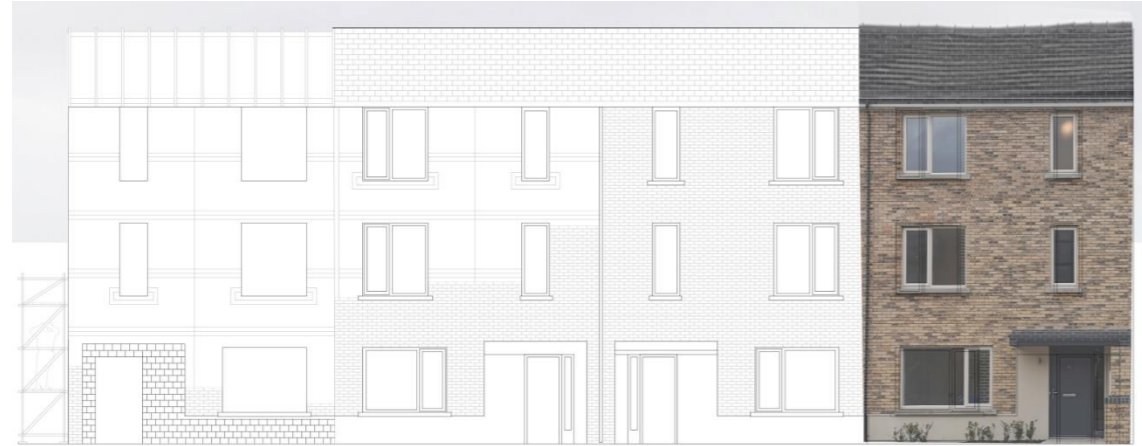
The Cabra and (further North) Finglas areas were largely constructed through the 1930's and 1950's using the then traditional model. There was very little further development until the construction in the early 1990's of the first phase of the Rathborne area located between these two towns and to the north of the Royal Canal.

The area has seen the construction of over 2100 units in several phases either side of the collapse of the Celtic Tiger. This provides us with a unique view on the changing approach to residential construction that Ireland has seen even in the last 30 years.

The buildings completed prior to the downturn are predominantly multistorey apartment blocks, high rise high density, built to house a workforce commuting into the city centre and aimed at maximising developer or landlord profits through the growing rental economy at the time.

The more recent phases of this development, including the Royal Canal Park and Rathborne Park developments, take a mixed units approach, featuring houses with several different layouts and heights with taller apartment blocks throughout the area. There are also two developments under construction at present that will add a further 500 units to the area, the Rathborne Avenue and the 8th Lock developments, a mixture of low rise housing and high rise apartments.

This change in approach to a mixed housing typology reflects a recognition of demand for something other than high rise developments.



[Figure 4] Rathborne Illustrative Elevation

Cabra as an area was largely built up in the 1930s, to serve the main purpose of resettling people from Dublin's Inner City tenement slums. With this goal in mind the project was successful, providing people with new homes and large gardens but as time has moved forwards the area has suffered.

However, the original houses are not up to modern standards both from an environmental aspect as well as a comfort aspect. Excluding instances where the owners have intervened, these originally state-built homes have seen no discernible change in almost a century.

During the course of this academic year a home on Carnlough Road went on sale for €275,000. With the likely exception of cosmetic changes such as wallpaper the home appeared unchanged from the original construction, including the externally accessed toilet. By contrast the average price of a new home sold in Cabra between May 2022 and April 2023 was €522,000. [10][11]

Modern living has come to recognise that the "one size fits all" approach to housing is no longer the singular strategy to development and that, while maximising profits is a goal of any private development, stuffing as many people as possible onto a site is neither suitable nor sustainable, lest we return to the tenements of old.

As a result, we have seen more variety in the types of unit being developed. Whereas in the original Cabra area the vast majority of the houses follow a similar capacity, two bedroom, with some variation to the material choice and ground floor layout, and the first phase of Rathborne comprised all multi storey apartment blocks, the modern

Rathborne Development comprises a mixture of unit styles with changes in capacity, layout and the height of the housing projects. One development under construction features 5 distinct house types. There have also been several apartment schemes developed in the area, which feature several different apartment types.

This change in approach to housing construction can be seen as a response to Ireland's evolution from the more traditional nuclear family structure to a more varied range of household types and sizes, resulting in requests and needs for more diverse living conditions. Another contributory factor is the changing demographics of the country partially brought on the country's evolving economic status over the last one hundred years (e.g., smaller family units and large scale immigration).

SDG 11 - Sustainable Cities and Communities

When researching the Tolka Valley and Cabra area and for this thesis project the Sustainable Development Goal that I found most relevant to my thinking was **Sustainable Development Goal 11, titled "Sustainable Cities and Communities"**.

Goal 11 is defined as “making cities and human settlements inclusive, safe, resilient and sustainable.” [12]

Some of the individual targets have very achievable methods using architecture and not just policy.

Understanding the targets from an architectural point of view is key to knowing how to attempt to achieve them. What follows is my understanding of these targets.

Inclusivity: To make a place more inclusive it must be suitable for occupancy by a variety of people, most obviously by way of physical access but also occupancy. So with housing that means designing spaces that can be adapted to evolving uses and users.

Safety: Designing a space that won't cause people to be afraid to be in it. This can be seen in public spaces with passive surveillance. Observation assists supervision -the more people observing and supervising an area the less likely it is to feel isolated and dangerous.

Resilience: Places, their components and materials must be able to handle the forces that they endure. In architecture this can mean the activities that take place within it, the amount of people that go through it and most simply it must be able to withstand the effects of the elements.

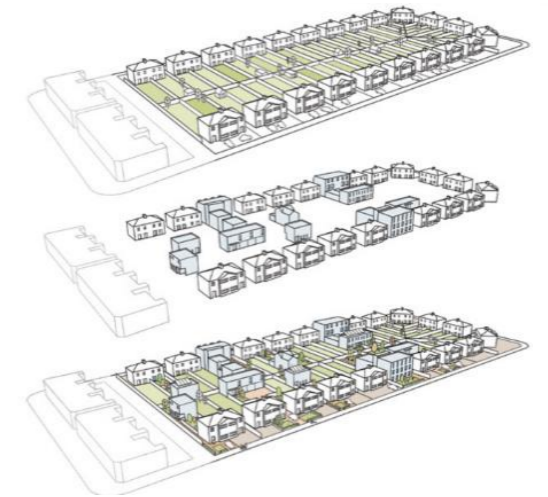
Sustainability: A topic architects (among others) have become very familiar with. The simplest approach for dealing with sustainability of a building is its energy and its materials. Does the energy come from renewable sources? Does the building produce this energy itself? Is the building wasting its energy? Where did the materials come from? What is the embodied energy of the material? How long will the materials last? What happens to the materials when the building is no longer fit for purpose? Within cities it also looks at the dependence on the car and how can that be reduced. A sustainable community is one that has all of the amenities, facilities, and employment opportunities required within itself.

Precedents and Analysis

Precedents

A number of schemes have tackled various aspects of my objectives in different ways.

Supurbia by HTA explores how existing low-density suburban plots can be re-worked to support a wider range of housing typologies that in turn support a more varied demographic. The concept uses 'plot passports' to determine the appropriate strategy for each plot and to help ensure that a mixture of housing types is produced.



[Figure 5] Supurbia Diagram

Habitat '67 by Moshe Safdie was designed to integrate the benefits of suburban homes, such as gardens, with the density of an urban apartment block while also providing community facilities in central areas of the development to help create a thriving community.



[Figure 6] Habitat 67

Dundanion Court, in Cork by Neil Hegarty, gives great consideration to the transition from the public to the private realm. The project uses various methods to encourage people to meet while maintaining their privacy, i.e. the thresholds separating the communal courtyard, low garden walls, community car parking and the courtyard walkways. Hegarty himself took inspiration from Span Developments in the UK.



[Figure 7] Dundanion Court

Analysis

The existing site has a population of 314 people across 112 units with a density of 115 people per hectare and 41 units per hectare. Experimenting with different scales of intervention I looked at how one might potentially increase this density and whether those interventions would be appropriate.

Mass Demolition

The first investigation looked at the feasibility of mass demolition and replacement of the existing housing stock. Clearing all of the units and replacing them with a single tall and dense block was done through placing Unité d'Habitation on the site and comparing the scale of it to the surrounding context.

Multiple Towers

A partial demolition with replacement with a series of tower blocks was also considered. This study was influenced by Le Corbusier's Plan Voisin concept for Paris.

These ideas were judged not to be feasible or appropriate for the goals set out as the immediately required large amounts of unsustainable demolition and would have uprooted a significant percentage if not the entire community. It is also contrary to the preferred housing type of the majority of the population.

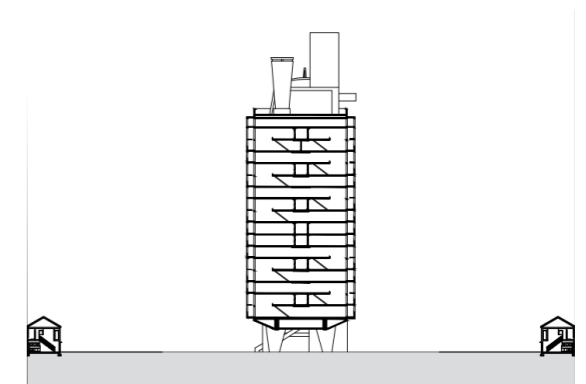
Additional Floor

Expanding the existing housing stock vertically was considered, the concept allowing for an increase in the density of the area while not impacting the ground plane. However, this solution was not seen as cost effective due to the extensive structural work that would be required and being disruptive to the existing residents. It also was not the most efficient method of creating a diverse housing stock.

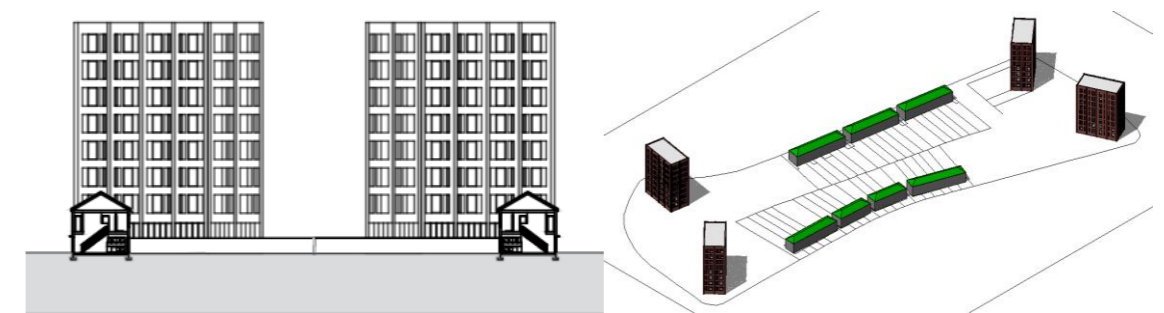
Mews Lane

Taking advantage of the long gardens the possibility of mews housing was explored. Consideration was given to how one would enter and leave the mews lane to avoid creating a cul-de-sac environment.

