

Design Statement

Kildare County Council
Part 8 Submission

For
Development at
St Patrick's Park
Rathangan
Co Kildare
R51 E308



Prepared by



October 2022

Contents

Introduction

- 1. Context**
- 2. Connections**
- 3. Inclusivity**
- 4. Variety**
- 5. Efficiency**
- 6. Layout**
- 7. Public Realm**
- 8. Adaptability**
- 9. Privacy / Amenity**
- 10. Parking**

INTRODUCTION

McCrossan O' Rourke Manning Architects are instructed by Kildare County Council to prepare a Part 8 submission for revisions to the existing St Patrick's Park, Rathangan estate as follows:

The proposed development comprises of the demolition of 15 no. dwellings, Refurbishment of 25 no. dwellings, construction of 7 no. dwellings and extensive site development works to create a new landscaped public open space. These works will consist of:

- Construction of 1 no. 4-Bed 1-storey dwelling, 3 no. 3-Bed 2-storey dwellings and 3 no. 2-bed single-storey dwellings.
- Refurbishment of 17 no. vacant units and 8 no. occupied units.
- Demolition of 15 no. units to allow the development of a new landscaped public open space.
- Removal of existing hardscaped play area and replacement with a new landscaped public open space and car parking.
- The provision of new car park area on Kildare County Council lands to the north-west.
- Proposed new gate access to adjacent Kildare County Council lands.
- The removal of existing back lane and extension of existing gardens to the rear of units 657 to 662.
- Associated site development and civil works; including works to existing site and dwelling boundaries, boundaries to new dwellings; drainage, utilities, public lighting; upgrade of paths and roads, new paths and roads and hard landscaping, ancillary site services and site development works above and below ground; Extensive Site Development Works to create New Landscaped Public Open Space.

St Patrick's Park is a local authority mixed tenure estate, constructed in the 1970s and early 1980s, originally comprising circa 80 units in single and two-storey typology. The estate locates approximately 1km from Rathangan town centre.



The proposals have regard to the following:

National Planning Framework

- Strategic Outcomes, no. 8, Transition to a Low Carbon and Climate Resilient Society.

Regional Spatial and Economic Strategy for the Eastern and Midlands Regional Assembly

- Healthy Placemaking:
 - To promote people's quality of life through the creation of healthy and attractive places to live, work, visit, invest and study in.
- Climate Action
 - To enhance climate resilience and to accelerate a transition to a low carbon society recognising the role of natural capital and ecosystem services in achieving this.

1 CONTEXT

The subject site is located in the edge of Rathangan town. When first built, the estate would have located away from the town however in subsequent years the lands between the town centre and the scheme were developed and a number of schemes of similar scale and built height now locate to the west and to the north. Some single houses on their own sites are also located adjacent.

While the layouts of more recent developments are unlikely to have been informed by a masterplan for the area, the organic development "creep" along the R401 Road (Kildare Road) has served to integrate the scheme reducing what might have been a segregation from the wider community.

The developments adjacent to the subject site are similar in scale and layout comprising generally single storey and two storey semi-detached and terraced dwellings. This proposal will not alter these established characteristics on the subject site.

Lands directly west and south of the subject site are currently being farmed.



2 CONNECTIONS

The subject site and the neighbouring developments cluster organically along the R401 which is an extension towards Kildare town of the main street running through the town. This type of development, taking advantage of road and services infrastructure available at the time of construction is a common habitation pattern in most Irish towns.

The main travel artery to the developments (R401) is therefore well defined as the primary travel route, and thereafter the entrance and main access road into each development is legible. The main access road is generally also the main egress road from the respective developments with no existing interconnectivity.

The main travel artery (R401) provides a direct and walkable connection to the town centre for the subject site. This proposal does not alter that connectivity.

Facilities in the town include schools, churches, a library, community hall and other meeting facilities. The town centre offers a limited range of shops to serve the community however, as is the case with many smaller Irish towns, Rathangan is primarily served by larger retail centres

(Newbridge and Kildare) in the region of 8-10km away. Most residents generally use private transport to access these retail centres.