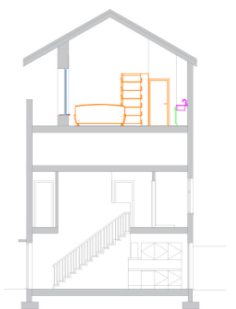
Using these investigations it became clear that a large scale vertical block would be unsuitable to the area, however the mews housing would be a suitable solution for adding both diversity and density to the site.



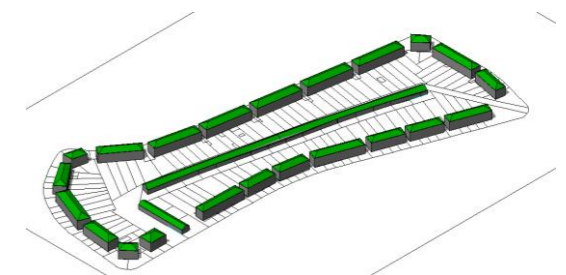
[Figure 8] A section showing Unité d'Habitation on the existing site and dwarfing the surrounding context.



[Figures 9 & 10] A series of tower blocks replacing the existing houses and freeing up ground space.



[Figure 11] Investigative section exploring the idea of a vertical extension to existing houses.



[Figure 12] Investigating the potential of mews houses.

Pedestrian Experience

Investigating the condition of the area at a pedestrian level it became clear that the car is a dominating factor in the area. All of the pedestrian walkways are alongside the roadways which is dominated by on street parking. The number of cars being parked on the road causes visibility issues for those looking to cross from one side to another.

There are no pedestrian only routes breaking up the area, if an individual wishes to visit a home on the opposite side of a block, they must walk all the way around. This creates a feeling of residential islands separated by the roads.



[Figure 13] Map showing the existing routes around the site.

Monotype Suburban Block

Analysing the site showed that with the exception of the lone apartment block, the houses were built to one capacity type: two bedroom houses. This lack of variation creates a lack of diversity amongst the occupants as this housing suits a certain demographic more than others.



[Figure 14] Map of the site showing the existing building types.

Proposition

Following on from this analysis I believe that a denser realm is required to help address the housing crisis in Ireland and to manage the growing population without adding to the urban sprawl Ireland has generated in the past. Currently most new housing is being provided in multi storey apartment developments which have higher densities and varying unit sizes.

Little is being done to increase diversity or density in existing estates. It is incumbent on us to make use of the existing housing stock and revitalise it where there is the opportunity to do so. We must take advantage of land that no longer serves its original function and is effectively superfluous.

When making interventions to an area one should be looking at the ways one can enhance not just the building(s) but the existing environment.

The Project

The project is located in Cabra; specifically between Ventry Park and Broombridge Road. The overall area of the site is 25,200m². The site is currently occupied by 112 residential units made up of 104 housing units, in a mixture of terraced and semi-detached sets, and one two-storey apartment block containing 8 units with a maintenance yard located to the rear.

The area is quite well served by public transport, with each of the train, Luas and Dublin bus having stops close by or directly within the area. The area is extremely vehicle dominated with extensive on-street and on pavement parking.



[Figure 15] Site Location Map

What originally started as a study into potential density changes evolved into a project of transforming the area into a more diverse and sustainable community.



[Figure 16] Photo showing Dublin Bus travelling between the parked cars in the site.

Traffic and Parking

When dealing with sustainability the first step of this project was to identify measures to discourage the over-reliance on cars in the area and remove the on street parking thereby making the area safer for the residents by improving pedestrian visibility.

This was accomplished by identifying potential locations for local car parks, in the North Cabra Area. The locations chosen were a mixture of vacant sites and an existing car park that currently has minimal opening hours. These sites have the potential to accommodate 487 cars.



[Figure 17] Map showing the locations of potential car parks.

Upgrading the Houses

The next goal to be tackled was improving the existing housing supply.

The houses as they were originally built are not the most comfortable experience to live in today. They do not meet today's standards or user expectations in terms of comfort, amenity, and energy consumption.

The George Herbert Simm's designed homes served their original purpose of helping to clear out the inner-city slums but adapting them now to be suitable for modern life requires two immediate solutions, spatial comfort and thermal comfort.

The spatial aspect was achieved through the creation of a rear extension to the original footprint. This new space provides a dedicated kitchen area while opening up the existing ground floor plan to allow for both a living room and dining area.

To improve the thermal efficiency and energy rating it is proposed to fit new triple glazed windows, external insulating wrap and enhanced attic insulation to each block of houses.

When looking at the goal of developing the strategy to be applicable to all of Cabra this component of the strategy is manageable as the majority of the housing stock in the wider area follows the same 1930s system.



[Figure 18] Illustrative Section showing External Wrap

Increasing Diversity and Density

The next step in the overall strategy is adding diversity and improving the density of the area's housing stock.

As discussed previously, studies were undertaken of different ways to improve the density in the area, such as mass demolition of the existing houses and replacement with tower blocks or expanding the existing houses vertically.

The chosen method is the opening of a new pedestrian street to provide access to a range of single storey mews buildings in the long rear gardens of the existing houses. The existing houses followed the garden city principles, previously discussed in Marino, of featuring long gardens. Many of these gardens are over 30m in length.

These new mews houses will add a one bedroom option to the area. This will allow potential for some people in the area to downsize out of the larger houses if they feel they no longer require their size but wish to stay in the area, or it can provide an opportunity for someone to take their first step onto the property ladder on a more manageable scale.

As large portions of Cabra were developed using the Garden City template there are more blocks where the long gardens can be adapted to add further mews lanes, adding further diversity to the housing stock of the wider area, and increasing the density.

New Blocks

Whereas mass demolition of the area would not have been sustainable for the community as it would have uprooted the existing population for the duration of construction, there is scope for the strategic replacement of certain units on the site to allow the creation of new more diverse blocks.

The next step in improving the area and creating a more sustainable community comes when tackling the existing apartment block and maintenance yard to its rear. The replacement of these allows for the creation of a new mixed-use block, providing both residential units and commercial amenities including a local convenience store, a café, and a restaurant to enhance the area.

In addition, it allows for the creation of a new public space. There are football pitches nearby and Ventry Park (currently under reconstruction/renovation) provides a basketball court. What is lacking is a more secluded pocket park style space where residents can sit and relax away from the cars and any sporting activity. This will be a space on a different scale and ambiance to the existing larger recreational spaces. This space provides the community with an area to gather that is sheltered from the roadways, allowing for a calmer, quieter experience to be enjoyed.

This will also facilitate creating a new through route from the existing Ventry Park to Broombridge Road providing access to the new mews houses. Adding a pedestrian only route to the area will also shorten the route people will have to travel to cross the site.

The strategic replacement of certain houses allows the creation of the Corner Apartment Block. This is a three storey block featuring six units with both studio and three bedroom apartment options. The block also takes inspiration from an aspect of Simm's wider legacy of work around Dublin with its curved frontage similar to other buildings such as Henrietta House.

These corner blocks can be used at other points throughout the wider Cabra area. In assessing the area of Cabra to the North of Faussagh Avenue over 30 further locations have been identified where the corner block design can be implemented.

Conclusion

This project set out to develop a multifaceted strategy that would allow the area to develop a more diverse style of housing while also increasing the existing density and improving the quality and sustainability of the area and the existing housing.

The specific objectives that were set to help form this larger strategy were as follows:

1. To improve the existing homes in terms of both comfort and environmental quality.
2. To increase the density of the area from both a unit count and population aspect.
3. To develop a strategy that would improve the street level experience of the area.
4. To provide new social, recreational and community focused facilities.
5. To improve pedestrian access through the area.
6. To develop a system that could be rolled out across the wider area.

A solution has been proposed for each of the objectives that adds to the quality of the area and accomplishes the aims.

Ireland is in the middle of housing and energy crises and while there is not a one size fits all approach to solving the problem, architects are uniquely positioned to help develop both the small and large scale strategies that address these crises.

These solutions are a test of the hypothesis of densifying an existing urban realm, a realm largely made up of housing estates and monotype housing blocks. The existing suburbs are in need of an upgrade but we must not destroy communities in the process of these upgrades.

The combined effect of the proposed interventions is greater than the sum of the individual elements. The hope is that this thesis might promote consideration of a wider range of tactics for creating diverse, dense, sustainable and resilient communities.

Bibliography

- [1] <https://www.architectsjournal.co.uk/news/opinion/the-greenest-building-is-the-one-that-already-exists>
Accessed 20 Sep. 2022
- [2] <https://dublininquirer.com/2022/09/21/of-983-dublin-homes-identified-since-2017-as-vacant-long-term-655-are-still-empty-council-says/>
Accessed 20 Sep. 2022
- [3] Critical Care: Architecture and Urbanism for a Broken Planet by Angelika Fitz and Elke Krasny (2019)
- [4] Eire, Census Reports, esp. General Reports, 1926 and 1936 ; see also Freeman, T. W., in Journal of the Statistical and Social Inquiry Society of Ireland, Dublin, vol. xvi, pp. 89-104, 1938-1939, and in Geographical Review, New York, vol. 29, pp. 507-508, 1939.
- [5] The Housing Program in Ireland, Arthur and Mary Bromage (1942)
- [6] Housing schemes in Ireland. Report on Dublin housing by P.C.Cowan (1918)
- [7] Electronic Irish Statute Book (EISB). Irishstatutebook.ie, Office of the Attorney General,. Retrieved from www.irishstatutebook.ie/eli/1919/act/45/enacted/en/print.html.
Accessed 04 Feb. 2023.
- [8] <https://www.britannica.com/topic/garden-city-urban-planning>
Accessed 07 Nov. 2022
- [9] Noel Moffett in interview (by Marie O'Dwyer), 'Prefabricated Houses for Eire', (September 1946)
- [10] <https://www.daft.ie/for-sale/end-of-terrace-house-450-carnlough-road-cabra-dublin-7/3961318>
Accessed 31 Jan. 2023
- [11] <https://proper.ie/county/Dublin/area/Cabra>
Accessed 02 May. 2023
- [12] <https://www.un.org/sustainabledevelopment/cities/>
Accessed 27 Sep. 2022

Table of Figures

- [Figure 1] Dublin Corporation, Housing Block Plan of Marino, 1919. Report 210/1919 Sheet 2
<https://marinodublin.files.wordpress.com/2020/03/marino-design.jpg?w=1372>
Accessed 21 Nov. 2022
- [Figure 2] Original Image - Existing Cabra House Plans
- [Figure 3] Dublin Corporation – Cabra Estate Layout Plan
Cabra estate Layout, West Cabra 719 houses, Section 2 & 23, Dublin City Council, City Architects/Conservation
- [Figure 4] Original Image – Illustrative Elevation showing Rathborne Construction
- [Figure 5] Suburbia by HTA Design
<https://www.hta.co.uk/news-description/hta50-supurbia>
Accessed 09 Dec. 2022
- [Figure 6] Original Image - Habitat '67 Photograph – Taken 2014
- [Figure 7] Dundanion Court 'Past Images'
<http://www.dundanioncourt.com/galleries-2/past-images/>
Accessed 02 Mar. 2023
- [Figure 8] Original Image – Unité d'Habitation Section
- [Figure 9] Original Image – Towers Section
- [Figure 10] Original Image – Towers 3-D
- [Figure 11] Original Image – Vertical Extension Section
- [Figure 12] Original Image – Mews Lane 3-D
- [Figure 13] Original Image – Route Map
- [Figure 14] Original Image – Building Types Plan
- [Figure 15] Original Image – Site Location Map
- [Figure 16] Original Image – Photo of Cabra Street – Taken 2022
- [Figure 17] Original Image – Potential Car Parks Map
- [Figure 18] Original Image – Illustrative Section showing Thermal Wrap

Final Design Proposal





Location: Cabra

Block Area : 25,200m²

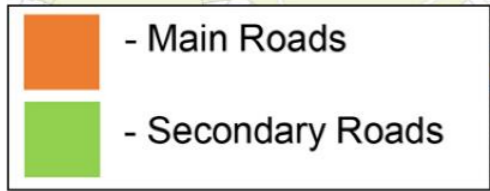
Existing Units: 112
Existing Population: 314

Existing Units per Hectare: 41
Existing People per Hectare: 115

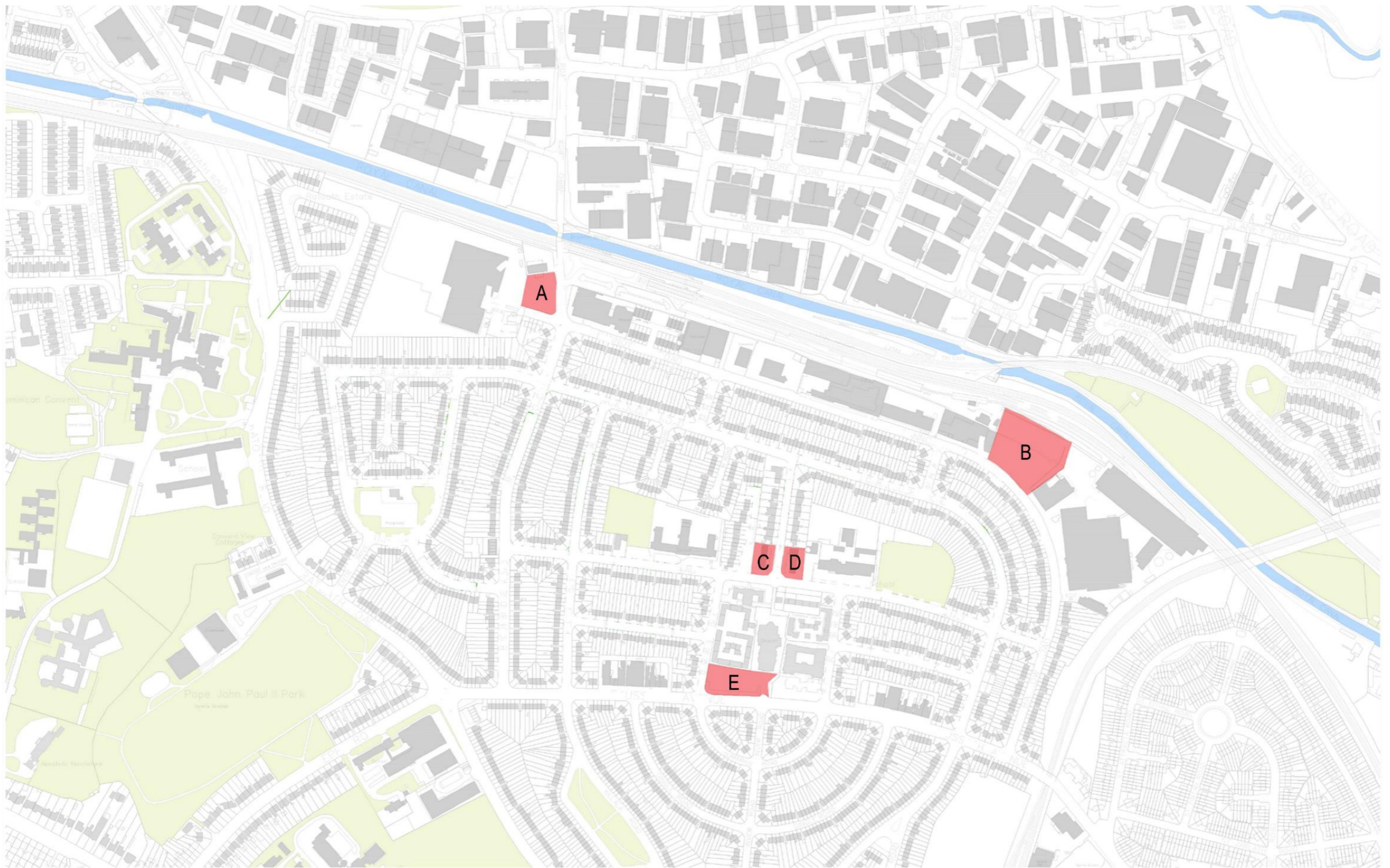
Projected Total Units: 149
Projected Population: 420

Projected Units per Hectare: 59
Projected People per Hectare 167





Roads / Routes 1 : 5,000



A - 73 Spaces B - 260 Spaces C - 40 Spaces D - 40 Spaces E - 74 Spaces

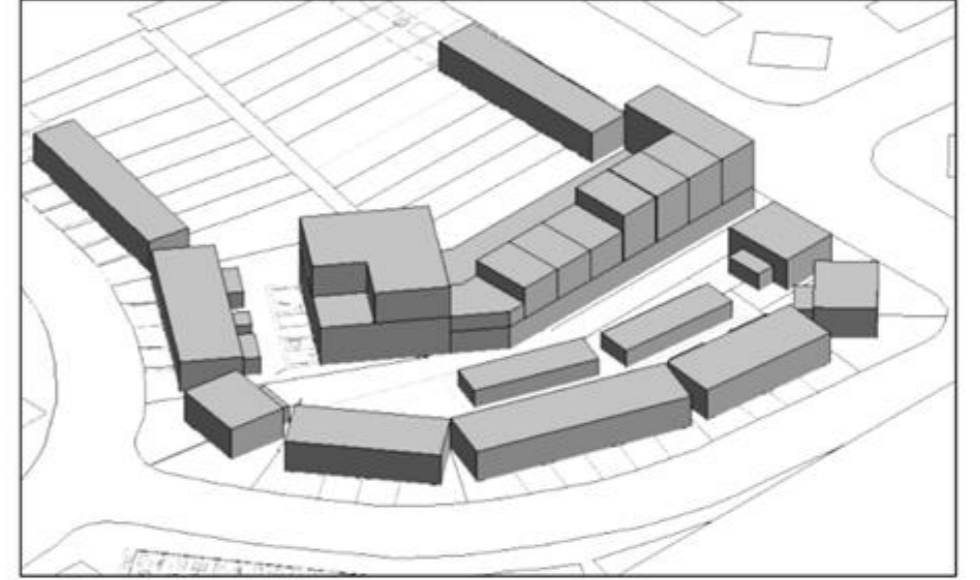
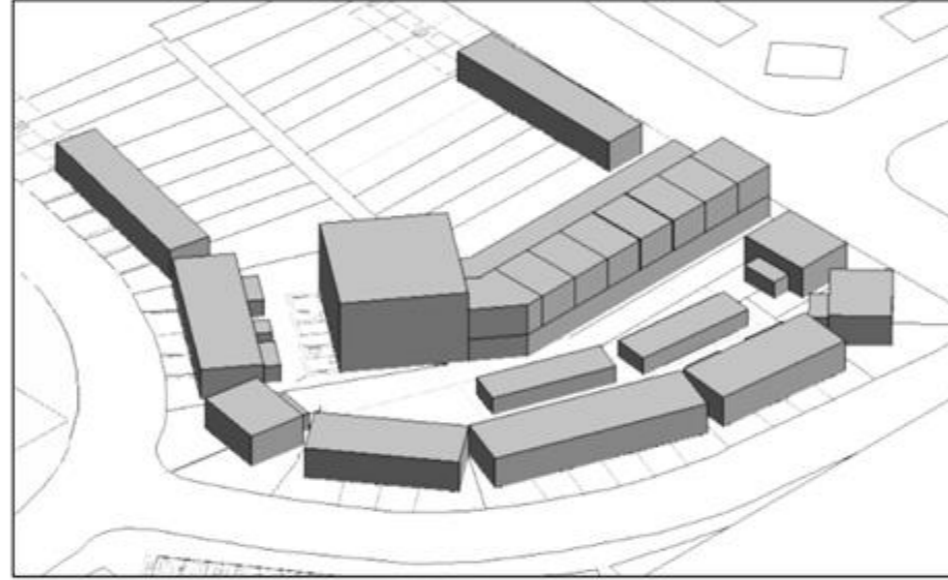
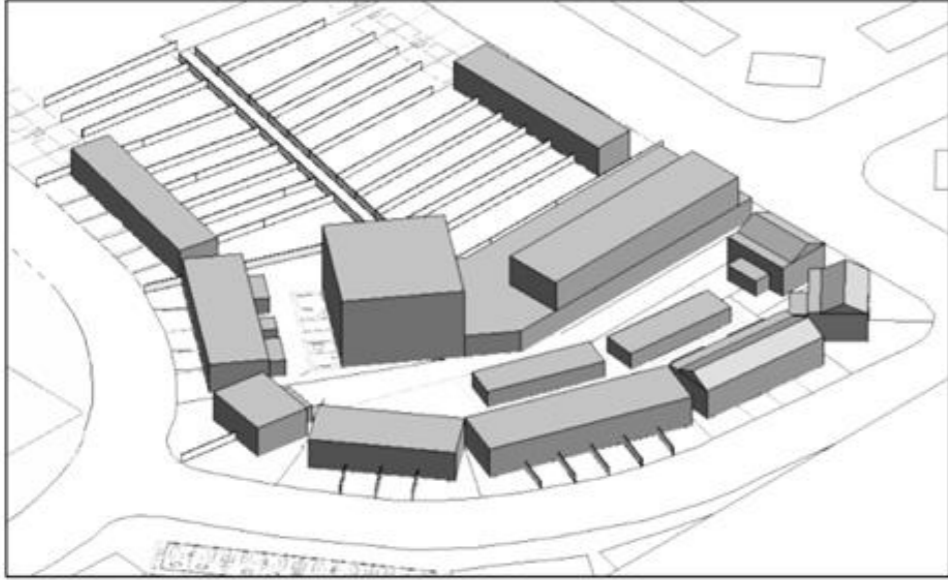
487 Total Potential Car Park Spaces