3 INCLUSIVITY

As noted at 1 above, the estate has benefited, since its construction in the 1970s and early 1980s, from the subsequent adjoining residential development along the Kildare Road which has linked the estate to the town and has helped to reduce its position of segregation from the wider Rathangan community.

When compared to the more recently constructed neighbouring residential developments, the estate is under-provided with usable landscaped open space. In addition, factors including the maintenance challenges stemming from the estate design and the vandalism-related damage to public areas and dwellings have worked to undermine the image and reputation of the estate in the minds of the wider community and of the residents of the estate. Pride in one's place is a primary requirement for a sense of inclusivity.

While the existing dwellings are of sound basic construction, they have fallen considerably behind in terms of energy efficiency, comfort levels and an awareness of this will undermine a sense of equality and inclusivity.

Retrofitting work to units in Northern portion of the estate was completed under Phase 1 of the remedial works programme addressed this issue for those units.

This proposal aims to right the above deficiencies through the interventions outlined in the sections of this document to follow.

It is anticipated that the large public open space in these proposals will serve as a popular and well-used recreation and meeting space for all residents of the estate. This will foster a sense of community, an awareness of place and inclusion.



4 VARIETY

The existing dwellings to the front (north) zone of the estate carry a repeating aesthetic typical of the era of construction. The existing dwellings to the rear (south) zone of the estate also carry a repeating aesthetic typical of their slightly later era of construction.

In both cases the dwellings, through simple un-adorned aesthetics and rational un-complicated structures, are spared the design excesses of some houses of the 1970s and early 1980s.

While the proposal requires the demolition of some units, those retained units will be upgraded in a manner to respect and to retain their original aesthetic.

New dwellings are proposed at prominent locations. These new units will deliver surveillance and active corners and will provide subtle "bookends" to the existing repeating rows of houses.

The design intent is to provide quiet interventions which will subtly announce their 21st century origins without fighting against or attempting to overpower the existing. Form and shape will be similar to the existing. Materials and detailing will subtly differ.

The built compositions will therefore comprise existing upgraded units retaining their quiet repetition and new units delivering subtle visual incident and variety.



5 EFFICIENCY

Land use efficiency

The existing estate is low density comprising single-storey and two-storey dwellings, representing what would have been the typical land use pattern for Local Authority builds of the 1970s and early 1980s. Living and use patterns are established and this proposal does not provide for an increase in density.

Re-use of existing housing stock

While this proposal includes the demolition of some dwellings to deliver needed open space and to improve surveillance, it is intended to upgrade those retained dwellings to deliver up to date energy performances and comfort levels.

The existing dwellings are of sound and relatively uncomplicated construction and their retention as part of this proposal is seen as efficient use of existing stock

Energy Efficiency

A report by Homan O'Brien Consulting Engineers on Conservation of Energy is included in this submission. The opening summary in that report is as follows:

This report outlines building regulation compliance criteria for the residential development of new and existing dwellings of St. Patricks Park, Co. Kildare. This report has been prepared as a compliance requirement for planning applications made in accordance with Kildare County Council guidelines.

"The Residential units will achieve Building Regulations TGD L 2019 dwelling Compliance.

The new units will comply with Regulation 8 and L1 as defined in TGDL 2019. The

Existing\Refurbished units will comply with Regulation 7 and L2 as defined in TGD L 2019.

Key Energy Reduction and Sustainable Design Features include:
 1. BER minimum of A-3 (New Houses).
 2. Reduction in Primary Energy compared to a Building Regulation Compliant Residential Building

3. Reduction in CO2 Emissions compared to a Building Regulation Compliant Residential Building to Part L 2019"

The energy efficiency provisions will also include:

- **Building Fabric**

The new dwellings will incorporate floor, wall and roof insulation to deliver U-values equal or superior to the Maximum Fabric Insulation U-value performances set out in Building Regulations Technical Guidance Document L 2019 Conservation of Fuel and Energy – Dwellings (or updated/revised version that document if relevant at time of construction).