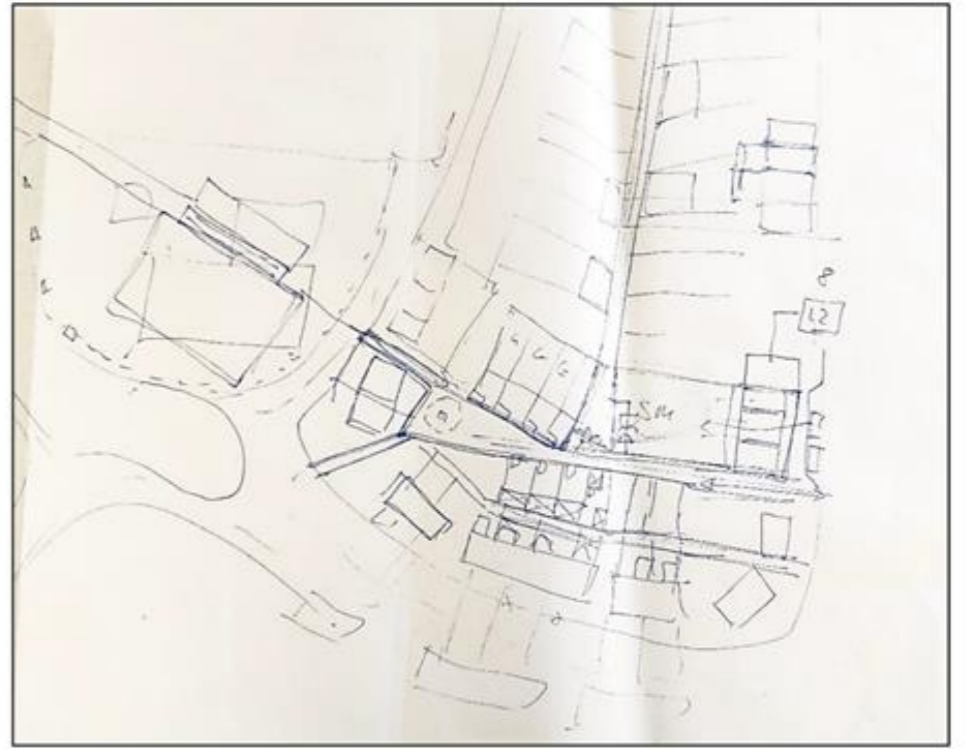
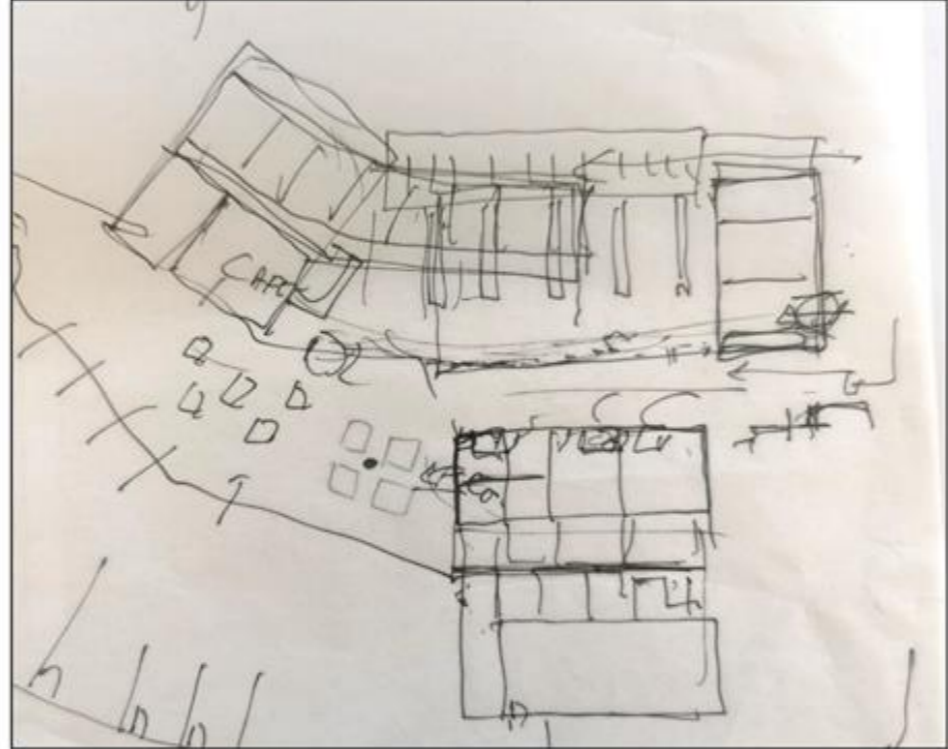
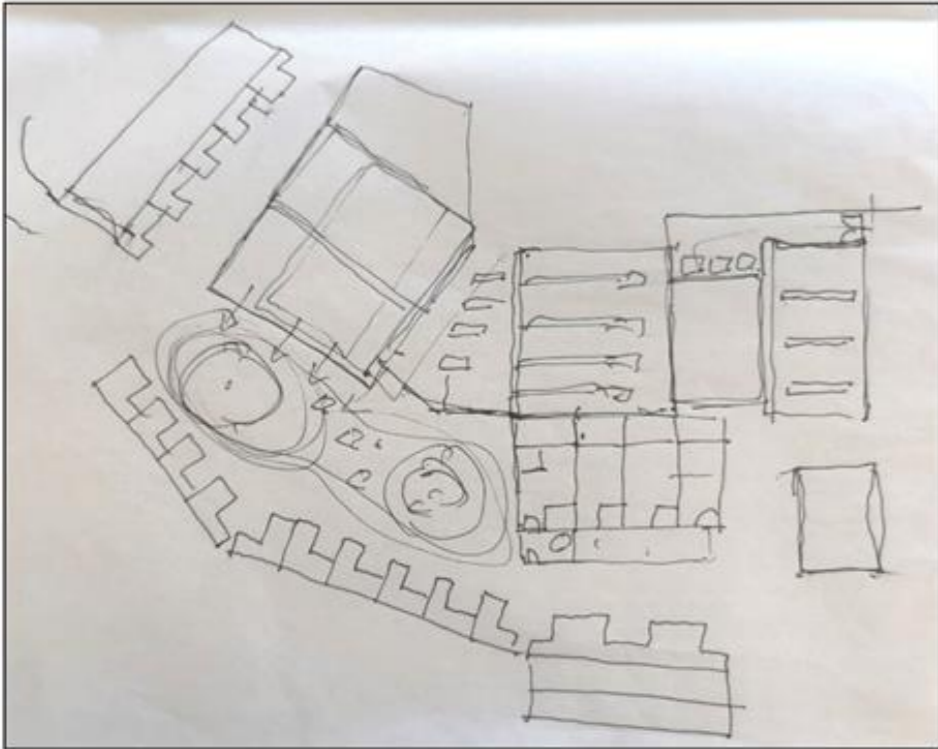
Mews Housing – Clerkin Lane