Existing dwellings will be upgraded having regard to Regulation 7 and L2 as defined in TGD L 2019, incorporating new fabric insulation, high performance double-glazed or triple-glazed windows, and air-sealing details.

Windows will be double or triple glazed to deliver insulation performance in accordance with that set out in the Technical Guidance Document. Glazing with solar resistance will be provided where required to control solar heat build-up.

Construction detailing for new dwellings around window and door opes, at floor edges etc. will incorporate the provisions of the document "Limiting Thermal Bridging and Air Infiltration – Acceptable Construction Details", published by Department of Environment, Heritage and Local Government. This detailing limits heat loss and also limits the air permeability of the envelope of the buildings.

The Existing\Refurbished units will comply with Regulation 7 and L2 as defined in TGD L 2019.

- **Building Services and Renewable Technologies**

The use of Heat Pumps, designed to capture heat from external air, is included for consideration in the design of the subject buildings. Other energy efficient technologies may also be considered at a later date.

Lighting points will be suitable for the use of low energy lighting.

For new dwellings, the building fabric, detailing and services/renewables requirements set out in Building Regulations Technical Guidance Document L 2019 Conservation of Fuel and Energy – Dwellings combine to deliver NZEB (Near Zero Energy Building) standards. The proposed new dwellings will be constructed to achieve these required standards and will therefore be NZEB. NZEB standard is equivalent to BER (Building Energy Rating) for each new unit of generally A2.

The Existing\Refurbished units will comply with Regulation 7 and L2 as defined in TGD L 2019.

Building use and maintenance efficiency

The materials and finishes to be used in the refurbishing of the existing dwellings and in the construction of the new dwellings are chosen to maintain and improve the design character of the estate. Materials and detailing will be visually controlled and understated.

In addition to these visual considerations, buildability, lifespan and maintenance are also considered in materials' choice and detailing. Priority is given to materials with low embedded energy and with long lifespan/low maintenance credentials. To this end the following are included in this proposal:

- Concrete roof tiles & slates.

- Clay brick and render finish to external walls
- Low maintenance pre-finished doors and windows.

External features (garden walls, surfacing's, landscaping) are considered in the same manner.

6 LAYOUT

The built form of the estate comprises, in the northern zone, rows of houses served by east-west streets and, in the southern zone, a number of house clusters looking inward into small courtyard squares.

In both cases, extensive runs of rear garden walls present to public areas and the courtyard squares, envisaged initially as landscaped area, are tarmacked over. Outside of these squares, the southern zone is served by one small open space.

The layout of the southern zone delivers several blank gabled dwellings offering poor passive surveillance. This deficiency, combined with the difficulty of maintaining small areas of landscaping, the lack of a single coherent well designed and overlooked Public Open Space and a need for increased parking has contributed to the failure of the original landscaped courtyards. In addition, the secluded nature of the rear laneway accesses to the back gardens of the houses contributes to a reported anti-social behaviour, refuse dumping and uncontrolled access to adjacent lands.

This proposal aims to deliver improved landscape open space, to increase passive surveillance and to reduce back-land areas with a revised layout incorporating limited new-build, while, in as far as possible, retaining and refurbishing the existing housing stock.



- Improved landscaped open space:

The housing cluster locating centrally is removed to open up a large area of the site to deliver a large landscaped open space of meaningful scale. The majority of the houses, new and

retained, will have a direct view of this space. The proposal places the large open space at the centre of the southern end of the estate, the adjacent housing layouts now consciously addressing and framing the space



Existing Site Plan



Proposed Site Plan

- Increased passive surveillance

New dwellings are introduced at critical corners to deliver passive surveillance. The new corner dwellings will include wrap around windows and a number of primary use windows on each public-facing elevation.

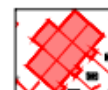
“Blind” ends of runs of houses are thereby eliminated in this proposal.

The proposed layout when built will clearly inform visitors and residents that open spaces and roads are positively overlooked and monitored. A visitor or resident moving along the roads and open space will be aware of constant vistas of active windows and house frontages.

Demolition Plan



House to be demolished



The following 15 no. housing units are to be demolished:



Pic 1: Units 532a and 532B.



Pic 2: Unit 649.



Pic 3: Units 674 and 675.



Pic 4: Units 676, 677 and 678.



Pic 5: Units 680, 681 and 682.



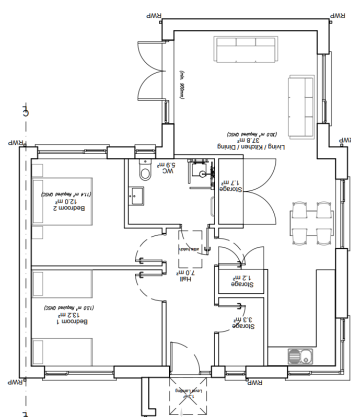
Pic 6: Units 683 and 684.



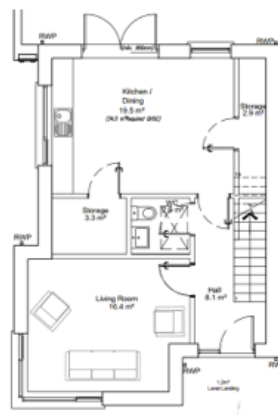
Pic 7: Units 685 and 686.



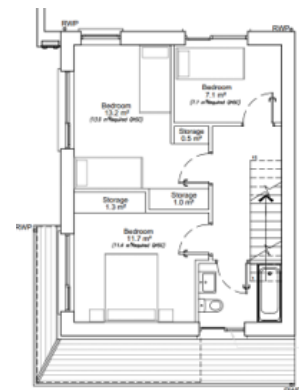
Proposed Site Plan – Indicating New Corner Units (Orange)



House Type B
Single Storey



House Type D
Ground Floor Plan



House Type D
First Floor Plan

Reduced back-land areas

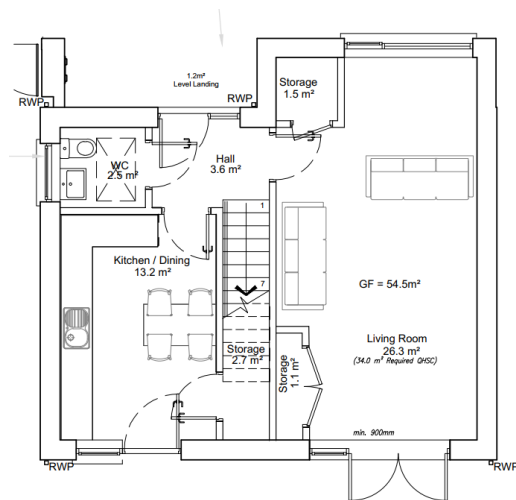
The rear laneway access function is established on in this scheme. This proposal rationalises these laneways in as far as possible, with those at the south-west corner removed entirely.

8 ADAPTABILITY

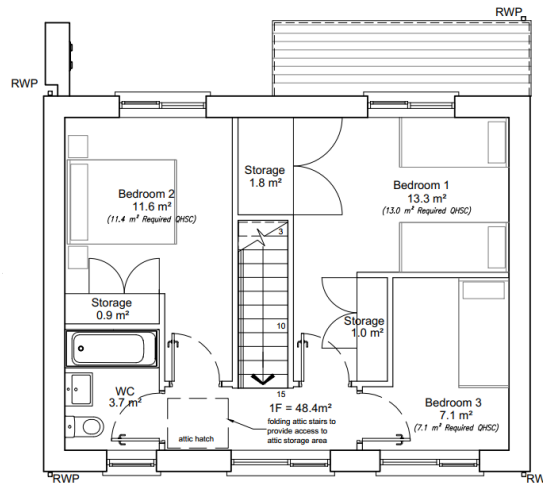
- Layout and dwelling design

It is anticipated that the proposed dwellings will be constructed of masonry construction, finished in traditional materials and with internal layouts that can be easily adapted in the future. There may be potential for future expansion into the rear gardens of the proposed two storey units.