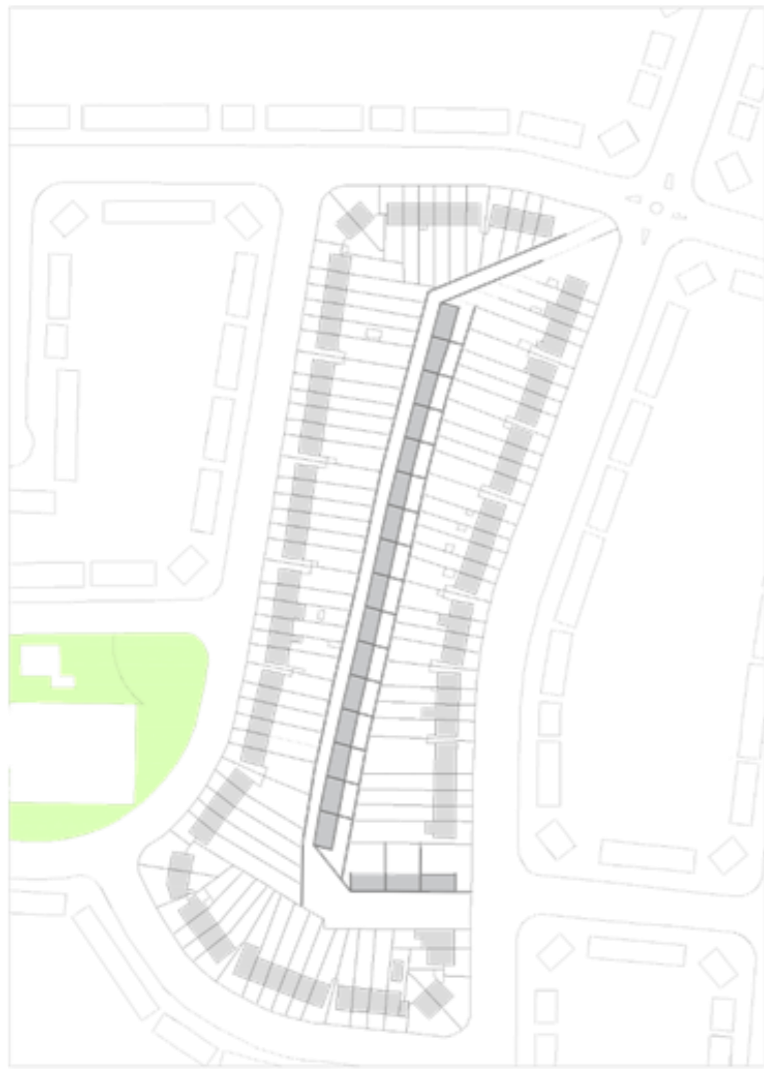
New Rear Entrance to Existing Houses



Evolution of Commercial / Apartment Building Form



Sketches of Park/Public Square Concepts



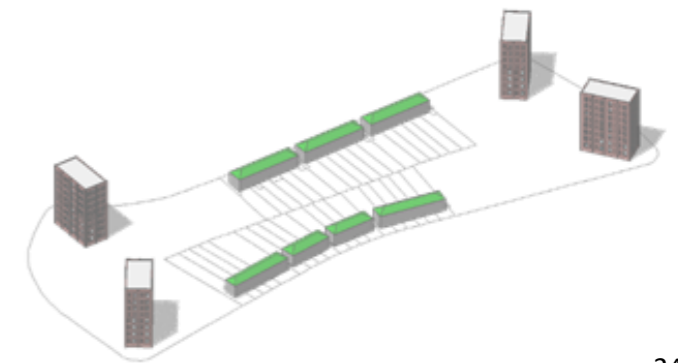
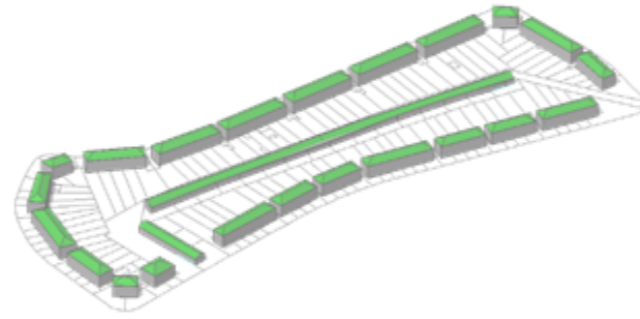
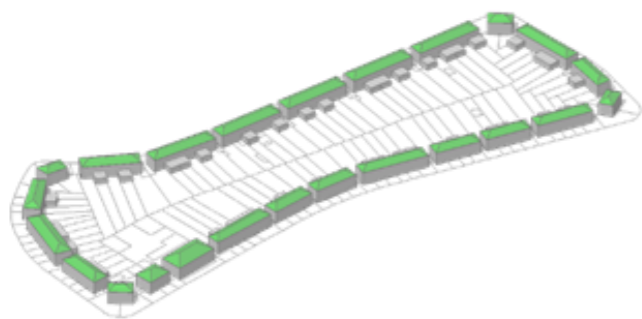
Mews Study