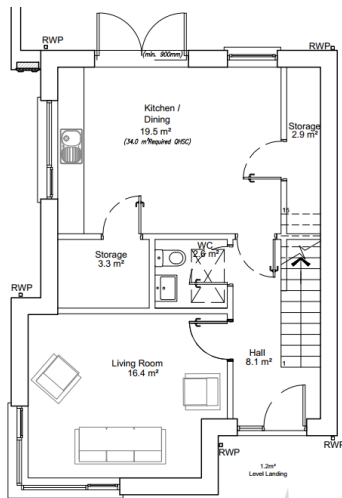
Two Storey Units:



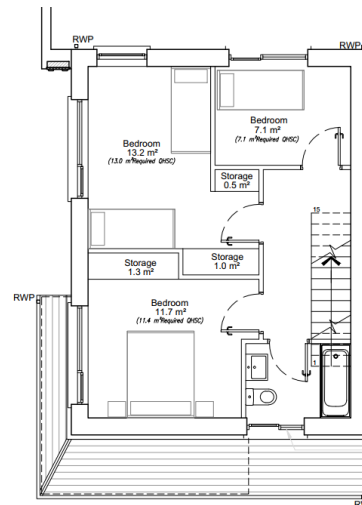
House type C – Ground Floor.
3 Bed – 2 Storey



First Floor.

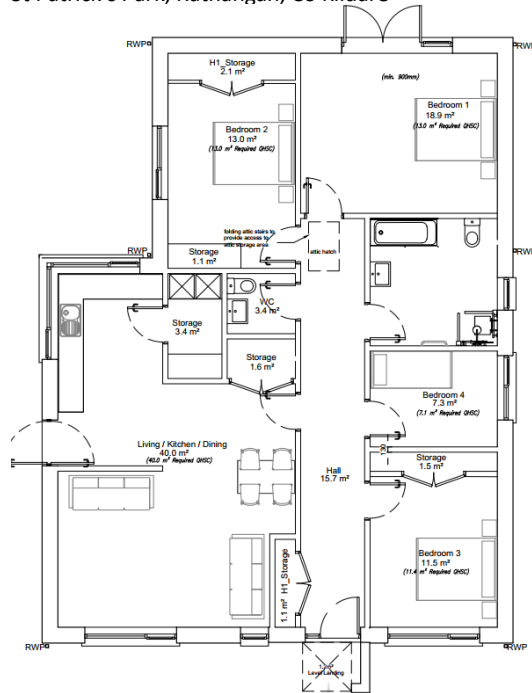


House type D – Ground Floor.
3 Bed – 2 Storey

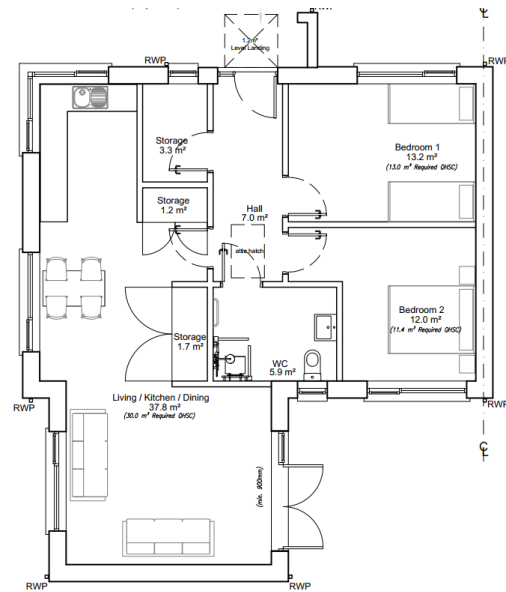


First Floor.

The proposed new two-storey dwellings will incorporate the requirements of Building Regulations Technical Document M 2010 (Access and Use), or revision of same which might apply at time of construction.