Extension Study



Tower Study





Abode at Great Kneighton - Proctor & Matthews Architects



Alexandra Road Estate – Neave Brown



Hamilton Gardens – Plus Architecture



Henrietta House – Herbert Simms



Existing Apartment Block



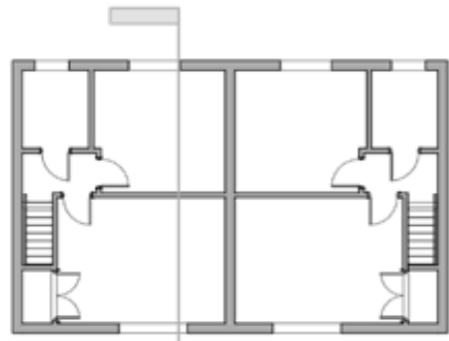
Existing Entrance Lane



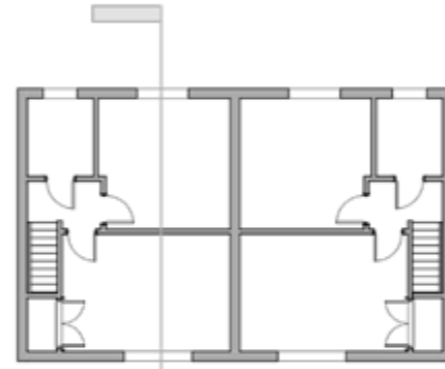
Streets Dominated by Vehicles



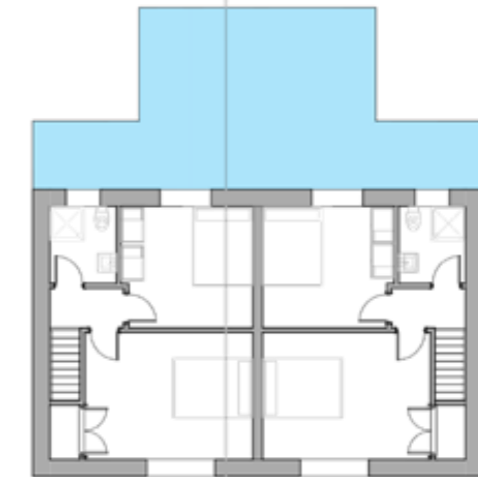
Feature Elevation at T-Junction



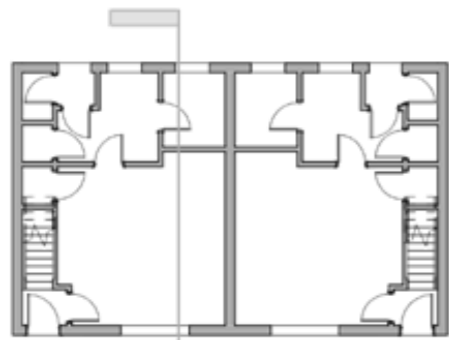
Existing First Floor - Type A



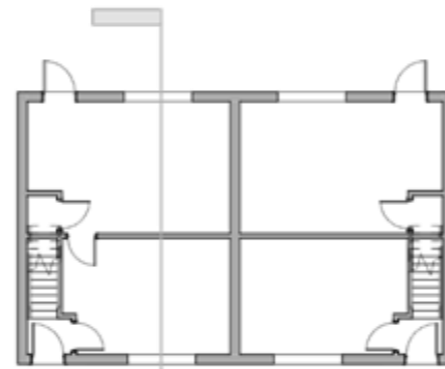
Existing First Floor - Type B



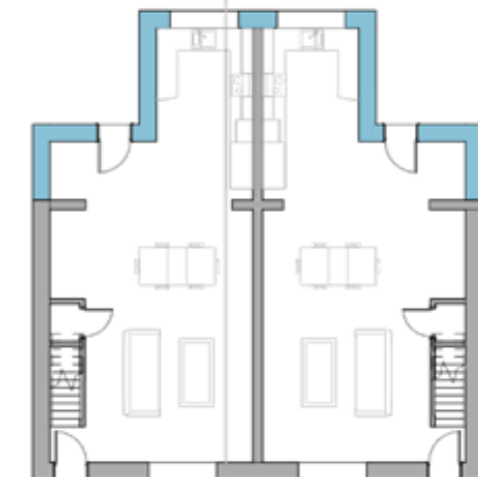
Proposed First Floor



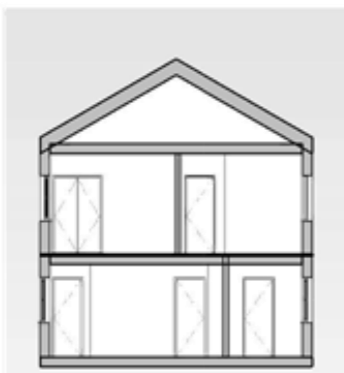
Existing Ground Floor - Type A



Existing Ground Floor - Type B



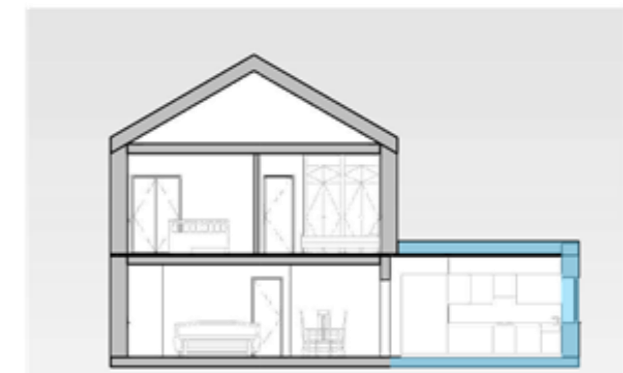
Proposed Ground Floor



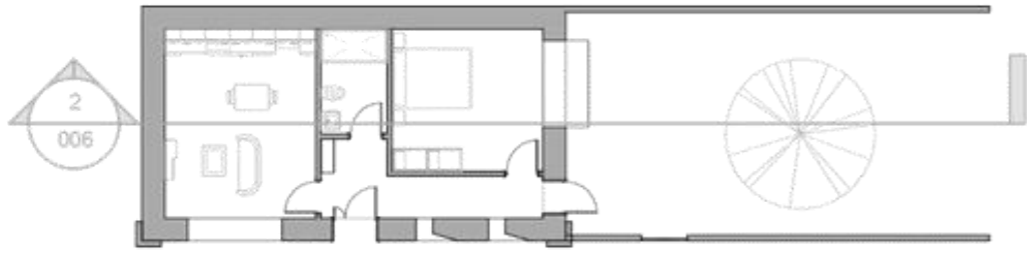
Existing Section - Type A



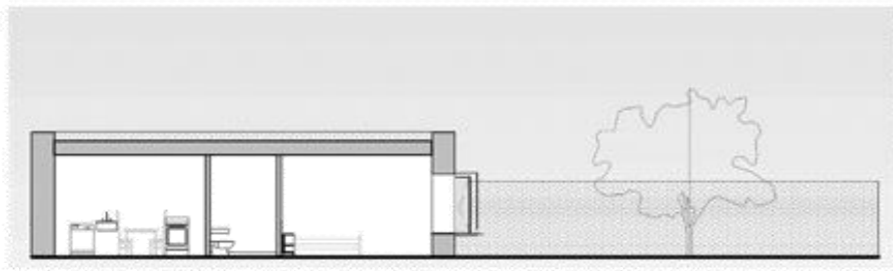
Existing Section - Type B



Proposed Section



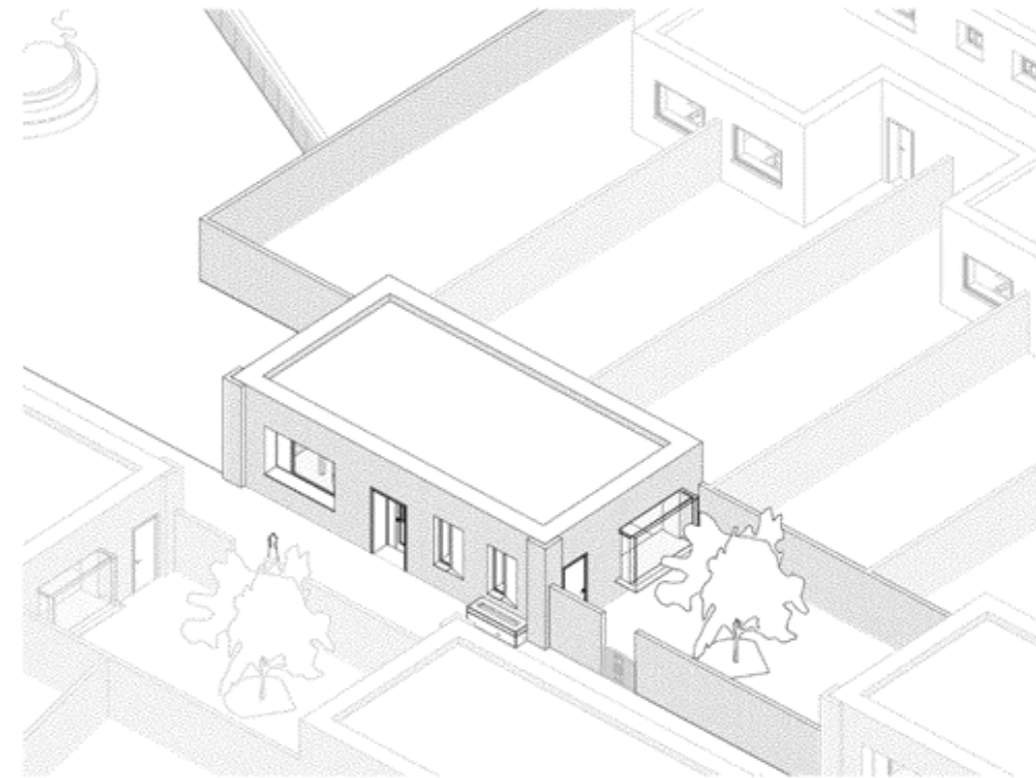
Mews House - Floor Plan



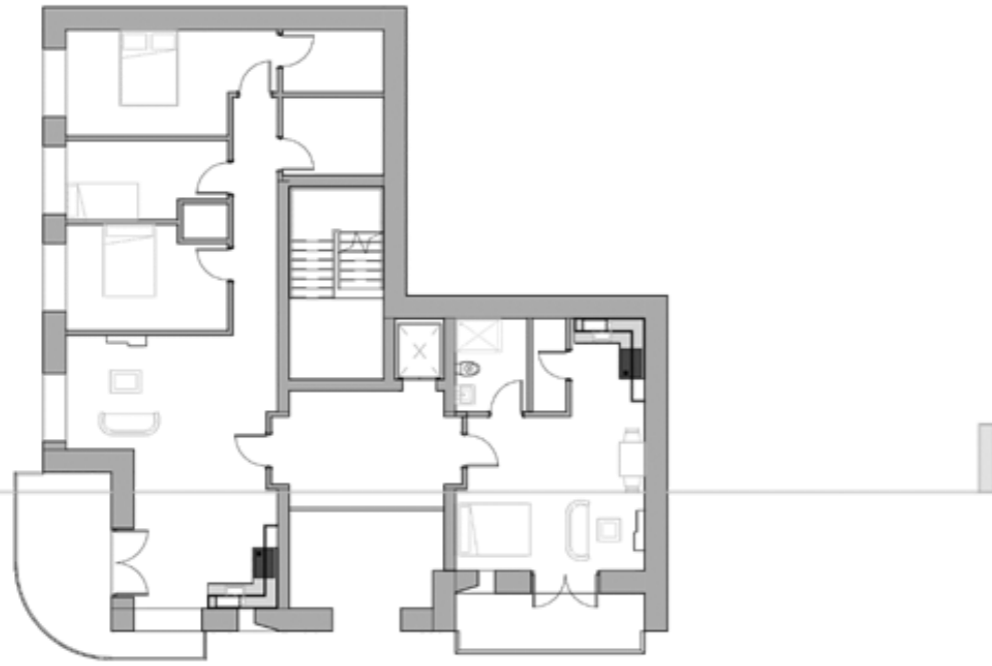
Mews House - Long Section



Mews House - Elevation



Mews House - Axonometric



Corner Apartment Block - 1st/2nd Floor Plans



Corner Apartment Block - Long Section



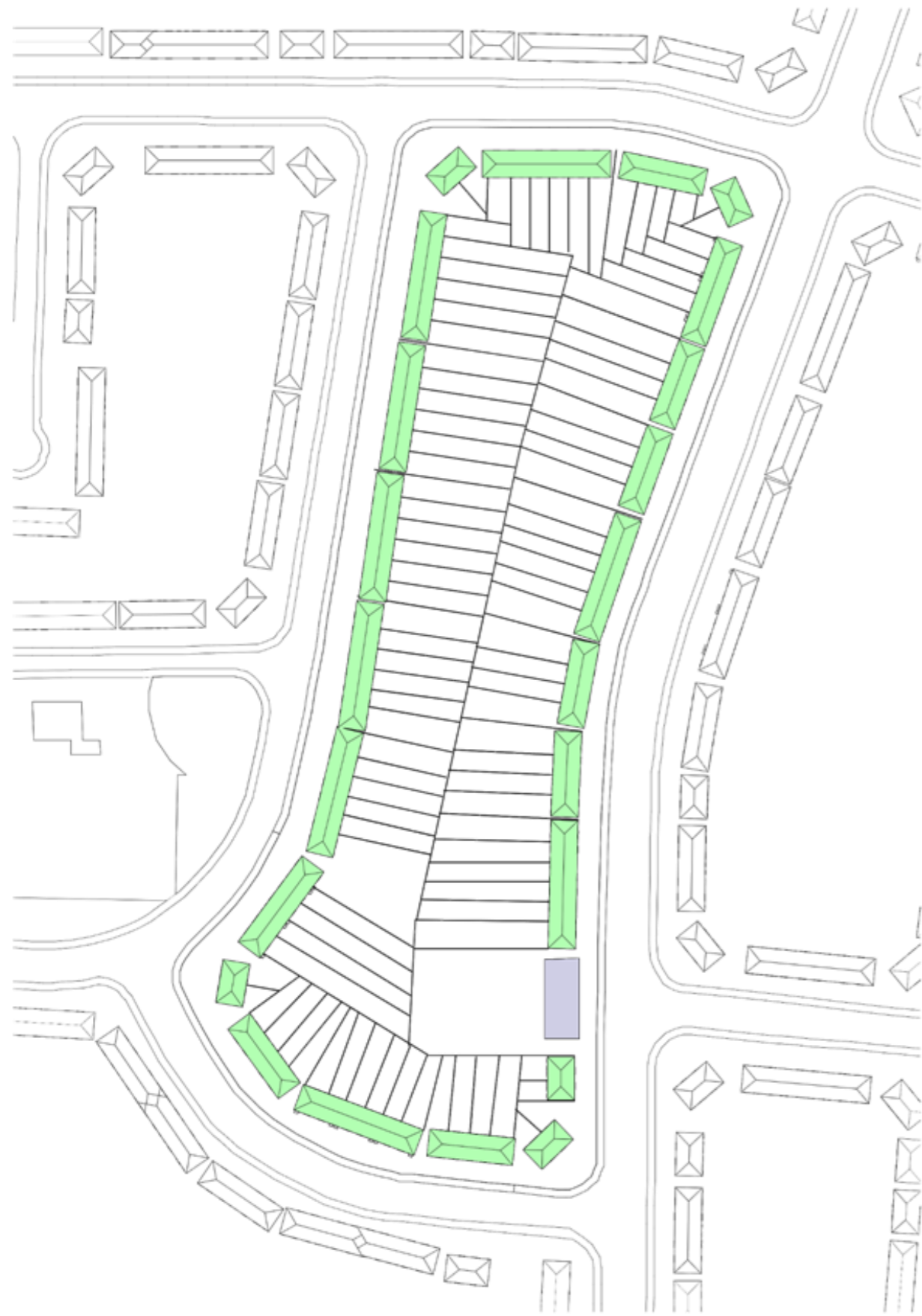
Corner Apartment Block - Front Elevation



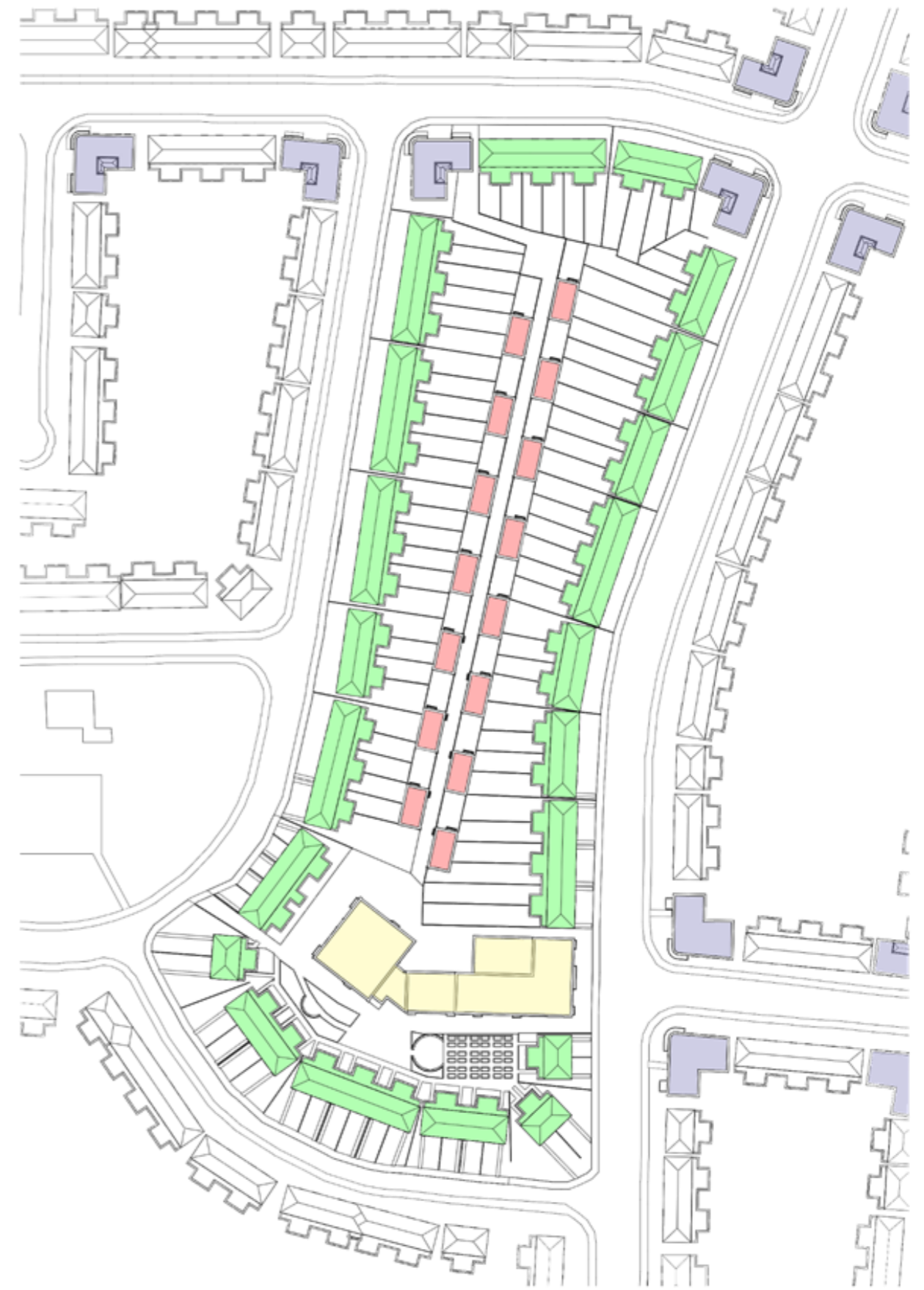
Corner Apartment Block - Ground Floor Plan