House type A – 4 Bed single storey



Typical House type B – 2 Bed 1 Storey

The proposed new single-storey dwellings also incorporate the requirements of Building Regulations Technical Document M 2010 (Access and Use) and, in addition, incorporate additional access and use provisions including enlarged bathroom and kitchen spaces and wider than normal circulation spaces. These units will be of particular value to individuals and to families with special needs.

The proposal therefore offers new dwellings designed to foster access and inclusivity and, in the particular case of the single-storey units, to deliver flexibility for future adaptability.

- Adapting to climate change

The proposed buildings will be energy-efficient and equipped for anticipated climate change challenges.

The buildings will incorporate floor, wall and roof insulation to deliver U-values equal or superior to the Maximum Fabric Insulation U-value performances set out in Building Regulations Technical Guidance Document L 2019 Conservation of Fuel and Energy – Dwellings (or updated/revised version that document if relevant at time of construction).

The use of Heat Pumps, designed to capture heat from external air, is included for consideration in the design of the subject buildings. Other energy efficient technologies may also be considered at a later stage
Lighting points will be suitable for the use of low energy lighting.

See also Section 5 above.

The proposed drainage designs will incorporate SUDS measures where possible, to ensure the runoff from the site is controlled. Consequently, there will be no increase in risk of flooding in the receiving waters.

9 PRIVACY/AMENITY

The layout, spacing and orientations of the existing retained houses are established and are generally not altered by this proposal.

The new dwellings are inserted in strategic corners and retaining established building lines and building patterns. In limited situations rear garden sizes and depths are below green-field layout standards.

In these situations the balance between absolute standards and the requirement to honour established building lines and patterns was carefully considered.

All new houses have private rear gardens and enclosed private front gardens.

Bin storage areas are provided in the rear gardens. Where direct access is provided to the rear gardens or with dedicated, designed bin stores to the front of the units with no direct access to rear gardens.

10 PARKING

While the town centre offers some shops to serve the community, Rathangan is primarily served by larger retail centres (Newbridge and Kildare) in the region of 8-10km away. Most residents generally use private transport to access these retail centres. This, and other factors, has led to a car dependency in the estate.

The proposed carparking layout has resulted from consultations by Kildare County Council Housing Section, Internal Sections of Kildare county Council and with the residents of St. Patricks Park. Parking, where not on-curtilage, locates in controlled rows, broken by trees/planting to avoid overpowering lengths. Priority was given to ensuring that car spaces are overlooked and, wherever possible, directly visible from the dwellings served by the parking spaces.

There is currently a provision of approximately 20 no. spaces for public parking in the estate which catered for 74 no. housing units. None of these spaces are formally marked out. The majority of homeowners park along the side of public carriageways and on footpaths within the estate. This then can have an impact for access to the estate for emergency services and disabled persons.

Under this Part 8 proposal there will be a provision of 94 no. public parking spaces which includes 7no. disabled persons carparking spaces. The additional no. 94 public parking spaces caters for 66 housing units.

Road traffic Assessment:

On 27th September 2022 Kildare County Council conducted a 1 day Road Traffic count. On that date there were 48no. occupied units in the estate with 27 vacant units.

Time	Vehicles Exiting	Vehicles Entering	Pedestrians Exiting	Pedestrians Entering	Cyclists Exiting	Cyclists Entering	HGVs
07:00	16	4	4	0	1	0	0
08:00	25	11	11	0	1	0	0
09:00	13	10	1	0	3	0	0
10:00	12	14	0	3	0	2	0
11:00	17	20	0	0	0	0	2
12:00	17	18	5	0	1	1	0
13:00	18	12	3	3	0	1	0
14:00	10	12	2	0	0	0	0
15:00	10	18	0	0	0	0	0
16:00	20	24	1	2	5	5	0
17:00	15	22	5	3	5	5	0
18:00	25	25	1	5	0	0	0
Totals	198	190	33	16	16	14	2