Corner Apartment Block - Axonometric




Existing Building Types




Proposed Building Types

 Two Bedroom House

 Apartment Building

 Mews House

 Commercial/Retail Building

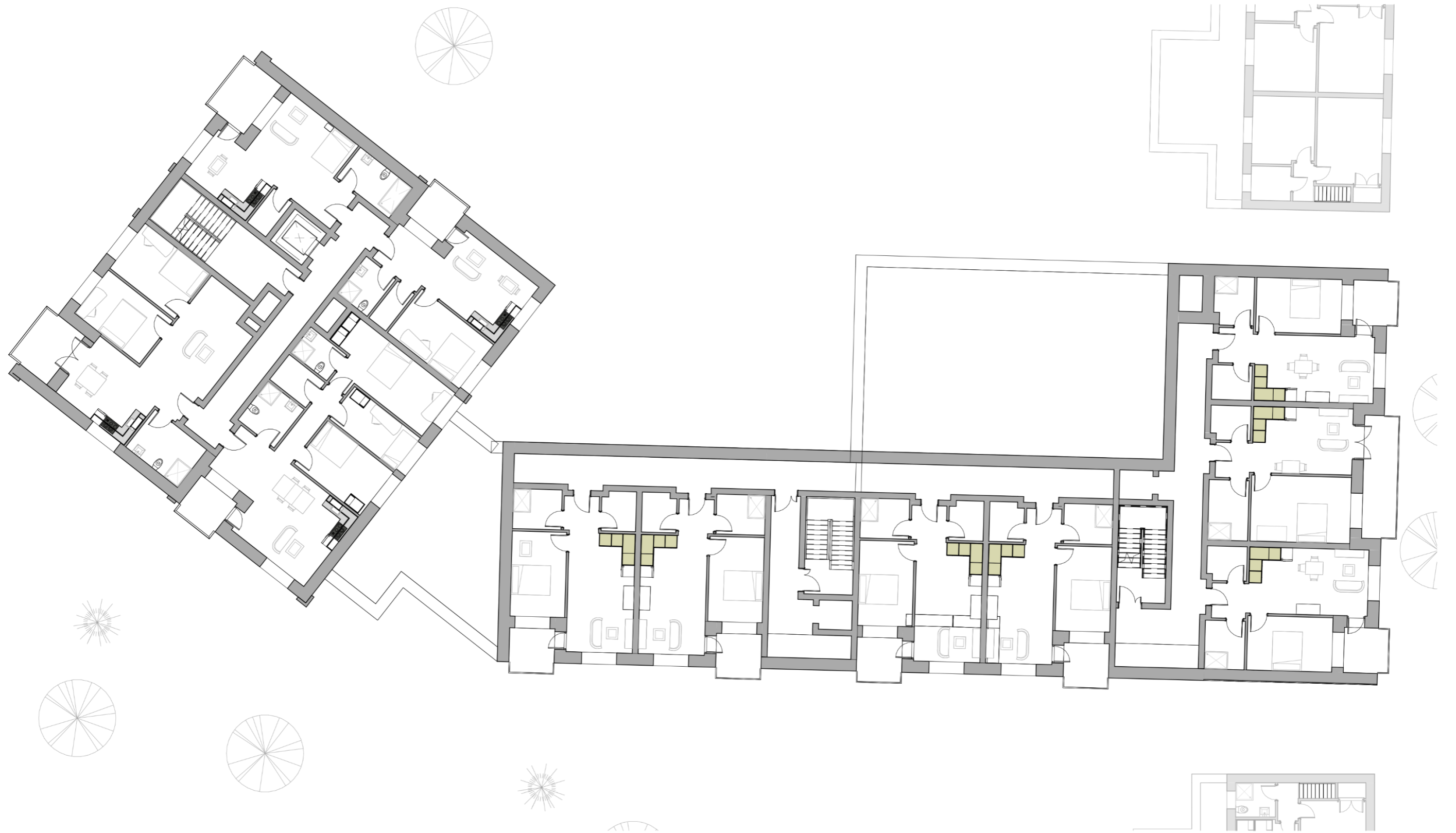


Proposed Commercial / Apartment Block

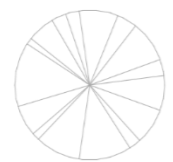
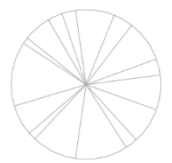
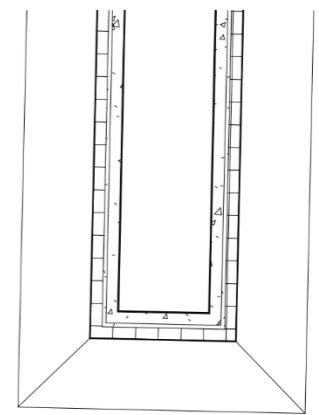
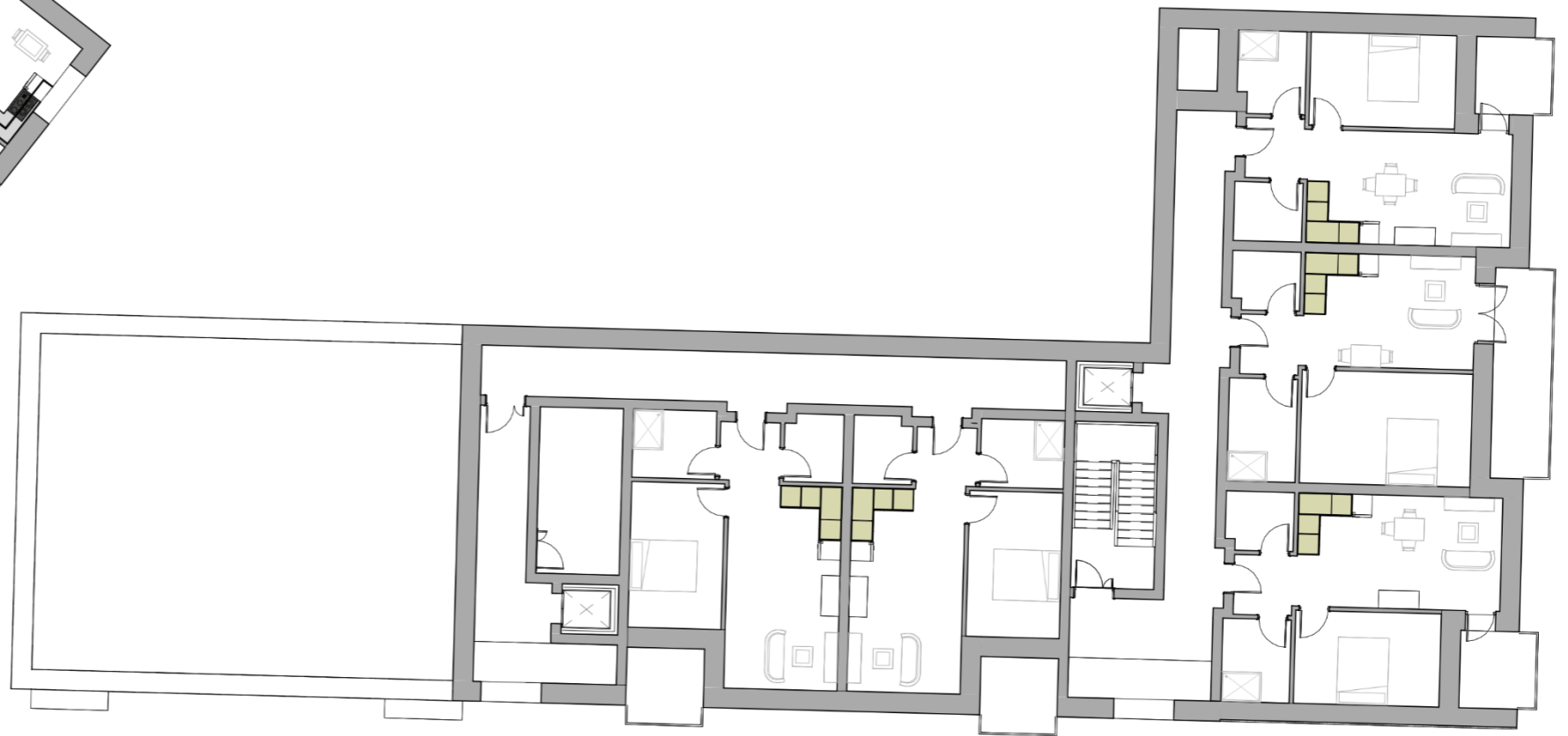


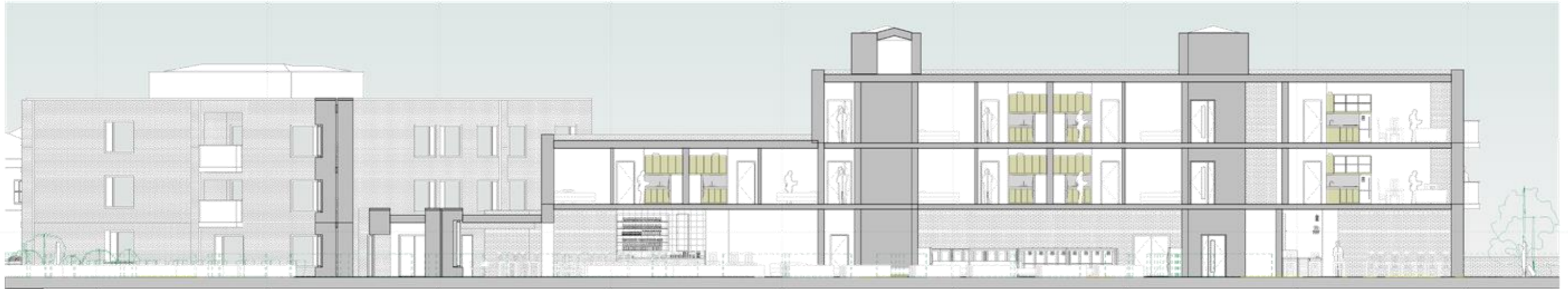
Proposed Access to Ventry Park





Commercial/Apartment Building - 1st Floor Plan 1:200





Commercial/Apartment Building - Section A-A



Commercial/Apartment Building - Section B-B



Commercial/Apartment Building - Section C-C



Key Plan



View of East Elevation of Commercial / Apartment Block from Broombridge Road



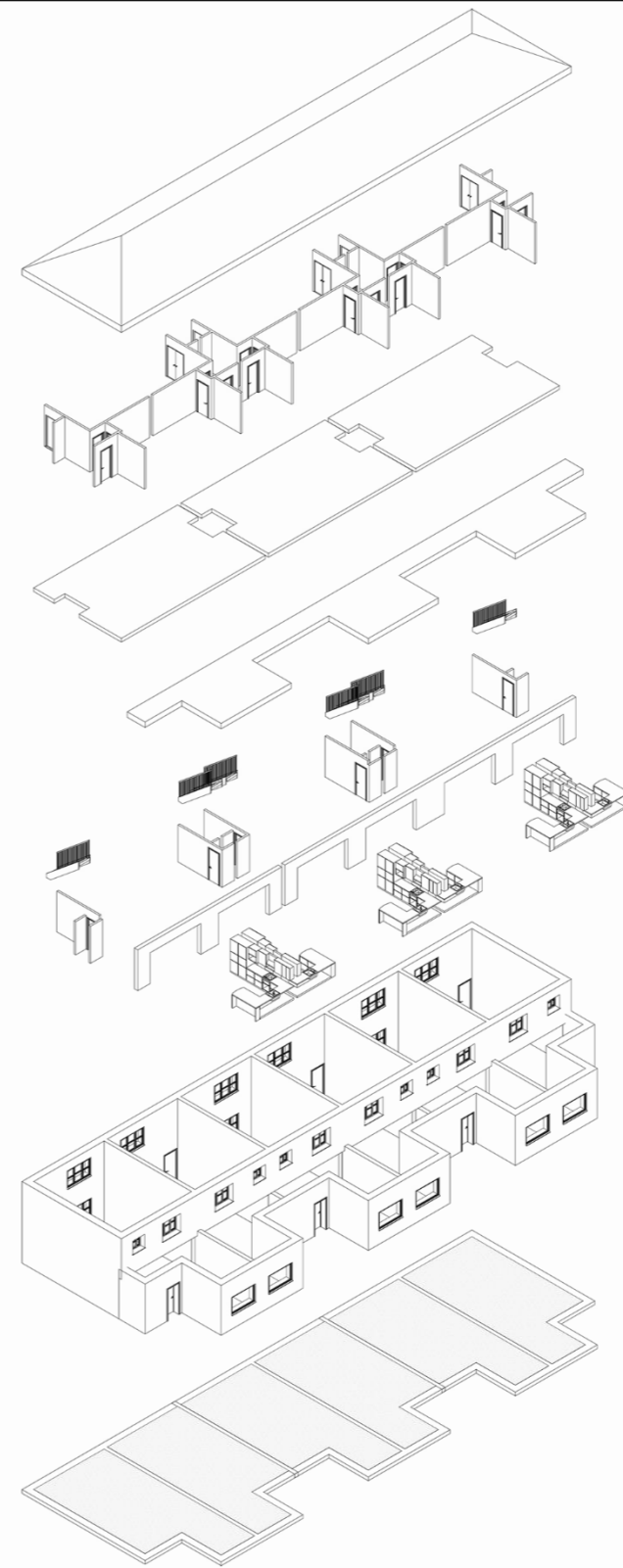
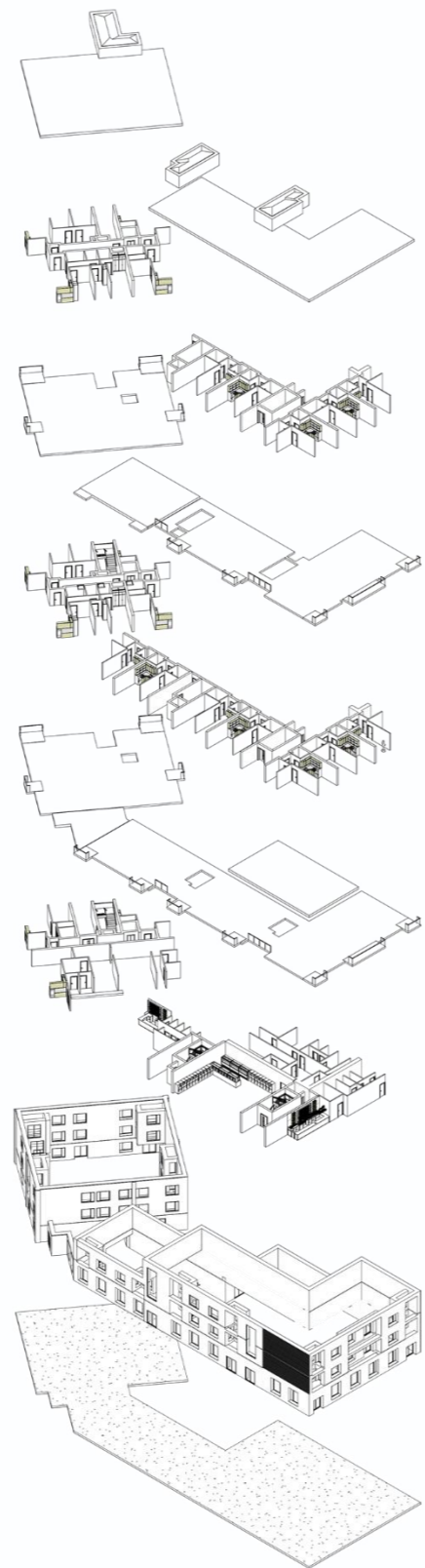
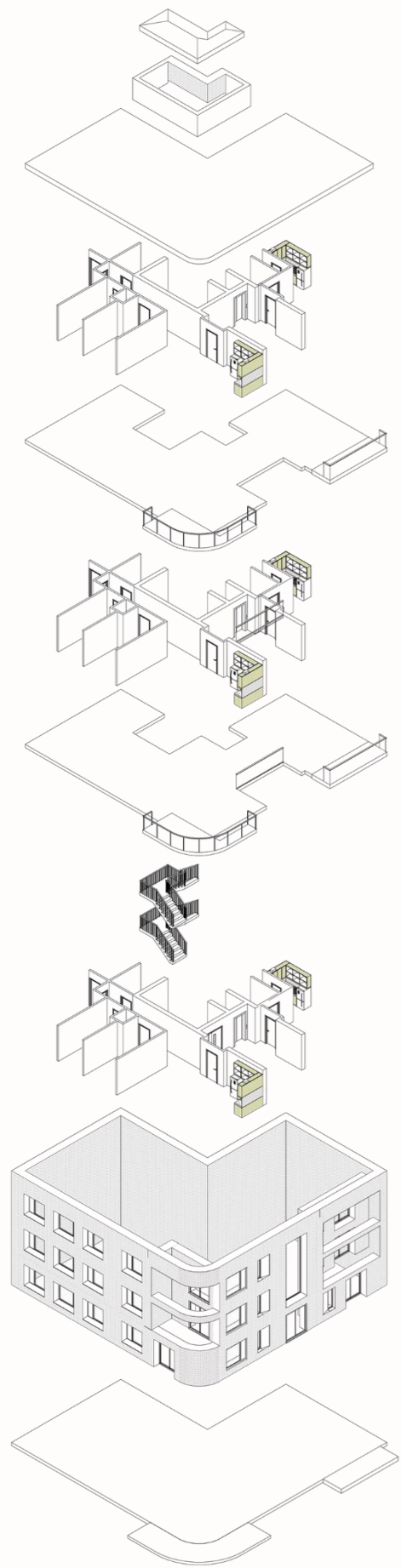
View of West Elevation of Commercial / Apartment Building



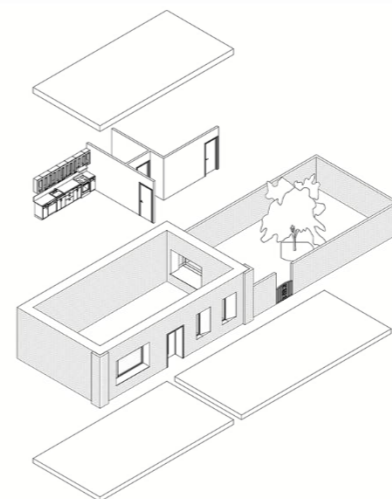
Ventry Gap Park



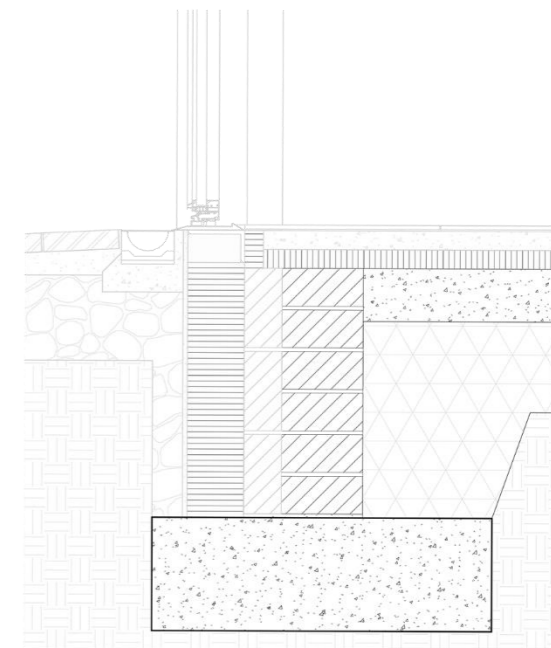
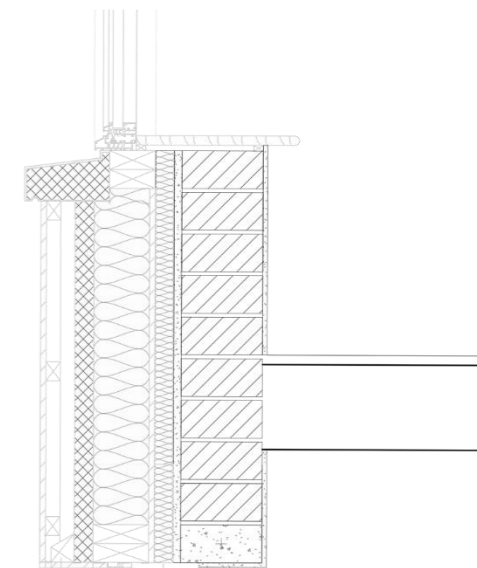
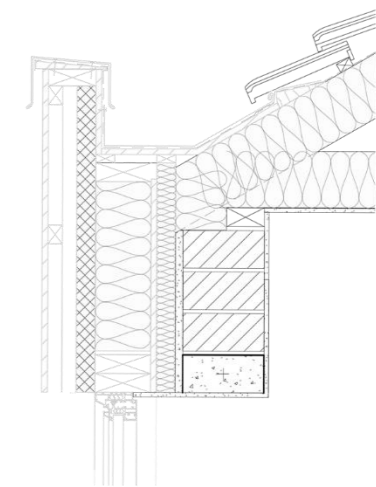
Corner Block Apartment Building



House - Exploded Axonometric



Mews House - Exploded Axonometric



House Section